Appendix D

Laboratory Data Analytical Package (on CD)

AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES
CAMP O'BRYAN
SN5717

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

TABLE OF CONTENTS

Total number of pages: 1,760

SAMPLE DATA PACKAGE		0000001		
Narrative	----------	0000002	to	0000006
Supporting Documents	----------	0000007	to	0000008
Chain of Custody Record	----------	0000009	to	0000010
Login Report	----------	0000011	to	0000017
SAMPLE DATA SUMMARY				
Report of Analytical Results	----------	A000001	to	A000865
METALS DATA		4000001		
Sample Data	----------	4000002	to	4000018
QC Summary	----------	4000019	to	4000150
Raw Data	----------	4000151	to	4000847
Logbooks and Supporting Documents	----------	4000848	to	4000853
CONVENTIONAL AND PHYSICAL ANALYTICAL DATA		5000001		
QC Summary	----------	5000002	to	5000005
Sample Data	----------	5000006	to	5000020
Raw Data	----------	5000021	to	5000025

SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES – CAMP O'RYAN
SN5717

Sample Receipt

The following samples were received on July 28, 2020 and were logged in under Katahdin Analytical Services work order number SN5717 for a hardcopy due date of August 20, 2020.

KATAHDIN Sample No.	AECOM Sample Identification
SN5717-1	COR01DA01A
SN5717-4	COR01DB02A
SN5717-5	COR01DA02A
SN5717-7	COR02DA01A
SN5717-8	COR02DA02B
SN5717-9	COR02DA02A
SN5717-10	COR02DB02A
SN5717-12	COR03DA01A
SN5717-13	COR03DB01A
SN5717-14	COR03DA02A
SN5717-15	COR03DA02B
SN5717-17	COR03DB03A
SN5717-18	COR03DA03A
SN5717-20	COR03EQB

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Metals Analysis:

The samples associated with Katahdin Work Order SN5717 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Mass Spectrometric Analysis (ICP-MS)

Solid-matrix Katahdin Sample Numbers SN5717-(1, 5, 7, 8, 9, 12, 18) were digested for ICP-MS analysis on 07/16/20 (QC Batch NG16IMS1) in accordance with USEPA Method 3050B. Per client request, SN5717-(5, 7, 18) were prepared with duplicate matrix spiked aliquots.

Solid-matrix Katahdin Sample Numbers SN5717-(14, 15) were digested for ICP-MS analysis on 07/20/20 (QC Batch NG20IMS2) in accordance with USEPA Method 3050B.

Aqueous-matrix Katahdin Sample Number SN5717-20 was digested for ICP-MS analysis on 07/21/20 (QC Batch NG21IMW2) in accordance with USEPA Method 3010A. The preparation blank associated with this batch, PBWNG21IMW2, was outside of laboratory acceptance criteria for zinc. All associated samples were redigested on 7/29/20 (QC Batch NG21IMW2). These digestates are identified on sample preparation logbooks, analysis run logs, and throughout the raw data by the suffix "R" appended to the Katahdin Sample Number, e.g. "SN5717-020R".

Solid-matrix Katahdin Sample Numbers SN5717-(4, 10, 13, 17) were digested for ICP-MS analysis on 08/04/20 (QC Batch NH04IMS1) in accordance with USEPA Method 3050B. SN5717-10 was prepared with duplicate matrix-spiked aliquots.

ICP-MS analyses of Katahdin Work Order SN5717 sample digestates were performed using an Agilent 7800 ICP-MS spectrometer in accordance with USEPA Method 6020A. Results for all standards and samples are reported using the mean of 3 replicate measurements. All sample digestates were diluted by a factor of 5 during analysis to reduce mass interferences from chlorine, which is present in the digestates from the hydrochloric acid used in digesting the samples. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following exceptions:

The ICSAB run at 16:01 in analytical batch LNG20A was outside of laboratory acceptance criteria for copper. Because all associated samples were greater than ten times the failed value, they were accepted without corrective action.

The CCBs run at at 00:11, 00:16, and 00:48 in analytical batch LNG20A were outside of laboratory acceptance criteria for lead. All associated samples were greater than ten times the failed value, and so were accepted without corrective action.

Internal standard recoveries for ICP-MS analyses can be found in the raw data section of the accompanying data package. The following table indicates which analytes are associated with each internal standard element.

Internal Standard Element	Associated Analytes
Lithium	Beryllium, Boron
Scandium	Sodium, Magnesium, Aluminum, Potassium, Calcium
Germanium or Yttrium	Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Zinc, Arsenic, Selenium, Silver, Cadmium, Strontium, Molybdenum
Terbium	Antimony, Barium, Tin, Tungsten
Bismuth	Lead, Thallium, Thorium, Uranium

Instrument tuning information can also be found in the raw data section in the reports labeled "USEPA Method Tune Report". For Method 6020A, the relative standard deviation was determined from 5 replicate measurements and the peak width was measured at 10% of the peak height.

Matrix QC Summary

The measured recoveries in one or both of the matrix spiked aliquots of Katahdin Sample Number SN5717-5 are outside of laboratory acceptance criteria for antimony, copper, and lead. For lead, this could be due to the concentration of lead being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN5717-5 is within laboratory acceptance criteria for all analytes.

The measured recoveries of lead and zinc in the post-digestion spiked aliquot of Katahdin Sample Number SN5717-5 are outside laboratory acceptance criteria. This could be due to the concentrations of lead and zinc being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The serial dilution analyses of Katahdin Sample Number SN5717-5 are outside laboratory acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for copper and zinc. Because the laboratory control sample was acceptable, no corrective action was taken.

The measured recoveries in one or both of the matrix spiked aliquots of Katahdin Sample Number SN5717-7 are outside of laboratory acceptance criteria for antimony, copper, lead, and zinc. For lead, this could be due to the concentration of lead being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN5717-7 is within laboratory acceptance criteria for all analytes.

The measured recoveries of lead, zinc, and copper in the post-digestion spiked aliquot of Katahdin Sample Number SN5717-7 are outside laboratory acceptance criteria. This could be due to the concentrations of these analytes being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The serial dilution analyses of Katahdin Sample Number SN5717-7 are outside laboratory acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for copper and zinc. Because the laboratory control sample was acceptable, no corrective action was taken.

The measured recoveries in one or both of the matrix spiked aliquots of Katahdin Sample Number SN5717-10 are outside of laboratory acceptance criteria for antimony and lead. Because the laboratory control sample was acceptable, no corrective action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN5717-10 is within laboratory acceptance criteria for all analytes.

The measured recoveries of lead in the post-digestion spiked aliquot of Katahdin Sample Number SN5717-10 are outside laboratory acceptance criteria. This could be due to the concentrations of lead being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The serial dilution analyses of Katahdin Sample Number SN5717-10 are outside laboratory acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for copper and zinc. Because the laboratory control sample was acceptable, no corrective action was taken.

The measured recoveries in one or both of the matrix spiked aliquots of Katahdin Sample Number SN5717-18 are outside of laboratory acceptance criteria for antimony, lead, and zinc. For lead, this could be due to the concentration of lead being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN5717-18 is outside laboratory acceptance criteria for antimony. Because the laboratory control sample was acceptable, no corrective action was taken.

The measured recoveries of lead in the post-digestion spiked aliquot of Katahdin Sample Number SN5717-18 are outside laboratory acceptance criteria. This could be due to the concentrations of lead being significantly higher than the spike added. Because the laboratory control sample was acceptable, no corrective action was taken.

The serial dilution analyses of Katahdin Sample Number SN5717-18 are outside laboratory acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for copper and zinc. Because the laboratory control sample was acceptable, no corrective action was taken.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured

concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted LOD is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis:

The samples of Work Order SN5717 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times, and all quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond 08252e
Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. — Sample Receipt Condition Report

Client:	AECOM	KAS PM:	HTM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Fedex
KAS Work Order#:	SN5717	KIMS Review By:	HTM	Received By:	JCB
SDG #:		Cooler: 1 of 1		Date/Time Rec.:	7.14.20 1020

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.3 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: AECOM
Contact: Joe Witte, Amibeth Salvatore
Phone #: 39-944-3617 (703) 307-0558
Fax #: ( )

Address: 12420 Milestone Center Dr
City: Germantown
State: MD
Zip Code: 20876

Purchase Order #: 60519685
Proj. Name / No.: SARS 6 Camp O'Ryan
Katahdin Quote #:

Bill (if different than above): same as above
Address:

Sampler (Print / Sign): Meagen Wallace / Meagen Wallace
Copies To: joe.witte@aecom.com, amibeth.salvatore@aecom.com

LAB USE ONLY
WORK ORDER #: SN5717
KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	EPA6020A/CA6010 Hg2 (Filt. ☐Y ☐N)	Target Metals (Pb, Sb, Cu, Zn)	TCLP Metals (Filt. ☐Y ☐N)	reactivity, flash point, corrosivity	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	COR01DA01A	7/8/20 / 1730	SOIL	1	X												
	COR01DB01B	7/8/20 / 1740 MW	SOIL	1	X				*Hold analysis pending COR01DA01A results								
	COR01DB01A	7/8/20 / 1735	SOIL	1	X				*Hold analysis pending COR01DA01A results								
	COR01DB02A	7/8/20 / 1755	SOIL	1	X				*Hold analysis pending COR01DA02A results								
	COR01DA02A	7/8/20 / 1750	SOIL	1	X				*Collect MS/MSD								
	COR01X39E	7/8/20 / 1800	SOIL	1			X										
	COR02DA01A	7/10/20 / 1625	SOIL	1	X				*Collect MS/MSD								
	COR02DA02B	7/10/20 / 1650	SOIL	1	X												
	COR02DA02A	7/10/20 / 1645	SOIL	1	X												
	COR02DB02A	7/10/20 / 1655	SOIL	1	X				*Hold analysis pending COR02DA02A results								
	COR02X01TCLP	7/10/20 / 1630	SOIL	1			X										
	COR03DA01A	7/9/20 / 1708	SOIL	1	X												
	COR03DB01A	7/9/20 / 1715	SOIL	1	X				*Hold analysis pending COR03DA01A results								
	COR03DA02A	7/10/20 / 1550	SOIL	1	X												
	COR03DA02B	7/10/20 / 1555	SOIL	1	X												
	COR03DB02A	7/10/20 / 1559	SOIL	1	X				*Hold pending analysis/results of COR03DA02A								

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	7/13/20 1800	[signature] 7.14.20 1020			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: AECOM

Contact: Joe Witte Phone # 301-944-3617 Fax #
Amibeth Salvatore (703) 307-0558 ( )

Address: 12420 Milestone Center Dr City: Germantow State: MD Zip Code: 20876

Purchase Order # 60519685 Proj. Name / No.: SARS 16 Camp O'Ryan Katahdin Quote #

Bill (if different than above): same as above Address:

Sampler (Print / Sign): Meagen Wallace / Meagen Wallace

Copies To: joe.witte@aecom.com amibeth.salvatore@aecom.com

LAB USE ONLY

WORK ORDER #:

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ❒ FED EX ❒ UPS ❒ CLIENT

AIRBILL NO:

TEMP°C ❒ TEMP BLANK ❒ INTACT ❒ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. EPA 6020A/CALCULATED Target Metals (Pb, Sb, Zn, Cu)	Filt. TCLP metals Reactivity, Flashpoint, Corrosivity	Filt.	Filt.	Filt.	Filt.	Filt.	Filt.	Filt.	Filt.
	COR03DB03A	7/9/20/1549	SOIL	1	X	*Hold analysis pending COR03DA03A results								
	COR03DA03A	7/9/20/1543	SOIL	1	X	*collect MS/MSD								
	COR03X01TCLP	7/9/20/1310	SOIL	1		X								
	COR03EQB	7/10/20/1940	AQUEOUS	1	X	X								
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COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	7/13/20 1800	[signature] 7.14.20 1020			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Aug. 12, 2020
10:51 AM

Quote/Incoming: SMALLARMS-NGB

Login Number: SN5717

Account: METCAL001
AECOM Environment

Project: SMALLARMS-NGB

Web

Primary Report Address:
Joe Witte
AECOM
12420 Milestone Center Drive
Suite 150
Germantown,MD 20876
joe.witte@aecom.com

Primary Invoice Address:
Accounts Payable
AECOM
PO Box 5604

Glen Allen,VA 23058-5604

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DoD QSM 5.1. "U" LOD w/ J flags. Must report soils in mg/kg.
CHECK NO.	:	
CLIENT PO#	:	97532, Proj 60519685
CLIENT PROJECT MANAGE	:	Naoum Tavantzis
CONTRACT	:	W9133L-14-D-0001/006
COOLER TEMPERATURE	:	1.3
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ERIS EDD & KAS153
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Former Small Arms Ranges - Camp O'Ryan
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	SDS needs all forms. Email final PDF & EDD to joe.witte@aecom.com, amibeth.salvatore@aecom.com, & Meagen.Wallace@aecom.com. Email invoice to USAPImaging@aecom.com & joe.witte@aecom.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	1

10:52 am, Aug 12, 2020

Login Number: SN5717

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-1	COR01DA01A	08-JUL-20 17:30	28-JUL-20		**21-JUL-20**	20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	TS	22-JUL-20			

SN5717-5	COR01DA02A	08-JUL-20 17:50	14-JUL-20		**21-JUL-20**	20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	TS	22-JUL-20			

SN5717-9	COR02DA02A	10-JUL-20 16:45	14-JUL-20		**21-JUL-20**	20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

SN5717-12	COR03DA01A	09-JUL-20 17:08	14-JUL-20		**21-JUL-20**	20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	05-JAN-21			
Solid	S	SW6020-ANTIMONY	05-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	05-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	05-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	05-JAN-21	4oz Glass		
Solid	S	TS	23-JUL-20			

SN5717-18	COR03DA03A	09-JUL-20 15:43	14-JUL-20		**21-JUL-20**	20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	05-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	05-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	05-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	05-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	05-JAN-21	4oz Glass		
Solid	S	TS	23-JUL-20			

Total Samples: 17 ***Total Analyses: 98***

10:52 am, Aug 12, 2020

Quote/Incoming: SMALLARMS-NGB

Login Number: SN5717

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Primary Report Address:

Joe Witte
AECOM
12420 Milestone Center Drive
Suite 150
Germantown,MD 20876
joe.witte@aecom.com

Primary Invoice Address:

Accounts Payable
AECOM
PO Box 5604

Glen Allen,VA 23058-5604

Report CC Addresses:

Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DoD QSM 5.1. "U" LOD w/ J flags. Must report soils in mg/kg.
CHECK NO.	:	
CLIENT PO#	:	97532, Proj 60519685
CLIENT PROJECT MANAGE	:	Naoum Tavantzis
CONTRACT	:	W9133L-14-D-0001/006
COOLER TEMPERATURE	:	1.3
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ERIS EDD & KAS153
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Former Small Arms Ranges - Camp O'Ryan
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	SDS needs all forms. Email final PDF & EDD to joe.witte@aecom.com, amibeth.salvatore@aecom.com, & Meagen.Wallace@aecom.com. Email invoice to USAPImaging@aecom.com & joe.witte@aecom.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	1

10:52 am, Aug 12, 2020

Login Number: SN5717

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-14	COR03DA02A	10-JUL-20 15:50	14-JUL-20		**22-JUL-20**	20-AUG-20	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

Total Samples: 17 ***Total Analyses: 98***

10:52 am, Aug 12, 2020

Aug. 12, 2020
10:51 AM

Login Number: SN5717

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Quote/Incoming: SMALLARMS-NGB

Primary Report Address:
Joe Witte
AECOM
12420 Milestone Center Drive
Suite 150
Germantown,MD 20876
joe.witte@aecom.com

Primary Invoice Address:
Accounts Payable
AECOM
PO Box 5604

Glen Allen,VA 23058-5604

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DoD QSM 5.1. "U" LOD w/ J flags. Must report soils in mg/kg.
CHECK NO.	:	
CLIENT PO#	:	97532, Proj 60519685
CLIENT PROJECT MANAGE	:	Naoum Tavantzis
CONTRACT	:	W9133L-14-D-0001/006
COOLER TEMPERATURE	:	1.3
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ERIS EDD & KAS153
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Former Small Arms Ranges - Camp O'Ryan
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	SDS needs all forms. Email final PDF & EDD to joe.witte@aecom.com, amibeth.salvatore@aecom.com, & Meagen.Wallace@aecom.com. Email invoice to USAPImaging@aecom.com & joe.witte@aecom.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	1

10:52 am, Aug 12, 2020

Login Number: SN5717

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-2	COR01DB01B	08-JUL-20 17:40	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
						Cancelled 07/28/20. Received on hold pending SN5717-1 result.

SN5717-3	COR01DB01A	08-JUL-20 17:35	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
						Cancelled 07/28/20. Received on hold pending SN5717-1 result.

SN5717-4	COR01DB02A	08-JUL-20 17:55	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			**Taken off hold 07/28/20. Received on hold pending SN5717-5 result.**
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	TS	22-JUL-20			

SN5717-6	COR01X39E	08-JUL-20 18:00	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW1010-IGNITABILITY	22-JUL-20	250mL Plastic		**Do not report. Received off hold, client put on hold on 07222020 and cancelled on 07/28/20.**
Solid	S	SW7.3.4-REAC CYANIDE	22-JUL-20	500mL P+ZnAc/NaOH		
Solid	S	SW7.3.4-REAC SULFIDE	15-JUL-20	100g Glass		
Solid	S	SW9045C-PH SOIL	10-JUL-20	100g Glass		
Solid	P	TCLP-METALS				

SN5717-7	COR02DA01A	10-JUL-20 16:25	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

SN5717-8	COR02DA02B	10-JUL-20 16:50	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

SN5717-10	COR02DB02A	10-JUL-20 16:55	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			**Taken off hold 07/28/20. Received on hold pending SN5717-9 result.**
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

Login Number: SN5717

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-11	COR02X01TCLP	10-JUL-20 16:30	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW1010-IGNITABILITY	24-JUL-20	250mL Plastic		**Do not report. Received off hold, client put on hold on 07222020 and cancelled on 07/28/20.**
Solid	S	SW7.3.4-REAC CYANIDE	24-JUL-20	500mL P+ZnAc/NaOH		
Solid	S	SW7.3.4-REAC SULFIDE	17-JUL-20	100g Glass		
Solid	S	SW9045C-PH SOIL	12-JUL-20	100g Glass		
Solid	P	TCLP-METALS				

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-13	COR03DB01A	09-JUL-20 17:15	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	05-JAN-21			**Taken off hold 07/28/20. Received on hold pending SN5717-12 result.**
Solid	S	SW6020-ANTIMONY	05-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	05-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	05-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	05-JAN-21	4oz Glass		
Solid	S	TS	23-JUL-20			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-15	COR03DA02B	10-JUL-20 15:55	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	TS	24-JUL-20			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-16	COR03DB02A	10-JUL-20 15:59	14-JUL-20			20-AUG-20	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
					Cancelled 07/28/20. Received on hold pending SN5717-14 result.

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-17	COR03DB03A	09-JUL-20 15:49	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	05-JAN-21			**Taken off hold 07/28/20. Received on hold pending SN5717-18 result.**
Solid	S	SW6020-ANTIMONY	05-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	05-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	05-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	05-JAN-21	4oz Glass		
Solid	S	TS	23-JUL-20			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-19	COR03X01TCLP	09-JUL-20 17:10	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW1010-IGNITABILITY	23-JUL-20	250mL Plastic		**Do not report. Received off hold, client put on hold on 07222020 and cancelled on 07/28/20.**
Solid	S	SW7.3.4-REAC CYANIDE	23-JUL-20	500mL P+ZnAc/NaOH		
Solid	S	SW7.3.4-REAC SULFIDE	16-JUL-20	100g Glass		
Solid	S	SW9045C-PH SOIL	11-JUL-20	100g Glass		
Solid	P	TCLP-METALS				

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5717-20	COR03EQB	10-JUL-20 19:40	14-JUL-20			20-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW3010MS-PREP	06-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-ANTIMONY	06-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-COPPER	06-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-LEAD	06-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-ZINC	06-JAN-21	250mL Plastic+HNO3		

Total Samples: 17 ***Total Analyses: 98***

SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SN5717 **SOW No.** SW846

Client Field ID	Lab Sample ID
COR01DA01A	SN5717-001
COR01DA02A	SN5717-005
COR01DA02AP	SN5717-005P
COR01DA02AS	SN5717-005S
COR01DB02A	SN5717-004
COR02DA01A	SN5717-007
COR02DA01AP	SN5717-007P
COR02DA01AS	SN5717-007S
COR02DA02A	SN5717-009
COR02DA02B	SN5717-008
COR02DB02A	SN5717-010
COR02DB02AP	SN5717-010P
COR02DB02AS	SN5717-010S
COR03DA01A	SN5717-012
COR03DA02A	SN5717-014
COR03DA02B	SN5717-015
COR03DA03A	SN5717-018
COR03DA03AP	SN5717-018P
COR03DA03AS	SN5717-018S
COR03DB01A	SN5717-013
COR03DB03A	SN5717-017
COR03EQB	SN5717-020

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Kayla Crot Name: Kayla Croteau

Date: 8/21/2020 Title: Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.0 **Lab Sample ID:** SN5717-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.11			MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	20.8			MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	16.5			MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	74.8			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.9 **Lab Sample ID:** SN5717-004

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.20			MS	5	0.10	0.020	0.050
7440-50-8	COPPER, TOTAL	24.7			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	36.1			MS	5	0.10	0.0071	0.050
7440-66-6	ZINC, TOTAL	87.4			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	1.14		N	MS	5	0.082	0.016	0.041
7440-50-8	COPPER, TOTAL	23.3		NE	MS	5	0.24	0.057	0.16
7439-92-1	LEAD, TOTAL	502		NA	MS	5	0.082	0.0057	0.041
7440-66-6	ZINC, TOTAL	75.2		EA	MS	5	0.82	0.11	0.65

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.15		N	MS	5	0.078	0.016	0.039
7440-50-8	COPPER, TOTAL	24.4		NEA	MS	5	0.24	0.055	0.16
7439-92-1	LEAD, TOTAL	38.0		NA	MS	5	0.078	0.0055	0.039
7440-66-6	ZINC, TOTAL	71.8		NEA	MS	5	0.78	0.10	0.63

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA02B

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.6 **Lab Sample ID:** SN5717-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.276			MS	5	0.096	0.019	0.048
7440-50-8	COPPER, TOTAL	24.1			MS	5	0.29	0.067	0.19
7439-92-1	LEAD, TOTAL	57.8			MS	5	0.096	0.0067	0.048
7440-66-6	ZINC, TOTAL	57.3			MS	5	0.96	0.12	0.77

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.6 **Lab Sample ID:** SN5717-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.341			MS	5	0.10	0.020	0.050
7440-50-8	COPPER, TOTAL	28.2			MS	5	0.30	0.070	0.20
7439-92-1	LEAD, TOTAL	82.6			MS	5	0.10	0.0070	0.050
7440-66-6	ZINC, TOTAL	65.0			MS	5	1.0	0.13	0.80

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.11	J	N	MS	5	0.11	0.022	0.054
7440-50-8	COPPER, TOTAL	24.2		E	MS	5	0.32	0.075	0.22
7439-92-1	LEAD, TOTAL	19.3		NA	MS	5	0.11	0.0075	0.054
7440-66-6	ZINC, TOTAL	66.4		E	MS	5	1.1	0.14	0.86

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 85.8 **Lab Sample ID:** SN5717-012

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.447			MS	5	0.11	0.021	0.053
7440-50-8	COPPER, TOTAL	29.4			MS	5	0.32	0.075	0.21
7439-92-1	LEAD, TOTAL	34.2			MS	5	0.11	0.0075	0.053
7440-66-6	ZINC, TOTAL	78.4			MS	5	1.1	0.14	0.86

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DB01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 80.9 **Lab Sample ID:** SN5717-013

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	1.00			MS	5	0.12	0.024	0.061
7440-50-8	COPPER, TOTAL	86.8			MS	5	0.36	0.085	0.24
7439-92-1	LEAD, TOTAL	393			MS	5	0.12	0.0085	0.061
7440-66-6	ZINC, TOTAL	110			MS	5	1.2	0.16	0.97

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 88.1 **Lab Sample ID:** SN5717-014

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.11	0.023	0.057
7440-50-8	COPPER, TOTAL	15.8			MS	5	0.34	0.079	0.23
7439-92-1	LEAD, TOTAL	22.1		B	MS	5	0.11	0.0079	0.057
7440-66-6	ZINC, TOTAL	55.8			MS	5	1.1	0.15	0.91

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA02B

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.1 **Lab Sample ID:** SN5717-015

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.11			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	19.6			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	24.6		B	MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	58.1			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DB03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 89.1 **Lab Sample ID:** SN5717-017

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.096	J		MS	5	0.11	0.022	0.056
7440-50-8	COPPER, TOTAL	28.8			MS	5	0.34	0.079	0.22
7439-92-1	LEAD, TOTAL	17.1			MS	5	0.11	0.0079	0.056
7440-66-6	ZINC, TOTAL	82.8			MS	5	1.1	0.15	0.90

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.236		N*	MS	5	0.097	0.019	0.048
7440-50-8	COPPER, TOTAL	15.2			MS	5	0.29	0.068	0.19
7439-92-1	LEAD, TOTAL	90.7		NA	MS	5	0.097	0.0068	0.048
7440-66-6	ZINC, TOTAL	62.6		N	MS	5	0.97	0.13	0.78

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03EQB

Matrix: WATER **SDG Name:** SN5717

Percent Solids: 0.00 **Lab Sample ID:** SN5717-020

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.11	J		MS	5	1.0	0.055	0.50
7440-50-8	COPPER, TOTAL	2.36	J	B	MS	5	3.0	0.19	2.0
7439-92-1	LEAD, TOTAL	3.86			MS	5	1.0	0.075	0.50
7440-66-6	ZINC, TOTAL	6.7	J		MS	5	10	3.9	8.0

Comments:

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG20A Jul 20, 2020 15:26

Analyte	True	Found	%R (1)
ALUMINUM	400.0	376.75	94.2
ANTIMONY	20.0	19.98	99.9
CALCIUM	4000.0	4101.19	102.5
COPPER	20.0	20.39	102.0
IRON	4000.0	4114.77	102.9
LEAD	20.0	19.81	99.0
MAGNESIUM	4000.0	3995.85	99.9
MOLYBDENUM	40.0	40.22	100.6
POTASSIUM	4000.0	3958.32	99.0
SODIUM	4000.0	4049.95	101.2
ZINC	20.0	20.83	104.1

SAMPLE: CCV

File: LNG20A Jul 20, 2020 15:53

Analyte	True	Found	%R (1)
ALUMINUM	500.0	503.09	100.6
ANTIMONY	25.0	24.36	97.4
CALCIUM	5000.0	5025.17	100.5
COPPER	25.0	25.64	102.6
IRON	5000.0	5028.96	100.6
LEAD	25.0	23.88	95.5
MAGNESIUM	5000.0	4937.73	98.8
MOLYBDENUM	25.0	26.26	105.0
POTASSIUM	5000.0	4973.94	99.5
SODIUM	5000.0	5143.05	102.9
ZINC	25.0	25.31	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 16:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.78	97.6
ANTIMONY	25.0	25.17	100.7
CALCIUM	5000.0	5051.81	101.0
COPPER	25.0	24.92	99.7
IRON	5000.0	5055.77	101.1
LEAD	25.0	24.94	99.8
MAGNESIUM	5000.0	4918.41	98.4
MOLYBDENUM	25.0	24.24	97.0
POTASSIUM	5000.0	4912.23	98.2
SODIUM	5000.0	5058.62	101.2
ZINC	25.0	24.97	99.9

SAMPLE: CCV

File: LNG20A Jul 20, 2020 16:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.93	96.8
ANTIMONY	25.0	24.41	97.6
CALCIUM	5000.0	5057.67	101.2
COPPER	25.0	24.99	100.0
IRON	5000.0	5049.95	101.0
LEAD	25.0	24.43	97.7
MAGNESIUM	5000.0	5015.84	100.3
MOLYBDENUM	25.0	24.60	98.4
POTASSIUM	5000.0	4936.32	98.7
SODIUM	5000.0	5271.38	105.4
ZINC	25.0	24.98	99.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 17:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.74	97.5
ANTIMONY	25.0	24.42	97.7
CALCIUM	5000.0	5280.37	105.6
COPPER	25.0	24.90	99.6
IRON	5000.0	5248.99	105.0
LEAD	25.0	24.03	96.1
MAGNESIUM	5000.0	4989.23	99.8
MOLYBDENUM	25.0	23.89	95.6
POTASSIUM	5000.0	4925.88	98.5
SODIUM	5000.0	5223.89	104.5
ZINC	25.0	24.97	99.9

SAMPLE: CCV

File: LNG20A Jul 20, 2020 17:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	491.06	98.2
ANTIMONY	25.0	24.09	96.4
CALCIUM	5000.0	5062.62	101.3
COPPER	25.0	25.16	100.6
IRON	5000.0	5085.34	101.7
LEAD	25.0	24.19	96.8
MAGNESIUM	5000.0	5013.75	100.3
MOLYBDENUM	25.0	24.54	98.2
POTASSIUM	5000.0	4947.36	98.9
SODIUM	5000.0	5202.91	104.1
ZINC	25.0	24.75	99.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 18:20

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.76	94.2
ANTIMONY	25.0	24.30	97.2
CALCIUM	5000.0	4997.76	100.0
COPPER	25.0	24.87	99.5
IRON	5000.0	4878.52	97.6
LEAD	25.0	24.68	98.7
MAGNESIUM	5000.0	4977.03	99.5
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4952.96	99.1
SODIUM	5000.0	5079.57	101.6
ZINC	25.0	24.52	98.1

SAMPLE: CCV

File: LNG20A Jul 20, 2020 18:52

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.02	95.2
ANTIMONY	25.0	24.21	96.8
CALCIUM	5000.0	5078.85	101.6
COPPER	25.0	25.12	100.5
IRON	5000.0	5069.08	101.4
LEAD	25.0	25.56	102.2
MAGNESIUM	5000.0	4845.59	96.9
MOLYBDENUM	25.0	24.27	97.1
POTASSIUM	5000.0	4864.56	97.3
SODIUM	5000.0	4987.38	99.7
ZINC	25.0	25.24	101.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 19:24

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.53	94.3
ANTIMONY	25.0	23.54	94.2
CALCIUM	5000.0	4946.52	98.9
COPPER	25.0	24.39	97.6
IRON	5000.0	4875.73	97.5
LEAD	25.0	23.89	95.6
MAGNESIUM	5000.0	4851.30	97.0
MOLYBDENUM	25.0	24.43	97.7
POTASSIUM	5000.0	4884.14	97.7
SODIUM	5000.0	4975.93	99.5
ZINC	25.0	23.76	95.0

SAMPLE: CCV

File: LNG20A Jul 20, 2020 19:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	460.31	92.1
ANTIMONY	25.0	23.55	94.2
CALCIUM	5000.0	5050.18	101.0
COPPER	25.0	24.26	97.0
IRON	5000.0	4875.39	97.5
LEAD	25.0	23.78	95.1
MAGNESIUM	5000.0	4832.22	96.6
MOLYBDENUM	25.0	24.96	99.8
POTASSIUM	5000.0	4862.93	97.3
SODIUM	5000.0	4992.71	99.9
ZINC	25.0	24.69	98.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 20:29

Analyte	True	Found	%R (1)
ALUMINUM	500.0	469.00	93.8
ANTIMONY	25.0	22.93	91.7
CALCIUM	5000.0	4963.54	99.3
COPPER	25.0	24.62	98.5
IRON	5000.0	4867.97	97.4
LEAD	25.0	23.51	94.0
MAGNESIUM	5000.0	4852.84	97.1
MOLYBDENUM	25.0	24.36	97.4
POTASSIUM	5000.0	4886.34	97.7
SODIUM	5000.0	4981.52	99.6
ZINC	25.0	24.32	97.3

SAMPLE: CCV

File: LNG20A Jul 20, 2020 21:01

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.81	96.6
ANTIMONY	25.0	24.61	98.4
CALCIUM	5000.0	4932.76	98.7
COPPER	25.0	25.18	100.7
IRON	5000.0	4962.96	99.3
LEAD	25.0	24.66	98.6
MAGNESIUM	5000.0	4848.26	97.0
MOLYBDENUM	25.0	24.92	99.7
POTASSIUM	5000.0	4940.49	98.8
SODIUM	5000.0	4937.95	98.8
ZINC	25.0	24.22	96.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 21:33

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.75	95.2
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4953.04	99.1
COPPER	25.0	24.65	98.6
IRON	5000.0	4852.87	97.1
LEAD	25.0	24.02	96.1
MAGNESIUM	5000.0	4847.74	97.0
MOLYBDENUM	25.0	25.05	100.2
POTASSIUM	5000.0	4924.20	98.5
SODIUM	5000.0	5004.11	100.1
ZINC	25.0	24.95	99.8

SAMPLE: CCV

File: LNG20A Jul 20, 2020 22:05

Analyte	True	Found	%R (1)
ALUMINUM	500.0	456.86	91.4
ANTIMONY	25.0	24.10	96.4
CALCIUM	5000.0	4915.75	98.3
COPPER	25.0	24.20	96.8
IRON	5000.0	4844.15	96.9
LEAD	25.0	24.51	98.0
MAGNESIUM	5000.0	4751.98	95.0
MOLYBDENUM	25.0	24.18	96.7
POTASSIUM	5000.0	4788.79	95.8
SODIUM	5000.0	4867.82	97.4
ZINC	25.0	23.20	92.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 22:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	462.70	92.5
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4935.06	98.7
COPPER	25.0	25.06	100.2
IRON	5000.0	4860.18	97.2
LEAD	25.0	23.95	95.8
MAGNESIUM	5000.0	4871.27	97.4
MOLYBDENUM	25.0	24.95	99.8
POTASSIUM	5000.0	4913.58	98.3
SODIUM	5000.0	4990.53	99.8
ZINC	25.0	23.76	95.0

SAMPLE: CCV

File: LNG20A Jul 20, 2020 23:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.77	93.4
ANTIMONY	25.0	22.80	91.2
CALCIUM	5000.0	4851.47	97.0
COPPER	25.0	24.42	97.7
IRON	5000.0	4754.04	95.1
LEAD	25.0	22.80	91.2
MAGNESIUM	5000.0	4805.39	96.1
MOLYBDENUM	25.0	25.67	102.7
POTASSIUM	5000.0	4909.55	98.2
SODIUM	5000.0	4956.70	99.1
ZINC	25.0	23.98	95.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 23:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	474.61	94.9
ANTIMONY	25.0	23.37	93.5
CALCIUM	5000.0	4935.96	98.7
COPPER	25.0	24.52	98.1
IRON	5000.0	4862.67	97.3
LEAD	25.0	23.33	93.3
MAGNESIUM	5000.0	4854.70	97.1
MOLYBDENUM	25.0	24.31	97.2
POTASSIUM	5000.0	4926.40	98.5
SODIUM	5000.0	4986.80	99.7
ZINC	25.0	24.35	97.4

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.22	94.6
ANTIMONY	25.0	23.08	92.3
CALCIUM	5000.0	4968.01	99.4
COPPER	25.0	23.93	95.7
IRON	5000.0	4811.39	96.2
LEAD	25.0	23.74	95.0
MAGNESIUM	5000.0	4720.65	94.4
MOLYBDENUM	25.0	23.90	95.6
POTASSIUM	5000.0	4788.58	95.8
SODIUM	5000.0	4804.54	96.1
ZINC	25.0	23.77	95.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	465.80	93.2
ANTIMONY	25.0	23.14	92.6
CALCIUM	5000.0	4952.65	99.1
COPPER	25.0	24.39	97.6
IRON	5000.0	4819.88	96.4
LEAD	25.0	23.43	93.7
MAGNESIUM	5000.0	4735.11	94.7
MOLYBDENUM	25.0	24.45	97.8
POTASSIUM	5000.0	4897.91	98.0
SODIUM	5000.0	4862.90	97.3
ZINC	25.0	23.97	95.9

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	455.79	91.2
ANTIMONY	25.0	25.09	100.4
CALCIUM	5000.0	4953.93	99.1
COPPER	25.0	24.40	97.6
IRON	5000.0	4931.79	98.6
LEAD	25.0	24.37	97.5
MAGNESIUM	5000.0	4648.76	93.0
MOLYBDENUM	25.0	23.93	95.7
POTASSIUM	5000.0	4854.55	97.1
SODIUM	5000.0	4745.34	94.9
ZINC	25.0	24.26	97.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG22A Jul 22, 2020 13:37

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.88	95.5
ANTIMONY	20.0	20.02	100.1
CALCIUM	4000.0	4031.49	100.8
COPPER	20.0	20.39	102.0
IRON	4000.0	4037.34	100.9
LEAD	20.0	20.21	101.1
MAGNESIUM	4000.0	4044.93	101.1
MOLYBDENUM	40.0	39.62	99.0
POTASSIUM	4000.0	4032.27	100.8
SODIUM	4000.0	4144.42	103.6
ZINC	20.0	20.60	103.0

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.16	96.2
ANTIMONY	25.0	23.72	94.9
CALCIUM	5000.0	4738.81	94.8
COPPER	25.0	24.99	100.0
IRON	5000.0	4785.07	95.7
LEAD	25.0	23.76	95.0
MAGNESIUM	5000.0	4948.42	99.0
MOLYBDENUM	25.0	24.84	99.4
POTASSIUM	5000.0	4933.72	98.7
SODIUM	5000.0	5108.90	102.2
ZINC	25.0	24.97	99.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:15

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.50	95.7
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4834.58	96.7
COPPER	25.0	25.09	100.4
IRON	5000.0	4841.43	96.8
LEAD	25.0	23.32	93.3
MAGNESIUM	5000.0	4948.20	99.0
MOLYBDENUM	25.0	24.52	98.1
POTASSIUM	5000.0	4955.62	99.1
SODIUM	5000.0	5085.75	101.7
ZINC	25.0	25.21	100.8

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:33

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.94	96.2
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4930.09	98.6
COPPER	25.0	25.15	100.6
IRON	5000.0	4983.58	99.7
LEAD	25.0	23.44	93.8
MAGNESIUM	5000.0	4906.32	98.1
MOLYBDENUM	25.0	24.28	97.1
POTASSIUM	5000.0	4945.87	98.9
SODIUM	5000.0	5046.64	100.9
ZINC	25.0	25.13	100.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG24A Jul 24, 2020 17:19

Analyte	True	Found	%R (1)
ALUMINUM	400.0	391.94	98.0
ANTIMONY	20.0	19.69	98.5
CALCIUM	4000.0	3973.95	99.3
IRON	4000.0	3948.94	98.7
LEAD	20.0	19.83	99.1
MAGNESIUM	4000.0	4025.92	100.6
MOLYBDENUM	40.0	40.06	100.2
POTASSIUM	4000.0	4014.47	100.4
SODIUM	4000.0	4100.39	102.5

SAMPLE: CCV

File: LNG24A Jul 24, 2020 17:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.29	97.1
ANTIMONY	25.0	24.33	97.3
CALCIUM	5000.0	4787.56	95.8
IRON	5000.0	4840.93	96.8
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4793.15	95.9
MOLYBDENUM	25.0	24.88	99.5
POTASSIUM	5000.0	4782.74	95.7
SODIUM	5000.0	4958.05	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.70	95.9
ANTIMONY	25.0	23.34	93.4
CALCIUM	5000.0	4880.97	97.6
IRON	5000.0	4863.52	97.3
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4976.93	99.5
MOLYBDENUM	25.0	25.20	100.8
POTASSIUM	5000.0	4813.51	96.3
SODIUM	5000.0	5152.45	103.0

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.85	96.6
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4826.83	96.5
IRON	5000.0	4765.73	95.3
LEAD	25.0	23.77	95.1
MAGNESIUM	5000.0	4900.34	98.0
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4796.74	95.9
SODIUM	5000.0	5095.64	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.79	94.2
ANTIMONY	25.0	23.20	92.8
CALCIUM	5000.0	4835.68	96.7
IRON	5000.0	4804.85	96.1
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4970.75	99.4
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4840.66	96.8
SODIUM	5000.0	5169.95	103.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.02	94.6
ANTIMONY	25.0	23.73	94.9
CALCIUM	5000.0	4870.24	97.4
IRON	5000.0	4816.00	96.3
LEAD	25.0	24.93	99.7
MAGNESIUM	5000.0	5018.00	100.4
MOLYBDENUM	25.0	25.48	101.9
POTASSIUM	5000.0	4786.29	95.7
SODIUM	5000.0	5237.15	104.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG27A Jul 27, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.37	92.8
CALCIUM	4000.0	4024.59	100.6
COPPER	20.0	20.22	101.1
IRON	4000.0	4035.38	100.9
MAGNESIUM	4000.0	3955.83	98.9
MOLYBDENUM	40.0	39.82	99.6
POTASSIUM	4000.0	3935.04	98.4
SODIUM	4000.0	4031.58	100.8

SAMPLE: CCV

File: LNG27A Jul 27, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.45	95.7
CALCIUM	5000.0	4897.84	98.0
COPPER	25.0	25.06	100.2
IRON	5000.0	4949.13	99.0
MAGNESIUM	5000.0	4844.99	96.9
MOLYBDENUM	25.0	25.00	100.0
POTASSIUM	5000.0	4849.53	97.0
SODIUM	5000.0	5007.64	100.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.68	93.7
CALCIUM	5000.0	4911.47	98.2
COPPER	25.0	24.77	99.1
IRON	5000.0	4893.39	97.9
MAGNESIUM	5000.0	4923.79	98.5
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	4803.62	96.1
SODIUM	5000.0	5086.07	101.7

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.15	93.2
CALCIUM	5000.0	4947.54	99.0
COPPER	25.0	24.86	99.4
IRON	5000.0	4931.12	98.6
MAGNESIUM	5000.0	4938.59	98.8
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4770.07	95.4
SODIUM	5000.0	5097.36	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.32	93.3
CALCIUM	5000.0	4903.88	98.1
COPPER	25.0	24.84	99.4
IRON	5000.0	4828.46	96.6
MAGNESIUM	5000.0	5000.00	100.0
MOLYBDENUM	25.0	24.94	99.8
POTASSIUM	5000.0	4801.27	96.0
SODIUM	5000.0	5288.90	105.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH04A Aug 04, 2020 14:43

Analyte	True	Found	%R (1)
ALUMINUM	400.0	373.02	93.3
CALCIUM	4000.0	3927.75	98.2
IRON	4000.0	3950.74	98.8
MAGNESIUM	4000.0	3933.84	98.3
MOLYBDENUM	40.0	40.32	100.8
POTASSIUM	4000.0	3913.14	97.8
SODIUM	4000.0	3928.25	98.2
ZINC	20.0	20.52	102.6

SAMPLE: CCV

File: LNH04A Aug 04, 2020 15:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.80	94.2
CALCIUM	5000.0	4727.91	94.6
IRON	5000.0	4823.39	96.5
MAGNESIUM	5000.0	4962.06	99.2
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4903.58	98.1
SODIUM	5000.0	5065.87	101.3
ZINC	25.0	25.20	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH04A Aug 04, 2020 17:38

Analyte	True	Found	%R (1)
ALUMINUM	500.0	472.80	94.6
CALCIUM	5000.0	4777.77	95.6
IRON	5000.0	4810.93	96.2
MAGNESIUM	5000.0	4919.33	98.4
MOLYBDENUM	25.0	24.93	99.7
POTASSIUM	5000.0	4781.17	95.6
SODIUM	5000.0	4936.34	98.7
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNH04A Aug 04, 2020 18:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.84	96.2
CALCIUM	5000.0	4831.78	96.6
IRON	5000.0	4866.36	97.3
MAGNESIUM	5000.0	5027.15	100.5
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4857.49	97.1
SODIUM	5000.0	5122.39	102.4
ZINC	25.0	25.15	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH05A Aug 05, 2020 16:06

Analyte	True	Found	%R (1)
ALUMINUM	400.0	368.02	92.0
CALCIUM	4000.0	4087.97	102.2
COPPER	20.0	20.37	101.8
IRON	4000.0	4111.52	102.8
LEAD	20.0	20.24	101.2
MAGNESIUM	4000.0	3965.12	99.1
MOLYBDENUM	40.0	40.44	101.1
POTASSIUM	4000.0	3933.99	98.3
SODIUM	4000.0	3977.04	99.4
ZINC	20.0	19.86	99.3

SAMPLE: CCV

File: LNH05A Aug 05, 2020 16:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.76	96.2
CALCIUM	5000.0	5049.24	101.0
COPPER	25.0	26.22	104.9
IRON	5000.0	5122.91	102.5
LEAD	25.0	25.34	101.4
MAGNESIUM	5000.0	5073.26	101.5
MOLYBDENUM	25.0	25.32	101.3
POTASSIUM	5000.0	5044.24	100.9
SODIUM	5000.0	5165.67	103.3
ZINC	25.0	25.91	103.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH05A Aug 05, 2020 17:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.18	95.2
CALCIUM	5000.0	5053.26	101.1
COPPER	25.0	25.79	103.2
IRON	5000.0	5114.94	102.3
LEAD	25.0	26.15	104.6
MAGNESIUM	5000.0	5035.27	100.7
MOLYBDENUM	25.0	24.95	99.8
POTASSIUM	5000.0	4962.71	99.3
SODIUM	5000.0	5135.79	102.7
ZINC	25.0	25.39	101.6

SAMPLE: CCV

File: LNH05A Aug 05, 2020 17:41

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.06	96.8
CALCIUM	5000.0	5058.80	101.2
COPPER	25.0	25.54	102.2
IRON	5000.0	5060.84	101.2
LEAD	25.0	25.89	103.6
MAGNESIUM	5000.0	5031.83	100.6
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4970.06	99.4
SODIUM	5000.0	5094.29	101.9
ZINC	25.0	25.19	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH06A Aug 06, 2020 15:31

Analyte	True	Found	%R (1)
ALUMINUM	400.0	376.89	94.2
ANTIMONY	20.0	20.21	101.1
CALCIUM	4000.0	3937.52	98.4
COPPER	20.0	20.44	102.2
IRON	4000.0	3895.50	97.4
LEAD	20.0	20.07	100.4
MAGNESIUM	4000.0	3982.00	99.6
MOLYBDENUM	40.0	40.36	100.9
POTASSIUM	4000.0	3973.61	99.3
SODIUM	4000.0	3968.72	99.2

SAMPLE: CCV

File: LNH06A Aug 06, 2020 15:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	499.94	100.0
ANTIMONY	25.0	25.83	103.3
CALCIUM	5000.0	5008.51	100.2
COPPER	25.0	25.95	103.8
IRON	5000.0	5023.16	100.5
LEAD	25.0	25.18	100.7
MAGNESIUM	5000.0	5074.43	101.5
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	5051.18	101.0
SODIUM	5000.0	5144.62	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH06A Aug 06, 2020 16:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.86	98.2
ANTIMONY	25.0	25.04	100.2
CALCIUM	5000.0	4821.79	96.4
COPPER	25.0	25.15	100.6
IRON	5000.0	4831.51	96.6
LEAD	25.0	24.84	99.4
MAGNESIUM	5000.0	4943.12	98.9
MOLYBDENUM	25.0	24.80	99.2
POTASSIUM	5000.0	4922.09	98.4
SODIUM	5000.0	4985.76	99.7

SAMPLE: CCV

File: LNH06A Aug 06, 2020 16:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	497.32	99.5
ANTIMONY	25.0	24.92	99.7
CALCIUM	5000.0	4872.62	97.5
COPPER	25.0	25.54	102.2
IRON	5000.0	4849.28	97.0
LEAD	25.0	24.57	98.3
MAGNESIUM	5000.0	5048.58	101.0
MOLYBDENUM	25.0	25.11	100.4
POTASSIUM	5000.0	5011.60	100.2
SODIUM	5000.0	5092.70	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH06A Aug 06, 2020 17:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	495.13	99.0
ANTIMONY	25.0	25.99	104.0
CALCIUM	5000.0	4853.52	97.1
COPPER	25.0	25.18	100.7
IRON	5000.0	4851.61	97.0
LEAD	25.0	25.59	102.4
MAGNESIUM	5000.0	4939.76	98.8
MOLYBDENUM	25.0	24.78	99.1
POTASSIUM	5000.0	4917.60	98.4
SODIUM	5000.0	4950.98	99.0

SAMPLE: CCV

File: LNH06A Aug 06, 2020 18:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.94	97.2
ANTIMONY	25.0	24.85	99.4
CALCIUM	5000.0	4899.44	98.0
COPPER	25.0	25.26	101.0
IRON	5000.0	4831.74	96.6
LEAD	25.0	24.48	97.9
MAGNESIUM	5000.0	4915.94	98.3
MOLYBDENUM	25.0	24.80	99.2
POTASSIUM	5000.0	4924.85	98.5
SODIUM	5000.0	4926.22	98.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH12B Aug 12, 2020 15:16

Analyte	True	Found	%R (1)
ALUMINUM	400.0	378.32	94.6
CALCIUM	4000.0	4019.70	100.5
IRON	4000.0	3976.06	99.4
MAGNESIUM	4000.0	3982.14	99.6
MOLYBDENUM	40.0	39.41	98.5
POTASSIUM	4000.0	3913.96	97.8
SODIUM	4000.0	3945.32	98.6
ZINC	20.0	19.53	97.7

SAMPLE: CCV

File: LNH12B Aug 12, 2020 15:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	501.52	100.3
CALCIUM	5000.0	4904.97	98.1
IRON	5000.0	4875.33	97.5
MAGNESIUM	5000.0	5050.67	101.0
MOLYBDENUM	25.0	25.49	102.0
POTASSIUM	5000.0	5047.46	100.9
SODIUM	5000.0	5042.48	100.8
ZINC	25.0	25.28	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH12B Aug 12, 2020 16:12

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.74	97.3
CALCIUM	5000.0	4976.11	99.5
IRON	5000.0	4892.27	97.8
MAGNESIUM	5000.0	4891.43	97.8
MOLYBDENUM	25.0	24.23	96.9
POTASSIUM	5000.0	4871.85	97.4
SODIUM	5000.0	4859.34	97.2
ZINC	25.0	24.05	96.2

SAMPLE: CCV

File: LNH12B Aug 12, 2020 16:47

Analyte	True	Found	%R (1)
ALUMINUM	500.0	504.79	101.0
CALCIUM	5000.0	4973.87	99.5
IRON	5000.0	4920.01	98.4
MAGNESIUM	5000.0	5101.02	102.0
MOLYBDENUM	25.0	24.90	99.6
POTASSIUM	5000.0	5013.16	100.3
SODIUM	5000.0	5047.96	101.0
ZINC	25.0	24.80	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH12B Aug 12, 2020 17:18

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.84	98.6
CALCIUM	5000.0	4985.05	99.7
IRON	5000.0	4935.37	98.7
MAGNESIUM	5000.0	4941.32	98.8
MOLYBDENUM	25.0	24.21	96.8
POTASSIUM	5000.0	4886.24	97.7
SODIUM	5000.0	4889.68	97.8
ZINC	25.0	24.48	97.9

SAMPLE: CCV

File: LNH12B Aug 12, 2020 17:49

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.20	97.4
CALCIUM	5000.0	4947.11	98.9
IRON	5000.0	4917.66	98.4
MAGNESIUM	5000.0	4892.22	97.8
MOLYBDENUM	25.0	24.06	96.2
POTASSIUM	5000.0	4834.10	96.7
SODIUM	5000.0	4805.45	96.1
ZINC	25.0	24.16	96.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG20A Jul 20, 2020 15:31

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	17.39	87.0
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	20.28	101.4
COPPER	0.6	0.58	96.7
IRON	20.0	21.27	106.3
LEAD	0.2	0.21	105.0
MAGNESIUM	20.0	20.61	103.1
MOLYBDENUM	1.0	1.00	100.0
POTASSIUM	200.0	204.44	102.2
SODIUM	200.0	205.47	102.7
ZINC	2.0	2.14	107.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG22A Jul 22, 2020 13:42

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.99	94.9
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	22.59	112.9
COPPER	0.6	0.64	106.7
IRON	20.0	21.76	108.8
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	19.97	99.8
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	213.75	106.9
SODIUM	200.0	218.75	109.4
ZINC	2.0	2.10	105.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG24A Jul 24, 2020 17:24

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.94	109.7
IRON	20.0	23.11	115.6
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	19.22	96.1
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.16	104.6
SODIUM	200.0	228.92	114.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG27A Jul 27, 2020 16:32

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.77	93.8
CALCIUM	20.0	22.19	111.0
COPPER	0.6	0.71	118.3
IRON	20.0	21.68	108.4
MAGNESIUM	20.0	20.50	102.5
MOLYBDENUM	1.0	1.06	106.0
POTASSIUM	200.0	201.86	100.9
SODIUM	200.0	218.83	109.4

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH04A Aug 04, 2020 14:49

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.59	93.0
CALCIUM	20.0	19.77	98.8
IRON	20.0	21.55	107.8
MAGNESIUM	20.0	21.01	105.1
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	204.83	102.4
SODIUM	200.0	208.69	104.3
ZINC	2.0	1.97	98.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH05A Aug 05, 2020 16:12

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	17.33	86.6
CALCIUM	20.0	16.65	83.2
COPPER	0.6	0.60	100.0
IRON	20.0	22.17	110.9
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	22.84	114.2
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	205.40	102.7
SODIUM	200.0	208.91	104.5
ZINC	2.0	1.62	81.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH06A Aug 06, 2020 15:36

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.02	100.1
ANTIMONY	0.2	0.23	115.0
CALCIUM	20.0	21.07	105.4
COPPER	0.6	0.68	113.3
IRON	20.0	21.68	108.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	23.53	117.7
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.78	104.4
SODIUM	200.0	209.93	105.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH12B Aug 12, 2020 15:21

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
CALCIUM	20.0	20.25	101.3
IRON	20.0	21.01	105.1
MAGNESIUM	20.0	21.66	108.3
MOLYBDENUM	1.0	0.99	99.0
POTASSIUM	200.0	210.44	105.2
SODIUM	200.0	214.53	107.3
ZINC	2.0	2.06	103.0

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG20A Jul 20, 2020 15:28

Analyte	Result	C
ALUMINUM	-1.074	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.118	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 20, 2020 15:56

Analyte	Result	C
ALUMINUM	9.152	J
ANTIMONY	0.061	U
CALCIUM	9.254	J
COPPER	0.425	B
IRON	12.456	B
LEAD	0.034	J
MAGNESIUM	11.730	B
MOLYBDENUM	0.456	J
POTASSIUM	25.258	J
SODIUM	71.078	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 20, 2020 16:12

Analyte	Result	C
ALUMINUM	-0.750	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	1.723	J
MOLYBDENUM	0.125	J
POTASSIUM	15.269	J
SODIUM	23.891	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 16:46

Analyte	Result	C
ALUMINUM	-1.409	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	10.239	B
MOLYBDENUM	0.020	U
POTASSIUM	18.973	J
SODIUM	129.162	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 17:18

Analyte	Result	C
ALUMINUM	-1.228	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.129	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	6.836	J
MOLYBDENUM	0.020	U
POTASSIUM	19.023	J
SODIUM	135.466	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 17:51

Analyte	Result	C
ALUMINUM	1.715	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.125	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	-1.443	U
MOLYBDENUM	-0.022	U
POTASSIUM	16.318	J
SODIUM	47.861	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 18:23

Analyte	Result	C
ALUMINUM	1.836	J
ANTIMONY	0.061	U
CALCIUM	10.653	B
COPPER	0.087	U
IRON	13.534	B
LEAD	0.050	J
MAGNESIUM	-4.459	U
MOLYBDENUM	0.023	J
POTASSIUM	16.119	J
SODIUM	51.551	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 18:55

Analyte	Result	C
ALUMINUM	-0.782	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	1.559	B
MAGNESIUM	-1.755	U
MOLYBDENUM	0.020	U
POTASSIUM	17.187	J
SODIUM	45.654	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 19:27

Analyte	Result	C
ALUMINUM	-1.251	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.351	B
MAGNESIUM	-2.479	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	34.825	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 19:59

Analyte	Result	C
ALUMINUM	-1.241	U
ANTIMONY	0.061	U
CALCIUM	6.858	J
COPPER	0.087	U
IRON	6.400	U
LEAD	0.170	B
MAGNESIUM	-2.127	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	41.748	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 20:31

Analyte	Result	C
ALUMINUM	-1.613	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.142	B
MAGNESIUM	-1.870	U
MOLYBDENUM	-0.023	U
POTASSIUM	17.718	J
SODIUM	21.541	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 21:04

Analyte	Result	C
ALUMINUM	1.619	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.092	U
IRON	20.505	B
LEAD	0.122	B
MAGNESIUM	-6.185	U
MOLYBDENUM	0.020	U
POTASSIUM	14.455	J
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 21:35

Analyte	Result	C
ALUMINUM	-1.333	U
ANTIMONY	0.061	U
CALCIUM	7.240	J
COPPER	-0.107	U
IRON	6.400	U
LEAD	0.075	J
MAGNESIUM	-1.810	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	7.979	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 22:07

Analyte	Result	C
ALUMINUM	-0.936	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.102	U
IRON	6.400	U
LEAD	0.064	J
MAGNESIUM	-1.731	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	14.402	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 22:40

Analyte	Result	C
ALUMINUM	-0.896	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.108	U
IRON	6.400	U
LEAD	0.050	J
MAGNESIUM	-1.348	U
MOLYBDENUM	-0.055	U
POTASSIUM	12.000	U
SODIUM	21.741	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 23:11

Analyte	Result	C
ALUMINUM	-1.466	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.065	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.405	J
POTASSIUM	28.138	J
SODIUM	63.793	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 23:40

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.104	U
IRON	6.400	U
LEAD	0.081	J
MAGNESIUM	-1.160	U
MOLYBDENUM	0.020	U
POTASSIUM	26.254	J
SODIUM	43.230	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 21, 2020 00:11

Analyte	Result	C
ALUMINUM	3.449	J
ANTIMONY	0.061	U
CALCIUM	11.540	B
COPPER	0.087	U
IRON	12.450	B
LEAD	0.172	B
MAGNESIUM	0.796	J
MOLYBDENUM	-0.038	U
POTASSIUM	22.952	J
SODIUM	13.235	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG20A Jul 21, 2020 00:16

Analyte	Result	C
ALUMINUM	2.343	J
ANTIMONY	0.061	U
CALCIUM	7.049	J
COPPER	-0.094	U
IRON	6.400	U
LEAD	0.106	B
MAGNESIUM	1.699	J
MOLYBDENUM	0.020	U
POTASSIUM	19.842	J
SODIUM	13.687	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 21, 2020 00:48

Analyte	Result	C
ALUMINUM	0.437	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.109	U
IRON	6.400	U
LEAD	0.120	B
MAGNESIUM	-1.020	U
MOLYBDENUM	0.020	U
POTASSIUM	24.357	J
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG22A Jul 22, 2020 13:40

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.039	J
MAGNESIUM	-1.628	U
MOLYBDENUM	0.153	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:13

Analyte	Result	C
ALUMINUM	17.806	B
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.185	J
IRON	6.788	J
LEAD	0.034	J
MAGNESIUM	21.388	B
MOLYBDENUM	0.524	B
POTASSIUM	29.833	J
SODIUM	69.891	J
ZINC	0.243	J

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:18

Analyte	Result	C
ALUMINUM	9.005	J
ANTIMONY	0.070	J
CALCIUM	14.926	B
COPPER	0.108	J
IRON	15.712	B
LEAD	0.083	J
MAGNESIUM	15.430	B
MOLYBDENUM	0.267	J
POTASSIUM	18.915	J
SODIUM	48.372	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:36

Analyte	Result	C
ALUMINUM	0.601	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	14.616	B
LEAD	0.024	J
MAGNESIUM	4.380	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	14.813	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG24A Jul 24, 2020 17:21

Analyte	Result	C
ALUMINUM	0.479	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.210	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 17:45

Analyte	Result	C
ALUMINUM	3.295	J
ANTIMONY	0.070	J
CALCIUM	6.800	U
IRON	6.436	J
LEAD	0.113	B
MAGNESIUM	1.431	J
MOLYBDENUM	0.158	J
POTASSIUM	12.000	U
SODIUM	24.662	J

SAMPLE: CCB

File: LNG24A Jul 24, 2020 18:16

Analyte	Result	C
ALUMINUM	0.368	J
ANTIMONY	0.061	U
CALCIUM	8.450	J
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-1.125	U
MOLYBDENUM	0.088	J
POTASSIUM	12.000	U
SODIUM	39.932	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 18:47

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-2.104	U
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:19

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	-2.495	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-10.409	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:51

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-0.804	U
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	51.319	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG27A Jul 27, 2020 16:30

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.196	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 16:54

Analyte	Result	C
ALUMINUM	1.453	J
CALCIUM	6.800	U
COPPER	0.158	J
IRON	6.400	U
MAGNESIUM	0.595	J
MOLYBDENUM	0.147	J
POTASSIUM	12.000	U
SODIUM	18.722	J

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:26

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	2.573	J
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:57

Analyte	Result	C
ALUMINUM	-0.586	U
CALCIUM	7.385	J
COPPER	0.088	J
IRON	6.400	U
MAGNESIUM	1.243	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	27.633	J

SAMPLE: CCB

File: LNG27A Jul 27, 2020 18:29

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	3.305	J
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	97.453	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH04A Aug 04, 2020 14:46

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.904	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 15:10

Analyte	Result	C
ALUMINUM	1.292	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.691	J
MOLYBDENUM	0.116	J
POTASSIUM	12.000	U
SODIUM	7.248	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 17:40

Analyte	Result	C
ALUMINUM	0.897	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.807	J
MOLYBDENUM	0.050	J
POTASSIUM	12.000	U
SODIUM	-11.487	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNH04A Aug 04, 2020 18:13

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.883	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	11.016	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH05A Aug 05, 2020 16:09

Analyte	Result	C
ALUMINUM	-1.378	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.828	J
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	J

SAMPLE: CCB

File: LNH05A Aug 05, 2020 16:33

Analyte	Result	C
ALUMINUM	-0.417	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.033	J
MAGNESIUM	3.089	J
MOLYBDENUM	0.127	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	-0.547	U

SAMPLE: CCB

File: LNH05A Aug 05, 2020 17:11

Analyte	Result	C
ALUMINUM	-0.735	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	2.764	J
MOLYBDENUM	0.054	J
POTASSIUM	12.000	U
SODIUM	-8.492	U
ZINC	-0.544	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNH05A Aug 05, 2020 17:43

Analyte	Result	C
ALUMINUM	-2.306	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	1.220	J
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	32.863	J
ZINC	-0.567	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH06A Aug 06, 2020 15:34

Analyte	Result	C
ALUMINUM	0.519	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	2.632	J
MOLYBDENUM	0.079	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNH06A Aug 06, 2020 15:58

Analyte	Result	C
ALUMINUM	1.985	J
ANTIMONY	0.105	B
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.165	B
MAGNESIUM	2.834	J
MOLYBDENUM	0.129	J
POTASSIUM	12.000	U
SODIUM	12.196	J

SAMPLE: CCB

File: LNH06A Aug 06, 2020 16:30

Analyte	Result	C
ALUMINUM	0.460	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.505	J
MOLYBDENUM	0.052	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNH06A Aug 06, 2020 17:02

Analyte	Result	C
ALUMINUM	0.589	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	0.837	J
MOLYBDENUM	0.041	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNH06A Aug 06, 2020 17:34

Analyte	Result	C
ALUMINUM	1.171	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.027	J
MAGNESIUM	1.092	J
MOLYBDENUM	0.042	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNH06A Aug 06, 2020 18:07

Analyte	Result	C
ALUMINUM	0.982	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.040	J
MAGNESIUM	1.014	J
MOLYBDENUM	0.044	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH12B Aug 12, 2020 15:19

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.100	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH12B Aug 12, 2020 15:43

Analyte	Result	C
ALUMINUM	4.214	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	4.630	J
MOLYBDENUM	0.164	J
POTASSIUM	12.000	U
SODIUM	11.588	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH12B Aug 12, 2020 16:14

Analyte	Result	C
ALUMINUM	1.193	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	1.553	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNH12B Aug 12, 2020 16:49

Analyte	Result	C
ALUMINUM	-0.369	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.037	J
POTASSIUM	12.000	U
SODIUM	-9.867	U
ZINC	0.220	U

SAMPLE: CCB
File: LNH12B Aug 12, 2020 17:20

Analyte	Result	C
ALUMINUM	-0.392	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	-0.352	U
MOLYBDENUM	0.023	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNH12B Aug 12, 2020 17:51

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG16IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG16IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.082	J
LEAD	0.036	J
ZINC	0.40	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG20IMS2

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG20IMS2

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.14	J
LEAD	0.140	B
ZINC	0.44	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNH04IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NH04IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.024	J
ZINC	0.13	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG21IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG21IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ANTIMONY	0.50	U
COPPER	1.7	B
LEAD	0.50	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG29IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ZINC	8.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSAB

File: LNG20A Jul 20, 2020 15:50

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89659.54	89.7
ANTIMONY	20.00	19.38	95.0
CALCIUM	100000.00	98697.43	98.7
COPPER	20.47	19.49	95.0
IRON	100000.00	96847.53	96.8
LEAD	20.13	19.65	100.0
MAGNESIUM	100000.00	93920.45	93.9
MOLYBDENUM	2000.00	1967.70	98.4
POTASSIUM	100000.00	92256.75	92.3
SODIUM	100000.00	93903.37	93.9
ZINC	20.40	18.83	95.0

SAMPLE: ICSA

File: LNG20A Jul 20, 2020 16:01

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91637.36	91.6
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	100004.80	100.0
COPPER	0.26	0.78	•
IRON	100000.00	97507.25	97.5
LEAD	0.13	0.10	
MAGNESIUM	100000.00	96140.78	96.1
MOLYBDENUM	2000.00	1980.68	99.1
POTASSIUM	100000.00	94013.93	94.0
SODIUM	100000.00	95865.06	95.9
ZINC	0.24	0.55	

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG22A Jul 22, 2020 13:45

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92025.10	92.0
ANTIMONY	0.19	0.15	
CALCIUM	100000.00	99865.83	99.9
COPPER	0.26	0.45	
IRON	100000.00	96989.03	97.0
LEAD	0.13	0.09	
MAGNESIUM	100000.00	97235.85	97.2
MOLYBDENUM	2000.00	1979.51	99.0
POTASSIUM	100000.00	95710.14	95.7
SODIUM	100000.00	96772.05	96.8
ZINC	0.24	0.57	

SAMPLE: ICSAB

File: LNG22A Jul 22, 2020 13:48

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89743.61	89.7
ANTIMONY	20.00	18.62	95.0
CALCIUM	100000.00	98416.17	98.4
COPPER	20.47	19.22	95.0
IRON	100000.00	96374.97	96.4
LEAD	20.13	19.82	100.0
MAGNESIUM	100000.00	95357.19	95.4
MOLYBDENUM	2000.00	1991.24	99.6
POTASSIUM	100000.00	93594.03	93.6
SODIUM	100000.00	95153.15	95.2
ZINC	20.40	18.70	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSAB

File: LNG22A Jul 22, 2020 14:04

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90025.53	90.0
ANTIMONY	20.00	18.24	90.0
CALCIUM	100000.00	101379.26	101.4
COPPER	20.47	19.32	95.0
IRON	100000.00	99086.59	99.1
LEAD	20.13	19.07	95.0
MAGNESIUM	100000.00	95589.71	95.6
MOLYBDENUM	2000.00	1996.17	99.8
POTASSIUM	100000.00	93692.87	93.7
SODIUM	100000.00	95287.94	95.3
ZINC	20.40	18.72	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG24A Jul 24, 2020 17:26

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	97196.56	97.2
ANTIMONY	0.19	0.17	
CALCIUM	100000.00	97945.29	97.9
IRON	100000.00	96464.18	96.5
LEAD	0.13	0.09	
MAGNESIUM	100000.00	101202.85	101.2
MOLYBDENUM	2000.00	2114.34	105.7
POTASSIUM	100000.00	97416.54	97.4
SODIUM	100000.00	101176.76	101.2

SAMPLE: ICSAB

File: LNG24A Jul 24, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92943.98	92.9
ANTIMONY	20.00	19.66	100.0
CALCIUM	100000.00	97685.99	97.7
IRON	100000.00	95228.33	95.2
LEAD	20.13	20.51	105.0
MAGNESIUM	100000.00	96860.91	96.9
MOLYBDENUM	2000.00	2054.76	102.8
POTASSIUM	100000.00	93389.44	93.4
SODIUM	100000.00	97298.41	97.3

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG27A Jul 27, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93327.61	93.3
CALCIUM	100000.00	101196.79	101.2
COPPER	0.26	0.55	
IRON	100000.00	98471.88	98.5
MAGNESIUM	100000.00	101869.86	101.9
MOLYBDENUM	2000.00	2077.93	103.9
POTASSIUM	100000.00	96134.05	96.1
SODIUM	100000.00	98444.57	98.4

SAMPLE: ICSAB

File: LNG27A Jul 27, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90492.65	90.5
CALCIUM	100000.00	96094.68	96.1
COPPER	20.47	19.03	95.0
IRON	100000.00	93815.11	93.8
MAGNESIUM	100000.00	99295.07	99.3
MOLYBDENUM	2000.00	2048.57	102.5
POTASSIUM	100000.00	93391.14	93.4
SODIUM	100000.00	96442.34	96.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH04A Aug 04, 2020 14:51

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90063.20	90.1
CALCIUM	100000.00	99196.61	99.2
IRON	100000.00	96110.21	96.1
MAGNESIUM	100000.00	95522.87	95.5
MOLYBDENUM	2000.00	1994.74	99.8
POTASSIUM	100000.00	96822.08	96.8
SODIUM	100000.00	97712.43	97.7
ZINC	0.24	0.53	

SAMPLE: ICSAB

File: LNH04A Aug 04, 2020 14:54

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91061.63	91.1
CALCIUM	100000.00	102667.63	102.7
IRON	100000.00	100851.08	100.9
MAGNESIUM	100000.00	98059.54	98.1
MOLYBDENUM	2000.00	2072.74	103.6
POTASSIUM	100000.00	98832.43	98.8
SODIUM	100000.00	100883.69	100.9
ZINC	20.40	19.65	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH05A Aug 05, 2020 16:14

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90636.38	90.6
CALCIUM	100000.00	102559.25	102.6
COPPER	0.26	0.27	
IRON	100000.00	99704.63	99.7
LEAD	0.13	0.10	
MAGNESIUM	100000.00	96178.73	96.2
MOLYBDENUM	2000.00	2009.47	100.4
POTASSIUM	100000.00	97696.07	97.7
SODIUM	100000.00	98931.48	98.9
ZINC	0.24	-0.10	

SAMPLE: ICSAB

File: LNH05A Aug 05, 2020 16:17

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90998.96	91.0
CALCIUM	100000.00	104747.88	104.7
COPPER	20.47	19.80	100.0
IRON	100000.00	101823.47	101.8
LEAD	20.13	21.50	110.0
MAGNESIUM	100000.00	98641.71	98.6
MOLYBDENUM	2000.00	2102.53	105.2
POTASSIUM	100000.00	99259.27	99.3
SODIUM	100000.00	101614.74	101.6
ZINC	20.40	19.32	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH06A Aug 06, 2020 15:39

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92824.05	92.8
ANTIMONY	0.19	0.15	
CALCIUM	100000.00	98143.41	98.1
COPPER	0.26	0.28	
IRON	100000.00	93801.68	93.8
LEAD	0.13	0.09	
MAGNESIUM	100000.00	98153.88	98.2
MOLYBDENUM	2000.00	2025.44	101.3
POTASSIUM	100000.00	99332.19	99.3
SODIUM	100000.00	99697.00	99.7

SAMPLE: ICSAB

File: LNH06A Aug 06, 2020 15:42

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93532.23	93.5
ANTIMONY	20.00	20.75	105.0
CALCIUM	100000.00	102082.51	102.1
COPPER	20.47	19.44	95.0
IRON	100000.00	98446.73	98.4
LEAD	20.13	21.24	105.0
MAGNESIUM	100000.00	99944.42	99.9
MOLYBDENUM	2000.00	2052.30	102.6
POTASSIUM	100000.00	101945.60	101.9
SODIUM	100000.00	102720.05	102.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH12B Aug 12, 2020 15:24

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	88724.73	88.7
CALCIUM	100000.00	100447.46	100.4
IRON	100000.00	94601.18	94.6
MAGNESIUM	100000.00	94369.89	94.4
MOLYBDENUM	2000.00	1935.58	96.8
POTASSIUM	100000.00	95168.60	95.2
SODIUM	100000.00	95659.34	95.7
ZINC	0.24	0.50	

SAMPLE: ICSAB

File: LNH12B Aug 12, 2020 15:27

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90270.57	90.3
CALCIUM	100000.00	103683.02	103.7
IRON	100000.00	97822.29	97.8
MAGNESIUM	100000.00	97346.02	97.3
MOLYBDENUM	2000.00	2032.21	101.6
POTASSIUM	100000.00	97703.11	97.7
SODIUM	100000.00	98685.69	98.7
ZINC	20.40	19.01	95.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.79		1.14		8.01	8.1	N	72	124	MS
COPPER, TOTAL	43.2		23.3		20.02	99.5		84	119	MS
LEAD, TOTAL	45.6		502		8.01	-5697.9	N	84	118	MS
ZINC, TOTAL	116		75.2		40.05	103.1		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.01		1.14		8.13	10.8	N	72	124	MS
COPPER, TOTAL	40.2		23.3		20.32	83.2	N	84	119	MS
LEAD, TOTAL	51.2		502		8.13	-5544.6	N	84	118	MS
ZINC, TOTAL	112		75.2		40.64	90.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.63		0.15		7.73	19.2	N	72	124	MS
COPPER, TOTAL	38.3		24.4		19.33	72.0	N	84	119	MS
LEAD, TOTAL	43.2		38.0		7.73	66.7	N	84	118	MS
ZINC, TOTAL	98.4		71.8		38.67	68.7	N	82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.92		0.15		7.85	22.5	N	72	124	MS
COPPER, TOTAL	43.2		24.4		19.62	96.0		84	119	MS
LEAD, TOTAL	48.6		38.0		7.85	135.7	N	84	118	MS
ZINC, TOTAL	116		71.8		39.23	114.2		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.08		0.11	J	10.68	27.8	N	72	124	MS
COPPER, TOTAL	49.2		24.2		26.7	93.8		84	119	MS
LEAD, TOTAL	30.2		19.3		10.68	102.4		84	118	MS
ZINC, TOTAL	114		66.4		53.4	89.5		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.06		0.11	J	10.68	27.6	N	72	124	MS
COPPER, TOTAL	51.7		24.2		26.7	102.9		84	119	MS
LEAD, TOTAL	33.3		19.3		10.68	131.0	N	84	118	MS
ZINC, TOTAL	120		66.4		53.4	100.5		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	5.18		0.236		9.97	49.6	N	72	124	MS
COPPER, TOTAL	40.6		15.2		24.92	101.9		84	119	MS
LEAD, TOTAL	89.4		90.7		9.97	-12.5	N	84	118	MS
ZINC, TOTAL	109		62.6		49.84	92.9		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.72		0.236		10.06	34.7	N	72	124	MS
COPPER, TOTAL	37.2		15.2		25.14	87.4		84	119	MS
LEAD, TOTAL	98.6		90.7		10.06	78.8	N	84	118	MS
ZINC, TOTAL	102		62.6		50.28	79.3	N	82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	4.65		2.78		2	93.6		80	120	MS
COPPER, TOTAL	62.4		56.9		6	91.3		80	120	MS
LEAD, TOTAL	1190		1230		2	-2017.8	A	80	120	MS
ZINC, TOTAL	196		184		20	59.4	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.26		0.38		2	94.1		80	120	MS
COPPER, TOTAL	65.4		62.1		6	55.5	A	80	120	MS
LEAD, TOTAL	93.5		96.9		2	-170.1	A	80	120	MS
ZINC, TOTAL	195		183		20	58.2	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.18		0.20	J	2	99.3		80	120	MS
COPPER, TOTAL	50.3		44.9		6	89.6		80	120	MS
LEAD, TOTAL	37.1		35.8		2	65.5	A	80	120	MS
ZINC, TOTAL	141		123		20	90.9		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.54		0.485		2	102.6		80	120	MS
COPPER, TOTAL	36.2		31.3		6	82.2		80	120	MS
LEAD, TOTAL	184		187		2	-145.6	A	80	120	MS
ZINC, TOTAL	148		129		20	94.9		80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.01		1.79		11.7		MS
COPPER, TOTAL		40.2		43.2		7.2		MS
LEAD, TOTAL		51.2		45.6		11.6		MS
ZINC, TOTAL		112		116		4.1		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		1.92		1.63		16.1		MS
COPPER, TOTAL		43.2		38.3		12.1		MS
LEAD, TOTAL		48.6		43.2		12.0		MS
ZINC, TOTAL		116		98.4		16.9		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.06		3.08		0.8		MS
COPPER, TOTAL		51.7		49.2		4.8		MS
LEAD, TOTAL		33.3		30.2		9.6		MS
ZINC, TOTAL		120		114		5.0		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.72		5.18		32.8	*	MS
COPPER, TOTAL		37.2		40.6		8.8		MS
LEAD, TOTAL		98.6		89.4		9.8		MS
ZINC, TOTAL		102		109		6.1		MS

Comments:

FORM VD - IN

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG16IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG16IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.53	95.3	72	124
COPPER	25.0	26.0	104.1	84	119
LEAD	10.0	9.62	96.2	84	118
ZINC	50.0	50.2	100.3	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG20IMS2

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG20IMS2

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	8.57	85.7	72	124
COPPER	25.0	24.3	97.2	84	119
LEAD	10.0	8.77	87.7	84	118
ZINC	50.0	46.7	93.4	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONH04IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NH04IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	10.4	103.6	72	124
COPPER	25.0	25.8	103.2	84	119
LEAD	10.0	10.4	104.3	84	118
ZINC	50.0	47.7	95.5	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG21IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG21IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	100	103	103.0	85	117
COPPER	250	279	111.5	85	118
LEAD	100	108	108.1	88	115

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG29IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ZINC	500	526	105.1	83	119

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-005L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	2.78		2.74		1.4		MS
COPPER, TOTAL	56.9		63.9		12.3	E	MS
LEAD, TOTAL	1230		1230		0.0		MS
ZINC, TOTAL	184		204		10.9	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-007L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.38		0.33	J	13.2		MS
COPPER, TOTAL	62.1		73.0		17.6	E	MS
LEAD, TOTAL	96.9		94.0		3.0		MS
ZINC, TOTAL	183		216		18.0	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-010L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.20	J	0.22	J	10.0		MS
COPPER, TOTAL	44.9		52.9		17.8	E	MS
LEAD, TOTAL	35.8		38.9		8.7		MS
ZINC, TOTAL	123		143		16.3	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-018L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.485		0.50	J	3.1		MS
COPPER, TOTAL	31.3		32.6		4.2		MS
LEAD, TOTAL	187		194		3.7		MS
ZINC, TOTAL	129		138		7.0		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.10	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.40	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	1.6	ug/L	MS	SW846 3010A / SW846 6020A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/25/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.011	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.037	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.015	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	0.78	ug/L	MS	SW846 3010A / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG16IMS1

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 07/16/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG16IMS1	LCSONG16IMS1	1	0.1	
PBSNG16IMS1	PBSNG16IMS1	1	0.1	
COR01DA01A	SN5717-001	1.17	0.1	A
COR01DA02A	SN5717-005	1.35	0.1	A
COR01DA02AP	SN5717-005P	1.38	0.1	A
COR01DA02AS	SN5717-005S	1.36	0.1	A
COR02DA01A	SN5717-007	1.36	0.1	A
COR02DA01AP	SN5717-007P	1.38	0.1	A
COR02DA01AS	SN5717-007S	1.36	0.1	A
COR02DA02B	SN5717-008	1.15	0.1	A
COR02DA02A	SN5717-009	1.1	0.1	A
COR03DA01A	SN5717-012	1.09	0.1	A
COR03DA03A	SN5717-018	1.18	0.1	A
COR03DA03AP	SN5717-018P	1.15	0.1	A
COR03DA03AS	SN5717-018S	1.14	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG20IMS2

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 07/20/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG20IMS2	LCSONG20IMS2	1	0.1	
PBSNG20IMS2	PBSNG20IMS2	1	0.1	
COR03DA02A	SN5717-014	1	0.1	A
COR03DA02B	SN5717-015	1.13	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG21IMW2

Matrix: WATER **SDG Name:** SN5717

Method: MS **Prep Date:** 07/21/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG21IMW2	LCSWNG21IMW2	0.05	0.05	
PBWNG21IMW2	PBWNG21IMW2	0.05	0.05	
COR03EQB	SN5717-020	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG29IMW2

Matrix: WATER **SDG Name:** SN5717

Method: MS **Prep Date:** 07/29/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG29IMW2	LCSWNG29IMW2	0.05	0.05	
PBWNG29IMW2	PBWNG29IMW2	0.05	0.05	
COR03EQB	SN5717-020R	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH04IMS1

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 08/04/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH04IMS1	LCSONH04IMS1	1	0.1	
PBSNH04IMS1	PBSNH04IMS1	1	0.1	
COR01DB02A	SN5717-004	1.09	0.1	A
COR02DB02A	SN5717-010	1.01	0.1	A
COR02DB02AP	SN5717-010P	1.02	0.1	A
COR02DB02AS	SN5717-010S	1.02	0.1	A
COR03DB01A	SN5717-013	1.02	0.1	A
COR03DB03A	SN5717-017	1	0.1	A

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	15:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	15:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	15:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	15:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	15:39											
ZZZZZZ		1	15:42											
ZZZZZZ		1	15:45											
ZZZZZZ		1	15:47											
ICSAB		1	15:50	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCV		1	15:53	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	15:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:01	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:04											
ZZZZZZ		5	16:06											
CCV		1	16:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:12	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:15											
ZZZZZZ		5	16:17											
ZZZZZZ		5	16:20											
ZZZZZZ		5	16:23											
ZZZZZZ		5	16:25											
ZZZZZZ		5	16:28											
ZZZZZZ		5	16:30											
ZZZZZZ		5	16:33											
ZZZZZZ		5	16:36											
ZZZZZZ		1	16:41											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCV		1	16:44	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:46	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:49											
ZZZZZZ		5	16:52											
ZZZZZZ		5	16:55											
ZZZZZZ		5	16:57											
ZZZZZZ		5	17:00											
ZZZZZZ		5	17:02											
ZZZZZZ		5	17:05											
ZZZZZZ		5	17:08											
ZZZZZZ		5	17:11											
ZZZZZZ		25	17:13											
CCV		1	17:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:18	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:21											
ZZZZZZ		5	17:24											
ZZZZZZ		5	17:27											
ZZZZZZ		1	17:29											
ZZZZZZ		5	17:32											
ZZZZZZ		1	17:34											
ZZZZZZ		1	17:37											
ZZZZZZ		5	17:40											
ZZZZZZ		5	17:43											
ZZZZZZ		5	17:45											
CCV		1	17:48	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:51	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:53											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	17:56									
ZZZZZZ		5	17:59									
ZZZZZZ		25	18:01									
ZZZZZZ		5	18:04									
ZZZZZZ		5	18:07									
ZZZZZZ		5	18:09									
ZZZZZZ		5	18:12									
ZZZZZZ		5	18:15									
ZZZZZZ		5	18:17									
CCV		1	18:20	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:25									
ZZZZZZ		5	18:28									
ZZZZZZ		5	18:31									
ZZZZZZ		5	18:33									
ZZZZZZ		5	18:36									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:42									
ZZZZZZ		5	18:44									
ZZZZZZ		5	18:47									
ZZZZZZ		5	18:50									
CCV		1	18:52	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:55	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:58									
ZZZZZZ		5	19:00									
ZZZZZZ		5	19:03									
ZZZZZZ		5	19:06									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:08									
ZZZZZZ		5	19:11									
ZZZZZZ		5	19:14									
ZZZZZZ		5	19:16									
ZZZZZZ		5	19:19									
ZZZZZZ		5	19:22									
CCV		1	19:24	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:27	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:30									
ZZZZZZ		5	19:32									
ZZZZZZ		5	19:35									
ZZZZZZ		5	19:38									
ZZZZZZ		5	19:40									
ZZZZZZ		5	19:43									
ZZZZZZ		5	19:46									
ZZZZZZ		5	19:48									
ZZZZZZ		5	19:51									
ZZZZZZ		5	19:54									
CCV		1	19:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:59	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:02									
ZZZZZZ		5	20:04									
ZZZZZZ		5	20:07									
ZZZZZZ		5	20:10									
ZZZZZZ		5	20:12									
ZZZZZZ		5	20:15									
ZZZZZZ		5	20:18									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	20:21									
ZZZZZZ		5	20:23									
ZZZZZZ		5	20:26									
CCV		1	20:29	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	20:31	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:34									
ZZZZZZ		1	20:37									
ZZZZZZ		5	20:39									
ZZZZZZ		1	20:42									
ZZZZZZ		5	20:45									
ZZZZZZ		5	20:47									
ZZZZZZ		5	20:50									
ZZZZZZ		5	20:53									
ZZZZZZ		5	20:55									
ZZZZZZ		5	20:58									
CCV		1	21:01	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	21:04	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:06									
ZZZZZZ		5	21:09									
ZZZZZZ		5	21:12									
ZZZZZZ		5	21:14									
ZZZZZZ		5	21:17									
ZZZZZZ		5	21:19									
ZZZZZZ		5	21:22									
ZZZZZZ		5	21:25									
ZZZZZZ		5	21:27									
ZZZZZZ		5	21:30									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCV		1	21:33	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:35	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:38											
ZZZZZZ		5	21:41											
ZZZZZZ		5	21:43											
ZZZZZZ		5	21:46											
ZZZZZZ		25	21:49											
ZZZZZZ		5	21:51											
ZZZZZZ		5	21:54											
ZZZZZZ		5	21:57											
ZZZZZZ		5	21:59											
ZZZZZZ		5	22:02											
CCV		1	22:05	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:07	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:10											
ZZZZZZ		5	22:13											
ZZZZZZ		5	22:15											
ZZZZZZ		5	22:18											
ZZZZZZ		25	22:21											
ZZZZZZ		5	22:23											
ZZZZZZ		5	22:26											
ZZZZZZ		5	22:29											
ZZZZZZ		5	22:32											
ZZZZZZ		5	22:34											
CCV		1	22:37	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:40	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:42											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		5	22:45										
ZZZZZZ		5	22:48										
ZZZZZZ		1	22:50										
ZZZZZZ		5	22:53										
ZZZZZZ		1	22:56										
ZZZZZZ		1	22:58										
ZZZZZZ		1	23:01										
ZZZZZZ		1	23:04										
ZZZZZZ		1	23:06										
CCV		1	23:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	23:14										
ZZZZZZ		5	23:17										
ZZZZZZ		1	23:19										
ZZZZZZ		1	23:22										
PBSNG16IMS1		5	23:24		Sb		Cu		Pb					Zn
LCSONG16IMS1		5	23:27		Sb		Cu		Pb					Zn
ZZZZZZ		5	23:30										
ZZZZZZ		5	23:32										
SN5717-001	COR01DA01A	5	23:35		Sb		Cu		Pb					Zn
CCV		1	23:37	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:40	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-005	COR01DA02A	5	23:43		Sb		Cu		Pb					Zn
SN5717-005L	COR01DA02AL	25	23:45		Sb		Cu		Pb					Zn
SN5717-005A	COR01DA02AA	5	23:48		Sb		Cu		Pb					Zn
SN5717-005S	COR01DA02AS	5	23:50		Sb		Cu		Pb					Zn
SN5717-005P	COR01DA02AP	5	23:53		Sb		Cu		Pb					Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements										
SN5717-007	COR02DA01A	5	23:56		Sb		Cu		Pb					Zn
SN5717-007L	COR02DA01AL	25	23:58		Sb		Cu		Pb					Zn
SN5717-007A	COR02DA01AA	5	00:01		Sb		Cu		Pb					Zn
SN5717-007S	COR02DA01AS	5	00:03		Sb		Cu		Pb					Zn
SN5717-007P	COR02DA01AP	5	00:06		Sb		Cu		Pb					Zn
CCV		1	00:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCV		1	00:14	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-008	COR02DA02B	5	00:19		Sb		Cu		Pb					Zn
SN5717-009	COR02DA02A	5	00:22		Sb		Cu		Pb					Zn
SN5717-012	COR03DA01A	5	00:24		Sb		Cu		Pb					Zn
SN5717-018	COR03DA03A	5	00:27		Sb		Cu		Pb					Zn
SN5717-018L	COR03DA03AL	25	00:29		Sb		Cu		Pb					Zn
SN5717-018A	COR03DA03AA	5	00:32		Sb		Cu		Pb					Zn
SN5717-018S	COR03DA03AS	5	00:35		Sb		Cu		Pb					Zn
SN5717-018P	COR03DA03AP	5	00:37		Sb		Cu		Pb					Zn
ZZZZZZ		1	00:40											
ZZZZZZ		5	00:43											
CCV		1	00:45	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:48	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22A

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	13:31	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CalStd		1	13:34	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICV		1	13:37	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICB		1	13:40	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
PQL		1	13:42	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSA		1	13:45	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSAB		1	13:48	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	13:50									
ZZZZZZ		1	13:53									
ZZZZZZ		1	13:55									
ZZZZZZ		1	13:58									
ICSAB		1	14:04	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:07									
CCV		1	14:10	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:13	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCV		1	14:15	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:18	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
PBSNG20IMS2		5	14:20	Sb		Cu	Pb					Zn
LCSONG20IMS2		5	14:23	Sb		Cu	Pb					Zn
SN5717-014	COR03DA02A	5	14:25	Sb		Cu	Pb					Zn
SN5717-015	COR03DA02B	5	14:28	Sb		Cu	Pb					Zn
ZZZZZZ		5	14:31									
CCV		1	14:33	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:36	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	17:13	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
CalStd		1	17:16	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ICV		1	17:19	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ICB		1	17:21	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
PQL		1	17:24	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ICSA		1	17:26	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ICSAB		1	17:29	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:32							
ZZZZZZ		1	17:34							
ZZZZZZ		1	17:37							
ZZZZZZ		1	17:40							
CCV		1	17:42	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
CCB		1	17:45	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:47							
ZZZZZZ		1	17:50							
ZZZZZZ		1	17:53							
ZZZZZZ		1	17:55							
ZZZZZZ		1	17:58							
ZZZZZZ		1	18:00							
ZZZZZZ		1	18:03							
ZZZZZZ		1	18:05							
ZZZZZZ		1	18:08							
ZZZZZZ		1	18:11							
CCV		1	18:13	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
CCB		1	18:16	Al Sb	Ca	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:18							
ZZZZZZ		5	18:21							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	18:24	
ZZZZZZ		1	18:26	
ZZZZZZ		1	18:29	
ZZZZZZ		1	18:31	
ZZZZZZ		5	18:34	
ZZZZZZ		5	18:37	
ZZZZZZ		5	18:39	
ZZZZZZ		5	18:42	
CCV		1	18:44	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	18:47	Al Sb Ca Fe Pb Mg Mo K Na
ZZZZZZ		5	18:50	
ZZZZZZ		5	18:53	
ZZZZZZ		5	18:55	
ZZZZZZ		5	18:58	
ZZZZZZ		10	19:00	
ZZZZZZ		20	19:03	
ZZZZZZ		5	19:06	
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
ZZZZZZ		5	19:13	
CCV		1	19:16	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	19:19	Al Sb Ca Fe Pb Mg Mo K Na
ZZZZZZ		5	19:21	
PBWNG21IMW2		5	19:24	Sb Pb
LCSWNG21IMW2		5	19:27	Sb Pb
SN5717-020	COR03EQB	5	19:29	Sb Pb
ZZZZZZ		5	19:32	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	19:35	
ZZZZZZ		5	19:37	
ZZZZZZ		5	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:45	
CCV		1	19:48	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	19:51	Al Sb Ca Fe Pb Mg Mo K Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	16:21	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CalStd		1	16:24	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICV		1	16:27	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICB		1	16:30	Al	Ca	Cu	Fe	Mg	Mo	K	Na
PQL		1	16:32	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICSA		1	16:35	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICSAB		1	16:38	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		1	16:40								
ZZZZZZ		1	16:43								
ZZZZZZ		1	16:46								
ZZZZZZ		1	16:48								
CCV		1	16:51	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	16:54	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		5	16:57								
ZZZZZZ		5	16:59								
ZZZZZZ		5	17:02								
ZZZZZZ		5	17:04								
ZZZZZZ		5	17:07								
ZZZZZZ		25	17:10								
ZZZZZZ		5	17:12								
ZZZZZZ		5	17:15								
ZZZZZZ		25	17:18								
ZZZZZZ		5	17:20								
CCV		1	17:23	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	17:26	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		5	17:28								
ZZZZZZ		5	17:31								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	17:33							
ZZZZZZ		1	17:36							
ZZZZZZ		1	17:39							
ZZZZZZ		1	17:41							
ZZZZZZ		1	17:44							
ZZZZZZ		1	17:47							
ZZZZZZ		1	17:49							
ZZZZZZ		1	17:52							
CCV		1	17:55	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	17:57	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		1	18:00							
ZZZZZZ		1	18:03							
ZZZZZZ		50	18:05							
PBWNG21IMW2		5	18:08			Cu				
LCSWNG21IMW2		5	18:11			Cu				
SN5717-020	COR03EQB	5	18:13			Cu				
ZZZZZZ		5	18:16							
ZZZZZZ		5	18:19							
ZZZZZZ		5	18:21							
ZZZZZZ		5	18:24							
CCV		1	18:27	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	18:29	Al	Ca	Cu	Fe	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	14:36	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	14:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	14:43	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	14:46	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	14:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	14:51	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	14:54	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:57								
ZZZZZZ		1	14:59								
ZZZZZZ		1	15:02								
ZZZZZZ		1	15:05								
CCV		1	15:08	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
ZZZZZZ		5	17:18								
ZZZZZZ		5	17:22								
ZZZZZZ		5	17:24								
ZZZZZZ		5	17:27								
ZZZZZZ		5	17:30								
ZZZZZZ		5	17:32								
LCSWNG29IMW2		5	17:35								Zn
CCV		1	17:38	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PBWNG29IMW2		5	17:43								Zn
SN5717-020R	COR03EQB	5	17:46								Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		5	17:48								
ZZZZZZ		5	17:51								
ZZZZZZ		5	17:54								
ZZZZZZ		5	17:57								
ZZZZZZ		5	17:59								
ZZZZZZ		5	18:02								
ZZZZZZ		5	18:05								
ZZZZZZ		5	18:07								
CCV		1	18:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:13	Al	Ca	Fe	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH05A

Date: 08/05/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:59	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	16:03	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	16:06	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	16:09	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	16:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	16:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:20										
ZZZZZZ		1	16:22										
ZZZZZZ		1	16:25										
ZZZZZZ		1	16:28										
CCV		1	16:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:42										
ZZZZZZ		5	16:44										
ZZZZZZ		5	16:47										
ZZZZZZ		5	16:49										
PBSNH04IMS1		5	16:52			Cu		Pb					Zn
ZZZZZZ		5	16:55										
SN5717-004	COR01DB02A	5	16:57			Cu		Pb					Zn
SN5717-010	COR02DB02A	5	17:00			Cu		Pb					Zn
SN5717-010L	COR02DB02AL	25	17:03			Cu		Pb					Zn
SN5717-010A	COR02DB02AA	5	17:05			Cu		Pb					Zn
CCV		1	17:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:11	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-010S	COR02DB02AS	5	17:14			Cu		Pb					Zn
SN5717-010P	COR02DB02AP	5	17:16			Cu		Pb					Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH05A

Date: 08/05/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
SN5717-013	COR03DB01A	5	17:19			Cu	Pb						Zn
SN5717-017	COR03DB03A	5	17:22			Cu	Pb						Zn
ZZZZZZ		1	17:25										
ZZZZZZ		1	17:27										
ZZZZZZ		5	17:30										
ZZZZZZ		1	17:33										
ZZZZZZ		1	17:35										
ZZZZZZ		1	17:38										
CCV		1	17:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:24	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CalStd		1	15:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICV		1	15:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICB		1	15:34	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
PQL		1	15:36	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSA		1	15:39	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSAB		1	15:42	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	15:45										
ZZZZZZ		1	15:47										
ZZZZZZ		1	15:50										
ZZZZZZ		1	15:53										
CCV		1	15:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	15:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:01										
ZZZZZZ		5	16:04										
ZZZZZZ		5	16:06										
ZZZZZZ		5	16:09										
ZZZZZZ		5	16:12										
ZZZZZZ		5	16:14										
ZZZZZZ		5	16:17										
ZZZZZZ		5	16:20										
ZZZZZZ		5	16:22										
ZZZZZZ		5	16:25										
CCV		1	16:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	16:30	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:33										
ZZZZZZ		5	16:35										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	16:38	
ZZZZZZ		5	16:41	
ZZZZZZ		5	16:43	
ZZZZZZ		5	16:46	
ZZZZZZ		25	16:49	
ZZZZZZ		5	16:51	
ZZZZZZ		5	16:54	
ZZZZZZ		5	16:57	
CCV		1	16:59	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	17:02	Al Sb Ca Cu Fe Pb Mg Mo K Na
ZZZZZZ		5	17:05	
ZZZZZZ		5	17:07	
ZZZZZZ		5	17:10	
ZZZZZZ		5	17:13	
ZZZZZZ		25	17:15	
ZZZZZZ		5	17:18	
ZZZZZZ		5	17:21	
PBSNH04IMS1		5	17:23	Sb
LCSONH04IMS1		5	17:26	Sb Cu Pb
SN5717-004	COR01DB02A	5	17:29	Sb
CCV		1	17:31	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	17:34	Al Sb Ca Cu Fe Pb Mg Mo K Na
SN5717-010	COR02DB02A	5	17:37	Sb
SN5717-010A	COR02DB02AA	5	17:39	Sb
SN5717-010L	COR02DB02AL	25	17:42	Sb
SN5717-010P	COR02DB02AP	5	17:45	Sb
SN5717-010S	COR02DB02AS	5	17:48	Sb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
SN5717-013	COR03DB01A	5	17:50	Sb
SN5717-017	COR03DB03A	5	17:53	Sb
ZZZZZZ		1	17:56	
ZZZZZZ		1	17:59	
ZZZZZZ		1	18:01	
CCV		1	18:04	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	18:07	Al Sb Ca Cu Fe Pb Mg Mo K Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	15:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	15:13	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	15:16	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	15:19	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	15:21	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	15:24	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	15:27	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	15:30								
ZZZZZZ		1	15:32								
ZZZZZZ		1	15:35								
ZZZZZZ		1	15:37								
CCV		1	15:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:43	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	15:46								
ZZZZZZ		5	15:48								
ZZZZZZ		5	15:51								
ZZZZZZ		10	15:54								
ZZZZZZ		1	15:56								
ZZZZZZ		10	15:59								
ZZZZZZ		1	16:01								
ZZZZZZ		5	16:04								
ZZZZZZ		5	16:06								
ZZZZZZ		25	16:09								
CCV		1	16:12	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	16:14	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:17								
ZZZZZZ		5	16:19								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		5	16:22								
ZZZZZZ		5	16:25								
ZZZZZZ		5	16:27								
ZZZZZZ		5	16:34								
ZZZZZZ		1	16:36								
ZZZZZZ		1	16:39								
ZZZZZZ		1	16:41								
ZZZZZZ		1	16:44								
CCV		1	16:47	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	16:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:52								
ZZZZZZ		5	16:54								
ZZZZZZ		5	16:57								
ZZZZZZ		10	17:00								
ZZZZZZ		10	17:02								
ZZZZZZ		20	17:05								
ZZZZZZ		20	17:07								
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
CCV		1	17:18	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:20	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:23								
ZZZZZZ		5	17:26								
ZZZZZZ		5	17:28								
ZZZZZZ		5	17:31								
ZZZZZZ		5	17:33								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		25	17:36								
ZZZZZZ		5	17:38								
ZZZZZZ		5	17:41								
ZZZZZZ		5	17:44								
LCSONH04IMS1		5	17:46								Zn
CCV		1	17:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:51	Al	Ca	Fe	Mg	Mo	K	Na	Zn

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/20/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED 07/24/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG20A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19455	06/16/20	06/16/21	0 ug/L
Standard 1	MW19486	07/08/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19465	07/08/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19499	07/20/20	07/27/20	Varies by Element
ICSAB	MW19500	07/20/20	07/27/20	Varies by Element
CCV	MW19495	07/14/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

KT 7/21/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

125x serial diln.: 2.0 mL of 25x diln. of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG20A	07/20/2020	15:19	AP
CalStd	1	LNG20A	07/20/2020	15:23	AP
ICV	1	LNG20A	07/20/2020	15:26	AP
ICB	1	LNG20A	07/20/2020	15:28	AP
PQL	1	LNG20A	07/20/2020	15:31	AP
LRS1	1	LNG20A	07/20/2020	15:39	AP
LRS2	1	LNG20A	07/20/2020	15:42	AP
RINSE	1	LNG20A	07/20/2020	15:45	AP
RINSE	1	LNG20A	07/20/2020	15:47	AP
ICSAB	1	LNG20A	07/20/2020	15:50	AP
CCV	1	LNG20A	07/20/2020	15:53	AP
CCB	1	LNG20A	07/20/2020	15:56	AP
ICSA	1	LNG20A	07/20/2020	16:01	AP
PBWNF30IMW1	5	LNG20A	07/20/2020	16:04	AP
LCSWNF30IMW1	5	LNG20A	07/20/2020	16:06	AP
CCV	1	LNG20A	07/20/2020	16:09	AP
CCB	1	LNG20A	07/20/2020	16:12	AP
SN5146-018	5	LNG20A	07/20/2020	16:15	AP
PBWNF30IMW2	5	LNG20A	07/20/2020	16:17	AP
LCSWNF30IMW2	5	LNG20A	07/20/2020	16:20	AP
SN5146-016	5	LNG20A	07/20/2020	16:23	AP
SN5151-001	5	LNG20A	07/20/2020	16:25	AP
SN5151-002	5	LNG20A	07/20/2020	16:28	AP
SN5151-004	5	LNG20A	07/20/2020	16:30	AP
SN5151-004	5	LNG20A	07/20/2020	16:33	AP
SN5151-004A	5	LNG20A	07/20/2020	16:36	AP
RINSE	1	LNG20A	07/20/2020	16:41	AP
CCV	1	LNG20A	07/20/2020	16:44	AP
CCB	1	LNG20A	07/20/2020	16:46	AP
RINSE	1	LNG20A	07/20/2020	16:49	AP
SN5151-004S	5	LNG20A	07/20/2020	16:52	AP
SN5151-004P	5	LNG20A	07/20/2020	16:55	AP
SN5151-005	5	LNG20A	07/20/2020	16:57	AP
SN5151-006	5	LNG20A	07/20/2020	17:00	AP
SN5173-001	5	LNG20A	07/20/2020	17:02	AP
SN5173-002	5	LNG20A	07/20/2020	17:05	AP
SN5173-003	5	LNG20A	07/20/2020	17:08	AP
SN5173-004	5	LNG20A	07/20/2020	17:11	AP
SN5151-004L	25	LNG20A	07/20/2020	17:13	AP
CCV	1	LNG20A	07/20/2020	17:16	AP
CCB	1	LNG20A	07/20/2020	17:18	AP
SN5173-005	5	LNG20A	07/20/2020	17:21	AP
SN5173-006	5	LNG20A	07/20/2020	17:24	AP
SN5173-008	5	LNG20A	07/20/2020	17:27	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNG01IMW1	1	LNG20A	07/20/2020	17:29	AP
LCSWNG01IMW1	5	LNG20A	07/20/2020	17:32	AP
SN5286-001	1	LNG20A	07/20/2020	17:34	AP
SN5286-002	1	LNG20A	07/20/2020	17:37	AP
PBSNG02IMS1	5	LNG20A	07/20/2020	17:40	AP
LCSONG02IMS1	5	LNG20A	07/20/2020	17:43	AP
SN5043-008	5	LNG20A	07/20/2020	17:45	AP
CCV	1	LNG20A	07/20/2020	17:48	AP
CCB	1	LNG20A	07/20/2020	17:51	AP
SN5043-010	5	LNG20A	07/20/2020	17:53	AP
SN5043-012	5	LNG20A	07/20/2020	17:56	AP
SN5043-014	5	LNG20A	07/20/2020	17:59	AP
SN5043-014L	25	LNG20A	07/20/2020	18:01	AP
SN5043-014A	5	LNG20A	07/20/2020	18:04	AP
SN5043-014S	5	LNG20A	07/20/2020	18:07	AP
SN5043-014P	5	LNG20A	07/20/2020	18:09	AP
SN5043-016	5	LNG20A	07/20/2020	18:12	AP
SN5043-021	5	LNG20A	07/20/2020	18:15	AP
PBSNG07IMS1	5	LNG20A	07/20/2020	18:17	AP
CCV	1	LNG20A	07/20/2020	18:20	AP
CCB	1	LNG20A	07/20/2020	18:23	AP
LCSONG07IMS1	5	LNG20A	07/20/2020	18:25	AP
SN5107-028	5	LNG20A	07/20/2020	18:28	AP
SN5107-029	5	LNG20A	07/20/2020	18:31	AP
SN5107-031	5	LNG20A	07/20/2020	18:33	AP
SN5107-032	5	LNG20A	07/20/2020	18:36	AP
SN5107-033	5	LNG20A	07/20/2020	18:39	AP
SN5107-035	5	LNG20A	07/20/2020	18:42	AP
PBWNG07IMW1	5	LNG20A	07/20/2020	18:44	AP
LCSWNG07IMW1	5	LNG20A	07/20/2020	18:47	AP
SN5146-010	5	LNG20A	07/20/2020	18:50	AP
CCV	1	LNG20A	07/20/2020	18:52	AP
CCB	1	LNG20A	07/20/2020	18:55	AP
SN5394-003	5	LNG20A	07/20/2020	18:58	AP
SN5394-004	5	LNG20A	07/20/2020	19:00	AP
PBSNG08IMS1	5	LNG20A	07/20/2020	19:03	AP
LCSONG08IMS1	5	LNG20A	07/20/2020	19:06	AP
SN5147-001	5	LNG20A	07/20/2020	19:08	AP
SN5147-003	5	LNG20A	07/20/2020	19:11	AP
SN5147-004	5	LNG20A	07/20/2020	19:14	AP
SN5338-001	5	LNG20A	07/20/2020	19:16	AP
PBWNG09IMS1	5	LNG20A	07/20/2020	19:19	AP
LCSONG09IMS1	5	LNG20A	07/20/2020	19:22	AP
CCV	1	LNG20A	07/20/2020	19:24	AP
CCB	1	LNG20A	07/20/2020	19:27	AP
SN5233-006	5	LNG20A	07/20/2020	19:30	AP
SN5233-007	5	LNG20A	07/20/2020	19:32	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5233-008	5	LNG20A	07/20/2020	19:35	AP
SN5233-009	5	LNG20A	07/20/2020	19:38	AP
SN5423-001	5	LNG20A	07/20/2020	19:40	AP
PBWNG09IMW1	5	LNG20A	07/20/2020	19:43	AP
LCSWNG09IMW1	5	LNG20A	07/20/2020	19:46	AP
SN5494-003	5	LNG20A	07/20/2020	19:48	AP
SN5494-004	5	LNG20A	07/20/2020	19:51	AP
SN5494-005	5	LNG20A	07/20/2020	19:54	AP
CCV	1	LNG20A	07/20/2020	19:56	AP
CCB	1	LNG20A	07/20/2020	19:59	AP
SN5494-007	5	LNG20A	07/20/2020	20:02	AP
SN5494-008	5	LNG20A	07/20/2020	20:04	AP
SN5497-005	5	LNG20A	07/20/2020	20:07	AP
SN5520-001	5	LNG20A	07/20/2020	20:10	AP
SN5520-002	5	LNG20A	07/20/2020	20:12	AP
SN5520-003	5	LNG20A	07/20/2020	20:15	AP
SN5520-004	5	LNG20A	07/20/2020	20:18	AP
SN5520-005	5	LNG20A	07/20/2020	20:21	AP
SN5520-006	5	LNG20A	07/20/2020	20:23	AP
SN5520-007	5	LNG20A	07/20/2020	20:26	AP
CCV	1	LNG20A	07/20/2020	20:29	AP
CCB	1	LNG20A	07/20/2020	20:31	AP
SN5520-008	5	LNG20A	07/20/2020	20:34	AP
PBWNG09IMW2	1	LNG20A	07/20/2020	20:37	AP
LCSWNG09IMW2	5	LNG20A	07/20/2020	20:39	AP
SN5513-001	1	LNG20A	07/20/2020	20:42	AP
PBSNG10IMS1	5	LNG20A	07/20/2020	20:45	AP
LCSONG10IMS1	5	LNG20A	07/20/2020	20:47	AP
SN5481-001	5	LNG20A	07/20/2020	20:50	AP
SN5497-001	5	LNG20A	07/20/2020	20:53	AP
SN5497-002	5	LNG20A	07/20/2020	20:55	AP
SN5497-003	5	LNG20A	07/20/2020	20:58	AP
CCV	1	LNG20A	07/20/2020	21:01	AP
CCB	1	LNG20A	07/20/2020	21:04	AP
SN5497-004	5	LNG20A	07/20/2020	21:06	AP
SN5497-006	5	LNG20A	07/20/2020	21:09	AP
SN5498-001	5	LNG20A	07/20/2020	21:12	AP
SN5498-002	5	LNG20A	07/20/2020	21:14	AP
PBWNG10IMW1	5	LNG20A	07/20/2020	21:17	AP
LCSWNG10IMW1	5	LNG20A	07/20/2020	21:19	AP
SN5497-007	5	LNG20A	07/20/2020	21:22	AP
SN5589-001	5	LNG20A	07/20/2020	21:25	AP
SN5589-002	5	LNG20A	07/20/2020	21:27	AP
SN5608-001	5	LNG20A	07/20/2020	21:30	AP
CCV	1	LNG20A	07/20/2020	21:33	AP
CCB	1	LNG20A	07/20/2020	21:35	AP
SN5608-002	5	LNG20A	07/20/2020	21:38	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5608-003	5	LNG20A	07/20/2020	21:41	AP
SN5608-004	5	LNG20A	07/20/2020	21:43	AP
SN5608-005	5	LNG20A	07/20/2020	21:46	AP
SN5608-005L	25	LNG20A	07/20/2020	21:49	AP
SN5608-005A	5	LNG20A	07/20/2020	21:51	AP
SN5608-005S	5	LNG20A	07/20/2020	21:54	AP
SN5608-005P	5	LNG20A	07/20/2020	21:57	AP
PBWNG13IMW2	5	LNG20A	07/20/2020	21:59	AP
LCSWNG13IMW2	5	LNG20A	07/20/2020	22:02	AP
CCV	1	LNG20A	07/20/2020	22:05	AP
CCB	1	LNG20A	07/20/2020	22:07	AP
SN5646-002	5	LNG20A	07/20/2020	22:10	AP
SN5646-003	5	LNG20A	07/20/2020	22:13	AP
SN5646-004	5	LNG20A	07/20/2020	22:15	AP
SN5646-005	5	LNG20A	07/20/2020	22:18	AP
SN5646-005L	25	LNG20A	07/20/2020	22:21	AP
SN5646-005A	5	LNG20A	07/20/2020	22:23	AP
SN5646-005S	5	LNG20A	07/20/2020	22:26	AP
SN5646-005P	5	LNG20A	07/20/2020	22:29	AP
SN5646-006	5	LNG20A	07/20/2020	22:32	AP
SN5646-007	5	LNG20A	07/20/2020	22:34	AP
CCV	1	LNG20A	07/20/2020	22:37	AP
CCB	1	LNG20A	07/20/2020	22:40	AP
SN4647-002	5	LNG20A	07/20/2020	22:42	AP
SN4647-003	5	LNG20A	07/20/2020	22:45	AP
SN4647-004	5	LNG20A	07/20/2020	22:48	AP
PBWNG13IMW3	1	LNG20A	07/20/2020	22:50	AP
LCSWNG13IMW3	5	LNG20A	07/20/2020	22:53	AP
SN5596-002	1	LNG20A	07/20/2020	22:56	AP
SN5621-001	1	LNG20A	07/20/2020	22:58	AP
SN5624-001	1	LNG20A	07/20/2020	23:01	AP
SN5625-001	1	LNG20A	07/20/2020	23:04	AP
SN5626-001	1	LNG20A	07/20/2020	23:06	AP
CCV	1	LNG20A	07/20/2020	23:09	AP
CCB	1	LNG20A	07/20/2020	23:11	AP
PBWNG15IMW1	1	LNG20A	07/20/2020	23:14	AP
LCSWNG15IMW1	5	LNG20A	07/20/2020	23:17	AP
SN5690-001	1	LNG20A	07/20/2020	23:19	AP
SN5691-001	1	LNG20A	07/20/2020	23:22	AP
PBSNG16IMS1	5	LNG20A	07/20/2020	23:24	AP
LCSONG16IMS1	5	LNG20A	07/20/2020	23:27	AP
SN5594-002	5	LNG20A	07/20/2020	23:30	AP
SN5594-003	5	LNG20A	07/20/2020	23:32	AP
SN5717-001	5	LNG20A	07/20/2020	23:35	AP
CCV	1	LNG20A	07/20/2020	23:37	AP
CCB	1	LNG20A	07/20/2020	23:40	AP
SN5717-005	5	LNG20A	07/20/2020	23:43	AP

AP 7/21/20

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5717-005L	25	LNG20A	07/20/2020	23:45	AP
SN5717-005A	5	LNG20A	07/20/2020	23:48	AP
SN5717-005S	5	LNG20A	07/20/2020	23:50	AP
SN5717-005P	5	LNG20A	07/20/2020	23:53	AP
SN5717-007	5	LNG20A	07/20/2020	23:56	AP
SN5717-007L	25	LNG20A	07/20/2020	23:58	AP
SN5717-007A	5	LNG20A	07/21/2020	00:01	AP
SN5717-007S	5	LNG20A	07/21/2020	00:03	AP
SN5717-007P	5	LNG20A	07/21/2020	00:06	AP
CCV	1	LNG20A	07/21/2020	00:09	AP
CCB	1	LNG20A	07/21/2020	00:11	AP
CCV	1	LNG20A	07/21/2020	00:14	AP
CCB	1	LNG20A	07/21/2020	00:16	AP
SN5717-008	5	LNG20A	07/21/2020	00:19	AP
SN5717-009	5	LNG20A	07/21/2020	00:22	AP
SN5717-012	5	LNG20A	07/21/2020	00:24	AP
SN5717-018	5	LNG20A	07/21/2020	00:27	AP
SN5717-018L	25	LNG20A	07/21/2020	00:29	AP
SN5717-018A	5	LNG20A	07/21/2020	00:32	AP
SN5717-018S	5	LNG20A	07/21/2020	00:35	AP
SN5717-018P	5	LNG20A	07/21/2020	00:37	AP
PBWNG16IMW1	1	LNG20A	07/21/2020	00:40	AP
LCSWNG16IMW1	5	LNG20A	07/21/2020	00:43	AP
CCV	1	LNG20A	07/21/2020	00:45	AP
CCB	1	LNG20A	07/21/2020	00:48	AP
CCV	1	LNG20A	07/21/2020	00:51	AP
CCB	1	LNG20A	07/21/2020	00:53	AP
SN5778-001	1	LNG20A	07/21/2020	00:56	AP
SN5779-001	1	LNG20A	07/21/2020	00:59	AP
SN5790-001	1	LNG20A	07/21/2020	01:01	AP
PBWNG20IMW2	1	LNG20A	07/21/2020	01:04	AP
LCSWNG20IMW2	1	LNG20A	07/21/2020	01:07	AP
SN5541-001X	1	LNG20A	07/21/2020	01:09	AP
SN5151-002	25	LNG20A	07/21/2020	01:12	AP
SN5151-004	25	LNG20A	07/21/2020	01:15	AP
SN5151-004L	125	LNG20A	07/21/2020	01:17	AP
SN5151-004A	25	LNG20A	07/21/2020	01:20	AP
CCV	1	LNG20A	07/21/2020	01:23	AP
CCB	1	LNG20A	07/21/2020	01:25	AP
CCV	1	LNG20A	07/21/2020	01:28	AP
CCB	1	LNG20A	07/21/2020	01:31	AP
SN5151-004S	25	LNG20A	07/21/2020	01:33	AP
SN5151-004P	25	LNG20A	07/21/2020	01:36	AP
SN5151-005	25	LNG20A	07/21/2020	01:39	AP
SN5151-006	25	LNG20A	07/21/2020	01:42	AP
RINSE	1	LNG20A	07/21/2020	01:44	AP
RINSE	1	LNG20A	07/21/2020	01:47	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
RINSE	1	LNG20A	07/21/2020	01:49	AP
CCV	1	LNG20A	07/21/2020	01:52	AP
CCB	1	LNG20A	07/21/2020	01:55	AP
CCV	1	LNG20A	07/21/2020	01:58	AP
CCB	1	LNG20A	07/21/2020	02:00	AP
PQL	1	LNG20A	07/21/2020	02:03	AP
RINSE	1	LNG20A	07/21/2020	02:06	AP
RINSE	1	LNG20A	07/21/2020	02:08	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A.b
Acq. Date-Time	7/20/2020 10:49:39 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

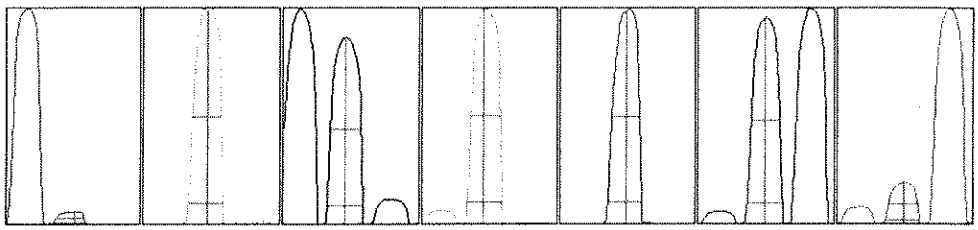
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2436	24357.22	0.499	5.000	
9	905	9054.64	0.835	5.000	
24	34975	349747.53	0.609	5.000	
59	6769	67688.74	0.492	5.000	
115	114361	1143610.82	0.531	5.000	
205	8156	81559.01	0.777	5.000	
208	18258	182575.14	0.481	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2449	2424	2427	2431	2448
9	897	903	917	903	908
24	34677	34848	35011	35152	35186
59	6766	6713	6777	6790	6798
115	113948	113564	114427	115012	114855
205	8050	8145	8192	8190	8202
208	18138	18233	18295	18244	18377

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	3984.71	7.05	6.90 - 7.10	
9	1449.57	8.95	8.90 - 9.10	
24	54228.01	23.90	23.90 - 24.10	
59	10674.50	58.90	58.90 - 59.10	
115	189649.26	115.00	114.90 - 115.10	
205	13396.97	205.00	204.90 - 205.10	
208	29524.90	208.00	207.90 - 208.10	

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US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.721	0.900	
9	0.64	0.752	0.900	
24	0.68	0.777	0.900	
59	0.66	0.766	0.900	
115	0.62	0.756	0.900	
205	0.63	0.775	0.900	
208	0.64	0.748	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	12.4 V
Extract 2	-115.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-50 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	427	4274.83	1.651	5.000	
89	60762	607621.67	1.920	5.000	
205	6405	64048.26	0.991	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	417	428	435	426	432
89	58903	60510	61211	61180	62007
205	6327	6364	6417	6422	6494

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	1.6 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1280	12801.47	0.569	5.000	
89	13216	132160.86	1.000	5.000	
205	3644	36442.05	0.789	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1275	1281	1284	1272	1290
89	13089	13073	13231	13326	13361
205	3647	3596	3656	3648	3673

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	1.2 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:19:57 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	18.89	71.3
11	B	6	No Gas	926.73	7.6
23	Na	45	He	6174.86	4.8
24	Mg	45	He	622.29	8.7
27	Al	45	He	50.01	11.5
28	Si	45	H2	260.29	13.9
39	K	45	He	11092.69	1.2
40	Ca	45	H2	1971.32	2.3
51	V	89	He	233.34	8.7
52	Cr	89	He	35.32	21.4
55	Mn	89	He	12.67	32.9
56	Fe	89	H2	8618.91	3.7
59	Co	89	He	8.89	43.3
60	Ni	89	He	42.22	16.4
63	Cu	89	He	425.58	12.3
66	Zn	89	He	65.56	5.9
75	As	89	He	4.67	12.4
78	Se	89	H2	0.50	100.0
88	Sr	89	He	6.67	100.0
95	Mo	89	He	126.67	24.1
107	Ag	89	He	11.11	45.8
111	Cd	89	He	1.11	100.0
118	Sn	159	He	71.11	2.7
121	Sb	159	No Gas	93.44	50.6
137	Ba	159	No Gas	16.68	91.7
182	W	159	No Gas	116.80	13.1
205	Tl	209	No Gas	26.69	43.3
208	Pb	209	No Gas	180.20	9.6
232	Th	209	No Gas	166.85	25.0
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1537409.87	0.6
Sc	45	No Gas	3373253.08	0.7
Sc	45	H2	415670.69	1.1
Sc	45	He	81171.76	0.7
Ge	72	No Gas	779333.11	0.3
Ge	72	H2	153246.58	1.6
Ge	72	He	63135.03	0.2
Y	89	H2	2642116.11	0.5
Y	89	He	544041.92	0.4
Tb	159	No Gas	8117023.84	0.9
Tb	159	He	2866479.19	0.2
Bi	209	No Gas	4424692.92	0.5

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:23:09 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	65205.12	1.9
11	B	6	No Gas	43743.62	1.5
23	Na	45	He	1118160.06	0.5
24	Mg	45	He	612459.95	0.4
27	Al	45	He	23744.90	1.4
28	Si	45	H2	44431.61	1.3
39	K	45	He	543723.55	0.2
40	Ca	45	H2	4223794.94	1.3
51	V	89	He	43503.52	0.7
52	Cr	89	He	53433.19	0.3
55	Mn	89	He	25461.69	0.3
56	Fe	89	H2	16794411.74	0.9
59	Co	89	He	90448.45	0.6
60	Ni	89	He	25665.34	2.2
63	Cu	89	He	69934.45	0.5
66	Zn	89	He	9586.95	2.1
75	As	89	He	7789.70	1.0
78	Se	89	H2	4181.77	1.9
88	Sr	89	He	38027.91	0.7
95	Mo	89	He	43786.44	0.6
107	Ag	89	He	148490.36	0.1
111	Cd	89	He	19784.54	0.2
118	Sn	159	He	42685.15	1.1
121	Sb	159	No Gas	368094.67	1.2
137	Ba	159	No Gas	144820.50	1.1
182	W	159	No Gas	292933.39	1.2
205	Tl	209	No Gas	646818.40	1.4
208	Pb	209	No Gas	894142.84	1.0
232	Th	209	No Gas	936110.95	1.7
238	U	209	No Gas	878578.95	1.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1504114.52	0.8	1537409.87	97.83	29.5	120.4	
Sc	45	No Gas	3354516.27	0.9	3373253.08	99.44	29.5	120.4	
Sc	45	H2	421300.84	2.0	415670.69	101.35	29.5	120.4	
Sc	45	He	80043.71	0.7	81171.76	98.61	29.5	120.4	
Ge	72	No Gas	772954.13	1.1	779333.11	99.18	29.5	120.4	
Ge	72	H2	156338.20	2.4	153246.58	102.02	29.5	120.4	
Ge	72	He	62495.21	0.6	63135.03	98.99	29.5	120.4	
Y	89	H2	2690794.76	1.5	2642116.11	101.84	29.5	120.4	
Y	89	He	539936.77	0.4	544041.92	99.25	29.5	120.4	
Tb	159	No Gas	8184203.77	0.7	8117023.84	100.83	29.5	120.4	
Tb	159	He	2848709.99	0.4	2866479.19	99.38	29.5	120.4	
Bi	209	No Gas	4396488.16	0.9	4424692.92	99.36	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:26:19 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	19.904	ppb	3.9	26539.46	20	99.52	89.6	110.4	
11	B	6	No Gas	20.089	ppb	4.0	18515.71	20	100.44	89.6	110.4	
23	Na	45	He	4049.945	ppb	1.3	467702.08	4000	101.25	89.6	110.4	
24	Mg	45	He	3995.852	ppb	1.1	251130.42	4000	99.9	89.6	110.4	
27	Al	45	He	376.751	ppb	3.8	9199.95	400	94.19	89.6	110.4	
28	Si	45	H2	441.941	ppb	1.2	19368.00	400	110.49	89.6	110.4	> +/- 10%
39	K	45	He	3958.321	ppb	1.7	227292.15	4000	98.96	89.6	110.4	
40	Ca	45	H2	4101.188	ppb	2.5	1696433.90	4000	102.53	89.6	110.4	
51	V	89	He	19.975	ppb	0.8	17662.79	20	99.88	89.6	110.4	
52	Cr	89	He	20.359	ppb	1.1	21956.36	20	101.8	89.6	110.4	
55	Mn	89	He	20.374	ppb	1.6	10468.00	20	101.87	89.6	110.4	
56	Fe	89	H2	4114.769	ppb	2.2	6777573.69	4000	102.87	89.6	110.4	
59	Co	89	He	20.325	ppb	1.0	37073.39	20	101.62	89.6	110.4	
60	Ni	89	He	19.475	ppb	1.2	10105.10	20	97.38	89.6	110.4	
63	Cu	89	He	20.392	ppb	0.1	29007.51	20	101.96	89.6	110.4	
66	Zn	89	He	20.826	ppb	0.9	4064.08	20	104.13	89.6	110.4	
75	As	89	He	20.582	ppb	0.7	3235.40	20	102.91	89.6	110.4	
78	Se	89	H2	20.793	ppb	3.3	1704.70	20	103.96	89.6	110.4	
88	Sr	89	He	20.000	ppb	1.0	15340.17	20	100	89.6	110.4	
95	Mo	89	He	40.223	ppb	0.9	35538.02	40	100.56	89.6	110.4	
107	Ag	89	He	20.936	ppb	0.7	62690.85	20	104.68	89.6	110.4	
111	Cd	89	He	20.240	ppb	1.6	8075.45	20	101.2	89.6	110.4	
118	Sn	159	He	19.840	ppb	1.9	17174.81	20	99.2	89.6	110.4	
121	Sb	159	No Gas	19.980	ppb	3.3	149358.82	20	99.9	89.6	110.4	
137	Ba	159	No Gas	19.776	ppb	2.8	58154.82	20	98.88	89.6	110.4	
182	W	159	No Gas	19.697	ppb	3.4	117201.53	20	98.48	89.6	110.4	
205	Tl	209	No Gas	20.425	ppb	2.7	270662.83	20	102.12	89.6	110.4	
208	Pb	209	No Gas	19.813	ppb	3.3	363009.10	20	99.06	89.6	110.4	
232	Th	209	No Gas	19.715	ppb	3.5	378149.13	20	98.58	89.6	110.4	
238	U	209	No Gas	19.580	ppb	2.9	352409.59	20	97.9	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1537619.38	1.6	1537409.87	100.01	29.5	120.4	
Sc	45	No Gas	3416777.73	1.5	3373253.08	101.29	29.5	120.4	
Sc	45	H2	412377.82	2.2	415670.69	99.21	29.5	120.4	
Sc	45	He	82017.82	0.9	81171.76	101.04	29.5	120.4	
Ge	72	No Gas	787353.59	1.4	779333.11	101.03	29.5	120.4	
Ge	72	H2	151866.51	2.0	153246.58	99.1	29.5	120.4	
Ge	72	He	63324.01	0.7	63135.03	100.3	29.5	120.4	
Y	89	H2	2637289.75	1.4	2642116.11	99.82	29.5	120.4	
Y	89	He	544361.46	0.5	544041.92	100.06	29.5	120.4	
Tb	159	No Gas	8308683.21	1.4	8117023.84	102.36	29.5	120.4	
Tb	159	He	2881162.70	0.4	2866479.19	100.51	29.5	120.4	
Bi	209	No Gas	4503837.74	1.4	4424692.92	101.79	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:28:58 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.065	ppb	22.6	107.78	0.2	
11	B	6	No Gas	0.477	ppb	21.2	1370.11	4	
23	Na	45	He	-2.437	ppb	N/A	5967.81	200	
24	Mg	45	He	-0.297	ppb	N/A	611.17	20	
27	Al	45	He	-1.074	ppb	N/A	24.45	20	
28	Si	45	H2	0.896	ppb	79.8	297.00	100	
39	K	45	He	-2.675	ppb	N/A	11077.78	200	
40	Ca	45	H2	0.002	ppb	13375.1	1956.88	20	
51	V	89	He	-0.049	ppb	N/A	192.23	1	
52	Cr	89	He	0.016	ppb	8.4	53.32	1	
55	Mn	89	He	0.013	ppb	93.6	19.33	0.4	
56	Fe	89	H2	0.457	ppb	20.8	9363.61	20	
59	Co	89	He	0.000	ppb	N/A	8.89	0.2	
60	Ni	89	He	0.001	ppb	1478.6	43.33	0.4	
63	Cu	89	He	-0.065	ppb	N/A	337.80	0.6	
66	Zn	89	He	-0.021	ppb	N/A	62.23	2	
75	As	89	He	0.019	ppb	69.9	7.67	1	
78	Se	89	H2	0.063	ppb	19.9	5.67	1	
88	Sr	89	He	-0.002	ppb	N/A	5.56	1	
95	Mo	89	He	0.118	ppb	32.7	233.34	1	
107	Ag	89	He	0.008	ppb	27.5	35.56	0.2	
111	Cd	89	He	0.003	ppb	1.5	2.22	0.2	
118	Sn	159	He	0.087	ppb	34.8	146.67	1	
121	Sb	159	No Gas	0.011	ppb	19.3	176.86	0.2	
137	Ba	159	No Gas	0.017	ppb	103.9	66.74	0.4	
182	W	159	No Gas	0.057	ppb	58.8	460.53	1	
205	Tl	209	No Gas	0.016	ppb	8.9	246.95	0.2	
208	Pb	209	No Gas	0.013	ppb	27.0	427.15	0.2	
232	Th	209	No Gas	0.040	ppb	30.8	961.11	1	
238	U	209	No Gas	0.015	ppb	23.4	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1566883.60	2.0	1537409.87	101.92	29.5	120.4	
Sc	45	No Gas	3449162.92	3.3	3373253.08	102.25	29.5	120.4	
Sc	45	H2	412556.02	1.3	415670.69	99.25	29.5	120.4	
Sc	45	He	82135.20	1.8	81171.76	101.19	29.5	120.4	
Ge	72	No Gas	791134.60	2.8	779333.11	101.51	29.5	120.4	
Ge	72	H2	152761.10	0.8	153246.58	99.68	29.5	120.4	
Ge	72	He	63407.78	0.7	63135.03	100.43	29.5	120.4	
Y	89	H2	2640173.47	1.0	2642116.11	99.93	29.5	120.4	
Y	89	He	549642.08	0.8	544041.92	101.03	29.5	120.4	
Tb	159	No Gas	8360132.86	3.4	8117023.84	103	29.5	120.4	
Tb	159	He	2882716.52	0.6	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4546637.67	3.7	4424692.92	102.76	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:31:38 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.253	ppb	4.7	362.24	0.2	126.5	79.5	120.4	Failed DoD
11	B	6	No Gas	3.904	ppb	3.6	4428.62	4	97.6	79.5	120.4	
23	Na	45	He	205.470	ppb	2.1	29593.74	200	102.74	79.5	120.4	
24	Mg	45	He	20.608	ppb	15.4	1918.06	20	103.04	79.5	120.4	
27	Al	45	He	17.391	ppb	17.0	471.13	20	86.96	79.5	120.4	
28	Si	45	H2	103.516	ppb	6.2	4746.09	100	103.52	79.5	120.4	
39	K	45	He	204.443	ppb	6.0	22323.91	200	102.22	79.5	120.4	
40	Ca	45	H2	20.275	ppb	5.1	10365.25	20	101.38	79.5	120.4	
51	V	89	He	1.023	ppb	4.6	1130.09	1	102.3	79.5	120.4	
52	Cr	89	He	1.070	ppb	2.3	1192.51	1	107	79.5	120.4	
55	Mn	89	He	0.413	ppb	11.8	225.96	0.4	103.25	79.5	120.4	
56	Fe	89	H2	21.269	ppb	2.4	43552.60	20	106.34	79.5	120.4	
59	Co	89	He	0.220	ppb	23.5	411.15	0.2	110	79.5	120.4	
60	Ni	89	He	0.419	ppb	7.8	260.01	0.4	104.75	79.5	120.4	
63	Cu	89	He	0.581	ppb	8.7	1244.54	0.6	96.83	79.5	120.4	
66	Zn	89	He	2.143	ppb	4.5	478.91	2	107.15	79.5	120.4	
75	As	89	He	0.947	ppb	7.4	154.02	1	94.7	79.5	120.4	
78	Se	89	H2	0.985	ppb	4.7	81.17	1	98.5	79.5	120.4	
88	Sr	89	He	1.013	ppb	5.3	786.72	1	101.3	79.5	120.4	
95	Mo	89	He	0.997	ppb	3.4	1008.96	1	99.7	79.5	120.4	
107	Ag	89	He	0.214	ppb	5.6	654.49	0.2	107	79.5	120.4	
111	Cd	89	He	0.211	ppb	6.4	85.56	0.2	105.5	79.5	120.4	
118	Sn	159	He	0.979	ppb	5.4	918.95	1	97.9	79.5	120.4	
121	Sb	159	No Gas	0.221	ppb	1.7	1735.39	0.2	110.5	79.5	120.4	
137	Ba	159	No Gas	0.407	ppb	3.0	1204.73	0.4	101.75	79.5	120.4	
182	W	159	No Gas	0.973	ppb	6.4	5857.90	1	97.3	79.5	120.4	
205	Tl	209	No Gas	0.220	ppb	2.8	2946.99	0.2	110	79.5	120.4	
208	Pb	209	No Gas	0.212	ppb	7.6	4078.15	0.2	106	79.5	120.4	
232	Th	209	No Gas	0.206	ppb	4.8	4128.68	0.2	103	79.5	120.4	
238	U	209	No Gas	0.203	ppb	7.4	3661.33	0.2	101.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1566886.11	1.0	1537409.87	101.92	29.5	120.4	
Sc	45	No Gas	3433874.61	1.2	3373253.08	101.8	29.5	120.4	
Sc	45	H2	413669.22	1.6	415670.69	99.52	29.5	120.4	
Sc	45	He	81867.72	1.6	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	787408.37	1.5	779333.11	101.04	29.5	120.4	
Ge	72	H2	153590.82	1.0	153246.58	100.22	29.5	120.4	
Ge	72	He	63556.06	0.6	63135.03	100.67	29.5	120.4	
Y	89	H2	2634383.85	1.7	2642116.11	99.71	29.5	120.4	
Y	89	He	546699.78	1.4	544041.92	100.49	29.5	120.4	
Tb	159	No Gas	8247861.41	1.1	8117023.84	101.61	29.5	120.4	
Tb	159	He	2891086.80	1.2	2866479.19	100.86	29.5	120.4	
Bi	209	No Gas	4513641.97	1.1	4424692.92	102.01	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:39:51 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	95.465	ppb	4.7	130673.84	100	95.46	89.5	110.4	
11	B	6	No Gas	456.586	ppb	5.1	411557.91	500	91.32	89.5	110.4	
51	V	89	He	992.271	ppb	0.5	851648.71	1000	99.23	89.5	110.4	
52	Cr	89	He	1986.381	ppb	0.5	2103305.50	2000	99.32	89.5	110.4	
55	Mn	89	He	1965.187	ppb	0.6	991716.49	2000	98.26	89.5	110.4	
59	Co	89	He	1013.720	ppb	0.8	1817967.28	1000	101.37	89.5	110.4	
60	Ni	89	He	988.659	ppb	0.7	502390.82	1000	98.87	89.5	110.4	
63	Cu	89	He	1951.408	ppb	0.6	2690136.80	2000	97.57	89.5	110.4	
66	Zn	89	He	2011.048	ppb	0.8	379749.08	2000	100.55	89.5	110.4	
75	As	89	He	999.503	ppb	0.6	154295.49	1000	99.95	89.5	110.4	
78	Se	89	H2	1011.271	ppb	1.7	83984.30	1000	101.13	89.5	110.4	
88	Sr	89	He	2000.200	ppb	0.2	1508061.58	2000	100.01	89.5	110.4	
95	Mo	89	He	1012.808	ppb	0.8	876974.67	1000	101.28	89.5	110.4	
107	Ag	89	He	110.494	ppb	0.7	325337.28	100	110.49	89.5	110.4	> +/- 10%
111	Cd	89	He	1016.181	ppb	0.4	398640.66	1000	101.62	89.5	110.4	
118	Sn	159	He	972.929	ppb	0.1	840750.21	1000	97.29	89.5	110.4	
121	Sb	159	No Gas	927.147	ppb	4.9	7288691.14	1000	92.71	89.5	110.4	
137	Ba	159	No Gas	1843.292	ppb	5.5	5701186.72	2000	92.16	89.5	110.4	
182	W	159	No Gas	970.221	ppb	4.8	6069201.70	1000	97.02	89.5	110.4	
205	Tl	209	No Gas	951.383	ppb	4.4	13431041.82	1000	95.14	89.5	110.4	
208	Pb	209	No Gas	1847.899	ppb	4.9	36052232.05	2000	92.39	89.5	110.4	
232	Th	209	No Gas	921.402	ppb	6.0	18816727.11	1000	92.14	89.5	110.4	
238	U	209	No Gas	917.906	ppb	6.3	17595228.15	1000	91.79	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1580009.48	2.6	1537409.87	102.77	29.5	120.4	
Sc	45	No Gas	3492771.24	3.5	3373253.08	103.54	29.5	120.4	
Ge	72	No Gas	810314.65	3.1	779333.11	103.98	29.5	120.4	
Tb	159	No Gas	8749214.11	3.0	8117023.84	107.79	29.5	120.4	
Bi	209	No Gas	4801978.27	3.3	4424692.92	108.53	29.5	120.4	
Sc	45	H2	410409.97	2.4	415670.69	98.73	29.5	120.4	
Ge	72	H2	152861.04	1.7	153246.58	99.75	29.5	120.4	
Y	89	H2	2671970.94	1.4	2642116.11	101.13	29.5	120.4	
Sc	45	He	79320.41	1.2	81171.76	97.72	29.5	120.4	
Ge	72	He	62310.90	0.8	63135.03	98.69	29.5	120.4	
Y	89	He	535329.94	0.6	544041.92	98.4	29.5	120.4	
Tb	159	He	2887955.10	0.4	2866479.19	100.75	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 3:42:27 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.193	ppb	26.1	243.34	100	
11	B	6	No Gas	9.541	ppb	8.0	8168.15	1000	
23	Na	45	He	192300.728	ppb	0.9	21357287.78	200000	
24	Mg	45	He	192432.014	ppb	0.6	11755796.77	200000	
27	Al	45	He	186745.578	ppb	0.9	4417996.84	200000	
28	Si	45	H2	10116.011	ppb	0.7	422868.29	10000	>LDR
39	K	45	He	189470.162	ppb	0.8	10090186.78	200000	
40	Ca	45	H2	201724.170	ppb	0.3	80557066.58	200000	>LDR
51	V	89	He	0.043	ppb	62.6	263.34	1000	
52	Cr	89	He	1.337	ppb	5.8	1431.82	2000	
55	Mn	89	He	7.398	ppb	2.1	3697.83	2000	
56	Fe	89	H2	98997.565	ppb	0.4	158084111.88	100000	
59	Co	89	He	0.588	ppb	1.1	1049.01	1000	
60	Ni	89	He	1.923	ppb	11.0	1005.63	1000	
63	Cu	89	He	1.218	ppb	12.7	2070.23	2000	
66	Zn	89	He	1.655	ppb	15.9	372.24	2000	
75	As	89	He	0.272	ppb	9.8	46.01	1000	
78	Se	89	H2	1.318	ppb	67.8	104.83	1000	
88	Sr	89	He	1.207	ppb	3.3	904.51	2000	
95	Mo	89	He	1.531	ppb	1.9	1431.25	1000	
107	Ag	89	He	0.122	ppb	7.8	365.58	100	
111	Cd	89	He	0.140	ppb	11.8	55.19	1000	
118	Sn	159	He	1.219	ppb	2.9	1082.31	1000	
121	Sb	159	No Gas	1.078	ppb	17.8	7887.91	1000	
137	Ba	159	No Gas	1.976	ppb	16.8	5640.83	2000	
182	W	159	No Gas	2.055	ppb	9.4	11935.60	1000	
205	Tl	209	No Gas	0.798	ppb	24.0	9537.77	1000	
208	Pb	209	No Gas	1.814	ppb	18.1	30051.36	2000	
232	Th	209	No Gas	2.917	ppb	45.6	50636.55	1000	
238	U	209	No Gas	1.180	ppb	39.0	19158.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1352429.20	1.6	1537409.87	87.97	29.5	120.4	
Sc	45	No Gas	3245797.59	1.9	3373253.08	96.22	29.5	120.4	
Sc	45	H2	398422.80	1.5	415670.69	95.85	29.5	120.4	
Sc	45	He	79919.27	1.6	81171.76	98.46	29.5	120.4	
Ge	72	No Gas	729654.67	2.2	779333.11	93.63	29.5	120.4	
Ge	72	H2	142568.89	0.1	153246.58	93.03	29.5	120.4	
Ge	72	He	60231.11	1.2	63135.03	95.4	29.5	120.4	
Y	89	H2	2559310.63	1.1	2642116.11	96.87	29.5	120.4	
Y	89	He	528466.13	0.8	544041.92	97.14	29.5	120.4	
Tb	159	No Gas	8027257.87	1.7	8117023.84	98.89	29.5	120.4	
Tb	159	He	2779344.09	0.6	2866479.19	96.96	29.5	120.4	
Bi	209	No Gas	4046313.46	1.7	4424692.92	91.45	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 3:45:15 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	13.0	108.89	100	
11	B	6	No Gas	1.927	ppb	5.3	2752.58	1000	
23	Na	45	He	243.362	ppb	16.2	34549.81	200000	
24	Mg	45	He	19.998	ppb	9.1	1918.05	200000	
27	Al	45	He	22.155	ppb	19.5	597.81	200000	
28	Si	45	H2	5.086	ppb	62.8	507.24	10000	
39	K	45	He	57.568	ppb	11.5	14634.32	200000	
40	Ca	45	H2	32.633	ppb	5.6	16371.15	200000	
51	V	89	He	0.175	ppb	16.6	392.24	1000	
52	Cr	89	He	0.103	ppb	5.4	147.97	2000	
55	Mn	89	He	0.147	ppb	16.9	89.32	2000	
56	Fe	89	H2	22.614	ppb	8.2	48162.88	100000	
59	Co	89	He	0.059	ppb	11.4	117.79	1000	
60	Ni	89	He	0.071	ppb	19.7	80.01	1000	
63	Cu	89	He	1.680	ppb	4.1	2817.06	2000	
66	Zn	89	He	0.821	ppb	11.9	226.68	2000	
75	As	89	He	0.052	ppb	48.0	13.00	1000	
78	Se	89	H2	0.234	ppb	36.2	20.67	1000	
88	Sr	89	He	0.048	ppb	52.6	44.45	2000	
95	Mo	89	He	0.363	ppb	23.9	453.36	1000	
107	Ag	89	He	0.008	ppb	102.9	35.56	100	
111	Cd	89	He	0.065	ppb	19.0	27.41	1000	
118	Sn	159	He	0.439	ppb	11.4	451.14	1000	
121	Sb	159	No Gas	0.070	ppb	17.2	634.06	1000	
137	Ba	159	No Gas	0.106	ppb	22.5	337.05	2000	
182	W	159	No Gas	0.163	ppb	21.2	1111.30	1000	
205	Tl	209	No Gas	0.043	ppb	8.2	600.69	1000	
208	Pb	209	No Gas	0.130	ppb	11.9	2599.69	2000	
232	Th	209	No Gas	0.043	ppb	15.4	1011.18	1000	
238	U	209	No Gas	0.029	ppb	12.4	537.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1618738.11	1.2	1537409.87	105.29	29.5	120.4	
Sc	45	No Gas	3554250.71	1.9	3373253.08	105.37	29.5	120.4	
Sc	45	H2	437176.66	1.4	415670.69	105.17	29.5	120.4	
Sc	45	He	83681.45	3.6	81171.76	103.09	29.5	120.4	
Ge	72	No Gas	806224.90	1.3	779333.11	103.45	29.5	120.4	
Ge	72	H2	160789.28	0.7	153246.58	104.92	29.5	120.4	
Ge	72	He	64584.73	2.4	63135.03	102.3	29.5	120.4	
Y	89	H2	2772707.56	1.0	2642116.11	104.94	29.5	120.4	
Y	89	He	551858.95	2.7	544041.92	101.44	29.5	120.4	
Tb	159	No Gas	8456423.21	2.0	8117023.84	104.18	29.5	120.4	
Tb	159	He	2886144.02	2.7	2866479.19	100.69	29.5	120.4	
Bi	209	No Gas	4559243.77	1.8	4424692.92	103.04	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 3:47:55 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.058	ppb	29.8	102.23	100	
11	B	6	No Gas	1.540	ppb	4.3	2422.52	1000	
23	Na	45	He	115.001	ppb	5.8	19799.01	200000	
24	Mg	45	He	12.152	ppb	22.4	1424.62	200000	
27	Al	45	He	15.177	ppb	4.0	428.91	200000	
28	Si	45	H2	4.216	ppb	58.4	453.85	10000	
39	K	45	He	35.341	ppb	13.9	13448.65	200000	
40	Ca	45	H2	16.340	ppb	4.9	8988.69	200000	
51	V	89	He	0.252	ppb	16.7	466.69	1000	
52	Cr	89	He	0.092	ppb	16.3	138.64	2000	
55	Mn	89	He	0.141	ppb	17.9	87.32	2000	
56	Fe	89	H2	12.953	ppb	4.9	30794.51	100000	
59	Co	89	He	0.058	ppb	23.2	117.79	1000	
60	Ni	89	He	0.079	ppb	47.7	85.56	1000	
63	Cu	89	He	1.070	ppb	4.9	1981.32	2000	
66	Zn	89	He	0.862	ppb	13.2	237.79	2000	
75	As	89	He	0.063	ppb	17.0	15.00	1000	
78	Se	89	H2	0.146	ppb	32.5	12.83	1000	
88	Sr	89	He	0.058	ppb	66.8	52.22	2000	
95	Mo	89	He	0.224	ppb	30.1	333.35	1000	
107	Ag	89	He	0.005	ppb	13.8	25.56	100	
111	Cd	89	He	0.037	ppb	34.6	16.29	1000	
118	Sn	159	He	0.255	ppb	6.5	295.57	1000	
121	Sb	159	No Gas	0.180	ppb	60.5	1469.04	1000	
137	Ba	159	No Gas	0.362	ppb	64.9	1101.64	2000	
182	W	159	No Gas	0.210	ppb	36.4	1391.99	1000	
205	Tl	209	No Gas	0.151	ppb	58.4	2063.78	1000	
208	Pb	209	No Gas	0.343	ppb	62.2	6576.14	2000	
232	Th	209	No Gas	0.154	ppb	65.3	3178.38	1000	
238	U	209	No Gas	0.149	ppb	67.9	2726.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1636914.77	1.2	1537409.87	106.47	29.5	120.4	
Sc	45	No Gas	3553320.56	1.4	3373253.08	105.34	29.5	120.4	
Sc	45	H2	425687.48	1.1	415670.69	102.41	29.5	120.4	
Sc	45	He	83966.13	0.8	81171.76	103.44	29.5	120.4	
Ge	72	No Gas	806045.48	1.1	779333.11	103.43	29.5	120.4	
Ge	72	H2	157779.25	1.5	153246.58	102.96	29.5	120.4	
Ge	72	He	65129.67	0.4	63135.03	103.16	29.5	120.4	
Y	89	H2	2715276.74	1.2	2642116.11	102.77	29.5	120.4	
Y	89	He	559994.87	0.1	544041.92	102.93	29.5	120.4	
Tb	159	No Gas	8445936.06	0.7	8117023.84	104.05	29.5	120.4	
Tb	159	He	2925917.73	0.7	2866479.19	102.07	29.5	120.4	
Bi	209	No Gas	4569007.96	0.9	4424692.92	103.26	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	017ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:50:38 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	19.180	ppb	4.8	24333.29	20	79.5	120.4	
11	B	6	No Gas	20.113	ppb	5.0	17636.83	20	79.5	120.4	
23	Na	45	He	93903.374	ppb	0.8	10349957.93	100000	79.5	120.4	
24	Mg	45	He	93920.450	ppb	0.7	5692743.95	100000	79.5	120.4	
27	Al	45	He	89659.537	ppb	0.9	2104435.18	100000	79.5	120.4	
28	Si	45	H2	507.549	ppb	2.6	21623.72	500	79.5	120.4	
39	K	45	He	92256.753	ppb	1.1	4879663.39	100000	79.5	120.4	
40	Ca	45	H2	98697.429	ppb	1.4	39723185.24	100000	79.5	120.4	
51	V	89	He	19.700	ppb	0.7	17013.00	20	79.5	120.4	
52	Cr	89	He	19.394	ppb	0.5	20427.00	20	79.5	120.4	
55	Mn	89	He	19.829	ppb	2.0	9949.72	20	79.5	120.4	
56	Fe	89	H2	96847.532	ppb	1.4	155924160.33	100000	79.5	120.4	
59	Co	89	He	19.792	ppb	0.8	35253.12	20	79.5	120.4	
60	Ni	89	He	19.176	ppb	1.9	9717.05	20	79.5	120.4	
63	Cu	89	He	19.490	ppb	0.6	27091.42	20	79.5	120.4	
66	Zn	89	He	18.826	ppb	5.9	3593.94	20	79.5	120.4	
75	As	89	He	19.853	ppb	1.5	3047.67	20	79.5	120.4	
78	Se	89	H2	20.242	ppb	2.0	1624.19	20	79.5	120.4	
88	Sr	89	He	20.328	ppb	2.0	15225.57	20	79.5	120.4	
95	Mo	89	He	1967.701	ppb	0.5	1691809.21	2000	79.5	120.4	
107	Ag	89	He	13.451	ppb	1.4	39336.65	20	79.5	120.4	> +/- 10%
111	Cd	89	He	19.248	ppb	1.1	7498.82	20	79.5	120.4	
118	Sn	159	He	19.596	ppb	1.5	16804.38	20	79.5	120.4	
121	Sb	159	No Gas	19.379	ppb	4.9	141782.13	20	79.5	120.4	
137	Ba	159	No Gas	19.284	ppb	4.7	55497.11	20	79.5	120.4	
182	W	159	No Gas	19.731	ppb	4.5	114910.99	20	79.5	120.4	
205	Tl	209	No Gas	19.529	ppb	4.0	241788.06	20	79.5	120.4	
208	Pb	209	No Gas	19.652	ppb	5.1	336353.01	20	79.5	120.4	
232	Th	209	No Gas	20.347	ppb	5.4	364563.76	20	79.5	120.4	
238	U	209	No Gas	20.183	ppb	4.8	339375.57	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1463739.06	2.9	1537409.87	95.21	29.5	120.4	
Sc	45	No Gas	3314206.15	3.0	3373253.08	98.25	29.5	120.4	
Sc	45	H2	401542.80	0.6	415670.69	96.6	29.5	120.4	
Sc	45	He	79286.62	0.5	81171.76	97.68	29.5	120.4	
Ge	72	No Gas	758456.70	3.2	779333.11	97.32	29.5	120.4	
Ge	72	H2	146979.43	1.6	153246.58	95.91	29.5	120.4	
Ge	72	He	60635.38	0.3	63135.03	96.04	29.5	120.4	
Y	89	H2	2580569.85	0.8	2642116.11	97.67	29.5	120.4	
Y	89	He	531577.42	0.6	544041.92	97.71	29.5	120.4	
Tb	159	No Gas	8135662.66	2.4	8117023.84	100.23	29.5	120.4	
Tb	159	He	2854076.21	0.4	2866479.19	99.57	29.5	120.4	
Bi	209	No Gas	4210067.63	2.8	4424692.92	95.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	018_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:53:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.341	ppb	4.5	31552.96	25	93.36	89.8	110.2	
11	B	6	No Gas	23.365	ppb	4.0	21684.65	25	93.46	89.8	110.2	
23	Na	45	He	5143.050	ppb	2.0	602114.08	5000	102.86	89.8	110.2	
24	Mg	45	He	4937.726	ppb	2.2	315334.95	5000	98.75	89.8	110.2	
27	Al	45	He	503.092	ppb	3.0	12470.28	500	100.62	89.8	110.2	
28	Si	45	H2	493.737	ppb	1.1	22308.85	500	98.75	89.8	110.2	
39	K	45	He	4973.938	ppb	2.6	287420.94	5000	99.48	89.8	110.2	
40	Ca	45	H2	5025.169	ppb	0.8	2146485.39	5000	100.5	89.8	110.2	
51	V	89	He	24.673	ppb	1.0	22181.45	25	98.69	89.8	110.2	
52	Cr	89	He	25.160	ppb	2.6	27647.24	25	100.64	89.8	110.2	
55	Mn	89	He	24.782	ppb	1.0	12975.63	25	99.13	89.8	110.2	
56	Fe	89	H2	5028.964	ppb	1.7	8574327.05	5000	100.58	89.8	110.2	
59	Co	89	He	25.105	ppb	1.4	46673.71	25	100.42	89.8	110.2	
60	Ni	89	He	25.458	ppb	2.0	13450.22	25	101.83	89.8	110.2	
63	Cu	89	He	25.640	ppb	1.9	37063.30	25	102.56	89.8	110.2	
66	Zn	89	He	25.311	ppb	3.0	5019.97	25	101.24	89.8	110.2	
75	As	89	He	24.747	ppb	0.9	3964.33	25	98.99	89.8	110.2	
78	Se	89	H2	24.915	ppb	1.6	2114.90	25	99.66	89.8	110.2	
88	Sr	89	He	24.318	ppb	0.9	19010.38	25	97.27	89.8	110.2	
95	Mo	89	He	26.260	ppb	2.3	23692.25	25	105.04	89.8	110.2	
107	Ag	89	He	18.448	ppb	1.1	56309.67	25	73.79	89.8	110.2	> +/- 10%
111	Cd	89	He	24.844	ppb	2.6	10102.39	25	99.38	89.8	110.2	
118	Sn	159	He	24.359	ppb	0.9	21337.49	25	97.44	89.8	110.2	
121	Sb	159	No Gas	24.362	ppb	5.2	187640.37	25	97.45	89.8	110.2	
137	Ba	159	No Gas	23.950	ppb	4.2	72574.42	25	95.8	89.8	110.2	
182	W	159	No Gas	23.448	ppb	4.1	143781.83	25	93.79	89.8	110.2	
205	Tl	209	No Gas	24.013	ppb	4.3	326692.30	25	96.05	89.8	110.2	
208	Pb	209	No Gas	23.883	ppb	4.0	449246.04	25	95.53	89.8	110.2	
232	Th	209	No Gas	23.635	ppb	5.1	465396.32	25	94.54	89.8	110.2	
238	U	209	No Gas	23.583	ppb	4.6	435776.68	25	94.33	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559386.22	2.1	1537409.87	101.43	29.5	120.4	
Sc	45	No Gas	3517378.84	1.8	3373253.08	104.27	29.5	120.4	
Sc	45	H2	425790.94	1.0	415670.69	102.43	29.5	120.4	
Sc	45	He	83400.57	2.1	81171.76	102.75	29.5	120.4	
Ge	72	No Gas	808165.98	2.4	779333.11	103.7	29.5	120.4	
Ge	72	H2	159333.21	0.3	153246.58	103.97	29.5	120.4	
Ge	72	He	64656.86	0.5	63135.03	102.41	29.5	120.4	
Y	89	H2	2730459.06	1.5	2642116.11	103.34	29.5	120.4	
Y	89	He	554877.55	0.7	544041.92	101.99	29.5	120.4	
Tb	159	No Gas	8565560.85	2.1	8117023.84	105.53	29.5	120.4	
Tb	159	He	2917711.73	0.8	2866479.19	101.79	29.5	120.4	
Bi	209	No Gas	4625644.49	2.1	4424692.92	104.54	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	019_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:56:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.074	ppb	13.2	118.89	0.2	
11	B	6	No Gas	0.771	ppb	8.7	1629.04	4	
23	Na	45	He	71.078	ppb	7.1	14540.18	200	
24	Mg	45	He	11.730	ppb	21.2	1386.83	20	Failed DoD
27	Al	45	He	9.152	ppb	53.8	278.90	20	
28	Si	45	H2	0.731	ppb	118.8	303.67	100	
39	K	45	He	25.258	ppb	7.5	12768.40	200	
40	Ca	45	H2	9.254	ppb	2.0	6049.31	20	
51	V	89	He	0.149	ppb	15.6	368.91	1	
52	Cr	89	He	0.063	ppb	24.1	104.65	1	
55	Mn	89	He	0.068	ppb	61.9	48.66	0.4	
56	Fe	89	H2	12.456	ppb	2.3	30533.81	20	Failed DoD
59	Co	89	He	0.037	ppb	38.9	77.78	0.2	
60	Ni	89	He	0.053	ppb	72.3	71.11	0.4	
63	Cu	89	He	0.425	ppb	7.6	1035.63	0.6	Failed DoD
66	Zn	89	He	0.012	ppb	287.6	68.89	2	
75	As	89	He	0.031	ppb	23.6	9.67	1	
78	Se	89	H2	0.065	ppb	68.1	6.17	1	
88	Sr	89	He	0.034	ppb	51.6	33.33	1	
95	Mo	89	He	0.456	ppb	23.5	537.81	1	
107	Ag	89	He	0.012	ppb	67.9	46.67	0.2	
111	Cd	89	He	0.032	ppb	67.2	14.07	0.2	
118	Sn	159	He	0.147	ppb	19.8	197.79	1	
121	Sb	159	No Gas	0.032	ppb	39.8	343.72	0.2	
137	Ba	159	No Gas	0.040	ppb	23.6	136.82	0.4	
182	W	159	No Gas	0.076	ppb	29.7	584.00	1	
205	Tl	209	No Gas	0.029	ppb	16.5	420.48	0.2	
208	Pb	209	No Gas	0.034	ppb	26.2	827.60	0.2	
232	Th	209	No Gas	0.051	ppb	8.1	1174.70	1	
238	U	209	No Gas	0.023	ppb	28.7	427.17	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1563579.21	2.5	1537409.87	101.7	29.5	120.4	
Sc	45	No Gas	3537558.66	2.3	3373253.08	104.87	29.5	120.4	
Sc	45	H2	431614.45	2.0	415670.69	103.84	29.5	120.4	
Sc	45	He	83200.71	2.9	81171.76	102.5	29.5	120.4	
Ge	72	No Gas	808388.19	1.9	779333.11	103.73	29.5	120.4	
Ge	72	H2	158734.84	2.7	153246.58	103.58	29.5	120.4	
Ge	72	He	64750.81	1.9	63135.03	102.56	29.5	120.4	
Y	89	H2	2767574.19	1.6	2642116.11	104.75	29.5	120.4	
Y	89	He	552533.56	2.8	544041.92	101.56	29.5	120.4	
Tb	159	No Gas	8481126.33	2.6	8117023.84	104.49	29.5	120.4	
Tb	159	He	2877328.08	3.0	2866479.19	100.38	29.5	120.4	
Bi	209	No Gas	4574833.32	2.3	4424692.92	103.39	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	021ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:01:26 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.032	ppb	27.7	56.67	0.2	-50	50	
B	11	6	No Gas	0.750	ppb	3.0	1471.24	4	-50	100	
Na	23	45	He	95865.056	ppb	1.7	10349496.84	100000	80	120	
Mg	24	45	He	96140.778	ppb	2.0	5707641.51	100000	80	120	
Al	27	45	He	91637.356	ppb	2.1	2106679.12	100000	80	120	
Si	28	45	H2	5.398	ppb	8.5	473.88	100	-50	50	
K	39	45	He	94013.934	ppb	1.8	4870418.69	100000	80	120	
Ca	40	45	H2	100004.803	ppb	2.2	39866582.18	100000	80	120	
V	51	89	He	0.142	ppb	30.0	342.24	1	-50	100	
Cr	52	89	He	0.307	ppb	3.0	351.28	0.78	-100	100	
Mn	55	89	He	0.395	ppb	4.3	206.63	0.0826	100	100	
Fe	56	89	H2	97507.252	ppb	1.4	156083903.40	100000	80	120	
Co	59	89	He	0.269	ppb	12.7	480.05	0.2	-50	100	
Ni	60	89	He	0.275	ppb	22.1	176.67	0.114	100	100	
Cu	63	89	He	0.780	ppb	4.1	1457.90	-0.043	100	100	DoD
Zn	66	89	He	0.545	ppb	7.2	163.34	-0.7632	100	100	
As	75	89	He	0.055	ppb	55.8	12.67	1	-50	100	
Se	78	89	H2	0.172	ppb	25.0	14.17	1	-50	100	
Sr	88	89	He	0.782	ppb	5.1	582.25	0.0578	100	100	
Mo	95	89	He	1980.677	ppb	1.8	1672688.74	2000	80	120	
Ag	107	89	He	0.019	ppb	23.5	65.56	0.2	-50	50	
Cd	111	89	He	0.364	ppb	5.1	140.37	0.268	100	100	
Sn	118	159	He	0.311	ppb	13.7	331.13	-0.24	100	100	
Sb	121	159	No Gas	0.159	ppb	4.0	1248.11	0.089	100	100	
Ba	137	159	No Gas	0.208	ppb	9.2	610.70	-0.0794	100	100	
W	182	159	No Gas	0.203	ppb	7.0	1294.85	0.32	-100	100	
Tl	205	209	No Gas	0.004	ppb	34.7	73.42	0.2	-50	50	
Pb	208	209	No Gas	0.096	ppb	10.5	1795.40	0.03	100	100	
Th	232	209	No Gas	0.036	ppb	38.3	807.60	0.2	-50	50	
U	238	209	No Gas	0.003	ppb	86.4	60.07	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1428320.58	2.1	1537409.87	92.9	29.5	120.4	
Sc	45	No Gas	3305719.59	2.3	3373253.08	98	29.5	120.4	
Sc	45	H2	397721.78	1.0	415670.69	95.68	29.5	120.4	
Sc	45	He	77678.45	2.1	81171.76	95.7	29.5	120.4	
Ge	72	No Gas	755442.14	2.3	779333.11	96.93	29.5	120.4	
Ge	72	H2	145259.47	1.0	153246.58	94.79	29.5	120.4	
Ge	72	He	59866.73	1.4	63135.03	94.82	29.5	120.4	
Y	89	H2	2565706.76	1.1	2642116.11	97.11	29.5	120.4	
Y	89	He	522235.95	1.7	544041.92	95.99	29.5	120.4	
Tb	159	No Gas	8096408.28	2.3	8117023.84	99.75	29.5	120.4	
Tb	159	He	2804481.56	1.6	2866479.19	97.84	29.5	120.4	
Bi	209	No Gas	4178657.26	2.1	4424692.92	94.44	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF30IMW1
File Name	022_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:04:08 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.132	ppb	22.2	55.56	0.5	
B	11	6	No Gas	2.186	ppb	21.1	1338.99	10	
Na	23	45	He	707.304	ppb	11.3	21560.27	500	PB 6020 Fails DoD
Mg	24	45	He	93.225	ppb	16.1	1733.56	50	PB 6020 Fails DoD
Al	27	45	He	113.685	ppb	6.5	581.15	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Si	28	45	H2	17.083	ppb	69.8	400.46	250	
K	39	45	He	220.366	ppb	10.9	13133.50	500	
Ca	40	45	H2	212.586	ppb	4.5	19229.19	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
V	51	89	He	3.231	ppb	1.3	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.315	ppb	41.5	101.32	2.5	
Mn	55	89	He	0.582	ppb	16.5	71.32	1	
Fe	56	89	H2	164.295	ppb	2.5	62997.83	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.044	ppb	88.2	24.44	0.5	
Ni	60	89	He	0.268	ppb	56.0	68.89	1	
Cu	63	89	He	5.098	ppb	5.9	1824.63	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	3.703	ppb	7.2	204.45	5	
As	75	89	He	0.304	ppb	37.5	14.00	2.5	
Se	78	89	H2	0.456	ppb	15.3	8.00	2.5	
Sr	88	89	He	0.081	ppb	109.2	18.89	2.5	
Mo	95	89	He	10.219	ppb	5.9	1895.76	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Ag	107	89	He	0.017	ppb	147.9	21.11	0.5	
Cd	111	89	He	0.057	ppb	88.9	5.55	0.5	
Sn	118	159	He	1.243	ppb	20.3	286.68	2.5	
Sb	121	159	No Gas	0.067	ppb	58.0	200.23	0.5	
Ba	137	159	No Gas	0.066	ppb	39.9	56.73	1	
W	182	159	No Gas	0.026	ppb	212.3	153.50	2.5	
Tl	205	209	No Gas	0.015	ppb	92.4	70.08	0.5	
Pb	208	209	No Gas	0.279	ppb	14.4	1238.08	0.5	
Th	232	209	No Gas	0.055	ppb	20.3	390.45	2.5	
U	238	209	No Gas	0.015	ppb	96.6	60.07	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573321.88	2.7	1537409.87	102.34	29.5	120.4	
Sc	45	No Gas	3385796.67	1.7	3373253.08	100.37	29.5	120.4	
Sc	45	H2	406215.16	1.9	415670.69	97.73	29.5	120.4	
Sc	45	He	79130.26	0.9	81171.76	97.48	29.5	120.4	
Ge	72	No Gas	794753.76	1.7	779333.11	101.98	29.5	120.4	
Ge	72	H2	149990.75	2.4	153246.58	97.88	29.5	120.4	
Ge	72	He	61847.78	1.4	63135.03	97.96	29.5	120.4	
Y	89	H2	2651511.34	2.0	2642116.11	100.36	29.5	120.4	
Y	89	He	535660.24	1.0	544041.92	98.46	29.5	120.4	
Tb	159	No Gas	8476086.40	1.4	8117023.84	104.42	29.5	120.4	
Tb	159	He	2891335.65	0.6	2866479.19	100.87	29.5	120.4	
Bi	209	No Gas	4631778.75	2.3	4424692.92	104.68	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF30IMW1
File Name	023LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:06:50 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	43.859	ppb	4.6	11457.14	50	17.54	79.5	120.4	
B	11	6	No Gas	476.817	ppb	5.8	82596.98	500	19.07	79.5	120.4	
Na	23	45	He	8113.410	ppb	1.6	184125.03	7500	21.64	79.5	120.4	
Mg	24	45	He	4989.972	ppb	1.6	60874.38	5000	19.96	79.5	120.4	
Al	27	45	He	1803.353	ppb	1.3	8483.91	2000	18.03	79.5	120.4	
Si	28	45	H2	1051.741	ppb	4.4	9052.90	1000	21.03	0	200	
K	39	45	He	10352.600	ppb	0.9	119686.59	10000	20.71	79.5	120.4	
Ca	40	45	H2	2666.378	ppb	0.8	215204.72	2500	21.33	79.5	120.4	
V	51	89	He	476.086	ppb	0.1	82032.07	500	19.04	79.5	120.4	
Cr	52	89	He	192.616	ppb	0.9	40874.56	200	19.26	79.5	120.4	
Mn	55	89	He	480.833	ppb	0.6	48601.58	500	19.23	79.5	120.4	
Fe	56	89	H2	1048.488	ppb	1.3	350550.55	1000	20.97	79.5	120.4	
Co	59	89	He	491.286	ppb	0.2	176440.85	500	19.65	79.5	120.4	
Ni	60	89	He	473.155	ppb	0.4	48184.76	500	18.93	79.5	120.4	
Cu	63	89	He	243.993	ppb	0.2	67764.85	250	19.52	79.5	120.4	
Zn	66	89	He	481.447	ppb	2.2	18268.12	500	19.26	79.5	120.4	
As	75	89	He	100.940	ppb	1.9	3125.03	100	20.19	79.5	120.4	
Se	78	89	H2	100.767	ppb	0.8	1638.19	100	20.15	79.5	120.4	
Sr	88	89	He	507.803	ppb	0.9	76672.75	500	20.31	79.5	120.4	
Mo	95	89	He	104.580	ppb	3.3	18254.96	100	20.92	79.5	120.4	
Ag	107	89	He	50.683	ppb	1.2	29892.54	50	20.27	79.5	120.4	
Cd	111	89	He	253.294	ppb	0.9	19898.05	250	20.26	79.5	120.4	
Sn	118	159	He	492.523	ppb	1.6	85304.07	500	19.7	79.5	120.4	
Sb	121	159	No Gas	97.421	ppb	5.7	150571.38	100	19.48	79.5	120.4	
Ba	137	159	No Gas	1799.008	ppb	5.7	1093409.47	2000	17.99	79.5	120.4	
W	182	159	No Gas	100.061	ppb	4.9	123122.20	100	20.01	79.5	120.4	
Tl	205	209	No Gas	98.871	ppb	5.9	271588.56	100	19.77	79.5	120.4	
[Pb]	206	209	No Gas	100.062	ppb	6.2	94611.29	100	20.01	79.5	120.4	
[Pb]	207	209	No Gas	98.645	ppb	5.8	81765.48	100	19.73	79.5	120.4	
Pb	208	209	No Gas	98.771	ppb	5.7	375161.79	100	19.75	79.5	120.4	
Th	232	209	No Gas	97.689	ppb	6.5	388382.93	100	19.54	79.5	120.4	
U	238	209	No Gas	98.228	ppb	6.5	366445.16	100	19.65	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1505650.32	3.4	1537409.87	97.93	29.5	120.4	
Sc	45	No Gas	3388736.58	3.4	3373253.08	100.46	29.5	120.4	
Sc	45	H2	399092.36	1.3	415670.69	96.01	29.5	120.4	
Sc	45	He	79008.58	0.7	81171.76	97.34	29.5	120.4	
Ge	72	No Gas	788889.98	3.3	779333.11	101.23	29.5	120.4	
Ge	72	H2	148034.71	1.0	153246.58	96.6	29.5	120.4	
Ge	72	He	62012.89	0.8	63135.03	98.22	29.5	120.4	
Y	89	H2	2614091.79	0.9	2642116.11	98.94	29.5	120.4	
Y	89	He	535985.25	0.5	544041.92	98.52	29.5	120.4	
Tb	159	No Gas	8598091.33	3.4	8117023.84	105.93	29.5	120.4	
Tb	159	He	2892063.74	0.4	2866479.19	100.89	29.5	120.4	
Bi	209	No Gas	4673848.63	3.8	4424692.92	105.63	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	024_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:09:40 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.015	ppb	3.6	30999.52	25	100.06	89.8	110.2	
11	B	6	No Gas	25.325	ppb	4.8	21473.27	25	101.3	89.8	110.2	
23	Na	45	He	5058.624	ppb	0.8	581592.97	5000	101.17	89.8	110.2	
24	Mg	45	He	4918.408	ppb	1.5	308392.51	5000	98.37	89.8	110.2	
27	Al	45	He	487.782	ppb	2.5	11873.10	500	97.56	89.8	110.2	
28	Si	45	H2	513.441	ppb	3.4	22379.01	500	102.69	89.8	110.2	
39	K	45	He	4912.231	ppb	2.1	278844.59	5000	98.24	89.8	110.2	
40	Ca	45	H2	5051.806	ppb	0.2	2082764.80	5000	101.04	89.8	110.2	
51	V	89	He	24.311	ppb	1.8	21668.40	25	97.24	89.8	110.2	
52	Cr	89	He	24.409	ppb	2.1	26590.07	25	97.64	89.8	110.2	
55	Mn	89	He	24.603	ppb	1.4	12770.78	25	98.41	89.8	110.2	
56	Fe	89	H2	5055.773	ppb	0.4	8315202.83	5000	101.12	89.8	110.2	
59	Co	89	He	24.737	ppb	3.1	45587.90	25	98.95	89.8	110.2	
60	Ni	89	He	24.984	ppb	2.0	13085.42	25	99.94	89.8	110.2	
63	Cu	89	He	24.916	ppb	0.4	35718.70	25	99.66	89.8	110.2	
66	Zn	89	He	24.972	ppb	0.2	4911.05	25	99.89	89.8	110.2	
75	As	89	He	24.299	ppb	0.9	3859.29	25	97.2	89.8	110.2	
78	Se	89	H2	25.641	ppb	1.3	2099.56	25	102.56	89.8	110.2	
88	Sr	89	He	24.427	ppb	1.5	18929.19	25	97.71	89.8	110.2	
95	Mo	89	He	24.245	ppb	3.1	21694.51	25	96.98	89.8	110.2	
107	Ag	89	He	17.899	ppb	1.3	54157.73	25	71.6	89.8	110.2	> +/- 10%
111	Cd	89	He	24.305	ppb	2.6	9798.08	25	97.22	89.8	110.2	
118	Sn	159	He	23.540	ppb	2.3	20487.33	25	94.16	89.8	110.2	
121	Sb	159	No Gas	25.171	ppb	7.6	184644.83	25	100.68	89.8	110.2	
137	Ba	159	No Gas	24.997	ppb	7.0	72156.18	25	99.99	89.8	110.2	
182	W	159	No Gas	24.616	ppb	7.3	143744.37	25	98.46	89.8	110.2	
205	Tl	209	No Gas	25.134	ppb	7.1	326617.58	25	100.54	89.8	110.2	
208	Pb	209	No Gas	24.945	ppb	6.2	448284.40	25	99.78	89.8	110.2	
232	Th	209	No Gas	24.743	ppb	7.0	465468.10	25	98.97	89.8	110.2	
238	U	209	No Gas	24.684	ppb	7.9	435608.98	25	98.74	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1428981.73	1.2	1537409.87	92.95	29.5	120.4	
Sc	45	No Gas	3315987.82	4.8	3373253.08	98.3	29.5	120.4	
Sc	45	H2	410950.81	0.9	415670.69	98.86	29.5	120.4	
Sc	45	He	81868.47	1.0	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	763223.76	2.0	779333.11	97.93	29.5	120.4	
Ge	72	H2	153370.25	1.4	153246.58	100.08	29.5	120.4	
Ge	72	He	63918.01	0.7	63135.03	101.24	29.5	120.4	
Y	89	H2	2633432.43	0.5	2642116.11	99.67	29.5	120.4	
Y	89	He	550074.01	1.0	544041.92	101.11	29.5	120.4	
Tb	159	No Gas	8173102.38	5.1	8117023.84	100.69	29.5	120.4	
Tb	159	He	2898949.47	1.4	2866479.19	101.13	29.5	120.4	
Bi	209	No Gas	4424628.12	4.4	4424692.92	100	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	025_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:12:22 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	6.4	103.33	0.2	
11	B	6	No Gas	0.883	ppb	4.1	1635.71	4	
23	Na	45	He	23.891	ppb	1.4	8949.36	200	
24	Mg	45	He	1.723	ppb	59.5	735.63	20	
27	Al	45	He	-0.750	ppb	N/A	32.22	20	
28	Si	45	H2	0.443	ppb	160.9	276.98	100	
39	K	45	He	15.269	ppb	39.3	12026.33	200	
40	Ca	45	H2	0.842	ppb	25.9	2303.61	20	
51	V	89	He	0.086	ppb	32.7	311.13	1	
52	Cr	89	He	0.038	ppb	15.5	76.66	1	
55	Mn	89	He	0.014	ppb	95.9	20.00	0.4	
56	Fe	89	H2	4.222	ppb	10.2	15442.42	20	
59	Co	89	He	0.010	ppb	135.7	26.67	0.2	
60	Ni	89	He	0.035	ppb	133.1	61.11	0.4	
63	Cu	89	He	0.084	ppb	23.4	547.81	0.6	
66	Zn	89	He	0.037	ppb	203.5	73.34	2	
75	As	89	He	-0.002	ppb	N/A	4.33	1	
78	Se	89	H2	0.057	ppb	14.0	5.17	1	
88	Sr	89	He	0.009	ppb	87.4	13.34	1	
95	Mo	89	He	0.125	ppb	54.1	238.90	1	
107	Ag	89	He	0.007	ppb	32.9	32.22	0.2	
111	Cd	89	He	0.000	ppb	N/A	1.11	0.2	
118	Sn	159	He	0.187	ppb	22.2	232.23	1	
121	Sb	159	No Gas	0.019	ppb	24.9	236.93	0.2	
137	Ba	159	No Gas	0.024	ppb	51.9	86.77	0.4	
182	W	159	No Gas	0.073	ppb	26.4	543.95	1	
205	Tl	209	No Gas	0.019	ppb	27.0	270.31	0.2	
208	Pb	209	No Gas	0.017	ppb	6.5	487.22	0.2	
232	Th	209	No Gas	0.120	ppb	10.0	2446.33	1	
238	U	209	No Gas	0.018	ppb	37.1	323.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1479010.69	0.6	1537409.87	96.2	29.5	120.4	
Sc	45	No Gas	3378358.16	1.8	3373253.08	100.15	29.5	120.4	
Sc	45	H2	412639.06	2.5	415670.69	99.27	29.5	120.4	
Sc	45	He	81914.72	0.6	81171.76	100.92	29.5	120.4	
Ge	72	No Gas	778504.07	1.2	779333.11	99.89	29.5	120.4	
Ge	72	H2	153856.59	2.1	153246.58	100.4	29.5	120.4	
Ge	72	He	63767.16	0.4	63135.03	101	29.5	120.4	
Y	89	H2	2620873.18	2.1	2642116.11	99.2	29.5	120.4	
Y	89	He	549136.97	0.1	544041.92	100.94	29.5	120.4	
Tb	159	No Gas	8179788.00	2.0	8117023.84	100.77	29.5	120.4	
Tb	159	He	2879091.83	0.1	2866479.19	100.44	29.5	120.4	
Bi	209	No Gas	4454340.64	1.7	4424692.92	100.67	29.5	120.4	

Sample Report

Sample Name SN5146-018

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:15:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.111	ppb	26.7	47.78	100	
11	B	6	No Gas	11.756	ppb	5.6	2952.62	1000	
23	Na	45	He	2934.229	ppb	1.1	69853.87	200000	
24	Mg	45	He	353.315	ppb	10.0	4836.77	200000	
27	Al	45	He	253.734	ppb	14.3	1226.77	200000	
28	Si	45	H2	1220.082	ppb	3.4	10642.48	10000	
39	K	45	He	138.571	ppb	6.7	12154.81	200000	
40	Ca	45	H2	2752.714	ppb	1.3	225909.90	200000	
51	V	89	He	3.807	ppb	10.8	867.84	1000	
52	Cr	89	He	0.723	ppb	2.9	184.64	2000	
55	Mn	89	He	15.935	ppb	3.6	1594.47	2000	
56	Fe	89	H2	694.712	ppb	1.0	236592.05	100000	
59	Co	89	He	0.258	ppb	43.9	100.01	1000	
60	Ni	89	He	1.513	ppb	10.0	192.23	1000	
63	Cu	89	He	2.138	ppb	5.7	991.18	2000	
66	Zn	89	He	10.853	ppb	9.2	466.69	2000	
75	As	89	He	0.324	ppb	17.1	14.33	1000	
78	Se	89	H2	0.326	ppb	22.9	5.83	1000	
88	Sr	89	He	7.928	ppb	1.9	1182.32	2000	
95	Mo	89	He	0.856	ppb	36.0	268.91	1000	
107	Ag	89	He	0.054	ppb	120.8	42.22	100	
111	Cd	89	He	0.101	ppb	60.1	8.89	1000	
118	Sn	159	He	1.517	ppb	13.3	327.79	1000	
121	Sb	159	No Gas	3.594	ppb	2.6	5524.07	1000	
137	Ba	159	No Gas	7.419	ppb	1.0	4425.66	2000	
182	W	159	No Gas	0.058	ppb	76.7	190.22	1000	
205	Tl	209	No Gas	0.023	ppb	15.3	90.10	1000	
208	Pb	209	No Gas	0.784	ppb	5.2	3100.30	2000	
232	Th	209	No Gas	0.421	ppb	9.8	1812.18	1000	
238	U	209	No Gas	0.033	ppb	21.6	123.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1521022.94	2.2	1537409.87	98.93	29.5	120.4	
Sc	45	No Gas	3396617.93	1.0	3373253.08	100.69	29.5	120.4	
Sc	45	H2	405930.25	0.8	415670.69	97.66	29.5	120.4	
Sc	45	He	78369.08	1.1	81171.76	96.55	29.5	120.4	
Ge	72	No Gas	795868.68	1.1	779333.11	102.12	29.5	120.4	
Ge	72	H2	150206.13	1.1	153246.58	98.02	29.5	120.4	
Ge	72	He	61358.49	1.1	63135.03	97.19	29.5	120.4	
Y	89	H2	2630481.22	0.8	2642116.11	99.56	29.5	120.4	
Y	89	He	526481.47	1.4	544041.92	96.77	29.5	120.4	
Tb	159	No Gas	8396010.15	0.8	8117023.84	103.44	29.5	120.4	
Tb	159	He	2838334.06	1.0	2866479.19	99.02	29.5	120.4	
Bi	209	No Gas	4568582.01	0.6	4424692.92	103.25	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF30IMW2
File Name	027_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:17:43 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.053	ppb	114.5	31.11	0.5	
B	11	6	No Gas	2.505	ppb	28.8	1283.44	10	
Na	23	45	He	167.545	ppb	5.1	9674.14	500	
Mg	24	45	He	31.572	ppb	82.8	986.79	50	
Al	27	45	He	12.855	ppb	135.3	108.90	50	
Si	28	45	H2	10.144	ppb	33.2	333.71	250	
K	39	45	He	82.023	ppb	9.6	11641.19	500	
Ca	40	45	H2	36.989	ppb	2.8	4839.90	50	
V	51	89	He	2.845	ppb	13.7	714.49	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.320	ppb	10.3	101.98	2.5	
Mn	55	89	He	0.991	ppb	23.5	111.98	1	
Fe	56	89	H2	24.064	ppb	6.8	16200.62	50	
Co	59	89	He	0.069	ppb	211.5	33.34	0.5	
Ni	60	89	He	0.382	ppb	31.7	80.00	1	
Cu	63	89	He	1.246	ppb	21.1	758.94	1.5	
Zn	66	89	He	2.637	ppb	9.0	163.34	5	
As	75	89	He	0.155	ppb	73.5	9.33	2.5	
Se	78	89	H2	0.229	ppb	15.5	4.17	2.5	
Sr	88	89	He	0.060	ppb	129.4	15.56	2.5	
Mo	95	89	He	0.272	ppb	207.7	171.12	2.5	
Ag	107	89	He	0.002	ppb	1181.9	12.22	0.5	
Cd	111	89	He	0.038	ppb	77.9	4.07	0.5	
Sn	118	159	He	1.297	ppb	11.7	295.57	2.5	
Sb	121	159	No Gas	0.060	ppb	56.5	186.88	0.5	
Ba	137	159	No Gas	0.156	ppb	2.3	110.12	1	
W	182	159	No Gas	0.041	ppb	73.2	170.19	2.5	
Tl	205	209	No Gas	-0.002	ppb	N/A	23.36	0.5	
Pb	208	209	No Gas	0.099	ppb	15.8	553.96	0.5	
Th	232	209	No Gas	0.048	ppb	18.6	360.41	2.5	
U	238	209	No Gas	0.006	ppb	107.7	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1445630.49	1.1	1537409.87	94.03	29.5	120.4	
Sc	45	No Gas	3339062.67	2.3	3373253.08	98.99	29.5	120.4	
Sc	45	H2	398172.64	1.2	415670.69	95.79	29.5	120.4	
Sc	45	He	78886.94	1.0	81171.76	97.19	29.5	120.4	
Ge	72	No Gas	777381.51	1.4	779333.11	99.75	29.5	120.4	
Ge	72	H2	147580.96	1.6	153246.58	96.3	29.5	120.4	
Ge	72	He	61435.99	0.6	63135.03	97.31	29.5	120.4	
Y	89	H2	2586708.83	1.2	2642116.11	97.9	29.5	120.4	
Y	89	He	532942.96	0.3	544041.92	97.96	29.5	120.4	
Tb	159	No Gas	8391592.03	2.0	8117023.84	103.38	29.5	120.4	
Tb	159	He	2885687.28	0.6	2866479.19	100.67	29.5	120.4	
Bi	209	No Gas	4565526.25	1.6	4424692.92	103.18	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF30IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:20:21 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.111	ppb	2.4	12328.94	50	19.24	79.5	120.4	
B	11	6	No Gas	496.620	ppb	4.0	84372.56	500	19.86	79.5	120.4	
Na	23	45	He	8229.634	ppb	1.6	187476.68	7500	21.95	79.5	120.4	
Mg	24	45	He	5227.804	ppb	2.3	64026.01	5000	20.91	79.5	120.4	
Al	27	45	He	1928.549	ppb	2.0	9108.79	2000	19.29	79.5	120.4	
Si	28	45	H2	1060.178	ppb	1.0	9019.66	1000	21.2	0	200	
K	39	45	He	10620.454	ppb	0.8	123032.05	10000	21.24	79.5	120.4	
Ca	40	45	H2	2795.064	ppb	1.1	222921.67	2500	22.36	79.5	120.4	
V	51	89	He	513.446	ppb	0.5	88115.45	500	20.54	79.5	120.4	
Cr	52	89	He	208.755	ppb	0.5	44129.74	200	20.88	79.5	120.4	
Mn	55	89	He	518.803	ppb	0.7	52239.27	500	20.75	79.5	120.4	
Fe	56	89	H2	1114.539	ppb	1.2	366111.81	1000	22.29	79.5	120.4	
Co	59	89	He	531.884	ppb	0.6	190292.59	500	21.28	79.5	120.4	
Ni	60	89	He	507.639	ppb	1.2	51494.42	500	20.31	79.5	120.4	
Cu	63	89	He	261.953	ppb	1.4	72442.51	250	20.96	79.5	120.4	
Zn	66	89	He	518.892	ppb	1.5	19606.59	500	20.76	79.5	120.4	
As	75	89	He	105.840	ppb	1.3	3263.74	100	21.17	79.5	120.4	
Se	78	89	H2	103.992	ppb	1.3	1663.53	100	20.8	79.5	120.4	
Sr	88	89	He	519.495	ppb	0.5	78140.97	500	20.78	79.5	120.4	
Mo	95	89	He	106.562	ppb	1.4	18527.60	100	21.31	79.5	120.4	
Ag	107	89	He	54.471	ppb	0.8	32005.16	50	21.79	79.5	120.4	
Cd	111	89	He	264.548	ppb	0.7	20703.67	250	21.16	79.5	120.4	
Sn	118	159	He	507.819	ppb	0.8	87856.90	500	20.31	79.5	120.4	
Sb	121	159	No Gas	101.856	ppb	4.9	156710.01	100	20.37	79.5	120.4	
Ba	137	159	No Gas	1933.990	ppb	4.7	1170132.75	2000	19.34	79.5	120.4	
W	182	159	No Gas	102.094	ppb	5.3	125029.56	100	20.42	79.5	120.4	
Tl	205	209	No Gas	103.481	ppb	3.7	281469.49	100	20.7	79.5	120.4	
[Pb]	206	209	No Gas	105.256	ppb	4.9	98531.41	100	21.05	79.5	120.4	
[Pb]	207	209	No Gas	103.689	ppb	3.8	85097.89	100	20.74	79.5	120.4	
Pb	208	209	No Gas	103.602	ppb	4.1	389599.17	100	20.72	79.5	120.4	
Th	232	209	No Gas	100.628	ppb	5.0	396138.84	100	20.13	79.5	120.4	
U	238	209	No Gas	101.317	ppb	4.4	374279.30	100	20.26	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1476171.20	1.8	1537409.87	96.02	29.5	120.4	
Sc	45	No Gas	3384734.56	2.6	3373253.08	100.34	29.5	120.4	
Sc	45	H2	394572.02	1.7	415670.69	94.92	29.5	120.4	
Sc	45	He	79352.73	1.1	81171.76	97.76	29.5	120.4	
Ge	72	No Gas	793053.31	2.5	779333.11	101.76	29.5	120.4	
Ge	72	H2	146673.54	0.7	153246.58	95.71	29.5	120.4	
Ge	72	He	61872.74	0.5	63135.03	98	29.5	120.4	
Y	89	H2	2572634.57	2.0	2642116.11	97.37	29.5	120.4	
Y	89	He	533962.54	0.9	544041.92	98.15	29.5	120.4	
Tb	159	No Gas	8554918.07	2.5	8117023.84	105.39	29.5	120.4	
Tb	159	He	2888867.11	0.6	2866479.19	100.78	29.5	120.4	
Bi	209	No Gas	4623460.69	2.1	4424692.92	104.49	29.5	120.4	

Sample Report

Sample Name SN5146-016

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:23:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.173	ppb	28.7	61.12	100	
11	B	6	No Gas	13.465	ppb	2.1	3084.88	1000	
23	Na	45	He	1011.354	ppb	2.2	28289.21	200000	
24	Mg	45	He	187.957	ppb	8.1	2884.95	200000	
27	Al	45	He	197.431	ppb	5.0	974.51	200000	
28	Si	45	H2	1144.192	ppb	5.0	9941.26	10000	
39	K	45	He	253.948	ppb	8.8	13503.73	200000	
40	Ca	45	H2	650.308	ppb	2.4	54564.71	200000	
51	V	89	He	3.362	ppb	1.2	806.72	1000	
52	Cr	89	He	0.801	ppb	25.4	204.63	2000	
55	Mn	89	He	8.432	ppb	1.7	863.87	2000	
56	Fe	89	H2	36.403	ppb	7.0	20337.24	100000	
59	Co	89	He	0.316	ppb	31.6	122.23	1000	
60	Ni	89	He	1.669	ppb	18.0	211.12	1000	
63	Cu	89	He	5.254	ppb	6.2	1867.98	2000	
66	Zn	89	He	17.287	ppb	8.5	717.82	2000	
75	As	89	He	0.391	ppb	5.7	16.67	1000	
78	Se	89	H2	2.643	ppb	4.6	43.33	1000	
88	Sr	89	He	1.827	ppb	9.6	282.24	2000	
95	Mo	89	He	0.223	ppb	43.9	163.34	1000	
107	Ag	89	He	0.021	ppb	25.8	23.33	100	
111	Cd	89	He	0.123	ppb	62.7	10.74	1000	
118	Sn	159	He	1.768	ppb	9.1	377.80	1000	
121	Sb	159	No Gas	0.291	ppb	28.7	543.96	1000	
137	Ba	159	No Gas	6.497	ppb	3.6	3951.67	2000	
182	W	159	No Gas	0.230	ppb	20.5	403.79	1000	
205	Tl	209	No Gas	0.106	ppb	22.0	317.03	1000	
208	Pb	209	No Gas	0.301	ppb	7.8	1324.85	2000	
232	Th	209	No Gas	1.407	ppb	24.3	5764.54	1000	
238	U	209	No Gas	0.136	ppb	23.1	507.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443799.57	2.4	1537409.87	93.91	29.5	120.4	
Sc	45	No Gas	3399025.23	2.6	3373253.08	100.76	29.5	120.4	
Sc	45	H2	404031.39	2.6	415670.69	97.2	29.5	120.4	
Sc	45	He	79233.58	1.7	81171.76	97.61	29.5	120.4	
Ge	72	No Gas	800502.62	2.2	779333.11	102.72	29.5	120.4	
Ge	72	H2	148963.17	2.8	153246.58	97.2	29.5	120.4	
Ge	72	He	62205.75	0.6	63135.03	98.53	29.5	120.4	
Y	89	H2	2606312.16	1.7	2642116.11	98.64	29.5	120.4	
Y	89	He	535498.38	0.9	544041.92	98.43	29.5	120.4	
Tb	159	No Gas	8560274.11	2.8	8117023.84	105.46	29.5	120.4	
Tb	159	He	2893217.14	0.7	2866479.19	100.93	29.5	120.4	
Bi	209	No Gas	4642488.73	3.2	4424692.92	104.92	29.5	120.4	

Sample Report

Sample Name SN5151-001

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:25:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	71.2	40.00	100	
11	B	6	No Gas	1135.735	ppb	1.8	183415.48	1000	
23	Na	45	He	782672.707	ppb	0.3	17130443.59	200000	
24	Mg	45	He	393520.997	ppb	0.7	4737660.45	200000	
27	Al	45	He	35.832	ppb	11.9	215.56	200000	
28	Si	45	H2	7526.838	ppb	5.3	60809.90	10000	
39	K	45	He	11074.813	ppb	1.0	126848.38	200000	
40	Ca	45	H2	520109.865	ppb	5.5	40003548.29	200000	
51	V	89	He	5.389	ppb	5.9	1136.75	1000	
52	Cr	89	He	1.380	ppb	3.5	321.95	2000	
55	Mn	89	He	38.042	ppb	2.0	3791.82	2000	
56	Fe	89	H2	4.522	ppb	56.3	9500.54	100000	
59	Co	89	He	0.171	ppb	28.1	68.89	1000	
60	Ni	89	He	2.354	ppb	17.9	276.68	1000	
63	Cu	89	He	4.168	ppb	6.4	1543.48	2000	
66	Zn	89	He	5.610	ppb	14.6	272.24	2000	
75	As	89	He	0.684	ppb	10.9	25.33	1000	
78	Se	89	H2	13.678	ppb	3.6	212.16	1000	
88	Sr	89	He	7623.118	ppb	0.9	1131591.21	2000	
95	Mo	89	He	0.180	ppb	57.0	153.34	1000	
107	Ag	89	He	0.010	ppb	260.7	16.67	100	
111	Cd	89	He	0.053	ppb	14.7	5.19	1000	
118	Sn	159	He	1.310	ppb	22.3	293.35	1000	
121	Sb	159	No Gas	0.224	ppb	21.4	430.49	1000	
137	Ba	159	No Gas	16.901	ppb	3.6	9948.20	2000	
182	W	159	No Gas	0.064	ppb	134.7	196.89	1000	
205	Tl	209	No Gas	0.094	ppb	54.6	270.31	1000	
208	Pb	209	No Gas	0.233	ppb	30.2	1007.82	2000	
232	Th	209	No Gas	0.153	ppb	24.9	734.18	1000	
238	U	209	No Gas	133.405	ppb	0.9	465153.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410918.61	1.6	1537409.87	91.77	29.5	120.4	
Sc	45	No Gas	3313970.42	2.5	3373253.08	98.24	29.5	120.4	
Sc	45	H2	384161.31	3.5	415670.69	92.42	29.5	120.4	
Sc	45	He	78740.47	0.4	81171.76	97	29.5	120.4	
Ge	72	No Gas	766740.45	1.6	779333.11	98.38	29.5	120.4	
Ge	72	H2	141936.10	2.3	153246.58	92.62	29.5	120.4	
Ge	72	He	60428.28	0.5	63135.03	95.71	29.5	120.4	
Y	89	H2	2488907.68	4.3	2642116.11	94.2	29.5	120.4	
Y	89	He	527016.21	1.0	544041.92	96.87	29.5	120.4	
Tb	159	No Gas	8298416.89	2.0	8117023.84	102.23	29.5	120.4	
Tb	159	He	2843156.80	0.6	2866479.19	99.19	29.5	120.4	
Bi	209	No Gas	4361632.62	1.9	4424692.92	98.57	29.5	120.4	

Sample Report

Sample Name SN5151-002

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:28:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	64.2	37.78	100	
11	B	6	No Gas	836.015	ppb	2.4	139587.31	1000	
23	Na	45	He	1451638.497	ppb	0.6	32218265.05	200000	>LDR
24	Mg	45	He	335490.356	ppb	0.7	4096511.60	200000	
27	Al	45	He	-1.220	ppb	N/A	43.34	200000	
28	Si	45	H2	5735.050	ppb	8.4	47384.52	10000	
39	K	45	He	10973.007	ppb	0.7	127570.42	200000	
40	Ca	45	H2	472121.117	ppb	8.5	37095298.06	200000	
51	V	89	He	5.911	ppb	5.3	1223.43	1000	
52	Cr	89	He	1.026	ppb	3.0	247.96	2000	
55	Mn	89	He	232.391	ppb	0.6	23081.98	2000	
56	Fe	89	H2	16.190	ppb	16.1	13408.07	100000	
59	Co	89	He	0.341	ppb	24.7	128.90	1000	
60	Ni	89	He	4.227	ppb	4.2	463.36	1000	
63	Cu	89	He	6.575	ppb	5.3	2194.70	2000	
66	Zn	89	He	15.491	ppb	10.6	638.93	2000	
75	As	89	He	0.477	ppb	18.6	19.00	1000	
78	Se	89	H2	5.985	ppb	11.2	94.83	1000	
88	Sr	89	He	5527.272	ppb	0.8	819804.46	2000	
95	Mo	89	He	2.047	ppb	5.7	471.14	1000	
107	Ag	89	He	0.012	ppb	109.7	17.78	100	
111	Cd	89	He	0.111	ppb	14.6	9.63	1000	
118	Sn	159	He	1.155	ppb	19.5	265.57	1000	
121	Sb	159	No Gas	0.173	ppb	13.7	350.40	1000	
137	Ba	159	No Gas	18.273	ppb	3.4	10619.31	2000	
182	W	159	No Gas	0.007	ppb	170.5	126.81	1000	
205	Tl	209	No Gas	0.045	ppb	17.3	136.82	1000	
208	Pb	209	No Gas	0.128	ppb	10.5	614.02	2000	
232	Th	209	No Gas	0.043	ppb	22.1	313.69	1000	
238	U	209	No Gas	95.313	ppb	2.9	322921.66	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1456404.66	0.8	1537409.87	94.73	29.5	120.4	
Sc	45	No Gas	3306141.49	0.7	3373253.08	98.01	29.5	120.4	
Sc	45	H2	393079.82	5.3	415670.69	94.57	29.5	120.4	
Sc	45	He	79862.47	1.3	81171.76	98.39	29.5	120.4	
Ge	72	No Gas	763314.46	1.0	779333.11	97.94	29.5	120.4	
Ge	72	H2	143832.16	4.2	153246.58	93.86	29.5	120.4	
Ge	72	He	60457.35	0.1	63135.03	95.76	29.5	120.4	
Y	89	H2	2543996.77	5.4	2642116.11	96.29	29.5	120.4	
Y	89	He	526541.46	0.4	544041.92	96.78	29.5	120.4	
Tb	159	No Gas	8197589.53	0.4	8117023.84	100.99	29.5	120.4	
Tb	159	He	2828038.88	0.6	2866479.19	98.66	29.5	120.4	
Bi	209	No Gas	4238552.88	1.2	4424692.92	95.79	29.5	120.4	

Sample Report

Sample Name SN5151-004

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:30:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.078	ppb	51.4	38.89	100	
11	B	6	No Gas	831.460	ppb	1.7	143908.20	1000	
23	Na	45	He	1301503.377	ppb	3.7	28486224.18	200000	>LDR
24	Mg	45	He	376713.437	ppb	3.8	4536011.56	200000	
27	Al	45	He	3.887	ppb	64.2	66.67	200000	
28	Si	45	H2	5767.797	ppb	2.7	48690.03	10000	
39	K	45	He	57759.367	ppb	4.2	616269.89	200000	
40	Ca	45	H2	386325.672	ppb	0.7	31014870.93	200000	
51	V	89	He	7.415	ppb	8.5	1483.47	1000	
52	Cr	89	He	0.690	ppb	15.6	178.64	2000	
55	Mn	89	He	8738.141	ppb	3.5	871371.49	2000	
56	Fe	89	H2	123.110	ppb	3.6	47804.58	100000	
59	Co	89	He	4.072	ppb	8.7	1451.31	1000	
60	Ni	89	He	10.407	ppb	6.9	1085.64	1000	
63	Cu	89	He	3.802	ppb	9.1	1449.02	2000	
66	Zn	89	He	16.623	ppb	13.3	683.37	2000	
75	As	89	He	2.628	ppb	7.2	84.68	1000	
78	Se	89	H2	0.691	ppb	28.6	11.50	1000	
88	Sr	89	He	5861.198	ppb	2.9	873288.07	2000	
95	Mo	89	He	2.324	ppb	5.1	521.14	1000	
107	Ag	89	He	0.010	ppb	148.9	16.67	100	
111	Cd	89	He	0.019	ppb	40.7	2.59	1000	
118	Sn	159	He	1.055	ppb	8.5	247.79	1000	
121	Sb	159	No Gas	0.397	ppb	23.4	680.79	1000	
137	Ba	159	No Gas	27.467	ppb	2.3	16004.18	2000	
182	W	159	No Gas	0.013	ppb	134.2	133.48	1000	
205	Tl	209	No Gas	0.039	ppb	50.6	123.47	1000	
208	Pb	209	No Gas	0.144	ppb	16.9	674.10	2000	
232	Th	209	No Gas	0.033	ppb	7.9	280.31	1000	
238	U	209	No Gas	37.548	ppb	2.3	127904.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509649.19	0.8	1537409.87	98.19	29.5	120.4	
Sc	45	No Gas	3325725.64	1.1	3373253.08	98.59	29.5	120.4	
Sc	45	H2	400472.72	0.4	415670.69	96.34	29.5	120.4	
Sc	45	He	78804.75	2.8	81171.76	97.08	29.5	120.4	
Ge	72	No Gas	763054.78	0.2	779333.11	97.91	29.5	120.4	
Ge	72	H2	145588.43	0.5	153246.58	95	29.5	120.4	
Ge	72	He	60646.41	1.8	63135.03	96.06	29.5	120.4	
Y	89	H2	2567103.08	0.4	2642116.11	97.16	29.5	120.4	
Y	89	He	529112.11	1.7	544041.92	97.26	29.5	120.4	
Tb	159	No Gas	8222310.92	1.2	8117023.84	101.3	29.5	120.4	
Tb	159	He	2819808.47	1.8	2866479.19	98.37	29.5	120.4	
Bi	209	No Gas	4261127.96	0.6	4424692.92	96.3	29.5	120.4	

Sample Report

Sample Name SN5151-004L

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:33:30 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.172	ppb	45.2	27.78	100	
11	B	6	No Gas	4039.976	ppb	3.9	141411.83	1000	
23	Na	45	He	6439028.942	ppb	1.6	28272397.86	200000	>LDR
24	Mg	45	He	1864016.032	ppb	1.7	4502607.71	200000	
27	Al	45	He	8.549	ppb	65.3	56.67	200000	
28	Si	45	H2	29012.632	ppb	0.9	48827.50	10000	
39	K	45	He	285720.718	ppb	1.4	611723.14	200000	
40	Ca	45	H2	1928797.188	ppb	0.9	30867435.93	200000	
51	V	89	He	39.240	ppb	3.6	1546.81	1000	
52	Cr	89	He	3.577	ppb	14.9	182.64	2000	
55	Mn	89	He	43609.942	ppb	1.9	863839.38	2000	
56	Fe	89	H2	607.558	ppb	2.0	47001.43	100000	
59	Co	89	He	18.990	ppb	11.1	1344.60	1000	
60	Ni	89	He	49.149	ppb	2.1	1021.19	1000	
63	Cu	89	He	17.068	ppb	3.3	1334.56	2000	
66	Zn	89	He	80.651	ppb	1.3	661.15	2000	
75	As	89	He	12.298	ppb	6.7	79.01	1000	
78	Se	89	H2	3.526	ppb	11.3	11.67	1000	
88	Sr	89	He	29156.239	ppb	1.9	862838.21	2000	
95	Mo	89	He	9.478	ppb	26.2	444.47	1000	
107	Ag	89	He	0.032	ppb	276.8	14.44	100	
111	Cd	89	He	0.123	ppb	69.9	2.96	1000	
118	Sn	159	He	5.298	ppb	17.9	248.90	1000	
121	Sb	159	No Gas	1.680	ppb	15.7	594.01	1000	
137	Ba	159	No Gas	131.464	ppb	2.6	15389.51	2000	
182	W	159	No Gas	-0.009	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.113	ppb	53.3	83.43	1000	
208	Pb	209	No Gas	0.432	ppb	13.2	477.21	2000	
232	Th	209	No Gas	0.048	ppb	109.8	196.89	1000	
238	U	209	No Gas	182.531	ppb	3.9	125440.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1526631.03	1.3	1537409.87	99.3	29.5	120.4	
Sc	45	No Gas	3349749.00	1.5	3373253.08	99.3	29.5	120.4	
Sc	45	H2	399171.84	1.2	415670.69	96.03	29.5	120.4	
Sc	45	He	78999.59	1.2	81171.76	97.32	29.5	120.4	
Ge	72	No Gas	768223.63	1.6	779333.11	98.57	29.5	120.4	
Ge	72	H2	144201.20	0.1	153246.58	94.1	29.5	120.4	
Ge	72	He	60621.77	1.6	63135.03	96.02	29.5	120.4	
Y	89	H2	2551092.98	0.1	2642116.11	96.55	29.5	120.4	
Y	89	He	525379.50	1.3	544041.92	96.57	29.5	120.4	
Tb	159	No Gas	8262208.21	1.2	8117023.84	101.79	29.5	120.4	
Tb	159	He	2821880.31	1.3	2866479.19	98.44	29.5	120.4	
Bi	209	No Gas	4300016.43	1.9	4424692.92	97.18	29.5	120.4	

Sample Report

Sample Name SN5151-004A

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:36:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.404	ppb	3.8	2529.20	100	
11	B	6	No Gas	983.546	ppb	5.5	173349.19	1000	
23	Na	45	He	1317839.232	ppb	1.7	28446530.32	200000	>LDR
24	Mg	45	He	378636.448	ppb	1.5	4496489.06	200000	
27	Al	45	He	943.573	ppb	3.4	4387.50	200000	
28	Si	45	H2	10874.508	ppb	2.9	91704.38	10000	
39	K	45	He	67825.811	ppb	1.7	711886.01	200000	
40	Ca	45	H2	384614.171	ppb	2.0	30923932.87	200000	
51	V	89	He	60.027	ppb	1.2	10021.71	1000	
52	Cr	89	He	51.867	ppb	2.5	10483.35	2000	
55	Mn	89	He	8959.807	ppb	2.1	860432.95	2000	
56	Fe	89	H2	1161.862	ppb	1.2	378319.34	100000	
59	Co	89	He	14.789	ppb	4.1	5054.63	1000	
60	Ni	89	He	29.938	ppb	4.1	2934.86	1000	
63	Cu	89	He	33.551	ppb	2.3	9198.89	2000	
66	Zn	89	He	119.737	ppb	3.5	4363.08	2000	
75	As	89	He	54.677	ppb	3.8	1611.61	1000	
78	Se	89	H2	52.466	ppb	0.5	832.99	1000	
88	Sr	89	He	6051.457	ppb	1.8	868267.79	2000	
95	Mo	89	He	54.033	ppb	3.2	9019.96	1000	
107	Ag	89	He	10.627	ppb	3.5	5963.73	100	
111	Cd	89	He	10.368	ppb	4.0	774.84	1000	
118	Sn	159	He	50.569	ppb	3.3	8386.26	1000	
121	Sb	159	No Gas	10.731	ppb	4.5	16101.00	1000	
137	Ba	159	No Gas	45.504	ppb	8.2	26703.31	2000	
182	W	159	No Gas	49.831	ppb	5.0	59255.15	1000	
205	Tl	209	No Gas	10.186	ppb	6.2	26008.83	1000	
208	Pb	209	No Gas	10.316	ppb	4.4	36558.58	2000	
232	Th	209	No Gas	10.598	ppb	5.6	39285.56	1000	
238	U	209	No Gas	46.851	ppb	6.3	162338.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1540554.51	3.4	1537409.87	100.2	29.5	120.4	
Sc	45	No Gas	3348477.24	3.4	3373253.08	99.27	29.5	120.4	
Sc	45	H2	401164.40	2.1	415670.69	96.51	29.5	120.4	
Sc	45	He	77678.66	1.5	81171.76	95.7	29.5	120.4	
Ge	72	No Gas	768596.75	3.1	779333.11	98.62	29.5	120.4	
Ge	72	H2	145409.72	1.1	153246.58	94.89	29.5	120.4	
Ge	72	He	58807.64	2.2	63135.03	93.15	29.5	120.4	
Y	89	H2	2552313.42	1.0	2642116.11	96.6	29.5	120.4	
Y	89	He	509497.18	2.1	544041.92	93.65	29.5	120.4	
Tb	159	No Gas	8299986.68	3.1	8117023.84	102.25	29.5	120.4	
Tb	159	He	2750106.24	2.4	2866479.19	95.94	29.5	120.4	
Bi	209	No Gas	4339925.66	3.4	4424692.92	98.08	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:41:39 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	20.00	100	
11	B	6	No Gas	2.178	ppb	4.9	3152.68	1000	
23	Na	45	He	360.606	ppb	18.1	46970.98	200000	
24	Mg	45	He	46.301	ppb	26.8	3505.78	200000	
27	Al	45	He	-1.664	ppb	N/A	10.00	200000	
28	Si	45	H2	5.369	ppb	28.5	487.21	10000	
39	K	45	He	28.907	ppb	2.3	12679.95	200000	
40	Ca	45	H2	16.387	ppb	4.2	8676.29	200000	
51	V	89	He	3.316	ppb	4.1	3089.35	1000	
52	Cr	89	He	0.170	ppb	7.2	215.30	2000	
55	Mn	89	He	0.943	ppb	44.7	490.61	2000	
56	Fe	89	H2	-1.559	ppb	N/A	6007.94	100000	
59	Co	89	He	-0.001	ppb	N/A	6.67	1000	
60	Ni	89	He	-0.038	ppb	N/A	22.22	1000	
63	Cu	89	He	0.315	ppb	10.8	856.72	2000	
66	Zn	89	He	0.174	ppb	107.9	97.78	2000	
75	As	89	He	0.119	ppb	14.4	23.00	1000	
78	Se	89	H2	0.082	ppb	8.6	7.17	1000	
88	Sr	89	He	0.545	ppb	39.3	418.93	2000	
95	Mo	89	He	-0.043	ppb	N/A	87.78	1000	
107	Ag	89	He	-0.002	ppb	N/A	5.55	100	
111	Cd	89	He	0.003	ppb	98.8	2.22	1000	
118	Sn	159	He	0.191	ppb	8.1	236.68	1000	
121	Sb	159	No Gas	0.010	ppb	35.9	176.86	1000	
137	Ba	159	No Gas	0.009	ppb	165.5	46.72	2000	
182	W	159	No Gas	0.039	ppb	18.2	367.09	1000	
205	Tl	209	No Gas	0.000	ppb	495.6	33.37	1000	
208	Pb	209	No Gas	0.007	ppb	13.7	327.03	2000	
232	Th	209	No Gas	0.032	ppb	28.5	810.93	1000	
238	U	209	No Gas	0.002	ppb	62.2	36.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710706.96	2.1	1537409.87	111.27	29.5	120.4	
Sc	45	No Gas	3594063.76	1.3	3373253.08	106.55	29.5	120.4	
Sc	45	H2	409919.14	0.2	415670.69	98.62	29.5	120.4	
Sc	45	He	81335.29	0.9	81171.76	100.2	29.5	120.4	
Ge	72	No Gas	843843.39	1.6	779333.11	108.28	29.5	120.4	
Ge	72	H2	149217.65	1.7	153246.58	97.37	29.5	120.4	
Ge	72	He	61941.96	0.9	63135.03	98.11	29.5	120.4	
Y	89	H2	2624294.46	0.1	2642116.11	99.33	29.5	120.4	
Y	89	He	537790.04	0.1	544041.92	98.85	29.5	120.4	
Tb	159	No Gas	8735769.10	1.2	8117023.84	107.62	29.5	120.4	
Tb	159	He	2884136.83	0.8	2866479.19	100.62	29.5	120.4	
Bi	209	No Gas	4708088.29	1.5	4424692.92	106.4	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	036_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:44:19 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.743	ppb	5.8	32134.15	25	98.97	89.8	110.2	
11	B	6	No Gas	24.456	ppb	5.8	21762.54	25	97.82	89.8	110.2	
23	Na	45	He	5271.379	ppb	2.0	574011.06	5000	105.43	89.8	110.2	
24	Mg	45	He	5015.844	ppb	2.4	297996.35	5000	100.32	89.8	110.2	
27	Al	45	He	483.925	ppb	4.1	11159.20	500	96.78	89.8	110.2	
28	Si	45	H2	507.517	ppb	2.1	21189.33	500	101.5	89.8	110.2	
39	K	45	He	4936.325	ppb	2.1	265477.39	5000	98.73	89.8	110.2	
40	Ca	45	H2	5057.669	ppb	1.3	1996810.01	5000	101.15	89.8	110.2	
51	V	89	He	24.699	ppb	2.6	20768.15	25	98.8	89.8	110.2	
52	Cr	89	He	24.646	ppb	2.4	25333.34	25	98.58	89.8	110.2	
55	Mn	89	He	24.884	ppb	0.8	12187.73	25	99.54	89.8	110.2	
56	Fe	89	H2	5049.947	ppb	1.5	7969913.90	5000	101	89.8	110.2	
59	Co	89	He	24.966	ppb	0.7	43425.46	25	99.86	89.8	110.2	
60	Ni	89	He	25.044	ppb	2.6	12378.09	25	100.18	89.8	110.2	
63	Cu	89	He	24.987	ppb	1.2	33802.85	25	99.95	89.8	110.2	
66	Zn	89	He	24.983	ppb	2.3	4636.48	25	99.93	89.8	110.2	
75	As	89	He	24.459	ppb	2.2	3664.89	25	97.84	89.8	110.2	
78	Se	89	H2	24.858	ppb	2.1	1953.05	25	99.43	89.8	110.2	
88	Sr	89	He	24.473	ppb	1.6	17897.76	25	97.89	89.8	110.2	
95	Mo	89	He	24.600	ppb	2.6	20768.65	25	98.4	89.8	110.2	
107	Ag	89	He	18.371	ppb	1.0	52453.04	25	73.48	89.8	110.2	> +/- 10%
111	Cd	89	He	24.665	ppb	2.5	9381.49	25	98.66	89.8	110.2	
118	Sn	159	He	23.617	ppb	2.5	19830.70	25	94.47	89.8	110.2	
121	Sb	159	No Gas	24.409	ppb	9.7	180931.91	25	97.64	89.8	110.2	
137	Ba	159	No Gas	24.554	ppb	8.1	71644.53	25	98.22	89.8	110.2	
182	W	159	No Gas	23.979	ppb	8.2	141573.23	25	95.92	89.8	110.2	
205	Tl	209	No Gas	24.569	ppb	7.1	323413.02	25	98.28	89.8	110.2	
208	Pb	209	No Gas	24.427	ppb	7.4	444507.86	25	97.71	89.8	110.2	
232	Th	209	No Gas	24.294	ppb	8.1	462718.85	25	97.18	89.8	110.2	
238	U	209	No Gas	24.551	ppb	7.9	438834.20	25	98.2	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1499634.28	4.2	1537409.87	97.54	29.5	120.4	
Sc	45	No Gas	3390921.38	6.5	3373253.08	100.52	29.5	120.4	
Sc	45	H2	393566.21	0.9	415670.69	94.68	29.5	120.4	
Sc	45	He	77586.72	1.7	81171.76	95.58	29.5	120.4	
Ge	72	No Gas	765765.31	4.9	779333.11	98.26	29.5	120.4	
Ge	72	H2	145690.40	2.0	153246.58	95.07	29.5	120.4	
Ge	72	He	60322.65	1.0	63135.03	95.55	29.5	120.4	
Y	89	H2	2527410.68	1.5	2642116.11	95.66	29.5	120.4	
Y	89	He	519075.93	1.2	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8272667.03	6.6	8117023.84	101.92	29.5	120.4	
Tb	159	He	2796890.38	0.8	2866479.19	97.57	29.5	120.4	
Bi	209	No Gas	4485332.62	5.8	4424692.92	101.37	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	037_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:46:57 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.058	ppb	5.8	93.34	0.2	
11	B	6	No Gas	0.953	ppb	19.4	1719.06	4	
23	Na	45	He	129.162	ppb	6.3	19929.41	200	Failed DoD
24	Mg	45	He	10.239	ppb	17.2	1209.03	20	Failed DoD
27	Al	45	He	-1.409	ppb	N/A	15.55	20	
28	Si	45	H2	-0.721	ppb	N/A	216.91	100	
39	K	45	He	18.973	ppb	57.3	11642.88	200	
40	Ca	45	H2	1.553	ppb	28.0	2484.76	20	
51	V	89	He	0.333	ppb	14.9	504.47	1	
52	Cr	89	He	0.020	ppb	23.8	55.32	1	
55	Mn	89	He	0.093	ppb	42.2	57.99	0.4	
56	Fe	89	H2	-0.498	ppb	N/A	7436.94	20	
59	Co	89	He	0.002	ppb	392.1	11.11	0.2	
60	Ni	89	He	-0.026	ppb	N/A	27.78	0.4	
63	Cu	89	He	-0.074	ppb	N/A	308.91	0.6	
66	Zn	89	He	-0.014	ppb	N/A	60.00	2	
75	As	89	He	0.025	ppb	10.1	8.33	1	
78	Se	89	H2	0.053	ppb	45.2	4.67	1	
88	Sr	89	He	0.033	ppb	86.2	31.11	1	
95	Mo	89	He	0.001	ppb	3843.5	122.23	1	
107	Ag	89	He	0.008	ppb	53.8	34.44	0.2	
111	Cd	89	He	0.006	ppb	85.7	3.33	0.2	
118	Sn	159	He	0.101	ppb	53.4	153.34	1	
121	Sb	159	No Gas	0.027	ppb	44.4	293.67	0.2	
137	Ba	159	No Gas	0.022	ppb	70.9	80.09	0.4	
182	W	159	No Gas	0.083	ppb	31.4	604.03	1	
205	Tl	209	No Gas	0.032	ppb	48.4	443.84	0.2	
208	Pb	209	No Gas	0.020	ppb	65.7	543.94	0.2	
232	Th	209	No Gas	0.095	ppb	20.2	1975.72	1	
238	U	209	No Gas	0.030	ppb	31.9	533.94	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1500864.95	3.4	1537409.87	97.62	29.5	120.4	
Sc	45	No Gas	3312073.83	3.7	3373253.08	98.19	29.5	120.4	
Sc	45	H2	394527.06	0.6	415670.69	94.91	29.5	120.4	
Sc	45	He	78078.63	3.5	81171.76	96.19	29.5	120.4	
Ge	72	No Gas	756089.77	2.7	779333.11	97.02	29.5	120.4	
Ge	72	H2	144870.51	1.9	153246.58	94.53	29.5	120.4	
Ge	72	He	61259.46	2.0	63135.03	97.03	29.5	120.4	
Y	89	H2	2519667.03	0.5	2642116.11	95.37	29.5	120.4	
Y	89	He	524708.32	3.7	544041.92	96.45	29.5	120.4	
Tb	159	No Gas	8220906.54	3.9	8117023.84	101.28	29.5	120.4	
Tb	159	He	2808683.53	4.0	2866479.19	97.98	29.5	120.4	
Bi	209	No Gas	4497765.05	3.9	4424692.92	101.65	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:49:42 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	63.1	43.33	100	
11	B	6	No Gas	1.702	ppb	4.8	2480.31	1000	
23	Na	45	He	151.612	ppb	4.3	22161.84	200000	
24	Mg	45	He	8.791	ppb	21.5	1111.24	200000	
27	Al	45	He	-1.691	ppb	N/A	8.89	200000	
28	Si	45	H2	7.998	ppb	25.3	550.62	10000	
39	K	45	He	22.439	ppb	11.2	11721.23	200000	
40	Ca	45	H2	6.804	ppb	5.8	4348.61	200000	
51	V	89	He	1.726	ppb	2.7	1660.16	1000	
52	Cr	89	He	0.154	ppb	0.8	191.97	2000	
55	Mn	89	He	0.114	ppb	18.0	67.99	2000	
56	Fe	89	H2	-1.380	ppb	N/A	5884.41	100000	
59	Co	89	He	-0.001	ppb	N/A	6.67	1000	
60	Ni	89	He	-0.021	ppb	N/A	30.00	1000	
63	Cu	89	He	0.187	ppb	23.2	656.70	2000	
66	Zn	89	He	0.101	ppb	116.9	81.11	2000	
75	As	89	He	0.097	ppb	29.4	19.00	1000	
78	Se	89	H2	0.101	ppb	21.2	8.17	1000	
88	Sr	89	He	0.040	ppb	29.6	35.56	2000	
95	Mo	89	He	-0.067	ppb	N/A	64.45	1000	
107	Ag	89	He	0.003	ppb	37.2	20.00	100	
111	Cd	89	He	0.005	ppb	66.6	2.96	1000	
118	Sn	159	He	0.220	ppb	28.7	256.68	1000	
121	Sb	159	No Gas	0.012	ppb	30.5	190.21	1000	
137	Ba	159	No Gas	0.010	ppb	72.9	46.72	2000	
182	W	159	No Gas	0.047	ppb	53.9	413.81	1000	
205	Tl	209	No Gas	0.009	ppb	129.1	156.85	1000	
208	Pb	209	No Gas	0.017	ppb	45.2	507.24	2000	
232	Th	209	No Gas	0.143	ppb	9.9	3023.80	1000	
238	U	209	No Gas	0.009	ppb	103.0	173.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577567.90	1.6	1537409.87	102.61	29.5	120.4	
Sc	45	No Gas	3374521.04	1.2	3373253.08	100.04	29.5	120.4	
Sc	45	H2	376259.39	1.9	415670.69	90.52	29.5	120.4	
Sc	45	He	77314.92	1.5	81171.76	95.25	29.5	120.4	
Ge	72	No Gas	793778.56	1.0	779333.11	101.85	29.5	120.4	
Ge	72	H2	136704.46	1.8	153246.58	89.21	29.5	120.4	
Ge	72	He	59565.35	0.7	63135.03	94.35	29.5	120.4	
Y	89	H2	2451449.67	1.4	2642116.11	92.78	29.5	120.4	
Y	89	He	519568.96	0.9	544041.92	95.5	29.5	120.4	
Tb	159	No Gas	8575629.52	0.9	8117023.84	105.65	29.5	120.4	
Tb	159	He	2833056.41	0.7	2866479.19	98.83	29.5	120.4	
Bi	209	No Gas	4687607.49	0.8	4424692.92	105.94	29.5	120.4	

Sample Report

Sample Name SN5151-004S

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:52:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.120	ppb	0.7	11807.41	100	
11	B	6	No Gas	1305.055	ppb	0.9	215434.28	1000	
23	Na	45	He	1323574.788	ppb	3.0	27929969.20	200000	>LDR
24	Mg	45	He	386458.925	ppb	3.4	4486051.91	200000	
27	Al	45	He	1917.430	ppb	1.1	8670.71	200000	
28	Si	45	H2	6810.770	ppb	0.6	55653.26	10000	
39	K	45	He	68172.741	ppb	2.2	699578.76	200000	
40	Ca	45	H2	386758.472	ppb	1.9	30074279.28	200000	
51	V	89	He	527.863	ppb	3.5	85258.41	1000	
52	Cr	89	He	205.811	ppb	4.3	40941.63	2000	
55	Mn	89	He	9437.566	ppb	3.7	894177.83	2000	
56	Fe	89	H2	1138.914	ppb	2.1	363378.89	100000	
59	Co	89	He	516.944	ppb	3.4	174076.39	1000	
60	Ni	89	He	491.108	ppb	3.6	46890.63	1000	
63	Cu	89	He	249.260	ppb	3.2	64907.01	2000	
66	Zn	89	He	510.138	ppb	4.0	18142.38	2000	
75	As	89	He	107.664	ppb	3.7	3124.70	1000	
78	Se	89	H2	104.637	ppb	2.3	1626.52	1000	
88	Sr	89	He	6503.268	ppb	3.4	920632.40	2000	
95	Mo	89	He	108.676	ppb	5.2	17775.41	1000	
107	Ag	89	He	49.836	ppb	4.5	27553.21	100	
111	Cd	89	He	251.991	ppb	3.7	18560.62	1000	
118	Sn	159	He	503.461	ppb	4.0	82312.34	1000	
121	Sb	159	No Gas	99.804	ppb	1.2	144511.09	1000	
137	Ba	159	No Gas	1749.716	ppb	0.6	996292.14	2000	
182	W	159	No Gas	103.827	ppb	0.7	119663.44	1000	
205	Tl	209	No Gas	101.873	ppb	1.5	250909.11	1000	
208	Pb	209	No Gas	101.233	ppb	0.5	344739.09	2000	
232	Th	209	No Gas	105.853	ppb	1.3	377388.58	1000	
238	U	209	No Gas	144.310	ppb	1.3	482768.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443056.04	0.9	1537409.87	93.86	29.5	120.4	
Sc	45	No Gas	3182947.63	1.4	3373253.08	94.36	29.5	120.4	
Sc	45	H2	387959.28	1.5	415670.69	93.33	29.5	120.4	
Sc	45	He	75976.34	3.3	81171.76	93.6	29.5	120.4	
Ge	72	No Gas	730045.95	0.5	779333.11	93.68	29.5	120.4	
Ge	72	H2	140738.10	1.3	153246.58	91.84	29.5	120.4	
Ge	72	He	57985.41	2.0	63135.03	91.84	29.5	120.4	
Y	89	H2	2500007.10	1.3	2642116.11	94.62	29.5	120.4	
Y	89	He	502980.61	3.7	544041.92	92.45	29.5	120.4	
Tb	159	No Gas	8045105.37	1.0	8117023.84	99.11	29.5	120.4	
Tb	159	He	2732358.59	3.3	2866479.19	95.32	29.5	120.4	
Bi	209	No Gas	4184429.60	0.1	4424692.92	94.57	29.5	120.4	

Sample Report

Sample Name SN5151-004P

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:55:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	44.786	ppb	5.8	11827.44	100	
11	B	6	No Gas	1283.769	ppb	5.4	223368.09	1000	
23	Na	45	He	1313391.780	ppb	0.5	28438833.66	200000	>LDR
24	Mg	45	He	382436.891	ppb	0.4	4555671.71	200000	
27	Al	45	He	1884.545	ppb	1.7	8740.75	200000	
28	Si	45	H2	6990.576	ppb	1.7	57057.14	10000	
39	K	45	He	67073.410	ppb	0.9	706313.08	200000	
40	Ca	45	H2	396205.043	ppb	2.0	30778227.32	200000	
51	V	89	He	517.958	ppb	0.6	85754.00	1000	
52	Cr	89	He	200.465	ppb	1.2	40882.64	2000	
55	Mn	89	He	9312.561	ppb	0.8	904452.54	2000	
56	Fe	89	H2	1179.977	ppb	3.0	372604.75	100000	
59	Co	89	He	509.667	ppb	0.8	175915.18	1000	
60	Ni	89	He	483.822	ppb	0.1	47354.22	1000	
63	Cu	89	He	245.388	ppb	0.9	65496.04	2000	
66	Zn	89	He	489.699	ppb	2.0	17855.33	2000	
75	As	89	He	103.088	ppb	1.2	3067.34	1000	
78	Se	89	H2	106.552	ppb	2.3	1641.02	1000	
88	Sr	89	He	6361.311	ppb	1.0	923028.91	2000	
95	Mo	89	He	107.899	ppb	1.7	18096.94	1000	
107	Ag	89	He	49.021	ppb	1.5	27785.82	100	
111	Cd	89	He	246.737	ppb	0.2	18630.32	1000	
118	Sn	159	He	489.700	ppb	0.2	81634.70	1000	
121	Sb	159	No Gas	98.141	ppb	5.9	145306.83	1000	
137	Ba	159	No Gas	1308.958	ppb	6.6	761966.11	2000	
182	W	159	No Gas	101.604	ppb	7.5	119686.32	1000	
205	Tl	209	No Gas	100.611	ppb	6.3	253190.75	1000	
208	Pb	209	No Gas	98.724	ppb	6.0	343546.73	2000	
232	Th	209	No Gas	103.577	ppb	5.8	377364.00	1000	
238	U	209	No Gas	140.333	ppb	6.6	479626.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1522620.68	3.2	1537409.87	99.04	29.5	120.4	
Sc	45	No Gas	3292164.29	4.1	3373253.08	97.6	29.5	120.4	
Sc	45	H2	387616.46	2.5	415670.69	93.25	29.5	120.4	
Sc	45	He	77907.95	0.2	81171.76	95.98	29.5	120.4	
Ge	72	No Gas	758509.22	4.4	779333.11	97.33	29.5	120.4	
Ge	72	H2	141622.15	1.6	153246.58	92.41	29.5	120.4	
Ge	72	He	59307.90	0.7	63135.03	93.94	29.5	120.4	
Y	89	H2	2476856.87	2.3	2642116.11	93.75	29.5	120.4	
Y	89	He	515146.03	1.0	544041.92	94.69	29.5	120.4	
Tb	159	No Gas	8239500.01	4.2	8117023.84	101.51	29.5	120.4	
Tb	159	He	2783477.11	0.5	2866479.19	97.1	29.5	120.4	
Bi	209	No Gas	4283645.99	4.6	4424692.92	96.81	29.5	120.4	

Sample Report

Sample Name SN5151-005

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:57:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.123	ppb	27.3	50.00	100	
11	B	6	No Gas	684.823	ppb	0.9	116848.48	1000	
23	Na	45	He	1292228.936	ppb	4.3	27448193.90	200000	>LDR
24	Mg	45	He	277017.100	ppb	4.8	3236800.99	200000	
27	Al	45	He	0.649	ppb	65.0	50.00	200000	
28	Si	45	H2	5538.989	ppb	3.7	44759.70	10000	
39	K	45	He	6290.431	ppb	6.7	74417.08	200000	
40	Ca	45	H2	502672.743	ppb	2.9	38627303.87	200000	
51	V	89	He	5.405	ppb	2.6	1098.97	1000	
52	Cr	89	He	1.625	ppb	1.0	359.94	2000	
55	Mn	89	He	3.718	ppb	10.3	367.94	2000	
56	Fe	89	H2	-9.118	ppb	N/A	5223.47	100000	
59	Co	89	He	0.425	ppb	30.6	153.34	1000	
60	Ni	89	He	2.640	ppb	22.7	293.35	1000	
63	Cu	89	He	3.834	ppb	6.5	1401.24	2000	
66	Zn	89	He	11.725	ppb	7.9	482.25	2000	
75	As	89	He	0.624	ppb	14.6	22.67	1000	
78	Se	89	H2	13.434	ppb	7.0	205.49	1000	
88	Sr	89	He	5698.493	ppb	3.5	815659.04	2000	
95	Mo	89	He	1.974	ppb	19.9	442.25	1000	
107	Ag	89	He	0.015	ppb	117.7	18.89	100	
111	Cd	89	He	0.165	ppb	11.3	13.33	1000	
118	Sn	159	He	1.454	ppb	13.2	307.80	1000	
121	Sb	159	No Gas	0.222	ppb	19.5	420.47	1000	
137	Ba	159	No Gas	14.295	ppb	1.4	8281.80	2000	
182	W	159	No Gas	0.205	ppb	24.7	357.07	1000	
205	Tl	209	No Gas	0.121	ppb	46.2	327.04	1000	
208	Pb	209	No Gas	0.124	ppb	33.0	600.68	2000	
232	Th	209	No Gas	0.991	ppb	33.7	3731.45	1000	
238	U	209	No Gas	92.768	ppb	0.3	314615.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486142.39	0.3	1537409.87	96.67	29.5	120.4	
Sc	45	No Gas	3265050.30	1.2	3373253.08	96.79	29.5	120.4	
Sc	45	H2	383538.57	2.9	415670.69	92.27	29.5	120.4	
Sc	45	He	76506.27	3.7	81171.76	94.25	29.5	120.4	
Ge	72	No Gas	750180.74	0.6	779333.11	96.26	29.5	120.4	
Ge	72	H2	141129.36	1.7	153246.58	92.09	29.5	120.4	
Ge	72	He	58547.08	2.0	63135.03	92.73	29.5	120.4	
Y	89	H2	2457844.29	2.7	2642116.11	93.03	29.5	120.4	
Y	89	He	508414.36	2.3	544041.92	93.45	29.5	120.4	
Tb	159	No Gas	8168098.91	1.5	8117023.84	100.63	29.5	120.4	
Tb	159	He	2750511.42	2.4	2866479.19	95.95	29.5	120.4	
Bi	209	No Gas	4242071.66	1.0	4424692.92	95.87	29.5	120.4	

Sample Report

Sample Name SN5151-006

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:00:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	466.0	20.00	100	
11	B	6	No Gas	758.937	ppb	13.8	121581.23	1000	
23	Na	45	He	1333936.197	ppb	0.8	28500120.36	200000	>LDR
24	Mg	45	He	287875.459	ppb	0.8	3383853.53	200000	
27	Al	45	He	-1.371	ppb	N/A	41.12	200000	
28	Si	45	H2	5496.092	ppb	1.3	44685.85	10000	
39	K	45	He	6409.778	ppb	2.5	76095.15	200000	
40	Ca	45	H2	522387.312	ppb	1.5	40379924.95	200000	
51	V	89	He	5.729	ppb	3.7	1165.65	1000	
52	Cr	89	He	1.464	ppb	7.7	331.28	2000	
55	Mn	89	He	0.997	ppb	15.3	108.65	2000	
56	Fe	89	H2	-11.393	ppb	N/A	4549.13	100000	
59	Co	89	He	0.233	ppb	54.8	88.90	1000	
60	Ni	89	He	2.741	ppb	10.9	307.79	1000	
63	Cu	89	He	3.928	ppb	4.0	1443.46	2000	
66	Zn	89	He	10.962	ppb	7.6	460.02	2000	
75	As	89	He	0.817	ppb	22.4	28.67	1000	
78	Se	89	H2	14.526	ppb	2.2	223.66	1000	
88	Sr	89	He	5965.378	ppb	0.1	864660.89	2000	
95	Mo	89	He	1.722	ppb	23.8	406.69	1000	
107	Ag	89	He	0.001	ppb	312.9	11.11	100	
111	Cd	89	He	0.094	ppb	91.3	8.15	1000	
118	Sn	159	He	1.129	ppb	9.6	256.68	1000	
121	Sb	159	No Gas	0.141	ppb	47.2	280.32	1000	
137	Ba	159	No Gas	15.024	ppb	17.4	8134.90	2000	
182	W	159	No Gas	0.056	ppb	56.2	173.53	1000	
205	Tl	209	No Gas	0.030	ppb	50.8	93.44	1000	
208	Pb	209	No Gas	0.102	ppb	55.6	480.54	2000	
232	Th	209	No Gas	0.088	ppb	15.2	450.52	1000	
238	U	209	No Gas	108.856	ppb	18.3	342790.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410225.93	10.8	1537409.87	91.73	29.5	120.4	
Sc	45	No Gas	3101126.46	13.4	3373253.08	91.93	29.5	120.4	
Sc	45	H2	385620.75	0.8	415670.69	92.77	29.5	120.4	
Sc	45	He	76878.01	1.1	81171.76	94.71	29.5	120.4	
Ge	72	No Gas	705949.86	12.4	779333.11	90.58	29.5	120.4	
Ge	72	H2	140754.59	2.0	153246.58	91.85	29.5	120.4	
Ge	72	He	59056.48	0.7	63135.03	93.54	29.5	120.4	
Y	89	H2	2471567.78	0.9	2642116.11	93.55	29.5	120.4	
Y	89	He	514579.32	0.6	544041.92	94.58	29.5	120.4	
Tb	159	No Gas	7751091.55	13.0	8117023.84	95.49	29.5	120.4	
Tb	159	He	2777922.29	0.7	2866479.19	96.91	29.5	120.4	
Bi	209	No Gas	4003449.32	13.2	4424692.92	90.48	29.5	120.4	

Sample Report

Sample Name SN5173-001

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:02:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.050	ppb	107.6	32.22	100	
11	B	6	No Gas	97.218	ppb	2.5	17847.10	1000	
23	Na	45	He	67148.612	ppb	0.1	1391842.54	200000	
24	Mg	45	He	31662.163	ppb	0.2	360183.01	200000	
27	Al	45	He	87.870	ppb	6.9	432.24	200000	
28	Si	45	H2	8021.865	ppb	3.4	63323.71	10000	
39	K	45	He	14214.836	ppb	0.8	150741.03	200000	
40	Ca	45	H2	107216.947	ppb	2.3	8062613.49	200000	
51	V	89	He	6.500	ppb	11.0	1256.77	1000	
52	Cr	89	He	1.075	ppb	7.3	245.29	2000	
55	Mn	89	He	2308.912	ppb	0.2	217824.69	2000	
56	Fe	89	H2	53910.228	ppb	2.1	16401741.16	100000	
59	Co	89	He	5.273	ppb	2.9	1775.79	1000	
60	Ni	89	He	4.304	ppb	10.9	447.80	1000	
63	Cu	89	He	1.323	ppb	9.9	732.27	2000	
66	Zn	89	He	3.517	ppb	21.7	184.45	2000	
75	As	89	He	44.527	ppb	6.5	1288.87	1000	
78	Se	89	H2	1.037	ppb	14.7	16.17	1000	
88	Sr	89	He	929.809	ppb	0.8	131051.87	2000	
95	Mo	89	He	-0.005	ppb	N/A	115.56	1000	
107	Ag	89	He	0.006	ppb	107.7	13.33	100	
111	Cd	89	He	0.016	ppb	185.7	2.22	1000	
118	Sn	159	He	1.014	ppb	29.6	237.79	1000	
121	Sb	159	No Gas	0.218	ppb	12.4	420.47	1000	
137	Ba	159	No Gas	113.084	ppb	1.5	66304.48	2000	
182	W	159	No Gas	0.020	ppb	17.9	143.50	1000	
205	Tl	209	No Gas	0.019	ppb	63.5	76.75	1000	
208	Pb	209	No Gas	0.404	ppb	1.6	1645.23	2000	
232	Th	209	No Gas	0.077	ppb	21.7	460.53	1000	
238	U	209	No Gas	0.115	ppb	10.0	413.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1528494.52	2.4	1537409.87	99.42	29.5	120.4	
Sc	45	No Gas	3268996.36	2.4	3373253.08	96.91	29.5	120.4	
Sc	45	H2	375140.55	1.6	415670.69	90.25	29.5	120.4	
Sc	45	He	74292.24	0.0	81171.76	91.52	29.5	120.4	
Ge	72	No Gas	754042.08	2.5	779333.11	96.75	29.5	120.4	
Ge	72	H2	137257.37	1.3	153246.58	89.57	29.5	120.4	
Ge	72	He	57558.43	0.8	63135.03	91.17	29.5	120.4	
Y	89	H2	2437553.77	1.4	2642116.11	92.26	29.5	120.4	
Y	89	He	500354.71	0.6	544041.92	91.97	29.5	120.4	
Tb	159	No Gas	8282817.03	1.1	8117023.84	102.04	29.5	120.4	
Tb	159	He	2781159.47	0.1	2866479.19	97.02	29.5	120.4	
Bi	209	No Gas	4456718.59	1.1	4424692.92	100.72	29.5	120.4	

Sample Report

Sample Name SN5173-002

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:05:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	69.1	38.89	100	
11	B	6	No Gas	95.077	ppb	3.4	15788.05	1000	
23	Na	45	He	65748.904	ppb	1.5	1355026.63	200000	
24	Mg	45	He	30999.058	ppb	1.8	350608.29	200000	
27	Al	45	He	12.174	ppb	47.0	98.89	200000	
28	Si	45	H2	7715.234	ppb	3.3	59968.75	10000	
39	K	45	He	14083.420	ppb	1.5	148573.66	200000	
40	Ca	45	H2	105050.924	ppb	1.4	7778285.02	200000	
51	V	89	He	4.369	ppb	1.9	923.40	1000	
52	Cr	89	He	0.981	ppb	9.7	228.63	2000	
55	Mn	89	He	2287.255	ppb	0.6	217689.23	2000	
56	Fe	89	H2	52680.969	ppb	1.4	16004740.74	100000	
59	Co	89	He	5.358	ppb	7.1	1820.26	1000	
60	Ni	89	He	4.600	ppb	9.6	480.03	1000	
63	Cu	89	He	0.854	ppb	13.0	616.70	2000	
66	Zn	89	He	1.974	ppb	32.4	131.12	2000	
75	As	89	He	42.016	ppb	1.6	1227.52	1000	
78	Se	89	H2	1.116	ppb	14.9	17.33	1000	
88	Sr	89	He	910.043	ppb	1.1	129401.55	2000	
95	Mo	89	He	0.042	ppb	402.9	124.45	1000	
107	Ag	89	He	0.001	ppb	948.1	11.11	100	
111	Cd	89	He	0.021	ppb	41.1	2.59	1000	
118	Sn	159	He	0.967	ppb	7.3	232.24	1000	
121	Sb	159	No Gas	0.235	ppb	16.4	437.17	1000	
137	Ba	159	No Gas	109.405	ppb	1.8	63011.71	2000	
182	W	159	No Gas	0.054	ppb	84.8	180.20	1000	
205	Tl	209	No Gas	0.005	ppb	221.1	40.05	1000	
208	Pb	209	No Gas	0.027	ppb	59.5	273.64	2000	
232	Th	209	No Gas	0.024	ppb	54.1	253.62	1000	
238	U	209	No Gas	0.043	ppb	42.8	153.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1380947.02	1.5	1537409.87	89.82	29.5	120.4	
Sc	45	No Gas	3096172.99	0.1	3373253.08	91.79	29.5	120.4	
Sc	45	H2	369317.44	1.5	415670.69	88.85	29.5	120.4	
Sc	45	He	73867.70	1.0	81171.76	91	29.5	120.4	
Ge	72	No Gas	724871.58	0.2	779333.11	93.01	29.5	120.4	
Ge	72	H2	136932.38	2.0	153246.58	89.35	29.5	120.4	
Ge	72	He	58202.92	0.8	63135.03	92.19	29.5	120.4	
Y	89	H2	2433793.99	1.4	2642116.11	92.12	29.5	120.4	
Y	89	He	504781.84	0.1	544041.92	92.78	29.5	120.4	
Tb	159	No Gas	8135086.68	0.5	8117023.84	100.22	29.5	120.4	
Tb	159	He	2808375.86	0.3	2866479.19	97.97	29.5	120.4	
Bi	209	No Gas	4380972.49	0.3	4424692.92	99.01	29.5	120.4	

Sample Report

Sample Name SN5173-003

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:08:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.066	ppb	109.8	31.11	100	
11	B	6	No Gas	78.567	ppb	7.8	12758.27	1000	
23	Na	45	He	131954.611	ppb	2.0	2777434.11	200000	
24	Mg	45	He	5666.621	ppb	1.6	66070.70	200000	
27	Al	45	He	110.217	ppb	3.0	540.03	200000	
28	Si	45	H2	4567.343	ppb	0.7	35747.84	10000	
39	K	45	He	1833.014	ppb	3.9	28774.35	200000	
40	Ca	45	H2	43206.141	ppb	0.4	3213255.75	200000	
51	V	89	He	2.776	ppb	14.1	671.15	1000	
52	Cr	89	He	0.724	ppb	8.0	178.64	2000	
55	Mn	89	He	1015.278	ppb	1.8	97343.53	2000	
56	Fe	89	H2	254.327	ppb	0.8	85759.51	100000	
59	Co	89	He	0.766	ppb	8.3	268.91	1000	
60	Ni	89	He	2.215	ppb	1.8	253.34	1000	
63	Cu	89	He	1.356	ppb	15.9	752.27	2000	
66	Zn	89	He	13.041	ppb	11.8	528.92	2000	
75	As	89	He	0.681	ppb	7.1	24.33	1000	
78	Se	89	H2	0.331	ppb	20.0	5.50	1000	
88	Sr	89	He	189.264	ppb	1.9	27114.25	2000	
95	Mo	89	He	-0.300	ppb	N/A	68.89	1000	
107	Ag	89	He	0.003	ppb	448.5	12.22	100	
111	Cd	89	He	0.071	ppb	10.1	6.30	1000	
118	Sn	159	He	0.820	ppb	19.5	207.79	1000	
121	Sb	159	No Gas	0.130	ppb	44.1	280.31	1000	
137	Ba	159	No Gas	25.076	ppb	9.3	14390.45	2000	
182	W	159	No Gas	-0.001	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.022	ppb	113.6	83.43	1000	
208	Pb	209	No Gas	0.198	ppb	13.3	894.35	2000	
232	Th	209	No Gas	0.042	ppb	30.9	323.70	1000	
238	U	209	No Gas	0.104	ppb	15.4	370.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1338969.87	5.5	1537409.87	87.09	29.5	120.4	
Sc	45	No Gas	3079437.82	5.6	3373253.08	91.29	29.5	120.4	
Sc	45	H2	370803.50	0.8	415670.69	89.21	29.5	120.4	
Sc	45	He	75615.51	2.3	81171.76	93.15	29.5	120.4	
Ge	72	No Gas	721592.97	5.5	779333.11	92.59	29.5	120.4	
Ge	72	H2	137580.75	1.1	153246.58	89.78	29.5	120.4	
Ge	72	He	59010.23	2.0	63135.03	93.47	29.5	120.4	
Y	89	H2	2450528.80	0.2	2642116.11	92.75	29.5	120.4	
Y	89	He	508591.00	1.9	544041.92	93.48	29.5	120.4	
Tb	159	No Gas	8127025.99	5.6	8117023.84	100.12	29.5	120.4	
Tb	159	He	2810729.65	1.5	2866479.19	98.06	29.5	120.4	
Bi	209	No Gas	4422492.86	5.5	4424692.92	99.95	29.5	120.4	

Sample Report

Sample Name SN5173-004

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:11:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	237.4	22.22	100	
11	B	6	No Gas	70.535	ppb	5.7	12186.67	1000	
23	Na	45	He	124306.802	ppb	0.9	2691406.50	200000	
24	Mg	45	He	5303.782	ppb	0.9	63637.74	200000	
27	Al	45	He	1.456	ppb	345.8	54.45	200000	
28	Si	45	H2	4358.052	ppb	1.2	35520.30	10000	
39	K	45	He	1836.165	ppb	3.6	29628.83	200000	
40	Ca	45	H2	41730.917	ppb	1.4	3230744.08	200000	
51	V	89	He	3.344	ppb	9.4	778.94	1000	
52	Cr	89	He	0.472	ppb	10.5	130.65	2000	
55	Mn	89	He	927.967	ppb	0.7	90825.73	2000	
56	Fe	89	H2	-2.324	ppb	N/A	7507.04	100000	
59	Co	89	He	0.461	ppb	12.9	168.90	1000	
60	Ni	89	He	1.609	ppb	13.1	198.90	1000	
63	Cu	89	He	0.898	ppb	29.3	645.59	2000	
66	Zn	89	He	2.570	ppb	12.3	156.67	2000	
75	As	89	He	0.508	ppb	13.0	19.67	1000	
78	Se	89	H2	0.468	ppb	4.5	7.83	1000	
88	Sr	89	He	179.866	ppb	1.4	26302.57	2000	
95	Mo	89	He	-0.289	ppb	N/A	72.22	1000	
107	Ag	89	He	-0.003	ppb	N/A	8.89	100	
111	Cd	89	He	0.040	ppb	21.9	4.07	1000	
118	Sn	159	He	0.951	ppb	19.4	233.34	1000	
121	Sb	159	No Gas	0.062	ppb	42.1	190.22	1000	
137	Ba	159	No Gas	22.492	ppb	5.7	13375.16	2000	
182	W	159	No Gas	0.011	ppb	336.3	133.48	1000	
205	Tl	209	No Gas	0.017	ppb	92.3	73.42	1000	
208	Pb	209	No Gas	0.038	ppb	78.4	323.70	2000	
232	Th	209	No Gas	0.017	ppb	255.9	236.94	1000	
238	U	209	No Gas	0.157	ppb	61.0	570.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1411728.79	2.2	1537409.87	91.83	29.5	120.4	
Sc	45	No Gas	3245821.07	2.2	3373253.08	96.22	29.5	120.4	
Sc	45	H2	386014.63	0.8	415670.69	92.87	29.5	120.4	
Sc	45	He	77752.86	1.1	81171.76	95.79	29.5	120.4	
Ge	72	No Gas	760866.35	3.0	779333.11	97.63	29.5	120.4	
Ge	72	H2	143563.78	1.3	153246.58	93.68	29.5	120.4	
Ge	72	He	60388.46	0.9	63135.03	95.65	29.5	120.4	
Y	89	H2	2526340.08	0.9	2642116.11	95.62	29.5	120.4	
Y	89	He	519048.41	0.9	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8397261.19	2.1	8117023.84	103.45	29.5	120.4	
Tb	159	He	2854832.70	0.9	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4543702.19	2.8	4424692.92	102.69	29.5	120.4	

Sample Report

Sample Name SN5151-004L

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:13:39 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.023	ppb	N/A	16.67	100	
11	B	6	No Gas	903.819	ppb	2.8	30774.69	1000	
23	Na	45	He	1381851.202	ppb	0.3	6171651.64	200000	
24	Mg	45	He	401160.695	ppb	0.8	985360.85	200000	
27	Al	45	He	0.646	ppb	2002.5	50.00	200000	
28	Si	45	H2	6066.990	ppb	1.4	10428.68	10000	
39	K	45	He	61178.602	ppb	0.9	141747.47	200000	
40	Ca	45	H2	411303.450	ppb	0.9	6597729.48	200000	
51	V	89	He	16.700	ppb	7.4	805.61	1000	
52	Cr	89	He	1.406	ppb	11.1	94.65	2000	
55	Mn	89	He	9355.963	ppb	0.5	189600.26	2000	
56	Fe	89	H2	75.906	ppb	6.0	13237.82	100000	
59	Co	89	He	4.080	ppb	17.6	302.25	1000	
60	Ni	89	He	10.586	ppb	7.7	257.79	1000	
63	Cu	89	He	0.277	ppb	146.4	435.58	2000	
66	Zn	89	He	64.590	ppb	6.2	554.48	2000	
75	As	89	He	2.160	ppb	39.4	18.00	1000	
78	Se	89	H2	1.257	ppb	32.3	4.50	1000	
88	Sr	89	He	6244.108	ppb	0.8	189048.69	2000	
95	Mo	89	He	-0.338	ppb	N/A	113.34	1000	
107	Ag	89	He	-0.055	ppb	N/A	4.44	100	
111	Cd	89	He	-0.046	ppb	N/A	0.37	1000	
118	Sn	159	He	0.804	ppb	7.2	98.89	1000	
121	Sb	159	No Gas	0.325	ppb	27.3	193.55	1000	
137	Ba	159	No Gas	30.245	ppb	11.0	3584.52	2000	
182	W	159	No Gas	-0.108	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.113	ppb	136.0	86.76	1000	
208	Pb	209	No Gas	0.183	ppb	113.3	317.03	2000	
232	Th	209	No Gas	0.000	ppb	192121.7	170.20	1000	
238	U	209	No Gas	37.989	ppb	7.0	27330.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1452371.79	2.3	1537409.87	94.47	29.5	120.4	
Sc	45	No Gas	3332196.04	2.9	3373253.08	98.78	29.5	120.4	
Sc	45	H2	400000.19	0.6	415670.69	96.23	29.5	120.4	
Sc	45	He	80284.43	0.8	81171.76	98.91	29.5	120.4	
Ge	72	No Gas	771839.23	2.9	779333.11	99.04	29.5	120.4	
Ge	72	H2	147022.54	2.4	153246.58	95.94	29.5	120.4	
Ge	72	He	62963.09	0.8	63135.03	99.73	29.5	120.4	
Y	89	H2	2567197.19	0.7	2642116.11	97.16	29.5	120.4	
Y	89	He	537389.66	0.9	544041.92	98.78	29.5	120.4	
Tb	159	No Gas	8350507.24	3.2	8117023.84	102.88	29.5	120.4	
Tb	159	He	2872248.36	0.5	2866479.19	100.2	29.5	120.4	
Bi	209	No Gas	4503249.55	2.5	4424692.92	101.78	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	048_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:16:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.506	ppb	3.9	31327.96	25	98.02	89.8	110.2	
11	B	6	No Gas	25.478	ppb	5.1	22277.85	25	101.91	89.8	110.2	
23	Na	45	He	5223.887	ppb	2.0	579547.54	5000	104.48	89.8	110.2	
24	Mg	45	He	4989.235	ppb	1.5	302002.24	5000	99.78	89.8	110.2	
27	Al	45	He	487.736	ppb	0.7	11460.57	500	97.55	89.8	110.2	
28	Si	45	H2	525.971	ppb	12.1	21379.61	500	105.19	89.8	110.2	
39	K	45	He	4925.879	ppb	1.2	269930.24	5000	98.52	89.8	110.2	
40	Ca	45	H2	5280.373	ppb	9.6	2032410.40	5000	105.61	89.8	110.2	
51	V	89	He	24.643	ppb	1.9	21188.78	25	98.57	89.8	110.2	
52	Cr	89	He	24.652	ppb	0.6	25908.96	25	98.61	89.8	110.2	
55	Mn	89	He	25.125	ppb	2.1	12580.67	25	100.5	89.8	110.2	
56	Fe	89	H2	5248.985	ppb	9.7	8115307.84	5000	104.98	89.8	110.2	
59	Co	89	He	24.722	ppb	0.8	43956.18	25	98.89	89.8	110.2	
60	Ni	89	He	24.520	ppb	2.1	12390.34	25	98.08	89.8	110.2	
63	Cu	89	He	24.904	ppb	1.7	34441.08	25	99.62	89.8	110.2	
66	Zn	89	He	24.972	ppb	1.7	4737.64	25	99.89	89.8	110.2	
75	As	89	He	24.703	ppb	1.4	3784.60	25	98.81	89.8	110.2	
78	Se	89	H2	26.307	ppb	8.9	2025.89	25	105.23	89.8	110.2	
88	Sr	89	He	24.277	ppb	1.4	18150.24	25	97.11	89.8	110.2	
95	Mo	89	He	23.885	ppb	2.2	20620.58	25	95.54	89.8	110.2	
107	Ag	89	He	18.306	ppb	1.1	53433.74	25	73.22	89.8	110.2	> +/- 10%
111	Cd	89	He	24.292	ppb	0.6	9447.08	25	97.17	89.8	110.2	
118	Sn	159	He	23.514	ppb	0.9	20131.14	25	94.06	89.8	110.2	
121	Sb	159	No Gas	24.417	ppb	3.6	181800.37	25	97.67	89.8	110.2	
137	Ba	159	No Gas	24.384	ppb	2.9	71430.20	25	97.54	89.8	110.2	
182	W	159	No Gas	23.922	ppb	2.2	141797.85	25	95.69	89.8	110.2	
205	Tl	209	No Gas	24.270	ppb	3.3	321313.46	25	97.08	89.8	110.2	
208	Pb	209	No Gas	24.028	ppb	3.3	439817.64	25	96.11	89.8	110.2	
232	Th	209	No Gas	23.911	ppb	4.1	458190.82	25	95.64	89.8	110.2	
238	U	209	No Gas	24.125	ppb	3.7	433812.80	25	96.5	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1474384.69	1.6	1537409.87	95.9	29.5	120.4	
Sc	45	No Gas	3381277.54	1.6	3373253.08	100.24	29.5	120.4	
Sc	45	H2	385501.57	7.5	415670.69	92.74	29.5	120.4	
Sc	45	He	79040.06	1.6	81171.76	97.37	29.5	120.4	
Ge	72	No Gas	779756.11	1.9	779333.11	100.05	29.5	120.4	
Ge	72	H2	144638.71	4.7	153246.58	94.38	29.5	120.4	
Ge	72	He	61689.66	1.1	63135.03	97.71	29.5	120.4	
Y	89	H2	2486780.70	6.9	2642116.11	94.12	29.5	120.4	
Y	89	He	530636.49	0.4	544041.92	97.54	29.5	120.4	
Tb	159	No Gas	8277953.70	1.8	8117023.84	101.98	29.5	120.4	
Tb	159	He	2851326.10	0.5	2866479.19	99.47	29.5	120.4	
Bi	209	No Gas	4500115.58	1.6	4424692.92	101.7	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	049_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:18:59 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.034	ppb	22.7	62.23	0.2	
11	B	6	No Gas	1.415	ppb	12.1	2088.01	4	
23	Na	45	He	135.466	ppb	2.3	20952.22	200	Failed DoD
24	Mg	45	He	6.836	ppb	16.4	1022.34	20	
27	Al	45	He	-1.228	ppb	N/A	20.00	20	
28	Si	45	H2	0.513	ppb	183.8	270.30	100	
39	K	45	He	19.023	ppb	42.2	11837.93	200	
40	Ca	45	H2	0.303	ppb	15.5	2006.89	20	
51	V	89	He	0.159	ppb	20.8	363.35	1	
52	Cr	89	He	0.018	ppb	36.0	53.99	1	
55	Mn	89	He	0.072	ppb	22.0	48.66	0.4	
56	Fe	89	H2	-1.415	ppb	N/A	6081.40	20	
59	Co	89	He	-0.001	ppb	N/A	6.67	0.2	
60	Ni	89	He	-0.018	ppb	N/A	32.22	0.4	
63	Cu	89	He	-0.129	ppb	N/A	240.01	0.6	
66	Zn	89	He	0.079	ppb	181.2	78.89	2	
75	As	89	He	-0.001	ppb	N/A	4.33	1	
78	Se	89	H2	0.048	ppb	48.7	4.33	1	
88	Sr	89	He	0.009	ppb	48.3	13.33	1	
95	Mo	89	He	0.002	ppb	1953.7	125.56	1	
107	Ag	89	He	0.002	ppb	83.5	15.55	0.2	
111	Cd	89	He	0.007	ppb	65.5	3.70	0.2	
118	Sn	159	He	0.122	ppb	22.7	174.45	1	
121	Sb	159	No Gas	0.016	ppb	44.0	210.24	0.2	
137	Ba	159	No Gas	0.024	ppb	43.6	86.77	0.4	
182	W	159	No Gas	0.086	ppb	27.2	620.71	1	
205	Tl	209	No Gas	0.017	ppb	52.0	253.62	0.2	
208	Pb	209	No Gas	0.012	ppb	50.6	407.12	0.2	
232	Th	209	No Gas	0.066	ppb	6.2	1425.03	1	
238	U	209	No Gas	0.016	ppb	32.1	287.00	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1481509.20	0.7	1537409.87	96.36	29.5	120.4	
Sc	45	No Gas	3285675.53	0.4	3373253.08	97.4	29.5	120.4	
Sc	45	H2	397703.67	0.8	415670.69	95.68	29.5	120.4	
Sc	45	He	79286.63	0.4	81171.76	97.68	29.5	120.4	
Ge	72	No Gas	757494.67	0.7	779333.11	97.2	29.5	120.4	
Ge	72	H2	147120.29	1.3	153246.58	96	29.5	120.4	
Ge	72	He	61709.45	0.8	63135.03	97.74	29.5	120.4	
Y	89	H2	2556153.46	0.4	2642116.11	96.75	29.5	120.4	
Y	89	He	531956.75	0.4	544041.92	97.78	29.5	120.4	
Tb	159	No Gas	8141242.66	0.7	8117023.84	100.3	29.5	120.4	
Tb	159	He	2846509.79	0.4	2866479.19	99.3	29.5	120.4	
Bi	209	No Gas	4452330.35	0.8	4424692.92	100.62	29.5	120.4	

Sample Report

Sample Name SN5173-005

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:21:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.055	ppb	114.5	32.22	100	
11	B	6	No Gas	52.870	ppb	5.3	9722.48	1000	
23	Na	45	He	8509.901	ppb	3.3	188605.21	200000	
24	Mg	45	He	5773.216	ppb	1.0	68790.48	200000	
27	Al	45	He	95.010	ppb	3.0	482.25	200000	
28	Si	45	H2	7132.832	ppb	0.5	57295.11	10000	
39	K	45	He	3329.273	ppb	2.0	44804.65	200000	
40	Ca	45	H2	117275.510	ppb	0.9	8969131.53	200000	
51	V	89	He	2.749	ppb	3.3	680.04	1000	
52	Cr	89	He	0.465	ppb	19.5	129.31	2000	
55	Mn	89	He	560.140	ppb	0.4	54829.15	2000	
56	Fe	89	H2	11238.072	ppb	0.3	3510362.74	100000	
59	Co	89	He	2.475	ppb	14.7	868.98	1000	
60	Ni	89	He	1.609	ppb	7.4	198.90	1000	
63	Cu	89	He	0.568	ppb	18.7	557.81	2000	
66	Zn	89	He	4.144	ppb	15.0	214.45	2000	
75	As	89	He	2.254	ppb	18.4	72.01	1000	
78	Se	89	H2	0.485	ppb	40.4	8.00	1000	
88	Sr	89	He	496.060	ppb	0.8	72537.22	2000	
95	Mo	89	He	-0.184	ppb	N/A	90.00	1000	
107	Ag	89	He	0.057	ppb	60.9	43.33	100	
111	Cd	89	He	0.171	ppb	12.0	14.07	1000	
118	Sn	159	He	0.917	ppb	12.7	226.68	1000	
121	Sb	159	No Gas	0.271	ppb	11.1	497.23	1000	
137	Ba	159	No Gas	25.747	ppb	3.7	15032.14	2000	
182	W	159	No Gas	0.106	ppb	96.1	243.61	1000	
205	Tl	209	No Gas	0.064	ppb	41.7	196.89	1000	
208	Pb	209	No Gas	0.338	ppb	4.4	1428.30	2000	
232	Th	209	No Gas	0.416	ppb	16.1	1772.10	1000	
238	U	209	No Gas	0.609	ppb	4.3	2206.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1467823.88	1.4	1537409.87	95.47	29.5	120.4	
Sc	45	No Gas	3217461.31	0.4	3373253.08	95.38	29.5	120.4	
Sc	45	H2	381433.56	1.1	415670.69	91.76	29.5	120.4	
Sc	45	He	77269.09	0.3	81171.76	95.19	29.5	120.4	
Ge	72	No Gas	751680.62	0.8	779333.11	96.45	29.5	120.4	
Ge	72	H2	140011.58	1.9	153246.58	91.36	29.5	120.4	
Ge	72	He	60187.58	0.7	63135.03	95.33	29.5	120.4	
Y	89	H2	2497530.78	0.6	2642116.11	94.53	29.5	120.4	
Y	89	He	519082.56	1.1	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8239238.00	0.6	8117023.84	101.51	29.5	120.4	
Tb	159	He	2844904.09	0.6	2866479.19	99.25	29.5	120.4	
Bi	209	No Gas	4524464.20	1.1	4424692.92	102.25	29.5	120.4	

Sample Report

Sample Name SN5173-006

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:24:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.056	ppb	81.2	31.11	100	
11	B	6	No Gas	56.892	ppb	6.8	10057.16	1000	
23	Na	45	He	8465.666	ppb	0.8	185013.63	200000	
24	Mg	45	He	6058.903	ppb	0.5	71155.43	200000	
27	Al	45	He	1.193	ppb	225.5	52.23	200000	
28	Si	45	H2	7198.933	ppb	3.6	57978.17	10000	
39	K	45	He	3547.905	ppb	0.6	46397.39	200000	
40	Ca	45	H2	121983.202	ppb	2.8	9354410.07	200000	
51	V	89	He	2.874	ppb	14.4	696.71	1000	
52	Cr	89	He	0.378	ppb	6.5	110.65	2000	
55	Mn	89	He	588.477	ppb	1.1	57296.55	2000	
56	Fe	89	H2	11262.597	ppb	2.2	3545550.95	100000	
59	Co	89	He	2.640	ppb	13.3	922.32	1000	
60	Ni	89	He	1.404	ppb	23.6	177.79	1000	
63	Cu	89	He	0.420	ppb	36.8	515.59	2000	
66	Zn	89	He	4.183	ppb	13.5	214.45	2000	
75	As	89	He	1.867	ppb	8.7	60.01	1000	
78	Se	89	H2	0.449	ppb	12.2	7.50	1000	
88	Sr	89	He	520.265	ppb	0.9	75669.63	2000	
95	Mo	89	He	-0.361	ppb	N/A	60.00	1000	
107	Ag	89	He	0.001	ppb	670.2	11.11	100	
111	Cd	89	He	0.143	ppb	31.4	11.85	1000	
118	Sn	159	He	1.347	ppb	17.4	302.24	1000	
121	Sb	159	No Gas	0.203	ppb	24.3	403.79	1000	
137	Ba	159	No Gas	26.576	ppb	4.1	15780.32	2000	
182	W	159	No Gas	0.039	ppb	49.8	166.85	1000	
205	Tl	209	No Gas	0.027	ppb	57.0	100.11	1000	
208	Pb	209	No Gas	0.132	ppb	9.6	680.77	2000	
232	Th	209	No Gas	0.055	ppb	14.8	390.46	1000	
238	U	209	No Gas	0.557	ppb	8.5	2055.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1421290.94	3.1	1537409.87	92.45	29.5	120.4	
Sc	45	No Gas	3247829.98	1.7	3373253.08	96.28	29.5	120.4	
Sc	45	H2	382593.23	1.9	415670.69	92.04	29.5	120.4	
Sc	45	He	76189.57	0.9	81171.76	93.86	29.5	120.4	
Ge	72	No Gas	769076.78	2.1	779333.11	98.68	29.5	120.4	
Ge	72	H2	140889.45	1.9	153246.58	91.94	29.5	120.4	
Ge	72	He	59674.88	1.0	63135.03	94.52	29.5	120.4	
Y	89	H2	2517489.30	1.4	2642116.11	95.28	29.5	120.4	
Y	89	He	516329.14	0.8	544041.92	94.91	29.5	120.4	
Tb	159	No Gas	8382968.63	1.6	8117023.84	103.28	29.5	120.4	
Tb	159	He	2865396.97	0.6	2866479.19	99.96	29.5	120.4	
Bi	209	No Gas	4610657.73	2.0	4424692.92	104.2	29.5	120.4	

Sample Report

Sample Name SN5173-008

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:27:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.028	ppb	128.5	23.33	100	
11	B	6	No Gas	38.450	ppb	3.4	6781.82	1000	
23	Na	45	He	63300.897	ppb	0.8	1312249.14	200000	
24	Mg	45	He	9818.161	ppb	2.0	112058.34	200000	
27	Al	45	He	16.395	ppb	20.3	117.78	200000	
28	Si	45	H2	4833.690	ppb	0.8	37885.63	10000	
39	K	45	He	2804.685	ppb	0.9	37886.52	200000	
40	Ca	45	H2	54711.819	ppb	1.3	4075494.77	200000	
51	V	89	He	2.050	ppb	6.3	548.92	1000	
52	Cr	89	He	0.386	ppb	19.7	109.98	2000	
55	Mn	89	He	9078.176	ppb	0.3	865018.39	2000	
56	Fe	89	H2	25412.420	ppb	2.0	7745710.33	100000	
59	Co	89	He	22.312	ppb	2.8	7562.63	1000	
60	Ni	89	He	11.266	ppb	2.2	1120.08	1000	
63	Cu	89	He	-0.254	ppb	N/A	328.90	2000	
66	Zn	89	He	4.931	ppb	11.6	236.68	2000	
75	As	89	He	11.069	ppb	4.9	327.04	1000	
78	Se	89	H2	0.146	ppb	92.2	2.67	1000	
88	Sr	89	He	246.160	ppb	0.3	35048.90	2000	
95	Mo	89	He	-0.414	ppb	N/A	50.00	1000	
107	Ag	89	He	-0.003	ppb	N/A	8.89	100	
111	Cd	89	He	0.016	ppb	161.0	2.22	1000	
118	Sn	159	He	1.037	ppb	12.5	244.45	1000	
121	Sb	159	No Gas	0.061	ppb	51.3	183.54	1000	
137	Ba	159	No Gas	35.663	ppb	5.0	20532.24	2000	
182	W	159	No Gas	0.043	ppb	73.1	166.85	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	10.01	1000	
208	Pb	209	No Gas	0.025	ppb	27.8	270.31	2000	
232	Th	209	No Gas	0.036	ppb	48.3	303.68	1000	
238	U	209	No Gas	0.040	ppb	34.6	143.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1360982.43	1.4	1537409.87	88.52	29.5	120.4	
Sc	45	No Gas	3092750.12	3.3	3373253.08	91.68	29.5	120.4	
Sc	45	H2	371452.58	0.5	415670.69	89.36	29.5	120.4	
Sc	45	He	74285.31	0.9	81171.76	91.52	29.5	120.4	
Ge	72	No Gas	742504.55	1.8	779333.11	95.27	29.5	120.4	
Ge	72	H2	137258.42	0.7	153246.58	89.57	29.5	120.4	
Ge	72	He	58656.71	0.7	63135.03	92.91	29.5	120.4	
Y	89	H2	2440505.99	0.9	2642116.11	92.37	29.5	120.4	
Y	89	He	505395.09	0.7	544041.92	92.9	29.5	120.4	
Tb	159	No Gas	8133288.91	2.8	8117023.84	100.2	29.5	120.4	
Tb	159	He	2815037.60	0.1	2866479.19	98.21	29.5	120.4	
Bi	209	No Gas	4430730.57	2.4	4424692.92	100.14	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG01IMW1
File Name	053_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:29:37 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.004	ppb	128.9	22.22	0.1	
B	11	6	No Gas	1.027	ppb	2.9	1683.49	2	
Na	23	45	He	91.804	ppb	16.9	15863.62	100	
Mg	24	45	He	5.421	ppb	34.8	920.10	10	
Al	27	45	He	0.522	ppb	130.0	60.00	10	
Si	28	45	H2	5.212	ppb	25.4	450.51	50	
K	39	45	He	24.426	ppb	28.4	11919.61	100	
Ca	40	45	H2	7.183	ppb	15.8	4592.05	10	
V	51	89	He	-0.016	ppb	N/A	208.90	0.5	
Cr	52	89	He	0.035	ppb	38.5	69.32	0.5	
Mn	55	89	He	0.832	ppb	49.9	417.29	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Fe	56	89	H2	-0.319	ppb	N/A	7667.43	10	
Co	59	89	He	-0.002	ppb	N/A	4.45	0.1	
Ni	60	89	He	0.009	ppb	233.7	44.44	0.2	
Cu	63	89	He	-0.015	ppb	N/A	385.58	0.3	
Zn	66	89	He	0.685	ppb	38.8	187.78	1	
As	75	89	He	0.004	ppb	359.1	5.00	0.5	
Se	78	89	H2	-0.004	ppb	N/A	0.17	0.5	
Sr	88	89	He	0.069	ppb	82.8	56.67	0.5	
Mo	95	89	He	-0.123	ppb	N/A	17.78	0.5	
Ag	107	89	He	-0.001	ppb	N/A	8.89	0.1	
Cd	111	89	He	0.001	ppb	394.8	1.48	0.1	
Sn	118	159	He	0.032	ppb	48.4	97.78	0.5	
Sb	121	159	No Gas	0.003	ppb	259.7	120.14	0.1	
Ba	137	159	No Gas	0.087	ppb	81.9	280.32	0.2	
W	182	159	No Gas	0.000	ppb	N/A	120.14	0.5	
Tl	205	209	No Gas	0.007	ppb	196.7	126.82	0.1	
[Pb]	206	209	No Gas	0.016	ppb	46.9	123.47	0.1	
[Pb]	207	209	No Gas	0.010	ppb	77.2	83.43	0.1	
Pb	208	209	No Gas	0.015	ppb	66.7	483.88	0.1	
Th	232	209	No Gas	0.004	ppb	234.9	250.29	0.5	
U	238	209	No Gas	0.008	ppb	165.7	163.53	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1417085.07	3.5	1537409.87	92.17	29.5	120.4	
Sc	45	No Gas	3275038.36	4.0	3373253.08	97.09	29.5	120.4	
Sc	45	H2	384350.98	1.0	415670.69	92.47	29.5	120.4	
Sc	45	He	77957.39	0.9	81171.76	96.04	29.5	120.4	
Ge	72	No Gas	763110.15	3.9	779333.11	97.92	29.5	120.4	
Ge	72	H2	142778.27	1.0	153246.58	93.17	29.5	120.4	
Ge	72	He	60740.69	0.9	63135.03	96.21	29.5	120.4	
Y	89	H2	2503459.36	0.3	2642116.11	94.75	29.5	120.4	
Y	89	He	518595.01	1.2	544041.92	95.32	29.5	120.4	
Tb	159	No Gas	8379617.72	3.9	8117023.84	103.24	29.5	120.4	
Tb	159	He	2835803.88	0.7	2866479.19	98.93	29.5	120.4	
Bi	209	No Gas	4613611.73	4.2	4424692.92	104.27	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG01IMW1
File Name	054_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:32:17 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.246	ppb	4.9	12663.71	50	19.7	79.5	120.4	
B	11	6	No Gas	486.405	ppb	5.6	82953.40	500	19.46	79.5	120.4	
Na	23	45	He	8446.835	ppb	0.7	190922.23	7500	22.52	79.5	120.4	
Mg	24	45	He	5299.861	ppb	1.2	64445.47	5000	21.2	79.5	120.4	
Al	27	45	He	1913.135	ppb	3.3	8974.23	2000	19.13	79.5	120.4	
Si	28	45	H2	1060.316	ppb	1.7	8929.41	1000	21.21	79.5	120.4	
K	39	45	He	10466.801	ppb	0.9	120553.96	10000	20.93	79.5	120.4	
Ca	40	45	H2	2715.893	ppb	0.5	214496.31	2500	21.73	79.5	120.4	
V	51	89	He	513.811	ppb	0.6	86843.12	500	20.55	79.5	120.4	
Cr	52	89	He	206.746	ppb	1.2	43042.69	200	20.67	79.5	120.4	
Mn	55	89	He	521.944	ppb	1.0	51757.55	500	20.88	79.5	120.4	
Fe	56	89	H2	1089.348	ppb	0.5	352084.52	1000	21.79	79.5	120.4	
Co	59	89	He	533.757	ppb	0.4	188067.07	500	21.35	79.5	120.4	
Ni	60	89	He	506.237	ppb	0.6	50576.51	500	20.25	79.5	120.4	
Cu	63	89	He	260.651	ppb	0.3	70994.05	250	20.85	79.5	120.4	
Zn	66	89	He	528.055	ppb	1.2	19650.02	500	21.12	79.5	120.4	
As	75	89	He	103.413	ppb	1.0	3140.70	100	20.68	79.5	120.4	
Se	78	89	H2	105.028	ppb	1.1	1652.19	100	21.01	79.5	120.4	
Sr	88	89	He	512.305	ppb	0.7	75888.43	500	20.49	79.5	120.4	
Mo	95	89	He	102.521	ppb	2.3	17561.78	100	20.5	79.5	120.4	
Ag	107	89	He	53.825	ppb	1.8	31143.21	50	21.53	79.5	120.4	
Cd	111	89	He	262.473	ppb	1.2	20229.99	250	21	79.5	120.4	
Sn	118	159	He	489.478	ppb	0.5	83676.25	500	19.58	79.5	120.4	
Sb	121	159	No Gas	101.746	ppb	4.8	152395.85	100	20.35	79.5	120.4	
Ba	137	159	No Gas	1944.299	ppb	4.8	1145162.77	2000	19.44	79.5	120.4	
W	182	159	No Gas	98.570	ppb	4.5	117531.55	100	19.71	79.5	120.4	
Tl	205	209	No Gas	100.249	ppb	4.2	268153.65	100	20.05	79.5	120.4	
Pb	208	209	No Gas	102.060	ppb	5.2	377379.76	100	20.41	79.5	120.4	
Th	232	209	No Gas	96.296	ppb	5.9	372741.45	100	19.26	79.5	120.4	
U	238	209	No Gas	99.753	ppb	5.3	362336.76	100	19.95	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1482320.10	2.8	1537409.87	96.42	29.5	120.4	
Sc	45	No Gas	3316642.52	2.8	3373253.08	98.32	29.5	120.4	
Sc	45	H2	390592.09	0.5	415670.69	93.97	29.5	120.4	
Sc	45	He	78791.61	0.5	81171.76	97.07	29.5	120.4	
Ge	72	No Gas	764048.13	3.1	779333.11	98.04	29.5	120.4	
Ge	72	H2	145443.35	0.7	153246.58	94.91	29.5	120.4	
Ge	72	He	61138.45	0.4	63135.03	96.84	29.5	120.4	
Y	89	H2	2529544.56	0.3	2642116.11	95.74	29.5	120.4	
Y	89	He	525855.46	0.5	544041.92	96.66	29.5	120.4	
Tb	159	No Gas	8329313.42	2.9	8117023.84	102.62	29.5	120.4	
Tb	159	He	2854366.73	0.5	2866479.19	99.58	29.5	120.4	
Bi	209	No Gas	4548580.51	3.3	4424692.92	102.8	29.5	120.4	

Sample Report

Sample Name SN5286-001

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:34:57 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.025	ppb	0.6	46.67	100	
11	B	6	No Gas	2.702	ppb	8.1	2905.95	1000	
23	Na	45	He	367.765	ppb	1.6	45823.88	200000	
24	Mg	45	He	244.209	ppb	2.3	15171.26	200000	
27	Al	45	He	1.481	ppb	74.5	82.23	200000	
28	Si	45	H2	1136.421	ppb	2.8	46798.21	10000	
39	K	45	He	147.021	ppb	6.7	18303.49	200000	
40	Ca	45	H2	901.889	ppb	1.0	355003.51	200000	
51	V	89	He	0.240	ppb	9.4	426.69	1000	
52	Cr	89	He	0.055	ppb	30.5	91.32	2000	
55	Mn	89	He	0.311	ppb	13.0	165.97	2000	
56	Fe	89	H2	-0.930	ppb	N/A	6755.79	100000	
59	Co	89	He	0.022	ppb	70.5	46.67	1000	
60	Ni	89	He	-0.001	ppb	N/A	40.00	1000	
63	Cu	89	He	-0.103	ppb	N/A	271.13	2000	
66	Zn	89	He	0.565	ppb	23.5	167.79	2000	
75	As	89	He	0.050	ppb	22.8	12.00	1000	
78	Se	89	H2	0.041	ppb	48.0	3.67	1000	
88	Sr	89	He	1.998	ppb	4.4	1482.36	2000	
95	Mo	89	He	-0.010	ppb	N/A	113.34	1000	
107	Ag	89	He	0.002	ppb	193.5	16.66	100	
111	Cd	89	He	0.010	ppb	16.7	4.81	1000	
118	Sn	159	He	0.521	ppb	19.4	512.25	1000	
121	Sb	159	No Gas	0.035	ppb	3.0	333.71	1000	
137	Ba	159	No Gas	0.712	ppb	27.3	1995.90	2000	
182	W	159	No Gas	0.078	ppb	16.7	533.94	1000	
205	Tl	209	No Gas	0.030	ppb	44.6	400.46	1000	
208	Pb	209	No Gas	0.027	ppb	66.9	660.76	2000	
232	Th	209	No Gas	0.256	ppb	4.6	4676.16	1000	
238	U	209	No Gas	0.032	ppb	18.5	547.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1359870.72	12.1	1537409.87	88.45	29.5	120.4	
Sc	45	No Gas	3076845.17	12.9	3373253.08	91.21	29.5	120.4	
Sc	45	H2	390670.89	0.4	415670.69	93.99	29.5	120.4	
Sc	45	He	78068.07	1.4	81171.76	96.18	29.5	120.4	
Ge	72	No Gas	705301.89	13.7	779333.11	90.5	29.5	120.4	
Ge	72	H2	145442.13	0.1	153246.58	94.91	29.5	120.4	
Ge	72	He	61402.80	0.2	63135.03	97.26	29.5	120.4	
Y	89	H2	2519413.31	0.2	2642116.11	95.36	29.5	120.4	
Y	89	He	524482.44	0.6	544041.92	96.4	29.5	120.4	
Tb	159	No Gas	7677970.30	13.1	8117023.84	94.59	29.5	120.4	
Tb	159	He	2835306.73	0.6	2866479.19	98.91	29.5	120.4	
Bi	209	No Gas	4158259.42	13.7	4424692.92	93.98	29.5	120.4	

Sample Report

Sample Name SN5286-002

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:37:40 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	16.6	31.11	100	
11	B	6	No Gas	1.233	ppb	8.2	1899.08	1000	
23	Na	45	He	353.876	ppb	1.0	44206.74	200000	
24	Mg	45	He	231.670	ppb	3.7	14383.75	200000	
27	Al	45	He	2.158	ppb	37.2	97.78	200000	
28	Si	45	H2	1099.075	ppb	0.9	44518.69	10000	
39	K	45	He	128.689	ppb	5.8	17309.57	200000	
40	Ca	45	H2	881.698	ppb	1.3	341371.12	200000	
51	V	89	He	0.301	ppb	12.9	474.47	1000	
52	Cr	89	He	0.049	ppb	11.3	84.65	2000	
55	Mn	89	He	0.349	ppb	12.2	183.30	2000	
56	Fe	89	H2	-2.057	ppb	N/A	4923.01	100000	
59	Co	89	He	0.007	ppb	115.7	20.00	1000	
60	Ni	89	He	-0.001	ppb	N/A	40.00	1000	
63	Cu	89	He	-0.124	ppb	N/A	241.12	2000	
66	Zn	89	He	0.706	ppb	17.9	192.23	2000	
75	As	89	He	0.024	ppb	75.1	8.00	1000	
78	Se	89	H2	0.028	ppb	35.0	2.67	1000	
88	Sr	89	He	2.250	ppb	6.8	1655.72	2000	
95	Mo	89	He	-0.083	ppb	N/A	51.11	1000	
107	Ag	89	He	0.000	ppb	N/A	10.00	100	
111	Cd	89	He	0.004	ppb	111.5	2.59	1000	
118	Sn	159	He	0.150	ppb	28.4	196.68	1000	
121	Sb	159	No Gas	0.002	ppb	216.8	110.12	1000	
137	Ba	159	No Gas	0.314	ppb	25.4	934.41	2000	
182	W	159	No Gas	-0.004	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.001	ppb	159.4	40.04	1000	
208	Pb	209	No Gas	0.003	ppb	106.5	233.60	2000	
232	Th	209	No Gas	0.019	ppb	31.8	543.95	1000	
238	U	209	No Gas	0.004	ppb	36.5	70.08	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455825.88	2.2	1537409.87	94.69	29.5	120.4	
Sc	45	No Gas	3291166.26	2.7	3373253.08	97.57	29.5	120.4	
Sc	45	H2	384241.16	1.6	415670.69	92.44	29.5	120.4	
Sc	45	He	77871.44	1.0	81171.76	95.93	29.5	120.4	
Ge	72	No Gas	762719.40	3.0	779333.11	97.87	29.5	120.4	
Ge	72	H2	141523.66	1.8	153246.58	92.35	29.5	120.4	
Ge	72	He	60951.34	0.2	63135.03	96.54	29.5	120.4	
Y	89	H2	2488232.16	1.0	2642116.11	94.18	29.5	120.4	
Y	89	He	520574.49	0.5	544041.92	95.69	29.5	120.4	
Tb	159	No Gas	8235990.78	2.6	8117023.84	101.47	29.5	120.4	
Tb	159	He	2828562.53	0.8	2866479.19	98.68	29.5	120.4	
Bi	209	No Gas	4512459.44	2.8	4424692.92	101.98	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG02IMS1
File Name	057_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:40:17 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.004	ppb	N/A	16.66	0.5	
B	11	6	No Gas	7.807	ppb	8.2	2140.23	10	
Na	23	45	He	471.057	ppb	4.7	15856.40	500	
Mg	24	45	He	36.929	ppb	19.5	1020.11	50	
Al	27	45	He	5.278	ppb	65.9	71.12	50	
Si	28	45	H2	17.553	ppb	20.4	377.09	250	
K	39	45	He	123.786	ppb	17.7	11732.91	500	
Ca	40	45	H2	45.079	ppb	1.8	5225.60	50	
V	51	89	He	3.368	ppb	1.5	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.769	ppb	3.8	191.97	2.5	
Mn	55	89	He	1.719	ppb	8.6	180.64	1	PB 6020 Fails DoD
Fe	56	89	H2	-3.918	ppb	N/A	6882.71	50	
Co	59	89	He	0.020	ppb	54.1	15.55	0.5	
Ni	60	89	He	0.289	ppb	64.0	68.89	1	
Cu	63	89	He	1.564	ppb	5.9	825.61	1.5	PB 6020 Fails DoD
Zn	66	89	He	4.379	ppb	25.0	223.34	5	
As	75	89	He	0.374	ppb	5.0	15.67	2.5	
Se	78	89	H2	0.154	ppb	81.4	2.83	2.5	
Sr	88	89	He	0.154	ppb	30.9	28.89	2.5	
Mo	95	89	He	-0.548	ppb	N/A	28.89	2.5	
Ag	107	89	He	0.014	ppb	92.9	18.89	0.5	
Cd	111	89	He	0.020	ppb	111.0	2.59	0.5	
Sn	118	159	He	47.091	ppb	2.2	8112.75	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.051	ppb	34.9	170.19	0.5	
Ba	137	159	No Gas	0.194	ppb	39.2	130.14	1	
W	182	159	No Gas	-0.002	ppb	N/A	116.80	2.5	
Tl	205	209	No Gas	0.012	ppb	60.5	60.07	0.5	
Pb	208	209	No Gas	0.107	ppb	20.5	577.32	0.5	
Th	232	209	No Gas	0.200	ppb	18.4	941.10	2.5	
U	238	209	No Gas	0.003	ppb	116.0	13.35	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1434228.42	0.7	1537409.87	93.29	29.5	120.4	
Sc	45	No Gas	3186472.61	0.9	3373253.08	94.46	29.5	120.4	
Sc	45	H2	379217.46	1.2	415670.69	91.23	29.5	120.4	
Sc	45	He	76618.85	0.3	81171.76	94.39	29.5	120.4	
Ge	72	No Gas	755167.24	1.1	779333.11	96.9	29.5	120.4	
Ge	72	H2	139777.42	1.4	153246.58	91.21	29.5	120.4	
Ge	72	He	59887.40	0.7	63135.03	94.86	29.5	120.4	
Y	89	H2	2481626.12	1.1	2642116.11	93.93	29.5	120.4	
Y	89	He	520000.10	0.2	544041.92	95.58	29.5	120.4	
Tb	159	No Gas	8238436.06	1.4	8117023.84	101.5	29.5	120.4	
Tb	159	He	2853734.51	0.5	2866479.19	99.56	29.5	120.4	
Bi	209	No Gas	4523956.25	0.7	4424692.92	102.24	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG02IMS1
File Name	058LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:43:00 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.813	ppb	6.4	11972.02	50	19.13	79.5	120.4	
B	11	6	No Gas	469.727	ppb	6.0	78051.96	500	18.79	79.5	120.4	
Na	23	45	He	8250.060	ppb	0.6	182335.34	7500	22	79.5	120.4	
Mg	24	45	He	5009.048	ppb	0.5	59542.57	5000	20.04	79.5	120.4	
Al	27	45	He	1845.229	ppb	2.0	8458.35	2000	18.45	79.5	120.4	
Si	28	45	H2	941.979	ppb	4.5	7880.90	1000	18.84	79.5	120.4	
K	39	45	He	10180.494	ppb	0.6	114855.70	10000	20.36	79.5	120.4	
Ca	40	45	H2	2598.496	ppb	2.1	203253.34	2500	20.79	79.5	120.4	
V	51	89	He	487.952	ppb	0.9	81761.60	500	19.52	79.5	120.4	
Cr	52	89	He	200.769	ppb	0.8	41434.15	200	20.08	79.5	120.4	
Mn	55	89	He	497.702	ppb	2.5	48924.20	500	19.91	79.5	120.4	
Fe	56	89	H2	1029.237	ppb	1.2	334476.99	1000	20.58	79.5	120.4	
Co	59	89	He	510.466	ppb	0.6	178292.55	500	20.42	79.5	120.4	
Ni	60	89	He	490.408	ppb	1.2	48568.44	500	19.62	79.5	120.4	
Cu	63	89	He	252.803	ppb	1.3	68268.37	250	20.22	79.5	120.4	
Zn	66	89	He	499.671	ppb	1.0	18435.00	500	19.99	79.5	120.4	
As	75	89	He	99.528	ppb	2.9	2996.65	100	19.91	79.5	120.4	
Se	78	89	H2	101.455	ppb	2.6	1602.35	100	20.29	79.5	120.4	
Sr	88	89	He	497.014	ppb	0.1	72982.78	500	19.88	79.5	120.4	
Mo	95	89	He	102.398	ppb	1.6	17386.08	100	20.48	79.5	120.4	
Ag	107	89	He	52.714	ppb	1.8	30235.50	50	21.09	79.5	120.4	
Cd	111	89	He	253.888	ppb	0.1	19397.67	250	20.31	79.5	120.4	
Sn	118	159	He	518.795	ppb	0.3	89390.21	500	20.75	79.5	120.4	
Sb	121	159	No Gas	96.079	ppb	8.7	148440.30	100	19.22	79.5	120.4	
Ba	137	159	No Gas	1831.230	ppb	6.8	1113082.08	2000	18.31	79.5	120.4	
W	182	159	No Gas	97.576	ppb	6.0	120080.89	100	19.52	79.5	120.4	
Tl	205	209	No Gas	97.757	ppb	6.7	268868.34	100	19.55	79.5	120.4	
[Pb]	206	209	No Gas	98.088	ppb	6.5	92870.60	100	19.62	79.5	120.4	
[Pb]	207	209	No Gas	98.268	ppb	7.7	81530.65	100	19.65	79.5	120.4	
Pb	208	209	No Gas	97.258	ppb	7.2	369814.34	100	19.45	79.5	120.4	
Th	232	209	No Gas	94.217	ppb	7.5	375036.38	100	18.84	79.5	120.4	
U	238	209	No Gas	96.453	ppb	8.5	360142.07	100	19.29	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1444110.81	3.4	1537409.87	93.93	29.5	120.4	
Sc	45	No Gas	3314155.32	4.5	3373253.08	98.25	29.5	120.4	
Sc	45	H2	386740.21	1.5	415670.69	93.04	29.5	120.4	
Sc	45	He	76984.13	0.5	81171.76	94.84	29.5	120.4	
Ge	72	No Gas	789977.00	3.7	779333.11	101.37	29.5	120.4	
Ge	72	H2	143179.62	1.6	153246.58	93.43	29.5	120.4	
Ge	72	He	60550.68	0.3	63135.03	95.91	29.5	120.4	
Y	89	H2	2540158.66	1.5	2642116.11	96.14	29.5	120.4	
Y	89	He	521265.82	0.2	544041.92	95.81	29.5	120.4	
Tb	159	No Gas	8602914.66	3.9	8117023.84	105.99	29.5	120.4	
Tb	159	He	2877143.47	0.3	2866479.19	100.37	29.5	120.4	
Bi	209	No Gas	4681094.16	4.0	4424692.92	105.79	29.5	120.4	

Sample Report

Sample Name SN5043-008

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:45:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.836	ppb	9.5	2526.97	100	
11	B	6	No Gas	33.140	ppb	3.0	5861.41	1000	
23	Na	45	He	478.819	ppb	4.6	16013.39	200000	
24	Mg	45	He	5095.484	ppb	0.7	60240.82	200000	
27	Al	45	He	99679.675	ppb	0.6	451976.15	200000	
28	Si	45	H2	2854.944	ppb	4.0	22977.31	10000	
39	K	45	He	3519.261	ppb	0.9	46340.38	200000	
40	Ca	45	H2	6173.778	ppb	2.2	471855.57	200000	
51	V	89	He	816.504	ppb	0.7	138977.65	1000	
52	Cr	89	He	1560.608	ppb	1.3	327281.52	2000	
55	Mn	89	He	3607.741	ppb	1.0	360565.57	2000	
56	Fe	89	H2	454393.943	ppb	1.4	145232730.95	100000	
59	Co	89	He	64.664	ppb	1.5	22976.00	1000	
60	Ni	89	He	70.999	ppb	2.8	7186.56	1000	
63	Cu	89	He	59.137	ppb	1.4	16556.97	2000	
66	Zn	89	He	240.126	ppb	3.2	9043.25	2000	
75	As	89	He	192.004	ppb	2.5	5873.89	1000	
78	Se	89	H2	3.716	ppb	8.7	59.67	1000	
88	Sr	89	He	111.553	ppb	1.3	16662.83	2000	
95	Mo	89	He	26.222	ppb	1.7	4619.83	1000	
107	Ag	89	He	0.307	ppb	17.4	190.01	100	
111	Cd	89	He	0.496	ppb	2.3	39.63	1000	
118	Sn	159	He	42.516	ppb	2.2	7333.38	1000	
121	Sb	159	No Gas	4.706	ppb	4.8	7296.80	1000	
137	Ba	159	No Gas	398.328	ppb	5.9	239695.47	2000	
182	W	159	No Gas	0.687	ppb	7.0	961.11	1000	
205	Tl	209	No Gas	1.086	ppb	7.6	2973.68	1000	
208	Pb	209	No Gas	110.570	ppb	6.1	414997.29	2000	
232	Th	209	No Gas	46.272	ppb	6.0	181930.91	1000	
238	U	209	No Gas	20.536	ppb	8.5	75672.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1339420.44	3.7	1537409.87	87.12	29.5	120.4	
Sc	45	No Gas	3260238.61	3.7	3373253.08	96.65	29.5	120.4	
Sc	45	H2	379859.17	0.9	415670.69	91.38	29.5	120.4	
Sc	45	He	76575.56	0.5	81171.76	94.34	29.5	120.4	
Ge	72	No Gas	762485.73	4.1	779333.11	97.84	29.5	120.4	
Ge	72	H2	135427.47	0.5	153246.58	88.37	29.5	120.4	
Ge	72	He	58793.89	0.6	63135.03	93.12	29.5	120.4	
Y	89	H2	2561379.93	0.3	2642116.11	96.94	29.5	120.4	
Y	89	He	530098.15	0.7	544041.92	97.44	29.5	120.4	
Tb	159	No Gas	8512617.17	3.4	8117023.84	104.87	29.5	120.4	
Tb	159	He	2854674.16	0.4	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4619461.18	4.0	4424692.92	104.4	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	060_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:48:24 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.243	ppb	4.1	29216.88	25	100.97	89.8	110.2	
11	B	6	No Gas	25.399	ppb	3.3	20112.35	25	101.6	89.8	110.2	
23	Na	45	He	5202.909	ppb	1.8	546690.58	5000	104.06	89.8	110.2	
24	Mg	45	He	5013.754	ppb	1.4	287413.39	5000	100.28	89.8	110.2	
27	Al	45	He	491.056	ppb	1.6	10925.63	500	98.21	89.8	110.2	
28	Si	45	H2	508.332	ppb	1.1	19956.16	500	101.67	89.8	110.2	
39	K	45	He	4947.365	ppb	2.1	256677.92	5000	98.95	89.8	110.2	
40	Ca	45	H2	5062.620	ppb	1.8	1879431.03	5000	101.25	89.8	110.2	
51	V	89	He	24.917	ppb	2.4	20468.82	25	99.67	89.8	110.2	
52	Cr	89	He	24.890	ppb	1.3	25000.83	25	99.56	89.8	110.2	
55	Mn	89	He	24.844	ppb	2.2	11891.56	25	99.38	89.8	110.2	
56	Fe	89	H2	5085.339	ppb	1.4	7737960.66	5000	101.71	89.8	110.2	
59	Co	89	He	25.176	ppb	2.0	42776.67	25	100.7	89.8	110.2	
60	Ni	89	He	25.520	ppb	4.4	12325.87	25	102.08	89.8	110.2	
63	Cu	89	He	25.164	ppb	2.3	33253.69	25	100.66	89.8	110.2	
66	Zn	89	He	24.748	ppb	1.7	4487.54	25	98.99	89.8	110.2	
75	As	89	He	24.886	ppb	2.4	3643.22	25	99.54	89.8	110.2	
78	Se	89	H2	24.814	ppb	4.0	1879.21	25	99.26	89.8	110.2	
88	Sr	89	He	24.347	ppb	1.6	17394.87	25	97.39	89.8	110.2	
95	Mo	89	He	24.540	ppb	1.7	20244.49	25	98.16	89.8	110.2	
107	Ag	89	He	18.908	ppb	1.4	52746.58	25	75.63	89.8	110.2	> +/- 10%
111	Cd	89	He	25.362	ppb	2.1	9425.58	25	101.45	89.8	110.2	
118	Sn	159	He	23.685	ppb	2.8	19852.98	25	94.74	89.8	110.2	
121	Sb	159	No Gas	24.087	ppb	3.2	181563.69	25	96.35	89.8	110.2	
137	Ba	159	No Gas	23.661	ppb	3.5	70155.80	25	94.64	89.8	110.2	
182	W	159	No Gas	23.975	ppb	3.1	143844.18	25	95.9	89.8	110.2	
205	Tl	209	No Gas	24.234	ppb	3.5	326386.15	25	96.94	89.8	110.2	
208	Pb	209	No Gas	24.187	ppb	3.7	450360.30	25	96.75	89.8	110.2	
232	Th	209	No Gas	23.688	ppb	3.7	461772.18	25	94.75	89.8	110.2	
238	U	209	No Gas	24.108	ppb	4.1	440968.47	25	96.43	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1334616.11	0.7	1537409.87	86.81	29.5	120.4	
Sc	45	No Gas	3203119.41	1.1	3373253.08	94.96	29.5	120.4	
Sc	45	H2	370080.39	1.2	415670.69	89.03	29.5	120.4	
Sc	45	He	74855.13	1.7	81171.76	92.22	29.5	120.4	
Ge	72	No Gas	753627.56	1.7	779333.11	96.7	29.5	120.4	
Ge	72	H2	137689.82	1.3	153246.58	89.85	29.5	120.4	
Ge	72	He	59797.10	0.5	63135.03	94.71	29.5	120.4	
Y	89	H2	2436387.03	1.5	2642116.11	92.21	29.5	120.4	
Y	89	He	507199.36	1.7	544041.92	93.23	29.5	120.4	
Tb	159	No Gas	8379373.90	1.5	8117023.84	103.23	29.5	120.4	
Tb	159	He	2792430.17	1.4	2866479.19	97.42	29.5	120.4	
Bi	209	No Gas	4578382.49	2.0	4424692.92	103.47	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	061_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:51:02 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	30.0	78.89	0.2	
11	B	6	No Gas	0.958	ppb	16.8	1567.92	4	
23	Na	45	He	47.861	ppb	7.4	10862.74	200	
24	Mg	45	He	-1.443	ppb	N/A	500.05	20	
27	Al	45	He	1.715	ppb	189.6	85.56	20	
28	Si	45	H2	1.701	ppb	136.7	300.34	100	
39	K	45	He	16.318	ppb	24.7	11241.09	200	
40	Ca	45	H2	-0.232	ppb	N/A	1685.72	20	
51	V	89	He	-0.037	ppb	N/A	190.01	1	
52	Cr	89	He	0.055	ppb	64.7	89.32	1	
55	Mn	89	He	0.133	ppb	23.2	76.65	0.4	
56	Fe	89	H2	5.896	ppb	3.7	17015.95	20	
59	Co	89	He	0.016	ppb	99.0	35.56	0.2	
60	Ni	89	He	-0.018	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.125	ppb	N/A	236.68	0.6	
66	Zn	89	He	0.057	ppb	166.2	72.23	2	
75	As	89	He	0.022	ppb	63.5	7.67	1	
78	Se	89	H2	0.055	ppb	71.9	4.67	1	
88	Sr	89	He	0.014	ppb	128.3	16.67	1	
95	Mo	89	He	-0.022	ppb	N/A	101.11	1	
107	Ag	89	He	0.008	ppb	57.8	32.22	0.2	
111	Cd	89	He	0.008	ppb	173.4	4.07	0.2	
118	Sn	159	He	0.186	ppb	21.6	226.68	1	
121	Sb	159	No Gas	0.025	ppb	42.1	287.00	0.2	
137	Ba	159	No Gas	0.036	ppb	58.7	123.48	0.4	
182	W	159	No Gas	0.076	ppb	14.2	573.99	1	
205	Tl	209	No Gas	0.022	ppb	24.2	320.36	0.2	
208	Pb	209	No Gas	0.018	ppb	20.0	513.92	0.2	
232	Th	209	No Gas	0.099	ppb	1.5	2089.20	1	
238	U	209	No Gas	0.021	ppb	31.6	393.79	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1366489.51	2.2	1537409.87	88.88	29.5	120.4	
Sc	45	No Gas	3229434.38	2.5	3373253.08	95.74	29.5	120.4	
Sc	45	H2	373794.55	0.5	415670.69	89.93	29.5	120.4	
Sc	45	He	76203.56	0.3	81171.76	93.88	29.5	120.4	
Ge	72	No Gas	752366.18	1.9	779333.11	96.54	29.5	120.4	
Ge	72	H2	139760.47	0.6	153246.58	91.2	29.5	120.4	
Ge	72	He	59903.00	0.2	63135.03	94.88	29.5	120.4	
Y	89	H2	2451932.00	0.4	2642116.11	92.8	29.5	120.4	
Y	89	He	514020.38	0.2	544041.92	94.48	29.5	120.4	
Tb	159	No Gas	8350082.38	2.6	8117023.84	102.87	29.5	120.4	
Tb	159	He	2819652.11	0.4	2866479.19	98.37	29.5	120.4	
Bi	209	No Gas	4554639.32	2.0	4424692.92	102.94	29.5	120.4	

Sample Report

Sample Name SN5043-010

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:53:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	34.012	ppb	7.1	8170.38	100	
11	B	6	No Gas	25.385	ppb	7.1	4833.20	1000	
23	Na	45	He	522.087	ppb	4.0	17299.61	200000	
24	Mg	45	He	21384.237	ppb	1.3	256360.97	200000	
27	Al	45	He	139875.486	ppb	0.4	647974.62	200000	
28	Si	45	H2	2028.224	ppb	3.0	16738.42	10000	
39	K	45	He	6030.848	ppb	1.2	73502.84	200000	
40	Ca	45	H2	193964.284	ppb	1.6	15082818.52	200000	
51	V	89	He	1145.763	ppb	0.7	207149.89	1000	
52	Cr	89	He	1112.323	ppb	0.7	247914.00	2000	
55	Mn	89	He	20123.902	ppb	0.6	2137316.05	2000	>LDR
56	Fe	89	H2	797459.537	ppb	1.6	272483600.67	100000	>LDR
59	Co	89	He	202.902	ppb	0.9	76596.52	1000	
60	Ni	89	He	153.712	ppb	1.1	16482.41	1000	
63	Cu	89	He	165.378	ppb	1.2	48413.58	2000	
66	Zn	89	He	759.694	ppb	0.9	30254.69	2000	
75	As	89	He	475.281	ppb	1.4	15445.24	1000	
78	Se	89	H2	4.759	ppb	6.5	81.50	1000	
88	Sr	89	He	389.606	ppb	0.3	61830.64	2000	
95	Mo	89	He	36.330	ppb	1.2	6750.82	1000	
107	Ag	89	He	0.333	ppb	16.4	217.79	100	
111	Cd	89	He	1.798	ppb	10.0	149.63	1000	
118	Sn	159	He	39.293	ppb	1.6	6735.26	1000	
121	Sb	159	No Gas	2.072	ppb	9.6	3284.06	1000	
137	Ba	159	No Gas	1371.741	ppb	4.9	830604.59	2000	
182	W	159	No Gas	0.424	ppb	10.5	644.07	1000	
205	Tl	209	No Gas	1.898	ppb	11.6	5140.12	1000	
208	Pb	209	No Gas	370.198	ppb	4.9	1379352.07	2000	
232	Th	209	No Gas	50.671	ppb	5.9	197774.11	1000	
238	U	209	No Gas	24.320	ppb	4.7	89058.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1384124.26	2.3	1537409.87	90.03	29.5	120.4	
Sc	45	No Gas	3406064.51	2.8	3373253.08	100.97	29.5	120.4	
Sc	45	H2	387927.85	1.5	415670.69	93.33	29.5	120.4	
Sc	45	He	78238.96	0.9	81171.76	96.39	29.5	120.4	
Ge	72	No Gas	785474.01	3.0	779333.11	100.79	29.5	120.4	
Ge	72	H2	138726.08	1.5	153246.58	90.52	29.5	120.4	
Ge	72	He	59545.94	1.2	63135.03	94.32	29.5	120.4	
Y	89	H2	2738691.98	1.4	2642116.11	103.66	29.5	120.4	
Y	89	He	563348.33	1.1	544041.92	103.55	29.5	120.4	
Tb	159	No Gas	8562860.43	2.8	8117023.84	105.49	29.5	120.4	
Tb	159	He	2834521.07	0.4	2866479.19	98.89	29.5	120.4	
Bi	209	No Gas	4585087.79	3.4	4424692.92	103.62	29.5	120.4	

Sample Report

Sample Name SN5043-012

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:56:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	16.839	ppb	8.0	3976.24	100	
11	B	6	No Gas	31.598	ppb	2.4	5704.64	1000	
23	Na	45	He	475.795	ppb	4.1	16648.16	200000	
24	Mg	45	He	8115.455	ppb	1.9	99769.70	200000	
27	Al	45	He	137963.398	ppb	1.3	652919.67	200000	
28	Si	45	H2	2941.176	ppb	3.1	24454.55	10000	
39	K	45	He	6409.635	ppb	2.6	79114.46	200000	
40	Ca	45	H2	15940.518	ppb	0.8	1256199.48	200000	
51	V	89	He	860.236	ppb	1.2	161578.63	1000	
52	Cr	89	He	1074.681	ppb	0.5	248749.02	2000	
55	Mn	89	He	24595.116	ppb	0.9	2712759.61	2000	>LDR
56	Fe	89	H2	456277.414	ppb	1.4	160529825.84	100000	
59	Co	89	He	236.042	ppb	0.4	92530.28	1000	
60	Ni	89	He	265.940	ppb	1.3	29578.70	1000	
63	Cu	89	He	104.946	ppb	1.6	32073.18	2000	
66	Zn	89	He	737.510	ppb	0.9	30504.14	2000	
75	As	89	He	189.620	ppb	1.9	6402.85	1000	
78	Se	89	H2	2.906	ppb	6.9	51.50	1000	
88	Sr	89	He	103.511	ppb	0.3	17064.43	2000	
95	Mo	89	He	25.086	ppb	2.8	4883.27	1000	
107	Ag	89	He	0.651	ppb	7.3	431.13	100	
111	Cd	89	He	8.091	ppb	5.8	694.84	1000	
118	Sn	159	He	44.186	ppb	1.6	7678.00	1000	
121	Sb	159	No Gas	3.562	ppb	6.4	5580.73	1000	
137	Ba	159	No Gas	1771.749	ppb	2.9	1072973.98	2000	
182	W	159	No Gas	0.880	ppb	4.1	1201.39	1000	
205	Tl	209	No Gas	3.557	ppb	5.1	9614.33	1000	
208	Pb	209	No Gas	304.698	ppb	4.0	1135304.26	2000	
232	Th	209	No Gas	53.497	ppb	3.7	208858.60	1000	
238	U	209	No Gas	35.829	ppb	4.4	131184.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1357616.08	2.0	1537409.87	88.31	29.5	120.4	
Sc	45	No Gas	3402895.25	0.6	3373253.08	100.88	29.5	120.4	
Sc	45	H2	392565.08	1.5	415670.69	94.44	29.5	120.4	
Sc	45	He	79940.80	2.0	81171.76	98.48	29.5	120.4	
Ge	72	No Gas	780057.99	1.7	779333.11	100.09	29.5	120.4	
Ge	72	H2	138907.50	0.5	153246.58	90.64	29.5	120.4	
Ge	72	He	60736.68	0.5	63135.03	96.2	29.5	120.4	
Y	89	H2	2819680.96	1.0	2642116.11	106.72	29.5	120.4	
Y	89	He	585013.91	0.4	544041.92	107.53	29.5	120.4	
Tb	159	No Gas	8557382.16	0.9	8117023.84	105.43	29.5	120.4	
Tb	159	He	2876801.10	0.2	2866479.19	100.36	29.5	120.4	
Bi	209	No Gas	4581719.21	1.6	4424692.92	103.55	29.5	120.4	

Sample Report

Sample Name SN5043-014

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:59:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.686	ppb	7.0	1372.34	100	
11	B	6	No Gas	23.974	ppb	6.5	4586.45	1000	
23	Na	45	He	471.522	ppb	3.1	16250.52	200000	
24	Mg	45	He	6091.155	ppb	3.9	73638.57	200000	
27	Al	45	He	80891.350	ppb	3.2	375710.91	200000	
28	Si	45	H2	1993.532	ppb	1.7	16701.76	10000	
39	K	45	He	4731.197	ppb	3.8	60123.82	200000	
40	Ca	45	H2	12728.081	ppb	1.1	1006033.54	200000	
51	V	89	He	268.908	ppb	1.3	47832.08	1000	
52	Cr	89	He	204.198	ppb	2.8	44628.56	2000	
55	Mn	89	He	15500.989	ppb	2.1	1613441.74	2000	>LDR
56	Fe	89	H2	131740.725	ppb	1.8	44096552.50	100000	
59	Co	89	He	146.824	ppb	2.0	54319.19	1000	
60	Ni	89	He	83.035	ppb	1.6	8746.36	1000	
63	Cu	89	He	63.808	ppb	1.8	18572.90	2000	
66	Zn	89	He	301.858	ppb	1.7	11822.08	2000	
75	As	89	He	46.744	ppb	4.1	1492.91	1000	
78	Se	89	H2	1.498	ppb	25.7	25.50	1000	
88	Sr	89	He	69.293	ppb	3.6	10780.17	2000	
95	Mo	89	He	7.284	ppb	3.5	1429.02	1000	
107	Ag	89	He	0.275	ppb	18.6	177.78	100	
111	Cd	89	He	1.671	ppb	3.4	136.30	1000	
118	Sn	159	He	40.283	ppb	4.1	6989.84	1000	
121	Sb	159	No Gas	0.881	ppb	11.5	1478.39	1000	
137	Ba	159	No Gas	1238.161	ppb	3.4	761035.26	2000	
182	W	159	No Gas	0.257	ppb	6.1	443.85	1000	
205	Tl	209	No Gas	1.653	ppb	6.3	4599.31	1000	
208	Pb	209	No Gas	162.720	ppb	4.0	622202.67	2000	
232	Th	209	No Gas	36.472	ppb	4.5	146132.57	1000	
238	U	209	No Gas	8.084	ppb	6.5	30363.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1376649.44	2.8	1537409.87	89.54	29.5	120.4	
Sc	45	No Gas	3430031.92	2.4	3373253.08	101.68	29.5	120.4	
Sc	45	H2	393569.24	1.0	415670.69	94.68	29.5	120.4	
Sc	45	He	78480.60	2.5	81171.76	96.68	29.5	120.4	
Ge	72	No Gas	788405.25	2.0	779333.11	101.16	29.5	120.4	
Ge	72	H2	141453.84	2.6	153246.58	92.3	29.5	120.4	
Ge	72	He	61143.75	1.4	63135.03	96.85	29.5	120.4	
Y	89	H2	2682435.23	1.5	2642116.11	101.53	29.5	120.4	
Y	89	He	552200.93	1.8	544041.92	101.5	29.5	120.4	
Tb	159	No Gas	8687603.97	1.8	8117023.84	107.03	29.5	120.4	
Tb	159	He	2871661.10	2.1	2866479.19	100.18	29.5	120.4	
Bi	209	No Gas	4702548.37	2.6	4424692.92	106.28	29.5	120.4	

Sample Report

Sample Name SN5043-014L

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:01:50 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.414	ppb	9.7	310.01	100	
11	B	6	No Gas	33.670	ppb	9.8	1811.29	1000	
23	Na	45	He	956.502	ppb	13.0	10341.92	200000	
24	Mg	45	He	6145.390	ppb	0.9	15654.11	200000	
27	Al	45	He	84093.417	ppb	0.3	79756.79	200000	
28	Si	45	H2	2253.457	ppb	6.5	3991.69	10000	
39	K	45	He	4967.703	ppb	4.6	21524.84	200000	
40	Ca	45	H2	13738.699	ppb	3.1	219990.64	200000	
51	V	89	He	291.290	ppb	2.0	10360.83	1000	
52	Cr	89	He	213.532	ppb	1.3	9198.02	2000	
55	Mn	89	He	16732.359	ppb	0.6	342190.44	2000	
56	Fe	89	H2	144234.472	ppb	2.2	9355496.21	100000	
59	Co	89	He	155.736	ppb	0.3	11327.61	1000	
60	Ni	89	He	82.622	ppb	1.6	1743.50	1000	
63	Cu	89	He	63.052	ppb	1.2	3946.26	2000	
66	Zn	89	He	323.411	ppb	4.1	2539.22	2000	
75	As	89	He	51.705	ppb	4.0	328.04	1000	
78	Se	89	H2	2.220	ppb	65.8	7.67	1000	
88	Sr	89	He	72.208	ppb	3.1	2212.48	2000	
95	Mo	89	He	5.172	ppb	17.2	307.79	1000	
107	Ag	89	He	0.261	ppb	13.4	42.22	100	
111	Cd	89	He	1.585	ppb	21.3	26.29	1000	
118	Sn	159	He	41.426	ppb	6.5	1511.25	1000	
121	Sb	159	No Gas	0.826	ppb	46.0	337.05	1000	
137	Ba	159	No Gas	1340.343	ppb	3.9	155733.38	2000	
182	W	159	No Gas	0.109	ppb	236.1	143.49	1000	
205	Tl	209	No Gas	1.743	ppb	13.9	941.09	1000	
208	Pb	209	No Gas	177.419	ppb	5.2	128913.88	2000	
232	Th	209	No Gas	36.675	ppb	3.3	28046.30	1000	
238	U	209	No Gas	8.654	ppb	5.4	6175.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1323830.07	3.7	1537409.87	86.11	29.5	120.4	
Sc	45	No Gas	3260947.52	2.8	3373253.08	96.67	29.5	120.4	
Sc	45	H2	396041.56	0.7	415670.69	95.28	29.5	120.4	
Sc	45	He	80046.40	0.5	81171.76	98.61	29.5	120.4	
Ge	72	No Gas	754869.95	3.7	779333.11	96.86	29.5	120.4	
Ge	72	H2	143315.09	1.1	153246.58	93.52	29.5	120.4	
Ge	72	He	62438.97	0.3	63135.03	98.9	29.5	120.4	
Y	89	H2	2597017.47	0.7	2642116.11	98.29	29.5	120.4	
Y	89	He	542355.77	1.0	544041.92	99.69	29.5	120.4	
Tb	159	No Gas	8212440.29	2.5	8117023.84	101.18	29.5	120.4	
Tb	159	He	2902694.64	0.3	2866479.19	101.26	29.5	120.4	
Bi	209	No Gas	4464876.49	3.1	4424692.92	100.91	29.5	120.4	

Sample Report

Sample Name SN5043-014A

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:04:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.671	ppb	3.2	3759.51	100	
11	B	6	No Gas	225.602	ppb	3.3	36236.22	1000	
23	Na	45	He	10750.413	ppb	1.1	243070.40	200000	
24	Mg	45	He	6864.960	ppb	1.9	83879.20	200000	
27	Al	45	He	79382.900	ppb	1.1	372970.85	200000	
28	Si	45	H2	6993.454	ppb	2.6	57958.08	10000	
39	K	45	He	14532.369	ppb	1.5	164344.75	200000	
40	Ca	45	H2	13631.497	ppb	2.3	1077142.33	200000	
51	V	89	He	311.597	ppb	1.4	55714.25	1000	
52	Cr	89	He	245.888	ppb	1.2	54059.47	2000	
55	Mn	89	He	15067.876	ppb	0.7	1577752.49	2000	>LDR
56	Fe	89	H2	130514.628	ppb	1.5	43833192.06	100000	
59	Co	89	He	151.908	ppb	2.0	56532.38	1000	
60	Ni	89	He	99.103	ppb	2.1	10490.96	1000	
63	Cu	89	He	90.340	ppb	2.0	26269.95	2000	
66	Zn	89	He	386.271	ppb	1.5	15198.72	2000	
75	As	89	He	93.521	ppb	1.0	3000.33	1000	
78	Se	89	H2	49.108	ppb	1.5	822.16	1000	
88	Sr	89	He	116.413	ppb	1.0	18219.33	2000	
95	Mo	89	He	56.315	ppb	2.0	10245.31	1000	
107	Ag	89	He	10.991	ppb	2.4	6726.38	100	
111	Cd	89	He	11.671	ppb	0.5	951.16	1000	
118	Sn	159	He	87.906	ppb	1.2	15318.10	1000	
121	Sb	159	No Gas	11.105	ppb	6.6	17273.74	1000	
137	Ba	159	No Gas	1249.095	ppb	3.7	760337.40	2000	
182	W	159	No Gas	49.514	ppb	4.6	61065.53	1000	
205	Tl	209	No Gas	12.143	ppb	4.5	32852.21	1000	
208	Pb	209	No Gas	172.741	ppb	3.9	645579.70	2000	
232	Th	209	No Gas	47.447	ppb	4.5	185760.56	1000	
238	U	209	No Gas	18.324	ppb	3.6	67291.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1378060.25	2.2	1537409.87	89.64	29.5	120.4	
Sc	45	No Gas	3379805.89	1.8	3373253.08	100.19	29.5	120.4	
Sc	45	H2	393526.96	0.5	415670.69	94.67	29.5	120.4	
Sc	45	He	79350.80	0.9	81171.76	97.76	29.5	120.4	
Ge	72	No Gas	782805.11	1.5	779333.11	100.45	29.5	120.4	
Ge	72	H2	142156.96	0.5	153246.58	92.76	29.5	120.4	
Ge	72	He	61522.64	0.8	63135.03	97.45	29.5	120.4	
Y	89	H2	2691099.76	0.3	2642116.11	101.85	29.5	120.4	
Y	89	He	555395.29	0.8	544041.92	102.09	29.5	120.4	
Tb	159	No Gas	8603661.19	1.7	8117023.84	106	29.5	120.4	
Tb	159	He	2898446.42	0.3	2866479.19	101.12	29.5	120.4	
Bi	209	No Gas	4595453.68	2.0	4424692.92	103.86	29.5	120.4	

Sample Report

Sample Name SN5043-014S

File Name 067SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:07:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	55.651	ppb	1.1	12962.86	100	
11	B	6	No Gas	488.723	ppb	2.5	75516.13	1000	
23	Na	45	He	7646.076	ppb	0.5	175327.03	200000	
24	Mg	45	He	12294.897	ppb	1.2	150356.84	200000	
27	Al	45	He	117493.008	ppb	0.9	554248.83	200000	
28	Si	45	H2	2655.428	ppb	7.4	22221.98	10000	
39	K	45	He	16489.711	ppb	1.3	185773.17	200000	
40	Ca	45	H2	14060.935	ppb	5.7	1114534.42	200000	
51	V	89	He	773.362	ppb	1.2	141134.43	1000	
52	Cr	89	He	468.225	ppb	1.1	105301.54	2000	
55	Mn	89	He	10789.711	ppb	0.7	1156128.53	2000	>LDR
56	Fe	89	H2	152481.468	ppb	5.7	52104209.04	100000	
59	Co	89	He	553.318	ppb	0.6	210706.82	1000	
60	Ni	89	He	537.713	ppb	1.5	58056.85	1000	
63	Cu	89	He	291.070	ppb	0.8	85628.91	2000	
66	Zn	89	He	780.469	ppb	1.0	31354.97	2000	
75	As	89	He	142.946	ppb	0.5	4690.31	1000	
78	Se	89	H2	88.933	ppb	3.5	1515.18	1000	
88	Sr	89	He	513.709	ppb	1.2	82239.41	2000	
95	Mo	89	He	92.523	ppb	1.0	17140.20	1000	
107	Ag	89	He	46.468	ppb	1.5	29059.62	100	
111	Cd	89	He	222.140	ppb	1.5	18502.73	1000	
118	Sn	159	He	468.801	ppb	0.4	82105.41	1000	
121	Sb	159	No Gas	32.177	ppb	3.3	48950.36	1000	
137	Ba	159	No Gas	2705.404	ppb	1.5	1616334.44	2000	
182	W	159	No Gas	46.194	ppb	2.2	55932.74	1000	
205	Tl	209	No Gas	98.025	ppb	1.4	261482.01	1000	
208	Pb	209	No Gas	264.879	ppb	1.6	976617.56	2000	
232	Th	209	No Gas	136.543	ppb	2.2	527154.07	1000	
238	U	209	No Gas	105.972	ppb	2.5	383926.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1341845.90	0.8	1537409.87	87.28	29.5	120.4	
Sc	45	No Gas	3336374.38	0.6	3373253.08	98.91	29.5	120.4	
Sc	45	H2	395292.18	3.6	415670.69	95.1	29.5	120.4	
Sc	45	He	79670.29	0.5	81171.76	98.15	29.5	120.4	
Ge	72	No Gas	771425.45	1.5	779333.11	98.99	29.5	120.4	
Ge	72	H2	143176.20	1.9	153246.58	93.43	29.5	120.4	
Ge	72	He	61880.52	0.7	63135.03	98.01	29.5	120.4	
Y	89	H2	2741589.54	3.4	2642116.11	103.76	29.5	120.4	
Y	89	He	568345.12	1.3	544041.92	104.47	29.5	120.4	
Tb	159	No Gas	8441515.92	0.6	8117023.84	104	29.5	120.4	
Tb	159	He	2924170.89	0.8	2866479.19	102.01	29.5	120.4	
Bi	209	No Gas	4532186.45	0.8	4424692.92	102.43	29.5	120.4	

Sample Report

Sample Name SN5043-014P

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:09:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	57.207	ppb	5.5	13306.55	100	
11	B	6	No Gas	471.384	ppb	5.5	72763.55	1000	
23	Na	45	He	7435.250	ppb	0.9	168899.75	200000	
24	Mg	45	He	11416.667	ppb	1.5	138221.90	200000	
27	Al	45	He	108814.768	ppb	1.8	508013.93	200000	
28	Si	45	H2	2785.337	ppb	5.1	23399.58	10000	
39	K	45	He	15238.461	ppb	1.2	170727.51	200000	
40	Ca	45	H2	13445.423	ppb	1.3	1070418.22	200000	
51	V	89	He	1219.363	ppb	0.7	220308.17	1000	
52	Cr	89	He	694.743	ppb	0.8	154764.46	2000	
55	Mn	89	He	30663.372	ppb	0.6	3254700.66	2000	>LDR
56	Fe	89	H2	302552.426	ppb	0.6	104034854.52	100000	
59	Co	89	He	677.348	ppb	0.0	255516.39	1000	
60	Ni	89	He	557.064	ppb	0.2	59580.78	1000	
63	Cu	89	He	299.723	ppb	1.2	87331.61	2000	
66	Zn	89	He	940.205	ppb	0.5	37405.47	2000	
75	As	89	He	181.178	ppb	0.3	5887.56	1000	
78	Se	89	H2	85.411	ppb	1.2	1463.68	1000	
88	Sr	89	He	512.982	ppb	0.6	81356.10	2000	
95	Mo	89	He	96.464	ppb	0.3	17697.55	1000	
107	Ag	89	He	46.385	ppb	1.7	28737.92	100	
111	Cd	89	He	221.296	ppb	0.8	18262.06	1000	
118	Sn	159	He	459.635	ppb	0.4	79797.38	1000	
121	Sb	159	No Gas	35.881	ppb	7.6	56109.50	1000	
137	Ba	159	No Gas	5695.518	ppb	6.8	3499057.66	2000	
182	W	159	No Gas	50.946	ppb	9.3	63372.77	1000	
205	Tl	209	No Gas	94.887	ppb	6.2	259718.58	1000	
208	Pb	209	No Gas	323.099	ppb	6.6	1222236.27	2000	
232	Th	209	No Gas	131.146	ppb	7.2	519426.93	1000	
238	U	209	No Gas	106.839	ppb	7.9	397017.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1341422.19	3.4	1537409.87	87.25	29.5	120.4	
Sc	45	No Gas	3424316.59	4.2	3373253.08	101.51	29.5	120.4	
Sc	45	H2	396493.45	1.4	415670.69	95.39	29.5	120.4	
Sc	45	He	78851.11	0.7	81171.76	97.14	29.5	120.4	
Ge	72	No Gas	792696.99	3.9	779333.11	101.71	29.5	120.4	
Ge	72	H2	141388.27	1.1	153246.58	92.26	29.5	120.4	
Ge	72	He	60914.16	1.2	63135.03	96.48	29.5	120.4	
Y	89	H2	2755541.59	0.7	2642116.11	104.29	29.5	120.4	
Y	89	He	562993.52	0.8	544041.92	103.48	29.5	120.4	
Tb	159	No Gas	8696410.22	4.2	8117023.84	107.14	29.5	120.4	
Tb	159	He	2898730.30	0.9	2866479.19	101.13	29.5	120.4	
Bi	209	No Gas	4658517.26	4.3	4424692.92	105.28	29.5	120.4	

Sample Report

Sample Name SN5043-016

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:12:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.272	ppb	5.0	3453.87	100	
11	B	6	No Gas	44.694	ppb	1.5	7396.59	1000	
23	Na	45	He	563.810	ppb	0.3	17877.66	200000	
24	Mg	45	He	16243.876	ppb	1.5	191330.58	200000	
27	Al	45	He	121154.720	ppb	2.1	550969.81	200000	
28	Si	45	H2	3150.779	ppb	1.2	25942.34	10000	
39	K	45	He	6365.387	ppb	1.7	75584.50	200000	
40	Ca	45	H2	127386.125	ppb	0.8	9933128.60	200000	
51	V	89	He	509.278	ppb	1.2	92992.33	1000	
52	Cr	89	He	508.722	ppb	0.8	114367.53	2000	
55	Mn	89	He	14857.704	ppb	0.6	1591438.51	2000	>LDR
56	Fe	89	H2	263606.258	ppb	1.0	91367510.96	100000	
59	Co	89	He	135.480	ppb	1.5	51577.78	1000	
60	Ni	89	He	105.022	ppb	2.5	11371.66	1000	
63	Cu	89	He	100.835	ppb	1.7	29942.93	2000	
66	Zn	89	He	439.117	ppb	0.4	17666.21	2000	
75	As	89	He	121.620	ppb	0.8	3990.02	1000	
78	Se	89	H2	3.291	ppb	7.6	57.33	1000	
88	Sr	89	He	341.299	ppb	0.9	54624.74	2000	
95	Mo	89	He	14.416	ppb	1.1	2781.49	1000	
107	Ag	89	He	0.334	ppb	14.8	220.01	100	
111	Cd	89	He	1.739	ppb	8.6	145.93	1000	
118	Sn	159	He	44.372	ppb	0.6	7694.69	1000	
121	Sb	159	No Gas	2.064	ppb	4.4	3264.02	1000	
137	Ba	159	No Gas	1145.108	ppb	2.2	691189.98	2000	
182	W	159	No Gas	0.550	ppb	11.5	794.24	1000	
205	Tl	209	No Gas	1.847	ppb	8.9	4996.61	1000	
208	Pb	209	No Gas	426.468	ppb	1.8	1586079.96	2000	
232	Th	209	No Gas	48.832	ppb	2.0	190288.83	1000	
238	U	209	No Gas	15.562	ppb	0.1	56879.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1298840.12	1.5	1537409.87	84.48	29.5	120.4	
Sc	45	No Gas	3331858.62	1.0	3373253.08	98.77	29.5	120.4	
Sc	45	H2	388902.69	0.8	415670.69	93.56	29.5	120.4	
Sc	45	He	76817.03	1.3	81171.76	94.64	29.5	120.4	
Ge	72	No Gas	769559.23	1.2	779333.11	98.75	29.5	120.4	
Ge	72	H2	138662.10	1.6	153246.58	90.48	29.5	120.4	
Ge	72	He	59396.82	1.1	63135.03	94.08	29.5	120.4	
Y	89	H2	2777573.39	0.7	2642116.11	105.13	29.5	120.4	
Y	89	He	568131.28	0.7	544041.92	104.43	29.5	120.4	
Tb	159	No Gas	8527672.72	0.8	8117023.84	105.06	29.5	120.4	
Tb	159	He	2871190.24	0.7	2866479.19	100.16	29.5	120.4	
Bi	209	No Gas	4571567.71	1.2	4424692.92	103.32	29.5	120.4	

Sample Report

Sample Name SN5043-021

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:15:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	26.716	ppb	0.7	5483.46	100	
11	B	6	No Gas	29.717	ppb	1.3	4709.83	1000	
23	Na	45	He	640.322	ppb	3.9	17784.28	200000	
24	Mg	45	He	26610.343	ppb	1.8	285420.65	200000	
27	Al	45	He	118120.853	ppb	1.5	489780.68	200000	
28	Si	45	H2	2995.098	ppb	8.3	21884.40	10000	
39	K	45	He	5267.621	ppb	0.8	58681.71	200000	
40	Ca	45	H2	503600.631	ppb	6.9	34840192.54	200000	
51	V	89	He	933.007	ppb	0.5	154361.33	1000	
52	Cr	89	He	956.591	ppb	0.7	195053.05	2000	
55	Mn	89	He	49564.662	ppb	0.3	4815878.08	2000	>LDR
56	Fe	89	H2	789093.030	ppb	7.8	245219268.97	100000	>LDR
59	Co	89	He	232.659	ppb	0.6	80344.18	1000	
60	Ni	89	He	114.355	ppb	2.9	11227.12	1000	
63	Cu	89	He	113.677	ppb	0.3	30572.01	2000	
66	Zn	89	He	1727.960	ppb	1.1	62875.67	2000	
75	As	89	He	413.972	ppb	0.5	12308.79	1000	
78	Se	89	H2	4.189	ppb	14.4	65.17	1000	
88	Sr	89	He	663.277	ppb	0.7	96291.76	2000	
95	Mo	89	He	32.524	ppb	2.5	5541.32	1000	
107	Ag	89	He	0.281	ppb	4.2	170.01	100	
111	Cd	89	He	1.825	ppb	3.2	138.89	1000	
118	Sn	159	He	44.242	ppb	1.7	7368.96	1000	
121	Sb	159	No Gas	3.697	ppb	4.8	5540.65	1000	
137	Ba	159	No Gas	1702.604	ppb	0.9	987066.23	2000	
182	W	159	No Gas	0.440	ppb	26.6	634.05	1000	
205	Tl	209	No Gas	1.701	ppb	3.8	4452.48	1000	
208	Pb	209	No Gas	353.196	ppb	1.1	1270112.10	2000	
232	Th	209	No Gas	45.341	ppb	1.1	170860.77	1000	
238	U	209	No Gas	23.352	ppb	1.3	82525.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180759.96	1.9	1537409.87	76.8	29.5	120.4	
Sc	45	No Gas	3013179.58	0.2	3373253.08	89.33	29.5	120.4	
Sc	45	H2	345930.42	5.2	415670.69	83.22	29.5	120.4	
Sc	45	He	70037.40	1.4	81171.76	86.28	29.5	120.4	
Ge	72	No Gas	712656.38	0.7	779333.11	91.44	29.5	120.4	
Ge	72	H2	124861.70	4.5	153246.58	81.48	29.5	120.4	
Ge	72	He	54451.29	0.7	63135.03	86.25	29.5	120.4	
Y	89	H2	2497826.44	5.7	2642116.11	94.54	29.5	120.4	
Y	89	He	515357.36	0.4	544041.92	94.73	29.5	120.4	
Tb	159	No Gas	8191007.59	0.4	8117023.84	100.91	29.5	120.4	
Tb	159	He	2757605.38	0.1	2866479.19	96.2	29.5	120.4	
Bi	209	No Gas	4420403.37	0.6	4424692.92	99.9	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	071_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:17:51 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.177	ppb	13.7	51.12	0.5	
B	11	6	No Gas	6.109	ppb	4.2	1545.69	10	
Na	23	45	He	182.119	ppb	3.1	8886.01	500	
Mg	24	45	He	-12.447	ppb	N/A	404.48	50	
Al	27	45	He	38.015	ppb	7.0	201.12	50	
Si	28	45	H2	37.070	ppb	24.9	483.88	250	
K	39	45	He	94.968	ppb	25.2	10472.52	500	
Ca	40	45	H2	167.398	ppb	9.6	13175.44	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
V	51	89	He	0.806	ppb	37.0	336.68	2.5	
Cr	52	89	He	0.917	ppb	6.3	209.30	2.5	
Mn	55	89	He	13.017	ppb	10.8	1213.84	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	286.169	ppb	9.5	91513.81	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.192	ppb	25.3	71.12	0.5	
Ni	60	89	He	0.810	ppb	50.2	113.34	1	
Cu	63	89	He	0.065	ppb	185.7	398.91	1.5	
Zn	66	89	He	10.009	ppb	12.3	404.47	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.217	ppb	23.2	10.33	2.5	
Se	78	89	H2	0.210	ppb	30.4	3.50	2.5	
Sr	88	89	He	0.206	ppb	17.5	34.44	2.5	
Mo	95	89	He	-0.572	ppb	N/A	23.33	2.5	
Ag	107	89	He	0.008	ppb	48.1	14.44	0.5	
Cd	111	89	He	0.012	ppb	149.3	1.85	0.5	
Sn	118	159	He	37.251	ppb	0.7	6277.25	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.020	ppb	85.3	126.81	0.5	
Ba	137	159	No Gas	1.491	ppb	12.0	904.38	1	PB 6020 Fails DoD
W	182	159	No Gas	-0.045	ppb	N/A	66.74	2.5	
Tl	205	209	No Gas	0.009	ppb	117.5	53.39	0.5	
Pb	208	209	No Gas	0.836	ppb	0.7	3333.92	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.184	ppb	39.1	904.38	2.5	
U	238	209	No Gas	0.022	ppb	22.1	86.77	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1190266.98	2.4	1537409.87	77.42	29.5	120.4	
Sc	45	No Gas	3004874.53	2.7	3373253.08	89.08	29.5	120.4	
Sc	45	H2	344286.20	2.0	415670.69	82.83	29.5	120.4	
Sc	45	He	70159.11	1.5	81171.76	86.43	29.5	120.4	
Ge	72	No Gas	717126.42	2.2	779333.11	92.02	29.5	120.4	
Ge	72	H2	129164.93	2.4	153246.58	84.29	29.5	120.4	
Ge	72	He	56048.74	0.8	63135.03	88.78	29.5	120.4	
Y	89	H2	2349926.20	2.3	2642116.11	88.94	29.5	120.4	
Y	89	He	489483.82	1.4	544041.92	89.97	29.5	120.4	
Tb	159	No Gas	8392624.04	2.4	8117023.84	103.4	29.5	120.4	
Tb	159	He	2785274.34	1.6	2866479.19	97.17	29.5	120.4	
Bi	209	No Gas	4623704.90	2.7	4424692.92	104.5	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	072_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:20:33 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.372	ppb	3.0	26289.46	25	101.49	89.8	110.2	
11	B	6	No Gas	25.752	ppb	5.1	18246.74	25	103.01	89.8	110.2	
23	Na	45	He	5079.573	ppb	0.9	523678.99	5000	101.59	89.8	110.2	
24	Mg	45	He	4977.032	ppb	0.6	279857.65	5000	99.54	89.8	110.2	
27	Al	45	He	470.759	ppb	2.5	10276.28	500	94.15	89.8	110.2	
28	Si	45	H2	489.829	ppb	1.6	18763.04	500	97.97	89.8	110.2	
39	K	45	He	4952.956	ppb	0.2	252060.36	5000	99.06	89.8	110.2	
40	Ca	45	H2	4997.762	ppb	0.8	1809619.57	5000	99.96	89.8	110.2	
51	V	89	He	24.218	ppb	0.4	19866.82	25	96.87	89.8	110.2	
52	Cr	89	He	24.523	ppb	0.2	24586.83	25	98.09	89.8	110.2	
55	Mn	89	He	25.580	ppb	1.3	12218.42	25	102.32	89.8	110.2	
56	Fe	89	H2	4878.521	ppb	0.8	7363180.84	5000	97.57	89.8	110.2	
59	Co	89	He	24.890	ppb	0.6	42217.31	25	99.56	89.8	110.2	
60	Ni	89	He	25.204	ppb	1.5	12149.01	25	100.82	89.8	110.2	
63	Cu	89	He	24.866	ppb	1.2	32805.99	25	99.46	89.8	110.2	
66	Zn	89	He	24.521	ppb	2.4	4438.64	25	98.08	89.8	110.2	
75	As	89	He	24.862	ppb	0.7	3633.54	25	99.45	89.8	110.2	
78	Se	89	H2	24.543	ppb	2.3	1844.04	25	98.17	89.8	110.2	
88	Sr	89	He	24.194	ppb	1.5	17254.70	25	96.78	89.8	110.2	
95	Mo	89	He	24.811	ppb	0.3	20430.27	25	99.24	89.8	110.2	
107	Ag	89	He	18.898	ppb	0.8	52623.90	25	75.59	89.8	110.2	> +/- 10%
111	Cd	89	He	24.892	ppb	0.8	9234.71	25	99.57	89.8	110.2	
118	Sn	159	He	23.378	ppb	2.0	19716.16	25	93.51	89.8	110.2	
121	Sb	159	No Gas	24.297	ppb	5.3	173837.43	25	97.19	89.8	110.2	
137	Ba	159	No Gas	24.238	ppb	5.4	68215.91	25	96.95	89.8	110.2	
182	W	159	No Gas	24.232	ppb	6.9	137979.76	25	96.93	89.8	110.2	
205	Tl	209	No Gas	24.649	ppb	5.3	313654.31	25	98.6	89.8	110.2	
208	Pb	209	No Gas	24.676	ppb	4.9	434113.92	25	98.7	89.8	110.2	
232	Th	209	No Gas	24.229	ppb	6.9	446242.94	25	96.92	89.8	110.2	
238	U	209	No Gas	24.734	ppb	5.2	427516.80	25	98.94	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1194439.89	2.5	1537409.87	77.69	29.5	120.4	
Sc	45	No Gas	2977605.91	2.9	3373253.08	88.27	29.5	120.4	
Sc	45	H2	360911.37	0.2	415670.69	86.83	29.5	120.4	
Sc	45	He	73412.08	0.3	81171.76	90.44	29.5	120.4	
Ge	72	No Gas	697070.20	3.9	779333.11	89.44	29.5	120.4	
Ge	72	H2	135839.27	1.1	153246.58	88.64	29.5	120.4	
Ge	72	He	58857.96	1.0	63135.03	93.23	29.5	120.4	
Y	89	H2	2416591.59	0.3	2642116.11	91.46	29.5	120.4	
Y	89	He	506198.03	0.1	544041.92	93.04	29.5	120.4	
Tb	159	No Gas	7956140.50	2.9	8117023.84	98.02	29.5	120.4	
Tb	159	He	2808753.78	0.2	2866479.19	97.99	29.5	120.4	
Bi	209	No Gas	4325946.63	3.7	4424692.92	97.77	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	073_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:23:13 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.060	ppb	10.1	82.23	0.2	
11	B	6	No Gas	1.799	ppb	7.2	2093.55	4	
23	Na	45	He	51.551	ppb	6.9	10482.28	200	
24	Mg	45	He	-4.459	ppb	N/A	302.25	20	
27	Al	45	He	1.836	ppb	43.5	82.23	20	
28	Si	45	H2	5.622	ppb	36.8	427.15	100	
39	K	45	He	16.119	ppb	34.2	10460.81	200	
40	Ca	45	H2	10.653	ppb	9.6	5424.58	20	Failed DoD
51	V	89	He	0.763	ppb	2.1	816.72	1	Failed DoD
52	Cr	89	He	0.127	ppb	1.4	156.64	1	
55	Mn	89	He	1.346	ppb	13.7	639.23	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	13.534	ppb	9.7	27798.31	20	Failed DoD
59	Co	89	He	0.013	ppb	48.3	28.89	0.2	
60	Ni	89	He	-0.032	ppb	N/A	23.33	0.4	
63	Cu	89	He	-0.071	ppb	N/A	296.68	0.6	
66	Zn	89	He	0.066	ppb	221.3	71.11	2	
75	As	89	He	0.087	ppb	11.7	16.67	1	
78	Se	89	H2	0.055	ppb	23.6	4.50	1	
88	Sr	89	He	0.023	ppb	23.2	22.22	1	
95	Mo	89	He	0.023	ppb	177.9	133.34	1	
107	Ag	89	He	0.006	ppb	45.5	25.55	0.2	
111	Cd	89	He	0.015	ppb	44.2	6.30	0.2	
118	Sn	159	He	0.322	ppb	7.7	338.91	1	
121	Sb	159	No Gas	0.025	ppb	24.3	293.67	0.2	
137	Ba	159	No Gas	0.066	ppb	20.9	220.25	0.4	
182	W	159	No Gas	0.114	ppb	20.1	820.95	1	
205	Tl	209	No Gas	0.021	ppb	7.8	317.03	0.2	
208	Pb	209	No Gas	0.050	ppb	15.9	1141.30	0.2	
232	Th	209	No Gas	0.178	ppb	41.9	3761.54	1	
238	U	209	No Gas	0.017	ppb	20.9	320.36	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1285446.70	2.1	1537409.87	83.61	29.5	120.4	
Sc	45	No Gas	3159740.39	2.8	3373253.08	93.67	29.5	120.4	
Sc	45	H2	352009.93	1.3	415670.69	84.68	29.5	120.4	
Sc	45	He	70984.01	0.9	81171.76	87.45	29.5	120.4	
Ge	72	No Gas	748839.33	3.0	779333.11	96.09	29.5	120.4	
Ge	72	H2	129241.62	1.5	153246.58	84.34	29.5	120.4	
Ge	72	He	56249.42	0.5	63135.03	89.09	29.5	120.4	
Y	89	H2	2374872.26	1.1	2642116.11	89.89	29.5	120.4	
Y	89	He	494628.50	0.5	544041.92	90.92	29.5	120.4	
Tb	159	No Gas	8601429.18	2.4	8117023.84	105.97	29.5	120.4	
Tb	159	He	2799075.23	0.3	2866479.19	97.65	29.5	120.4	
Bi	209	No Gas	4695760.02	2.1	4424692.92	106.13	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG07IMS1
File Name	074LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:25:57 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.218	ppb	3.7	10897.81	50	20.09	79.5	120.4	
B	11	6	No Gas	500.668	ppb	5.0	72035.43	500	20.03	79.5	120.4	
Na	23	45	He	7391.634	ppb	0.8	156455.76	7500	19.71	79.5	120.4	
Mg	24	45	He	4992.520	ppb	0.6	56627.81	5000	19.97	79.5	120.4	
Al	27	45	He	1862.935	ppb	1.1	8147.05	2000	18.63	79.5	120.4	
Si	28	45	H2	977.432	ppb	12.3	7557.08	1000	19.55	79.5	120.4	
K	39	45	He	9903.561	ppb	1.0	106882.56	10000	19.81	79.5	120.4	
Ca	40	45	H2	2597.846	ppb	11.9	187986.77	2500	20.78	79.5	120.4	
V	51	89	He	489.907	ppb	1.5	80115.62	500	19.6	79.5	120.4	
Cr	52	89	He	199.757	ppb	0.8	40235.59	200	19.98	79.5	120.4	
Mn	55	89	He	497.193	ppb	1.6	47700.82	500	19.89	79.5	120.4	
Fe	56	89	H2	1098.872	ppb	11.0	339843.09	1000	21.98	79.5	120.4	
Co	59	89	He	505.561	ppb	1.3	172337.35	500	20.22	79.5	120.4	
Ni	60	89	He	490.181	ppb	1.0	47379.84	500	19.61	79.5	120.4	
Cu	63	89	He	252.604	ppb	1.1	66575.80	250	20.21	79.5	120.4	
Zn	66	89	He	498.889	ppb	1.0	17964.37	500	19.96	79.5	120.4	
As	75	89	He	99.356	ppb	0.5	2919.63	100	19.87	79.5	120.4	
Se	78	89	H2	99.813	ppb	10.7	1502.85	100	19.96	79.5	120.4	
Sr	88	89	He	497.384	ppb	1.9	71280.76	500	19.9	79.5	120.4	
Mo	95	89	He	102.023	ppb	1.0	16907.67	100	20.4	79.5	120.4	
Ag	107	89	He	53.438	ppb	1.3	29914.92	50	21.38	79.5	120.4	
Cd	111	89	He	252.182	ppb	0.9	18804.60	250	20.17	79.5	120.4	
Sn	118	159	He	510.425	ppb	1.2	87302.46	500	20.42	79.5	120.4	
Sb	121	159	No Gas	97.530	ppb	3.1	148931.68	100	19.51	79.5	120.4	
Ba	137	159	No Gas	1888.201	ppb	3.9	1133708.70	2000	18.88	79.5	120.4	
W	182	159	No Gas	100.549	ppb	3.4	122208.93	100	20.11	79.5	120.4	
Tl	205	209	No Gas	100.238	ppb	3.6	273318.14	100	20.05	79.5	120.4	
[Pb]	206	209	No Gas	100.472	ppb	2.7	94318.58	100	20.09	79.5	120.4	
[Pb]	207	209	No Gas	101.082	ppb	3.5	83166.48	100	20.22	79.5	120.4	
Pb	208	209	No Gas	99.954	ppb	3.2	376861.02	100	19.99	79.5	120.4	
Th	232	209	No Gas	98.888	ppb	5.0	390231.35	100	19.78	79.5	120.4	
U	238	209	No Gas	99.383	ppb	5.2	367974.79	100	19.88	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1250605.95	2.4	1537409.87	81.34	29.5	120.4	
Sc	45	No Gas	3102586.64	2.3	3373253.08	91.98	29.5	120.4	
Sc	45	H2	359882.95	7.6	415670.69	86.58	29.5	120.4	
Sc	45	He	73454.59	0.1	81171.76	90.49	29.5	120.4	
Ge	72	No Gas	741892.43	2.2	779333.11	95.2	29.5	120.4	
Ge	72	H2	135926.29	4.9	153246.58	88.7	29.5	120.4	
Ge	72	He	58419.06	0.6	63135.03	92.53	29.5	120.4	
Y	89	H2	2433636.34	7.3	2642116.11	92.11	29.5	120.4	
Y	89	He	508755.32	0.5	544041.92	93.51	29.5	120.4	
Tb	159	No Gas	8487049.25	1.9	8117023.84	104.56	29.5	120.4	
Tb	159	He	2856157.53	0.9	2866479.19	99.64	29.5	120.4	
Bi	209	No Gas	4635215.26	2.5	4424692.92	104.76	29.5	120.4	

Sample Report

Sample Name SN5107-028

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:28:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.181	ppb	49.1	53.34	100	
11	B	6	No Gas	17.748	ppb	2.5	3228.25	1000	
23	Na	45	He	232.032	ppb	3.2	10482.19	200000	
24	Mg	45	He	79.775	ppb	33.9	1482.42	200000	
27	Al	45	He	969.179	ppb	13.5	4327.54	200000	
28	Si	45	H2	707.773	ppb	2.6	5670.79	10000	
39	K	45	He	112.249	ppb	22.9	11307.78	200000	
40	Ca	45	H2	261.846	ppb	2.2	20980.57	200000	
51	V	89	He	5.642	ppb	24.1	1155.65	1000	
52	Cr	89	He	5.513	ppb	16.9	1159.85	2000	
55	Mn	89	He	36.079	ppb	84.2	3532.76	2000	
56	Fe	89	H2	462.860	ppb	2.3	150181.18	100000	
59	Co	89	He	0.745	ppb	65.4	266.69	1000	
60	Ni	89	He	0.849	ppb	37.4	123.34	1000	
63	Cu	89	He	0.613	ppb	30.6	566.70	2000	
66	Zn	89	He	5.671	ppb	33.5	268.90	2000	
75	As	89	He	0.925	ppb	42.1	32.00	1000	
78	Se	89	H2	0.242	ppb	34.2	4.17	1000	
88	Sr	89	He	28.054	ppb	2.4	4085.21	2000	
95	Mo	89	He	0.285	ppb	43.9	167.78	1000	
107	Ag	89	He	0.081	ppb	113.1	56.67	100	
111	Cd	89	He	0.201	ppb	103.0	16.29	1000	
118	Sn	159	He	37.498	ppb	1.6	6546.30	1000	
121	Sb	159	No Gas	0.141	ppb	20.5	310.35	1000	
137	Ba	159	No Gas	12.897	ppb	5.2	7674.09	2000	
182	W	159	No Gas	0.239	ppb	21.7	407.13	1000	
205	Tl	209	No Gas	0.080	ppb	13.4	243.60	1000	
208	Pb	209	No Gas	10.411	ppb	1.7	39057.05	2000	
232	Th	209	No Gas	5.384	ppb	3.5	21221.91	1000	
238	U	209	No Gas	1.019	ppb	1.9	3741.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1229740.57	2.0	1537409.87	79.99	29.5	120.4	
Sc	45	No Gas	3089259.78	1.2	3373253.08	91.58	29.5	120.4	
Sc	45	H2	366655.24	1.4	415670.69	88.21	29.5	120.4	
Sc	45	He	74590.15	0.7	81171.76	91.89	29.5	120.4	
Ge	72	No Gas	745543.59	1.3	779333.11	95.66	29.5	120.4	
Ge	72	H2	135207.82	0.3	153246.58	88.23	29.5	120.4	
Ge	72	He	59074.74	0.8	63135.03	93.57	29.5	120.4	
Y	89	H2	2461697.21	1.1	2642116.11	93.17	29.5	120.4	
Y	89	He	516121.12	0.5	544041.92	94.87	29.5	120.4	
Tb	159	No Gas	8388765.43	1.0	8117023.84	103.35	29.5	120.4	
Tb	159	He	2885354.09	0.9	2866479.19	100.66	29.5	120.4	
Bi	209	No Gas	4589926.17	0.9	4424692.92	103.73	29.5	120.4	

Sample Report

Sample Name	SN5107-029
File Name	076SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:31:17 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	56.7	37.78	100	
11	B	6	No Gas	12.096	ppb	10.0	2463.64	1000	
23	Na	45	He	246.983	ppb	7.8	10846.15	200000	
24	Mg	45	He	66.058	ppb	17.2	1331.28	200000	
27	Al	45	He	930.177	ppb	2.0	4175.21	200000	
28	Si	45	H2	777.433	ppb	6.5	6151.58	10000	
39	K	45	He	101.550	ppb	11.3	11259.38	200000	
40	Ca	45	H2	365.030	ppb	34.1	28243.21	200000	
51	V	89	He	5.196	ppb	3.7	1087.86	1000	
52	Cr	89	He	4.006	ppb	10.6	856.54	2000	
55	Mn	89	He	9.318	ppb	7.8	925.20	2000	
56	Fe	89	H2	626.414	ppb	51.0	200018.27	100000	
59	Co	89	He	0.154	ppb	50.7	62.23	1000	
60	Ni	89	He	0.707	ppb	26.9	110.01	1000	
63	Cu	89	He	0.434	ppb	33.1	522.25	2000	
66	Zn	89	He	6.269	ppb	17.4	292.24	2000	
75	As	89	He	0.496	ppb	14.4	19.33	1000	
78	Se	89	H2	0.264	ppb	66.9	4.50	1000	
88	Sr	89	He	24.207	ppb	3.6	3548.36	2000	
95	Mo	89	He	0.027	ppb	738.5	125.56	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.045	ppb	34.1	4.44	1000	
118	Sn	159	He	39.718	ppb	3.6	6973.16	1000	
121	Sb	159	No Gas	0.049	ppb	43.3	176.87	1000	
137	Ba	159	No Gas	10.826	ppb	10.2	6662.45	2000	
182	W	159	No Gas	0.069	ppb	96.5	210.24	1000	
205	Tl	209	No Gas	0.018	ppb	46.5	80.09	1000	
208	Pb	209	No Gas	8.664	ppb	5.2	33565.17	2000	
232	Th	209	No Gas	1.347	ppb	2.7	5620.94	1000	
238	U	209	No Gas	0.316	ppb	5.7	1201.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1244662.95	1.7	1537409.87	80.96	29.5	120.4	
Sc	45	No Gas	3207125.21	3.3	3373253.08	95.08	29.5	120.4	
Sc	45	H2	363211.28	1.0	415670.69	87.38	29.5	120.4	
Sc	45	He	74980.28	1.1	81171.76	92.37	29.5	120.4	
Ge	72	No Gas	769798.01	2.7	779333.11	98.78	29.5	120.4	
Ge	72	H2	134500.49	1.8	153246.58	87.77	29.5	120.4	
Ge	72	He	59662.04	1.3	63135.03	94.5	29.5	120.4	
Y	89	H2	2465654.50	1.4	2642116.11	93.32	29.5	120.4	
Y	89	He	519456.17	1.1	544041.92	95.48	29.5	120.4	
Tb	159	No Gas	8689558.14	3.0	8117023.84	107.05	29.5	120.4	
Tb	159	He	2903769.05	1.1	2866479.19	101.3	29.5	120.4	
Bi	209	No Gas	4740448.30	3.1	4424692.92	107.14	29.5	120.4	

Sample Report

Sample Name SN5107-031

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:33:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.326	ppb	20.5	87.78	100	
11	B	6	No Gas	14.885	ppb	2.4	2940.40	1000	
23	Na	45	He	261.436	ppb	4.1	11280.30	200000	
24	Mg	45	He	235.868	ppb	10.4	3316.18	200000	
27	Al	45	He	15368.499	ppb	1.2	69067.39	200000	
28	Si	45	H2	2792.593	ppb	0.7	22446.15	10000	
39	K	45	He	226.230	ppb	17.9	12651.60	200000	
40	Ca	45	H2	411.232	ppb	1.7	33058.24	200000	
51	V	89	He	15.560	ppb	2.9	2828.17	1000	
52	Cr	89	He	11.286	ppb	2.2	2365.11	2000	
55	Mn	89	He	12.763	ppb	2.6	1268.50	2000	
56	Fe	89	H2	1884.836	ppb	0.4	600742.01	100000	
59	Co	89	He	0.503	ppb	21.3	184.46	1000	
60	Ni	89	He	3.884	ppb	8.3	425.58	1000	
63	Cu	89	He	2.089	ppb	4.9	970.07	2000	
66	Zn	89	He	11.117	ppb	13.4	472.25	2000	
75	As	89	He	0.914	ppb	31.8	32.00	1000	
78	Se	89	H2	0.672	ppb	21.1	11.00	1000	
88	Sr	89	He	7.869	ppb	5.7	1163.43	2000	
95	Mo	89	He	0.043	ppb	161.2	128.90	1000	
107	Ag	89	He	0.678	ppb	7.5	400.02	100	
111	Cd	89	He	0.030	ppb	130.2	3.33	1000	
118	Sn	159	He	39.694	ppb	4.4	6965.36	1000	
121	Sb	159	No Gas	0.067	ppb	44.9	206.90	1000	
137	Ba	159	No Gas	14.173	ppb	5.7	8755.95	2000	
182	W	159	No Gas	0.119	ppb	34.2	273.64	1000	
205	Tl	209	No Gas	0.028	ppb	11.5	106.78	1000	
208	Pb	209	No Gas	15.194	ppb	3.9	59515.07	2000	
232	Th	209	No Gas	4.088	ppb	4.3	16890.33	1000	
238	U	209	No Gas	0.573	ppb	7.1	2199.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1279165.67	2.0	1537409.87	83.2	29.5	120.4	
Sc	45	No Gas	3257973.46	3.2	3373253.08	96.58	29.5	120.4	
Sc	45	H2	379212.23	0.4	415670.69	91.23	29.5	120.4	
Sc	45	He	75855.96	0.4	81171.76	93.45	29.5	120.4	
Ge	72	No Gas	775941.05	3.0	779333.11	99.56	29.5	120.4	
Ge	72	H2	139670.02	0.9	153246.58	91.14	29.5	120.4	
Ge	72	He	59982.37	0.3	63135.03	95.01	29.5	120.4	
Y	89	H2	2519368.45	0.5	2642116.11	95.35	29.5	120.4	
Y	89	He	522143.29	0.7	544041.92	95.97	29.5	120.4	
Tb	159	No Gas	8721566.33	3.6	8117023.84	107.45	29.5	120.4	
Tb	159	He	2902067.88	0.2	2866479.19	101.24	29.5	120.4	
Bi	209	No Gas	4803586.85	3.3	4424692.92	108.56	29.5	120.4	

Sample Report

Sample Name SN5107-032

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:36:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.352	ppb	27.2	93.34	100	
11	B	6	No Gas	13.891	ppb	3.1	2782.58	1000	
23	Na	45	He	267.530	ppb	7.8	11450.64	200000	
24	Mg	45	He	239.015	ppb	6.8	3365.10	200000	
27	Al	45	He	9622.915	ppb	0.6	43424.64	200000	
28	Si	45	H2	1857.631	ppb	1.3	14804.11	10000	
39	K	45	He	209.269	ppb	24.7	12521.56	200000	
40	Ca	45	H2	888.383	ppb	2.8	68339.55	200000	
51	V	89	He	14.158	ppb	3.3	2582.56	1000	
52	Cr	89	He	8.428	ppb	1.9	1767.13	2000	
55	Mn	89	He	14.383	ppb	1.8	1421.82	2000	
56	Fe	89	H2	1184.989	ppb	2.4	376453.41	100000	
59	Co	89	He	0.531	ppb	6.7	193.35	1000	
60	Ni	89	He	2.675	ppb	15.5	304.46	1000	
63	Cu	89	He	3.948	ppb	2.6	1463.46	2000	
66	Zn	89	He	15.649	ppb	9.5	636.71	2000	
75	As	89	He	0.808	ppb	6.7	28.67	1000	
78	Se	89	H2	1.402	ppb	13.4	22.17	1000	
88	Sr	89	He	8.586	ppb	6.3	1263.44	2000	
95	Mo	89	He	0.086	ppb	83.0	135.56	1000	
107	Ag	89	He	3.773	ppb	3.4	2168.03	100	
111	Cd	89	He	0.059	ppb	85.1	5.55	1000	
118	Sn	159	He	38.440	ppb	3.1	6716.36	1000	
121	Sb	159	No Gas	0.156	ppb	10.7	337.05	1000	
137	Ba	159	No Gas	21.659	ppb	5.3	13044.38	2000	
182	W	159	No Gas	0.239	ppb	15.8	413.80	1000	
205	Tl	209	No Gas	0.040	ppb	38.7	140.16	1000	
208	Pb	209	No Gas	29.353	ppb	3.3	112461.88	2000	
232	Th	209	No Gas	3.458	ppb	3.9	14026.78	1000	
238	U	209	No Gas	0.641	ppb	3.5	2412.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273344.82	0.7	1537409.87	82.82	29.5	120.4	
Sc	45	No Gas	3167549.24	1.1	3373253.08	93.9	29.5	120.4	
Sc	45	H2	373966.92	2.8	415670.69	89.97	29.5	120.4	
Sc	45	He	76134.68	1.3	81171.76	93.79	29.5	120.4	
Ge	72	No Gas	762270.22	1.3	779333.11	97.81	29.5	120.4	
Ge	72	H2	139595.76	3.1	153246.58	91.09	29.5	120.4	
Ge	72	He	59813.87	0.3	63135.03	94.74	29.5	120.4	
Y	89	H2	2491567.21	1.6	2642116.11	94.3	29.5	120.4	
Y	89	He	519855.32	0.6	544041.92	95.55	29.5	120.4	
Tb	159	No Gas	8501128.69	1.1	8117023.84	104.73	29.5	120.4	
Tb	159	He	2889015.44	0.7	2866479.19	100.79	29.5	120.4	
Bi	209	No Gas	4702931.72	1.0	4424692.92	106.29	29.5	120.4	

Sample Report

Sample Name SN5107-033

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:39:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.190	ppb	4.2	970.06	100	
11	B	6	No Gas	39.975	ppb	3.6	6769.58	1000	
23	Na	45	He	669.953	ppb	3.8	22790.35	200000	
24	Mg	45	He	3504.827	ppb	3.3	47202.51	200000	
27	Al	45	He	111948.075	ppb	2.8	575782.65	200000	
28	Si	45	H2	2926.046	ppb	3.2	26517.27	10000	
39	K	45	He	2368.928	ppb	4.2	39260.87	200000	
40	Ca	45	H2	32197.729	ppb	1.2	2763019.09	200000	
51	V	89	He	255.304	ppb	2.7	47802.99	1000	
52	Cr	89	He	121.719	ppb	2.8	28015.20	2000	
55	Mn	89	He	1183.917	ppb	2.4	129710.08	2000	
56	Fe	89	H2	125288.766	ppb	0.4	43931121.24	100000	
59	Co	89	He	9.563	ppb	3.6	3731.89	1000	
60	Ni	89	He	72.536	ppb	4.2	8045.94	1000	
63	Cu	89	He	11879.259	ppb	2.4	3554918.73	2000	>LDR
66	Zn	89	He	2306.182	ppb	1.5	94596.79	2000	
75	As	89	He	26.948	ppb	1.9	908.13	1000	
78	Se	89	H2	8.755	ppb	3.8	153.49	1000	
88	Sr	89	He	103.864	ppb	2.9	17005.52	2000	
95	Mo	89	He	6.168	ppb	3.4	1294.55	1000	
107	Ag	89	He	0.852	ppb	6.9	556.70	100	
111	Cd	89	He	0.886	ppb	13.3	76.67	1000	
118	Sn	159	He	44.487	ppb	1.3	8009.34	1000	
121	Sb	159	No Gas	175.028	ppb	0.6	275281.49	1000	
137	Ba	159	No Gas	216.636	ppb	0.8	134019.06	2000	
182	W	159	No Gas	0.228	ppb	27.6	410.47	1000	
205	Tl	209	No Gas	0.657	ppb	7.5	1862.23	1000	
208	Pb	209	No Gas	118076.401	ppb	0.7	455179446.74	2000	>LDR
232	Th	209	No Gas	21.551	ppb	0.6	87165.08	1000	
238	U	209	No Gas	6.261	ppb	0.1	23725.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1313036.90	1.5	1537409.87	85.41	29.5	120.4	
Sc	45	No Gas	3474403.00	2.9	3373253.08	103	29.5	120.4	
Sc	45	H2	427863.34	2.6	415670.69	102.93	29.5	120.4	
Sc	45	He	86892.71	2.3	81171.76	107.05	29.5	120.4	
Ge	72	No Gas	803634.69	1.7	779333.11	103.12	29.5	120.4	
Ge	72	H2	154188.46	2.0	153246.58	100.61	29.5	120.4	
Ge	72	He	65885.80	0.9	63135.03	104.36	29.5	120.4	
Y	89	H2	2809647.75	1.8	2642116.11	106.34	29.5	120.4	
Y	89	He	581155.20	1.3	544041.92	106.82	29.5	120.4	
Tb	159	No Gas	8740017.02	1.7	8117023.84	107.68	29.5	120.4	
Tb	159	He	2981274.54	1.5	2866479.19	104	29.5	120.4	
Bi	209	No Gas	4739255.02	1.2	4424692.92	107.11	29.5	120.4	

Sample Report

Sample Name SN5107-035

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:42:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.265	ppb	5.3	798.94	100	
11	B	6	No Gas	34.752	ppb	3.4	6301.60	1000	
23	Na	45	He	478.478	ppb	6.2	18275.33	200000	
24	Mg	45	He	2494.090	ppb	1.1	34011.33	200000	
27	Al	45	He	82622.505	ppb	1.2	427784.60	200000	
28	Si	45	H2	3097.846	ppb	5.5	27456.88	10000	
39	K	45	He	1650.811	ppb	2.3	31164.91	200000	
40	Ca	45	H2	24194.802	ppb	4.9	2032436.08	200000	
51	V	89	He	167.466	ppb	1.2	31393.64	1000	
52	Cr	89	He	88.032	ppb	1.0	20240.79	2000	
55	Mn	89	He	640.704	ppb	0.2	70092.59	2000	
56	Fe	89	H2	67178.190	ppb	4.2	22849760.62	100000	
59	Co	89	He	6.151	ppb	0.9	2400.39	1000	
60	Ni	89	He	49.621	ppb	1.8	5510.17	1000	
63	Cu	89	He	8662.979	ppb	0.3	2588536.33	2000	
66	Zn	89	He	1389.556	ppb	0.1	56933.47	2000	
75	As	89	He	16.495	ppb	10.1	557.07	1000	
78	Se	89	H2	6.664	ppb	2.5	113.50	1000	
88	Sr	89	He	73.959	ppb	3.4	12092.39	2000	
95	Mo	89	He	3.847	ppb	14.3	856.73	1000	
107	Ag	89	He	0.512	ppb	11.1	338.91	100	
111	Cd	89	He	0.578	ppb	7.1	50.37	1000	
118	Sn	159	He	40.237	ppb	2.2	7312.24	1000	
121	Sb	159	No Gas	135.113	ppb	1.2	214101.01	1000	
137	Ba	159	No Gas	132.959	ppb	2.5	82893.76	2000	
182	W	159	No Gas	0.167	ppb	34.1	337.05	1000	
205	Tl	209	No Gas	0.389	ppb	4.9	1107.96	1000	
208	Pb	209	No Gas	88854.135	ppb	1.7	341178411.39	2000	>LDR
232	Th	209	No Gas	13.536	ppb	2.7	54589.44	1000	
238	U	209	No Gas	4.600	ppb	3.3	17361.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1381188.78	0.3	1537409.87	89.84	29.5	120.4	
Sc	45	No Gas	3657276.71	1.4	3373253.08	108.42	29.5	120.4	
Sc	45	H2	419008.84	2.8	415670.69	100.8	29.5	120.4	
Sc	45	He	87442.72	0.6	81171.76	107.73	29.5	120.4	
Ge	72	No Gas	829635.33	0.1	779333.11	106.45	29.5	120.4	
Ge	72	H2	152396.73	1.4	153246.58	99.45	29.5	120.4	
Ge	72	He	66207.65	0.7	63135.03	104.87	29.5	120.4	
Y	89	H2	2726513.08	2.2	2642116.11	103.19	29.5	120.4	
Y	89	He	580144.05	0.5	544041.92	106.64	29.5	120.4	
Tb	159	No Gas	8805308.97	1.5	8117023.84	108.48	29.5	120.4	
Tb	159	He	3005905.72	0.2	2866479.19	104.86	29.5	120.4	
Bi	209	No Gas	4720333.03	0.8	4424692.92	106.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG07IMW1
File Name	081_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:44:41 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.074	ppb	32.6	33.33	0.5	
B	11	6	No Gas	3.506	ppb	32.2	1333.44	10	
Na	23	45	He	140.720	ppb	6.9	9720.72	500	
Mg	24	45	He	-17.941	ppb	N/A	415.59	50	
Al	27	45	He	12.498	ppb	21.3	114.45	50	
Si	28	45	H2	11.813	ppb	50.2	363.74	250	
K	39	45	He	99.979	ppb	21.0	12658.26	500	
Ca	40	45	H2	21.714	ppb	1.1	3789.53	50	
V	51	89	He	2.574	ppb	8.8	700.04	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.346	ppb	14.8	112.65	2.5	
Mn	55	89	He	3.620	ppb	7.7	393.94	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	25.915	ppb	4.9	17319.86	50	
Co	59	89	He	0.017	ppb	119.6	15.56	0.5	
Ni	60	89	He	0.126	ppb	73.2	56.67	1	
Cu	63	89	He	2.205	ppb	6.5	1070.08	1.5	PB 6020 Fails DoD
Zn	66	89	He	1.932	ppb	31.5	143.34	5	
As	75	89	He	0.162	ppb	83.0	10.00	2.5	
Se	78	89	H2	0.110	ppb	68.7	2.33	2.5	
Sr	88	89	He	0.020	ppb	278.0	10.00	2.5	
Mo	95	89	He	-0.615	ppb	N/A	18.89	2.5	
Ag	107	89	He	0.001	ppb	1268.7	12.22	0.5	
Cd	111	89	He	0.000	ppb	N/A	1.11	0.5	
Sn	118	159	He	0.637	ppb	2.9	186.67	2.5	
Sb	121	159	No Gas	0.183	ppb	42.7	373.76	0.5	
Ba	137	159	No Gas	0.156	ppb	50.5	113.46	1	
W	182	159	No Gas	-0.054	ppb	N/A	56.73	2.5	
Tl	205	209	No Gas	-0.003	ppb	N/A	20.02	0.5	
Pb	208	209	No Gas	81.060	ppb	16.6	297944.34	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.065	ppb	20.3	423.82	2.5	
U	238	209	No Gas	0.007	ppb	95.9	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1337802.62	6.5	1537409.87	87.02	29.5	120.4	
Sc	45	No Gas	3517470.21	7.5	3373253.08	104.28	29.5	120.4	
Sc	45	H2	416666.09	0.7	415670.69	100.24	29.5	120.4	
Sc	45	He	84407.17	0.2	81171.76	103.99	29.5	120.4	
Ge	72	No Gas	803790.52	7.5	779333.11	103.14	29.5	120.4	
Ge	72	H2	152165.67	1.5	153246.58	99.29	29.5	120.4	
Ge	72	He	64664.59	1.2	63135.03	102.42	29.5	120.4	
Y	89	H2	2666408.92	0.0	2642116.11	100.92	29.5	120.4	
Y	89	He	558146.11	0.5	544041.92	102.59	29.5	120.4	
Tb	159	No Gas	8497084.25	7.2	8117023.84	104.68	29.5	120.4	
Tb	159	He	2967499.78	0.7	2866479.19	103.52	29.5	120.4	
Bi	209	No Gas	4547539.31	6.9	4424692.92	102.78	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG07IMW1
File Name	082LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:47:21 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.536	ppb	5.6	12013.15	50	19.81	79.5	120.4	
B	11	6	No Gas	522.733	ppb	4.0	84044.42	500	20.91	79.5	120.4	
Na	23	45	He	7677.040	ppb	0.8	178346.51	7500	20.47	79.5	120.4	
Mg	24	45	He	5191.316	ppb	1.2	64684.47	5000	20.77	79.5	120.4	
Al	27	45	He	1876.563	ppb	1.5	9018.69	2000	18.77	79.5	120.4	
Si	28	45	H2	1104.411	ppb	6.2	9490.43	1000	22.09	0	200	
K	39	45	He	10391.833	ppb	0.6	122706.61	10000	20.78	79.5	120.4	
Ca	40	45	H2	2679.378	ppb	1.9	216221.14	2500	21.44	79.5	120.4	
V	51	89	He	506.753	ppb	0.7	88781.84	500	20.27	79.5	120.4	
Cr	52	89	He	206.055	ppb	0.9	44466.72	200	20.61	79.5	120.4	
Mn	55	89	He	507.001	ppb	0.6	52115.41	500	20.28	79.5	120.4	
Fe	56	89	H2	1098.157	ppb	1.4	364929.65	1000	21.96	79.5	120.4	
Co	59	89	He	530.425	ppb	0.8	193726.43	500	21.22	79.5	120.4	
Ni	60	89	He	510.074	ppb	1.0	52821.53	500	20.4	79.5	120.4	
Cu	63	89	He	262.152	ppb	0.6	74011.02	250	20.97	79.5	120.4	
Zn	66	89	He	509.310	ppb	1.0	19647.75	500	20.37	79.5	120.4	
As	75	89	He	105.941	ppb	1.7	3335.11	100	21.19	79.5	120.4	
Se	78	89	H2	104.108	ppb	2.4	1684.03	100	20.82	79.5	120.4	
Sr	88	89	He	510.435	ppb	0.5	78376.85	500	20.42	79.5	120.4	
Mo	95	89	He	104.126	ppb	1.3	18485.25	100	20.82	79.5	120.4	
Ag	107	89	He	53.434	ppb	1.0	32048.69	50	21.37	79.5	120.4	
Cd	111	89	He	254.700	ppb	1.5	20348.33	250	20.38	79.5	120.4	
Sn	118	159	He	496.665	ppb	1.4	86952.22	500	19.87	79.5	120.4	
Sb	121	159	No Gas	102.486	ppb	3.0	160531.63	100	20.5	79.5	120.4	
Ba	137	159	No Gas	1933.426	ppb	3.1	1190891.45	2000	19.33	79.5	120.4	
W	182	159	No Gas	101.214	ppb	3.4	126186.07	100	20.24	79.5	120.4	
Tl	205	209	No Gas	102.465	ppb	3.9	281640.94	100	20.49	79.5	120.4	
[Pb]	206	209	No Gas	118.853	ppb	3.1	112458.06	100	23.77	79.5	120.4	DoD
[Pb]	207	209	No Gas	117.208	ppb	5.7	97174.07	100	23.44	79.5	120.4	DoD
Pb	208	209	No Gas	117.697	ppb	3.9	447268.87	100	23.54	79.5	120.4	DoD
Th	232	209	No Gas	99.153	ppb	4.8	394480.14	100	19.83	79.5	120.4	
U	238	209	No Gas	100.074	ppb	4.0	373617.04	100	20.02	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397836.45	2.2	1537409.87	90.92	29.5	120.4	
Sc	45	No Gas	3508996.95	2.0	3373253.08	104.02	29.5	120.4	
Sc	45	H2	399071.05	1.5	415670.69	96.01	29.5	120.4	
Sc	45	He	80724.97	0.6	81171.76	99.45	29.5	120.4	
Ge	72	No Gas	814105.05	1.9	779333.11	104.46	29.5	120.4	
Ge	72	H2	146527.39	0.3	153246.58	95.62	29.5	120.4	
Ge	72	He	63083.31	0.3	63135.03	99.92	29.5	120.4	
Y	89	H2	2601466.01	1.2	2642116.11	98.46	29.5	120.4	
Y	89	He	545075.66	0.1	544041.92	100.19	29.5	120.4	
Tb	159	No Gas	8706032.44	2.0	8117023.84	107.26	29.5	120.4	
Tb	159	He	2923282.87	0.2	2866479.19	101.98	29.5	120.4	
Bi	209	No Gas	4672594.25	2.3	4424692.92	105.6	29.5	120.4	

Sample Report

Sample Name SN5146-010

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:50:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	22.7	41.11	100	
11	B	6	No Gas	22.834	ppb	5.6	4319.67	1000	
23	Na	45	He	2961.904	ppb	0.4	71383.55	200000	
24	Mg	45	He	885.048	ppb	3.0	11349.73	200000	
27	Al	45	He	79.902	ppb	66.7	424.49	200000	
28	Si	45	H2	1742.130	ppb	3.8	14533.64	10000	
39	K	45	He	319.279	ppb	15.1	14225.76	200000	
40	Ca	45	H2	729.416	ppb	0.9	59035.76	200000	
51	V	89	He	4.112	ppb	20.6	935.62	1000	
52	Cr	89	He	0.667	ppb	36.3	175.97	2000	
55	Mn	89	He	12.314	ppb	9.3	1256.50	2000	
56	Fe	89	H2	881.875	ppb	1.6	290882.40	100000	
59	Co	89	He	0.342	ppb	82.5	131.12	1000	
60	Ni	89	He	1.076	ppb	59.8	151.12	1000	
63	Cu	89	He	3.997	ppb	145.4	1516.45	2000	
66	Zn	89	He	3.257	ppb	35.7	187.79	2000	
75	As	89	He	0.412	ppb	12.4	17.33	1000	
78	Se	89	H2	0.199	ppb	45.4	3.67	1000	
88	Sr	89	He	3.622	ppb	11.9	553.36	2000	
95	Mo	89	He	-0.361	ppb	N/A	62.22	1000	
107	Ag	89	He	0.019	ppb	140.6	22.22	100	
111	Cd	89	He	0.119	ppb	142.2	10.37	1000	
118	Sn	159	He	1.115	ppb	19.0	266.68	1000	
121	Sb	159	No Gas	0.148	ppb	10.8	330.37	1000	
137	Ba	159	No Gas	6.297	ppb	6.2	3868.22	2000	
182	W	159	No Gas	0.146	ppb	52.6	303.68	1000	
205	Tl	209	No Gas	0.081	ppb	29.0	250.28	1000	
208	Pb	209	No Gas	10.990	ppb	8.0	42007.52	2000	
232	Th	209	No Gas	1.374	ppb	28.3	5664.44	1000	
238	U	209	No Gas	0.068	ppb	19.9	256.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1347859.79	2.0	1537409.87	87.67	29.5	120.4	
Sc	45	No Gas	3402902.55	2.3	3373253.08	100.88	29.5	120.4	
Sc	45	H2	391059.16	1.0	415670.69	94.08	29.5	120.4	
Sc	45	He	79394.11	0.8	81171.76	97.81	29.5	120.4	
Ge	72	No Gas	797884.86	2.2	779333.11	102.38	29.5	120.4	
Ge	72	H2	145182.79	1.3	153246.58	94.74	29.5	120.4	
Ge	72	He	62597.78	0.8	63135.03	99.15	29.5	120.4	
Y	89	H2	2567702.17	1.6	2642116.11	97.18	29.5	120.4	
Y	89	He	536025.92	1.1	544041.92	98.53	29.5	120.4	
Tb	159	No Gas	8633528.55	1.9	8117023.84	106.36	29.5	120.4	
Tb	159	He	2916599.99	0.9	2866479.19	101.75	29.5	120.4	
Bi	209	No Gas	4671807.06	2.4	4424692.92	105.58	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	084_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:52:44 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.095	ppb	3.2	28661.22	25	100.38	89.8	110.2	
11	B	6	No Gas	24.628	ppb	3.1	19268.91	25	98.51	89.8	110.2	
23	Na	45	He	4987.380	ppb	1.9	547447.01	5000	99.75	89.8	110.2	
24	Mg	45	He	4845.593	ppb	2.6	290025.99	5000	96.91	89.8	110.2	
27	Al	45	He	476.024	ppb	1.3	11061.30	500	95.2	89.8	110.2	
28	Si	45	H2	505.359	ppb	2.6	20337.28	500	101.07	89.8	110.2	
39	K	45	He	4864.563	ppb	2.0	263720.70	5000	97.29	89.8	110.2	
40	Ca	45	H2	5078.845	ppb	4.0	1931986.33	5000	101.58	89.8	110.2	
51	V	89	He	24.634	ppb	2.1	20897.22	25	98.54	89.8	110.2	
52	Cr	89	He	24.691	ppb	1.8	25603.75	25	98.76	89.8	110.2	
55	Mn	89	He	24.676	ppb	2.3	12191.07	25	98.7	89.8	110.2	
56	Fe	89	H2	5069.083	ppb	4.5	7847570.00	5000	101.38	89.8	110.2	
59	Co	89	He	25.386	ppb	1.9	44535.30	25	101.54	89.8	110.2	
60	Ni	89	He	25.078	ppb	2.2	12502.69	25	100.31	89.8	110.2	
63	Cu	89	He	25.116	ppb	0.7	34272.83	25	100.46	89.8	110.2	
66	Zn	89	He	25.237	ppb	4.5	4722.08	25	100.95	89.8	110.2	
75	As	89	He	24.754	ppb	1.5	3741.92	25	99.02	89.8	110.2	
78	Se	89	H2	25.398	ppb	2.9	1958.22	25	101.59	89.8	110.2	
88	Sr	89	He	24.220	ppb	2.2	17865.56	25	96.88	89.8	110.2	
95	Mo	89	He	24.272	ppb	3.0	20671.79	25	97.09	89.8	110.2	
107	Ag	89	He	18.786	ppb	2.5	54101.72	25	75.14	89.8	110.2	> +/- 10%
111	Cd	89	He	24.851	ppb	1.4	9536.77	25	99.4	89.8	110.2	
118	Sn	159	He	23.236	ppb	1.7	20053.28	25	92.94	89.8	110.2	
121	Sb	159	No Gas	24.208	ppb	1.1	181908.93	25	96.83	89.8	110.2	
137	Ba	159	No Gas	24.105	ppb	0.2	71255.94	25	96.42	89.8	110.2	
182	W	159	No Gas	23.841	ppb	2.4	142598.67	25	95.36	89.8	110.2	
205	Tl	209	No Gas	24.086	ppb	2.4	321470.24	25	96.34	89.8	110.2	
208	Pb	209	No Gas	25.559	ppb	1.5	471642.08	25	102.24	89.8	110.2	
232	Th	209	No Gas	23.738	ppb	2.6	458611.58	25	94.95	89.8	110.2	
238	U	209	No Gas	24.006	ppb	2.0	435187.34	25	96.02	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1317256.40	1.8	1537409.87	85.68	29.5	120.4	
Sc	45	No Gas	3289645.49	0.8	3373253.08	97.52	29.5	120.4	
Sc	45	H2	379454.82	2.8	415670.69	91.29	29.5	120.4	
Sc	45	He	78166.25	2.0	81171.76	96.3	29.5	120.4	
Ge	72	No Gas	766377.87	1.3	779333.11	98.34	29.5	120.4	
Ge	72	H2	141938.02	2.4	153246.58	92.62	29.5	120.4	
Ge	72	He	61153.24	1.3	63135.03	96.86	29.5	120.4	
Y	89	H2	2481129.01	3.1	2642116.11	93.91	29.5	120.4	
Y	89	He	523647.47	1.4	544041.92	96.25	29.5	120.4	
Tb	159	No Gas	8351043.56	0.8	8117023.84	102.88	29.5	120.4	
Tb	159	He	2874507.11	0.7	2866479.19	100.28	29.5	120.4	
Bi	209	No Gas	4535523.70	0.8	4424692.92	102.5	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	085_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:55:22 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.040	ppb	25.2	64.45	0.2	
11	B	6	No Gas	1.639	ppb	5.8	2101.34	4	
23	Na	45	He	45.654	ppb	9.5	10492.26	200	
24	Mg	45	He	-1.755	ppb	N/A	475.60	20	
27	Al	45	He	-0.782	ppb	N/A	28.89	20	
28	Si	45	H2	6.743	ppb	11.8	497.23	100	
39	K	45	He	17.187	ppb	44.7	11137.72	200	
40	Ca	45	H2	5.489	ppb	12.6	3819.56	20	
51	V	89	He	1.331	ppb	5.3	1325.67	1	Fail All Methods□ Failed DoD
52	Cr	89	He	0.121	ppb	28.8	157.31	1	
55	Mn	89	He	0.205	ppb	15.5	111.98	0.4	Failed DoD
56	Fe	89	H2	2.356	ppb	5.7	11701.23	20	
59	Co	89	He	0.009	ppb	47.0	24.45	0.2	
60	Ni	89	He	-0.009	ppb	N/A	35.56	0.4	
63	Cu	89	He	0.074	ppb	35.4	503.36	0.6	
66	Zn	89	He	0.139	ppb	31.7	87.78	2	
75	As	89	He	0.069	ppb	11.2	14.67	1	
78	Se	89	H2	0.078	ppb	21.4	6.50	1	
88	Sr	89	He	0.011	ppb	103.2	14.44	1	
95	Mo	89	He	-0.006	ppb	N/A	115.56	1	
107	Ag	89	He	0.003	ppb	161.5	17.78	0.2	
111	Cd	89	He	0.008	ppb	21.4	4.07	0.2	
118	Sn	159	He	0.348	ppb	11.9	370.02	1	
121	Sb	159	No Gas	0.028	ppb	35.0	323.70	0.2	
137	Ba	159	No Gas	0.029	ppb	16.3	106.78	0.4	
182	W	159	No Gas	0.102	ppb	6.9	767.55	1	
205	Tl	209	No Gas	0.022	ppb	29.5	343.72	0.2	
208	Pb	209	No Gas	1.559	ppb	0.6	30244.54	0.2	Fail All Methods□ Failed DoD
232	Th	209	No Gas	0.183	ppb	27.7	3891.72	1	
238	U	209	No Gas	0.015	ppb	19.0	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1367835.14	2.2	1537409.87	88.97	29.5	120.4	
Sc	45	No Gas	3333672.77	2.4	3373253.08	98.83	29.5	120.4	
Sc	45	H2	372947.44	1.0	415670.69	89.72	29.5	120.4	
Sc	45	He	75207.95	0.5	81171.76	92.65	29.5	120.4	
Ge	72	No Gas	787312.68	2.2	779333.11	101.02	29.5	120.4	
Ge	72	H2	136438.18	0.9	153246.58	89.03	29.5	120.4	
Ge	72	He	58989.22	1.0	63135.03	93.43	29.5	120.4	
Y	89	H2	2472962.15	0.8	2642116.11	93.6	29.5	120.4	
Y	89	He	517462.89	0.9	544041.92	95.11	29.5	120.4	
Tb	159	No Gas	8753189.80	2.3	8117023.84	107.84	29.5	120.4	
Tb	159	He	2868144.02	0.7	2866479.19	100.06	29.5	120.4	
Bi	209	No Gas	4739869.75	2.3	4424692.92	107.12	29.5	120.4	

Sample Report

Sample Name SN5394-003

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:58:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.112	ppb	34.6	38.89	100	
11	B	6	No Gas	119.647	ppb	4.6	17343.10	1000	
23	Na	45	He	89253.671	ppb	1.3	1770878.85	200000	
24	Mg	45	He	9127.514	ppb	0.6	99886.82	200000	
27	Al	45	He	9.618	ppb	21.4	84.45	200000	
28	Si	45	H2	3611.407	ppb	2.7	26905.26	10000	
39	K	45	He	9997.572	ppb	0.3	104484.73	200000	
40	Ca	45	H2	110519.247	ppb	2.4	7806270.86	200000	
51	V	89	He	1.074	ppb	14.3	384.46	1000	
52	Cr	89	He	0.868	ppb	7.5	203.30	2000	
55	Mn	89	He	105.152	ppb	1.3	9874.36	2000	
56	Fe	89	H2	1245.950	ppb	0.9	380992.11	100000	
59	Co	89	He	0.542	ppb	7.3	188.91	1000	
60	Ni	89	He	8.167	ppb	5.1	810.05	1000	
63	Cu	89	He	6.300	ppb	3.5	2003.55	2000	
66	Zn	89	He	64.448	ppb	6.1	2322.50	2000	
75	As	89	He	1.456	ppb	15.6	46.01	1000	
78	Se	89	H2	0.170	ppb	31.4	3.00	1000	
88	Sr	89	He	462.442	ppb	1.1	64807.91	2000	
95	Mo	89	He	-0.409	ppb	N/A	50.00	1000	
107	Ag	89	He	0.022	ppb	33.6	22.22	100	
111	Cd	89	He	0.453	ppb	10.3	34.07	1000	
118	Sn	159	He	0.727	ppb	11.0	193.34	1000	
121	Sb	159	No Gas	0.233	ppb	10.1	447.18	1000	
137	Ba	159	No Gas	174.949	ppb	5.6	103791.80	2000	
182	W	159	No Gas	0.120	ppb	59.5	263.63	1000	
205	Tl	209	No Gas	0.024	ppb	72.1	90.10	1000	
208	Pb	209	No Gas	4.374	ppb	2.0	16325.60	2000	
232	Th	209	No Gas	0.007	ppb	118.9	196.89	1000	
238	U	209	No Gas	0.271	ppb	12.7	984.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1219519.75	3.3	1537409.87	79.32	29.5	120.4	
Sc	45	No Gas	3060919.72	3.2	3373253.08	90.74	29.5	120.4	
Sc	45	H2	352457.35	3.4	415670.69	84.79	29.5	120.4	
Sc	45	He	71192.88	1.2	81171.76	87.71	29.5	120.4	
Ge	72	No Gas	729446.33	3.2	779333.11	93.6	29.5	120.4	
Ge	72	H2	132002.33	2.2	153246.58	86.14	29.5	120.4	
Ge	72	He	57444.64	0.8	63135.03	90.99	29.5	120.4	
Y	89	H2	2400538.14	2.1	2642116.11	90.86	29.5	120.4	
Y	89	He	497518.96	1.1	544041.92	91.45	29.5	120.4	
Tb	159	No Gas	8388887.72	2.6	8117023.84	103.35	29.5	120.4	
Tb	159	He	2829756.63	0.8	2866479.19	98.72	29.5	120.4	
Bi	209	No Gas	4536270.02	3.1	4424692.92	102.52	29.5	120.4	

Sample Report

Sample Name SN5394-004

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:00:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.108	ppb	11.8	37.78	100	
11	B	6	No Gas	126.981	ppb	7.9	18334.36	1000	
23	Na	45	He	62472.417	ppb	0.8	1268688.84	200000	
24	Mg	45	He	26639.078	ppb	1.1	296899.44	200000	
27	Al	45	He	3.266	ppb	75.3	58.89	200000	
28	Si	45	H2	8045.042	ppb	1.6	61135.42	10000	
39	K	45	He	16201.856	ppb	1.0	166892.54	200000	
40	Ca	45	H2	106722.779	ppb	0.9	7724867.45	200000	
51	V	89	He	2.420	ppb	6.4	608.92	1000	
52	Cr	89	He	0.633	ppb	17.9	159.31	2000	
55	Mn	89	He	1384.567	ppb	0.5	131968.60	2000	
56	Fe	89	H2	11834.506	ppb	1.4	3617619.60	100000	
59	Co	89	He	4.195	ppb	7.3	1429.06	1000	
60	Ni	89	He	7.708	ppb	1.8	778.94	1000	
63	Cu	89	He	0.501	ppb	38.0	525.59	2000	
66	Zn	89	He	3.465	ppb	17.6	184.45	2000	
75	As	89	He	62.683	ppb	2.6	1831.66	1000	
78	Se	89	H2	0.068	ppb	82.2	1.50	1000	
88	Sr	89	He	454.495	ppb	0.5	64721.93	2000	
95	Mo	89	He	3.929	ppb	1.4	760.05	1000	
107	Ag	89	He	0.023	ppb	102.1	23.33	100	
111	Cd	89	He	0.061	ppb	42.7	5.56	1000	
118	Sn	159	He	0.685	ppb	35.1	188.90	1000	
121	Sb	159	No Gas	0.053	ppb	81.3	180.20	1000	
137	Ba	159	No Gas	58.043	ppb	7.4	35115.16	2000	
182	W	159	No Gas	0.318	ppb	27.1	510.58	1000	
205	Tl	209	No Gas	0.014	ppb	32.7	66.74	1000	
208	Pb	209	No Gas	3.625	ppb	13.5	13741.64	2000	
232	Th	209	No Gas	0.021	ppb	22.6	256.96	1000	
238	U	209	No Gas	57.782	ppb	7.4	212673.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1218708.85	3.5	1537409.87	79.27	29.5	120.4	
Sc	45	No Gas	3124940.19	4.1	3373253.08	92.64	29.5	120.4	
Sc	45	H2	361001.64	0.6	415670.69	86.85	29.5	120.4	
Sc	45	He	72766.63	0.4	81171.76	89.65	29.5	120.4	
Ge	72	No Gas	748729.11	3.7	779333.11	96.07	29.5	120.4	
Ge	72	H2	134809.54	1.2	153246.58	87.97	29.5	120.4	
Ge	72	He	58241.91	0.4	63135.03	92.25	29.5	120.4	
Y	89	H2	2444554.39	0.9	2642116.11	92.52	29.5	120.4	
Y	89	He	505503.57	0.4	544041.92	92.92	29.5	120.4	
Tb	159	No Gas	8558229.04	3.5	8117023.84	105.44	29.5	120.4	
Tb	159	He	2869494.05	0.2	2866479.19	100.11	29.5	120.4	
Bi	209	No Gas	4612416.27	3.9	4424692.92	104.24	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG08IMS1
File Name	088_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:03:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.100	ppb	77.1	36.67	0.5	
B	11	6	No Gas	8.776	ppb	1.3	1982.43	10	
Na	23	45	He	274.648	ppb	10.7	11303.64	500	
Mg	24	45	He	5.062	ppb	63.7	626.73	50	
Al	27	45	He	3.029	ppb	84.6	58.89	50	
Si	28	45	H2	27.014	ppb	10.1	433.82	250	
K	39	45	He	101.958	ppb	23.9	11149.39	500	
Ca	40	45	H2	87.408	ppb	5.9	8101.50	50	PB 6020 Fails DoD
V	51	89	He	4.720	ppb	1.4	1002.29	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.794	ppb	12.7	195.96	2.5	
Mn	55	89	He	1.631	ppb	9.2	170.64	1	PB 6020 Fails DoD
Fe	56	89	H2	16.836	ppb	12.3	13234.46	50	
Co	59	89	He	0.027	ppb	42.2	17.78	0.5	
Ni	60	89	He	0.678	ppb	28.4	106.67	1	
Cu	63	89	He	0.439	ppb	29.5	520.03	1.5	
Zn	66	89	He	9.593	ppb	6.2	411.13	5	PB 6020 Fails DoD
As	75	89	He	0.276	ppb	22.5	12.67	2.5	
Se	78	89	H2	0.089	ppb	57.1	1.83	2.5	
Sr	88	89	He	0.287	ppb	39.7	47.78	2.5	
Mo	95	89	He	-0.527	ppb	N/A	32.22	2.5	
Ag	107	89	He	0.007	ppb	93.4	14.45	0.5	
Cd	111	89	He	0.011	ppb	285.2	1.85	0.5	
Sn	118	159	He	43.460	ppb	1.7	7639.10	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.029	ppb	87.2	143.49	0.5	
Ba	137	159	No Gas	0.384	ppb	33.3	250.28	1	
W	182	159	No Gas	-0.014	ppb	N/A	106.79	2.5	
Tl	205	209	No Gas	0.005	ppb	101.7	43.38	0.5	
Pb	208	209	No Gas	3.613	ppb	4.5	13995.36	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.006	ppb	152.7	200.23	2.5	
U	238	209	No Gas	0.043	ppb	23.7	163.52	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1236904.12	0.7	1537409.87	80.45	29.5	120.4	
Sc	45	No Gas	3127034.06	0.6	3373253.08	92.7	29.5	120.4	
Sc	45	H2	364004.55	1.3	415670.69	87.57	29.5	120.4	
Sc	45	He	74224.43	1.8	81171.76	91.44	29.5	120.4	
Ge	72	No Gas	751387.58	0.7	779333.11	96.41	29.5	120.4	
Ge	72	H2	135780.70	2.5	153246.58	88.6	29.5	120.4	
Ge	72	He	58967.01	1.9	63135.03	93.4	29.5	120.4	
Y	89	H2	2468863.93	1.3	2642116.11	93.44	29.5	120.4	
Y	89	He	516060.04	2.1	544041.92	94.86	29.5	120.4	
Tb	159	No Gas	8568997.79	1.0	8117023.84	105.57	29.5	120.4	
Tb	159	He	2909622.07	1.3	2866479.19	101.51	29.5	120.4	
Bi	209	No Gas	4698077.08	0.6	4424692.92	106.18	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG08IMS1
File Name	089LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:06:03 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.087	ppb	1.1	10685.40	50	20.03	79.5	120.4	
B	11	6	No Gas	505.721	ppb	1.4	71538.44	500	20.23	79.5	120.4	
Na	23	45	He	7936.250	ppb	1.4	169566.80	7500	21.16	79.5	120.4	
Mg	24	45	He	4954.023	ppb	0.9	56864.40	5000	19.82	79.5	120.4	
Al	27	45	He	1820.831	ppb	2.6	8058.12	2000	18.21	79.5	120.4	
Si	28	45	H2	1032.542	ppb	10.1	7750.74	1000	20.65	79.5	120.4	
K	39	45	He	10159.250	ppb	2.7	110674.65	10000	20.32	79.5	120.4	
Ca	40	45	H2	2790.475	ppb	13.7	195738.60	2500	22.32	79.5	120.4	
V	51	89	He	486.565	ppb	3.1	81090.20	500	19.46	79.5	120.4	
Cr	52	89	He	198.430	ppb	2.8	40732.24	200	19.84	79.5	120.4	
Mn	55	89	He	487.041	ppb	1.9	47625.18	500	19.48	79.5	120.4	
Fe	56	89	H2	1109.589	ppb	13.9	334015.49	1000	22.19	79.5	120.4	
Co	59	89	He	505.436	ppb	1.6	175614.57	500	20.22	79.5	120.4	
Ni	60	89	He	485.357	ppb	2.9	47810.25	500	19.41	79.5	120.4	
Cu	63	89	He	251.256	ppb	1.3	67500.08	250	20.1	79.5	120.4	
Zn	66	89	He	488.013	ppb	3.6	17909.79	500	19.52	79.5	120.4	
As	75	89	He	100.333	ppb	1.7	3004.99	100	20.07	79.5	120.4	
Se	78	89	H2	105.324	ppb	12.1	1545.18	100	21.06	79.5	120.4	
Sr	88	89	He	495.585	ppb	2.3	72386.70	500	19.82	79.5	120.4	
Mo	95	89	He	103.170	ppb	3.3	17421.63	100	20.63	79.5	120.4	
Ag	107	89	He	53.606	ppb	2.8	30587.49	50	21.44	79.5	120.4	
Cd	111	89	He	254.661	ppb	1.5	19355.03	250	20.37	79.5	120.4	
Sn	118	159	He	513.833	ppb	2.7	90001.26	500	20.55	79.5	120.4	
Sb	121	159	No Gas	98.482	ppb	4.1	151474.77	100	19.7	79.5	120.4	
Ba	137	159	No Gas	1904.843	ppb	3.2	1152275.01	2000	19.05	79.5	120.4	
W	182	159	No Gas	102.121	ppb	2.7	125056.30	100	20.42	79.5	120.4	
Tl	205	209	No Gas	102.557	ppb	2.1	279391.89	100	20.51	79.5	120.4	
[Pb]	206	209	No Gas	106.248	ppb	3.4	99608.62	100	21.25	79.5	120.4	
[Pb]	207	209	No Gas	104.876	ppb	1.8	86212.32	100	20.98	79.5	120.4	
Pb	208	209	No Gas	105.476	ppb	2.2	397291.73	100	21.1	79.5	120.4	
Th	232	209	No Gas	100.282	ppb	1.9	395504.33	100	20.06	79.5	120.4	
U	238	209	No Gas	101.370	ppb	2.0	375103.75	100	20.27	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1228801.83	1.2	1537409.87	79.93	29.5	120.4	
Sc	45	No Gas	3106489.06	3.0	3373253.08	92.09	29.5	120.4	
Sc	45	H2	350055.74	9.8	415670.69	84.21	29.5	120.4	
Sc	45	He	74332.37	0.9	81171.76	91.57	29.5	120.4	
Ge	72	No Gas	754445.80	2.1	779333.11	96.81	29.5	120.4	
Ge	72	H2	133172.61	6.5	153246.58	86.9	29.5	120.4	
Ge	72	He	59709.35	1.2	63135.03	94.57	29.5	120.4	
Y	89	H2	2377452.47	9.6	2642116.11	89.98	29.5	120.4	
Y	89	He	518627.54	1.7	544041.92	95.33	29.5	120.4	
Tb	159	No Gas	8552649.80	3.4	8117023.84	105.37	29.5	120.4	
Tb	159	He	2925708.19	1.9	2866479.19	102.07	29.5	120.4	
Bi	209	No Gas	4630224.12	2.9	4424692.92	104.65	29.5	120.4	

Sample Report

Sample Name SN5147-001

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:08:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.152	ppb	40.4	47.78	100	
11	B	6	No Gas	19.516	ppb	3.7	3510.55	1000	
23	Na	45	He	254.643	ppb	5.8	10956.31	200000	
24	Mg	45	He	99.427	ppb	9.6	1706.89	200000	
27	Al	45	He	1226.079	ppb	2.0	5463.45	200000	
28	Si	45	H2	605.430	ppb	8.8	4963.24	10000	
39	K	45	He	157.618	ppb	7.8	11764.57	200000	
40	Ca	45	H2	1920.245	ppb	1.3	145050.38	200000	
51	V	89	He	6.926	ppb	1.3	1371.22	1000	
52	Cr	89	He	2.769	ppb	2.8	600.57	2000	
55	Mn	89	He	16.165	ppb	1.6	1589.81	2000	
56	Fe	89	H2	554.233	ppb	0.5	180986.58	100000	
59	Co	89	He	0.283	ppb	21.0	106.68	1000	
60	Ni	89	He	0.992	ppb	25.3	137.78	1000	
63	Cu	89	He	3.657	ppb	13.4	1380.12	2000	
66	Zn	89	He	11.771	ppb	2.8	492.25	2000	
75	As	89	He	0.633	ppb	7.5	23.33	1000	
78	Se	89	H2	0.538	ppb	24.9	8.83	1000	
88	Sr	89	He	9.503	ppb	7.8	1392.35	2000	
95	Mo	89	He	-0.016	ppb	N/A	117.78	1000	
107	Ag	89	He	0.020	ppb	72.0	22.22	100	
111	Cd	89	He	0.137	ppb	21.6	11.48	1000	
118	Sn	159	He	43.063	ppb	3.1	7535.72	1000	
121	Sb	159	No Gas	0.265	ppb	8.0	517.26	1000	
137	Ba	159	No Gas	14.534	ppb	3.0	8999.77	2000	
182	W	159	No Gas	0.105	ppb	22.0	256.96	1000	
205	Tl	209	No Gas	0.088	ppb	59.0	276.98	1000	
208	Pb	209	No Gas	33.122	ppb	3.9	128628.99	2000	
232	Th	209	No Gas	2.302	ppb	15.1	9551.03	1000	
238	U	209	No Gas	0.321	ppb	7.1	1228.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1241963.87	2.0	1537409.87	80.78	29.5	120.4	
Sc	45	No Gas	3180311.42	2.2	3373253.08	94.28	29.5	120.4	
Sc	45	H2	372276.29	1.3	415670.69	89.56	29.5	120.4	
Sc	45	He	74627.11	0.6	81171.76	91.94	29.5	120.4	
Ge	72	No Gas	774044.96	2.3	779333.11	99.32	29.5	120.4	
Ge	72	H2	137064.41	0.7	153246.58	89.44	29.5	120.4	
Ge	72	He	59286.40	0.3	63135.03	93.9	29.5	120.4	
Y	89	H2	2499169.99	1.4	2642116.11	94.59	29.5	120.4	
Y	89	He	517652.88	0.6	544041.92	95.15	29.5	120.4	
Tb	159	No Gas	8731298.55	2.2	8117023.84	107.57	29.5	120.4	
Tb	159	He	2896511.10	0.3	2866479.19	101.05	29.5	120.4	
Bi	209	No Gas	4769582.80	2.1	4424692.92	107.79	29.5	120.4	

Sample Report

Sample Name SN5147-003

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:11:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.193	ppb	20.1	56.67	100	
11	B	6	No Gas	11.048	ppb	3.0	2303.59	1000	
23	Na	45	He	224.702	ppb	6.0	10318.51	200000	
24	Mg	45	He	134.843	ppb	0.7	2106.98	200000	
27	Al	45	He	1595.173	ppb	1.3	7081.99	200000	
28	Si	45	H2	744.382	ppb	6.6	5954.81	10000	
39	K	45	He	171.115	ppb	10.9	11877.97	200000	
40	Ca	45	H2	2606.403	ppb	1.4	193283.86	200000	
51	V	89	He	7.485	ppb	2.9	1461.24	1000	
52	Cr	89	He	5.576	ppb	7.8	1173.17	2000	
55	Mn	89	He	18.976	ppb	4.3	1860.46	2000	
56	Fe	89	H2	843.233	ppb	1.9	269521.39	100000	
59	Co	89	He	0.386	ppb	15.2	142.24	1000	
60	Ni	89	He	0.813	ppb	28.2	120.01	1000	
63	Cu	89	He	5.437	ppb	4.6	1851.30	2000	
66	Zn	89	He	16.737	ppb	6.7	672.26	2000	
75	As	89	He	0.790	ppb	25.5	28.00	1000	
78	Se	89	H2	0.412	ppb	24.8	6.83	1000	
88	Sr	89	He	12.152	ppb	4.8	1774.62	2000	
95	Mo	89	He	-0.142	ppb	N/A	96.67	1000	
107	Ag	89	He	0.030	ppb	58.5	27.78	100	
111	Cd	89	He	0.089	ppb	58.7	7.78	1000	
118	Sn	159	He	41.476	ppb	1.8	7285.57	1000	
121	Sb	159	No Gas	0.126	ppb	25.8	293.66	1000	
137	Ba	159	No Gas	16.851	ppb	2.8	10258.71	2000	
182	W	159	No Gas	0.003	ppb	658.0	126.81	1000	
205	Tl	209	No Gas	0.017	ppb	73.3	76.75	1000	
208	Pb	209	No Gas	23.920	ppb	3.6	92058.47	2000	
232	Th	209	No Gas	1.776	ppb	6.1	7320.37	1000	
238	U	209	No Gas	0.467	ppb	20.3	1765.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237410.94	1.0	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3135227.59	0.9	3373253.08	92.94	29.5	120.4	
Sc	45	H2	366633.49	0.8	415670.69	88.2	29.5	120.4	
Sc	45	He	74500.89	0.2	81171.76	91.78	29.5	120.4	
Ge	72	No Gas	761033.75	1.2	779333.11	97.65	29.5	120.4	
Ge	72	H2	137714.70	1.8	153246.58	89.86	29.5	120.4	
Ge	72	He	59124.92	0.5	63135.03	93.65	29.5	120.4	
Y	89	H2	2484762.62	0.8	2642116.11	94.04	29.5	120.4	
Y	89	He	516738.05	1.0	544041.92	94.98	29.5	120.4	
Tb	159	No Gas	8587056.47	0.4	8117023.84	105.79	29.5	120.4	
Tb	159	He	2906549.09	0.4	2866479.19	101.4	29.5	120.4	
Bi	209	No Gas	4722128.63	0.7	4424692.92	106.72	29.5	120.4	

Sample Report

Sample Name SN5147-004

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:14:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	52.8	44.44	100	
11	B	6	No Gas	11.053	ppb	3.4	2294.71	1000	
23	Na	45	He	208.057	ppb	10.3	9847.66	200000	
24	Mg	45	He	91.036	ppb	5.4	1589.08	200000	
27	Al	45	He	1199.430	ppb	3.2	5270.03	200000	
28	Si	45	H2	595.595	ppb	5.8	4776.27	10000	
39	K	45	He	121.216	ppb	42.1	11239.40	200000	
40	Ca	45	H2	1700.069	ppb	0.5	125834.44	200000	
51	V	89	He	7.055	ppb	2.6	1376.79	1000	
52	Cr	89	He	2.599	ppb	8.7	559.25	2000	
55	Mn	89	He	17.059	ppb	5.3	1657.13	2000	
56	Fe	89	H2	539.693	ppb	0.6	173945.78	100000	
59	Co	89	He	0.326	ppb	28.2	120.01	1000	
60	Ni	89	He	1.078	ppb	11.1	144.45	1000	
63	Cu	89	He	2.243	ppb	2.7	991.18	2000	
66	Zn	89	He	11.439	ppb	1.9	474.47	2000	
75	As	89	He	0.519	ppb	30.6	19.67	1000	
78	Se	89	H2	0.220	ppb	45.2	3.83	1000	
88	Sr	89	He	7.838	ppb	5.0	1135.64	2000	
95	Mo	89	He	-0.183	ppb	N/A	88.89	1000	
107	Ag	89	He	0.011	ppb	233.9	16.67	100	
111	Cd	89	He	0.035	ppb	64.1	3.70	1000	
118	Sn	159	He	41.414	ppb	1.8	7221.09	1000	
121	Sb	159	No Gas	0.089	ppb	45.4	236.93	1000	
137	Ba	159	No Gas	12.037	ppb	2.6	7370.32	2000	
182	W	159	No Gas	-0.025	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.009	ppb	60.0	53.39	1000	
208	Pb	209	No Gas	15.712	ppb	3.4	60576.92	2000	
232	Th	209	No Gas	0.976	ppb	4.6	4105.27	1000	
238	U	209	No Gas	0.260	ppb	11.8	984.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232509.16	1.1	1537409.87	80.17	29.5	120.4	
Sc	45	No Gas	3154436.36	0.8	3373253.08	93.51	29.5	120.4	
Sc	45	H2	364166.60	0.5	415670.69	87.61	29.5	120.4	
Sc	45	He	73592.16	1.8	81171.76	90.66	29.5	120.4	
Ge	72	No Gas	762148.62	2.0	779333.11	97.79	29.5	120.4	
Ge	72	H2	137239.02	1.2	153246.58	89.55	29.5	120.4	
Ge	72	He	58669.90	0.2	63135.03	92.93	29.5	120.4	
Y	89	H2	2463681.80	0.2	2642116.11	93.25	29.5	120.4	
Y	89	He	511665.45	0.9	544041.92	94.05	29.5	120.4	
Tb	159	No Gas	8631166.19	0.8	8117023.84	106.33	29.5	120.4	
Tb	159	He	2884912.11	0.7	2866479.19	100.64	29.5	120.4	
Bi	209	No Gas	4725597.04	0.9	4424692.92	106.8	29.5	120.4	

Sample Report

Sample Name SN5338-001

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:16:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.336	ppb	26.7	85.56	100	
11	B	6	No Gas	67.879	ppb	6.0	10137.21	1000	
23	Na	45	He	31909.450	ppb	0.9	632959.27	200000	
24	Mg	45	He	7882.549	ppb	0.7	85837.73	200000	
27	Al	45	He	10719.294	ppb	1.4	44962.64	200000	
28	Si	45	H2	2588.644	ppb	3.6	19164.40	10000	
39	K	45	He	12571.880	ppb	1.4	128130.65	200000	
40	Ca	45	H2	49813.917	ppb	2.5	3487400.68	200000	
51	V	89	He	22.173	ppb	2.3	3743.97	1000	
52	Cr	89	He	82.444	ppb	1.1	16235.05	2000	
55	Mn	89	He	2540.966	ppb	0.9	237997.66	2000	
56	Fe	89	H2	19945.213	ppb	2.5	5992286.82	100000	
59	Co	89	He	11.013	ppb	2.7	3674.11	1000	
60	Ni	89	He	75.093	ppb	2.5	7119.85	1000	
63	Cu	89	He	746.998	ppb	0.7	191484.86	2000	
66	Zn	89	He	1191.451	ppb	0.5	41811.33	2000	
75	As	89	He	12.792	ppb	3.4	370.72	1000	
78	Se	89	H2	5.143	ppb	6.2	77.33	1000	
88	Sr	89	He	331.786	ppb	1.5	46431.53	2000	
95	Mo	89	He	15.540	ppb	2.6	2612.57	1000	
107	Ag	89	He	6.410	ppb	0.5	3512.81	100	
111	Cd	89	He	1.670	ppb	13.1	122.60	1000	
118	Sn	159	He	67.057	ppb	2.3	11495.27	1000	
121	Sb	159	No Gas	5.373	ppb	7.9	8408.65	1000	
137	Ba	159	No Gas	669.669	ppb	4.6	407786.01	2000	
182	W	159	No Gas	6.836	ppb	2.5	8545.69	1000	
205	Tl	209	No Gas	0.144	ppb	18.4	443.83	1000	
208	Pb	209	No Gas	27.681	ppb	4.4	110852.50	2000	
232	Th	209	No Gas	0.922	ppb	10.4	4038.51	1000	
238	U	209	No Gas	3.575	ppb	4.6	14050.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1217613.96	3.5	1537409.87	79.2	29.5	120.4	
Sc	45	No Gas	3080593.06	3.4	3373253.08	91.32	29.5	120.4	
Sc	45	H2	349168.15	2.1	415670.69	84	29.5	120.4	
Sc	45	He	70781.15	0.6	81171.76	87.2	29.5	120.4	
Ge	72	No Gas	738350.55	3.3	779333.11	94.74	29.5	120.4	
Ge	72	H2	129632.45	2.1	153246.58	84.59	29.5	120.4	
Ge	72	He	55824.04	1.0	63135.03	88.42	29.5	120.4	
Y	89	H2	2405325.16	2.2	2642116.11	91.04	29.5	120.4	
Y	89	He	496781.27	0.5	544041.92	91.31	29.5	120.4	
Tb	159	No Gas	8611115.42	3.0	8117023.84	106.09	29.5	120.4	
Tb	159	He	2847233.60	0.2	2866479.19	99.33	29.5	120.4	
Bi	209	No Gas	4918635.44	3.0	4424692.92	111.16	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMS1
File Name	094_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:19:24 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.028	ppb	N/A	8.89	0.5	
B	11	6	No Gas	5.925	ppb	4.5	1537.92	10	
Na	23	45	He	169.531	ppb	0.6	8959.50	500	
Mg	24	45	He	4.801	ppb	87.5	611.17	50	
Al	27	45	He	10.743	ppb	31.4	91.11	50	
Si	28	45	H2	8.552	ppb	119.2	283.65	250	
K	39	45	He	81.057	ppb	37.7	10725.92	500	
Ca	40	45	H2	55.869	ppb	2.9	5607.99	50	PB 6020 Fails DoD
V	51	89	He	3.015	ppb	5.4	707.82	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.716	ppb	4.0	377.27	2.5	
Mn	55	89	He	1.801	ppb	6.8	183.97	1	PB 6020 Fails DoD
Fe	56	89	H2	16.434	ppb	8.1	12746.72	50	
Co	59	89	He	0.087	ppb	57.0	37.78	0.5	
Ni	60	89	He	0.364	ppb	38.3	74.45	1	
Cu	63	89	He	-0.013	ppb	N/A	393.36	1.5	
Zn	66	89	He	3.666	ppb	33.2	192.23	5	
As	75	89	He	0.352	ppb	61.4	14.67	2.5	
Se	78	89	H2	0.092	ppb	110.8	1.83	2.5	
Sr	88	89	He	0.151	ppb	50.2	27.78	2.5	
Mo	95	89	He	-0.537	ppb	N/A	30.00	2.5	
Ag	107	89	He	0.013	ppb	51.4	17.78	0.5	
Cd	111	89	He	0.001	ppb	1454.7	1.11	0.5	
Sn	118	159	He	38.763	ppb	1.0	6759.72	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.022	ppb	55.1	133.48	0.5	
Ba	137	159	No Gas	0.516	ppb	34.3	333.71	1	
W	182	159	No Gas	-0.055	ppb	N/A	56.73	2.5	
Tl	205	209	No Gas	-0.001	ppb	N/A	26.69	0.5	
Pb	208	209	No Gas	1.109	ppb	4.4	4448.63	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.010	ppb	37.7	220.25	2.5	
U	238	209	No Gas	0.002	ppb	273.6	10.01	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203951.21	2.7	1537409.87	78.31	29.5	120.4	
Sc	45	No Gas	3056469.72	2.7	3373253.08	90.61	29.5	120.4	
Sc	45	H2	351807.43	0.8	415670.69	84.64	29.5	120.4	
Sc	45	He	72741.94	0.8	81171.76	89.61	29.5	120.4	
Ge	72	No Gas	741077.59	2.4	779333.11	95.09	29.5	120.4	
Ge	72	H2	133519.32	0.5	153246.58	87.13	29.5	120.4	
Ge	72	He	58107.72	1.1	63135.03	92.04	29.5	120.4	
Y	89	H2	2399679.39	0.9	2642116.11	90.82	29.5	120.4	
Y	89	He	507212.40	0.6	544041.92	93.23	29.5	120.4	
Tb	159	No Gas	8595398.00	3.2	8117023.84	105.89	29.5	120.4	
Tb	159	He	2883396.10	0.6	2866479.19	100.59	29.5	120.4	
Bi	209	No Gas	4723541.92	3.3	4424692.92	106.75	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG09IMS1
File Name	095LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:22:01 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.498	ppb	4.9	10329.59	50	19.4	79.5	120.4	
B	11	6	No Gas	498.845	ppb	6.1	70442.99	500	19.95	79.5	120.4	
Na	23	45	He	7288.815	ppb	1.4	154430.58	7500	19.44	79.5	120.4	
Mg	24	45	He	5044.538	ppb	1.8	57241.78	5000	20.18	79.5	120.4	
Al	27	45	He	1796.902	ppb	1.7	7863.54	2000	17.97	79.5	120.4	
Si	28	45	H2	897.829	ppb	5.5	7019.59	1000	17.96	79.5	120.4	
K	39	45	He	9818.957	ppb	1.2	106105.78	10000	19.64	79.5	120.4	
Ca	40	45	H2	2531.927	ppb	1.8	184916.18	2500	20.26	79.5	120.4	
V	51	89	He	473.961	ppb	0.7	77871.29	500	18.96	79.5	120.4	
Cr	52	89	He	194.968	ppb	0.6	39451.44	200	19.5	79.5	120.4	
Mn	55	89	He	480.825	ppb	0.2	46342.53	500	19.23	79.5	120.4	
Fe	56	89	H2	1041.575	ppb	2.3	325455.34	1000	20.83	79.5	120.4	
Co	59	89	He	498.666	ppb	0.3	170766.88	500	19.95	79.5	120.4	
Ni	60	89	He	477.536	ppb	0.8	46369.90	500	19.1	79.5	120.4	
Cu	63	89	He	246.023	ppb	0.8	65149.08	250	19.68	79.5	120.4	
Zn	66	89	He	484.382	ppb	1.1	17523.78	500	19.38	79.5	120.4	
As	75	89	He	99.642	ppb	2.7	2941.31	100	19.93	79.5	120.4	
Se	78	89	H2	98.869	ppb	2.0	1502.18	100	19.77	79.5	120.4	
Sr	88	89	He	487.054	ppb	1.3	70121.56	500	19.48	79.5	120.4	
Mo	95	89	He	101.686	ppb	1.4	16928.83	100	20.34	79.5	120.4	
Ag	107	89	He	52.709	ppb	0.6	29642.07	50	21.08	79.5	120.4	
Cd	111	89	He	252.060	ppb	0.9	18881.41	250	20.16	79.5	120.4	
Sn	118	159	He	500.678	ppb	1.5	87219.38	500	20.03	79.5	120.4	
Sb	121	159	No Gas	95.176	ppb	5.4	147890.88	100	19.04	79.5	120.4	
Ba	137	159	No Gas	1812.428	ppb	5.1	1107472.35	2000	18.12	79.5	120.4	
W	182	159	No Gas	97.518	ppb	6.0	120599.31	100	19.5	79.5	120.4	
Tl	205	209	No Gas	98.094	ppb	4.0	272261.56	100	19.62	79.5	120.4	
[Pb]	206	209	No Gas	99.184	ppb	4.8	94742.79	100	19.84	79.5	120.4	
[Pb]	207	209	No Gas	99.223	ppb	5.8	83066.09	100	19.84	79.5	120.4	
Pb	208	209	No Gas	98.930	ppb	5.4	379545.72	100	19.79	79.5	120.4	
Th	232	209	No Gas	95.433	ppb	6.8	383215.42	100	19.09	79.5	120.4	
U	238	209	No Gas	96.670	ppb	5.2	364340.30	100	19.33	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1227676.48	2.5	1537409.87	79.85	29.5	120.4	
Sc	45	No Gas	3107111.72	3.0	3373253.08	92.11	29.5	120.4	
Sc	45	H2	361051.84	2.3	415670.69	86.86	29.5	120.4	
Sc	45	He	73492.42	0.5	81171.76	90.54	29.5	120.4	
Ge	72	No Gas	753929.07	3.6	779333.11	96.74	29.5	120.4	
Ge	72	H2	134192.58	2.1	153246.58	87.57	29.5	120.4	
Ge	72	He	58609.05	0.3	63135.03	92.83	29.5	120.4	
Y	89	H2	2443654.77	2.2	2642116.11	92.49	29.5	120.4	
Y	89	He	511075.69	0.1	544041.92	93.94	29.5	120.4	
Tb	159	No Gas	8641302.65	2.8	8117023.84	106.46	29.5	120.4	
Tb	159	He	2908930.55	0.6	2866479.19	101.48	29.5	120.4	
Bi	209	No Gas	4719250.80	3.1	4424692.92	106.66	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	096_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:24:44 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.991	ppb	5.1	26852.24	25	99.96	89.8	110.2	
11	B	6	No Gas	25.986	ppb	5.9	19083.14	25	103.94	89.8	110.2	
23	Na	45	He	4975.934	ppb	0.4	517853.52	5000	99.52	89.8	110.2	
24	Mg	45	He	4851.297	ppb	0.6	275320.19	5000	97.03	89.8	110.2	
27	Al	45	He	471.530	ppb	3.4	10387.48	500	94.31	89.8	110.2	
28	Si	45	H2	484.354	ppb	3.4	18869.96	500	96.87	89.8	110.2	
39	K	45	He	4884.144	ppb	0.6	250994.36	5000	97.68	89.8	110.2	
40	Ca	45	H2	4946.521	ppb	1.0	1821175.98	5000	98.93	89.8	110.2	
51	V	89	He	23.779	ppb	1.7	19775.61	25	95.12	89.8	110.2	
52	Cr	89	He	24.365	ppb	1.2	24760.44	25	97.46	89.8	110.2	
55	Mn	89	He	24.458	ppb	0.9	11841.50	25	97.83	89.8	110.2	
56	Fe	89	H2	4875.729	ppb	0.3	7470338.04	5000	97.51	89.8	110.2	
59	Co	89	He	24.596	ppb	1.1	42286.26	25	98.38	89.8	110.2	
60	Ni	89	He	24.641	ppb	0.2	12040.02	25	98.56	89.8	110.2	
63	Cu	89	He	24.393	ppb	1.9	32627.74	25	97.57	89.8	110.2	
66	Zn	89	He	23.756	ppb	0.7	4360.83	25	95.02	89.8	110.2	
75	As	89	He	24.042	ppb	0.6	3561.52	25	96.17	89.8	110.2	
78	Se	89	H2	24.678	ppb	0.7	1882.37	25	98.71	89.8	110.2	
88	Sr	89	He	24.082	ppb	1.3	17408.24	25	96.33	89.8	110.2	
95	Mo	89	He	24.435	ppb	0.4	20395.79	25	97.74	89.8	110.2	
107	Ag	89	He	18.631	ppb	1.2	52586.86	25	74.52	89.8	110.2	> +/- 10%
111	Cd	89	He	24.745	ppb	0.6	9305.14	25	98.98	89.8	110.2	
118	Sn	159	He	22.960	ppb	0.4	19828.54	25	91.84	89.8	110.2	
121	Sb	159	No Gas	23.540	ppb	4.9	180203.60	25	94.16	89.8	110.2	
137	Ba	159	No Gas	24.053	ppb	4.5	72437.25	25	96.21	89.8	110.2	
182	W	159	No Gas	23.636	ppb	6.0	143975.27	25	94.54	89.8	110.2	
205	Tl	209	No Gas	23.817	ppb	5.6	325747.00	25	95.27	89.8	110.2	
208	Pb	209	No Gas	23.893	ppb	4.9	451889.69	25	95.57	89.8	110.2	
232	Th	209	No Gas	23.676	ppb	6.1	468671.53	25	94.7	89.8	110.2	
238	U	209	No Gas	23.815	ppb	5.9	442401.15	25	95.26	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239881.90	2.7	1537409.87	80.65	29.5	120.4	
Sc	45	No Gas	3170363.06	3.9	3373253.08	93.99	29.5	120.4	
Sc	45	H2	367010.98	1.4	415670.69	88.29	29.5	120.4	
Sc	45	He	74092.33	0.9	81171.76	91.28	29.5	120.4	
Ge	72	No Gas	751170.88	3.1	779333.11	96.39	29.5	120.4	
Ge	72	H2	136958.68	0.4	153246.58	89.37	29.5	120.4	
Ge	72	He	59244.68	0.8	63135.03	93.84	29.5	120.4	
Y	89	H2	2453147.49	0.3	2642116.11	92.85	29.5	120.4	
Y	89	He	513086.34	0.2	544041.92	94.31	29.5	120.4	
Tb	159	No Gas	8517648.55	3.9	8117023.84	104.94	29.5	120.4	
Tb	159	He	2875983.64	0.4	2866479.19	100.33	29.5	120.4	
Bi	209	No Gas	4653632.90	3.6	4424692.92	105.17	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	097_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:27:21 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	19.7	84.45	0.2	
11	B	6	No Gas	1.756	ppb	9.7	2043.55	4	
23	Na	45	He	34.825	ppb	13.0	9012.91	200	
24	Mg	45	He	-2.479	ppb	N/A	417.82	20	
27	Al	45	He	-1.251	ppb	N/A	17.78	20	
28	Si	45	H2	5.802	ppb	12.9	437.16	100	
39	K	45	He	6.840	ppb	8.9	10224.10	200	
40	Ca	45	H2	4.777	ppb	10.8	3376.09	20	
51	V	89	He	0.850	ppb	9.4	905.62	1	Failed DoD
52	Cr	89	He	0.100	ppb	12.4	132.64	1	
55	Mn	89	He	0.181	ppb	6.8	97.98	0.4	
56	Fe	89	H2	0.390	ppb	98.7	8418.50	20	
59	Co	89	He	0.008	ppb	120.8	22.22	0.2	
60	Ni	89	He	-0.042	ppb	N/A	18.89	0.4	
63	Cu	89	He	-0.007	ppb	N/A	386.69	0.6	
66	Zn	89	He	0.038	ppb	276.3	67.78	2	
75	As	89	He	0.071	ppb	23.8	14.67	1	
78	Se	89	H2	0.068	ppb	53.0	5.50	1	
88	Sr	89	He	0.013	ppb	90.1	15.56	1	
95	Mo	89	He	0.007	ppb	479.3	123.34	1	
107	Ag	89	He	0.007	ppb	9.5	28.89	0.2	
111	Cd	89	He	0.007	ppb	48.5	3.70	0.2	
118	Sn	159	He	0.369	ppb	16.9	390.02	1	
121	Sb	159	No Gas	0.046	ppb	37.7	457.19	0.2	
137	Ba	159	No Gas	0.149	ppb	114.4	477.25	0.4	
182	W	159	No Gas	0.135	ppb	36.0	967.79	1	
205	Tl	209	No Gas	0.043	ppb	68.2	630.75	0.2	
208	Pb	209	No Gas	0.351	ppb	14.5	6971.98	0.2	Fail All Methods□ Failed DoD
232	Th	209	No Gas	0.212	ppb	21.2	4485.89	1	
238	U	209	No Gas	0.040	ppb	74.9	757.60	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273165.02	2.8	1537409.87	82.81	29.5	120.4	
Sc	45	No Gas	3132308.21	2.2	3373253.08	92.86	29.5	120.4	
Sc	45	H2	354378.36	1.3	415670.69	85.25	29.5	120.4	
Sc	45	He	72404.79	0.9	81171.76	89.2	29.5	120.4	
Ge	72	No Gas	750879.42	2.6	779333.11	96.35	29.5	120.4	
Ge	72	H2	131369.37	0.9	153246.58	85.72	29.5	120.4	
Ge	72	He	57093.14	0.6	63135.03	90.43	29.5	120.4	
Y	89	H2	2402799.12	1.2	2642116.11	90.94	29.5	120.4	
Y	89	He	505359.59	0.7	544041.92	92.89	29.5	120.4	
Tb	159	No Gas	8710999.87	2.1	8117023.84	107.32	29.5	120.4	
Tb	159	He	2882796.28	0.2	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4754062.64	2.5	4424692.92	107.44	29.5	120.4	

Sample Report

Sample Name SN5233-006

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:30:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.009	ppb	5.9	1054.52	100	
11	B	6	No Gas	161.023	ppb	5.1	22690.71	1000	
23	Na	45	He	45315.959	ppb	1.5	915279.04	200000	
24	Mg	45	He	55802.569	ppb	1.2	616949.84	200000	
27	Al	45	He	86090.173	ppb	1.0	368331.21	200000	
28	Si	45	H2	2196.638	ppb	3.8	16421.33	10000	
39	K	45	He	25933.397	ppb	1.0	259324.48	200000	
40	Ca	45	H2	60267.586	ppb	1.1	4249687.72	200000	
51	V	89	He	265.022	ppb	0.7	44533.65	1000	
52	Cr	89	He	506.043	ppb	0.2	104442.11	2000	
55	Mn	89	He	1831.460	ppb	0.5	180100.83	2000	
56	Fe	89	H2	147942.363	ppb	1.1	45857050.02	100000	
59	Co	89	He	51.554	ppb	1.7	18023.97	1000	
60	Ni	89	He	144.723	ppb	1.3	14368.95	1000	
63	Cu	89	He	815.661	ppb	0.5	219476.48	2000	
66	Zn	89	He	1100.831	ppb	0.7	40561.05	2000	
75	As	89	He	43.800	ppb	3.7	1321.87	1000	
78	Se	89	H2	2.819	ppb	7.7	44.00	1000	
88	Sr	89	He	296.709	ppb	0.9	43596.48	2000	
95	Mo	89	He	14.944	ppb	2.7	2642.57	1000	
107	Ag	89	He	6.620	ppb	4.1	3808.45	100	
111	Cd	89	He	7.894	ppb	2.2	604.47	1000	
118	Sn	159	He	74.792	ppb	2.5	12893.27	1000	
121	Sb	159	No Gas	0.617	ppb	9.8	1051.21	1000	
137	Ba	159	No Gas	335.474	ppb	4.8	203858.65	2000	
182	W	159	No Gas	1.207	ppb	11.6	1605.25	1000	
205	Tl	209	No Gas	2.220	ppb	7.5	6088.27	1000	
208	Pb	209	No Gas	432.527	ppb	4.4	1632946.26	2000	
232	Th	209	No Gas	43.791	ppb	6.8	173187.13	1000	
238	U	209	No Gas	12.034	ppb	3.8	44656.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1198278.67	2.2	1537409.87	77.94	29.5	120.4	
Sc	45	No Gas	3082313.30	2.4	3373253.08	91.38	29.5	120.4	
Sc	45	H2	351642.49	1.3	415670.69	84.6	29.5	120.4	
Sc	45	He	72258.55	1.1	81171.76	89.02	29.5	120.4	
Ge	72	No Gas	738010.92	2.5	779333.11	94.7	29.5	120.4	
Ge	72	H2	130969.85	1.5	153246.58	85.46	29.5	120.4	
Ge	72	He	57286.91	0.4	63135.03	90.74	29.5	120.4	
Y	89	H2	2483749.21	0.6	2642116.11	94.01	29.5	120.4	
Y	89	He	521550.04	0.3	544041.92	95.87	29.5	120.4	
Tb	159	No Gas	8590704.32	2.1	8117023.84	105.84	29.5	120.4	
Tb	159	He	2864797.01	0.5	2866479.19	99.94	29.5	120.4	
Bi	209	No Gas	4644210.04	2.5	4424692.92	104.96	29.5	120.4	

Sample Report

Sample Name SN5233-007

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:32:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.254	ppb	11.6	906.73	100	
11	B	6	No Gas	169.188	ppb	4.0	24037.25	1000	
23	Na	45	He	54949.746	ppb	0.6	1184631.56	200000	
24	Mg	45	He	43231.792	ppb	1.5	510823.56	200000	
27	Al	45	He	77491.811	ppb	1.3	354238.14	200000	
28	Si	45	H2	2141.456	ppb	2.4	16929.02	10000	
39	K	45	He	24656.077	ppb	1.5	263945.96	200000	
40	Ca	45	H2	17909.287	ppb	0.6	1336536.11	200000	
51	V	89	He	215.015	ppb	0.4	38062.26	1000	
52	Cr	89	He	271.078	ppb	0.3	58885.78	2000	
55	Mn	89	He	1503.303	ppb	0.6	155558.30	2000	
56	Fe	89	H2	125571.356	ppb	1.4	40191825.41	100000	
59	Co	89	He	45.110	ppb	0.8	16595.32	1000	
60	Ni	89	He	111.273	ppb	0.7	11635.21	1000	
63	Cu	89	He	499.563	ppb	0.7	141606.20	2000	
66	Zn	89	He	704.868	ppb	1.3	27351.96	2000	
75	As	89	He	37.137	ppb	2.2	1180.18	1000	
78	Se	89	H2	3.032	ppb	12.1	48.83	1000	
88	Sr	89	He	167.198	ppb	0.6	25851.71	2000	
95	Mo	89	He	27.661	ppb	1.8	5037.77	1000	
107	Ag	89	He	3.353	ppb	5.4	2035.78	100	
111	Cd	89	He	3.040	ppb	9.8	245.56	1000	
118	Sn	159	He	53.979	ppb	2.3	9613.74	1000	
121	Sb	159	No Gas	0.419	ppb	5.4	744.18	1000	
137	Ba	159	No Gas	255.731	ppb	1.2	155001.90	2000	
182	W	159	No Gas	0.844	ppb	5.9	1158.01	1000	
205	Tl	209	No Gas	1.977	ppb	5.6	5367.14	1000	
208	Pb	209	No Gas	193.078	ppb	2.3	720738.86	2000	
232	Th	209	No Gas	37.520	ppb	1.2	146774.04	1000	
238	U	209	No Gas	17.807	ppb	1.2	65315.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1209118.40	0.2	1537409.87	78.65	29.5	120.4	
Sc	45	No Gas	3141483.17	0.9	3373253.08	93.13	29.5	120.4	
Sc	45	H2	371804.10	0.6	415670.69	89.45	29.5	120.4	
Sc	45	He	77200.80	0.3	81171.76	95.11	29.5	120.4	
Ge	72	No Gas	746122.75	0.8	779333.11	95.74	29.5	120.4	
Ge	72	H2	134311.26	0.7	153246.58	87.64	29.5	120.4	
Ge	72	He	60528.68	0.3	63135.03	95.87	29.5	120.4	
Y	89	H2	2564823.38	1.0	2642116.11	97.07	29.5	120.4	
Y	89	He	548786.25	0.7	544041.92	100.87	29.5	120.4	
Tb	159	No Gas	8562399.39	0.8	8117023.84	105.49	29.5	120.4	
Tb	159	He	2953475.62	0.6	2866479.19	103.03	29.5	120.4	
Bi	209	No Gas	4587829.23	0.5	4424692.92	103.69	29.5	120.4	

Sample Report

Sample Name SN5233-008

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:35:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.334	ppb	8.7	1174.53	100	
11	B	6	No Gas	226.653	ppb	6.2	33134.36	1000	
23	Na	45	He	58344.182	ppb	1.6	1271871.40	200000	
24	Mg	45	He	59246.178	ppb	1.6	707863.85	200000	
27	Al	45	He	107052.822	ppb	1.7	494964.74	200000	
28	Si	45	H2	2336.497	ppb	0.9	18937.08	10000	
39	K	45	He	31526.389	ppb	1.8	338389.47	200000	
40	Ca	45	H2	38853.557	ppb	0.5	2974078.74	200000	
51	V	89	He	302.666	ppb	0.7	54451.57	1000	
52	Cr	89	He	711.673	ppb	0.5	157331.46	2000	
55	Mn	89	He	2437.270	ppb	0.7	256744.97	2000	
56	Fe	89	H2	184756.334	ppb	0.4	61479967.39	100000	
59	Co	89	He	62.212	ppb	2.7	23296.49	1000	
60	Ni	89	He	180.022	ppb	1.8	19135.84	1000	
63	Cu	89	He	1046.455	ppb	0.7	301514.86	2000	
66	Zn	89	He	1341.909	ppb	1.7	52950.15	2000	
75	As	89	He	64.503	ppb	1.7	2083.38	1000	
78	Se	89	H2	3.790	ppb	6.3	63.33	1000	
88	Sr	89	He	329.801	ppb	0.6	51910.94	2000	
95	Mo	89	He	12.039	ppb	0.1	2305.83	1000	
107	Ag	89	He	7.805	ppb	2.1	4808.81	100	
111	Cd	89	He	8.530	ppb	2.0	699.66	1000	
118	Sn	159	He	93.822	ppb	2.0	16590.78	1000	
121	Sb	159	No Gas	0.645	ppb	12.9	1124.63	1000	
137	Ba	159	No Gas	424.080	ppb	6.0	264209.75	2000	
182	W	159	No Gas	1.555	ppb	16.6	2082.53	1000	
205	Tl	209	No Gas	2.450	ppb	11.2	6799.40	1000	
208	Pb	209	No Gas	619.494	ppb	6.2	2369641.50	2000	
232	Th	209	No Gas	47.623	ppb	7.6	190834.23	1000	
238	U	209	No Gas	11.902	ppb	8.5	44719.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255653.85	3.6	1537409.87	81.67	29.5	120.4	
Sc	45	No Gas	3342413.83	3.1	3373253.08	99.09	29.5	120.4	
Sc	45	H2	381605.82	1.2	415670.69	91.8	29.5	120.4	
Sc	45	He	78098.08	1.6	81171.76	96.21	29.5	120.4	
Ge	72	No Gas	782912.89	3.7	779333.11	100.46	29.5	120.4	
Ge	72	H2	140176.48	1.9	153246.58	91.47	29.5	120.4	
Ge	72	He	61103.81	1.1	63135.03	96.78	29.5	120.4	
Y	89	H2	2666422.68	0.5	2642116.11	100.92	29.5	120.4	
Y	89	He	558717.59	0.6	544041.92	102.7	29.5	120.4	
Tb	159	No Gas	8813096.53	3.3	8117023.84	108.58	29.5	120.4	
Tb	159	He	2942515.41	1.1	2866479.19	102.65	29.5	120.4	
Bi	209	No Gas	4709402.93	3.8	4424692.92	106.43	29.5	120.4	

Sample Report

Sample Name SN5233-009

File Name 101SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:38:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.609	ppb	4.7	788.94	100	
11	B	6	No Gas	136.190	ppb	3.1	19936.52	1000	
23	Na	45	He	39838.616	ppb	0.7	871097.17	200000	
24	Mg	45	He	38922.133	ppb	0.9	465639.37	200000	
27	Al	45	He	65719.370	ppb	0.9	304142.83	200000	
28	Si	45	H2	1475.029	ppb	1.2	12176.01	10000	
39	K	45	He	19033.648	ppb	1.0	208710.93	200000	
40	Ca	45	H2	29070.198	ppb	0.9	2249965.44	200000	
51	V	89	He	200.334	ppb	1.0	35770.73	1000	
52	Cr	89	He	158.054	ppb	0.5	34632.63	2000	
55	Mn	89	He	1602.338	ppb	0.8	167164.38	2000	
56	Fe	89	H2	123103.083	ppb	0.8	40656591.41	100000	
59	Co	89	He	40.018	ppb	3.2	14842.30	1000	
60	Ni	89	He	85.477	ppb	1.1	9022.09	1000	
63	Cu	89	He	108.755	ppb	0.7	31420.59	2000	
66	Zn	89	He	308.601	ppb	1.5	12112.39	2000	
75	As	89	He	37.330	ppb	2.1	1196.19	1000	
78	Se	89	H2	1.996	ppb	4.9	33.33	1000	
88	Sr	89	He	182.026	ppb	1.6	28379.02	2000	
95	Mo	89	He	41.688	ppb	2.1	7589.02	1000	
107	Ag	89	He	0.590	ppb	10.1	370.02	100	
111	Cd	89	He	1.064	ppb	7.4	87.41	1000	
118	Sn	159	He	43.498	ppb	3.9	7781.40	1000	
121	Sb	159	No Gas	0.190	ppb	18.9	400.46	1000	
137	Ba	159	No Gas	180.491	ppb	4.4	111592.72	2000	
182	W	159	No Gas	0.367	ppb	23.2	584.00	1000	
205	Tl	209	No Gas	1.030	ppb	3.4	2886.90	1000	
208	Pb	209	No Gas	55.009	ppb	4.0	211069.03	2000	
232	Th	209	No Gas	25.713	ppb	5.5	103358.01	1000	
238	U	209	No Gas	18.642	ppb	5.7	70218.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237409.15	2.6	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3325545.46	2.1	3373253.08	98.59	29.5	120.4	
Sc	45	H2	385799.03	0.5	415670.69	92.81	29.5	120.4	
Sc	45	He	78154.92	0.6	81171.76	96.28	29.5	120.4	
Ge	72	No Gas	789092.23	2.7	779333.11	101.25	29.5	120.4	
Ge	72	H2	141439.47	1.8	153246.58	92.3	29.5	120.4	
Ge	72	He	61876.82	0.9	63135.03	98.01	29.5	120.4	
Y	89	H2	2646312.91	0.6	2642116.11	100.16	29.5	120.4	
Y	89	He	553327.39	1.0	544041.92	101.71	29.5	120.4	
Tb	159	No Gas	8740241.61	2.5	8117023.84	107.68	29.5	120.4	
Tb	159	He	2961619.33	0.5	2866479.19	103.32	29.5	120.4	
Bi	209	No Gas	4716047.86	2.7	4424692.92	106.58	29.5	120.4	

Sample Report

Sample Name SN5423-001

File Name 102SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:40:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.558	ppb	26.0	136.67	100	
11	B	6	No Gas	27.735	ppb	6.4	4697.60	1000	
23	Na	45	He	1451.821	ppb	2.2	36851.66	200000	
24	Mg	45	He	4507.399	ppb	1.6	53543.27	200000	
27	Al	45	He	8593.446	ppb	0.4	39147.68	200000	
28	Si	45	H2	2596.565	ppb	2.4	20741.50	10000	
39	K	45	He	4151.784	ppb	1.9	52975.45	200000	
40	Ca	45	H2	24565.334	ppb	0.3	1856249.36	200000	
51	V	89	He	18.072	ppb	2.0	3314.98	1000	
52	Cr	89	He	51.051	ppb	1.6	10793.52	2000	
55	Mn	89	He	2406.813	ppb	1.7	241757.47	2000	
56	Fe	89	H2	32202.015	ppb	0.5	10247696.61	100000	
59	Co	89	He	8.425	ppb	1.7	3016.10	1000	
60	Ni	89	He	33.380	ppb	5.8	3416.11	1000	
63	Cu	89	He	1131.494	ppb	1.6	310834.74	2000	
66	Zn	89	He	3113.534	ppb	1.3	117069.68	2000	
75	As	89	He	12.936	ppb	5.1	402.05	1000	
78	Se	89	H2	10.848	ppb	3.1	172.32	1000	
88	Sr	89	He	159.176	ppb	1.7	23892.60	2000	
95	Mo	89	He	17.720	ppb	1.1	3178.27	1000	
107	Ag	89	He	10.058	ppb	4.4	5904.84	100	
111	Cd	89	He	9.896	ppb	2.7	773.73	1000	
118	Sn	159	He	119.754	ppb	0.6	21362.01	1000	
121	Sb	159	No Gas	4.700	ppb	4.8	7557.22	1000	
137	Ba	159	No Gas	383.595	ppb	4.9	239418.80	2000	
182	W	159	No Gas	4.533	ppb	3.6	5851.15	1000	
205	Tl	209	No Gas	0.231	ppb	18.4	724.16	1000	
208	Pb	209	No Gas	42.420	ppb	4.7	176687.85	2000	
232	Th	209	No Gas	0.427	ppb	24.0	2059.20	1000	
238	U	209	No Gas	4.241	ppb	3.6	17351.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1249693.69	2.9	1537409.87	81.29	29.5	120.4	
Sc	45	No Gas	3317093.51	2.9	3373253.08	98.34	29.5	120.4	
Sc	45	H2	376594.82	1.2	415670.69	90.6	29.5	120.4	
Sc	45	He	76851.31	0.7	81171.76	94.68	29.5	120.4	
Ge	72	No Gas	787820.86	2.8	779333.11	101.09	29.5	120.4	
Ge	72	H2	139481.72	0.9	153246.58	91.02	29.5	120.4	
Ge	72	He	60331.98	0.9	63135.03	95.56	29.5	120.4	
Y	89	H2	2548313.72	0.6	2642116.11	96.45	29.5	120.4	
Y	89	He	532808.79	1.2	544041.92	97.94	29.5	120.4	
Tb	159	No Gas	8824085.01	2.2	8117023.84	108.71	29.5	120.4	
Tb	159	He	2970757.35	1.1	2866479.19	103.64	29.5	120.4	
Bi	209	No Gas	5118349.06	2.4	4424692.92	115.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMW1
File Name	103_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:43:31 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.066	ppb	135.3	28.89	0.5	
B	11	6	No Gas	3.777	ppb	4.8	1254.54	10	
Na	23	45	He	121.650	ppb	13.7	8241.59	500	
Mg	24	45	He	-3.063	ppb	N/A	540.05	50	
Al	27	45	He	15.073	ppb	54.8	113.34	50	
Si	28	45	H2	22.492	ppb	58.6	410.46	250	
K	39	45	He	43.904	ppb	78.5	10685.92	500	
Ca	40	45	H2	24.056	ppb	3.9	3573.90	50	
V	51	89	He	3.925	ppb	5.0	885.62	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.317	ppb	24.1	99.98	2.5	
Mn	55	89	He	4.544	ppb	9.9	461.93	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	24.995	ppb	4.2	16117.11	50	
Co	59	89	He	0.014	ppb	242.3	13.34	0.5	
Ni	60	89	He	-0.119	ppb	N/A	28.89	1	
Cu	63	89	He	-0.430	ppb	N/A	294.46	1.5	
Zn	66	89	He	2.223	ppb	26.4	145.56	5	
As	75	89	He	0.247	ppb	45.9	12.00	2.5	
Se	78	89	H2	0.023	ppb	214.4	0.83	2.5	
Sr	88	89	He	0.084	ppb	15.0	18.89	2.5	
Mo	95	89	He	-0.615	ppb	N/A	17.78	2.5	
Ag	107	89	He	0.001	ppb	2627.7	11.11	0.5	
Cd	111	89	He	-0.009	ppb	N/A	0.37	0.5	
Sn	118	159	He	0.477	ppb	40.2	156.67	2.5	
Sb	121	159	No Gas	0.028	ppb	143.4	143.49	0.5	
Ba	137	159	No Gas	0.389	ppb	13.2	256.96	1	
W	182	159	No Gas	-0.044	ppb	N/A	70.08	2.5	
Tl	205	209	No Gas	-0.003	ppb	N/A	20.02	0.5	
Pb	208	209	No Gas	0.609	ppb	1.8	2522.92	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.010	ppb	57.1	216.92	2.5	
U	238	209	No Gas	0.006	ppb	162.5	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1214667.40	2.7	1537409.87	79.01	29.5	120.4	
Sc	45	No Gas	3195988.77	2.6	3373253.08	94.75	29.5	120.4	
Sc	45	H2	373693.77	0.5	415670.69	89.9	29.5	120.4	
Sc	45	He	74995.12	1.1	81171.76	92.39	29.5	120.4	
Ge	72	No Gas	761028.76	3.5	779333.11	97.65	29.5	120.4	
Ge	72	H2	139070.56	1.2	153246.58	90.75	29.5	120.4	
Ge	72	He	59816.45	0.8	63135.03	94.74	29.5	120.4	
Y	89	H2	2525858.24	0.2	2642116.11	95.6	29.5	120.4	
Y	89	He	524979.06	0.6	544041.92	96.5	29.5	120.4	
Tb	159	No Gas	8673821.33	2.7	8117023.84	106.86	29.5	120.4	
Tb	159	He	2937914.96	0.6	2866479.19	102.49	29.5	120.4	
Bi	209	No Gas	4707043.86	2.4	4424692.92	106.38	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG09IMW1
File Name	104LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:46:14 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.203	ppb	1.5	10859.97	50	20.08	79.5	120.4	
B	11	6	No Gas	514.366	ppb	1.3	73760.41	500	20.57	79.5	120.4	
Na	23	45	He	7550.210	ppb	0.6	164128.88	7500	20.13	79.5	120.4	
Mg	24	45	He	5254.507	ppb	2.8	61216.10	5000	21.02	79.5	120.4	
Al	27	45	He	1806.153	ppb	0.5	8119.25	2000	18.06	79.5	120.4	
Si	28	45	H2	1138.560	ppb	16.1	8695.69	1000	22.77	0	200	
K	39	45	He	10372.176	ppb	0.2	114558.55	10000	20.74	79.5	120.4	
Ca	40	45	H2	2855.638	ppb	13.0	205177.03	2500	22.85	79.5	120.4	
V	51	89	He	497.012	ppb	0.7	83479.62	500	19.88	79.5	120.4	
Cr	52	89	He	203.497	ppb	0.4	42097.85	200	20.35	79.5	120.4	
Mn	55	89	He	494.917	ppb	0.7	48767.55	500	19.8	79.5	120.4	
Fe	56	89	H2	1128.043	ppb	14.4	343597.77	1000	22.56	79.5	120.4	
Co	59	89	He	520.061	ppb	1.0	182076.89	500	20.8	79.5	120.4	
Ni	60	89	He	496.018	ppb	0.6	49242.97	500	19.84	79.5	120.4	
Cu	63	89	He	257.507	ppb	1.0	69697.40	250	20.6	79.5	120.4	
Zn	66	89	He	502.697	ppb	1.2	18591.87	500	20.11	79.5	120.4	
As	75	89	He	106.481	ppb	2.1	3213.06	100	21.3	79.5	120.4	
Se	78	89	H2	110.425	ppb	14.1	1638.36	100	22.08	79.5	120.4	
Sr	88	89	He	510.113	ppb	0.8	75089.50	500	20.4	79.5	120.4	
Mo	95	89	He	105.750	ppb	1.7	17994.62	100	21.15	79.5	120.4	
Ag	107	89	He	54.612	ppb	1.1	31399.27	50	21.84	79.5	120.4	
Cd	111	89	He	267.651	ppb	1.2	20497.45	250	21.41	79.5	120.4	
Sn	118	159	He	486.944	ppb	0.7	85852.63	500	19.48	79.5	120.4	
Sb	121	159	No Gas	101.652	ppb	1.1	159750.05	100	20.33	79.5	120.4	
Ba	137	159	No Gas	1901.567	ppb	0.8	1175181.56	2000	19.02	79.5	120.4	
W	182	159	No Gas	100.865	ppb	0.7	126189.71	100	20.17	79.5	120.4	
Tl	205	209	No Gas	104.110	ppb	0.7	290176.76	100	20.82	79.5	120.4	
[Pb]	206	209	No Gas	106.364	ppb	1.0	102035.98	100	21.27	79.5	120.4	
[Pb]	207	209	No Gas	106.734	ppb	1.7	89757.07	100	21.35	79.5	120.4	
Pb	208	209	No Gas	105.699	ppb	1.0	407286.48	100	21.14	79.5	120.4	
Th	232	209	No Gas	98.991	ppb	0.9	399433.15	100	19.8	79.5	120.4	
U	238	209	No Gas	100.179	ppb	0.6	379266.60	100	20.04	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1245791.17	1.0	1537409.87	81.03	29.5	120.4	
Sc	45	No Gas	3228275.77	1.4	3373253.08	95.7	29.5	120.4	
Sc	45	H2	358627.32	10.2	415670.69	86.28	29.5	120.4	
Sc	45	He	75493.20	0.7	81171.76	93	29.5	120.4	
Ge	72	No Gas	774313.09	2.0	779333.11	99.36	29.5	120.4	
Ge	72	H2	133529.63	10.3	153246.58	87.13	29.5	120.4	
Ge	72	He	59958.52	0.8	63135.03	94.97	29.5	120.4	
Y	89	H2	2410116.15	10.8	2642116.11	91.22	29.5	120.4	
Y	89	He	522523.30	0.7	544041.92	96.04	29.5	120.4	
Tb	159	No Gas	8732300.70	1.7	8117023.84	107.58	29.5	120.4	
Tb	159	He	2944033.91	1.3	2866479.19	102.71	29.5	120.4	
Bi	209	No Gas	4735286.32	1.5	4424692.92	107.02	29.5	120.4	

Sample Report

Sample Name SN5494-003

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:48:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.169	ppb	33.2	47.78	100	
11	B	6	No Gas	358.973	ppb	1.0	47814.28	1000	
23	Na	45	He	127461.465	ppb	4.8	2504229.25	200000	
24	Mg	45	He	32840.028	ppb	4.8	354758.74	200000	
27	Al	45	He	21.931	ppb	30.0	135.56	200000	
28	Si	45	H2	10478.582	ppb	1.0	77306.95	10000	
39	K	45	He	9331.543	ppb	6.1	97274.17	200000	
40	Ca	45	H2	166096.423	ppb	0.7	11681394.13	200000	
51	V	89	He	0.957	ppb	10.2	365.57	1000	
52	Cr	89	He	0.672	ppb	15.8	163.97	2000	
55	Mn	89	He	6509.029	ppb	3.9	608947.56	2000	
56	Fe	89	H2	35148.851	ppb	0.9	10642865.20	100000	
59	Co	89	He	15.874	ppb	3.8	5285.85	1000	
60	Ni	89	He	20.209	ppb	7.2	1941.32	1000	
63	Cu	89	He	0.251	ppb	49.9	452.25	2000	
66	Zn	89	He	8.034	ppb	6.8	341.13	2000	
75	As	89	He	54.979	ppb	6.4	1576.93	1000	
78	Se	89	H2	0.323	ppb	38.3	5.33	1000	
88	Sr	89	He	948.694	ppb	4.1	132601.86	2000	
95	Mo	89	He	6.464	ppb	1.8	1153.43	1000	
107	Ag	89	He	0.024	ppb	108.9	23.33	100	
111	Cd	89	He	0.073	ppb	46.6	6.30	1000	
118	Sn	159	He	1.151	ppb	20.7	267.79	1000	
121	Sb	159	No Gas	0.223	ppb	23.3	437.16	1000	
137	Ba	159	No Gas	70.088	ppb	1.0	42083.27	2000	
182	W	159	No Gas	0.386	ppb	2.7	590.68	1000	
205	Tl	209	No Gas	0.118	ppb	29.9	340.39	1000	
208	Pb	209	No Gas	0.542	ppb	5.7	2169.17	2000	
232	Th	209	No Gas	1.198	ppb	35.8	4759.66	1000	
238	U	209	No Gas	16.108	ppb	1.9	58025.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1152183.73	1.0	1537409.87	74.94	29.5	120.4	
Sc	45	No Gas	3016039.14	1.2	3373253.08	89.41	29.5	120.4	
Sc	45	H2	350800.34	0.9	415670.69	84.39	29.5	120.4	
Sc	45	He	70631.71	3.5	81171.76	87.02	29.5	120.4	
Ge	72	No Gas	727888.11	0.3	779333.11	93.4	29.5	120.4	
Ge	72	H2	130689.75	1.5	153246.58	85.28	29.5	120.4	
Ge	72	He	56630.40	1.8	63135.03	89.7	29.5	120.4	
Y	89	H2	2424945.25	0.8	2642116.11	91.78	29.5	120.4	
Y	89	He	496545.89	2.7	544041.92	91.27	29.5	120.4	
Tb	159	No Gas	8479423.76	1.4	8117023.84	104.46	29.5	120.4	
Tb	159	He	2865531.48	2.6	2866479.19	99.97	29.5	120.4	
Bi	209	No Gas	4505097.39	0.8	4424692.92	101.82	29.5	120.4	

Sample Report

Sample Name SN5494-004

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:51:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.176	ppb	69.7	50.00	100	
11	B	6	No Gas	173.829	ppb	5.6	23661.21	1000	
23	Na	45	He	104883.696	ppb	4.1	2061738.18	200000	
24	Mg	45	He	32436.067	ppb	4.6	350395.53	200000	
27	Al	45	He	0.800	ppb	241.5	46.67	200000	
28	Si	45	H2	10511.150	ppb	0.9	77097.03	10000	
39	K	45	He	6270.797	ppb	5.0	68542.84	200000	
40	Ca	45	H2	195428.768	ppb	0.6	13664678.27	200000	
51	V	89	He	0.792	ppb	28.6	338.91	1000	
52	Cr	89	He	0.552	ppb	30.3	140.64	2000	
55	Mn	89	He	11421.242	ppb	4.2	1067722.43	2000	>LDR
56	Fe	89	H2	28429.050	ppb	0.4	8558879.20	100000	
59	Co	89	He	14.675	ppb	6.9	4881.19	1000	
60	Ni	89	He	11.118	ppb	14.3	1083.42	1000	
63	Cu	89	He	-0.282	ppb	N/A	316.68	2000	
66	Zn	89	He	2.718	ppb	32.6	154.45	2000	
75	As	89	He	47.515	ppb	5.1	1362.89	1000	
78	Se	89	H2	0.170	ppb	70.5	3.00	1000	
88	Sr	89	He	897.687	ppb	4.5	125379.37	2000	
95	Mo	89	He	13.681	ppb	2.7	2310.29	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.042	ppb	53.7	4.07	1000	
118	Sn	159	He	0.730	ppb	15.2	196.68	1000	
121	Sb	159	No Gas	0.135	ppb	6.5	310.36	1000	
137	Ba	159	No Gas	53.874	ppb	2.0	33017.94	2000	
182	W	159	No Gas	0.002	ppb	1083.5	126.81	1000	
205	Tl	209	No Gas	0.020	ppb	84.0	83.42	1000	
208	Pb	209	No Gas	0.453	ppb	12.2	1888.84	2000	
232	Th	209	No Gas	0.049	ppb	55.7	367.09	1000	
238	U	209	No Gas	31.074	ppb	4.5	114749.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1160296.09	2.1	1537409.87	75.47	29.5	120.4	
Sc	45	No Gas	3050395.24	1.9	3373253.08	90.43	29.5	120.4	
Sc	45	H2	348766.48	0.4	415670.69	83.9	29.5	120.4	
Sc	45	He	70616.17	3.0	81171.76	87	29.5	120.4	
Ge	72	No Gas	740900.16	2.7	779333.11	95.07	29.5	120.4	
Ge	72	H2	132337.05	1.4	153246.58	86.36	29.5	120.4	
Ge	72	He	56782.54	1.9	63135.03	89.94	29.5	120.4	
Y	89	H2	2410565.45	0.5	2642116.11	91.24	29.5	120.4	
Y	89	He	496229.16	2.8	544041.92	91.21	29.5	120.4	
Tb	159	No Gas	8656457.58	2.1	8117023.84	106.65	29.5	120.4	
Tb	159	He	2874202.49	2.7	2866479.19	100.27	29.5	120.4	
Bi	209	No Gas	4621923.85	2.3	4424692.92	104.46	29.5	120.4	

Sample Report

Sample Name SN5494-005

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:54:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.067	ppb	12.7	27.78	100	
11	B	6	No Gas	26.063	ppb	2.2	4159.62	1000	
23	Na	45	He	9340.861	ppb	4.0	191897.23	200000	
24	Mg	45	He	10351.800	ppb	5.1	114192.89	200000	
27	Al	45	He	-0.094	ppb	N/A	43.33	200000	
28	Si	45	H2	7762.921	ppb	0.6	57868.25	10000	
39	K	45	He	6104.043	ppb	3.1	68202.44	200000	
40	Ca	45	H2	68379.974	ppb	0.8	4855751.28	200000	
51	V	89	He	1.803	ppb	11.3	508.92	1000	
52	Cr	89	He	0.359	ppb	12.1	104.65	2000	
55	Mn	89	He	29.006	ppb	4.8	2775.11	2000	
56	Fe	89	H2	10.152	ppb	13.3	11010.02	100000	
59	Co	89	He	0.191	ppb	33.5	73.34	1000	
60	Ni	89	He	1.695	ppb	9.3	202.23	1000	
63	Cu	89	He	-0.219	ppb	N/A	338.90	2000	
66	Zn	89	He	1.906	ppb	2.8	128.90	2000	
75	As	89	He	5.624	ppb	5.4	168.35	1000	
78	Se	89	H2	0.135	ppb	112.2	2.50	1000	
88	Sr	89	He	263.657	ppb	3.3	37543.29	2000	
95	Mo	89	He	0.763	ppb	16.6	242.23	1000	
107	Ag	89	He	0.015	ppb	97.3	18.89	100	
111	Cd	89	He	0.041	ppb	136.4	4.07	1000	
118	Sn	159	He	0.594	ppb	3.1	174.46	1000	
121	Sb	159	No Gas	0.030	ppb	173.0	143.49	1000	
137	Ba	159	No Gas	18.197	ppb	4.8	11006.91	2000	
182	W	159	No Gas	-0.021	ppb	N/A	96.78	1000	
205	Tl	209	No Gas	0.010	ppb	21.7	56.73	1000	
208	Pb	209	No Gas	0.431	ppb	11.5	1828.78	2000	
232	Th	209	No Gas	0.025	ppb	25.9	276.98	1000	
238	U	209	No Gas	124.157	ppb	1.2	464329.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164609.43	1.4	1537409.87	75.75	29.5	120.4	
Sc	45	No Gas	3033035.25	1.8	3373253.08	89.91	29.5	120.4	
Sc	45	H2	354102.35	1.1	415670.69	85.19	29.5	120.4	
Sc	45	He	71882.50	3.2	81171.76	88.56	29.5	120.4	
Ge	72	No Gas	738699.17	1.6	779333.11	94.79	29.5	120.4	
Ge	72	H2	133987.62	0.9	153246.58	87.43	29.5	120.4	
Ge	72	He	58763.18	2.1	63135.03	93.08	29.5	120.4	
Y	89	H2	2431446.75	0.4	2642116.11	92.03	29.5	120.4	
Y	89	He	505768.69	3.0	544041.92	92.97	29.5	120.4	
Tb	159	No Gas	8526824.39	2.2	8117023.84	105.05	29.5	120.4	
Tb	159	He	2889843.15	3.4	2866479.19	100.82	29.5	120.4	
Bi	209	No Gas	4677569.33	1.7	4424692.92	105.72	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	108_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:56:53 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.302	ppb	3.0	26586.20	25	101.21	89.8	110.2	
11	B	6	No Gas	25.052	ppb	4.7	18012.83	25	100.21	89.8	110.2	
23	Na	45	He	4992.715	ppb	1.2	513621.61	5000	99.85	89.8	110.2	
24	Mg	45	He	4832.220	ppb	0.7	271108.53	5000	96.64	89.8	110.2	
27	Al	45	He	460.310	ppb	1.8	10024.97	500	92.06	89.8	110.2	
28	Si	45	H2	480.488	ppb	0.4	18455.86	500	96.1	89.8	110.2	
39	K	45	He	4862.926	ppb	1.0	247097.59	5000	97.26	89.8	110.2	
40	Ca	45	H2	5050.180	ppb	1.4	1833310.75	5000	101	89.8	110.2	
51	V	89	He	24.047	ppb	0.8	19899.15	25	96.19	89.8	110.2	
52	Cr	89	He	24.294	ppb	0.2	24568.14	25	97.18	89.8	110.2	
55	Mn	89	He	24.546	ppb	0.9	11826.15	25	98.18	89.8	110.2	
56	Fe	89	H2	4875.394	ppb	1.8	7470340.49	5000	97.51	89.8	110.2	
59	Co	89	He	24.468	ppb	2.1	41858.58	25	97.87	89.8	110.2	
60	Ni	89	He	24.404	ppb	0.8	11866.54	25	97.62	89.8	110.2	
63	Cu	89	He	24.256	ppb	0.5	32288.08	25	97.02	89.8	110.2	
66	Zn	89	He	24.691	ppb	2.8	4507.57	25	98.76	89.8	110.2	
75	As	89	He	24.458	ppb	0.9	3605.53	25	97.83	89.8	110.2	
78	Se	89	H2	24.596	ppb	0.7	1876.38	25	98.38	89.8	110.2	
88	Sr	89	He	24.197	ppb	0.7	17407.11	25	96.79	89.8	110.2	
95	Mo	89	He	24.955	ppb	0.4	20726.30	25	99.82	89.8	110.2	
107	Ag	89	He	18.862	ppb	0.4	52978.44	25	75.45	89.8	110.2	> +/- 10%
111	Cd	89	He	25.310	ppb	0.6	9471.16	25	101.24	89.8	110.2	
118	Sn	159	He	22.850	ppb	0.6	19779.55	25	91.4	89.8	110.2	
121	Sb	159	No Gas	23.554	ppb	5.0	183495.35	25	94.22	89.8	110.2	
137	Ba	159	No Gas	23.417	ppb	5.8	71749.28	25	93.67	89.8	110.2	
182	W	159	No Gas	23.579	ppb	4.4	146229.50	25	94.32	89.8	110.2	
205	Tl	209	No Gas	23.914	ppb	4.6	331379.02	25	95.66	89.8	110.2	
208	Pb	209	No Gas	23.781	ppb	4.1	455661.96	25	95.12	89.8	110.2	
232	Th	209	No Gas	23.857	ppb	4.5	478510.38	25	95.43	89.8	110.2	
238	U	209	No Gas	23.930	ppb	3.7	450479.88	25	95.72	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1212068.92	3.0	1537409.87	78.84	29.5	120.4	
Sc	45	No Gas	3200937.99	3.4	3373253.08	94.89	29.5	120.4	
Sc	45	H2	361830.23	1.6	415670.69	87.05	29.5	120.4	
Sc	45	He	73249.11	1.4	81171.76	90.24	29.5	120.4	
Ge	72	No Gas	762082.96	3.1	779333.11	97.79	29.5	120.4	
Ge	72	H2	137359.12	1.6	153246.58	89.63	29.5	120.4	
Ge	72	He	58806.17	1.1	63135.03	93.14	29.5	120.4	
Y	89	H2	2453729.37	1.9	2642116.11	92.87	29.5	120.4	
Y	89	He	510594.15	0.6	544041.92	93.85	29.5	120.4	
Tb	159	No Gas	8668203.34	3.8	8117023.84	106.79	29.5	120.4	
Tb	159	He	2882691.03	0.5	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4713236.25	3.3	4424692.92	106.52	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	109_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:59:30 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.043	ppb	30.6	61.12	0.2	
11	B	6	No Gas	1.828	ppb	1.8	2023.55	4	
23	Na	45	He	41.748	ppb	3.3	9563.81	200	
24	Mg	45	He	-2.127	ppb	N/A	431.15	20	
27	Al	45	He	-1.241	ppb	N/A	17.78	20	
28	Si	45	H2	5.399	ppb	55.8	420.48	100	
39	K	45	He	5.278	ppb	150.0	9997.39	200	
40	Ca	45	H2	6.858	ppb	3.8	4096.30	20	
51	V	89	He	0.623	ppb	12.3	715.60	1	Failed DoD
52	Cr	89	He	0.115	ppb	14.5	146.64	1	
55	Mn	89	He	0.298	ppb	11.1	152.64	0.4	Failed DoD
56	Fe	89	H2	1.309	ppb	25.0	9897.93	20	
59	Co	89	He	0.011	ppb	106.2	26.67	0.2	
60	Ni	89	He	-0.030	ppb	N/A	24.44	0.4	
63	Cu	89	He	-0.008	ppb	N/A	382.24	0.6	
66	Zn	89	He	0.118	ppb	50.0	81.11	2	
75	As	89	He	0.074	ppb	19.3	15.00	1	
78	Se	89	H2	0.060	ppb	10.7	5.00	1	
88	Sr	89	He	0.024	ppb	63.6	23.34	1	
95	Mo	89	He	0.013	ppb	228.6	127.78	1	
107	Ag	89	He	0.009	ppb	37.6	34.44	0.2	
111	Cd	89	He	0.002	ppb	74.7	1.85	0.2	
118	Sn	159	He	0.301	ppb	10.4	328.90	1	
121	Sb	159	No Gas	0.025	ppb	15.7	297.00	0.2	
137	Ba	159	No Gas	0.020	ppb	41.6	80.09	0.4	
182	W	159	No Gas	0.118	ppb	10.3	850.99	1	
205	Tl	209	No Gas	0.021	ppb	21.7	313.69	0.2	
208	Pb	209	No Gas	0.170	ppb	6.8	3437.37	0.2	Failed DoD
232	Th	209	No Gas	0.184	ppb	35.7	3838.31	1	
238	U	209	No Gas	0.024	ppb	14.0	450.51	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1230818.99	1.1	1537409.87	80.06	29.5	120.4	
Sc	45	No Gas	3065755.70	1.5	3373253.08	90.88	29.5	120.4	
Sc	45	H2	352702.63	0.9	415670.69	84.85	29.5	120.4	
Sc	45	He	71348.25	2.1	81171.76	87.9	29.5	120.4	
Ge	72	No Gas	740760.54	1.2	779333.11	95.05	29.5	120.4	
Ge	72	H2	130999.35	2.1	153246.58	85.48	29.5	120.4	
Ge	72	He	56436.19	2.7	63135.03	89.39	29.5	120.4	
Y	89	H2	2427128.82	0.3	2642116.11	91.86	29.5	120.4	
Y	89	He	501459.07	2.6	544041.92	92.17	29.5	120.4	
Tb	159	No Gas	8629670.91	1.8	8117023.84	106.32	29.5	120.4	
Tb	159	He	2861260.13	2.7	2866479.19	99.82	29.5	120.4	
Bi	209	No Gas	4688670.80	1.5	4424692.92	105.97	29.5	120.4	

Sample Report

Sample Name SN5494-007

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:02:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	51.8	38.89	100	
11	B	6	No Gas	12.112	ppb	7.6	2308.05	1000	
23	Na	45	He	28195.513	ppb	0.9	582042.24	200000	
24	Mg	45	He	2364.437	ppb	0.7	27160.82	200000	
27	Al	45	He	12.059	ppb	29.6	97.78	200000	
28	Si	45	H2	2860.326	ppb	5.1	22054.77	10000	
39	K	45	He	2491.664	ppb	0.6	34460.84	200000	
40	Ca	45	H2	17637.850	ppb	1.4	1288352.39	200000	
51	V	89	He	2.279	ppb	5.2	598.93	1000	
52	Cr	89	He	0.420	ppb	13.8	119.31	2000	
55	Mn	89	He	1.943	ppb	4.4	201.30	2000	
56	Fe	89	H2	5.728	ppb	16.8	9854.37	100000	
59	Co	89	He	0.008	ppb	143.9	11.11	1000	
60	Ni	89	He	0.146	ppb	93.0	54.45	1000	
63	Cu	89	He	1.209	ppb	3.0	725.60	2000	
66	Zn	89	He	2.011	ppb	17.8	135.56	2000	
75	As	89	He	19.457	ppb	6.0	584.08	1000	
78	Se	89	H2	0.110	ppb	74.4	2.17	1000	
88	Sr	89	He	117.234	ppb	0.9	17064.43	2000	
95	Mo	89	He	10.613	ppb	2.1	1893.53	1000	
107	Ag	89	He	0.007	ppb	177.5	14.45	100	
111	Cd	89	He	0.128	ppb	17.1	10.74	1000	
118	Sn	159	He	0.654	ppb	12.7	187.79	1000	
121	Sb	159	No Gas	0.226	ppb	28.8	427.14	1000	
137	Ba	159	No Gas	7.256	ppb	11.2	4225.43	2000	
182	W	159	No Gas	2.421	ppb	5.1	2963.68	1000	
205	Tl	209	No Gas	0.024	ppb	141.8	90.11	1000	
208	Pb	209	No Gas	0.650	ppb	71.7	2533.11	2000	
232	Th	209	No Gas	0.037	ppb	80.8	310.35	1000	
238	U	209	No Gas	2.047	ppb	5.9	7377.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164173.17	2.2	1537409.87	75.72	29.5	120.4	
Sc	45	No Gas	2981417.85	4.2	3373253.08	88.38	29.5	120.4	
Sc	45	H2	363933.26	1.0	415670.69	87.55	29.5	120.4	
Sc	45	He	73578.41	0.6	81171.76	90.65	29.5	120.4	
Ge	72	No Gas	725809.01	3.4	779333.11	93.13	29.5	120.4	
Ge	72	H2	136228.54	0.7	153246.58	88.89	29.5	120.4	
Ge	72	He	59721.20	0.8	63135.03	94.59	29.5	120.4	
Y	89	H2	2478125.10	0.5	2642116.11	93.79	29.5	120.4	
Y	89	He	516549.38	0.4	544041.92	94.95	29.5	120.4	
Tb	159	No Gas	8220639.04	4.2	8117023.84	101.28	29.5	120.4	
Tb	159	He	2936412.98	0.5	2866479.19	102.44	29.5	120.4	
Bi	209	No Gas	4511842.05	3.9	4424692.92	101.97	29.5	120.4	

Sample Report

Sample Name SN5494-008

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:04:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.086	ppb	54.3	33.33	100	
11	B	6	No Gas	17.701	ppb	11.7	3239.36	1000	
23	Na	45	He	21054.159	ppb	0.3	441804.99	200000	
24	Mg	45	He	12778.618	ppb	1.7	146194.45	200000	
27	Al	45	He	4.206	ppb	68.5	64.45	200000	
28	Si	45	H2	5717.131	ppb	3.1	44271.21	10000	
39	K	45	He	5287.102	ppb	1.7	62651.64	200000	
40	Ca	45	H2	80860.276	ppb	1.9	5956595.33	200000	
51	V	89	He	1.533	ppb	15.7	476.69	1000	
52	Cr	89	He	0.298	ppb	18.0	94.65	2000	
55	Mn	89	He	944.707	ppb	0.9	92259.87	2000	
56	Fe	89	H2	1641.271	ppb	1.9	520335.91	100000	
59	Co	89	He	0.117	ppb	48.3	48.89	1000	
60	Ni	89	He	0.178	ppb	64.1	57.78	1000	
63	Cu	89	He	-0.228	ppb	N/A	344.46	2000	
66	Zn	89	He	2.981	ppb	33.8	171.12	2000	
75	As	89	He	2.688	ppb	8.1	84.68	1000	
78	Se	89	H2	0.055	ppb	87.6	1.33	1000	
88	Sr	89	He	415.245	ppb	0.6	60590.96	2000	
95	Mo	89	He	1.657	ppb	18.4	397.80	1000	
107	Ag	89	He	0.015	ppb	24.2	18.89	100	
111	Cd	89	He	0.161	ppb	26.0	13.33	1000	
118	Sn	159	He	0.354	ppb	27.6	134.45	1000	
121	Sb	159	No Gas	0.045	ppb	55.4	173.53	1000	
137	Ba	159	No Gas	25.730	ppb	10.3	16131.09	2000	
182	W	159	No Gas	0.375	ppb	40.1	597.35	1000	
205	Tl	209	No Gas	0.019	ppb	49.8	83.43	1000	
208	Pb	209	No Gas	0.357	ppb	10.9	1585.15	2000	
232	Th	209	No Gas	0.041	ppb	26.0	350.40	1000	
238	U	209	No Gas	65.093	ppb	10.8	249121.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239897.29	4.4	1537409.87	80.65	29.5	120.4	
Sc	45	No Gas	3249023.60	6.2	3373253.08	96.32	29.5	120.4	
Sc	45	H2	367462.02	1.9	415670.69	88.4	29.5	120.4	
Sc	45	He	74549.11	1.3	81171.76	91.84	29.5	120.4	
Ge	72	No Gas	774690.68	3.4	779333.11	99.4	29.5	120.4	
Ge	72	H2	137444.86	1.0	153246.58	89.69	29.5	120.4	
Ge	72	He	59810.82	1.3	63135.03	94.73	29.5	120.4	
Y	89	H2	2501324.02	1.3	2642116.11	94.67	29.5	120.4	
Y	89	He	517958.55	1.3	544041.92	95.21	29.5	120.4	
Tb	159	No Gas	8882523.48	6.0	8117023.84	109.43	29.5	120.4	
Tb	159	He	2924701.86	1.2	2866479.19	102.03	29.5	120.4	
Bi	209	No Gas	4806148.17	5.5	4424692.92	108.62	29.5	120.4	

Sample Report

Sample Name SN5497-005

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:07:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	56.6	34.45	100	
11	B	6	No Gas	19.953	ppb	2.8	3511.66	1000	
23	Na	45	He	2180.680	ppb	1.9	51155.04	200000	
24	Mg	45	He	2792.119	ppb	0.4	32596.85	200000	
27	Al	45	He	10.850	ppb	19.1	94.45	200000	
28	Si	45	H2	2992.413	ppb	4.3	23294.85	10000	
39	K	45	He	4121.805	ppb	1.6	51412.10	200000	
40	Ca	45	H2	29511.722	ppb	3.7	2176236.23	200000	
51	V	89	He	2.751	ppb	12.3	687.82	1000	
52	Cr	89	He	1.008	ppb	10.1	243.29	2000	
55	Mn	89	He	4.201	ppb	3.7	427.93	2000	
56	Fe	89	H2	34.225	ppb	6.5	18770.17	100000	
59	Co	89	He	0.184	ppb	37.6	73.34	1000	
60	Ni	89	He	1.097	ppb	2.7	150.01	1000	
63	Cu	89	He	3.806	ppb	4.5	1439.02	2000	
66	Zn	89	He	24.076	ppb	5.0	954.52	2000	
75	As	89	He	0.656	ppb	21.5	24.33	1000	
78	Se	89	H2	0.218	ppb	20.1	3.83	1000	
88	Sr	89	He	134.708	ppb	1.0	19919.46	2000	
95	Mo	89	He	-0.340	ppb	N/A	64.45	1000	
107	Ag	89	He	0.010	ppb	56.4	16.67	100	
111	Cd	89	He	0.039	ppb	42.8	4.07	1000	
118	Sn	159	He	0.464	ppb	15.4	155.56	1000	
121	Sb	159	No Gas	0.028	ppb	117.6	143.50	1000	
137	Ba	159	No Gas	46.183	ppb	2.8	28455.47	2000	
182	W	159	No Gas	-0.017	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.020	ppb	37.4	83.43	1000	
208	Pb	209	No Gas	0.363	ppb	2.5	1591.82	2000	
232	Th	209	No Gas	0.003	ppb	298.6	190.22	1000	
238	U	209	No Gas	0.155	ppb	15.0	590.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1221204.89	1.8	1537409.87	79.43	29.5	120.4	
Sc	45	No Gas	3186509.34	1.6	3373253.08	94.46	29.5	120.4	
Sc	45	H2	367765.54	2.2	415670.69	88.48	29.5	120.4	
Sc	45	He	75019.27	1.5	81171.76	92.42	29.5	120.4	
Ge	72	No Gas	775796.83	1.9	779333.11	99.55	29.5	120.4	
Ge	72	H2	138130.50	2.5	153246.58	90.14	29.5	120.4	
Ge	72	He	60418.57	0.5	63135.03	95.7	29.5	120.4	
Y	89	H2	2493394.64	2.8	2642116.11	94.37	29.5	120.4	
Y	89	He	524811.02	0.5	544041.92	96.47	29.5	120.4	
Tb	159	No Gas	8701668.20	1.4	8117023.84	107.2	29.5	120.4	
Tb	159	He	2960531.31	0.0	2866479.19	103.28	29.5	120.4	
Bi	209	No Gas	4734876.58	2.1	4424692.92	107.01	29.5	120.4	

Sample Report

Sample Name SN5520-001

File Name 113SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:10:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.115	ppb	5.9	38.89	100	
11	B	6	No Gas	20.892	ppb	4.7	3609.46	1000	
23	Na	45	He	7050.240	ppb	1.3	152282.22	200000	
24	Mg	45	He	31515.969	ppb	1.3	361105.66	200000	
27	Al	45	He	1.655	ppb	130.1	53.34	200000	
28	Si	45	H2	4022.304	ppb	0.8	31349.35	10000	
39	K	45	He	1451.571	ppb	4.0	24685.15	200000	
40	Ca	45	H2	38181.154	ppb	0.7	2825091.31	200000	
51	V	89	He	2.812	ppb	14.6	696.71	1000	
52	Cr	89	He	0.338	ppb	20.4	103.98	2000	
55	Mn	89	He	516.973	ppb	0.9	51028.45	2000	
56	Fe	89	H2	7792.575	ppb	0.4	2444703.65	100000	
59	Co	89	He	0.895	ppb	12.3	322.25	1000	
60	Ni	89	He	0.184	ppb	59.2	58.89	1000	
63	Cu	89	He	-0.434	ppb	N/A	292.24	2000	
66	Zn	89	He	1.750	ppb	32.9	127.78	2000	
75	As	89	He	49.765	ppb	2.4	1506.92	1000	
78	Se	89	H2	0.023	ppb	211.4	0.83	1000	
88	Sr	89	He	124.803	ppb	0.8	18406.18	2000	
95	Mo	89	He	-0.189	ppb	N/A	90.00	1000	
107	Ag	89	He	-0.001	ppb	N/A	10.00	100	
111	Cd	89	He	0.001	ppb	20.1	1.11	1000	
118	Sn	159	He	0.506	ppb	14.1	162.23	1000	
121	Sb	159	No Gas	0.023	ppb	152.2	136.82	1000	
137	Ba	159	No Gas	20.466	ppb	1.7	12630.03	2000	
182	W	159	No Gas	-0.042	ppb	N/A	73.42	1000	
205	Tl	209	No Gas	0.001	ppb	1394.3	30.03	1000	
208	Pb	209	No Gas	0.291	ppb	10.5	1294.82	2000	
232	Th	209	No Gas	0.001	ppb	2019.7	180.20	1000	
238	U	209	No Gas	0.073	ppb	24.0	273.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1210310.02	1.4	1537409.87	78.72	29.5	120.4	
Sc	45	No Gas	3178842.79	1.0	3373253.08	94.24	29.5	120.4	
Sc	45	H2	368892.66	0.7	415670.69	88.75	29.5	120.4	
Sc	45	He	74838.02	1.7	81171.76	92.2	29.5	120.4	
Ge	72	No Gas	773419.47	1.6	779333.11	99.24	29.5	120.4	
Ge	72	H2	138884.97	0.6	153246.58	90.63	29.5	120.4	
Ge	72	He	60410.35	1.3	63135.03	95.68	29.5	120.4	
Y	89	H2	2505819.37	0.4	2642116.11	94.84	29.5	120.4	
Y	89	He	523418.41	0.8	544041.92	96.21	29.5	120.4	
Tb	159	No Gas	8708173.83	1.4	8117023.84	107.28	29.5	120.4	
Tb	159	He	2945681.27	0.6	2866479.19	102.76	29.5	120.4	
Bi	209	No Gas	4666478.97	1.5	4424692.92	105.46	29.5	120.4	

Sample Report

Sample Name SN5520-002

File Name 114SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:12:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.142	ppb	57.1	44.45	100	
11	B	6	No Gas	15.895	ppb	5.8	2874.84	1000	
23	Na	45	He	9319.761	ppb	1.6	195846.04	200000	
24	Mg	45	He	18637.892	ppb	0.7	209902.43	200000	
27	Al	45	He	3.649	ppb	11.8	61.11	200000	
28	Si	45	H2	3360.229	ppb	0.7	25604.91	10000	
39	K	45	He	712.018	ppb	8.1	17002.55	200000	
40	Ca	45	H2	37874.952	ppb	1.1	2735997.18	200000	
51	V	89	He	2.178	ppb	7.2	577.81	1000	
52	Cr	89	He	0.316	ppb	20.7	97.32	2000	
55	Mn	89	He	922.575	ppb	0.4	89187.61	2000	
56	Fe	89	H2	14921.243	ppb	0.9	4576535.49	100000	
59	Co	89	He	6.446	ppb	4.0	2222.56	1000	
60	Ni	89	He	16.523	ppb	3.3	1647.93	1000	
63	Cu	89	He	-0.643	ppb	N/A	231.12	2000	
66	Zn	89	He	4.283	ppb	10.6	216.68	2000	
75	As	89	He	2.084	ppb	3.2	66.01	1000	
78	Se	89	H2	0.057	ppb	88.0	1.33	1000	
88	Sr	89	He	86.064	ppb	0.9	12434.94	2000	
95	Mo	89	He	-0.646	ppb	N/A	12.22	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.011	ppb	79.5	1.85	1000	
118	Sn	159	He	0.360	ppb	24.6	135.56	1000	
121	Sb	159	No Gas	0.003	ppb	154.1	103.45	1000	
137	Ba	159	No Gas	11.275	ppb	2.7	6859.46	2000	
182	W	159	No Gas	-0.029	ppb	N/A	86.76	1000	
205	Tl	209	No Gas	0.002	ppb	282.4	33.37	1000	
208	Pb	209	No Gas	0.285	ppb	20.1	1261.45	2000	
232	Th	209	No Gas	-0.004	ppb	N/A	160.18	1000	
238	U	209	No Gas	0.021	ppb	21.9	83.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1192880.81	5.5	1537409.87	77.59	29.5	120.4	
Sc	45	No Gas	3137045.14	4.1	3373253.08	93	29.5	120.4	
Sc	45	H2	360150.56	1.0	415670.69	86.64	29.5	120.4	
Sc	45	He	73470.14	0.5	81171.76	90.51	29.5	120.4	
Ge	72	No Gas	752388.32	5.8	779333.11	96.54	29.5	120.4	
Ge	72	H2	135889.39	0.5	153246.58	88.67	29.5	120.4	
Ge	72	He	58909.59	0.6	63135.03	93.31	29.5	120.4	
Y	89	H2	2453881.58	0.9	2642116.11	92.88	29.5	120.4	
Y	89	He	512682.17	0.1	544041.92	94.24	29.5	120.4	
Tb	159	No Gas	8578436.19	4.1	8117023.84	105.68	29.5	120.4	
Tb	159	He	2924777.91	0.5	2866479.19	102.03	29.5	120.4	
Bi	209	No Gas	4658669.39	4.7	4424692.92	105.29	29.5	120.4	

Sample Report

Sample Name SN5520-003

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:15:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.042	ppb	99.2	23.33	100	
11	B	6	No Gas	20.360	ppb	6.8	3483.87	1000	
23	Na	45	He	10392.049	ppb	0.1	214815.56	200000	
24	Mg	45	He	13914.116	ppb	0.6	154738.44	200000	
27	Al	45	He	4.109	ppb	73.1	62.23	200000	
28	Si	45	H2	3184.551	ppb	1.6	23856.41	10000	
39	K	45	He	577.588	ppb	1.9	15478.14	200000	
40	Ca	45	H2	23066.494	ppb	2.4	1637902.44	200000	
51	V	89	He	1.319	ppb	17.5	432.24	1000	
52	Cr	89	He	0.367	ppb	19.3	106.65	2000	
55	Mn	89	He	1090.357	ppb	0.6	104310.71	2000	
56	Fe	89	H2	17881.640	ppb	2.7	5400283.11	100000	
59	Co	89	He	11.184	ppb	2.3	3809.68	1000	
60	Ni	89	He	24.378	ppb	3.5	2386.96	1000	
63	Cu	89	He	-0.243	ppb	N/A	333.35	2000	
66	Zn	89	He	44.827	ppb	4.8	1665.72	2000	
75	As	89	He	6.052	ppb	10.3	181.35	1000	
78	Se	89	H2	0.091	ppb	110.9	1.83	1000	
88	Sr	89	He	49.512	ppb	3.4	7080.97	2000	
95	Mo	89	He	-0.591	ppb	N/A	21.11	1000	
107	Ag	89	He	0.003	ppb	207.7	12.22	100	
111	Cd	89	He	-0.004	ppb	N/A	0.74	1000	
118	Sn	159	He	0.479	ppb	13.1	154.45	1000	
121	Sb	159	No Gas	0.016	ppb	191.5	123.47	1000	
137	Ba	159	No Gas	16.014	ppb	6.4	9747.84	2000	
182	W	159	No Gas	-0.049	ppb	N/A	63.41	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	20.02	1000	
208	Pb	209	No Gas	0.282	ppb	8.4	1271.46	2000	
232	Th	209	No Gas	0.000	ppb	N/A	176.87	1000	
238	U	209	No Gas	0.000	ppb	N/A	3.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1192391.58	1.3	1537409.87	77.56	29.5	120.4	
Sc	45	No Gas	3105471.79	1.6	3373253.08	92.06	29.5	120.4	
Sc	45	H2	353951.35	1.7	415670.69	85.15	29.5	120.4	
Sc	45	He	72481.84	0.6	81171.76	89.29	29.5	120.4	
Ge	72	No Gas	752643.57	1.6	779333.11	96.58	29.5	120.4	
Ge	72	H2	133045.38	2.6	153246.58	86.82	29.5	120.4	
Ge	72	He	57880.80	1.1	63135.03	91.68	29.5	120.4	
Y	89	H2	2417489.28	1.7	2642116.11	91.5	29.5	120.4	
Y	89	He	507352.10	0.6	544041.92	93.26	29.5	120.4	
Tb	159	No Gas	8588279.31	1.0	8117023.84	105.81	29.5	120.4	
Tb	159	He	2887789.43	0.4	2866479.19	100.74	29.5	120.4	
Bi	209	No Gas	4704727.84	0.9	4424692.92	106.33	29.5	120.4	

Sample Report

Sample Name SN5520-004

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:18:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	119.9	21.11	100	
11	B	6	No Gas	38.125	ppb	6.0	5882.51	1000	
23	Na	45	He	12871.292	ppb	0.8	263985.36	200000	
24	Mg	45	He	20783.320	ppb	0.8	230190.04	200000	
27	Al	45	He	4.400	ppb	88.8	63.34	200000	
28	Si	45	H2	3277.736	ppb	0.8	24772.58	10000	
39	K	45	He	691.156	ppb	4.0	16525.50	200000	
40	Ca	45	H2	13561.827	ppb	0.2	972586.53	200000	
51	V	89	He	1.321	ppb	14.9	432.25	1000	
52	Cr	89	He	0.374	ppb	26.7	107.98	2000	
55	Mn	89	He	1546.871	ppb	0.9	147935.10	2000	
56	Fe	89	H2	18268.622	ppb	0.2	5551725.02	100000	
59	Co	89	He	16.286	ppb	2.5	5543.71	1000	
60	Ni	89	He	28.890	ppb	5.8	2820.40	1000	
63	Cu	89	He	-0.702	ppb	N/A	213.35	2000	
66	Zn	89	He	41.027	ppb	8.0	1529.03	2000	
75	As	89	He	9.901	ppb	7.0	294.04	1000	
78	Se	89	H2	0.058	ppb	66.7	1.33	1000	
88	Sr	89	He	37.881	ppb	1.7	5417.95	2000	
95	Mo	89	He	-0.612	ppb	N/A	17.78	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.67	100	
111	Cd	89	He	0.001	ppb	1333.8	1.11	1000	
118	Sn	159	He	0.249	ppb	19.5	114.45	1000	
121	Sb	159	No Gas	-0.002	ppb	N/A	96.78	1000	
137	Ba	159	No Gas	10.030	ppb	1.2	6111.59	2000	
182	W	159	No Gas	-0.060	ppb	N/A	50.05	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	26.70	1000	
208	Pb	209	No Gas	0.266	ppb	10.4	1198.03	2000	
232	Th	209	No Gas	-0.010	ppb	N/A	133.48	1000	
238	U	209	No Gas	0.013	ppb	58.1	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1190229.73	2.5	1537409.87	77.42	29.5	120.4	
Sc	45	No Gas	3093957.89	2.5	3373253.08	91.72	29.5	120.4	
Sc	45	H2	357130.69	0.4	415670.69	85.92	29.5	120.4	
Sc	45	He	72275.01	0.8	81171.76	89.04	29.5	120.4	
Ge	72	No Gas	750733.26	2.3	779333.11	96.33	29.5	120.4	
Ge	72	H2	135429.78	1.3	153246.58	88.37	29.5	120.4	
Ge	72	He	58644.33	0.1	63135.03	92.89	29.5	120.4	
Y	89	H2	2431976.47	0.4	2642116.11	92.05	29.5	120.4	
Y	89	He	507240.68	1.1	544041.92	93.24	29.5	120.4	
Tb	159	No Gas	8585813.69	2.5	8117023.84	105.78	29.5	120.4	
Tb	159	He	2883905.65	0.7	2866479.19	100.61	29.5	120.4	
Bi	209	No Gas	4653986.74	2.6	4424692.92	105.18	29.5	120.4	

Sample Report

Sample Name SN5520-005

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:21:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.067	ppb	32.9	27.78	100	
11	B	6	No Gas	22.518	ppb	9.1	3662.82	1000	
23	Na	45	He	9860.257	ppb	1.7	204821.42	200000	
24	Mg	45	He	16669.805	ppb	1.6	185926.55	200000	
27	Al	45	He	6.916	ppb	43.4	74.45	200000	
28	Si	45	H2	3318.213	ppb	1.1	25143.41	10000	
39	K	45	He	572.386	ppb	3.7	15483.15	200000	
40	Ca	45	H2	27448.738	ppb	0.7	1971784.76	200000	
51	V	89	He	1.493	ppb	17.3	461.14	1000	
52	Cr	89	He	0.353	ppb	15.5	103.98	2000	
55	Mn	89	He	816.606	ppb	0.4	78230.18	2000	
56	Fe	89	H2	11490.956	ppb	0.5	3511021.21	100000	
59	Co	89	He	6.348	ppb	3.6	2169.22	1000	
60	Ni	89	He	18.357	ppb	3.5	1810.18	1000	
63	Cu	89	He	-0.653	ppb	N/A	226.67	2000	
66	Zn	89	He	23.524	ppb	9.7	904.51	2000	
75	As	89	He	7.001	ppb	12.1	209.36	1000	
78	Se	89	H2	-0.020	ppb	N/A	0.17	1000	
88	Sr	89	He	60.990	ppb	2.2	8733.09	2000	
95	Mo	89	He	-0.557	ppb	N/A	26.67	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.66	100	
111	Cd	89	He	0.011	ppb	79.9	1.85	1000	
118	Sn	159	He	0.733	ppb	25.5	198.90	1000	
121	Sb	159	No Gas	0.059	ppb	30.4	183.54	1000	
137	Ba	159	No Gas	8.267	ppb	9.9	4822.94	2000	
182	W	159	No Gas	0.047	ppb	124.7	173.53	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	0.286	ppb	3.9	1228.06	2000	
232	Th	209	No Gas	-0.006	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.025	ppb	53.2	93.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1158220.55	4.0	1537409.87	75.34	29.5	120.4	
Sc	45	No Gas	2971621.12	6.4	3373253.08	88.09	29.5	120.4	
Sc	45	H2	358062.46	1.4	415670.69	86.14	29.5	120.4	
Sc	45	He	72750.26	1.7	81171.76	89.63	29.5	120.4	
Ge	72	No Gas	728151.59	5.1	779333.11	93.43	29.5	120.4	
Ge	72	H2	134013.82	0.5	153246.58	87.45	29.5	120.4	
Ge	72	He	58660.08	0.3	63135.03	92.91	29.5	120.4	
Y	89	H2	2443228.56	1.0	2642116.11	92.47	29.5	120.4	
Y	89	He	508041.69	0.9	544041.92	93.38	29.5	120.4	
Tb	159	No Gas	8245279.11	6.4	8117023.84	101.58	29.5	120.4	
Tb	159	He	2893883.32	0.6	2866479.19	100.96	29.5	120.4	
Bi	209	No Gas	4498825.12	5.7	4424692.92	101.68	29.5	120.4	

Sample Report

Sample Name SN5520-006

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:23:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.069	ppb	32.4	28.89	100	
11	B	6	No Gas	26.904	ppb	7.4	4361.93	1000	
23	Na	45	He	8633.353	ppb	2.7	181547.28	200000	
24	Mg	45	He	33869.197	ppb	1.5	380398.64	200000	
27	Al	45	He	0.616	ppb	483.3	47.78	200000	
28	Si	45	H2	3459.614	ppb	3.3	26269.86	10000	
39	K	45	He	1092.549	ppb	3.8	20694.01	200000	
40	Ca	45	H2	37837.430	ppb	2.1	2724655.24	200000	
51	V	89	He	2.077	ppb	6.2	561.14	1000	
52	Cr	89	He	0.303	ppb	0.2	94.65	2000	
55	Mn	89	He	116.041	ppb	2.0	11227.77	2000	
56	Fe	89	H2	6863.626	ppb	2.1	2104464.02	100000	
59	Co	89	He	2.098	ppb	11.1	728.96	1000	
60	Ni	89	He	11.184	ppb	6.5	1127.87	1000	
63	Cu	89	He	-0.626	ppb	N/A	235.57	2000	
66	Zn	89	He	3.355	ppb	22.3	183.34	2000	
75	As	89	He	41.138	ppb	2.7	1220.52	1000	
78	Se	89	H2	0.035	ppb	92.4	1.00	1000	
88	Sr	89	He	112.892	ppb	1.5	16311.33	2000	
95	Mo	89	He	-0.585	ppb	N/A	22.22	1000	
107	Ag	89	He	0.003	ppb	396.1	12.22	100	
111	Cd	89	He	-0.014	ppb	N/A	0.00	1000	
118	Sn	159	He	0.431	ppb	32.5	146.67	1000	
121	Sb	159	No Gas	-0.008	ppb	N/A	86.76	1000	
137	Ba	159	No Gas	14.113	ppb	6.7	8565.61	2000	
182	W	159	No Gas	-0.073	ppb	N/A	33.37	1000	
205	Tl	209	No Gas	0.001	ppb	446.2	30.03	1000	
208	Pb	209	No Gas	0.241	ppb	16.3	1087.91	2000	
232	Th	209	No Gas	0.001	ppb	1412.7	180.21	1000	
238	U	209	No Gas	0.149	ppb	15.5	550.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1189842.89	2.5	1537409.87	77.39	29.5	120.4	
Sc	45	No Gas	3115845.50	3.1	3373253.08	92.37	29.5	120.4	
Sc	45	H2	359031.70	0.7	415670.69	86.37	29.5	120.4	
Sc	45	He	73366.28	1.3	81171.76	90.38	29.5	120.4	
Ge	72	No Gas	749394.75	3.3	779333.11	96.16	29.5	120.4	
Ge	72	H2	135563.91	0.9	153246.58	88.46	29.5	120.4	
Ge	72	He	59140.56	0.2	63135.03	93.67	29.5	120.4	
Y	89	H2	2448264.43	1.0	2642116.11	92.66	29.5	120.4	
Y	89	He	512702.20	1.4	544041.92	94.24	29.5	120.4	
Tb	159	No Gas	8567182.86	2.5	8117023.84	105.55	29.5	120.4	
Tb	159	He	2899205.34	0.9	2866479.19	101.14	29.5	120.4	
Bi	209	No Gas	4609357.11	3.0	4424692.92	104.17	29.5	120.4	

Sample Report

Sample Name SN5520-007

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:26:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	14.44	100	
11	B	6	No Gas	19.412	ppb	7.7	3399.41	1000	
23	Na	45	He	6766.876	ppb	1.0	145567.65	200000	
24	Mg	45	He	29768.230	ppb	0.3	339202.81	200000	
27	Al	45	He	0.935	ppb	362.2	50.00	200000	
28	Si	45	H2	3025.779	ppb	12.5	24070.50	10000	
39	K	45	He	1492.726	ppb	1.1	24955.61	200000	
40	Ca	45	H2	44652.469	ppb	13.2	3361736.44	200000	
51	V	89	He	2.431	ppb	1.6	625.60	1000	
52	Cr	89	He	0.389	ppb	3.9	113.31	2000	
55	Mn	89	He	442.635	ppb	1.4	43221.30	2000	
56	Fe	89	H2	4983.150	ppb	14.5	1588686.64	100000	
59	Co	89	He	0.033	ppb	1.4	20.00	1000	
60	Ni	89	He	-0.093	ppb	N/A	31.11	1000	
63	Cu	89	He	-0.573	ppb	N/A	252.23	2000	
66	Zn	89	He	2.795	ppb	19.8	164.45	2000	
75	As	89	He	22.512	ppb	1.6	676.76	1000	
78	Se	89	H2	0.043	ppb	45.9	1.17	1000	
88	Sr	89	He	140.691	ppb	1.3	20525.99	2000	
95	Mo	89	He	-0.686	ppb	N/A	5.56	1000	
107	Ag	89	He	0.001	ppb	1366.7	11.11	100	
111	Cd	89	He	0.010	ppb	80.0	1.85	1000	
118	Sn	159	He	0.329	ppb	35.1	130.01	1000	
121	Sb	159	No Gas	0.020	ppb	150.3	130.14	1000	
137	Ba	159	No Gas	18.844	ppb	10.3	11544.52	2000	
182	W	159	No Gas	-0.063	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	26.70	1000	
208	Pb	209	No Gas	0.228	ppb	17.4	1057.89	2000	
232	Th	209	No Gas	-0.007	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.008	ppb	23.0	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1209534.20	3.7	1537409.87	78.67	29.5	120.4	
Sc	45	No Gas	3168487.44	4.1	3373253.08	93.93	29.5	120.4	
Sc	45	H2	378579.05	9.6	415670.69	91.08	29.5	120.4	
Sc	45	He	74409.52	0.6	81171.76	91.67	29.5	120.4	
Ge	72	No Gas	764461.17	3.6	779333.11	98.09	29.5	120.4	
Ge	72	H2	141301.57	8.3	153246.58	92.21	29.5	120.4	
Ge	72	He	59168.49	0.7	63135.03	93.72	29.5	120.4	
Y	89	H2	2567396.73	10.4	2642116.11	97.17	29.5	120.4	
Y	89	He	517805.28	0.8	544041.92	95.18	29.5	120.4	
Tb	159	No Gas	8666803.90	4.1	8117023.84	106.77	29.5	120.4	
Tb	159	He	2921745.54	0.6	2866479.19	101.93	29.5	120.4	
Bi	209	No Gas	4676261.10	4.3	4424692.92	105.69	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	120_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:29:05 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.311	ppb	6.6	26109.78	25	97.24	89.8	110.2	
11	B	6	No Gas	23.975	ppb	5.5	17661.24	25	95.9	89.8	110.2	
23	Na	45	He	4981.518	ppb	0.3	516217.18	5000	99.63	89.8	110.2	
24	Mg	45	He	4852.843	ppb	0.3	274237.00	5000	97.06	89.8	110.2	
27	Al	45	He	469.004	ppb	0.8	10288.49	500	93.8	89.8	110.2	
28	Si	45	H2	482.520	ppb	4.0	18863.40	500	96.5	89.8	110.2	
39	K	45	He	4886.339	ppb	0.5	250037.49	5000	97.73	89.8	110.2	
40	Ca	45	H2	4963.542	ppb	1.8	1834073.69	5000	99.27	89.8	110.2	
51	V	89	He	23.770	ppb	1.4	19800.06	25	95.08	89.8	110.2	
52	Cr	89	He	24.194	ppb	1.1	24627.57	25	96.78	89.8	110.2	
55	Mn	89	He	24.388	ppb	0.4	11826.83	25	97.55	89.8	110.2	
56	Fe	89	H2	4867.973	ppb	0.7	7499196.02	5000	97.36	89.8	110.2	
59	Co	89	He	24.625	ppb	2.2	42400.13	25	98.5	89.8	110.2	
60	Ni	89	He	24.562	ppb	2.0	12022.22	25	98.25	89.8	110.2	
63	Cu	89	He	24.622	ppb	0.6	32982.01	25	98.49	89.8	110.2	
66	Zn	89	He	24.325	ppb	4.7	4470.89	25	97.3	89.8	110.2	
75	As	89	He	24.000	ppb	3.0	3561.18	25	96	89.8	110.2	
78	Se	89	H2	24.514	ppb	1.0	1880.04	25	98.06	89.8	110.2	
88	Sr	89	He	23.710	ppb	2.5	17165.72	25	94.84	89.8	110.2	
95	Mo	89	He	24.356	ppb	1.0	20362.46	25	97.42	89.8	110.2	
107	Ag	89	He	18.793	ppb	1.8	53123.64	25	75.17	89.8	110.2	> +/- 10%
111	Cd	89	He	24.899	ppb	1.2	9377.78	25	99.6	89.8	110.2	
118	Sn	159	He	22.869	ppb	1.1	19761.74	25	91.48	89.8	110.2	
121	Sb	159	No Gas	22.928	ppb	5.1	177230.10	25	91.71	89.8	110.2	
137	Ba	159	No Gas	23.075	ppb	4.7	70168.83	25	92.3	89.8	110.2	
182	W	159	No Gas	22.969	ppb	5.3	141303.26	25	91.88	89.8	110.2	
205	Tl	209	No Gas	23.513	ppb	4.4	321857.43	25	94.05	89.8	110.2	
208	Pb	209	No Gas	23.506	ppb	5.0	444808.68	25	94.02	89.8	110.2	
232	Th	209	No Gas	22.985	ppb	6.5	455211.25	25	91.94	89.8	110.2	
238	U	209	No Gas	23.339	ppb	5.4	433850.52	25	93.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239716.42	2.8	1537409.87	80.64	29.5	120.4	
Sc	45	No Gas	3243080.65	4.0	3373253.08	96.14	29.5	120.4	
Sc	45	H2	368345.30	0.8	415670.69	88.61	29.5	120.4	
Sc	45	He	73775.40	0.1	81171.76	90.89	29.5	120.4	
Ge	72	No Gas	764174.30	4.1	779333.11	98.05	29.5	120.4	
Ge	72	H2	137700.26	1.2	153246.58	89.86	29.5	120.4	
Ge	72	He	59275.69	1.0	63135.03	93.89	29.5	120.4	
Y	89	H2	2466560.09	0.0	2642116.11	93.36	29.5	120.4	
Y	89	He	513909.66	0.7	544041.92	94.46	29.5	120.4	
Tb	159	No Gas	8600531.61	3.8	8117023.84	105.96	29.5	120.4	
Tb	159	He	2877796.66	0.4	2866479.19	100.39	29.5	120.4	
Bi	209	No Gas	4655940.88	3.4	4424692.92	105.23	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	121_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:31:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.048	ppb	33.4	66.67	0.2	
11	B	6	No Gas	1.401	ppb	1.7	1744.61	4	
23	Na	45	He	21.541	ppb	12.9	7633.84	200	
24	Mg	45	He	-1.870	ppb	N/A	448.93	20	
27	Al	45	He	-1.613	ppb	N/A	10.00	20	
28	Si	45	H2	6.195	ppb	13.4	453.84	100	
39	K	45	He	17.718	ppb	3.3	10689.25	200	
40	Ca	45	H2	4.766	ppb	8.3	3387.20	20	
51	V	89	He	0.634	ppb	15.2	730.05	1	Failed DoD
52	Cr	89	He	0.140	ppb	5.7	172.64	1	
55	Mn	89	He	0.132	ppb	12.3	74.66	0.4	
56	Fe	89	H2	0.051	ppb	347.4	7947.85	20	
59	Co	89	He	0.002	ppb	267.9	11.11	0.2	
60	Ni	89	He	-0.017	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.051	ppb	N/A	328.90	0.6	
66	Zn	89	He	0.101	ppb	30.3	78.89	2	
75	As	89	He	0.066	ppb	38.0	14.00	1	
78	Se	89	H2	0.069	ppb	20.2	5.67	1	
88	Sr	89	He	0.012	ppb	102.2	14.44	1	
95	Mo	89	He	-0.023	ppb	N/A	98.89	1	
107	Ag	89	He	0.008	ppb	51.6	33.33	0.2	
111	Cd	89	He	0.006	ppb	47.9	3.33	0.2	
118	Sn	159	He	0.287	ppb	3.7	318.90	1	
121	Sb	159	No Gas	0.033	ppb	6.2	357.08	0.2	
137	Ba	159	No Gas	0.032	ppb	76.1	116.80	0.4	
182	W	159	No Gas	0.116	ppb	16.4	840.97	1	
205	Tl	209	No Gas	0.028	ppb	21.6	423.83	0.2	
208	Pb	209	No Gas	0.142	ppb	15.8	2906.74	0.2	Failed DoD
232	Th	209	No Gas	0.179	ppb	42.4	3784.90	1	
238	U	209	No Gas	0.033	ppb	45.8	620.74	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1245233.86	1.9	1537409.87	81	29.5	120.4	
Sc	45	No Gas	3135267.74	1.4	3373253.08	92.94	29.5	120.4	
Sc	45	H2	355867.58	0.5	415670.69	85.61	29.5	120.4	
Sc	45	He	72007.30	1.4	81171.76	88.71	29.5	120.4	
Ge	72	No Gas	757855.02	2.7	779333.11	97.24	29.5	120.4	
Ge	72	H2	131063.35	1.0	153246.58	85.52	29.5	120.4	
Ge	72	He	57560.77	1.0	63135.03	91.17	29.5	120.4	
Y	89	H2	2412992.44	1.0	2642116.11	91.33	29.5	120.4	
Y	89	He	504937.52	0.5	544041.92	92.81	29.5	120.4	
Tb	159	No Gas	8655732.44	1.5	8117023.84	106.64	29.5	120.4	
Tb	159	He	2880984.82	0.7	2866479.19	100.51	29.5	120.4	
Bi	209	No Gas	4707143.12	1.2	4424692.92	106.38	29.5	120.4	

Sample Report

Sample Name SN5520-008

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:34:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.115	ppb	78.3	38.89	100	
11	B	6	No Gas	19.313	ppb	2.0	3391.63	1000	
23	Na	45	He	6697.699	ppb	1.4	144034.57	200000	
24	Mg	45	He	30144.219	ppb	1.2	343220.45	200000	
27	Al	45	He	0.421	ppb	847.8	47.78	200000	
28	Si	45	H2	3959.665	ppb	1.4	30459.97	10000	
39	K	45	He	1403.486	ppb	1.9	24052.78	200000	
40	Ca	45	H2	37471.579	ppb	2.1	2736307.74	200000	
51	V	89	He	2.212	ppb	11.9	588.92	1000	
52	Cr	89	He	0.324	ppb	12.8	99.98	2000	
55	Mn	89	He	503.135	ppb	1.1	49096.59	2000	
56	Fe	89	H2	7614.075	ppb	1.9	2341677.06	100000	
59	Co	89	He	0.828	ppb	2.4	295.58	1000	
60	Ni	89	He	0.168	ppb	20.2	56.67	1000	
63	Cu	89	He	-0.684	ppb	N/A	222.23	2000	
66	Zn	89	He	2.313	ppb	32.4	146.67	2000	
75	As	89	He	47.962	ppb	2.7	1435.90	1000	
78	Se	89	H2	0.078	ppb	61.6	1.67	1000	
88	Sr	89	He	120.826	ppb	0.1	17617.41	2000	
95	Mo	89	He	0.011	ppb	1421.3	122.23	1000	
107	Ag	89	He	0.003	ppb	233.7	12.22	100	
111	Cd	89	He	0.025	ppb	33.2	2.96	1000	
118	Sn	159	He	0.626	ppb	41.2	182.23	1000	
121	Sb	159	No Gas	0.024	ppb	51.0	136.82	1000	
137	Ba	159	No Gas	18.949	ppb	7.0	11651.46	2000	
182	W	159	No Gas	-0.026	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.004	ppb	255.5	40.04	1000	
208	Pb	209	No Gas	0.231	ppb	7.4	1067.88	2000	
232	Th	209	No Gas	0.026	ppb	106.2	283.65	1000	
238	U	209	No Gas	0.090	ppb	27.9	340.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1210214.01	2.4	1537409.87	78.72	29.5	120.4	
Sc	45	No Gas	3198480.66	2.9	3373253.08	94.82	29.5	120.4	
Sc	45	H2	364099.02	1.0	415670.69	87.59	29.5	120.4	
Sc	45	He	74360.28	1.4	81171.76	91.61	29.5	120.4	
Ge	72	No Gas	767008.66	3.1	779333.11	98.42	29.5	120.4	
Ge	72	H2	136569.13	1.9	153246.58	89.12	29.5	120.4	
Ge	72	He	59316.52	0.7	63135.03	93.95	29.5	120.4	
Y	89	H2	2456728.88	1.4	2642116.11	92.98	29.5	120.4	
Y	89	He	517455.48	0.7	544041.92	95.11	29.5	120.4	
Tb	159	No Gas	8684809.73	2.7	8117023.84	107	29.5	120.4	
Tb	159	He	2924419.47	0.7	2866479.19	102.02	29.5	120.4	
Bi	209	No Gas	4680889.27	2.9	4424692.92	105.79	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMW2
File Name	123_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:37:04 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.006	ppb	32.5	21.11	0.1	
B	11	6	No Gas	0.456	ppb	21.9	1064.52	2	
Na	23	45	He	-1.806	ppb	N/A	5346.92	100	
Mg	24	45	He	1.418	ppb	121.5	635.62	10	
Al	27	45	He	-0.298	ppb	N/A	38.89	10	
Si	28	45	H2	3.710	ppb	38.6	380.43	50	
K	39	45	He	18.737	ppb	99.3	10855.96	100	
Ca	40	45	H2	1.272	ppb	24.6	2261.38	10	
V	51	89	He	0.036	ppb	90.6	247.79	0.5	
Cr	52	89	He	0.032	ppb	27.9	65.32	0.5	
Mn	55	89	He	0.126	ppb	11.5	71.99	0.2	
Fe	56	89	H2	-1.464	ppb	N/A	5884.44	10	
Co	59	89	He	-0.002	ppb	N/A	4.44	0.1	
Ni	60	89	He	-0.018	ppb	N/A	30.00	0.2	
Cu	63	89	He	-0.172	ppb	N/A	172.23	0.3	
Zn	66	89	He	0.930	ppb	14.9	226.67	1	
As	75	89	He	0.000	ppb	4713.5	4.33	0.5	
Se	78	89	H2	0.003	ppb	373.4	0.67	0.5	
Sr	88	89	He	0.011	ppb	87.1	14.44	0.5	
Mo	95	89	He	-0.110	ppb	N/A	27.78	0.5	
Ag	107	89	He	0.000	ppb	306.9	11.11	0.1	
Cd	111	89	He	-0.002	ppb	N/A	0.37	0.1	
Sn	118	159	He	-0.014	ppb	N/A	57.78	0.5	
Sb	121	159	No Gas	-0.003	ppb	N/A	73.42	0.1	
Ba	137	159	No Gas	0.019	ppb	27.9	73.42	0.2	
W	182	159	No Gas	-0.008	ppb	N/A	73.42	0.5	
Tl	205	209	No Gas	0.000	ppb	798.1	30.03	0.1	
[Pb]	206	209	No Gas	0.007	ppb	136.9	80.09	0.1	
[Pb]	207	209	No Gas	0.012	ppb	53.5	90.10	0.1	
Pb	208	209	No Gas	0.012	ppb	25.7	413.80	0.1	
Th	232	209	No Gas	-0.001	ppb	N/A	143.50	0.5	
U	238	209	No Gas	0.001	ppb	126.0	23.36	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234382.67	0.9	1537409.87	80.29	29.5	120.4	
Sc	45	No Gas	3169065.67	0.3	3373253.08	93.95	29.5	120.4	
Sc	45	H2	376440.69	4.7	415670.69	90.56	29.5	120.4	
Sc	45	He	73046.36	6.4	81171.76	89.99	29.5	120.4	
Ge	72	No Gas	750725.07	0.0	779333.11	96.33	29.5	120.4	
Ge	72	H2	141072.38	4.2	153246.58	92.06	29.5	120.4	
Ge	72	He	58987.54	3.9	63135.03	93.43	29.5	120.4	
Y	89	H2	2511062.62	4.8	2642116.11	95.04	29.5	120.4	
Y	89	He	506585.75	6.1	544041.92	93.12	29.5	120.4	
Tb	159	No Gas	8352375.36	0.5	8117023.84	102.9	29.5	120.4	
Tb	159	He	2794611.73	5.6	2866479.19	97.49	29.5	120.4	
Bi	209	No Gas	4554540.68	0.8	4424692.92	102.93	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG09IMW2
File Name	124_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:39:47 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.055	ppb	4.8	11265.87	50	20.02	79.5	120.4	
B	11	6	No Gas	503.040	ppb	3.9	75082.83	500	20.12	79.5	120.4	
Na	23	45	He	7354.195	ppb	0.5	161105.44	7500	19.61	79.5	120.4	
Mg	24	45	He	5106.654	ppb	1.6	59917.39	5000	20.43	79.5	120.4	
Al	27	45	He	1906.624	ppb	2.0	8626.23	2000	19.07	79.5	120.4	
Si	28	45	H2	1076.604	ppb	8.9	8652.31	1000	21.53	79.5	120.4	
K	39	45	He	10244.443	ppb	0.4	114046.23	10000	20.49	79.5	120.4	
Ca	40	45	H2	2640.063	ppb	1.3	199235.54	2500	21.12	79.5	120.4	
V	51	89	He	494.376	ppb	0.9	82855.92	500	19.78	79.5	120.4	
Cr	52	89	He	200.184	ppb	1.1	41323.81	200	20.02	79.5	120.4	
Mn	55	89	He	497.355	ppb	1.6	48900.04	500	19.89	79.5	120.4	
Fe	56	89	H2	1063.514	ppb	2.0	335981.99	1000	21.27	79.5	120.4	
Co	59	89	He	517.815	ppb	1.4	180896.96	500	20.71	79.5	120.4	
Ni	60	89	He	493.254	ppb	1.4	48861.86	500	19.73	79.5	120.4	
Cu	63	89	He	255.208	ppb	0.5	68933.73	250	20.42	79.5	120.4	
Zn	66	89	He	513.663	ppb	3.8	18950.15	500	20.55	79.5	120.4	
As	75	89	He	100.886	ppb	1.4	3038.34	100	20.18	79.5	120.4	
Se	78	89	H2	104.481	ppb	0.9	1605.85	100	20.9	79.5	120.4	
Sr	88	89	He	515.059	ppb	1.3	75648.20	500	20.6	79.5	120.4	
Mo	95	89	He	103.591	ppb	0.4	17593.02	100	20.72	79.5	120.4	
Ag	107	89	He	53.202	ppb	1.7	30521.73	50	21.28	79.5	120.4	
Cd	111	89	He	261.435	ppb	1.3	19978.54	250	20.91	79.5	120.4	
Sn	118	159	He	483.917	ppb	0.5	83689.54	500	19.36	79.5	120.4	
Sb	121	159	No Gas	101.081	ppb	5.2	151890.08	100	20.22	79.5	120.4	
Ba	137	159	No Gas	1923.761	ppb	4.2	1136955.63	2000	19.24	79.5	120.4	
W	182	159	No Gas	100.817	ppb	3.3	120623.07	100	20.16	79.5	120.4	
Tl	205	209	No Gas	101.857	ppb	4.1	270708.06	100	20.37	79.5	120.4	
Pb	208	209	No Gas	102.262	ppb	4.8	375732.99	100	20.45	79.5	120.4	
Th	232	209	No Gas	96.388	ppb	6.5	370664.57	100	19.28	79.5	120.4	
U	238	209	No Gas	99.586	ppb	6.0	359363.32	100	19.92	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1296877.76	1.4	1537409.87	84.35	29.5	120.4	
Sc	45	No Gas	3218896.28	2.2	3373253.08	95.42	29.5	120.4	
Sc	45	H2	373165.80	1.3	415670.69	89.77	29.5	120.4	
Sc	45	He	76009.03	1.0	81171.76	93.64	29.5	120.4	
Ge	72	No Gas	759447.75	2.7	779333.11	97.45	29.5	120.4	
Ge	72	H2	138093.07	2.5	153246.58	90.11	29.5	120.4	
Ge	72	He	60303.97	0.3	63135.03	95.52	29.5	120.4	
Y	89	H2	2471436.77	1.2	2642116.11	93.54	29.5	120.4	
Y	89	He	521429.42	1.3	544041.92	95.84	29.5	120.4	
Tb	159	No Gas	8355593.56	2.6	8117023.84	102.94	29.5	120.4	
Tb	159	He	2887688.81	0.7	2866479.19	100.74	29.5	120.4	
Bi	209	No Gas	4519038.51	3.0	4424692.92	102.13	29.5	120.4	

Sample Report

Sample Name SN5513-001

File Name 125SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:42:25 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.041	ppb	48.8	60.00	100	
11	B	6	No Gas	24.103	ppb	5.2	18217.62	1000	
23	Na	45	He	12048.569	ppb	1.0	1262300.50	200000	
24	Mg	45	He	441.095	ppb	1.9	25885.10	200000	
27	Al	45	He	39.172	ppb	5.8	916.73	200000	
28	Si	45	H2	553.873	ppb	7.7	22482.72	10000	
39	K	45	He	2072.577	ppb	0.4	113817.28	200000	
40	Ca	45	H2	3237.772	ppb	6.3	1245361.58	200000	
51	V	89	He	0.174	ppb	27.3	367.80	1000	
52	Cr	89	He	0.138	ppb	17.5	175.30	2000	
55	Mn	89	He	8.444	ppb	1.8	4149.87	2000	
56	Fe	89	H2	55.663	ppb	7.6	96343.48	100000	
59	Co	89	He	0.091	ppb	32.8	166.68	1000	
60	Ni	89	He	0.433	ppb	21.2	254.46	1000	
63	Cu	89	He	2.099	ppb	0.8	3216.05	2000	
66	Zn	89	He	7.534	ppb	3.9	1444.58	2000	
75	As	89	He	0.113	ppb	51.4	21.33	1000	
78	Se	89	H2	0.056	ppb	40.8	4.83	1000	
88	Sr	89	He	15.913	ppb	1.3	11657.57	2000	
95	Mo	89	He	0.057	ppb	113.1	168.90	1000	
107	Ag	89	He	0.007	ppb	85.7	30.00	100	
111	Cd	89	He	0.022	ppb	52.1	9.63	1000	
118	Sn	159	He	0.587	ppb	5.8	576.70	1000	
121	Sb	159	No Gas	0.078	ppb	17.4	680.78	1000	
137	Ba	159	No Gas	1.861	ppb	13.1	5483.95	2000	
182	W	159	No Gas	0.124	ppb	26.8	854.33	1000	
205	Tl	209	No Gas	0.034	ppb	69.4	470.55	1000	
208	Pb	209	No Gas	0.238	ppb	34.5	4515.51	2000	
232	Th	209	No Gas	0.398	ppb	7.4	7821.35	1000	
238	U	209	No Gas	0.040	ppb	67.1	710.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1271865.62	2.2	1537409.87	82.73	29.5	120.4	
Sc	45	No Gas	3211675.96	2.6	3373253.08	95.21	29.5	120.4	
Sc	45	H2	384208.79	6.3	415670.69	92.43	29.5	120.4	
Sc	45	He	75066.13	0.3	81171.76	92.48	29.5	120.4	
Ge	72	No Gas	758290.49	2.3	779333.11	97.3	29.5	120.4	
Ge	72	H2	143773.91	5.1	153246.58	93.82	29.5	120.4	
Ge	72	He	60251.23	0.5	63135.03	95.43	29.5	120.4	
Y	89	H2	2543433.60	6.3	2642116.11	96.27	29.5	120.4	
Y	89	He	519887.03	1.4	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8314188.84	2.7	8117023.84	102.43	29.5	120.4	
Tb	159	He	2876795.75	0.6	2866479.19	100.36	29.5	120.4	
Bi	209	No Gas	4504671.86	3.0	4424692.92	101.81	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG10IMS1
File Name	126_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:45:09 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.036	ppb	89.6	23.33	0.5	
B	11	6	No Gas	8.923	ppb	10.2	2058.01	10	
Na	23	45	He	134.576	ppb	22.2	8278.28	500	
Mg	24	45	He	13.416	ppb	5.0	708.96	50	
Al	27	45	He	5.805	ppb	12.6	70.00	50	
Si	28	45	H2	24.829	ppb	24.8	423.82	250	
K	39	45	He	111.326	ppb	15.5	11051.01	500	
Ca	40	45	H2	59.599	ppb	1.6	6171.54	50	PB 6020 Fails DoD
V	51	89	He	2.346	ppb	17.2	603.37	2.5	
Cr	52	89	He	0.875	ppb	9.4	209.96	2.5	
Mn	55	89	He	3.706	ppb	15.8	369.27	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	11.300	ppb	10.4	11564.30	50	
Co	59	89	He	0.145	ppb	35.1	57.78	0.5	
Ni	60	89	He	0.634	ppb	17.4	101.11	1	
Cu	63	89	He	0.259	ppb	24.2	467.80	1.5	
Zn	66	89	He	8.679	ppb	4.9	374.46	5	PB 6020 Fails DoD
As	75	89	He	0.122	ppb	124.8	8.00	2.5	
Se	78	89	H2	0.078	ppb	87.0	1.67	2.5	
Sr	88	89	He	0.412	ppb	15.1	65.56	2.5	
Mo	95	89	He	-0.518	ppb	N/A	33.33	2.5	
Ag	107	89	He	0.013	ppb	50.9	17.78	0.5	
Cd	111	89	He	0.021	ppb	108.0	2.59	0.5	
Sn	118	159	He	39.859	ppb	1.4	6892.01	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.034	ppb	28.4	146.83	0.5	
Ba	137	159	No Gas	0.457	ppb	12.2	286.99	1	
W	182	159	No Gas	-0.022	ppb	N/A	93.44	2.5	
Tl	205	209	No Gas	0.009	ppb	91.0	50.06	0.5	
Pb	208	209	No Gas	0.547	ppb	1.8	2209.23	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.305	ppb	1.8	1351.61	2.5	
U	238	209	No Gas	0.012	ppb	47.1	46.72	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1270431.57	1.7	1537409.87	82.63	29.5	120.4	
Sc	45	No Gas	3137464.98	0.8	3373253.08	93.01	29.5	120.4	
Sc	45	H2	369776.93	0.5	415670.69	88.96	29.5	120.4	
Sc	45	He	72955.72	0.3	81171.76	89.88	29.5	120.4	
Ge	72	No Gas	754115.16	1.6	779333.11	96.76	29.5	120.4	
Ge	72	H2	136862.03	1.9	153246.58	89.31	29.5	120.4	
Ge	72	He	58964.57	0.2	63135.03	93.39	29.5	120.4	
Y	89	H2	2475560.16	0.8	2642116.11	93.7	29.5	120.4	
Y	89	He	510948.82	1.1	544041.92	93.92	29.5	120.4	
Tb	159	No Gas	8350688.14	0.8	8117023.84	102.88	29.5	120.4	
Tb	159	He	2860101.52	1.2	2866479.19	99.78	29.5	120.4	
Bi	209	No Gas	4548461.90	1.4	4424692.92	102.8	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG10IMS1
File Name	127LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:47:45 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.972	ppb	5.5	10706.51	50	19.59	79.5	120.4	
B	11	6	No Gas	494.522	ppb	3.7	71717.88	500	19.78	79.5	120.4	
Na	23	45	He	7337.758	ppb	2.6	159318.69	7500	19.57	79.5	120.4	
Mg	24	45	He	4973.589	ppb	3.1	57848.83	5000	19.89	79.5	120.4	
Al	27	45	He	1775.480	ppb	4.7	7964.69	2000	17.75	79.5	120.4	
Si	28	45	H2	914.312	ppb	2.5	7373.45	1000	18.29	79.5	120.4	
K	39	45	He	10012.050	ppb	3.3	110689.88	10000	20.02	79.5	120.4	
Ca	40	45	H2	2561.433	ppb	1.7	192982.11	2500	20.49	79.5	120.4	
V	51	89	He	488.731	ppb	2.8	81929.66	500	19.55	79.5	120.4	
Cr	52	89	He	199.216	ppb	2.0	41136.63	200	19.92	79.5	120.4	
Mn	55	89	He	493.793	ppb	1.7	48568.28	500	19.75	79.5	120.4	
Fe	56	89	H2	1044.558	ppb	1.9	335832.85	1000	20.89	79.5	120.4	
Co	59	89	He	513.431	ppb	2.2	179420.08	500	20.54	79.5	120.4	
Ni	60	89	He	492.333	ppb	3.3	48779.16	500	19.69	79.5	120.4	
Cu	63	89	He	254.352	ppb	2.3	68720.67	250	20.35	79.5	120.4	
Zn	66	89	He	501.467	ppb	2.3	18510.63	500	20.06	79.5	120.4	
As	75	89	He	101.422	ppb	3.1	3055.01	100	20.28	79.5	120.4	
Se	78	89	H2	97.912	ppb	1.6	1530.68	100	19.58	79.5	120.4	
Sr	88	89	He	501.934	ppb	2.2	73745.80	500	20.08	79.5	120.4	
Mo	95	89	He	103.697	ppb	2.9	17612.98	100	20.74	79.5	120.4	
Ag	107	89	He	53.989	ppb	3.1	30979.47	50	21.6	79.5	120.4	
Cd	111	89	He	253.314	ppb	2.3	19363.55	250	20.27	79.5	120.4	
Sn	118	159	He	513.308	ppb	2.1	90242.51	500	20.53	79.5	120.4	
Sb	121	159	No Gas	97.511	ppb	5.1	150732.87	100	19.5	79.5	120.4	
Ba	137	159	No Gas	1876.977	ppb	3.7	1141074.20	2000	18.77	79.5	120.4	
W	182	159	No Gas	99.544	ppb	3.6	122500.33	100	19.91	79.5	120.4	
Tl	205	209	No Gas	100.656	ppb	3.8	273812.84	100	20.13	79.5	120.4	
[Pb]	206	209	No Gas	101.581	ppb	6.2	95092.31	100	20.32	79.5	120.4	
[Pb]	207	209	No Gas	101.777	ppb	4.3	83532.47	100	20.36	79.5	120.4	
Pb	208	209	No Gas	100.738	ppb	4.4	378870.48	100	20.15	79.5	120.4	
Th	232	209	No Gas	96.410	ppb	4.8	379609.67	100	19.28	79.5	120.4	
U	238	209	No Gas	97.915	ppb	4.9	361735.82	100	19.58	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260005.85	1.9	1537409.87	81.96	29.5	120.4	
Sc	45	No Gas	3200930.71	2.0	3373253.08	94.89	29.5	120.4	
Sc	45	H2	372444.50	1.1	415670.69	89.6	29.5	120.4	
Sc	45	He	75355.65	2.3	81171.76	92.83	29.5	120.4	
Ge	72	No Gas	776020.71	1.7	779333.11	99.57	29.5	120.4	
Ge	72	H2	138878.66	2.1	153246.58	90.62	29.5	120.4	
Ge	72	He	59997.98	2.3	63135.03	95.03	29.5	120.4	
Y	89	H2	2513972.48	0.8	2642116.11	95.15	29.5	120.4	
Y	89	He	521672.17	1.9	544041.92	95.89	29.5	120.4	
Tb	159	No Gas	8592375.43	1.5	8117023.84	105.86	29.5	120.4	
Tb	159	He	2936240.65	1.6	2866479.19	102.43	29.5	120.4	
Bi	209	No Gas	4623791.18	1.9	4424692.92	104.5	29.5	120.4	

Sample Report

Sample Name SN5481-001

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:50:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.558	ppb	38.0	125.56	100	
11	B	6	No Gas	55.072	ppb	12.5	7938.01	1000	
23	Na	45	He	6867.143	ppb	2.0	141946.26	200000	
24	Mg	45	He	13805.155	ppb	2.3	151523.24	200000	
27	Al	45	He	6854.393	ppb	3.8	29069.33	200000	
28	Si	45	H2	1413.681	ppb	3.9	10699.32	10000	
39	K	45	He	18765.773	ppb	1.8	188501.73	200000	
40	Ca	45	H2	18408.055	ppb	2.5	1306088.06	200000	
51	V	89	He	112.247	ppb	1.9	18313.59	1000	
52	Cr	89	He	44.327	ppb	1.2	8853.85	2000	
55	Mn	89	He	159.287	ppb	1.0	15117.36	2000	
56	Fe	89	H2	22455.717	ppb	2.2	6744170.44	100000	
59	Co	89	He	6.103	ppb	2.5	2064.75	1000	
60	Ni	89	He	68.281	ppb	2.2	6558.44	1000	
63	Cu	89	He	1327.010	ppb	1.2	344107.85	2000	
66	Zn	89	He	1757.560	ppb	1.5	62416.08	2000	
75	As	89	He	13.908	ppb	3.7	407.72	1000	
78	Se	89	H2	8.478	ppb	9.8	127.33	1000	
88	Sr	89	He	1061.014	ppb	0.7	150334.42	2000	
95	Mo	89	He	13.295	ppb	4.5	2280.28	1000	
107	Ag	89	He	6.039	ppb	5.2	3350.54	100	
111	Cd	89	He	5.527	ppb	2.4	408.53	1000	
118	Sn	159	He	96.556	ppb	1.3	16608.54	1000	
121	Sb	159	No Gas	3.739	ppb	13.2	5423.83	1000	
137	Ba	159	No Gas	331.029	ppb	14.0	185679.91	2000	
182	W	159	No Gas	4.223	ppb	10.2	4916.44	1000	
205	Tl	209	No Gas	0.297	ppb	27.5	834.31	1000	
208	Pb	209	No Gas	61.099	ppb	11.9	227240.79	2000	
232	Th	209	No Gas	1.985	ppb	26.8	7945.01	1000	
238	U	209	No Gas	5.034	ppb	14.1	18367.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1161028.52	7.8	1537409.87	75.52	29.5	120.4	
Sc	45	No Gas	2944505.39	10.1	3373253.08	87.29	29.5	120.4	
Sc	45	H2	353624.26	2.2	415670.69	85.07	29.5	120.4	
Sc	45	He	71554.19	1.8	81171.76	88.15	29.5	120.4	
Ge	72	No Gas	697396.28	7.2	779333.11	89.49	29.5	120.4	
Ge	72	H2	133449.45	1.6	153246.58	87.08	29.5	120.4	
Ge	72	He	57016.19	0.4	63135.03	90.31	29.5	120.4	
Y	89	H2	2404813.72	1.9	2642116.11	91.02	29.5	120.4	
Y	89	He	503012.44	1.0	544041.92	92.46	29.5	120.4	
Tb	159	No Gas	7994248.15	9.4	8117023.84	98.49	29.5	120.4	
Tb	159	He	2862285.41	0.6	2866479.19	99.85	29.5	120.4	
Bi	209	No Gas	4598520.91	8.4	4424692.92	103.93	29.5	120.4	

Sample Report

Sample Name SN5497-001

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:53:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	21.095	ppb	3.5	4307.45	100	
11	B	6	No Gas	18.647	ppb	3.5	3202.68	1000	
23	Na	45	He	135.499	ppb	13.6	8508.63	200000	
24	Mg	45	He	8049.886	ppb	3.0	92626.40	200000	
27	Al	45	He	115881.123	ppb	3.3	513204.29	200000	
28	Si	45	H2	1886.482	ppb	2.9	14884.30	10000	
39	K	45	He	1954.565	ppb	5.2	29682.32	200000	
40	Ca	45	H2	104771.545	ppb	1.6	7778563.50	200000	
51	V	89	He	1791.592	ppb	2.6	304507.76	1000	
52	Cr	89	He	2872.074	ppb	2.2	601995.26	2000	
55	Mn	89	He	8084.888	ppb	2.3	807595.44	2000	
56	Fe	89	H2	967047.383	ppb	1.3	309017686.80	100000	>LDR
59	Co	89	He	130.921	ppb	3.0	46480.27	1000	
60	Ni	89	He	119.820	ppb	3.1	12091.21	1000	
63	Cu	89	He	88.852	ppb	2.3	24655.81	2000	
66	Zn	89	He	360.043	ppb	3.0	13518.08	2000	
75	As	89	He	402.176	ppb	2.9	12292.45	1000	
78	Se	89	H2	5.214	ppb	4.4	83.50	1000	
88	Sr	89	He	240.771	ppb	3.2	35934.54	2000	
95	Mo	89	He	47.538	ppb	1.6	8270.55	1000	
107	Ag	89	He	0.479	ppb	9.9	290.01	100	
111	Cd	89	He	0.840	ppb	2.0	66.30	1000	
118	Sn	159	He	39.095	ppb	4.1	6748.63	1000	
121	Sb	159	No Gas	10.709	ppb	6.6	16401.77	1000	
137	Ba	159	No Gas	397.608	ppb	4.8	238263.93	2000	
182	W	159	No Gas	1.523	ppb	1.0	1969.03	1000	
205	Tl	209	No Gas	0.704	ppb	4.9	1892.27	1000	
208	Pb	209	No Gas	173.424	ppb	5.2	634763.14	2000	
232	Th	209	No Gas	56.598	ppb	4.5	217038.85	1000	
238	U	209	No Gas	38.659	ppb	4.8	139048.60	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174573.81	3.1	1537409.87	76.4	29.5	120.4	
Sc	45	No Gas	3175603.09	2.0	3373253.08	94.14	29.5	120.4	
Sc	45	H2	370312.20	0.8	415670.69	89.09	29.5	120.4	
Sc	45	He	74829.53	2.2	81171.76	92.19	29.5	120.4	
Ge	72	No Gas	753692.43	2.5	779333.11	96.71	29.5	120.4	
Ge	72	H2	134510.87	1.4	153246.58	87.77	29.5	120.4	
Ge	72	He	58446.42	1.1	63135.03	92.57	29.5	120.4	
Y	89	H2	2560934.05	0.4	2642116.11	96.93	29.5	120.4	
Y	89	He	529921.72	1.5	544041.92	97.4	29.5	120.4	
Tb	159	No Gas	8471633.62	2.2	8117023.84	104.37	29.5	120.4	
Tb	159	He	2855724.06	1.7	2866479.19	99.62	29.5	120.4	
Bi	209	No Gas	4503082.30	3.1	4424692.92	101.77	29.5	120.4	

Sample Report

Sample Name SN5497-002

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:55:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.481	ppb	4.9	5276.70	100	
11	B	6	No Gas	21.901	ppb	9.3	3689.49	1000	
23	Na	45	He	118.611	ppb	5.3	8211.52	200000	
24	Mg	45	He	5365.327	ppb	2.4	62356.22	200000	
27	Al	45	He	82406.293	ppb	1.2	367527.83	200000	
28	Si	45	H2	2101.894	ppb	0.8	16895.53	10000	
39	K	45	He	3475.794	ppb	1.2	45144.10	200000	
40	Ca	45	H2	37487.701	ppb	2.3	2841055.31	200000	
51	V	89	He	917.974	ppb	1.0	159730.83	1000	
52	Cr	89	He	958.495	ppb	1.2	205542.82	2000	
55	Mn	89	He	23532.249	ppb	0.6	2404655.63	2000	>LDR
56	Fe	89	H2	496657.644	ppb	0.9	163325626.54	100000	
59	Co	89	He	111.477	ppb	0.3	40491.96	1000	
60	Ni	89	He	82.234	ppb	0.6	8502.87	1000	
63	Cu	89	He	104.581	ppb	2.0	29613.33	2000	
66	Zn	89	He	372.338	ppb	1.0	14300.03	2000	
75	As	89	He	392.021	ppb	1.6	12258.41	1000	
78	Se	89	H2	3.989	ppb	8.5	65.83	1000	
88	Sr	89	He	114.124	ppb	0.7	17430.44	2000	
95	Mo	89	He	26.587	ppb	1.7	4787.68	1000	
107	Ag	89	He	0.177	ppb	18.3	116.68	100	
111	Cd	89	He	0.904	ppb	15.1	72.96	1000	
118	Sn	159	He	39.860	ppb	3.5	6905.35	1000	
121	Sb	159	No Gas	3.120	ppb	5.3	4856.26	1000	
137	Ba	159	No Gas	963.091	ppb	3.9	577538.39	2000	
182	W	159	No Gas	0.570	ppb	3.8	814.27	1000	
205	Tl	209	No Gas	1.090	ppb	6.2	2946.98	1000	
208	Pb	209	No Gas	231.681	ppb	4.0	858491.37	2000	
232	Th	209	No Gas	28.946	ppb	5.8	112423.38	1000	
238	U	209	No Gas	17.299	ppb	4.3	62988.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1191906.28	2.1	1537409.87	77.53	29.5	120.4	
Sc	45	No Gas	3253040.53	2.0	3373253.08	96.44	29.5	120.4	
Sc	45	H2	377934.89	1.9	415670.69	90.92	29.5	120.4	
Sc	45	He	75322.47	1.1	81171.76	92.79	29.5	120.4	
Ge	72	No Gas	764645.37	2.0	779333.11	98.12	29.5	120.4	
Ge	72	H2	135761.84	1.8	153246.58	88.59	29.5	120.4	
Ge	72	He	59292.78	1.1	63135.03	93.91	29.5	120.4	
Y	89	H2	2635463.32	0.8	2642116.11	99.75	29.5	120.4	
Y	89	He	541995.26	0.8	544041.92	99.62	29.5	120.4	
Tb	159	No Gas	8476128.83	1.9	8117023.84	104.42	29.5	120.4	
Tb	159	He	2865698.15	0.7	2866479.19	99.97	29.5	120.4	
Bi	209	No Gas	4557074.42	2.3	4424692.92	102.99	29.5	120.4	

Sample Report

Sample Name SN5497-003

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:58:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	23.822	ppb	4.4	4931.01	100	
11	B	6	No Gas	23.316	ppb	8.0	3877.33	1000	
23	Na	45	He	105.175	ppb	20.1	8214.79	200000	
24	Mg	45	He	4783.931	ppb	0.5	57665.45	200000	
27	Al	45	He	113290.563	ppb	0.8	523414.87	200000	
28	Si	45	H2	2737.632	ppb	2.1	22225.30	10000	
39	K	45	He	3576.405	ppb	1.1	47813.00	200000	
40	Ca	45	H2	19684.121	ppb	1.1	1512894.41	200000	
51	V	89	He	1286.636	ppb	0.4	245397.05	1000	
52	Cr	89	He	2237.519	ppb	0.7	526112.12	2000	
55	Mn	89	He	31185.922	ppb	0.5	3494532.52	2000	>LDR
56	Fe	89	H2	660666.373	ppb	1.0	233969859.95	100000	>LDR
59	Co	89	He	323.205	ppb	0.3	128716.90	1000	
60	Ni	89	He	314.253	ppb	1.6	35500.33	1000	
63	Cu	89	He	121.472	ppb	1.7	37642.77	2000	
66	Zn	89	He	899.107	ppb	0.6	37765.25	2000	
75	As	89	He	253.701	ppb	2.2	8700.67	1000	
78	Se	89	H2	3.371	ppb	4.1	60.00	1000	
88	Sr	89	He	97.170	ppb	0.8	16274.60	2000	
95	Mo	89	He	36.794	ppb	1.0	7212.17	1000	
107	Ag	89	He	1.369	ppb	11.7	907.84	100	
111	Cd	89	He	10.144	ppb	2.9	884.85	1000	
118	Sn	159	He	41.078	ppb	1.9	7222.24	1000	
121	Sb	159	No Gas	7.077	ppb	6.0	10929.97	1000	
137	Ba	159	No Gas	2650.533	ppb	4.7	1596561.36	2000	
182	W	159	No Gas	1.560	ppb	16.1	2019.08	1000	
205	Tl	209	No Gas	5.043	ppb	7.7	13331.98	1000	
208	Pb	209	No Gas	395.320	ppb	4.8	1442611.60	2000	
232	Th	209	No Gas	53.699	ppb	5.7	205272.35	1000	
238	U	209	No Gas	46.959	ppb	6.0	168363.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1191265.17	3.3	1537409.87	77.49	29.5	120.4	
Sc	45	No Gas	3356384.24	3.5	3373253.08	99.5	29.5	120.4	
Sc	45	H2	382986.83	1.2	415670.69	92.14	29.5	120.4	
Sc	45	He	78029.86	0.7	81171.76	96.13	29.5	120.4	
Ge	72	No Gas	780294.74	3.4	779333.11	100.12	29.5	120.4	
Ge	72	H2	134941.47	0.3	153246.58	88.06	29.5	120.4	
Ge	72	He	60021.00	0.3	63135.03	95.07	29.5	120.4	
Y	89	H2	2838329.95	1.4	2642116.11	107.43	29.5	120.4	
Y	89	He	594348.46	0.6	544041.92	109.25	29.5	120.4	
Tb	159	No Gas	8519216.26	3.3	8117023.84	104.95	29.5	120.4	
Tb	159	He	2908752.42	0.3	2866479.19	101.47	29.5	120.4	
Bi	209	No Gas	4490771.18	3.5	4424692.92	101.49	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	132_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:01:27 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.843	ppb	1.9	26970.29	25	103.37	89.8	110.2	
11	B	6	No Gas	25.744	ppb	0.9	18373.32	25	102.98	89.8	110.2	
23	Na	45	He	4937.946	ppb	0.6	521250.64	5000	98.76	89.8	110.2	
24	Mg	45	He	4848.259	ppb	0.7	279062.29	5000	96.97	89.8	110.2	
27	Al	45	He	482.813	ppb	0.7	10786.69	500	96.56	89.8	110.2	
28	Si	45	H2	487.705	ppb	2.4	19364.64	500	97.54	89.8	110.2	
39	K	45	He	4940.486	ppb	0.9	257387.33	5000	98.81	89.8	110.2	
40	Ca	45	H2	4932.758	ppb	0.7	1851374.65	5000	98.66	89.8	110.2	
51	V	89	He	24.643	ppb	1.4	20574.51	25	98.57	89.8	110.2	
52	Cr	89	He	24.935	ppb	1.5	25446.83	25	99.74	89.8	110.2	
55	Mn	89	He	26.316	ppb	1.1	12794.15	25	105.26	89.8	110.2	
56	Fe	89	H2	4962.963	ppb	0.8	7688845.61	5000	99.26	89.8	110.2	
59	Co	89	He	25.301	ppb	0.1	43683.72	25	101.2	89.8	110.2	
60	Ni	89	He	25.280	ppb	2.3	12403.71	25	101.12	89.8	110.2	
63	Cu	89	He	25.178	ppb	0.8	33807.33	25	100.71	89.8	110.2	
66	Zn	89	He	24.216	ppb	2.7	4463.11	25	96.86	89.8	110.2	
75	As	89	He	24.682	ppb	2.1	3671.56	25	98.73	89.8	110.2	
78	Se	89	H2	24.187	ppb	1.3	1865.54	25	96.75	89.8	110.2	
88	Sr	89	He	24.054	ppb	1.1	17461.68	25	96.22	89.8	110.2	
95	Mo	89	He	24.919	ppb	0.7	20885.51	25	99.68	89.8	110.2	
107	Ag	89	He	18.809	ppb	0.9	53313.17	25	75.24	89.8	110.2	> +/- 10%
111	Cd	89	He	24.806	ppb	0.9	9367.76	25	99.22	89.8	110.2	
118	Sn	159	He	23.295	ppb	0.9	19766.20	25	93.18	89.8	110.2	
121	Sb	159	No Gas	24.613	ppb	0.8	179228.75	25	98.45	89.8	110.2	
137	Ba	159	No Gas	24.802	ppb	1.0	71038.72	25	99.21	89.8	110.2	
182	W	159	No Gas	24.146	ppb	1.1	139935.77	25	96.58	89.8	110.2	
205	Tl	209	No Gas	24.777	ppb	1.4	316085.65	25	99.11	89.8	110.2	
208	Pb	209	No Gas	24.664	ppb	2.0	434975.92	25	98.66	89.8	110.2	
232	Th	209	No Gas	24.061	ppb	0.3	444377.41	25	96.24	89.8	110.2	
238	U	209	No Gas	24.549	ppb	1.2	425421.42	25	98.2	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203283.23	1.7	1537409.87	78.27	29.5	120.4	
Sc	45	No Gas	3186879.19	2.4	3373253.08	94.47	29.5	120.4	
Sc	45	H2	374112.56	0.5	415670.69	90	29.5	120.4	
Sc	45	He	75146.56	0.7	81171.76	92.58	29.5	120.4	
Ge	72	No Gas	750022.38	1.9	779333.11	96.24	29.5	120.4	
Ge	72	H2	139106.72	0.8	153246.58	90.77	29.5	120.4	
Ge	72	He	60158.96	0.5	63135.03	95.29	29.5	120.4	
Y	89	H2	2480666.41	0.7	2642116.11	93.89	29.5	120.4	
Y	89	He	515272.90	0.4	544041.92	94.71	29.5	120.4	
Tb	159	No Gas	8092614.67	1.9	8117023.84	99.7	29.5	120.4	
Tb	159	He	2825904.61	0.3	2866479.19	98.58	29.5	120.4	
Bi	209	No Gas	4335524.43	1.7	4424692.92	97.98	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	133_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:04:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.075	ppb	19.5	95.56	0.2	
11	B	6	No Gas	1.516	ppb	11.4	1819.07	4	
23	Na	45	He	2.350	ppb	99.0	5877.74	200	
24	Mg	45	He	-6.185	ppb	N/A	217.79	20	
27	Al	45	He	1.619	ppb	22.0	81.12	20	
28	Si	45	H2	5.969	ppb	26.5	457.18	100	
39	K	45	He	14.455	ppb	27.3	10840.95	200	
40	Ca	45	H2	5.749	ppb	3.1	3838.44	20	
51	V	89	He	0.791	ppb	9.8	868.95	1	Failed DoD
52	Cr	89	He	0.184	ppb	20.6	219.96	1	
55	Mn	89	He	0.996	ppb	2.5	492.59	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	20.505	ppb	4.6	39231.59	20	Fail All Methods□ Failed DoD
59	Co	89	He	0.016	ppb	39.6	35.56	0.2	
60	Ni	89	He	-0.016	ppb	N/A	32.22	0.4	
63	Cu	89	He	-0.092	ppb	N/A	278.90	0.6	
66	Zn	89	He	0.070	ppb	21.3	74.45	2	
75	As	89	He	0.113	ppb	60.5	21.00	1	
78	Se	89	H2	0.040	ppb	17.0	3.50	1	
88	Sr	89	He	0.011	ppb	90.4	14.44	1	
95	Mo	89	He	-0.010	ppb	N/A	111.11	1	
107	Ag	89	He	0.003	ppb	127.9	18.89	0.2	
111	Cd	89	He	0.007	ppb	64.6	3.70	0.2	
118	Sn	159	He	0.343	ppb	13.9	365.58	1	
121	Sb	159	No Gas	0.034	ppb	21.6	347.06	0.2	
137	Ba	159	No Gas	0.057	ppb	18.7	183.54	0.4	
182	W	159	No Gas	0.105	ppb	18.2	734.17	1	
205	Tl	209	No Gas	0.024	ppb	28.6	340.39	0.2	
208	Pb	209	No Gas	0.122	ppb	3.3	2379.44	0.2	Failed DoD
232	Th	209	No Gas	0.118	ppb	33.8	2389.61	1	
238	U	209	No Gas	0.023	ppb	13.5	407.13	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1240228.21	1.5	1537409.87	80.67	29.5	120.4	
Sc	45	No Gas	3165498.02	0.3	3373253.08	93.84	29.5	120.4	
Sc	45	H2	365397.87	0.5	415670.69	87.91	29.5	120.4	
Sc	45	He	74124.36	1.5	81171.76	91.32	29.5	120.4	
Ge	72	No Gas	742416.11	0.4	779333.11	95.26	29.5	120.4	
Ge	72	H2	135115.04	2.1	153246.58	88.17	29.5	120.4	
Ge	72	He	58253.54	1.1	63135.03	92.27	29.5	120.4	
Y	89	H2	2443882.36	0.7	2642116.11	92.5	29.5	120.4	
Y	89	He	512106.49	2.3	544041.92	94.13	29.5	120.4	
Tb	159	No Gas	8221405.57	0.3	8117023.84	101.29	29.5	120.4	
Tb	159	He	2867434.75	1.7	2866479.19	100.03	29.5	120.4	
Bi	209	No Gas	4415512.65	0.5	4424692.92	99.79	29.5	120.4	

Sample Report

Sample Name SN5497-004

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:06:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	7.646	ppb	9.6	1624.60	100	
11	B	6	No Gas	22.921	ppb	3.2	3901.78	1000	
23	Na	45	He	157.418	ppb	21.9	9433.66	200000	
24	Mg	45	He	4905.393	ppb	3.8	59702.69	200000	
27	Al	45	He	85053.570	ppb	4.9	396796.69	200000	
28	Si	45	H2	2798.553	ppb	4.2	22890.63	10000	
39	K	45	He	4809.225	ppb	5.5	61213.04	200000	
40	Ca	45	H2	8963.713	ppb	1.9	695352.34	200000	
51	V	89	He	348.528	ppb	2.8	63566.39	1000	
52	Cr	89	He	309.305	ppb	4.2	69369.67	2000	
55	Mn	89	He	26927.501	ppb	4.4	2876603.35	2000	>LDR
56	Fe	89	H2	177512.463	ppb	2.2	59576828.90	100000	
59	Co	89	He	261.220	ppb	4.5	99177.91	1000	
60	Ni	89	He	106.914	ppb	3.2	11546.27	1000	
63	Cu	89	He	65.429	ppb	4.7	19534.25	2000	
66	Zn	89	He	311.885	ppb	3.9	12534.97	2000	
75	As	89	He	80.701	ppb	3.2	2642.54	1000	
78	Se	89	H2	1.563	ppb	13.6	26.67	1000	
88	Sr	89	He	73.510	ppb	2.9	11742.13	2000	
95	Mo	89	He	13.059	ppb	1.8	2526.99	1000	
107	Ag	89	He	0.304	ppb	2.6	201.12	100	
111	Cd	89	He	5.078	ppb	3.8	422.98	1000	
118	Sn	159	He	39.358	ppb	5.9	6999.84	1000	
121	Sb	159	No Gas	1.403	ppb	7.9	2209.33	1000	
137	Ba	159	No Gas	1649.524	ppb	1.7	976564.31	2000	
182	W	159	No Gas	0.690	ppb	11.5	947.76	1000	
205	Tl	209	No Gas	3.091	ppb	6.4	8158.42	1000	
208	Pb	209	No Gas	336.366	ppb	3.9	1223291.35	2000	
232	Th	209	No Gas	35.795	ppb	4.3	136451.77	1000	
238	U	209	No Gas	10.957	ppb	4.2	39161.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1213610.79	1.2	1537409.87	78.94	29.5	120.4	
Sc	45	No Gas	3278772.98	2.7	3373253.08	97.2	29.5	120.4	
Sc	45	H2	386013.20	1.0	415670.69	92.87	29.5	120.4	
Sc	45	He	78860.57	2.9	81171.76	97.15	29.5	120.4	
Ge	72	No Gas	766216.17	1.4	779333.11	98.32	29.5	120.4	
Ge	72	H2	140370.74	1.9	153246.58	91.6	29.5	120.4	
Ge	72	He	61557.06	2.7	63135.03	97.5	29.5	120.4	
Y	89	H2	2689999.10	1.7	2642116.11	101.81	29.5	120.4	
Y	89	He	567007.58	2.4	544041.92	104.22	29.5	120.4	
Tb	159	No Gas	8362068.63	2.5	8117023.84	103.02	29.5	120.4	
Tb	159	He	2944469.09	3.1	2866479.19	102.72	29.5	120.4	
Bi	209	No Gas	4468760.63	1.3	4424692.92	101	29.5	120.4	

Sample Report

Sample Name SN5497-006

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:09:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.068	ppb	9.6	2374.72	100	
11	B	6	No Gas	17.242	ppb	12.0	3157.11	1000	
23	Na	45	He	117.085	ppb	22.7	8465.24	200000	
24	Mg	45	He	3907.214	ppb	3.3	47185.08	200000	
27	Al	45	He	74678.621	ppb	2.2	344929.40	200000	
28	Si	45	H2	2017.304	ppb	2.8	16782.39	10000	
39	K	45	He	3541.735	ppb	3.8	47431.98	200000	
40	Ca	45	H2	12979.517	ppb	0.4	1019031.33	200000	
51	V	89	He	442.265	ppb	2.5	80385.26	1000	
52	Cr	89	He	456.279	ppb	2.3	102066.23	2000	
55	Mn	89	He	36491.932	ppb	1.3	3889445.53	2000	>LDR
56	Fe	89	H2	256885.294	ppb	0.4	87553011.60	100000	
59	Co	89	He	343.325	ppb	1.9	130051.16	1000	
60	Ni	89	He	110.567	ppb	1.2	11909.89	1000	
63	Cu	89	He	75.819	ppb	1.5	22514.33	2000	
66	Zn	89	He	372.738	ppb	0.7	14934.01	2000	
75	As	89	He	115.594	ppb	2.4	3773.27	1000	
78	Se	89	H2	2.079	ppb	15.2	35.83	1000	
88	Sr	89	He	79.965	ppb	1.9	12739.66	2000	
95	Mo	89	He	19.058	ppb	0.5	3617.27	1000	
107	Ag	89	He	0.287	ppb	15.0	190.01	100	
111	Cd	89	He	2.512	ppb	9.2	209.27	1000	
118	Sn	159	He	39.386	ppb	3.7	6852.00	1000	
121	Sb	159	No Gas	1.802	ppb	6.4	2843.49	1000	
137	Ba	159	No Gas	1847.207	ppb	8.1	1107206.14	2000	
182	W	159	No Gas	0.784	ppb	17.4	1071.24	1000	
205	Tl	209	No Gas	2.993	ppb	7.8	7931.41	1000	
208	Pb	209	No Gas	469.811	ppb	8.3	1714215.43	2000	
232	Th	209	No Gas	35.317	ppb	9.0	135056.64	1000	
238	U	209	No Gas	14.178	ppb	7.6	50845.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232184.28	3.3	1537409.87	80.15	29.5	120.4	
Sc	45	No Gas	3383116.52	2.7	3373253.08	100.29	29.5	120.4	
Sc	45	H2	390945.28	0.9	415670.69	94.05	29.5	120.4	
Sc	45	He	78030.29	2.5	81171.76	96.13	29.5	120.4	
Ge	72	No Gas	787958.34	2.9	779333.11	101.11	29.5	120.4	
Ge	72	H2	139920.56	0.9	153246.58	91.3	29.5	120.4	
Ge	72	He	61227.67	0.8	63135.03	96.98	29.5	120.4	
Y	89	H2	2731183.80	0.5	2642116.11	103.37	29.5	120.4	
Y	89	He	565404.00	1.7	544041.92	103.93	29.5	120.4	
Tb	159	No Gas	8480471.75	2.6	8117023.84	104.48	29.5	120.4	
Tb	159	He	2877727.21	1.4	2866479.19	100.39	29.5	120.4	
Bi	209	No Gas	4492066.44	2.8	4424692.92	101.52	29.5	120.4	

Sample Report

Sample Name SN5498-001

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:12:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.452	ppb	22.6	105.56	100	
11	B	6	No Gas	37.582	ppb	12.9	5705.75	1000	
23	Na	45	He	1997.075	ppb	2.9	45844.29	200000	
24	Mg	45	He	3360.678	ppb	1.6	37883.66	200000	
27	Al	45	He	29047.124	ppb	2.1	124981.52	200000	
28	Si	45	H2	3301.444	ppb	0.8	25848.88	10000	
39	K	45	He	1650.098	ppb	1.6	25888.34	200000	
40	Ca	45	H2	61549.421	ppb	1.6	4566858.20	200000	
51	V	89	He	23.676	ppb	2.1	4019.62	1000	
52	Cr	89	He	60.890	ppb	2.4	12107.00	2000	
55	Mn	89	He	1205.378	ppb	0.9	113939.17	2000	
56	Fe	89	H2	13693.537	ppb	1.5	4230386.07	100000	
59	Co	89	He	4.560	ppb	4.1	1540.21	1000	
60	Ni	89	He	36.441	ppb	2.5	3507.23	1000	
63	Cu	89	He	265.230	ppb	1.3	68861.30	2000	
66	Zn	89	He	302.915	ppb	3.4	10770.05	2000	
75	As	89	He	4.240	ppb	11.1	127.01	1000	
78	Se	89	H2	0.599	ppb	36.1	9.67	1000	
88	Sr	89	He	96.718	ppb	1.7	13663.94	2000	
95	Mo	89	He	8.457	ppb	6.1	1487.92	1000	
107	Ag	89	He	0.502	ppb	16.9	286.68	100	
111	Cd	89	He	2.769	ppb	6.6	204.45	1000	
118	Sn	159	He	53.183	ppb	2.4	9072.26	1000	
121	Sb	159	No Gas	1.292	ppb	16.8	1895.57	1000	
137	Ba	159	No Gas	181.473	ppb	20.3	99465.53	2000	
182	W	159	No Gas	1.224	ppb	19.6	1475.07	1000	
205	Tl	209	No Gas	0.283	ppb	26.8	720.83	1000	
208	Pb	209	No Gas	26.181	ppb	17.5	89677.06	2000	
232	Th	209	No Gas	3.044	ppb	15.5	11070.66	1000	
238	U	209	No Gas	2.121	ppb	15.8	7143.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1175323.07	8.4	1537409.87	76.45	29.5	120.4	
Sc	45	No Gas	3110582.43	12.4	3373253.08	92.21	29.5	120.4	
Sc	45	H2	369998.95	0.0	415670.69	89.01	29.5	120.4	
Sc	45	He	72658.09	1.1	81171.76	89.51	29.5	120.4	
Ge	72	No Gas	725509.57	10.7	779333.11	93.09	29.5	120.4	
Ge	72	H2	136510.37	0.9	153246.58	89.08	29.5	120.4	
Ge	72	He	57116.63	0.9	63135.03	90.47	29.5	120.4	
Y	89	H2	2471146.58	0.2	2642116.11	93.53	29.5	120.4	
Y	89	He	501347.99	1.1	544041.92	92.15	29.5	120.4	
Tb	159	No Gas	7866099.33	11.7	8117023.84	96.91	29.5	120.4	
Tb	159	He	2828704.19	0.9	2866479.19	98.68	29.5	120.4	
Bi	209	No Gas	4257742.80	11.2	4424692.92	96.23	29.5	120.4	

Sample Report

Sample Name SN5498-002

File Name 137SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:14:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.855	ppb	14.1	190.01	100	
11	B	6	No Gas	62.330	ppb	5.6	9117.62	1000	
23	Na	45	He	3859.467	ppb	4.6	84783.70	200000	
24	Mg	45	He	5790.491	ppb	2.8	65934.82	200000	
27	Al	45	He	27153.312	ppb	2.5	118761.76	200000	
28	Si	45	H2	2313.643	ppb	1.1	17410.17	10000	
39	K	45	He	4042.286	ppb	4.0	49823.76	200000	
40	Ca	45	H2	32260.089	ppb	1.5	2292362.95	200000	
51	V	89	He	46.536	ppb	5.9	7859.16	1000	
52	Cr	89	He	44.096	ppb	2.6	8971.92	2000	
55	Mn	89	He	1386.862	ppb	1.3	133991.89	2000	
56	Fe	89	H2	21493.564	ppb	1.8	6494163.94	100000	
59	Co	89	He	8.554	ppb	4.0	2944.96	1000	
60	Ni	89	He	37.939	ppb	5.3	3728.41	1000	
63	Cu	89	He	148.571	ppb	2.0	39600.46	2000	
66	Zn	89	He	449.388	ppb	3.3	16299.98	2000	
75	As	89	He	9.116	ppb	6.6	273.70	1000	
78	Se	89	H2	4.005	ppb	8.3	60.67	1000	
88	Sr	89	He	108.811	ppb	2.5	15709.50	2000	
95	Mo	89	He	4.560	ppb	8.6	874.50	1000	
107	Ag	89	He	0.854	ppb	15.2	491.14	100	
111	Cd	89	He	11.318	ppb	1.3	851.15	1000	
118	Sn	159	He	42.348	ppb	3.5	7334.48	1000	
121	Sb	159	No Gas	0.417	ppb	20.8	710.82	1000	
137	Ba	159	No Gas	243.828	ppb	5.0	141649.34	2000	
182	W	159	No Gas	1.155	ppb	10.2	1475.08	1000	
205	Tl	209	No Gas	0.717	ppb	5.1	1928.98	1000	
208	Pb	209	No Gas	28.929	ppb	6.5	106147.31	2000	
232	Th	209	No Gas	4.974	ppb	9.2	19246.21	1000	
238	U	209	No Gas	3.170	ppb	4.0	11418.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1183586.22	0.8	1537409.87	76.99	29.5	120.4	
Sc	45	No Gas	3068951.34	0.6	3373253.08	90.98	29.5	120.4	
Sc	45	H2	354231.88	0.8	415670.69	85.22	29.5	120.4	
Sc	45	He	73881.61	3.0	81171.76	91.02	29.5	120.4	
Ge	72	No Gas	731104.42	0.8	779333.11	93.81	29.5	120.4	
Ge	72	H2	130939.70	0.8	153246.58	85.44	29.5	120.4	
Ge	72	He	57540.46	2.1	63135.03	91.14	29.5	120.4	
Y	89	H2	2418645.62	0.8	2642116.11	91.54	29.5	120.4	
Y	89	He	512483.02	2.0	544041.92	94.2	29.5	120.4	
Tb	159	No Gas	8207359.81	0.1	8117023.84	101.11	29.5	120.4	
Tb	159	He	2866981.31	2.2	2866479.19	100.02	29.5	120.4	
Bi	209	No Gas	4504311.70	0.7	4424692.92	101.8	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG10IMW1
File Name	138_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:17:12 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.031	ppb	132.0	21.11	0.5	
B	11	6	No Gas	3.108	ppb	17.2	1146.76	10	
Na	23	45	He	-30.055	ppb	N/A	5029.81	500	
Mg	24	45	He	-19.039	ppb	N/A	353.36	50	
Al	27	45	He	15.865	ppb	28.5	115.56	50	
Si	28	45	H2	28.416	ppb	21.9	437.16	250	
K	39	45	He	74.087	ppb	37.4	10885.93	500	
Ca	40	45	H2	70.025	ppb	77.2	6830.78	50	PB 6020 Fails DoD
V	51	89	He	4.412	ppb	5.2	952.29	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.358	ppb	9.7	106.65	2.5	
Mn	55	89	He	4.604	ppb	3.5	460.60	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	103.585	ppb	88.4	39473.26	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.033	ppb	115.2	20.00	0.5	
Ni	60	89	He	-0.206	ppb	N/A	20.00	1	
Cu	63	89	He	-0.658	ppb	N/A	228.90	1.5	
Zn	66	89	He	1.401	ppb	5.8	113.34	5	
As	75	89	He	0.164	ppb	50.6	9.33	2.5	
Se	78	89	H2	0.060	ppb	121.3	1.33	2.5	
Sr	88	89	He	0.079	ppb	45.1	17.78	2.5	
Mo	95	89	He	-0.640	ppb	N/A	13.33	2.5	
Ag	107	89	He	-0.005	ppb	N/A	7.78	0.5	
Cd	111	89	He	0.010	ppb	213.5	1.85	0.5	
Sn	118	159	He	0.675	ppb	18.6	187.78	2.5	
Sb	121	159	No Gas	0.020	ppb	89.7	126.81	0.5	
Ba	137	159	No Gas	0.299	ppb	34.4	193.55	1	
W	182	159	No Gas	-0.067	ppb	N/A	40.04	2.5	
Tl	205	209	No Gas	-0.002	ppb	N/A	23.36	0.5	
Pb	208	209	No Gas	0.226	ppb	8.5	1014.49	0.5	
Th	232	209	No Gas	0.055	ppb	36.1	383.78	2.5	
U	238	209	No Gas	0.004	ppb	45.6	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1198040.12	1.9	1537409.87	77.93	29.5	120.4	
Sc	45	No Gas	3178534.47	2.6	3373253.08	94.23	29.5	120.4	
Sc	45	H2	358769.47	3.9	415670.69	86.31	29.5	120.4	
Sc	45	He	74306.69	0.9	81171.76	91.54	29.5	120.4	
Ge	72	No Gas	753675.58	2.7	779333.11	96.71	29.5	120.4	
Ge	72	H2	133954.33	4.2	153246.58	87.41	29.5	120.4	
Ge	72	He	59272.92	0.5	63135.03	93.88	29.5	120.4	
Y	89	H2	2412190.36	2.9	2642116.11	91.3	29.5	120.4	
Y	89	He	516673.59	0.5	544041.92	94.97	29.5	120.4	
Tb	159	No Gas	8352079.04	2.3	8117023.84	102.9	29.5	120.4	
Tb	159	He	2880939.96	0.5	2866479.19	100.5	29.5	120.4	
Bi	209	No Gas	4518109.51	2.5	4424692.92	102.11	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG10IMW1
File Name	139LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:19:44 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.217	ppb	2.9	10845.54	50	20.89	79.5	120.4	
B	11	6	No Gas	534.024	ppb	3.0	73510.50	500	21.36	79.5	120.4	
Na	23	45	He	7600.503	ppb	0.8	161407.73	7500	20.27	79.5	120.4	
Mg	24	45	He	5280.110	ppb	1.0	60111.37	5000	21.12	79.5	120.4	
Al	27	45	He	1895.357	ppb	1.9	8322.71	2000	18.95	79.5	120.4	
Si	28	45	H2	1067.662	ppb	2.0	8458.55	1000	21.35	0	200	
K	39	45	He	10474.221	ppb	1.1	112939.18	10000	20.95	79.5	120.4	
Ca	40	45	H2	2689.686	ppb	0.4	199923.31	2500	21.52	79.5	120.4	
V	51	89	He	516.839	ppb	0.5	84779.65	500	20.67	79.5	120.4	
Cr	52	89	He	209.808	ppb	1.4	42394.09	200	20.98	79.5	120.4	
Mn	55	89	He	517.163	ppb	0.7	49777.46	500	20.69	79.5	120.4	
Fe	56	89	H2	1114.667	ppb	0.3	349839.28	1000	22.29	79.5	120.4	
Co	59	89	He	537.958	ppb	0.3	183969.30	500	21.52	79.5	120.4	
Ni	60	89	He	524.401	ppb	0.1	50847.73	500	20.98	79.5	120.4	
Cu	63	89	He	265.899	ppb	0.5	70283.90	250	21.27	79.5	120.4	
Zn	66	89	He	518.172	ppb	1.2	18715.40	500	20.73	79.5	120.4	
As	75	89	He	108.075	ppb	0.7	3185.71	100	21.62	79.5	120.4	
Se	78	89	H2	105.739	ppb	2.4	1616.19	100	21.15	79.5	120.4	
Sr	88	89	He	524.512	ppb	0.1	75412.42	500	20.98	79.5	120.4	
Mo	95	89	He	108.667	ppb	1.1	18058.03	100	21.73	79.5	120.4	
Ag	107	89	He	56.296	ppb	1.1	31617.44	50	22.52	79.5	120.4	
Cd	111	89	He	263.983	ppb	1.3	19746.70	250	21.12	79.5	120.4	
Sn	118	159	He	496.786	ppb	0.7	84907.93	500	19.87	79.5	120.4	
Sb	121	159	No Gas	105.277	ppb	1.6	153621.31	100	21.06	79.5	120.4	
Ba	137	159	No Gas	2009.871	ppb	2.1	1153308.25	2000	20.1	79.5	120.4	
W	182	159	No Gas	104.675	ppb	3.0	121558.31	100	20.94	79.5	120.4	
Tl	205	209	No Gas	107.478	ppb	1.5	276493.68	100	21.5	79.5	120.4	
[Pb]	206	209	No Gas	108.143	ppb	2.4	95741.93	100	21.63	79.5	120.4	
[Pb]	207	209	No Gas	107.257	ppb	2.9	83230.31	100	21.45	79.5	120.4	
Pb	208	209	No Gas	107.165	ppb	1.8	381103.11	100	21.43	79.5	120.4	
Th	232	209	No Gas	104.445	ppb	2.2	388857.14	100	20.89	79.5	120.4	
U	238	209	No Gas	104.866	ppb	2.7	366343.14	100	20.97	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1196560.20	1.3	1537409.87	77.83	29.5	120.4	
Sc	45	No Gas	3072313.61	1.6	3373253.08	91.08	29.5	120.4	
Sc	45	H2	367563.66	1.9	415670.69	88.43	29.5	120.4	
Sc	45	He	73771.75	1.2	81171.76	90.88	29.5	120.4	
Ge	72	No Gas	741661.53	0.8	779333.11	95.17	29.5	120.4	
Ge	72	H2	135529.81	0.9	153246.58	88.44	29.5	120.4	
Ge	72	He	58690.55	0.1	63135.03	92.96	29.5	120.4	
Y	89	H2	2457612.27	0.4	2642116.11	93.02	29.5	120.4	
Y	89	He	510383.83	0.7	544041.92	93.81	29.5	120.4	
Tb	159	No Gas	8108750.99	1.9	8117023.84	99.9	29.5	120.4	
Tb	159	He	2853874.26	0.3	2866479.19	99.56	29.5	120.4	
Bi	209	No Gas	4370534.13	1.5	4424692.92	98.78	29.5	120.4	

Sample Report

Sample Name SN5497-007

File Name 140SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:22:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.182	ppb	38.3	52.22	100	
11	B	6	No Gas	25.377	ppb	3.8	4154.08	1000	
23	Na	45	He	2024.909	ppb	3.5	45198.43	200000	
24	Mg	45	He	2702.399	ppb	3.2	29777.38	200000	
27	Al	45	He	10.793	ppb	15.6	88.89	200000	
28	Si	45	H2	2885.907	ppb	4.9	21874.59	10000	
39	K	45	He	3949.069	ppb	0.3	46885.50	200000	
40	Ca	45	H2	28117.961	ppb	3.0	2018544.08	200000	
51	V	89	He	2.338	ppb	14.3	578.92	1000	
52	Cr	89	He	0.983	ppb	10.6	222.63	2000	
55	Mn	89	He	3.306	ppb	5.1	317.28	2000	
56	Fe	89	H2	41.221	ppb	7.6	20267.10	100000	
59	Co	89	He	0.246	ppb	20.1	88.90	1000	
60	Ni	89	He	1.200	ppb	48.8	150.00	1000	
63	Cu	89	He	6.033	ppb	1.6	1909.08	2000	
66	Zn	89	He	4.808	ppb	6.9	225.57	2000	
75	As	89	He	0.758	ppb	28.4	25.67	1000	
78	Se	89	H2	0.290	ppb	40.5	4.83	1000	
88	Sr	89	He	130.999	ppb	2.8	18119.19	2000	
95	Mo	89	He	-0.061	ppb	N/A	104.45	1000	
107	Ag	89	He	0.010	ppb	66.5	15.55	100	
111	Cd	89	He	0.079	ppb	18.0	6.67	1000	
118	Sn	159	He	1.080	ppb	12.3	251.13	1000	
121	Sb	159	No Gas	0.179	ppb	9.1	367.08	1000	
137	Ba	159	No Gas	44.523	ppb	7.8	26369.09	2000	
182	W	159	No Gas	0.183	ppb	33.6	340.39	1000	
205	Tl	209	No Gas	0.152	ppb	31.2	430.50	1000	
208	Pb	209	No Gas	0.420	ppb	6.2	1721.98	2000	
232	Th	209	No Gas	2.510	ppb	39.0	9848.79	1000	
238	U	209	No Gas	0.206	ppb	13.7	747.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1188956.82	2.5	1537409.87	77.34	29.5	120.4	
Sc	45	No Gas	3147545.30	2.8	3373253.08	93.31	29.5	120.4	
Sc	45	H2	357972.34	2.1	415670.69	86.12	29.5	120.4	
Sc	45	He	70784.48	1.5	81171.76	87.2	29.5	120.4	
Ge	72	No Gas	756706.55	2.3	779333.11	97.1	29.5	120.4	
Ge	72	H2	132899.39	2.8	153246.58	86.72	29.5	120.4	
Ge	72	He	56869.81	1.5	63135.03	90.08	29.5	120.4	
Y	89	H2	2412816.59	2.2	2642116.11	91.32	29.5	120.4	
Y	89	He	490968.79	1.4	544041.92	90.24	29.5	120.4	
Tb	159	No Gas	8368455.64	1.6	8117023.84	103.1	29.5	120.4	
Tb	159	He	2808067.25	1.7	2866479.19	97.96	29.5	120.4	
Bi	209	No Gas	4506714.00	1.9	4424692.92	101.85	29.5	120.4	

Sample Report

Sample Name SN5589-001

File Name 141SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:25:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.110	ppb	44.8	33.33	100	
11	B	6	No Gas	3.976	ppb	16.3	1125.64	1000	
23	Na	45	He	-32.285	ppb	N/A	4829.53	200000	
24	Mg	45	He	-12.624	ppb	N/A	413.37	200000	
27	Al	45	He	0.540	ppb	655.4	46.67	200000	
28	Si	45	H2	17.441	ppb	36.1	347.06	10000	
39	K	45	He	15.402	ppb	262.8	9987.38	200000	
40	Ca	45	H2	24.002	ppb	12.6	3346.07	200000	
51	V	89	He	2.046	ppb	7.9	543.37	1000	
52	Cr	89	He	0.815	ppb	6.4	193.97	2000	
55	Mn	89	He	1.387	ppb	8.7	142.64	2000	
56	Fe	89	H2	39.025	ppb	1.9	19221.09	100000	
59	Co	89	He	0.009	ppb	129.6	11.11	1000	
60	Ni	89	He	-0.082	ppb	N/A	31.11	1000	
63	Cu	89	He	-0.877	ppb	N/A	165.56	2000	
66	Zn	89	He	0.808	ppb	38.3	88.89	2000	
75	As	89	He	0.117	ppb	36.3	7.67	1000	
78	Se	89	H2	0.049	ppb	104.1	1.17	1000	
88	Sr	89	He	0.043	ppb	175.3	12.22	2000	
95	Mo	89	He	-0.548	ppb	N/A	27.78	1000	
107	Ag	89	He	-0.002	ppb	N/A	8.89	100	
111	Cd	89	He	0.011	ppb	78.0	1.85	1000	
118	Sn	159	He	0.506	ppb	32.2	156.67	1000	
121	Sb	159	No Gas	0.018	ppb	66.3	110.13	1000	
137	Ba	159	No Gas	0.333	ppb	34.0	190.21	2000	
182	W	159	No Gas	-0.054	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	0.002	ppb	184.8	30.03	1000	
208	Pb	209	No Gas	0.190	ppb	10.6	790.90	2000	
232	Th	209	No Gas	0.058	ppb	50.7	350.40	1000	
238	U	209	No Gas	0.003	ppb	226.1	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1065167.55	3.9	1537409.87	69.28	29.5	120.4	
Sc	45	No Gas	2731907.90	2.5	3373253.08	80.99	29.5	120.4	
Sc	45	H2	350485.62	1.7	415670.69	84.32	29.5	120.4	
Sc	45	He	71997.28	0.9	81171.76	88.7	29.5	120.4	
Ge	72	No Gas	657070.72	3.5	779333.11	84.31	29.5	120.4	
Ge	72	H2	129663.56	2.2	153246.58	84.61	29.5	120.4	
Ge	72	He	57495.18	0.2	63135.03	91.07	29.5	120.4	
Y	89	H2	2363679.77	1.4	2642116.11	89.46	29.5	120.4	
Y	89	He	501113.57	0.9	544041.92	92.11	29.5	120.4	
Tb	159	No Gas	7406051.07	1.6	8117023.84	91.24	29.5	120.4	
Tb	159	He	2846613.46	0.9	2866479.19	99.31	29.5	120.4	
Bi	209	No Gas	4047018.13	2.5	4424692.92	91.46	29.5	120.4	

Sample Report

Sample Name SN5589-002

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:27:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.039	ppb	233.4	22.23	100	
11	B	6	No Gas	24.701	ppb	8.6	3930.69	1000	
23	Na	45	He	9074.963	ppb	1.6	183514.46	200000	
24	Mg	45	He	36407.492	ppb	1.5	393741.42	200000	
27	Al	45	He	1.545	ppb	95.8	50.00	200000	
28	Si	45	H2	2621.296	ppb	3.4	19504.93	10000	
39	K	45	He	2832.538	ppb	1.3	36292.96	200000	
40	Ca	45	H2	49114.185	ppb	4.3	3455002.69	200000	
51	V	89	He	2.321	ppb	19.4	577.81	1000	
52	Cr	89	He	0.324	ppb	21.9	95.32	2000	
55	Mn	89	He	700.898	ppb	1.9	65091.90	2000	
56	Fe	89	H2	1016.039	ppb	3.6	309695.07	100000	
59	Co	89	He	11.565	ppb	3.7	3825.25	1000	
60	Ni	89	He	14.767	ppb	3.2	1419.02	1000	
63	Cu	89	He	-0.485	ppb	N/A	262.23	2000	
66	Zn	89	He	5.554	ppb	21.4	252.24	2000	
75	As	89	He	2.339	ppb	10.9	70.68	1000	
78	Se	89	H2	0.049	ppb	107.8	1.17	1000	
88	Sr	89	He	152.070	ppb	2.1	21103.49	2000	
95	Mo	89	He	-0.518	ppb	N/A	32.22	1000	
107	Ag	89	He	0.002	ppb	364.2	11.11	100	
111	Cd	89	He	0.058	ppb	29.0	5.18	1000	
118	Sn	159	He	0.513	ppb	31.6	155.56	1000	
121	Sb	159	No Gas	0.057	ppb	15.5	180.20	1000	
137	Ba	159	No Gas	20.346	ppb	4.2	11905.25	2000	
182	W	159	No Gas	-0.063	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	0.002	ppb	319.5	33.37	1000	
208	Pb	209	No Gas	0.151	ppb	2.0	727.49	2000	
232	Th	209	No Gas	0.021	ppb	94.3	246.95	1000	
238	U	209	No Gas	0.251	ppb	4.9	894.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1151690.91	2.6	1537409.87	74.91	29.5	120.4	
Sc	45	No Gas	3026455.13	2.9	3373253.08	89.72	29.5	120.4	
Sc	45	H2	351065.77	3.2	415670.69	84.46	29.5	120.4	
Sc	45	He	70648.49	0.9	81171.76	87.04	29.5	120.4	
Ge	72	No Gas	726869.27	3.3	779333.11	93.27	29.5	120.4	
Ge	72	H2	129969.44	2.2	153246.58	84.81	29.5	120.4	
Ge	72	He	56761.27	1.3	63135.03	89.9	29.5	120.4	
Y	89	H2	2382918.43	2.6	2642116.11	90.19	29.5	120.4	
Y	89	He	492549.48	1.4	544041.92	90.54	29.5	120.4	
Tb	159	No Gas	8261119.04	2.4	8117023.84	101.78	29.5	120.4	
Tb	159	He	2802858.08	1.7	2866479.19	97.78	29.5	120.4	
Bi	209	No Gas	4446913.84	2.9	4424692.92	100.5	29.5	120.4	

Sample Report

Sample Name SN5608-001

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:30:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	38.9	30.00	100	
11	B	6	No Gas	62.103	ppb	4.0	8851.89	1000	
23	Na	45	He	30898.273	ppb	0.6	610807.11	200000	
24	Mg	45	He	13029.380	ppb	0.6	141007.17	200000	
27	Al	45	He	10.637	ppb	140.1	87.78	200000	
28	Si	45	H2	6195.454	ppb	1.5	45760.33	10000	
39	K	45	He	4281.370	ppb	1.8	49827.46	200000	
40	Ca	45	H2	65776.046	ppb	1.0	4623376.35	200000	
51	V	89	He	4.693	ppb	4.2	958.96	1000	
52	Cr	89	He	0.434	ppb	55.8	117.31	2000	
55	Mn	89	He	735.361	ppb	1.0	68778.35	2000	
56	Fe	89	H2	23.326	ppb	10.4	14740.96	100000	
59	Co	89	He	0.311	ppb	58.9	111.12	1000	
60	Ni	89	He	1.845	ppb	4.0	212.23	1000	
63	Cu	89	He	0.000	ppb	N/A	387.80	2000	
66	Zn	89	He	2.678	ppb	44.1	153.34	2000	
75	As	89	He	0.329	ppb	79.8	13.67	1000	
78	Se	89	H2	0.048	ppb	39.9	1.17	1000	
88	Sr	89	He	298.350	ppb	0.8	41688.63	2000	
95	Mo	89	He	0.923	ppb	29.2	263.34	1000	
107	Ag	89	He	-0.002	ppb	N/A	8.89	100	
111	Cd	89	He	0.164	ppb	46.8	12.96	1000	
118	Sn	159	He	0.614	ppb	16.1	174.45	1000	
121	Sb	159	No Gas	0.034	ppb	54.4	146.83	1000	
137	Ba	159	No Gas	15.875	ppb	4.5	9337.11	2000	
182	W	159	No Gas	0.422	ppb	20.1	620.72	1000	
205	Tl	209	No Gas	0.015	ppb	40.9	66.74	1000	
208	Pb	209	No Gas	0.213	ppb	13.5	964.44	2000	
232	Th	209	No Gas	0.016	ppb	77.5	230.26	1000	
238	U	209	No Gas	14.647	ppb	4.9	52673.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1153337.37	1.8	1537409.87	75.02	29.5	120.4	
Sc	45	No Gas	3042500.15	2.1	3373253.08	90.19	29.5	120.4	
Sc	45	H2	350560.10	1.9	415670.69	84.34	29.5	120.4	
Sc	45	He	70518.72	0.5	81171.76	86.88	29.5	120.4	
Ge	72	No Gas	736505.44	2.1	779333.11	94.5	29.5	120.4	
Ge	72	H2	130491.52	1.9	153246.58	85.15	29.5	120.4	
Ge	72	He	57004.46	0.6	63135.03	90.29	29.5	120.4	
Y	89	H2	2387875.92	0.4	2642116.11	90.38	29.5	120.4	
Y	89	He	496004.06	0.6	544041.92	91.17	29.5	120.4	
Tb	159	No Gas	8299425.02	1.9	8117023.84	102.25	29.5	120.4	
Tb	159	He	2834268.12	0.5	2866479.19	98.88	29.5	120.4	
Bi	209	No Gas	4500600.23	1.8	4424692.92	101.72	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	144_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:33:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.061	ppb	6.3	25686.83	25	100.24	89.8	110.2	
11	B	6	No Gas	24.792	ppb	5.7	17404.34	25	99.17	89.8	110.2	
23	Na	45	He	5004.111	ppb	0.9	503967.02	5000	100.08	89.8	110.2	
24	Mg	45	He	4847.743	ppb	1.3	266251.57	5000	96.95	89.8	110.2	
27	Al	45	He	475.746	ppb	0.8	10142.84	500	95.15	89.8	110.2	
28	Si	45	H2	486.070	ppb	2.3	18409.03	500	97.21	89.8	110.2	
39	K	45	He	4924.205	ppb	0.8	244820.60	5000	98.48	89.8	110.2	
40	Ca	45	H2	4953.040	ppb	2.1	1772682.63	5000	99.06	89.8	110.2	
51	V	89	He	24.159	ppb	0.9	19571.99	25	96.64	89.8	110.2	
52	Cr	89	He	24.148	ppb	1.3	23909.15	25	96.59	89.8	110.2	
55	Mn	89	He	24.532	ppb	1.3	11571.97	25	98.13	89.8	110.2	
56	Fe	89	H2	4852.868	ppb	2.1	7309270.32	5000	97.06	89.8	110.2	
59	Co	89	He	24.830	ppb	0.7	41590.81	25	99.32	89.8	110.2	
60	Ni	89	He	24.414	ppb	0.4	11622.97	25	97.66	89.8	110.2	
63	Cu	89	He	24.651	ppb	1.1	32119.88	25	98.6	89.8	110.2	
66	Zn	89	He	24.949	ppb	4.5	4458.66	25	99.8	89.8	110.2	
75	As	89	He	24.196	ppb	0.9	3492.16	25	96.78	89.8	110.2	
78	Se	89	H2	24.642	ppb	1.4	1847.87	25	98.57	89.8	110.2	
88	Sr	89	He	24.251	ppb	1.5	17080.03	25	97	89.8	110.2	
95	Mo	89	He	25.048	ppb	2.3	20366.95	25	100.19	89.8	110.2	
107	Ag	89	He	19.028	ppb	0.6	52325.10	25	76.11	89.8	110.2	> +/- 10%
111	Cd	89	He	25.197	ppb	1.6	9231.01	25	100.79	89.8	110.2	
118	Sn	159	He	22.875	ppb	2.2	19253.29	25	91.5	89.8	110.2	
121	Sb	159	No Gas	23.492	ppb	4.6	175528.34	25	93.97	89.8	110.2	
137	Ba	159	No Gas	23.546	ppb	6.4	69179.34	25	94.18	89.8	110.2	
182	W	159	No Gas	23.251	ppb	7.0	138205.98	25	93	89.8	110.2	
205	Tl	209	No Gas	23.941	ppb	5.4	316187.68	25	95.76	89.8	110.2	
208	Pb	209	No Gas	24.015	ppb	5.4	438520.11	25	96.06	89.8	110.2	
232	Th	209	No Gas	23.479	ppb	7.7	448596.40	25	93.92	89.8	110.2	
238	U	209	No Gas	23.960	ppb	6.5	429701.06	25	95.84	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1183085.48	2.8	1537409.87	76.95	29.5	120.4	
Sc	45	No Gas	3119409.74	3.6	3373253.08	92.47	29.5	120.4	
Sc	45	H2	356784.14	1.1	415670.69	85.83	29.5	120.4	
Sc	45	He	71704.38	0.4	81171.76	88.34	29.5	120.4	
Ge	72	No Gas	741157.93	3.6	779333.11	95.1	29.5	120.4	
Ge	72	H2	135023.28	1.0	153246.58	88.11	29.5	120.4	
Ge	72	He	57790.14	0.1	63135.03	91.53	29.5	120.4	
Y	89	H2	2411889.33	1.1	2642116.11	91.29	29.5	120.4	
Y	89	He	499891.85	0.3	544041.92	91.88	29.5	120.4	
Tb	159	No Gas	8312284.18	3.5	8117023.84	102.41	29.5	120.4	
Tb	159	He	2802985.58	0.3	2866479.19	97.78	29.5	120.4	
Bi	209	No Gas	4494090.81	3.9	4424692.92	101.57	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	145_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:35:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	28.1	83.34	0.2	
11	B	6	No Gas	1.433	ppb	12.0	1700.16	4	
23	Na	45	He	7.979	ppb	20.3	6084.68	200	
24	Mg	45	He	-1.810	ppb	N/A	437.82	20	
27	Al	45	He	-1.333	ppb	N/A	15.55	20	
28	Si	45	H2	8.303	ppb	29.2	513.92	100	
39	K	45	He	10.021	ppb	65.4	9999.02	200	
40	Ca	45	H2	7.240	ppb	12.8	4121.86	20	
51	V	89	He	1.028	ppb	9.4	1016.74	1	Fail All Methods□ Failed DoD
52	Cr	89	He	0.111	ppb	14.3	139.31	1	
55	Mn	89	He	0.244	ppb	10.8	123.98	0.4	Failed DoD
56	Fe	89	H2	2.942	ppb	22.9	11961.88	20	
59	Co	89	He	0.003	ppb	3.5	13.33	0.2	
60	Ni	89	He	-0.036	ppb	N/A	21.11	0.4	
63	Cu	89	He	-0.107	ppb	N/A	248.90	0.6	
66	Zn	89	He	0.031	ppb	240.6	64.45	2	
75	As	89	He	0.067	ppb	53.3	13.67	1	
78	Se	89	H2	0.081	ppb	17.5	6.33	1	
88	Sr	89	He	0.020	ppb	47.9	20.00	1	
95	Mo	89	He	0.016	ppb	232.8	126.67	1	
107	Ag	89	He	0.005	ppb	43.1	22.22	0.2	
111	Cd	89	He	0.009	ppb	43.8	4.07	0.2	
118	Sn	159	He	0.337	ppb	10.6	354.46	1	
121	Sb	159	No Gas	0.042	ppb	30.8	413.80	0.2	
137	Ba	159	No Gas	0.021	ppb	15.2	80.09	0.4	
182	W	159	No Gas	0.109	ppb	3.5	777.56	1	
205	Tl	209	No Gas	0.031	ppb	25.7	447.18	0.2	
208	Pb	209	No Gas	0.075	ppb	4.8	1571.80	0.2	
232	Th	209	No Gas	0.199	ppb	26.9	4048.58	1	
238	U	209	No Gas	0.023	ppb	10.7	423.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1197558.05	1.1	1537409.87	77.89	29.5	120.4	
Sc	45	No Gas	3033379.88	1.3	3373253.08	89.92	29.5	120.4	
Sc	45	H2	343708.62	1.9	415670.69	82.69	29.5	120.4	
Sc	45	He	69801.63	2.7	81171.76	85.99	29.5	120.4	
Ge	72	No Gas	729335.74	0.8	779333.11	93.58	29.5	120.4	
Ge	72	H2	127790.03	0.9	153246.58	83.39	29.5	120.4	
Ge	72	He	55791.85	1.0	63135.03	88.37	29.5	120.4	
Y	89	H2	2346823.67	1.3	2642116.11	88.82	29.5	120.4	
Y	89	He	489577.10	1.4	544041.92	89.99	29.5	120.4	
Tb	159	No Gas	8384361.89	0.9	8117023.84	103.29	29.5	120.4	
Tb	159	He	2819331.03	1.6	2866479.19	98.36	29.5	120.4	
Bi	209	No Gas	4570377.61	1.0	4424692.92	103.29	29.5	120.4	

Sample Report

Sample Name SN5608-002

File Name 146SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:38:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.117	ppb	61.9	37.78	100	
11	B	6	No Gas	24.241	ppb	5.3	3915.11	1000	
23	Na	45	He	30724.866	ppb	1.2	618095.48	200000	
24	Mg	45	He	23621.876	ppb	1.3	259684.54	200000	
27	Al	45	He	1.151	ppb	410.9	48.89	200000	
28	Si	45	H2	8345.811	ppb	1.1	61534.28	10000	
39	K	45	He	3532.387	ppb	3.3	43551.48	200000	
40	Ca	45	H2	123635.129	ppb	1.1	8683909.73	200000	
51	V	89	He	2.880	ppb	10.2	684.49	1000	
52	Cr	89	He	0.386	ppb	29.0	109.98	2000	
55	Mn	89	He	7.826	ppb	5.6	758.55	2000	
56	Fe	89	H2	33.381	ppb	5.5	17727.65	100000	
59	Co	89	He	0.035	ppb	2.6	20.00	1000	
60	Ni	89	He	0.957	ppb	15.5	131.12	1000	
63	Cu	89	He	-0.432	ppb	N/A	283.35	2000	
66	Zn	89	He	2.224	ppb	46.6	140.01	2000	
75	As	89	He	1.919	ppb	2.1	60.34	1000	
78	Se	89	H2	0.071	ppb	47.2	1.50	1000	
88	Sr	89	He	689.783	ppb	1.9	98289.34	2000	
95	Mo	89	He	0.204	ppb	51.1	151.12	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.67	100	
111	Cd	89	He	0.101	ppb	16.9	8.52	1000	
118	Sn	159	He	0.558	ppb	13.7	168.90	1000	
121	Sb	159	No Gas	0.010	ppb	278.1	113.46	1000	
137	Ba	159	No Gas	4.215	ppb	10.6	2559.78	2000	
182	W	159	No Gas	-0.005	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.018	ppb	79.0	76.75	1000	
208	Pb	209	No Gas	0.145	ppb	7.9	730.82	2000	
232	Th	209	No Gas	0.023	ppb	41.5	263.63	1000	
238	U	209	No Gas	147.210	ppb	6.6	540856.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164330.06	2.2	1537409.87	75.73	29.5	120.4	
Sc	45	No Gas	3086536.82	3.6	3373253.08	91.5	29.5	120.4	
Sc	45	H2	350324.17	0.4	415670.69	84.28	29.5	120.4	
Sc	45	He	71764.79	1.4	81171.76	88.41	29.5	120.4	
Ge	72	No Gas	744944.60	3.3	779333.11	95.59	29.5	120.4	
Ge	72	H2	131002.74	1.9	153246.58	85.48	29.5	120.4	
Ge	72	He	57929.99	1.0	63135.03	91.76	29.5	120.4	
Y	89	H2	2387046.23	0.4	2642116.11	90.35	29.5	120.4	
Y	89	He	505934.57	1.5	544041.92	93	29.5	120.4	
Tb	159	No Gas	8539883.63	3.1	8117023.84	105.21	29.5	120.4	
Tb	159	He	2899500.34	1.5	2866479.19	101.15	29.5	120.4	
Bi	209	No Gas	4602358.55	3.4	4424692.92	104.02	29.5	120.4	

Sample Report

Sample Name SN5608-003

File Name 147SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:41:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.171	ppb	12.8	46.67	100	
11	B	6	No Gas	1046.192	ppb	4.4	133730.99	1000	
23	Na	45	He	113189.804	ppb	1.0	2194881.76	200000	
24	Mg	45	He	40703.919	ppb	0.3	433751.23	200000	
27	Al	45	He	8.736	ppb	74.0	78.89	200000	
28	Si	45	H2	7556.966	ppb	2.0	55160.50	10000	
39	K	45	He	57779.601	ppb	1.2	545002.50	200000	
40	Ca	45	H2	184965.906	ppb	0.8	12857494.39	200000	
51	V	89	He	3.880	ppb	1.0	820.05	1000	
52	Cr	89	He	1.977	ppb	2.3	415.27	2000	
55	Mn	89	He	4782.152	ppb	0.6	441992.40	2000	
56	Fe	89	H2	49998.334	ppb	0.7	14804624.73	100000	
59	Co	89	He	8.846	ppb	10.4	2911.66	1000	
60	Ni	89	He	19.108	ppb	4.5	1815.75	1000	
63	Cu	89	He	0.018	ppb	407.4	387.80	2000	
66	Zn	89	He	1.824	ppb	43.1	122.23	2000	
75	As	89	He	117.301	ppb	3.9	3320.10	1000	
78	Se	89	H2	0.241	ppb	14.0	4.00	1000	
88	Sr	89	He	1102.046	ppb	0.3	152182.70	2000	
95	Mo	89	He	0.899	ppb	22.8	256.68	1000	
107	Ag	89	He	0.006	ppb	344.7	13.34	100	
111	Cd	89	He	0.090	ppb	51.3	7.41	1000	
118	Sn	159	He	0.769	ppb	22.9	202.23	1000	
121	Sb	159	No Gas	0.117	ppb	5.2	273.64	1000	
137	Ba	159	No Gas	301.684	ppb	4.5	178688.39	2000	
182	W	159	No Gas	0.114	ppb	30.5	256.96	1000	
205	Tl	209	No Gas	0.007	ppb	153.2	43.38	1000	
208	Pb	209	No Gas	0.379	ppb	5.4	1545.09	2000	
232	Th	209	No Gas	0.027	ppb	85.3	266.97	1000	
238	U	209	No Gas	23.746	ppb	5.6	84045.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1117107.64	2.5	1537409.87	72.66	29.5	120.4	
Sc	45	No Gas	2983521.96	2.7	3373253.08	88.45	29.5	120.4	
Sc	45	H2	346742.16	1.2	415670.69	83.42	29.5	120.4	
Sc	45	He	69617.47	0.2	81171.76	85.77	29.5	120.4	
Ge	72	No Gas	719683.23	2.9	779333.11	92.35	29.5	120.4	
Ge	72	H2	128170.23	2.6	153246.58	83.64	29.5	120.4	
Ge	72	He	55834.85	0.7	63135.03	88.44	29.5	120.4	
Y	89	H2	2371798.38	0.2	2642116.11	89.77	29.5	120.4	
Y	89	He	490231.53	1.0	544041.92	90.11	29.5	120.4	
Tb	159	No Gas	8374231.40	2.6	8117023.84	103.17	29.5	120.4	
Tb	159	He	2854626.73	0.1	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4431918.53	3.1	4424692.92	100.16	29.5	120.4	

Sample Report

Sample Name SN5608-004

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:43:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	49.8	28.89	100	
11	B	6	No Gas	794.795	ppb	2.9	101605.64	1000	
23	Na	45	He	156999.033	ppb	0.5	3074784.00	200000	
24	Mg	45	He	30115.164	ppb	0.2	324475.95	200000	
27	Al	45	He	24.543	ppb	2.4	145.56	200000	
28	Si	45	H2	9534.180	ppb	2.1	68567.03	10000	
39	K	45	He	68460.169	ppb	0.7	650859.75	200000	
40	Ca	45	H2	155727.285	ppb	1.8	10671512.69	200000	
51	V	89	He	2.801	ppb	18.2	653.37	1000	
52	Cr	89	He	5.068	ppb	3.7	1019.86	2000	
55	Mn	89	He	6890.988	ppb	0.1	640145.69	2000	
56	Fe	89	H2	11869.739	ppb	1.2	3467078.47	100000	
59	Co	89	He	10.977	ppb	1.6	3631.84	1000	
60	Ni	89	He	56.171	ppb	4.0	5292.30	1000	
63	Cu	89	He	1.349	ppb	14.4	727.82	2000	
66	Zn	89	He	2.510	ppb	24.2	146.67	2000	
75	As	89	He	40.064	ppb	3.9	1142.84	1000	
78	Se	89	H2	0.211	ppb	33.1	3.50	1000	
88	Sr	89	He	1044.433	ppb	0.6	144957.58	2000	
95	Mo	89	He	1.790	ppb	10.3	400.02	1000	
107	Ag	89	He	0.008	ppb	158.5	14.45	100	
111	Cd	89	He	0.084	ppb	11.1	7.04	1000	
118	Sn	159	He	0.662	ppb	4.4	183.35	1000	
121	Sb	159	No Gas	0.120	ppb	21.6	276.98	1000	
137	Ba	159	No Gas	136.197	ppb	3.4	80805.00	2000	
182	W	159	No Gas	0.058	ppb	63.8	190.21	1000	
205	Tl	209	No Gas	0.052	ppb	11.9	163.52	1000	
208	Pb	209	No Gas	0.415	ppb	2.8	1681.92	2000	
232	Th	209	No Gas	0.024	ppb	53.5	256.96	1000	
238	U	209	No Gas	19.961	ppb	4.9	70940.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1114771.36	0.6	1537409.87	72.51	29.5	120.4	
Sc	45	No Gas	2975002.53	0.3	3373253.08	88.19	29.5	120.4	
Sc	45	H2	341842.09	1.6	415670.69	82.24	29.5	120.4	
Sc	45	He	70359.96	0.5	81171.76	86.68	29.5	120.4	
Ge	72	No Gas	721513.71	1.2	779333.11	92.58	29.5	120.4	
Ge	72	H2	129210.24	1.0	153246.58	84.32	29.5	120.4	
Ge	72	He	56034.51	0.6	63135.03	88.75	29.5	120.4	
Y	89	H2	2335864.25	0.9	2642116.11	88.41	29.5	120.4	
Y	89	He	492714.03	0.5	544041.92	90.57	29.5	120.4	
Tb	159	No Gas	8381913.28	0.8	8117023.84	103.26	29.5	120.4	
Tb	159	He	2845521.21	0.5	2866479.19	99.27	29.5	120.4	
Bi	209	No Gas	4446510.52	0.9	4424692.92	100.49	29.5	120.4	

Sample Report

Sample Name SN5608-005

File Name 149SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:46:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.095	ppb	114.2	33.34	100	
11	B	6	No Gas	23.673	ppb	4.7	3820.64	1000	
23	Na	45	He	26462.791	ppb	0.5	532511.74	200000	
24	Mg	45	He	2632.120	ppb	3.1	29389.82	200000	
27	Al	45	He	2.979	ppb	209.4	56.67	200000	
28	Si	45	H2	5228.366	ppb	19.8	34366.61	10000	
39	K	45	He	3568.921	ppb	0.7	43850.29	200000	
40	Ca	45	H2	16106.912	ppb	18.4	1008886.10	200000	
51	V	89	He	2.259	ppb	12.4	584.48	1000	
52	Cr	89	He	0.371	ppb	6.6	107.31	2000	
55	Mn	89	He	5.763	ppb	8.0	562.58	2000	
56	Fe	89	H2	136.607	ppb	23.0	43301.83	100000	
59	Co	89	He	0.008	ppb	361.4	11.11	1000	
60	Ni	89	He	0.146	ppb	126.7	53.33	1000	
63	Cu	89	He	0.069	ppb	97.5	414.47	2000	
66	Zn	89	He	2.891	ppb	4.7	164.45	2000	
75	As	89	He	10.584	ppb	4.4	313.71	1000	
78	Se	89	H2	0.015	ppb	317.7	0.67	1000	
88	Sr	89	He	71.993	ppb	1.0	10284.22	2000	
95	Mo	89	He	8.756	ppb	1.9	1553.48	1000	
107	Ag	89	He	0.011	ppb	105.6	16.67	100	
111	Cd	89	He	0.041	ppb	55.5	4.07	1000	
118	Sn	159	He	0.468	ppb	6.1	153.34	1000	
121	Sb	159	No Gas	0.018	ppb	106.1	126.81	1000	
137	Ba	159	No Gas	3.363	ppb	2.9	2055.79	2000	
182	W	159	No Gas	9.961	ppb	1.2	12329.81	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	23.36	1000	
208	Pb	209	No Gas	0.229	ppb	16.8	1057.87	2000	
232	Th	209	No Gas	-0.005	ppb	N/A	156.84	1000	
238	U	209	No Gas	0.380	ppb	6.9	1418.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1157773.55	0.0	1537409.87	75.31	29.5	120.4	
Sc	45	No Gas	3068293.26	1.4	3373253.08	90.96	29.5	120.4	
Sc	45	H2	317313.04	13.7	415670.69	76.34	29.5	120.4	
Sc	45	He	71678.69	0.6	81171.76	88.3	29.5	120.4	
Ge	72	No Gas	754234.35	0.9	779333.11	96.78	29.5	120.4	
Ge	72	H2	120056.35	11.6	153246.58	78.34	29.5	120.4	
Ge	72	He	58705.41	0.5	63135.03	92.98	29.5	120.4	
Y	89	H2	2169146.57	13.2	2642116.11	82.1	29.5	120.4	
Y	89	He	506842.00	0.4	544041.92	93.16	29.5	120.4	
Tb	159	No Gas	8562707.23	1.2	8117023.84	105.49	29.5	120.4	
Tb	159	He	2903233.08	0.5	2866479.19	101.28	29.5	120.4	
Bi	209	No Gas	4661036.55	0.8	4424692.92	105.34	29.5	120.4	

Sample Report

Sample Name SN5608-005L

File Name 150SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:49:12 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.329	ppb	65.1	27.78	100	
11	B	6	No Gas	28.081	ppb	9.5	1463.46	1000	
23	Na	45	He	26331.831	ppb	0.9	114874.85	200000	
24	Mg	45	He	2587.326	ppb	3.8	6475.33	200000	
27	Al	45	He	0.852	ppb	1618.9	46.67	200000	
28	Si	45	H2	4710.943	ppb	1.5	7390.15	10000	
39	K	45	He	3520.951	ppb	1.2	17192.66	200000	
40	Ca	45	H2	14542.935	ppb	3.0	212964.42	200000	
51	V	89	He	4.349	ppb	21.2	367.80	1000	
52	Cr	89	He	0.865	ppb	7.9	69.32	2000	
55	Mn	89	He	7.993	ppb	17.1	168.64	2000	
56	Fe	89	H2	105.881	ppb	9.2	14426.87	100000	
59	Co	89	He	0.069	ppb	135.6	13.33	1000	
60	Ni	89	He	-0.468	ppb	N/A	31.11	1000	
63	Cu	89	He	-3.298	ppb	N/A	230.01	2000	
66	Zn	89	He	5.417	ppb	53.7	102.23	2000	
75	As	89	He	9.596	ppb	3.9	62.01	1000	
78	Se	89	H2	0.174	ppb	90.3	1.00	1000	
88	Sr	89	He	72.661	ppb	5.6	2133.58	2000	
95	Mo	89	He	5.032	ppb	20.6	290.01	1000	
107	Ag	89	He	0.043	ppb	103.0	15.56	100	
111	Cd	89	He	0.027	ppb	307.1	1.48	1000	
118	Sn	159	He	-0.066	ppb	N/A	70.00	1000	
121	Sb	159	No Gas	-0.062	ppb	N/A	80.09	1000	
137	Ba	159	No Gas	3.456	ppb	9.1	437.16	2000	
182	W	159	No Gas	9.988	ppb	3.7	2576.50	1000	
205	Tl	209	No Gas	0.003	ppb	531.0	30.03	1000	
208	Pb	209	No Gas	0.204	ppb	64.7	343.72	2000	
232	Th	209	No Gas	-0.036	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.415	ppb	20.6	313.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1177320.18	1.6	1537409.87	76.58	29.5	120.4	
Sc	45	No Gas	3161059.59	1.7	3373253.08	93.71	29.5	120.4	
Sc	45	H2	362576.51	3.8	415670.69	87.23	29.5	120.4	
Sc	45	He	74620.33	0.5	81171.76	91.93	29.5	120.4	
Ge	72	No Gas	768286.88	1.2	779333.11	98.58	29.5	120.4	
Ge	72	H2	137685.97	3.1	153246.58	89.85	29.5	120.4	
Ge	72	He	60636.20	1.0	63135.03	96.04	29.5	120.4	
Y	89	H2	2445367.31	2.9	2642116.11	92.55	29.5	120.4	
Y	89	He	519875.45	1.1	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8578743.76	1.6	8117023.84	105.69	29.5	120.4	
Tb	159	He	2917225.93	1.0	2866479.19	101.77	29.5	120.4	
Bi	209	No Gas	4666001.25	1.7	4424692.92	105.45	29.5	120.4	

Sample Report

Sample Name SN5608-005A

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:51:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.208	ppb	2.4	2120.22	100	
11	B	6	No Gas	217.764	ppb	1.1	30237.95	1000	
23	Na	45	He	35871.461	ppb	1.5	729499.52	200000	
24	Mg	45	He	3529.978	ppb	3.7	39741.75	200000	
27	Al	45	He	913.388	ppb	3.4	3971.80	200000	
28	Si	45	H2	9041.711	ppb	1.3	68792.20	10000	
39	K	45	He	13434.343	ppb	2.7	139807.09	200000	
40	Ca	45	H2	14722.259	ppb	1.8	1068837.82	200000	
51	V	89	He	53.756	ppb	2.6	8997.64	1000	
52	Cr	89	He	49.378	ppb	6.8	9976.39	2000	
55	Mn	89	He	25.336	ppb	0.4	2445.77	2000	
56	Fe	89	H2	1122.002	ppb	2.8	354621.79	100000	
59	Co	89	He	10.788	ppb	7.4	3687.42	1000	
60	Ni	89	He	21.318	ppb	4.6	2100.23	1000	
63	Cu	89	He	31.271	ppb	3.2	8600.71	2000	
66	Zn	89	He	106.009	ppb	3.5	3869.56	2000	
75	As	89	He	61.121	ppb	0.9	1800.32	1000	
78	Se	89	H2	48.498	ppb	2.2	746.99	1000	
88	Sr	89	He	121.539	ppb	2.2	17444.89	2000	
95	Mo	89	He	61.205	ppb	2.2	10203.08	1000	
107	Ag	89	He	11.369	ppb	4.7	6378.38	100	
111	Cd	89	He	11.214	ppb	3.9	838.19	1000	
118	Sn	159	He	48.318	ppb	5.0	8468.51	1000	
121	Sb	159	No Gas	10.163	ppb	3.5	16144.19	1000	
137	Ba	159	No Gas	22.693	ppb	3.2	14119.93	2000	
182	W	159	No Gas	58.171	ppb	0.6	73210.94	1000	
205	Tl	209	No Gas	10.191	ppb	0.6	28664.22	1000	
208	Pb	209	No Gas	10.209	ppb	0.8	39842.74	2000	
232	Th	209	No Gas	9.747	ppb	1.2	39814.08	1000	
238	U	209	No Gas	10.281	ppb	1.1	39245.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1189919.20	0.9	1537409.87	77.4	29.5	120.4	
Sc	45	No Gas	3189389.85	1.3	3373253.08	94.55	29.5	120.4	
Sc	45	H2	361640.99	1.3	415670.69	87	29.5	120.4	
Sc	45	He	72648.67	2.2	81171.76	89.5	29.5	120.4	
Ge	72	No Gas	776333.74	0.8	779333.11	99.62	29.5	120.4	
Ge	72	H2	136212.46	1.4	153246.58	88.88	29.5	120.4	
Ge	72	He	58928.40	1.8	63135.03	93.34	29.5	120.4	
Y	89	H2	2475960.17	1.4	2642116.11	93.71	29.5	120.4	
Y	89	He	509551.49	2.4	544041.92	93.66	29.5	120.4	
Tb	159	No Gas	8777736.46	1.1	8117023.84	108.14	29.5	120.4	
Tb	159	He	2906970.06	3.1	2866479.19	101.41	29.5	120.4	
Bi	209	No Gas	4774188.29	0.7	4424692.92	107.9	29.5	120.4	

Sample Report

Sample Name SN5608-005S

File Name 152SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:54:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.346	ppb	2.7	10058.26	100	
11	B	6	No Gas	524.330	ppb	4.6	70819.33	1000	
23	Na	45	He	31883.568	ppb	1.0	663284.14	200000	
24	Mg	45	He	7399.048	ppb	1.7	84532.93	200000	
27	Al	45	He	2128.210	ppb	1.1	9398.95	200000	
28	Si	45	H2	5696.137	ppb	9.4	41318.89	10000	
39	K	45	He	13008.983	ppb	0.8	138697.03	200000	
40	Ca	45	H2	17528.311	ppb	8.6	1210870.38	200000	
51	V	89	He	474.713	ppb	1.7	79326.76	1000	
52	Cr	89	He	193.231	ppb	0.8	39774.45	2000	
55	Mn	89	He	499.683	ppb	0.5	48985.58	2000	
56	Fe	89	H2	1656.510	ppb	7.9	496131.93	100000	
59	Co	89	He	500.466	ppb	0.4	174329.97	1000	
60	Ni	89	He	477.149	ppb	0.5	47129.04	1000	
63	Cu	89	He	249.716	ppb	0.9	67253.67	2000	
66	Zn	89	He	609.353	ppb	0.6	22407.57	2000	
75	As	89	He	108.325	ppb	2.6	3252.74	1000	
78	Se	89	H2	103.949	ppb	8.7	1527.02	1000	
88	Sr	89	He	557.445	ppb	1.3	81628.85	2000	
95	Mo	89	He	110.353	ppb	0.4	18676.65	1000	
107	Ag	89	He	52.834	ppb	1.1	30221.07	100	
111	Cd	89	He	251.984	ppb	0.9	19199.65	1000	
118	Sn	159	He	467.764	ppb	0.3	82774.00	1000	
121	Sb	159	No Gas	97.087	ppb	4.2	151314.61	1000	
137	Ba	159	No Gas	1859.139	ppb	2.8	1139498.16	2000	
182	W	159	No Gas	110.215	ppb	2.7	136725.45	1000	
205	Tl	209	No Gas	100.092	ppb	3.6	274832.69	1000	
208	Pb	209	No Gas	100.601	ppb	3.1	381955.09	2000	
232	Th	209	No Gas	98.685	ppb	3.5	392247.54	1000	
238	U	209	No Gas	98.556	ppb	3.4	367567.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174443.07	2.4	1537409.87	76.39	29.5	120.4	
Sc	45	No Gas	3126988.81	0.7	3373253.08	92.7	29.5	120.4	
Sc	45	H2	345295.50	5.9	415670.69	83.07	29.5	120.4	
Sc	45	He	74228.54	0.4	81171.76	91.45	29.5	120.4	
Ge	72	No Gas	767153.84	1.0	779333.11	98.44	29.5	120.4	
Ge	72	H2	132030.58	4.4	153246.58	86.16	29.5	120.4	
Ge	72	He	60389.28	0.6	63135.03	95.65	29.5	120.4	
Y	89	H2	2369706.89	5.5	2642116.11	89.69	29.5	120.4	
Y	89	He	519858.71	1.0	544041.92	95.55	29.5	120.4	
Tb	159	No Gas	8660617.86	0.8	8117023.84	106.7	29.5	120.4	
Tb	159	He	2954643.81	1.2	2866479.19	103.08	29.5	120.4	
Bi	209	No Gas	4666310.68	1.4	4424692.92	105.46	29.5	120.4	

Sample Report

Sample Name SN5608-005P

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:57:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.971	ppb	3.1	10501.92	100	
11	B	6	No Gas	538.594	ppb	4.5	73524.93	1000	
23	Na	45	He	32452.116	ppb	1.7	675852.05	200000	
24	Mg	45	He	7440.848	ppb	1.0	85122.68	200000	
27	Al	45	He	1819.786	ppb	3.5	8052.55	200000	
28	Si	45	H2	5520.078	ppb	4.0	42738.22	10000	
39	K	45	He	13299.131	ppb	1.9	141743.37	200000	
40	Ca	45	H2	16132.400	ppb	1.3	1189415.06	200000	
51	V	89	He	481.448	ppb	0.7	81145.23	1000	
52	Cr	89	He	196.452	ppb	0.9	40781.07	2000	
55	Mn	89	He	493.970	ppb	0.6	48841.09	2000	
56	Fe	89	H2	1134.590	ppb	1.2	363370.65	100000	
59	Co	89	He	506.183	ppb	0.1	177832.38	1000	
60	Ni	89	He	484.671	ppb	0.7	48280.75	1000	
63	Cu	89	He	251.754	ppb	0.1	68384.67	2000	
66	Zn	89	He	494.116	ppb	1.9	18337.07	2000	
75	As	89	He	110.092	ppb	1.2	3333.77	1000	
78	Se	89	H2	100.609	ppb	2.6	1569.69	1000	
88	Sr	89	He	564.013	ppb	0.4	83305.85	2000	
95	Mo	89	He	113.645	ppb	1.1	19396.57	1000	
107	Ag	89	He	53.811	ppb	1.0	31044.07	100	
111	Cd	89	He	255.135	ppb	1.0	19606.13	1000	
118	Sn	159	He	475.323	ppb	1.5	84882.32	1000	
121	Sb	159	No Gas	99.187	ppb	3.1	157341.16	1000	
137	Ba	159	No Gas	1887.760	ppb	2.6	1177616.87	2000	
182	W	159	No Gas	111.150	ppb	3.6	140333.60	1000	
205	Tl	209	No Gas	101.935	ppb	3.1	284340.30	1000	
208	Pb	209	No Gas	102.208	ppb	3.1	394183.96	2000	
232	Th	209	No Gas	99.860	ppb	4.3	403179.19	1000	
238	U	209	No Gas	100.421	ppb	4.2	380437.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1187130.19	1.7	1537409.87	77.22	29.5	120.4	
Sc	45	No Gas	3194732.38	0.9	3373253.08	94.71	29.5	120.4	
Sc	45	H2	367289.31	1.0	415670.69	88.36	29.5	120.4	
Sc	45	He	74334.63	1.5	81171.76	91.58	29.5	120.4	
Ge	72	No Gas	780175.32	1.2	779333.11	100.11	29.5	120.4	
Ge	72	H2	138487.54	1.3	153246.58	90.37	29.5	120.4	
Ge	72	He	60635.79	0.3	63135.03	96.04	29.5	120.4	
Y	89	H2	2508970.16	0.5	2642116.11	94.96	29.5	120.4	
Y	89	He	524315.25	0.7	544041.92	96.37	29.5	120.4	
Tb	159	No Gas	8814708.06	0.8	8117023.84	108.6	29.5	120.4	
Tb	159	He	2981848.46	0.5	2866479.19	104.02	29.5	120.4	
Bi	209	No Gas	4740120.53	1.2	4424692.92	107.13	29.5	120.4	

Sample Report

Sample Name PBWNG13IMW2

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:59:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.197	ppb	35.9	53.34	100	
11	B	6	No Gas	11.196	ppb	9.0	2159.13	1000	
23	Na	45	He	74.149	ppb	9.4	7269.88	200000	
24	Mg	45	He	-2.208	ppb	N/A	551.16	200000	
27	Al	45	He	0.565	ppb	673.0	48.89	200000	
28	Si	45	H2	17.555	ppb	45.9	363.74	10000	
39	K	45	He	40.004	ppb	43.5	10677.52	200000	
40	Ca	45	H2	25.633	ppb	6.4	3621.70	200000	
51	V	89	He	4.204	ppb	8.9	935.62	1000	
52	Cr	89	He	0.367	ppb	24.3	110.65	2000	
55	Mn	89	He	1.252	ppb	10.7	136.64	2000	
56	Fe	89	H2	-4.243	ppb	N/A	6869.36	100000	
59	Co	89	He	0.202	ppb	9.5	80.01	1000	
60	Ni	89	He	-0.120	ppb	N/A	28.89	1000	
63	Cu	89	He	-0.515	ppb	N/A	272.23	2000	
66	Zn	89	He	2.031	ppb	19.7	138.90	2000	
75	As	89	He	0.313	ppb	37.1	14.00	1000	
78	Se	89	H2	0.204	ppb	32.3	3.67	1000	
88	Sr	89	He	0.106	ppb	32.1	22.22	2000	
95	Mo	89	He	-0.478	ppb	N/A	41.11	1000	
107	Ag	89	He	0.008	ppb	145.4	15.55	100	
111	Cd	89	He	0.053	ppb	31.5	5.18	1000	
118	Sn	159	He	1.158	ppb	13.3	280.01	1000	
121	Sb	159	No Gas	0.126	ppb	24.3	293.66	1000	
137	Ba	159	No Gas	1.368	ppb	10.0	850.99	2000	
182	W	159	No Gas	0.176	ppb	24.9	340.38	1000	
205	Tl	209	No Gas	0.127	ppb	8.9	377.09	1000	
208	Pb	209	No Gas	0.296	ppb	6.9	1314.84	2000	
232	Th	209	No Gas	1.065	ppb	28.8	4419.13	1000	
238	U	209	No Gas	0.093	ppb	21.4	350.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1148819.19	1.4	1537409.87	74.72	29.5	120.4	
Sc	45	No Gas	3132799.33	0.3	3373253.08	92.87	29.5	120.4	
Sc	45	H2	366562.99	1.5	415670.69	88.19	29.5	120.4	
Sc	45	He	75203.50	1.5	81171.76	92.65	29.5	120.4	
Ge	72	No Gas	768607.04	0.9	779333.11	98.62	29.5	120.4	
Ge	72	H2	138342.36	2.2	153246.58	90.27	29.5	120.4	
Ge	72	He	60529.14	0.4	63135.03	95.87	29.5	120.4	
Y	89	H2	2513940.00	0.6	2642116.11	95.15	29.5	120.4	
Y	89	He	526594.13	0.5	544041.92	96.79	29.5	120.4	
Tb	159	No Gas	8606338.97	0.5	8117023.84	106.03	29.5	120.4	
Tb	159	He	2976594.09	0.1	2866479.19	103.84	29.5	120.4	
Bi	209	No Gas	4672934.65	0.7	4424692.92	105.61	29.5	120.4	

Sample Report

Sample Name LCSWNG13IMW2

File Name 155SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:02:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.884	ppb	2.7	10516.34	100	
11	B	6	No Gas	536.593	ppb	0.3	72093.33	1000	
23	Na	45	He	7367.990	ppb	2.7	158650.15	200000	
24	Mg	45	He	5083.001	ppb	3.5	58622.88	200000	
27	Al	45	He	1834.277	ppb	4.7	8157.06	200000	
28	Si	45	H2	1037.117	ppb	6.6	8188.17	10000	
39	K	45	He	10234.900	ppb	1.9	112025.36	200000	
40	Ca	45	H2	2625.817	ppb	2.7	194457.17	200000	
51	V	89	He	496.957	ppb	4.0	83054.84	1000	
52	Cr	89	He	204.080	ppb	3.4	42013.75	2000	
55	Mn	89	He	500.795	ppb	3.1	49111.97	2000	
56	Fe	89	H2	1053.179	ppb	2.7	337461.48	100000	
59	Co	89	He	528.696	ppb	2.9	184223.69	1000	
60	Ni	89	He	500.930	ppb	2.4	49497.26	1000	
63	Cu	89	He	262.595	ppb	2.6	70735.06	2000	
66	Zn	89	He	506.859	ppb	2.7	18656.36	2000	
75	As	89	He	103.083	ppb	3.1	3096.02	1000	
78	Se	89	H2	101.218	ppb	3.9	1577.19	1000	
88	Sr	89	He	513.330	ppb	2.3	75208.21	2000	
95	Mo	89	He	107.630	ppb	1.9	18229.39	1000	
107	Ag	89	He	55.209	ppb	4.1	31585.24	100	
111	Cd	89	He	263.752	ppb	3.3	20103.15	1000	
118	Sn	159	He	487.678	ppb	3.2	86086.66	1000	
121	Sb	159	No Gas	102.947	ppb	2.1	159509.46	1000	
137	Ba	159	No Gas	1967.672	ppb	1.5	1198993.46	2000	
182	W	159	No Gas	104.622	ppb	1.3	129040.12	1000	
205	Tl	209	No Gas	106.021	ppb	0.2	290551.72	1000	
208	Pb	209	No Gas	105.741	ppb	1.7	400591.08	2000	
232	Th	209	No Gas	103.566	ppb	1.7	410746.67	1000	
238	U	209	No Gas	103.645	ppb	2.1	385689.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1167732.59	1.3	1537409.87	75.95	29.5	120.4	
Sc	45	No Gas	3135259.65	2.6	3373253.08	92.94	29.5	120.4	
Sc	45	H2	366267.78	2.1	415670.69	88.11	29.5	120.4	
Sc	45	He	74744.98	2.5	81171.76	92.08	29.5	120.4	
Ge	72	No Gas	771270.65	2.5	779333.11	98.97	29.5	120.4	
Ge	72	H2	136863.22	2.1	153246.58	89.31	29.5	120.4	
Ge	72	He	59794.56	1.3	63135.03	94.71	29.5	120.4	
Y	89	H2	2506341.59	1.4	2642116.11	94.86	29.5	120.4	
Y	89	He	520307.42	2.7	544041.92	95.64	29.5	120.4	
Tb	159	No Gas	8611046.68	2.4	8117023.84	106.09	29.5	120.4	
Tb	159	He	2948801.45	2.1	2866479.19	102.87	29.5	120.4	
Bi	209	No Gas	4656167.93	2.5	4424692.92	105.23	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	156_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:05:18 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.472	ppb	2.1	25930.54	25	101.89	89.8	110.2	
11	B	6	No Gas	27.071	ppb	1.3	18809.52	25	108.28	89.8	110.2	
23	Na	45	He	4867.821	ppb	1.1	513918.50	5000	97.36	89.8	110.2	
24	Mg	45	He	4751.976	ppb	1.4	273524.12	5000	95.04	89.8	110.2	
27	Al	45	He	456.860	ppb	1.7	10210.67	500	91.37	89.8	110.2	
28	Si	45	H2	469.694	ppb	5.1	18325.42	500	93.94	89.8	110.2	
39	K	45	He	4788.789	ppb	1.0	249802.51	5000	95.78	89.8	110.2	
40	Ca	45	H2	4915.746	ppb	1.3	1812507.63	5000	98.31	89.8	110.2	
51	V	89	He	23.473	ppb	2.3	19852.34	25	93.89	89.8	110.2	
52	Cr	89	He	23.877	ppb	1.0	24674.32	25	95.51	89.8	110.2	
55	Mn	89	He	23.492	ppb	2.1	11565.98	25	93.97	89.8	110.2	
56	Fe	89	H2	4844.149	ppb	1.5	7461451.66	5000	96.88	89.8	110.2	
59	Co	89	He	24.439	ppb	0.5	42723.10	25	97.76	89.8	110.2	
60	Ni	89	He	24.402	ppb	0.9	12124.54	25	97.61	89.8	110.2	
63	Cu	89	He	24.199	ppb	1.1	32915.07	25	96.8	89.8	110.2	
66	Zn	89	He	23.195	ppb	4.3	4330.84	25	92.78	89.8	110.2	
75	As	89	He	24.000	ppb	1.2	3615.21	25	96	89.8	110.2	
78	Se	89	H2	24.329	ppb	2.7	1865.38	25	97.32	89.8	110.2	
88	Sr	89	He	23.478	ppb	1.9	17256.94	25	93.91	89.8	110.2	
95	Mo	89	He	24.181	ppb	0.7	20524.94	25	96.72	89.8	110.2	
107	Ag	89	He	18.668	ppb	0.6	53576.36	25	74.67	89.8	110.2	> +/- 10%
111	Cd	89	He	24.421	ppb	1.1	9337.75	25	97.68	89.8	110.2	
118	Sn	159	He	22.553	ppb	1.7	19759.54	25	90.21	89.8	110.2	
121	Sb	159	No Gas	24.100	ppb	2.4	183778.17	25	96.4	89.8	110.2	
137	Ba	159	No Gas	24.509	ppb	2.5	73534.68	25	98.04	89.8	110.2	
182	W	159	No Gas	24.148	ppb	2.1	146582.92	25	96.59	89.8	110.2	
205	Tl	209	No Gas	24.627	ppb	2.2	330466.94	25	98.51	89.8	110.2	
208	Pb	209	No Gas	24.515	ppb	2.6	454770.53	25	98.06	89.8	110.2	
232	Th	209	No Gas	24.221	ppb	0.9	470554.75	25	96.88	89.8	110.2	
238	U	209	No Gas	24.206	ppb	1.0	441274.30	25	96.82	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174018.30	2.4	1537409.87	76.36	29.5	120.4	
Sc	45	No Gas	3180985.33	3.1	3373253.08	94.3	29.5	120.4	
Sc	45	H2	367550.89	1.2	415670.69	88.42	29.5	120.4	
Sc	45	He	75148.65	1.0	81171.76	92.58	29.5	120.4	
Ge	72	No Gas	759869.53	1.7	779333.11	97.5	29.5	120.4	
Ge	72	H2	135803.07	1.6	153246.58	88.62	29.5	120.4	
Ge	72	He	60277.26	1.1	63135.03	95.47	29.5	120.4	
Y	89	H2	2466510.78	1.3	2642116.11	93.35	29.5	120.4	
Y	89	He	521719.82	0.3	544041.92	95.9	29.5	120.4	
Tb	159	No Gas	8478514.73	3.0	8117023.84	104.45	29.5	120.4	
Tb	159	He	2917437.11	0.7	2866479.19	101.78	29.5	120.4	
Bi	209	No Gas	4561141.76	2.3	4424692.92	103.08	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	157_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:07:55 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.070	ppb	24.7	87.78	0.2	
11	B	6	No Gas	2.013	ppb	2.1	2094.67	4	Failed DoD
23	Na	45	He	14.402	ppb	14.1	6929.45	200	
24	Mg	45	He	-1.731	ppb	N/A	457.82	20	
27	Al	45	He	-0.936	ppb	N/A	24.44	20	
28	Si	45	H2	6.237	ppb	36.0	450.51	100	
39	K	45	He	10.593	ppb	23.4	10367.45	200	
40	Ca	45	H2	5.193	ppb	7.2	3505.02	20	
51	V	89	He	0.655	ppb	5.6	754.50	1	Failed DoD
52	Cr	89	He	0.104	ppb	8.1	137.98	1	
55	Mn	89	He	0.179	ppb	8.8	97.98	0.4	
56	Fe	89	H2	1.034	ppb	28.5	9433.62	20	
59	Co	89	He	0.022	ppb	17.3	46.67	0.2	
60	Ni	89	He	-0.018	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.102	ppb	N/A	264.46	0.6	
66	Zn	89	He	0.053	ppb	129.8	71.11	2	
75	As	89	He	0.056	ppb	61.4	12.67	1	
78	Se	89	H2	0.081	ppb	9.1	6.50	1	
88	Sr	89	He	0.018	ppb	40.7	18.89	1	
95	Mo	89	He	-0.019	ppb	N/A	103.34	1	
107	Ag	89	He	0.006	ppb	82.1	26.67	0.2	
111	Cd	89	He	0.016	ppb	28.5	7.04	0.2	
118	Sn	159	He	0.373	ppb	7.5	397.80	1	
121	Sb	159	No Gas	0.034	ppb	19.3	373.76	0.2	
137	Ba	159	No Gas	0.088	ppb	17.0	293.67	0.4	
182	W	159	No Gas	0.123	ppb	12.3	901.04	1	
205	Tl	209	No Gas	0.033	ppb	24.4	490.57	0.2	
208	Pb	209	No Gas	0.064	ppb	12.8	1431.64	0.2	
232	Th	209	No Gas	0.306	ppb	34.9	6412.30	1	
238	U	209	No Gas	0.032	ppb	33.2	610.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1197259.70	3.0	1537409.87	77.88	29.5	120.4	
Sc	45	No Gas	3157345.85	2.6	3373253.08	93.6	29.5	120.4	
Sc	45	H2	352342.00	0.8	415670.69	84.76	29.5	120.4	
Sc	45	He	72142.51	1.0	81171.76	88.88	29.5	120.4	
Ge	72	No Gas	770672.57	2.5	779333.11	98.89	29.5	120.4	
Ge	72	H2	131729.97	2.3	153246.58	85.96	29.5	120.4	
Ge	72	He	58046.03	1.5	63135.03	91.94	29.5	120.4	
Y	89	H2	2414427.68	0.9	2642116.11	91.38	29.5	120.4	
Y	89	He	510383.95	0.5	544041.92	93.81	29.5	120.4	
Tb	159	No Gas	8806874.87	2.2	8117023.84	108.5	29.5	120.4	
Tb	159	He	2914620.96	0.8	2866479.19	101.68	29.5	120.4	
Bi	209	No Gas	4767125.50	2.2	4424692.92	107.74	29.5	120.4	

Sample Report

Sample Name SN5646-002

File Name 158SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:10:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.217	ppb	20.1	57.78	100	
11	B	6	No Gas	29.162	ppb	1.2	4528.64	1000	
23	Na	45	He	10335.608	ppb	1.2	214561.10	200000	
24	Mg	45	He	17210.443	ppb	1.1	192063.43	200000	
27	Al	45	He	23.108	ppb	18.4	144.45	200000	
28	Si	45	H2	3317.321	ppb	6.2	25333.97	10000	
39	K	45	He	663.441	ppb	7.3	16377.09	200000	
40	Ca	45	H2	14364.486	ppb	4.2	1041312.61	200000	
51	V	89	He	1.586	ppb	13.3	476.69	1000	
52	Cr	89	He	0.323	ppb	6.6	97.98	2000	
55	Mn	89	He	2108.632	ppb	0.9	202277.99	2000	
56	Fe	89	H2	25937.390	ppb	2.4	8067457.38	100000	
59	Co	89	He	18.320	ppb	2.3	6252.98	1000	
60	Ni	89	He	44.317	ppb	1.3	4319.72	1000	
63	Cu	89	He	-0.713	ppb	N/A	211.12	2000	
66	Zn	89	He	62.071	ppb	2.5	2289.17	2000	
75	As	89	He	6.111	ppb	5.7	183.69	1000	
78	Se	89	H2	0.132	ppb	90.4	2.50	1000	
88	Sr	89	He	38.809	ppb	1.2	5567.99	2000	
95	Mo	89	He	-0.456	ppb	N/A	43.34	1000	
107	Ag	89	He	0.007	ppb	49.2	14.44	100	
111	Cd	89	He	0.071	ppb	100.4	6.29	1000	
118	Sn	159	He	0.685	ppb	17.7	192.23	1000	
121	Sb	159	No Gas	0.069	ppb	17.5	206.90	1000	
137	Ba	159	No Gas	12.817	ppb	6.6	7874.48	2000	
182	W	159	No Gas	0.048	ppb	67.0	183.54	1000	
205	Tl	209	No Gas	0.019	ppb	42.7	80.09	1000	
208	Pb	209	No Gas	0.150	ppb	14.1	767.54	2000	
232	Th	209	No Gas	0.050	ppb	63.6	380.43	1000	
238	U	209	No Gas	0.119	ppb	19.7	453.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1153559.46	2.9	1537409.87	75.03	29.5	120.4	
Sc	45	No Gas	3130520.57	2.5	3373253.08	92.8	29.5	120.4	
Sc	45	H2	361307.10	2.7	415670.69	86.92	29.5	120.4	
Sc	45	He	72785.41	0.7	81171.76	89.67	29.5	120.4	
Ge	72	No Gas	765528.11	1.9	779333.11	98.23	29.5	120.4	
Ge	72	H2	136002.09	2.4	153246.58	88.75	29.5	120.4	
Ge	72	He	59069.21	0.4	63135.03	93.56	29.5	120.4	
Y	89	H2	2490788.80	1.5	2642116.11	94.27	29.5	120.4	
Y	89	He	508789.85	0.5	544041.92	93.52	29.5	120.4	
Tb	159	No Gas	8667014.31	2.4	8117023.84	106.78	29.5	120.4	
Tb	159	He	2919772.04	0.6	2866479.19	101.86	29.5	120.4	
Bi	209	No Gas	4712739.66	3.0	4424692.92	106.51	29.5	120.4	

Sample Report

Sample Name SN5646-003

File Name 159SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:13:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.146	ppb	28.3	42.22	100	
11	B	6	No Gas	26.154	ppb	8.3	4011.81	1000	
23	Na	45	He	106385.608	ppb	1.1	2117380.25	200000	
24	Mg	45	He	5080.800	ppb	2.1	56040.86	200000	
27	Al	45	He	3.268	ppb	63.1	57.78	200000	
28	Si	45	H2	4926.803	ppb	2.8	36781.84	10000	
39	K	45	He	3524.971	ppb	2.2	43287.29	200000	
40	Ca	45	H2	65912.147	ppb	2.9	4676968.47	200000	
51	V	89	He	1.136	ppb	23.5	396.69	1000	
52	Cr	89	He	0.271	ppb	16.3	85.99	2000	
55	Mn	89	He	1408.044	ppb	0.6	132762.78	2000	
56	Fe	89	H2	20163.157	ppb	2.0	6074257.07	100000	
59	Co	89	He	1.361	ppb	17.6	464.49	1000	
60	Ni	89	He	0.469	ppb	15.5	83.34	1000	
63	Cu	89	He	-0.596	ppb	N/A	237.79	2000	
66	Zn	89	He	2.608	ppb	16.9	152.23	2000	
75	As	89	He	36.035	ppb	2.3	1043.49	1000	
78	Se	89	H2	0.147	ppb	24.2	2.67	1000	
88	Sr	89	He	389.226	ppb	0.3	54832.43	2000	
95	Mo	89	He	0.242	ppb	53.4	155.56	1000	
107	Ag	89	He	0.008	ppb	198.3	14.44	100	
111	Cd	89	He	0.011	ppb	77.1	1.85	1000	
118	Sn	159	He	0.783	ppb	53.7	206.72	1000	
121	Sb	159	No Gas	0.026	ppb	120.2	136.82	1000	
137	Ba	159	No Gas	28.327	ppb	7.1	16963.21	2000	
182	W	159	No Gas	-0.031	ppb	N/A	83.43	1000	
205	Tl	209	No Gas	0.015	ppb	38.3	66.74	1000	
208	Pb	209	No Gas	0.116	ppb	8.9	617.36	2000	
232	Th	209	No Gas	0.018	ppb	101.9	243.61	1000	
238	U	209	No Gas	0.026	ppb	16.0	96.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1121236.52	2.8	1537409.87	72.93	29.5	120.4	
Sc	45	No Gas	3034933.55	2.0	3373253.08	89.97	29.5	120.4	
Sc	45	H2	353982.70	2.1	415670.69	85.16	29.5	120.4	
Sc	45	He	71446.48	0.9	81171.76	88.02	29.5	120.4	
Ge	72	No Gas	730682.52	0.4	779333.11	93.76	29.5	120.4	
Ge	72	H2	131190.60	1.7	153246.58	85.61	29.5	120.4	
Ge	72	He	57376.66	0.8	63135.03	90.88	29.5	120.4	
Y	89	H2	2411807.53	2.0	2642116.11	91.28	29.5	120.4	
Y	89	He	500072.12	0.6	544041.92	91.92	29.5	120.4	
Tb	159	No Gas	8457491.89	1.7	8117023.84	104.19	29.5	120.4	
Tb	159	He	2882555.86	0.6	2866479.19	100.56	29.5	120.4	
Bi	209	No Gas	4574724.36	1.6	4424692.92	103.39	29.5	120.4	

Sample Report

Sample Name SN5646-004

File Name 160SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:15:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.058	ppb	49.4	25.56	100	
11	B	6	No Gas	29.555	ppb	9.7	4549.77	1000	
23	Na	45	He	68120.565	ppb	4.1	1357606.94	200000	
24	Mg	45	He	21602.460	ppb	4.9	236396.58	200000	
27	Al	45	He	4.098	ppb	55.4	61.12	200000	
28	Si	45	H2	2400.558	ppb	3.9	18051.50	10000	
39	K	45	He	2007.585	ppb	5.6	28859.58	200000	
40	Ca	45	H2	34358.437	ppb	4.4	2439895.97	200000	
51	V	89	He	1.820	ppb	7.0	505.58	1000	
52	Cr	89	He	0.425	ppb	32.0	116.65	2000	
55	Mn	89	He	2.028	ppb	40.3	199.97	2000	
56	Fe	89	H2	8.297	ppb	21.6	10388.74	100000	
59	Co	89	He	0.259	ppb	18.8	95.56	1000	
60	Ni	89	He	5.497	ppb	3.3	560.03	1000	
63	Cu	89	He	0.727	ppb	37.0	576.70	2000	
66	Zn	89	He	5.842	ppb	8.9	266.68	2000	
75	As	89	He	1.340	ppb	18.8	42.67	1000	
78	Se	89	H2	0.575	ppb	40.0	9.17	1000	
88	Sr	89	He	172.403	ppb	5.1	24245.56	2000	
95	Mo	89	He	-0.568	ppb	N/A	24.44	1000	
107	Ag	89	He	0.022	ppb	82.6	22.22	100	
111	Cd	89	He	0.042	ppb	26.2	4.07	1000	
118	Sn	159	He	0.630	ppb	9.5	177.79	1000	
121	Sb	159	No Gas	0.021	ppb	27.4	133.48	1000	
137	Ba	159	No Gas	3.150	ppb	6.3	1942.31	2000	
182	W	159	No Gas	4.421	ppb	7.3	5584.10	1000	
205	Tl	209	No Gas	0.023	ppb	18.6	90.10	1000	
208	Pb	209	No Gas	0.121	ppb	2.7	644.06	2000	
232	Th	209	No Gas	0.026	ppb	24.1	276.98	1000	
238	U	209	No Gas	0.021	ppb	37.3	80.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1148017.98	3.3	1537409.87	74.67	29.5	120.4	
Sc	45	No Gas	3101587.24	4.9	3373253.08	91.95	29.5	120.4	
Sc	45	H2	354372.70	3.6	415670.69	85.25	29.5	120.4	
Sc	45	He	71543.02	5.6	81171.76	88.14	29.5	120.4	
Ge	72	No Gas	744350.77	1.8	779333.11	95.51	29.5	120.4	
Ge	72	H2	132613.54	2.2	153246.58	86.54	29.5	120.4	
Ge	72	He	58032.37	5.0	63135.03	91.92	29.5	120.4	
Y	89	H2	2417984.44	3.6	2642116.11	91.52	29.5	120.4	
Y	89	He	500106.40	5.7	544041.92	91.92	29.5	120.4	
Tb	159	No Gas	8642818.20	4.5	8117023.84	106.48	29.5	120.4	
Tb	159	He	2840915.62	5.6	2866479.19	99.11	29.5	120.4	
Bi	209	No Gas	4614807.72	4.1	4424692.92	104.3	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 161SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:18:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.096	ppb	30.7	33.34	100	
11	B	6	No Gas	23.176	ppb	2.0	3742.85	1000	
23	Na	45	He	9595.917	ppb	1.2	204810.10	200000	
24	Mg	45	He	2423.732	ppb	1.1	28249.67	200000	
27	Al	45	He	18.317	ppb	39.9	126.67	200000	
28	Si	45	H2	3237.858	ppb	5.6	25123.56	10000	
39	K	45	He	299.960	ppb	10.2	13188.57	200000	
40	Ca	45	H2	4579.580	ppb	2.7	338405.12	200000	
51	V	89	He	2.559	ppb	4.2	650.04	1000	
52	Cr	89	He	0.447	ppb	15.9	125.98	2000	
55	Mn	89	He	6.945	ppb	10.4	693.22	2000	
56	Fe	89	H2	24.250	ppb	3.6	15730.04	100000	
59	Co	89	He	0.320	ppb	32.1	120.01	1000	
60	Ni	89	He	2.629	ppb	6.1	300.01	1000	
63	Cu	89	He	-0.573	ppb	N/A	253.35	2000	
66	Zn	89	He	3.893	ppb	24.0	205.56	2000	
75	As	89	He	1.118	ppb	21.4	38.00	1000	
78	Se	89	H2	0.088	ppb	23.0	1.83	1000	
88	Sr	89	He	31.527	ppb	3.1	4627.62	2000	
95	Mo	89	He	-0.628	ppb	N/A	15.55	1000	
107	Ag	89	He	0.009	ppb	103.4	15.56	100	
111	Cd	89	He	0.083	ppb	54.2	7.41	1000	
118	Sn	159	He	1.083	ppb	29.9	263.36	1000	
121	Sb	159	No Gas	0.041	ppb	131.7	163.52	1000	
137	Ba	159	No Gas	6.534	ppb	7.3	3978.36	2000	
182	W	159	No Gas	0.006	ppb	200.1	130.15	1000	
205	Tl	209	No Gas	0.034	ppb	27.4	120.13	1000	
208	Pb	209	No Gas	0.168	ppb	24.7	820.94	2000	
232	Th	209	No Gas	0.043	ppb	3.5	343.73	1000	
238	U	209	No Gas	0.061	ppb	22.9	230.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1154152.21	1.5	1537409.87	75.07	29.5	120.4	
Sc	45	No Gas	3110364.26	3.3	3373253.08	92.21	29.5	120.4	
Sc	45	H2	366878.24	2.4	415670.69	88.26	29.5	120.4	
Sc	45	He	74686.64	1.5	81171.76	92.01	29.5	120.4	
Ge	72	No Gas	756989.58	3.0	779333.11	97.13	29.5	120.4	
Ge	72	H2	139241.21	3.0	153246.58	90.86	29.5	120.4	
Ge	72	He	60337.88	0.6	63135.03	95.57	29.5	120.4	
Y	89	H2	2502045.32	1.8	2642116.11	94.7	29.5	120.4	
Y	89	He	520456.45	1.0	544041.92	95.66	29.5	120.4	
Tb	159	No Gas	8576826.19	3.0	8117023.84	105.66	29.5	120.4	
Tb	159	He	2938472.56	0.7	2866479.19	102.51	29.5	120.4	
Bi	209	No Gas	4627877.92	2.1	4424692.92	104.59	29.5	120.4	

Sample Report

Sample Name SN5646-005L

File Name 162SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:21:20 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	146.2	16.67	100	
11	B	6	No Gas	32.790	ppb	9.0	1600.14	1000	
23	Na	45	He	10162.117	ppb	2.4	48428.85	200000	
24	Mg	45	He	2627.665	ppb	0.5	6650.89	200000	
27	Al	45	He	6.365	ppb	122.9	52.22	200000	
28	Si	45	H2	3446.229	ppb	1.1	5657.45	10000	
39	K	45	He	512.652	ppb	34.6	11357.80	200000	
40	Ca	45	H2	4912.973	ppb	1.4	75676.60	200000	
51	V	89	He	2.458	ppb	12.0	310.02	1000	
52	Cr	89	He	0.694	ppb	44.8	63.32	2000	
55	Mn	89	He	8.711	ppb	2.5	185.97	2000	
56	Fe	89	H2	-46.745	ppb	N/A	5280.21	100000	
59	Co	89	He	0.129	ppb	168.5	17.78	1000	
60	Ni	89	He	1.832	ppb	47.2	77.78	1000	
63	Cu	89	He	-4.876	ppb	N/A	147.79	2000	
66	Zn	89	He	5.463	ppb	48.3	104.45	2000	
75	As	89	He	0.788	ppb	67.8	9.33	1000	
78	Se	89	H2	-0.045	ppb	N/A	0.33	1000	
88	Sr	89	He	32.729	ppb	3.3	981.18	2000	
95	Mo	89	He	-3.307	ppb	N/A	10.00	1000	
107	Ag	89	He	0.003	ppb	3108.6	11.11	100	
111	Cd	89	He	0.002	ppb	3084.3	1.11	1000	
118	Sn	159	He	1.313	ppb	41.6	118.90	1000	
121	Sb	159	No Gas	-0.060	ppb	N/A	80.09	1000	
137	Ba	159	No Gas	6.111	ppb	2.8	757.54	2000	
182	W	159	No Gas	-0.313	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.022	ppb	162.2	40.04	1000	
208	Pb	209	No Gas	0.050	ppb	102.3	226.92	2000	
232	Th	209	No Gas	-0.035	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.018	ppb	116.7	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1186048.55	1.9	1537409.87	77.15	29.5	120.4	
Sc	45	No Gas	3219922.05	1.3	3373253.08	95.45	29.5	120.4	
Sc	45	H2	375171.45	0.7	415670.69	90.26	29.5	120.4	
Sc	45	He	75568.75	0.5	81171.76	93.1	29.5	120.4	
Ge	72	No Gas	777999.06	2.3	779333.11	99.83	29.5	120.4	
Ge	72	H2	141519.65	0.9	153246.58	92.35	29.5	120.4	
Ge	72	He	61399.71	0.5	63135.03	97.25	29.5	120.4	
Y	89	H2	2519798.10	0.2	2642116.11	95.37	29.5	120.4	
Y	89	He	528694.37	0.6	544041.92	97.18	29.5	120.4	
Tb	159	No Gas	8555221.33	1.3	8117023.84	105.4	29.5	120.4	
Tb	159	He	2933572.53	0.8	2866479.19	102.34	29.5	120.4	
Bi	209	No Gas	4630375.73	1.8	4424692.92	104.65	29.5	120.4	

Sample Report

Sample Name SN5646-005A

File Name 163SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:23:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.169	ppb	6.4	2129.12	100	
11	B	6	No Gas	224.372	ppb	3.8	31393.67	1000	
23	Na	45	He	19296.384	ppb	1.1	408539.36	200000	
24	Mg	45	He	3385.883	ppb	2.4	39461.13	200000	
27	Al	45	He	868.080	ppb	1.5	3907.34	200000	
28	Si	45	H2	8013.697	ppb	6.6	60749.45	10000	
39	K	45	He	10064.511	ppb	1.5	110922.74	200000	
40	Ca	45	H2	5642.082	ppb	5.8	409095.04	200000	
51	V	89	He	50.875	ppb	1.3	8791.95	1000	
52	Cr	89	He	48.985	ppb	1.3	10211.86	2000	
55	Mn	89	He	25.349	ppb	1.2	2522.44	2000	
56	Fe	89	H2	1039.901	ppb	5.9	328271.09	100000	
59	Co	89	He	10.784	ppb	8.2	3800.81	1000	
60	Ni	89	He	22.571	ppb	5.5	2290.27	1000	
63	Cu	89	He	30.602	ppb	1.0	8688.55	2000	
66	Zn	89	He	106.585	ppb	2.3	4012.94	2000	
75	As	89	He	48.838	ppb	0.9	1483.91	1000	
78	Se	89	H2	49.454	ppb	5.2	759.32	1000	
88	Sr	89	He	78.879	ppb	1.1	11677.54	2000	
95	Mo	89	He	49.435	ppb	0.9	8521.84	1000	
107	Ag	89	He	11.045	ppb	0.6	6392.84	100	
111	Cd	89	He	10.467	ppb	4.7	806.70	1000	
118	Sn	159	He	47.271	ppb	0.7	8485.20	1000	
121	Sb	159	No Gas	10.373	ppb	4.1	16204.68	1000	
137	Ba	159	No Gas	25.985	ppb	3.6	15893.91	2000	
182	W	159	No Gas	48.266	ppb	2.9	59753.80	1000	
205	Tl	209	No Gas	10.266	ppb	2.4	28443.84	1000	
208	Pb	209	No Gas	10.296	ppb	3.4	39571.68	2000	
232	Th	209	No Gas	9.813	ppb	3.8	39472.44	1000	
238	U	209	No Gas	10.092	ppb	5.4	37936.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1200539.01	2.5	1537409.87	78.09	29.5	120.4	
Sc	45	No Gas	3178671.08	0.7	3373253.08	94.23	29.5	120.4	
Sc	45	H2	360693.33	3.6	415670.69	86.77	29.5	120.4	
Sc	45	He	75135.49	1.5	81171.76	92.56	29.5	120.4	
Ge	72	No Gas	774990.89	1.5	779333.11	99.44	29.5	120.4	
Ge	72	H2	136813.43	1.9	153246.58	89.28	29.5	120.4	
Ge	72	He	60591.24	1.2	63135.03	95.97	29.5	120.4	
Y	89	H2	2470838.62	3.2	2642116.11	93.52	29.5	120.4	
Y	89	He	525285.07	1.5	544041.92	96.55	29.5	120.4	
Tb	159	No Gas	8631916.54	0.3	8117023.84	106.34	29.5	120.4	
Tb	159	He	2973578.57	2.0	2866479.19	103.74	29.5	120.4	
Bi	209	No Gas	4703150.12	1.1	4424692.92	106.29	29.5	120.4	

Sample Report

Sample Name SN5646-005S

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:26:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.350	ppb	9.1	11059.02	100	
11	B	6	No Gas	552.854	ppb	6.0	75989.88	1000	
23	Na	45	He	17279.474	ppb	1.2	364706.53	200000	
24	Mg	45	He	7706.718	ppb	1.1	88670.36	200000	
27	Al	45	He	1913.513	ppb	0.5	8517.25	200000	
28	Si	45	H2	4391.763	ppb	0.9	34178.80	10000	
39	K	45	He	10721.302	ppb	0.5	116940.99	200000	
40	Ca	45	H2	7363.610	ppb	0.7	545826.39	200000	
51	V	89	He	512.131	ppb	0.6	85612.57	1000	
52	Cr	89	He	208.103	ppb	0.6	42850.76	2000	
55	Mn	89	He	522.454	ppb	0.9	51243.84	2000	
56	Fe	89	H2	1081.142	ppb	1.1	347248.64	100000	
59	Co	89	He	535.237	ppb	0.9	186528.55	1000	
60	Ni	89	He	517.385	ppb	0.7	51123.27	1000	
63	Cu	89	He	267.463	ppb	1.4	72045.24	2000	
66	Zn	89	He	522.942	ppb	1.7	19247.27	2000	
75	As	89	He	106.878	ppb	0.2	3210.39	1000	
78	Se	89	H2	104.964	ppb	2.7	1640.69	1000	
88	Sr	89	He	558.171	ppb	0.5	81781.44	2000	
95	Mo	89	He	107.552	ppb	0.3	18214.89	1000	
107	Ag	89	He	57.756	ppb	1.1	33053.23	100	
111	Cd	89	He	270.240	ppb	0.6	20600.95	1000	
118	Sn	159	He	499.194	ppb	0.5	87787.86	1000	
121	Sb	159	No Gas	102.307	ppb	7.5	160454.61	1000	
137	Ba	159	No Gas	1979.986	ppb	6.2	1221501.22	2000	
182	W	159	No Gas	103.620	ppb	7.3	129363.68	1000	
205	Tl	209	No Gas	105.171	ppb	6.1	289619.73	1000	
208	Pb	209	No Gas	104.779	ppb	6.7	398885.99	2000	
232	Th	209	No Gas	102.056	ppb	8.2	406618.06	1000	
238	U	209	No Gas	102.279	ppb	7.4	382445.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1196740.36	3.8	1537409.87	77.84	29.5	120.4	
Sc	45	No Gas	3202018.03	3.7	3373253.08	94.92	29.5	120.4	
Sc	45	H2	368613.92	1.6	415670.69	88.68	29.5	120.4	
Sc	45	He	74772.99	0.1	81171.76	92.12	29.5	120.4	
Ge	72	No Gas	779268.46	3.2	779333.11	99.99	29.5	120.4	
Ge	72	H2	138136.07	2.9	153246.58	90.14	29.5	120.4	
Ge	72	He	59985.43	0.1	63135.03	95.01	29.5	120.4	
Y	89	H2	2513621.71	1.9	2642116.11	95.14	29.5	120.4	
Y	89	He	520108.29	0.3	544041.92	95.6	29.5	120.4	
Tb	159	No Gas	8728587.99	3.4	8117023.84	107.53	29.5	120.4	
Tb	159	He	2936408.01	0.3	2866479.19	102.44	29.5	120.4	
Bi	209	No Gas	4685508.31	3.6	4424692.92	105.89	29.5	120.4	

Sample Report

Sample Name SN5646-005P

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:29:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.601	ppb	4.5	10700.96	100	
11	B	6	No Gas	540.359	ppb	4.3	74258.92	1000	
23	Na	45	He	17308.028	ppb	6.1	353518.65	200000	
24	Mg	45	He	7722.206	ppb	6.4	85972.44	200000	
27	Al	45	He	1960.881	ppb	8.5	8439.45	200000	
28	Si	45	H2	4335.204	ppb	1.3	33563.42	10000	
39	K	45	He	10792.153	ppb	7.3	113823.16	200000	
40	Ca	45	H2	7076.065	ppb	0.8	521835.53	200000	
51	V	89	He	515.968	ppb	5.1	83371.36	1000	
52	Cr	89	He	208.996	ppb	4.5	41605.96	2000	
55	Mn	89	He	519.510	ppb	4.5	49263.91	2000	
56	Fe	89	H2	1047.732	ppb	0.2	334150.78	100000	
59	Co	89	He	537.329	ppb	5.5	180982.82	1000	
60	Ni	89	He	519.851	ppb	5.0	49655.59	1000	
63	Cu	89	He	267.435	ppb	5.2	69629.81	2000	
66	Zn	89	He	521.660	ppb	5.2	18559.68	2000	
75	As	89	He	106.847	ppb	7.5	3100.02	1000	
78	Se	89	H2	101.966	ppb	2.3	1581.35	1000	
88	Sr	89	He	558.477	ppb	5.3	79088.86	2000	
95	Mo	89	He	111.373	ppb	5.9	18223.79	1000	
107	Ag	89	He	57.806	ppb	5.5	31975.26	100	
111	Cd	89	He	271.907	ppb	5.1	20037.15	1000	
118	Sn	159	He	509.878	ppb	5.2	86649.69	1000	
121	Sb	159	No Gas	99.817	ppb	5.0	156626.71	1000	
137	Ba	159	No Gas	1912.299	ppb	4.2	1180132.46	2000	
182	W	159	No Gas	100.570	ppb	4.5	125622.19	1000	
205	Tl	209	No Gas	102.014	ppb	5.2	281298.15	1000	
208	Pb	209	No Gas	101.853	ppb	4.1	388417.33	2000	
232	Th	209	No Gas	100.247	ppb	4.7	400184.55	1000	
238	U	209	No Gas	100.597	ppb	5.4	376752.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1195187.36	2.0	1537409.87	77.74	29.5	120.4	
Sc	45	No Gas	3206128.91	2.6	3373253.08	95.05	29.5	120.4	
Sc	45	H2	366654.87	0.4	415670.69	88.21	29.5	120.4	
Sc	45	He	72516.79	5.4	81171.76	89.34	29.5	120.4	
Ge	72	No Gas	781898.86	2.4	779333.11	100.33	29.5	120.4	
Ge	72	H2	137843.19	1.1	153246.58	89.95	29.5	120.4	
Ge	72	He	58641.05	4.4	63135.03	92.88	29.5	120.4	
Y	89	H2	2493731.66	0.2	2642116.11	94.38	29.5	120.4	
Y	89	He	503522.71	4.6	544041.92	92.55	29.5	120.4	
Tb	159	No Gas	8725219.31	2.5	8117023.84	107.49	29.5	120.4	
Tb	159	He	2841926.17	4.3	2866479.19	99.14	29.5	120.4	
Bi	209	No Gas	4689576.13	3.0	4424692.92	105.99	29.5	120.4	

Sample Report

Sample Name SN5646-006

File Name 166SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:32:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.189	ppb	72.0	53.34	100	
11	B	6	No Gas	33.027	ppb	3.0	5154.42	1000	
23	Na	45	He	10805.041	ppb	0.6	227788.05	200000	
24	Mg	45	He	7920.074	ppb	1.2	90160.12	200000	
27	Al	45	He	5.828	ppb	71.8	71.11	200000	
28	Si	45	H2	3002.249	ppb	1.6	22923.91	10000	
39	K	45	He	731.569	ppb	3.7	17317.70	200000	
40	Ca	45	H2	8681.681	ppb	1.9	628958.15	200000	
51	V	89	He	3.218	ppb	8.4	752.27	1000	
52	Cr	89	He	0.685	ppb	11.5	173.30	2000	
55	Mn	89	He	1762.661	ppb	1.7	171228.31	2000	
56	Fe	89	H2	11371.250	ppb	1.4	3488048.42	100000	
59	Co	89	He	14.721	ppb	1.6	5090.18	1000	
60	Ni	89	He	36.821	ppb	2.6	3641.72	1000	
63	Cu	89	He	-0.794	ppb	N/A	192.23	2000	
66	Zn	89	He	30.284	ppb	6.0	1162.32	2000	
75	As	89	He	0.873	ppb	7.3	30.33	1000	
78	Se	89	H2	0.242	ppb	42.2	4.17	1000	
88	Sr	89	He	32.708	ppb	2.6	4753.20	2000	
95	Mo	89	He	-0.520	ppb	N/A	33.33	1000	
107	Ag	89	He	0.022	ppb	134.1	23.33	100	
111	Cd	89	He	0.162	ppb	61.7	13.33	1000	
118	Sn	159	He	1.062	ppb	12.3	257.79	1000	
121	Sb	159	No Gas	0.129	ppb	9.0	303.67	1000	
137	Ba	159	No Gas	11.771	ppb	5.3	7283.46	2000	
182	W	159	No Gas	0.252	ppb	11.3	440.51	1000	
205	Tl	209	No Gas	0.133	ppb	14.5	397.12	1000	
208	Pb	209	No Gas	0.171	ppb	17.8	850.97	2000	
232	Th	209	No Gas	1.097	ppb	28.8	4616.12	1000	
238	U	209	No Gas	0.091	ppb	16.0	347.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180987.38	1.7	1537409.87	76.82	29.5	120.4	
Sc	45	No Gas	3221677.27	3.1	3373253.08	95.51	29.5	120.4	
Sc	45	H2	360462.33	1.2	415670.69	86.72	29.5	120.4	
Sc	45	He	73996.02	0.8	81171.76	91.16	29.5	120.4	
Ge	72	No Gas	782930.27	2.9	779333.11	100.46	29.5	120.4	
Ge	72	H2	135407.74	0.8	153246.58	88.36	29.5	120.4	
Ge	72	He	59819.08	0.4	63135.03	94.75	29.5	120.4	
Y	89	H2	2452875.03	1.2	2642116.11	92.84	29.5	120.4	
Y	89	He	515277.57	1.2	544041.92	94.71	29.5	120.4	
Tb	159	No Gas	8726770.08	2.8	8117023.84	107.51	29.5	120.4	
Tb	159	He	2918982.63	0.9	2866479.19	101.83	29.5	120.4	
Bi	209	No Gas	4729699.38	2.6	4424692.92	106.89	29.5	120.4	

Sample Report

Sample Name SN5646-007

File Name 167SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:34:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	45.9	32.22	100	
11	B	6	No Gas	25.987	ppb	4.0	4067.37	1000	
23	Na	45	He	104541.771	ppb	3.0	2084613.84	200000	
24	Mg	45	He	4993.476	ppb	3.6	55184.31	200000	
27	Al	45	He	3.414	ppb	155.7	58.89	200000	
28	Si	45	H2	4826.290	ppb	2.9	36778.24	10000	
39	K	45	He	3377.095	ppb	2.5	41965.68	200000	
40	Ca	45	H2	63451.807	ppb	0.9	4595150.97	200000	
51	V	89	He	1.745	ppb	8.7	495.58	1000	
52	Cr	89	He	0.365	ppb	27.6	104.65	2000	
55	Mn	89	He	1386.460	ppb	2.5	131005.86	2000	
56	Fe	89	H2	19280.067	ppb	1.4	5937150.64	100000	
59	Co	89	He	1.487	ppb	15.9	506.71	1000	
60	Ni	89	He	0.410	ppb	30.9	77.78	1000	
63	Cu	89	He	-0.606	ppb	N/A	235.57	2000	
66	Zn	89	He	2.718	ppb	15.8	156.67	2000	
75	As	89	He	35.940	ppb	5.1	1042.82	1000	
78	Se	89	H2	0.187	ppb	39.7	3.33	1000	
88	Sr	89	He	384.920	ppb	3.4	54334.87	2000	
95	Mo	89	He	0.097	ppb	114.7	132.23	1000	
107	Ag	89	He	0.002	ppb	433.8	11.11	100	
111	Cd	89	He	0.046	ppb	30.6	4.44	1000	
118	Sn	159	He	0.627	ppb	20.3	177.79	1000	
121	Sb	159	No Gas	0.029	ppb	80.3	143.50	1000	
137	Ba	159	No Gas	28.295	ppb	1.1	17136.79	2000	
182	W	159	No Gas	0.008	ppb	194.9	133.48	1000	
205	Tl	209	No Gas	0.024	ppb	38.2	93.44	1000	
208	Pb	209	No Gas	0.100	ppb	22.6	563.97	2000	
232	Th	209	No Gas	0.083	ppb	18.9	500.58	1000	
238	U	209	No Gas	0.052	ppb	11.0	193.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1141405.24	0.1	1537409.87	74.24	29.5	120.4	
Sc	45	No Gas	3116266.16	0.3	3373253.08	92.38	29.5	120.4	
Sc	45	H2	361154.55	1.1	415670.69	86.88	29.5	120.4	
Sc	45	He	71604.55	2.2	81171.76	88.21	29.5	120.4	
Ge	72	No Gas	756554.48	0.7	779333.11	97.08	29.5	120.4	
Ge	72	H2	133515.81	2.3	153246.58	87.12	29.5	120.4	
Ge	72	He	57692.64	1.8	63135.03	91.38	29.5	120.4	
Y	89	H2	2464727.77	0.8	2642116.11	93.29	29.5	120.4	
Y	89	He	501265.99	1.7	544041.92	92.14	29.5	120.4	
Tb	159	No Gas	8547730.36	0.7	8117023.84	105.31	29.5	120.4	
Tb	159	He	2848602.98	1.8	2866479.19	99.38	29.5	120.4	
Bi	209	No Gas	4609571.34	0.2	4424692.92	104.18	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	168_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:37:26 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.034	ppb	3.9	26116.50	25	100.14	89.8	110.2	
11	B	6	No Gas	24.978	ppb	5.0	17835.96	25	99.91	89.8	110.2	
23	Na	45	He	4990.533	ppb	2.5	518260.91	5000	99.81	89.8	110.2	
24	Mg	45	He	4871.265	ppb	2.9	275847.11	5000	97.43	89.8	110.2	
27	Al	45	He	462.697	ppb	1.8	10173.98	500	92.54	89.8	110.2	
28	Si	45	H2	470.076	ppb	1.3	18195.15	500	94.02	89.8	110.2	
39	K	45	He	4913.583	ppb	3.8	251865.30	5000	98.27	89.8	110.2	
40	Ca	45	H2	4935.058	ppb	0.7	1804700.25	5000	98.7	89.8	110.2	
51	V	89	He	24.170	ppb	2.1	20032.64	25	96.68	89.8	110.2	
52	Cr	89	He	24.175	ppb	1.3	24490.06	25	96.7	89.8	110.2	
55	Mn	89	He	24.483	ppb	1.8	11815.47	25	97.93	89.8	110.2	
56	Fe	89	H2	4860.183	ppb	0.7	7423074.22	5000	97.2	89.8	110.2	
59	Co	89	He	24.917	ppb	2.1	42698.52	25	99.67	89.8	110.2	
60	Ni	89	He	24.708	ppb	2.7	12036.67	25	98.83	89.8	110.2	
63	Cu	89	He	25.064	ppb	0.5	33409.64	25	100.26	89.8	110.2	
66	Zn	89	He	23.762	ppb	1.5	4348.64	25	95.05	89.8	110.2	
75	As	89	He	24.172	ppb	2.0	3569.19	25	96.69	89.8	110.2	
78	Se	89	H2	24.686	ppb	1.2	1877.21	25	98.74	89.8	110.2	
88	Sr	89	He	24.569	ppb	0.4	17706.46	25	98.28	89.8	110.2	
95	Mo	89	He	24.952	ppb	1.6	20761.93	25	99.81	89.8	110.2	
107	Ag	89	He	18.909	ppb	1.1	53202.70	25	75.64	89.8	110.2	> +/- 10%
111	Cd	89	He	25.168	ppb	2.0	9433.37	25	100.67	89.8	110.2	
118	Sn	159	He	23.087	ppb	1.7	19847.46	25	92.35	89.8	110.2	
121	Sb	159	No Gas	23.749	ppb	5.3	183397.03	25	95	89.8	110.2	
137	Ba	159	No Gas	23.713	ppb	4.2	72055.00	25	94.85	89.8	110.2	
182	W	159	No Gas	23.536	ppb	4.6	144690.53	25	94.14	89.8	110.2	
205	Tl	209	No Gas	24.073	ppb	5.3	328158.62	25	96.29	89.8	110.2	
208	Pb	209	No Gas	23.951	ppb	4.9	451448.06	25	95.8	89.8	110.2	
232	Th	209	No Gas	23.693	ppb	5.2	467515.26	25	94.77	89.8	110.2	
238	U	209	No Gas	23.794	ppb	5.2	440573.16	25	95.18	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203471.98	2.5	1537409.87	78.28	29.5	120.4	
Sc	45	No Gas	3213508.52	3.5	3373253.08	95.26	29.5	120.4	
Sc	45	H2	364510.23	0.6	415670.69	87.69	29.5	120.4	
Sc	45	He	73965.07	2.6	81171.76	91.12	29.5	120.4	
Ge	72	No Gas	761921.12	3.8	779333.11	97.77	29.5	120.4	
Ge	72	H2	135555.06	0.3	153246.58	88.46	29.5	120.4	
Ge	72	He	59312.86	0.6	63135.03	93.95	29.5	120.4	
Y	89	H2	2445505.84	0.7	2642116.11	92.56	29.5	120.4	
Y	89	He	511519.45	1.4	544041.92	94.02	29.5	120.4	
Tb	159	No Gas	8593811.47	4.0	8117023.84	105.87	29.5	120.4	
Tb	159	He	2863470.82	1.4	2866479.19	99.9	29.5	120.4	
Bi	209	No Gas	4638646.35	4.1	4424692.92	104.84	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	169_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:40:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.076	ppb	22.2	94.45	0.2	
11	B	6	No Gas	1.835	ppb	2.5	1996.88	4	
23	Na	45	He	21.741	ppb	21.8	7697.29	200	
24	Mg	45	He	-1.348	ppb	N/A	480.05	20	
27	Al	45	He	-0.896	ppb	N/A	25.56	20	
28	Si	45	H2	6.668	ppb	41.4	470.53	100	
39	K	45	He	7.544	ppb	77.6	10264.10	200	
40	Ca	45	H2	5.382	ppb	9.0	3592.81	20	
51	V	89	He	0.616	ppb	3.9	720.04	1	Failed DoD
52	Cr	89	He	0.102	ppb	16.8	135.31	1	
55	Mn	89	He	0.170	ppb	17.8	93.32	0.4	
56	Fe	89	H2	0.932	ppb	23.1	9360.28	20	
59	Co	89	He	0.011	ppb	1.5	26.67	0.2	
60	Ni	89	He	-0.040	ppb	N/A	20.00	0.4	
63	Cu	89	He	-0.108	ppb	N/A	255.57	0.6	
66	Zn	89	He	0.055	ppb	25.2	71.11	2	
75	As	89	He	0.073	ppb	58.0	15.00	1	
78	Se	89	H2	0.073	ppb	39.8	6.00	1	
88	Sr	89	He	0.007	ppb	141.5	11.11	1	
95	Mo	89	He	-0.055	ppb	N/A	73.33	1	
107	Ag	89	He	0.011	ppb	48.3	40.00	0.2	
111	Cd	89	He	0.022	ppb	41.1	9.26	0.2	
118	Sn	159	He	0.346	ppb	6.2	371.13	1	
121	Sb	159	No Gas	0.032	ppb	22.2	350.40	0.2	
137	Ba	159	No Gas	0.051	ppb	3.8	176.86	0.4	
182	W	159	No Gas	0.119	ppb	9.4	871.01	1	
205	Tl	209	No Gas	0.032	ppb	27.7	473.87	0.2	
208	Pb	209	No Gas	0.050	ppb	13.3	1167.99	0.2	
232	Th	209	No Gas	0.273	ppb	42.5	5711.28	1	
238	U	209	No Gas	0.031	ppb	32.1	597.36	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1211571.44	1.1	1537409.87	78.81	29.5	120.4	
Sc	45	No Gas	3172960.87	1.3	3373253.08	94.06	29.5	120.4	
Sc	45	H2	354528.82	1.8	415670.69	85.29	29.5	120.4	
Sc	45	He	72442.78	1.7	81171.76	89.25	29.5	120.4	
Ge	72	No Gas	770652.95	1.6	779333.11	98.89	29.5	120.4	
Ge	72	H2	132528.08	1.3	153246.58	86.48	29.5	120.4	
Ge	72	He	57810.57	0.8	63135.03	91.57	29.5	120.4	
Y	89	H2	2435310.98	2.1	2642116.11	92.17	29.5	120.4	
Y	89	He	508548.56	1.1	544041.92	93.48	29.5	120.4	
Tb	159	No Gas	8773680.15	0.7	8117023.84	108.09	29.5	120.4	
Tb	159	He	2892697.87	0.8	2866479.19	100.91	29.5	120.4	
Bi	209	No Gas	4754138.24	0.5	4424692.92	107.45	29.5	120.4	

Sample Report

Sample Name SN4647-002

File Name 170SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:42:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.081	ppb	71.3	31.11	100	
11	B	6	No Gas	30.428	ppb	5.1	4800.96	1000	
23	Na	45	He	23971.714	ppb	0.7	504526.79	200000	
24	Mg	45	He	20051.646	ppb	0.1	230137.56	200000	
27	Al	45	He	1.405	ppb	402.4	52.22	200000	
28	Si	45	H2	3421.258	ppb	2.9	26169.67	10000	
39	K	45	He	1501.616	ppb	1.6	25202.57	200000	
40	Ca	45	H2	27786.414	ppb	3.3	2015587.68	200000	
51	V	89	He	1.912	ppb	15.6	544.47	1000	
52	Cr	89	He	0.326	ppb	40.7	101.32	2000	
55	Mn	89	He	941.239	ppb	0.4	92724.94	2000	
56	Fe	89	H2	6573.433	ppb	2.8	2025287.44	100000	
59	Co	89	He	14.064	ppb	2.7	4932.34	1000	
60	Ni	89	He	13.866	ppb	1.2	1415.68	1000	
63	Cu	89	He	-0.614	ppb	N/A	243.35	2000	
66	Zn	89	He	16.349	ppb	4.4	665.60	2000	
75	As	89	He	2.496	ppb	2.8	79.68	1000	
78	Se	89	H2	0.156	ppb	74.7	2.83	1000	
88	Sr	89	He	119.362	ppb	1.0	17571.75	2000	
95	Mo	89	He	-0.417	ppb	N/A	51.11	1000	
107	Ag	89	He	0.005	ppb	445.9	13.33	100	
111	Cd	89	He	0.020	ppb	110.8	2.59	1000	
118	Sn	159	He	0.627	ppb	22.0	183.34	1000	
121	Sb	159	No Gas	0.037	ppb	45.1	160.18	1000	
137	Ba	159	No Gas	33.114	ppb	3.4	20505.41	2000	
182	W	159	No Gas	0.150	ppb	14.1	313.69	1000	
205	Tl	209	No Gas	0.017	ppb	64.8	76.75	1000	
208	Pb	209	No Gas	0.088	ppb	11.3	523.92	2000	
232	Th	209	No Gas	0.036	ppb	27.0	320.37	1000	
238	U	209	No Gas	0.032	ppb	14.6	123.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180395.69	2.1	1537409.87	76.78	29.5	120.4	
Sc	45	No Gas	3205141.96	2.5	3373253.08	95.02	29.5	120.4	
Sc	45	H2	361716.06	2.4	415670.69	87.02	29.5	120.4	
Sc	45	He	74886.33	0.8	81171.76	92.26	29.5	120.4	
Ge	72	No Gas	775568.06	3.1	779333.11	99.52	29.5	120.4	
Ge	72	H2	135720.00	1.6	153246.58	88.56	29.5	120.4	
Ge	72	He	60293.67	1.2	63135.03	95.5	29.5	120.4	
Y	89	H2	2459943.71	1.5	2642116.11	93.11	29.5	120.4	
Y	89	He	522454.39	0.9	544041.92	96.03	29.5	120.4	
Tb	159	No Gas	8745937.58	2.4	8117023.84	107.75	29.5	120.4	
Tb	159	He	2941670.34	0.5	2866479.19	102.62	29.5	120.4	
Bi	209	No Gas	4686697.84	2.7	4424692.92	105.92	29.5	120.4	

Sample Report

Sample Name SN4647-003

File Name 171SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:45:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	110.8	22.22	100	
11	B	6	No Gas	26.531	ppb	10.9	4236.33	1000	
23	Na	45	He	19751.973	ppb	1.0	418295.21	200000	
24	Mg	45	He	17446.714	ppb	0.7	201091.76	200000	
27	Al	45	He	68.296	ppb	11.7	350.02	200000	
28	Si	45	H2	3566.928	ppb	0.2	27610.69	10000	
39	K	45	He	1665.031	ppb	1.0	26936.59	200000	
40	Ca	45	H2	22488.708	ppb	1.9	1651853.86	200000	
51	V	89	He	2.891	ppb	19.0	707.83	1000	
52	Cr	89	He	0.452	ppb	7.4	127.31	2000	
55	Mn	89	He	29.807	ppb	2.4	2946.45	2000	
56	Fe	89	H2	174.888	ppb	2.6	62347.73	100000	
59	Co	89	He	0.433	ppb	7.1	160.01	1000	
60	Ni	89	He	1.757	ppb	26.1	214.45	1000	
63	Cu	89	He	-0.266	ppb	N/A	336.68	2000	
66	Zn	89	He	4.087	ppb	14.4	213.34	2000	
75	As	89	He	0.570	ppb	23.5	21.67	1000	
78	Se	89	H2	0.088	ppb	111.8	1.83	1000	
88	Sr	89	He	118.366	ppb	1.2	17412.71	2000	
95	Mo	89	He	-0.450	ppb	N/A	45.56	1000	
107	Ag	89	He	0.014	ppb	182.6	18.89	100	
111	Cd	89	He	0.035	ppb	106.7	3.70	1000	
118	Sn	159	He	0.893	ppb	10.5	228.90	1000	
121	Sb	159	No Gas	0.059	ppb	89.3	193.55	1000	
137	Ba	159	No Gas	11.673	ppb	11.3	7163.25	2000	
182	W	159	No Gas	-0.012	ppb	N/A	110.12	1000	
205	Tl	209	No Gas	0.023	ppb	34.5	90.10	1000	
208	Pb	209	No Gas	0.230	ppb	14.5	1051.20	2000	
232	Th	209	No Gas	0.041	ppb	60.1	333.71	1000	
238	U	209	No Gas	0.035	ppb	29.5	133.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1171577.77	4.9	1537409.87	76.2	29.5	120.4	
Sc	45	No Gas	3189558.53	5.3	3373253.08	94.55	29.5	120.4	
Sc	45	H2	366047.07	0.2	415670.69	88.06	29.5	120.4	
Sc	45	He	75176.96	1.2	81171.76	92.61	29.5	120.4	
Ge	72	No Gas	781720.06	5.2	779333.11	100.31	29.5	120.4	
Ge	72	H2	137410.54	1.6	153246.58	89.67	29.5	120.4	
Ge	72	He	60379.94	1.1	63135.03	95.64	29.5	120.4	
Y	89	H2	2485605.65	0.2	2642116.11	94.08	29.5	120.4	
Y	89	He	522092.31	0.7	544041.92	95.97	29.5	120.4	
Tb	159	No Gas	8685129.80	5.6	8117023.84	107	29.5	120.4	
Tb	159	He	2926102.25	0.5	2866479.19	102.08	29.5	120.4	
Bi	209	No Gas	4636333.62	5.2	4424692.92	104.78	29.5	120.4	

Sample Report

Sample Name SN4647-004

File Name 172SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:48:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.142	ppb	72.6	43.33	100	
11	B	6	No Gas	40.382	ppb	4.7	6152.64	1000	
23	Na	45	He	42726.340	ppb	2.6	883848.33	200000	
24	Mg	45	He	9320.841	ppb	4.1	105949.98	200000	
27	Al	45	He	4.044	ppb	114.4	63.34	200000	
28	Si	45	H2	2978.391	ppb	2.9	23050.94	10000	
39	K	45	He	3695.938	ppb	4.3	46499.46	200000	
40	Ca	45	H2	18230.687	ppb	1.1	1336598.68	200000	
51	V	89	He	1.950	ppb	8.8	544.47	1000	
52	Cr	89	He	0.384	ppb	13.4	111.98	2000	
55	Mn	89	He	1807.884	ppb	2.4	175994.82	2000	
56	Fe	89	H2	16202.809	ppb	0.9	5036504.03	100000	
59	Co	89	He	0.157	ppb	51.9	62.23	1000	
60	Ni	89	He	0.012	ppb	1060.6	41.11	1000	
63	Cu	89	He	-0.812	ppb	N/A	187.78	2000	
66	Zn	89	He	2.382	ppb	39.0	148.90	2000	
75	As	89	He	2.457	ppb	12.0	77.68	1000	
78	Se	89	H2	0.024	ppb	79.1	0.83	1000	
88	Sr	89	He	95.410	ppb	4.6	13878.57	2000	
95	Mo	89	He	-0.454	ppb	N/A	44.44	1000	
107	Ag	89	He	0.009	ppb	33.5	15.56	100	
111	Cd	89	He	0.025	ppb	64.3	2.96	1000	
118	Sn	159	He	0.572	ppb	17.3	171.12	1000	
121	Sb	159	No Gas	0.052	ppb	182.2	180.21	1000	
137	Ba	159	No Gas	22.312	ppb	11.6	13745.71	2000	
182	W	159	No Gas	-0.001	ppb	N/A	123.48	1000	
205	Tl	209	No Gas	0.055	ppb	132.6	176.87	1000	
208	Pb	209	No Gas	0.125	ppb	52.4	664.10	2000	
232	Th	209	No Gas	0.055	ppb	125.7	393.80	1000	
238	U	209	No Gas	0.062	ppb	149.9	230.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1182946.54	2.3	1537409.87	76.94	29.5	120.4	
Sc	45	No Gas	3218967.58	3.1	3373253.08	95.43	29.5	120.4	
Sc	45	H2	365281.38	1.6	415670.69	87.88	29.5	120.4	
Sc	45	He	74002.05	2.4	81171.76	91.17	29.5	120.4	
Ge	72	No Gas	778819.37	2.5	779333.11	99.93	29.5	120.4	
Ge	72	H2	136649.60	1.3	153246.58	89.17	29.5	120.4	
Ge	72	He	59534.13	1.0	63135.03	94.3	29.5	120.4	
Y	89	H2	2487056.16	0.7	2642116.11	94.13	29.5	120.4	
Y	89	He	516473.81	2.1	544041.92	94.93	29.5	120.4	
Tb	159	No Gas	8710271.95	2.7	8117023.84	107.31	29.5	120.4	
Tb	159	He	2900459.43	1.7	2866479.19	101.19	29.5	120.4	
Bi	209	No Gas	4689077.92	3.1	4424692.92	105.98	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW3
File Name	173_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:50:48 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.018	ppb	79.6	34.45	0.1	
B	11	6	No Gas	0.794	ppb	20.0	1291.21	2	
Na	23	45	He	-6.462	ppb	N/A	5079.88	100	
Mg	24	45	He	0.413	ppb	88.1	604.51	10	
Al	27	45	He	-0.496	ppb	N/A	35.56	10	
Si	28	45	H2	1.914	ppb	65.9	313.69	50	
K	39	45	He	13.244	ppb	16.6	11017.66	100	
Ca	40	45	H2	2.691	ppb	7.6	2827.06	10	
V	51	89	He	-0.025	ppb	N/A	204.46	0.5	
Cr	52	89	He	0.012	ppb	20.0	46.66	0.5	
Mn	55	89	He	0.172	ppb	12.6	97.31	0.2	
Fe	56	89	H2	1.095	ppb	14.5	9924.49	10	
Co	59	89	He	-0.001	ppb	N/A	6.67	0.1	
Ni	60	89	He	-0.031	ppb	N/A	25.55	0.2	
Cu	63	89	He	-0.222	ppb	N/A	111.12	0.3	
Zn	66	89	He	0.413	ppb	14.9	140.01	1	
As	75	89	He	0.010	ppb	241.3	6.00	0.5	
Se	78	89	H2	0.005	ppb	290.7	0.83	0.5	
Sr	88	89	He	0.006	ppb	39.1	11.11	0.5	
Mo	95	89	He	-0.130	ppb	N/A	12.22	0.5	
Ag	107	89	He	-0.001	ppb	N/A	7.78	0.1	
Cd	111	89	He	-0.001	ppb	N/A	0.74	0.1	
Sn	118	159	He	-0.006	ppb	N/A	66.67	0.5	
Sb	121	159	No Gas	-0.005	ppb	N/A	60.07	0.1	
Ba	137	159	No Gas	0.062	ppb	17.0	206.90	0.2	
W	182	159	No Gas	-0.010	ppb	N/A	63.41	0.5	
Tl	205	209	No Gas	0.001	ppb	114.3	46.72	0.1	
[Pb]	206	209	No Gas	0.007	ppb	24.0	80.09	0.1	
[Pb]	207	209	No Gas	0.003	ppb	142.1	53.39	0.1	
Pb	208	209	No Gas	0.006	ppb	50.8	307.01	0.1	
Th	232	209	No Gas	0.000	ppb	329.5	183.54	0.5	
U	238	209	No Gas	0.003	ppb	77.0	50.05	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1225326.23	2.8	1537409.87	79.7	29.5	120.4	
Sc	45	No Gas	3279364.07	3.2	3373253.08	97.22	29.5	120.4	
Sc	45	H2	380106.28	1.4	415670.69	91.44	29.5	120.4	
Sc	45	He	75732.09	1.2	81171.76	93.3	29.5	120.4	
Ge	72	No Gas	775019.13	3.6	779333.11	99.45	29.5	120.4	
Ge	72	H2	141027.09	0.8	153246.58	92.03	29.5	120.4	
Ge	72	He	60965.43	0.7	63135.03	96.56	29.5	120.4	
Y	89	H2	2515975.26	0.7	2642116.11	95.23	29.5	120.4	
Y	89	He	525512.21	1.7	544041.92	96.59	29.5	120.4	
Tb	159	No Gas	8591615.85	3.7	8117023.84	105.85	29.5	120.4	
Tb	159	He	2889188.50	0.8	2866479.19	100.79	29.5	120.4	
Bi	209	No Gas	4652124.82	3.6	4424692.92	105.14	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW3
File Name	174_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:53:31 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.771	ppb	0.9	11095.69	50	19.91	79.5	120.4	
B	11	6	No Gas	503.820	ppb	2.3	74473.21	500	20.15	79.5	120.4	
Na	23	45	He	7349.566	ppb	2.4	161472.00	7500	19.6	79.5	120.4	
Mg	24	45	He	5033.105	ppb	2.8	59236.65	5000	20.13	79.5	120.4	
Al	27	45	He	1846.709	ppb	2.0	8382.74	2000	18.47	79.5	120.4	
Si	28	45	H2	1033.497	ppb	2.1	8415.11	1000	20.67	79.5	120.4	
K	39	45	He	10213.489	ppb	1.9	114066.90	10000	20.43	79.5	120.4	
Ca	40	45	H2	2603.925	ppb	1.3	198750.52	2500	20.83	79.5	120.4	
V	51	89	He	489.228	ppb	0.9	82694.01	500	19.57	79.5	120.4	
Cr	52	89	He	198.589	ppb	0.9	41343.90	200	19.86	79.5	120.4	
Mn	55	89	He	492.391	ppb	0.8	48827.60	500	19.7	79.5	120.4	
Fe	56	89	H2	1040.503	ppb	1.5	331762.67	1000	20.81	79.5	120.4	
Co	59	89	He	513.883	ppb	1.1	181057.92	500	20.56	79.5	120.4	
Ni	60	89	He	494.566	ppb	1.4	49407.92	500	19.78	79.5	120.4	
Cu	63	89	He	252.642	ppb	1.6	68821.88	250	20.21	79.5	120.4	
Zn	66	89	He	502.027	ppb	1.5	18684.22	500	20.08	79.5	120.4	
As	75	89	He	102.176	ppb	2.7	3103.03	100	20.43	79.5	120.4	
Se	78	89	H2	104.022	ppb	3.6	1612.36	100	20.8	79.5	120.4	
Sr	88	89	He	504.294	ppb	1.9	74697.58	500	20.17	79.5	120.4	
Mo	95	89	He	102.841	ppb	3.8	17614.17	100	20.57	79.5	120.4	
Ag	107	89	He	53.068	ppb	2.2	30704.29	50	21.23	79.5	120.4	
Cd	111	89	He	256.874	ppb	1.7	19797.14	250	20.55	79.5	120.4	
Sn	118	159	He	482.588	ppb	0.3	83383.42	500	19.3	79.5	120.4	
Sb	121	159	No Gas	99.206	ppb	3.8	149114.79	100	19.84	79.5	120.4	
Ba	137	159	No Gas	1917.604	ppb	2.8	1133521.74	2000	19.18	79.5	120.4	
W	182	159	No Gas	98.547	ppb	3.2	117912.25	100	19.71	79.5	120.4	
Tl	205	209	No Gas	100.054	ppb	2.0	264814.96	100	20.01	79.5	120.4	
Pb	208	209	No Gas	100.523	ppb	3.4	367822.14	100	20.1	79.5	120.4	
Th	232	209	No Gas	94.758	ppb	3.9	362994.77	100	18.95	79.5	120.4	
U	238	209	No Gas	97.429	ppb	3.6	350201.60	100	19.49	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1284047.75	0.8	1537409.87	83.52	29.5	120.4	
Sc	45	No Gas	3262467.82	1.4	3373253.08	96.72	29.5	120.4	
Sc	45	H2	377339.77	0.8	415670.69	90.78	29.5	120.4	
Sc	45	He	76240.14	1.1	81171.76	93.92	29.5	120.4	
Ge	72	No Gas	767003.29	1.5	779333.11	98.42	29.5	120.4	
Ge	72	H2	140178.21	0.7	153246.58	91.47	29.5	120.4	
Ge	72	He	61318.45	0.6	63135.03	97.12	29.5	120.4	
Y	89	H2	2492792.05	0.7	2642116.11	94.35	29.5	120.4	
Y	89	He	525850.86	0.6	544041.92	96.66	29.5	120.4	
Tb	159	No Gas	8353606.47	1.3	8117023.84	102.91	29.5	120.4	
Tb	159	He	2884981.24	0.8	2866479.19	100.65	29.5	120.4	
Bi	209	No Gas	4497366.53	1.3	4424692.92	101.64	29.5	120.4	

Sample Report

Sample Name SN5596-002

File Name 175SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:56:09 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	18.6	63.34	100	
11	B	6	No Gas	21.718	ppb	3.1	16225.13	1000	
23	Na	45	He	13373.261	ppb	0.6	1435995.48	200000	
24	Mg	45	He	14553.130	ppb	1.2	856831.75	200000	
27	Al	45	He	23.477	ppb	4.5	582.25	200000	
28	Si	45	H2	3887.691	ppb	14.4	151084.57	10000	
39	K	45	He	544.514	ppb	1.4	38417.46	200000	
40	Ca	45	H2	1575.552	ppb	11.8	587010.20	200000	
51	V	89	He	1.217	ppb	14.7	1259.00	1000	
52	Cr	89	He	0.517	ppb	3.0	575.91	2000	
55	Mn	89	He	8.504	ppb	0.2	4257.22	2000	
56	Fe	89	H2	44.759	ppb	14.4	76147.11	100000	
59	Co	89	He	0.128	ppb	18.6	235.58	1000	
60	Ni	89	He	3.154	ppb	6.2	1626.82	1000	
63	Cu	89	He	1.905	ppb	1.0	3011.55	2000	
66	Zn	89	He	20.436	ppb	1.6	3880.68	2000	
75	As	89	He	0.398	ppb	17.6	65.34	1000	
78	Se	89	H2	0.040	ppb	25.0	3.50	1000	
88	Sr	89	He	9.275	ppb	1.5	6923.11	2000	
95	Mo	89	He	1.039	ppb	4.1	1013.41	1000	
107	Ag	89	He	0.008	ppb	16.3	34.45	100	
111	Cd	89	He	0.009	ppb	99.6	4.44	1000	
118	Sn	159	He	0.521	ppb	1.9	528.92	1000	
121	Sb	159	No Gas	0.056	ppb	38.4	507.25	1000	
137	Ba	159	No Gas	1.352	ppb	10.8	3948.37	2000	
182	W	159	No Gas	39.139	ppb	2.5	230066.99	1000	
205	Tl	209	No Gas	0.024	ppb	20.6	337.05	1000	
208	Pb	209	No Gas	0.087	ppb	18.8	1725.32	2000	
232	Th	209	No Gas	0.449	ppb	35.4	8512.74	1000	
238	U	209	No Gas	0.105	ppb	10.7	1825.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1250956.58	1.7	1537409.87	81.37	29.5	120.4	
Sc	45	No Gas	3210701.39	1.0	3373253.08	95.18	29.5	120.4	
Sc	45	H2	373114.74	8.6	415670.69	89.76	29.5	120.4	
Sc	45	He	76973.03	0.7	81171.76	94.83	29.5	120.4	
Ge	72	No Gas	761007.83	0.3	779333.11	97.65	29.5	120.4	
Ge	72	H2	140351.09	6.7	153246.58	91.59	29.5	120.4	
Ge	72	He	61180.76	0.3	63135.03	96.9	29.5	120.4	
Y	89	H2	2462169.66	9.7	2642116.11	93.19	29.5	120.4	
Y	89	He	529516.22	0.7	544041.92	97.33	29.5	120.4	
Tb	159	No Gas	8211354.95	1.1	8117023.84	101.16	29.5	120.4	
Tb	159	He	2928519.19	0.7	2866479.19	102.16	29.5	120.4	
Bi	209	No Gas	4353807.88	1.1	4424692.92	98.4	29.5	120.4	

Sample Report

Sample Name SN5621-001

File Name 176SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:58:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	20.3	35.55	100	
11	B	6	No Gas	12.327	ppb	0.9	9312.18	1000	
23	Na	45	He	40098.481	ppb	0.6	4220002.72	200000	
24	Mg	45	He	4951.765	ppb	0.8	286913.87	200000	
27	Al	45	He	78.786	ppb	4.4	1811.28	200000	
28	Si	45	H2	440.699	ppb	2.8	17503.56	10000	
39	K	45	He	59609.004	ppb	0.2	3011855.58	200000	
40	Ca	45	H2	9255.107	ppb	2.0	3468444.43	200000	
51	V	89	He	0.634	ppb	6.7	752.27	1000	
52	Cr	89	He	0.123	ppb	16.0	160.64	2000	
55	Mn	89	He	1.626	ppb	5.3	809.88	2000	
56	Fe	89	H2	4.854	ppb	3.1	15492.58	100000	
59	Co	89	He	0.363	ppb	4.9	642.29	1000	
60	Ni	89	He	1.050	ppb	9.3	558.92	1000	
63	Cu	89	He	2.564	ppb	1.6	3844.02	2000	
66	Zn	89	He	1.717	ppb	14.8	377.79	2000	
75	As	89	He	0.730	ppb	13.9	114.01	1000	
78	Se	89	H2	0.014	ppb	128.1	1.50	1000	
88	Sr	89	He	39.139	ppb	1.8	28699.50	2000	
95	Mo	89	He	1.126	ppb	9.0	1068.97	1000	
107	Ag	89	He	0.004	ppb	93.0	22.22	100	
111	Cd	89	He	0.024	ppb	24.5	10.37	1000	
118	Sn	159	He	0.098	ppb	12.4	154.45	1000	
121	Sb	159	No Gas	0.024	ppb	52.5	270.30	1000	
137	Ba	159	No Gas	0.503	ppb	15.9	1445.03	2000	
182	W	159	No Gas	0.104	ppb	29.1	717.49	1000	
205	Tl	209	No Gas	0.010	ppb	13.2	150.17	1000	
208	Pb	209	No Gas	0.017	ppb	23.6	460.52	2000	
232	Th	209	No Gas	0.001	ppb	350.7	173.53	1000	
238	U	209	No Gas	0.003	ppb	56.6	56.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1221300.50	1.0	1537409.87	79.44	29.5	120.4	
Sc	45	No Gas	3155806.37	1.4	3373253.08	93.55	29.5	120.4	
Sc	45	H2	373727.84	0.9	415670.69	89.91	29.5	120.4	
Sc	45	He	75646.68	0.9	81171.76	93.19	29.5	120.4	
Ge	72	No Gas	746174.97	1.0	779333.11	95.75	29.5	120.4	
Ge	72	H2	139992.82	1.0	153246.58	91.35	29.5	120.4	
Ge	72	He	60525.23	1.1	63135.03	95.87	29.5	120.4	
Y	89	H2	2462960.92	0.8	2642116.11	93.22	29.5	120.4	
Y	89	He	520580.11	0.9	544041.92	95.69	29.5	120.4	
Tb	159	No Gas	8038064.18	1.0	8117023.84	99.03	29.5	120.4	
Tb	159	He	2857803.67	1.2	2866479.19	99.7	29.5	120.4	
Bi	209	No Gas	4229012.25	0.6	4424692.92	95.58	29.5	120.4	

Sample Report

Sample Name SN5624-001

File Name 177SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:01:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	10.8	32.22	100	
11	B	6	No Gas	1.570	ppb	16.2	2020.21	1000	
23	Na	45	He	910.394	ppb	4.7	103253.77	200000	
24	Mg	45	He	95.040	ppb	6.6	6184.04	200000	
27	Al	45	He	2.261	ppb	44.1	98.89	200000	
28	Si	45	H2	113.480	ppb	7.6	4799.58	10000	
39	K	45	He	124.074	ppb	27.0	16878.30	200000	
40	Ca	45	H2	423.673	ppb	1.7	164659.24	200000	
51	V	89	He	0.497	ppb	9.1	644.48	1000	
52	Cr	89	He	0.066	ppb	25.9	102.65	2000	
55	Mn	89	He	0.829	ppb	5.7	423.27	2000	
56	Fe	89	H2	-0.971	ppb	N/A	6642.30	100000	
59	Co	89	He	0.012	ppb	162.5	28.89	1000	
60	Ni	89	He	0.012	ppb	47.2	46.67	1000	
63	Cu	89	He	0.048	ppb	34.0	476.69	2000	
66	Zn	89	He	0.352	ppb	52.2	128.89	2000	
75	As	89	He	0.043	ppb	28.7	11.00	1000	
78	Se	89	H2	0.015	ppb	48.0	1.67	1000	
88	Sr	89	He	1.960	ppb	5.7	1457.91	2000	
95	Mo	89	He	-0.025	ppb	N/A	101.11	1000	
107	Ag	89	He	0.002	ppb	201.2	16.67	100	
111	Cd	89	He	0.006	ppb	85.7	3.33	1000	
118	Sn	159	He	0.101	ppb	27.9	157.79	1000	
121	Sb	159	No Gas	0.028	ppb	14.2	303.68	1000	
137	Ba	159	No Gas	0.277	ppb	2.9	820.94	2000	
182	W	159	No Gas	0.009	ppb	112.8	170.20	1000	
205	Tl	209	No Gas	0.002	ppb	72.0	50.06	1000	
208	Pb	209	No Gas	0.011	ppb	17.8	377.09	2000	
232	Th	209	No Gas	0.000	ppb	2733.7	170.19	1000	
238	U	209	No Gas	0.023	ppb	9.0	407.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1351090.74	2.9	1537409.87	87.88	29.5	120.4	
Sc	45	No Gas	3306551.93	3.0	3373253.08	98.02	29.5	120.4	
Sc	45	H2	383541.35	1.9	415670.69	92.27	29.5	120.4	
Sc	45	He	77013.31	0.6	81171.76	94.88	29.5	120.4	
Ge	72	No Gas	776912.40	2.1	779333.11	99.69	29.5	120.4	
Ge	72	H2	144424.74	2.2	153246.58	94.24	29.5	120.4	
Ge	72	He	61220.70	0.8	63135.03	96.97	29.5	120.4	
Y	89	H2	2502019.20	1.3	2642116.11	94.7	29.5	120.4	
Y	89	He	525932.71	1.3	544041.92	96.67	29.5	120.4	
Tb	159	No Gas	8210593.63	2.9	8117023.84	101.15	29.5	120.4	
Tb	159	He	2864354.85	1.5	2866479.19	99.93	29.5	120.4	
Bi	209	No Gas	4429311.34	2.8	4424692.92	100.1	29.5	120.4	

Sample Report

Sample Name SN5625-001

File Name 178SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:04:12 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	32.4	26.67	100	
11	B	6	No Gas	32.340	ppb	2.0	24850.93	1000	
23	Na	45	He	12479.667	ppb	4.9	1289405.87	200000	
24	Mg	45	He	662.886	ppb	4.6	38088.69	200000	
27	Al	45	He	24.832	ppb	19.5	587.81	200000	
28	Si	45	H2	1386.187	ppb	1.1	55539.18	10000	
39	K	45	He	2994.471	ppb	5.6	157681.09	200000	
40	Ca	45	H2	4031.835	ppb	1.5	1539277.37	200000	
51	V	89	He	0.558	ppb	7.5	673.37	1000	
52	Cr	89	He	0.075	ppb	45.4	107.98	2000	
55	Mn	89	He	7.940	ppb	5.1	3819.84	2000	
56	Fe	89	H2	14.669	ppb	1.9	30968.43	100000	
59	Co	89	He	0.083	ppb	17.7	151.12	1000	
60	Ni	89	He	0.492	ppb	16.6	276.68	1000	
63	Cu	89	He	2.038	ppb	9.6	3066.01	2000	
66	Zn	89	He	8.342	ppb	7.4	1560.15	2000	
75	As	89	He	0.041	ppb	43.4	10.33	1000	
78	Se	89	H2	0.033	ppb	39.6	3.00	1000	
88	Sr	89	He	17.744	ppb	5.6	12721.85	2000	
95	Mo	89	He	0.536	ppb	5.9	560.03	1000	
107	Ag	89	He	0.000	ppb	513.4	11.11	100	
111	Cd	89	He	0.016	ppb	52.0	7.04	1000	
118	Sn	159	He	0.078	ppb	33.6	133.34	1000	
121	Sb	159	No Gas	0.044	ppb	14.6	410.47	1000	
137	Ba	159	No Gas	2.560	ppb	1.6	7346.86	2000	
182	W	159	No Gas	-0.007	ppb	N/A	76.75	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	13.35	1000	
208	Pb	209	No Gas	0.103	ppb	2.3	2019.00	2000	
232	Th	209	No Gas	0.000	ppb	625.0	173.53	1000	
238	U	209	No Gas	0.000	ppb	171.6	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1306136.22	0.9	1537409.87	84.96	29.5	120.4	
Sc	45	No Gas	3234546.28	1.0	3373253.08	95.89	29.5	120.4	
Sc	45	H2	380466.73	1.3	415670.69	91.53	29.5	120.4	
Sc	45	He	74140.26	4.2	81171.76	91.34	29.5	120.4	
Ge	72	No Gas	759808.87	0.6	779333.11	97.49	29.5	120.4	
Ge	72	H2	143788.65	0.6	153246.58	93.83	29.5	120.4	
Ge	72	He	59677.92	3.3	63135.03	94.52	29.5	120.4	
Y	89	H2	2494621.44	1.0	2642116.11	94.42	29.5	120.4	
Y	89	He	509382.32	3.5	544041.92	93.63	29.5	120.4	
Tb	159	No Gas	8092028.07	0.7	8117023.84	99.69	29.5	120.4	
Tb	159	He	2782495.17	3.7	2866479.19	97.07	29.5	120.4	
Bi	209	No Gas	4384109.74	1.0	4424692.92	99.08	29.5	120.4	

Sample Report

Sample Name SN5626-001

File Name 179SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:06:48 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	82.6	35.56	100	
11	B	6	No Gas	104.191	ppb	5.4	76234.90	1000	
23	Na	45	He	47070.199	ppb	1.1	4974427.17	200000	
24	Mg	45	He	864.665	ppb	2.7	50797.17	200000	
27	Al	45	He	137.705	ppb	3.6	3143.79	200000	
28	Si	45	H2	308.707	ppb	3.7	12385.85	10000	
39	K	45	He	2938.626	ppb	1.1	158997.91	200000	
40	Ca	45	H2	3086.639	ppb	1.2	1163170.40	200000	
51	V	89	He	0.563	ppb	18.2	697.82	1000	
52	Cr	89	He	0.118	ppb	19.1	155.97	2000	
55	Mn	89	He	10.392	ppb	0.6	5146.01	2000	
56	Fe	89	H2	4.519	ppb	8.1	14981.35	100000	
59	Co	89	He	10.507	ppb	2.5	18455.60	1000	
60	Ni	89	He	20.501	ppb	2.0	10238.53	1000	
63	Cu	89	He	7.822	ppb	0.8	10964.69	2000	
66	Zn	89	He	4.445	ppb	9.9	884.51	2000	
75	As	89	He	0.052	ppb	36.6	12.33	1000	
78	Se	89	H2	0.052	ppb	35.3	4.50	1000	
88	Sr	89	He	29.038	ppb	0.9	21438.53	2000	
95	Mo	89	He	713.471	ppb	0.7	604804.11	1000	
107	Ag	89	He	0.018	ppb	20.5	62.22	100	
111	Cd	89	He	0.154	ppb	13.7	60.37	1000	
118	Sn	159	He	0.062	ppb	21.6	124.45	1000	
121	Sb	159	No Gas	0.058	ppb	14.5	513.92	1000	
137	Ba	159	No Gas	0.973	ppb	6.6	2786.73	2000	
182	W	159	No Gas	8.278	ppb	5.9	47758.45	1000	
205	Tl	209	No Gas	0.001	ppb	87.8	43.38	1000	
208	Pb	209	No Gas	0.312	ppb	7.1	5553.39	2000	
232	Th	209	No Gas	0.000	ppb	1343.7	163.52	1000	
238	U	209	No Gas	0.011	ppb	31.8	196.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1272035.05	1.2	1537409.87	82.74	29.5	120.4	
Sc	45	No Gas	3176531.99	2.1	3373253.08	94.17	29.5	120.4	
Sc	45	H2	375405.18	1.3	415670.69	90.31	29.5	120.4	
Sc	45	He	75979.02	0.5	81171.76	93.6	29.5	120.4	
Ge	72	No Gas	752729.01	1.4	779333.11	96.59	29.5	120.4	
Ge	72	H2	142595.12	2.1	153246.58	93.05	29.5	120.4	
Ge	72	He	60829.26	1.0	63135.03	96.35	29.5	120.4	
Y	89	H2	2463425.08	1.9	2642116.11	93.24	29.5	120.4	
Y	89	He	524041.49	0.4	544041.92	96.32	29.5	120.4	
Tb	159	No Gas	8049808.49	2.4	8117023.84	99.17	29.5	120.4	
Tb	159	He	2872608.85	1.1	2866479.19	100.21	29.5	120.4	
Bi	209	No Gas	4250651.86	2.5	4424692.92	96.07	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	180_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:09:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.586	ppb	6.2	25854.96	25	90.34	89.8	110.2	
11	B	6	No Gas	24.408	ppb	5.5	19146.69	25	97.63	89.8	110.2	
23	Na	45	He	4956.701	ppb	1.1	525785.49	5000	99.13	89.8	110.2	
24	Mg	45	He	4805.392	ppb	1.4	277951.86	5000	96.11	89.8	110.2	
27	Al	45	He	466.772	ppb	3.6	10480.85	500	93.35	89.8	110.2	
28	Si	45	H2	472.311	ppb	2.5	19100.53	500	94.46	89.8	110.2	
39	K	45	He	4909.554	ppb	1.0	257094.07	5000	98.19	89.8	110.2	
40	Ca	45	H2	4851.465	ppb	1.8	1853909.07	5000	97.03	89.8	110.2	
51	V	89	He	23.950	ppb	1.4	20180.59	25	95.8	89.8	110.2	
52	Cr	89	He	24.051	ppb	3.2	24761.14	25	96.2	89.8	110.2	
55	Mn	89	He	23.876	ppb	2.6	11712.11	25	95.5	89.8	110.2	
56	Fe	89	H2	4754.039	ppb	2.3	7483662.41	5000	95.08	89.8	110.2	
59	Co	89	He	24.238	ppb	0.8	42221.66	25	96.95	89.8	110.2	
60	Ni	89	He	24.323	ppb	1.3	12042.24	25	97.29	89.8	110.2	
63	Cu	89	He	24.420	ppb	2.9	33090.07	25	97.68	89.8	110.2	
66	Zn	89	He	23.978	ppb	2.7	4458.66	25	95.91	89.8	110.2	
75	As	89	He	24.162	ppb	1.5	3626.54	25	96.65	89.8	110.2	
78	Se	89	H2	23.998	ppb	0.9	1881.21	25	95.99	89.8	110.2	
88	Sr	89	He	24.245	ppb	0.6	17758.72	25	96.98	89.8	110.2	
95	Mo	89	He	25.666	ppb	2.4	21698.98	25	102.66	89.8	110.2	
107	Ag	89	He	18.422	ppb	0.7	52686.37	25	73.69	89.8	110.2	> +/- 10%
111	Cd	89	He	24.588	ppb	1.4	9368.14	25	98.35	89.8	110.2	
118	Sn	159	He	22.974	ppb	1.7	19770.62	25	91.9	89.8	110.2	
121	Sb	159	No Gas	22.802	ppb	6.8	169038.53	25	91.21	89.8	110.2	
137	Ba	159	No Gas	23.080	ppb	4.6	67324.85	25	92.32	89.8	110.2	
182	W	159	No Gas	22.176	ppb	5.8	130874.84	25	88.7	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.890	ppb	6.5	296796.79	25	91.56	89.8	110.2	
208	Pb	209	No Gas	22.800	ppb	6.7	408758.85	25	91.2	89.8	110.2	
232	Th	209	No Gas	21.902	ppb	7.3	411071.61	25	87.61	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.094	ppb	6.4	389188.34	25	88.38	89.8	110.2	> +/- 10%

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1320606.63	1.8	1537409.87	85.9	29.5	120.4	
Sc	45	No Gas	3268535.09	2.6	3373253.08	96.9	29.5	120.4	
Sc	45	H2	380944.22	1.4	415670.69	91.65	29.5	120.4	
Sc	45	He	75517.70	0.9	81171.76	93.03	29.5	120.4	
Ge	72	No Gas	757948.04	3.6	779333.11	97.26	29.5	120.4	
Ge	72	H2	142944.72	1.3	153246.58	93.28	29.5	120.4	
Ge	72	He	60144.11	0.6	63135.03	95.26	29.5	120.4	
Y	89	H2	2521136.23	2.0	2642116.11	95.42	29.5	120.4	
Y	89	He	519909.15	1.2	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8245421.96	2.5	8117023.84	101.58	29.5	120.4	
Tb	159	He	2866153.91	1.3	2866479.19	99.99	29.5	120.4	
Bi	209	No Gas	4410201.19	2.7	4424692.92	99.67	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	181_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:11:58 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.050	ppb	4.5	73.34	0.2	
11	B	6	No Gas	1.914	ppb	4.7	2229.14	4	
23	Na	45	He	63.793	ppb	10.6	12082.24	200	
24	Mg	45	He	0.155	ppb	725.2	571.16	20	
27	Al	45	He	-1.466	ppb	N/A	13.33	20	
28	Si	45	H2	5.100	ppb	35.2	420.47	100	
39	K	45	He	28.138	ppb	24.8	11397.81	200	
40	Ca	45	H2	5.144	ppb	0.6	3589.50	20	
51	V	89	He	0.980	ppb	13.5	1016.74	1	Failed DoD
52	Cr	89	He	0.115	ppb	3.8	149.31	1	
55	Mn	89	He	0.131	ppb	21.2	74.66	0.4	
56	Fe	89	H2	0.286	ppb	86.5	8451.92	20	
59	Co	89	He	0.009	ppb	45.2	24.45	0.2	
60	Ni	89	He	-0.013	ppb	N/A	33.33	0.4	
63	Cu	89	He	0.021	ppb	32.1	425.58	0.6	
66	Zn	89	He	0.117	ppb	56.9	82.22	2	
75	As	89	He	0.086	ppb	18.1	17.00	1	
78	Se	89	H2	0.062	ppb	32.0	5.17	1	
88	Sr	89	He	0.008	ppb	61.0	12.22	1	
95	Mo	89	He	0.405	ppb	45.4	453.37	1	
107	Ag	89	He	0.012	ppb	39.1	44.44	0.2	
111	Cd	89	He	0.011	ppb	54.1	5.18	0.2	
118	Sn	159	He	0.350	ppb	4.3	370.02	1	
121	Sb	159	No Gas	0.033	ppb	19.5	343.72	0.2	
137	Ba	159	No Gas	0.020	ppb	74.8	76.75	0.4	
182	W	159	No Gas	0.108	ppb	13.0	760.88	1	
205	Tl	209	No Gas	0.030	ppb	23.3	423.81	0.2	
208	Pb	209	No Gas	0.065	ppb	13.3	1378.24	0.2	
232	Th	209	No Gas	0.282	ppb	28.3	5557.62	1	
238	U	209	No Gas	0.032	ppb	12.3	580.66	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1316674.02	1.2	1537409.87	85.64	29.5	120.4	
Sc	45	No Gas	3148281.08	0.5	3373253.08	93.33	29.5	120.4	
Sc	45	H2	362629.23	1.6	415670.69	87.24	29.5	120.4	
Sc	45	He	73342.14	1.5	81171.76	90.35	29.5	120.4	
Ge	72	No Gas	745860.02	2.1	779333.11	95.7	29.5	120.4	
Ge	72	H2	135156.58	1.8	153246.58	88.2	29.5	120.4	
Ge	72	He	58476.13	2.4	63135.03	92.62	29.5	120.4	
Y	89	H2	2457607.83	1.6	2642116.11	93.02	29.5	120.4	
Y	89	He	508999.12	2.5	544041.92	93.56	29.5	120.4	
Tb	159	No Gas	8316639.32	1.2	8117023.84	102.46	29.5	120.4	
Tb	159	He	2857256.17	2.6	2866479.19	99.68	29.5	120.4	
Bi	209	No Gas	4499954.75	1.0	4424692.92	101.7	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG15IMW1
File Name	182_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:14:38 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.016	ppb	72.9	32.22	0.1	
B	11	6	No Gas	0.828	ppb	5.9	1336.78	2	
Na	23	45	He	11.515	ppb	30.0	7083.00	100	
Mg	24	45	He	-0.169	ppb	N/A	580.06	10	
Al	27	45	He	-0.031	ppb	N/A	46.67	10	
Si	28	45	H2	1.640	ppb	57.2	307.01	50	
K	39	45	He	10.542	ppb	36.1	11051.01	100	
Ca	40	45	H2	-0.239	ppb	N/A	1733.50	10	
V	51	89	He	0.124	ppb	24.2	331.13	0.5	
Cr	52	89	He	0.024	ppb	72.4	59.32	0.5	
Mn	55	89	He	0.065	ppb	37.1	44.66	0.2	
Fe	56	89	H2	-3.104	ppb	N/A	3390.87	10	
Co	59	89	He	0.004	ppb	222.2	15.56	0.1	
Ni	60	89	He	-0.029	ppb	N/A	26.67	0.2	
Cu	63	89	He	-0.180	ppb	N/A	167.79	0.3	
Zn	66	89	He	0.159	ppb	51.4	93.33	1	
As	75	89	He	0.005	ppb	146.6	5.33	0.5	
Se	78	89	H2	0.002	ppb	650.8	0.67	0.5	
Sr	88	89	He	-0.004	ppb	N/A	3.33	0.5	
Mo	95	89	He	-0.001	ppb	N/A	122.23	0.5	
Ag	107	89	He	0.002	ppb	105.2	15.56	0.1	
Cd	111	89	He	-0.002	ppb	N/A	0.37	0.1	
Sn	118	159	He	0.031	ppb	56.4	97.78	0.5	
Sb	121	159	No Gas	-0.005	ppb	N/A	56.73	0.1	
Ba	137	159	No Gas	0.017	ppb	40.2	66.74	0.2	
W	182	159	No Gas	-0.003	ppb	N/A	103.45	0.5	
Tl	205	209	No Gas	0.002	ppb	101.9	56.73	0.1	
[Pb]	206	209	No Gas	0.001	ppb	772.6	50.05	0.1	
[Pb]	207	209	No Gas	0.003	ppb	55.9	53.40	0.1	
Pb	208	209	No Gas	0.004	ppb	91.7	253.62	0.1	
Th	232	209	No Gas	0.001	ppb	193.9	183.54	0.5	
U	238	209	No Gas	0.002	ppb	19.0	36.70	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1244389.70	2.5	1537409.87	80.94	29.5	120.4	
Sc	45	No Gas	3226210.08	3.6	3373253.08	95.64	29.5	120.4	
Sc	45	H2	385151.53	1.1	415670.69	92.66	29.5	120.4	
Sc	45	He	76927.07	1.1	81171.76	94.77	29.5	120.4	
Ge	72	No Gas	761402.98	2.9	779333.11	97.7	29.5	120.4	
Ge	72	H2	143426.63	2.2	153246.58	93.59	29.5	120.4	
Ge	72	He	61166.75	0.8	63135.03	96.88	29.5	120.4	
Y	89	H2	2557031.92	1.2	2642116.11	96.78	29.5	120.4	
Y	89	He	528288.77	0.9	544041.92	97.1	29.5	120.4	
Tb	159	No Gas	8239760.78	3.4	8117023.84	101.51	29.5	120.4	
Tb	159	He	2872470.83	0.2	2866479.19	100.21	29.5	120.4	
Bi	209	No Gas	4442870.74	2.9	4424692.92	100.41	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG15IMW1
File Name	183_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:17:09 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.707	ppb	3.6	11378.19	50	20.28	79.5	120.4	
B	11	6	No Gas	503.082	ppb	1.4	74850.46	500	20.12	79.5	120.4	
Na	23	45	He	7400.000	ppb	1.9	163603.84	7500	19.73	79.5	120.4	
Mg	24	45	He	5196.671	ppb	1.2	61546.34	5000	20.79	79.5	120.4	
Al	27	45	He	1847.672	ppb	3.9	8440.56	2000	18.48	79.5	120.4	
Si	28	45	H2	1047.340	ppb	6.8	8545.41	1000	20.95	79.5	120.4	
K	39	45	He	10373.347	ppb	0.3	116447.13	10000	20.75	79.5	120.4	
Ca	40	45	H2	2647.543	ppb	1.0	202504.91	2500	21.18	79.5	120.4	
V	51	89	He	500.559	ppb	0.6	84170.43	500	20.02	79.5	120.4	
Cr	52	89	He	202.684	ppb	0.3	41979.77	200	20.27	79.5	120.4	
Mn	55	89	He	509.478	ppb	0.2	50262.48	500	20.38	79.5	120.4	
Fe	56	89	H2	1130.250	ppb	1.0	358103.02	1000	22.6	79.5	120.4	
Co	59	89	He	520.381	ppb	1.5	182409.01	500	20.82	79.5	120.4	
Ni	60	89	He	502.507	ppb	0.2	49944.35	500	20.1	79.5	120.4	
Cu	63	89	He	256.922	ppb	1.3	69621.88	250	20.55	79.5	120.4	
Zn	66	89	He	512.138	ppb	2.8	18962.34	500	20.49	79.5	120.4	
As	75	89	He	103.671	ppb	0.7	3132.37	100	20.73	79.5	120.4	
Se	78	89	H2	106.166	ppb	3.9	1638.19	100	21.23	79.5	120.4	
Sr	88	89	He	511.876	ppb	1.2	75433.95	500	20.47	79.5	120.4	
Mo	95	89	He	103.270	ppb	0.5	17596.27	100	20.65	79.5	120.4	
Ag	107	89	He	54.049	ppb	0.3	31113.12	50	21.62	79.5	120.4	
Cd	111	89	He	258.761	ppb	0.7	19840.92	250	20.7	79.5	120.4	
Sn	118	159	He	490.819	ppb	1.1	83787.91	500	19.63	79.5	120.4	
Sb	121	159	No Gas	104.754	ppb	1.3	149703.18	100	20.95	79.5	120.4	
Ba	137	159	No Gas	2006.622	ppb	2.1	1127568.62	2000	20.07	79.5	120.4	
W	182	159	No Gas	103.299	ppb	2.5	117480.19	100	20.66	79.5	120.4	
Tl	205	209	No Gas	103.586	ppb	0.6	260884.23	100	20.72	79.5	120.4	
Pb	208	209	No Gas	104.462	ppb	0.4	363734.89	100	20.89	79.5	120.4	
Th	232	209	No Gas	98.234	ppb	0.6	358137.28	100	19.65	79.5	120.4	
U	238	209	No Gas	100.330	ppb	0.5	343176.39	100	20.07	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1292221.32	0.7	1537409.87	84.05	29.5	120.4	
Sc	45	No Gas	3145438.22	3.2	3373253.08	93.25	29.5	120.4	
Sc	45	H2	378195.93	0.5	415670.69	90.98	29.5	120.4	
Sc	45	He	76730.57	0.5	81171.76	94.53	29.5	120.4	
Ge	72	No Gas	746931.61	2.0	779333.11	95.84	29.5	120.4	
Ge	72	H2	141057.81	1.2	153246.58	92.05	29.5	120.4	
Ge	72	He	60768.62	0.3	63135.03	96.25	29.5	120.4	
Y	89	H2	2481976.96	1.2	2642116.11	93.94	29.5	120.4	
Y	89	He	523139.53	0.3	544041.92	96.16	29.5	120.4	
Tb	159	No Gas	7941629.61	2.5	8117023.84	97.84	29.5	120.4	
Tb	159	He	2850398.33	0.2	2866479.19	99.44	29.5	120.4	
Bi	209	No Gas	4278553.09	1.9	4424692.92	96.7	29.5	120.4	

Sample Report

Sample Name SN5690-001

File Name 184SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:19:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.028	ppb	51.1	44.45	100	
11	B	6	No Gas	2431.032	ppb	8.8	1679375.27	1000	>LDR
23	Na	45	He	313768.951	ppb	2.0	33114379.05	200000	>LDR
24	Mg	45	He	12.200	ppb	18.9	1289.04	200000	
27	Al	45	He	462.683	ppb	2.8	10448.59	200000	
28	Si	45	H2	23.671	ppb	6.4	1101.26	10000	
39	K	45	He	1804.882	ppb	1.3	101633.68	200000	
40	Ca	45	H2	475.687	ppb	5.6	170569.72	200000	
51	V	89	He	0.206	ppb	5.3	391.13	1000	
52	Cr	89	He	24.190	ppb	1.7	24689.00	2000	
55	Mn	89	He	0.495	ppb	9.5	252.62	2000	
56	Fe	89	H2	57.001	ppb	6.9	90366.34	100000	
59	Co	89	He	0.043	ppb	33.5	82.23	1000	
60	Ni	89	He	1.640	ppb	1.3	842.28	1000	
63	Cu	89	He	2.503	ppb	2.6	3723.96	2000	
66	Zn	89	He	1.444	ppb	8.0	324.46	2000	
75	As	89	He	0.044	ppb	15.3	11.00	1000	
78	Se	89	H2	0.057	ppb	44.1	4.67	1000	
88	Sr	89	He	24.867	ppb	0.7	18054.61	2000	
95	Mo	89	He	3.427	ppb	1.4	2975.99	1000	
107	Ag	89	He	0.020	ppb	24.7	66.67	100	
111	Cd	89	He	0.033	ppb	30.9	13.33	1000	
118	Sn	159	He	0.568	ppb	14.0	544.48	1000	
121	Sb	159	No Gas	1.773	ppb	9.5	12900.45	1000	
137	Ba	159	No Gas	2.552	ppb	7.5	7280.13	2000	
182	W	159	No Gas	0.275	ppb	6.3	1702.01	1000	
205	Tl	209	No Gas	0.036	ppb	7.2	463.86	1000	
208	Pb	209	No Gas	0.104	ppb	13.9	1905.53	2000	
232	Th	209	No Gas	0.503	ppb	23.7	9040.32	1000	
238	U	209	No Gas	0.021	ppb	36.3	360.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1215382.63	4.5	1537409.87	79.05	29.5	120.4	
Sc	45	No Gas	3194101.65	7.1	3373253.08	94.69	29.5	120.4	
Sc	45	H2	354949.40	5.5	415670.69	85.39	29.5	120.4	
Sc	45	He	75969.52	2.1	81171.76	93.59	29.5	120.4	
Ge	72	No Gas	727790.51	3.5	779333.11	93.39	29.5	120.4	
Ge	72	H2	134141.80	4.5	153246.58	87.53	29.5	120.4	
Ge	72	He	59134.05	1.1	63135.03	93.66	29.5	120.4	
Y	89	H2	2332753.35	5.3	2642116.11	88.29	29.5	120.4	
Y	89	He	515327.65	0.9	544041.92	94.72	29.5	120.4	
Tb	159	No Gas	8064142.93	7.0	8117023.84	99.35	29.5	120.4	
Tb	159	He	2796968.68	0.5	2866479.19	97.58	29.5	120.4	
Bi	209	No Gas	4103888.77	6.9	4424692.92	92.75	29.5	120.4	

Sample Report

Sample Name SN5691-001

File Name 185SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:22:20 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	22.0	30.00	100	
11	B	6	No Gas	33.610	ppb	11.7	26998.39	1000	
23	Na	45	He	8033.612	ppb	1.0	882851.77	200000	
24	Mg	45	He	2466.349	ppb	0.9	148720.55	200000	
27	Al	45	He	-0.124	ppb	N/A	45.56	200000	
28	Si	45	H2	1201.438	ppb	0.9	49098.45	10000	
39	K	45	He	1032.102	ppb	2.2	64704.75	200000	
40	Ca	45	H2	11073.844	ppb	0.2	4306102.20	200000	
51	V	89	He	0.286	ppb	8.9	476.69	1000	
52	Cr	89	He	0.100	ppb	20.1	141.31	2000	
55	Mn	89	He	0.236	ppb	16.5	131.98	2000	
56	Fe	89	H2	-1.269	ppb	N/A	6281.75	100000	
59	Co	89	He	0.008	ppb	103.4	22.23	1000	
60	Ni	89	He	0.127	ppb	11.3	106.67	1000	
63	Cu	89	He	11.756	ppb	1.6	16689.36	2000	
66	Zn	89	He	3.619	ppb	11.6	751.16	2000	
75	As	89	He	0.271	ppb	17.9	46.67	1000	
78	Se	89	H2	0.019	ppb	32.4	2.00	1000	
88	Sr	89	He	44.689	ppb	1.7	33837.00	2000	
95	Mo	89	He	0.026	ppb	35.7	147.79	1000	
107	Ag	89	He	0.003	ppb	98.2	20.00	100	
111	Cd	89	He	0.004	ppb	113.9	2.59	1000	
118	Sn	159	He	0.122	ppb	34.3	177.79	1000	
121	Sb	159	No Gas	0.004	ppb	76.3	123.47	1000	
137	Ba	159	No Gas	4.422	ppb	5.0	12813.90	2000	
182	W	159	No Gas	-0.003	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.002	ppb	88.3	53.39	1000	
208	Pb	209	No Gas	0.210	ppb	8.0	3897.95	2000	
232	Th	209	No Gas	0.006	ppb	31.2	276.98	1000	
238	U	209	No Gas	0.194	ppb	6.0	3377.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1365471.97	3.0	1537409.87	88.82	29.5	120.4	
Sc	45	No Gas	3345715.86	3.4	3373253.08	99.18	29.5	120.4	
Sc	45	H2	387802.24	0.8	415670.69	93.3	29.5	120.4	
Sc	45	He	78567.34	1.0	81171.76	96.79	29.5	120.4	
Ge	72	No Gas	782123.93	2.7	779333.11	100.36	29.5	120.4	
Ge	72	H2	144923.29	1.0	153246.58	94.57	29.5	120.4	
Ge	72	He	62461.23	0.6	63135.03	98.93	29.5	120.4	
Y	89	H2	2543144.33	0.5	2642116.11	96.25	29.5	120.4	
Y	89	He	537519.35	0.9	544041.92	98.8	29.5	120.4	
Tb	159	No Gas	8185687.65	3.1	8117023.84	100.85	29.5	120.4	
Tb	159	He	2903721.76	0.4	2866479.19	101.3	29.5	120.4	
Bi	209	No Gas	4354817.32	3.0	4424692.92	98.42	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG16IMS1
File Name	186_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:24:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.075	ppb	65.3	36.67	0.5	
B	11	6	No Gas	40.914	ppb	0.9	7581.14	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	1344.709	ppb	53.6	34296.16	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	14.203	ppb	25.3	748.97	50	
Al	27	45	He	4.880	ppb	15.8	68.89	50	
Si	28	45	H2	25.441	ppb	30.8	427.15	250	
K	39	45	He	156.300	ppb	12.5	11987.98	500	
Ca	40	45	H2	55.567	ppb	4.7	5855.88	50	PB 6020 Fails DoD
V	51	89	He	4.178	ppb	7.1	930.07	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.913	ppb	24.6	223.96	2.5	
Mn	55	89	He	1.886	ppb	8.7	199.30	1	PB 6020 Fails DoD
Fe	56	89	H2	13.383	ppb	10.2	12092.06	50	
Co	59	89	He	0.190	ppb	101.7	75.56	0.5	
Ni	60	89	He	0.804	ppb	5.1	121.12	1	
Cu	63	89	He	0.816	ppb	24.4	632.26	1.5	
Zn	66	89	He	4.013	ppb	5.5	212.23	5	
As	75	89	He	0.367	ppb	39.3	15.67	2.5	
Se	78	89	H2	0.265	ppb	1.7	4.50	2.5	
Sr	88	89	He	0.369	ppb	77.6	61.11	2.5	
Mo	95	89	He	-0.080	ppb	N/A	108.90	2.5	
Ag	107	89	He	0.037	ppb	58.5	32.22	0.5	
Cd	111	89	He	0.087	ppb	143.5	7.78	0.5	
Sn	118	159	He	43.258	ppb	3.0	7573.51	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.013	ppb	164.9	113.46	0.5	
Ba	137	159	No Gas	0.369	ppb	9.6	230.26	1	
W	182	159	No Gas	-0.006	ppb	N/A	110.12	2.5	
Tl	205	209	No Gas	0.000	ppb	N/A	26.69	0.5	
Pb	208	209	No Gas	0.359	ppb	10.9	1471.70	0.5	
Th	232	209	No Gas	0.061	ppb	28.0	397.12	2.5	
U	238	209	No Gas	0.009	ppb	101.1	33.37	0.5	

QC ISTD Table

Katahdin Analytical Services A0000368

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1439878.80	3.1	1537409.87	93.66	29.5	120.4	
Sc	45	No Gas	3236760.60	1.4	3373253.08	95.95	29.5	120.4	
Sc	45	H2	368733.68	0.8	415670.69	88.71	29.5	120.4	
Sc	45	He	76141.82	1.2	81171.76	93.8	29.5	120.4	
Ge	72	No Gas	764554.48	2.4	779333.11	98.1	29.5	120.4	
Ge	72	H2	137788.67	1.5	153246.58	89.91	29.5	120.4	
Ge	72	He	60470.40	0.6	63135.03	95.78	29.5	120.4	
Y	89	H2	2452478.93	1.6	2642116.11	92.82	29.5	120.4	
Y	89	He	525788.77	0.9	544041.92	96.64	29.5	120.4	
Tb	159	No Gas	8186780.78	1.6	8117023.84	100.86	29.5	120.4	
Tb	159	He	2898335.09	1.1	2866479.19	101.11	29.5	120.4	
Bi	209	No Gas	4432981.83	2.1	4424692.92	100.19	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG16IMS1
File Name	187LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:27:34 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.130	ppb	6.9	10290.68	50	18.05	79.5	120.4	
B	11	6	No Gas	477.705	ppb	5.7	72262.39	500	19.11	79.5	120.4	
Na	23	45	He	7886.002	ppb	1.8	166800.15	7500	21.03	79.5	120.4	
Mg	24	45	He	5118.802	ppb	1.1	58138.64	5000	20.48	79.5	120.4	
Al	27	45	He	1831.621	ppb	1.2	8023.64	2000	18.32	79.5	120.4	
Si	28	45	H2	966.592	ppb	5.2	7560.45	1000	19.33	79.5	120.4	
K	39	45	He	10303.153	ppb	2.5	110948.68	10000	20.61	79.5	120.4	
Ca	40	45	H2	2632.878	ppb	2.5	192743.86	2500	21.06	79.5	120.4	
V	51	89	He	501.839	ppb	1.6	81785.37	500	20.07	79.5	120.4	
Cr	52	89	He	204.297	ppb	2.3	41005.59	200	20.43	79.5	120.4	
Mn	55	89	He	505.498	ppb	1.9	48330.87	500	20.22	79.5	120.4	
Fe	56	89	H2	1082.006	ppb	3.7	333249.09	1000	21.64	79.5	120.4	
Co	59	89	He	529.501	ppb	2.4	179865.46	500	21.18	79.5	120.4	
Ni	60	89	He	504.559	ppb	3.3	48590.77	500	20.18	79.5	120.4	
Cu	63	89	He	260.312	ppb	1.5	68364.20	250	20.82	79.5	120.4	
Zn	66	89	He	501.569	ppb	0.7	18002.24	500	20.06	79.5	120.4	
As	75	89	He	103.368	ppb	4.0	3025.99	100	20.67	79.5	120.4	
Se	78	89	H2	104.264	ppb	4.8	1562.52	100	20.85	79.5	120.4	
Sr	88	89	He	511.272	ppb	1.9	73023.04	500	20.45	79.5	120.4	
Mo	95	89	He	105.268	ppb	3.1	17378.24	100	21.05	79.5	120.4	
Ag	107	89	He	55.545	ppb	2.3	30986.13	50	22.22	79.5	120.4	
Cd	111	89	He	258.710	ppb	2.7	19222.98	250	20.7	79.5	120.4	
Sn	118	159	He	527.212	ppb	1.1	89353.39	500	21.09	79.5	120.4	
Sb	121	159	No Gas	95.348	ppb	5.2	143760.01	100	19.07	79.5	120.4	
Ba	137	159	No Gas	1846.075	ppb	5.6	1094465.53	2000	18.46	79.5	120.4	
W	182	159	No Gas	94.439	ppb	5.9	113340.09	100	18.89	79.5	120.4	
Tl	205	209	No Gas	97.072	ppb	6.1	257118.98	100	19.41	79.5	120.4	
[Pb]	206	209	No Gas	96.786	ppb	6.2	88242.60	100	19.36	79.5	120.4	
[Pb]	207	209	No Gas	96.358	ppb	5.6	77021.17	100	19.27	79.5	120.4	
Pb	208	209	No Gas	96.158	ppb	6.2	352152.57	100	19.23	79.5	120.4	
Th	232	209	No Gas	91.540	ppb	8.4	350919.51	100	18.31	79.5	120.4	
U	238	209	No Gas	93.096	ppb	6.3	334937.95	100	18.62	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1313893.99	1.7	1537409.87	85.46	29.5	120.4	
Sc	45	No Gas	3218991.51	1.2	3373253.08	95.43	29.5	120.4	
Sc	45	H2	362074.21	2.2	415670.69	87.11	29.5	120.4	
Sc	45	He	73582.15	2.0	81171.76	90.65	29.5	120.4	
Ge	72	No Gas	779134.22	0.6	779333.11	99.97	29.5	120.4	
Ge	72	H2	136036.46	2.7	153246.58	88.77	29.5	120.4	
Ge	72	He	58697.40	2.1	63135.03	92.97	29.5	120.4	
Y	89	H2	2411537.55	2.6	2642116.11	91.27	29.5	120.4	
Y	89	He	507144.36	2.3	544041.92	93.22	29.5	120.4	
Tb	159	No Gas	8377169.46	0.7	8117023.84	103.2	29.5	120.4	
Tb	159	He	2830352.32	1.4	2866479.19	98.74	29.5	120.4	
Bi	209	No Gas	4502079.31	1.6	4424692.92	101.75	29.5	120.4	

Sample Report

Sample Name SN5594-002

File Name 188SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:30:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.173	ppb	40.2	52.23	100	
11	B	6	No Gas	1799.704	ppb	15.4	256266.20	1000	
23	Na	45	He	16763.263	ppb	1.3	359476.60	200000	
24	Mg	45	He	31.981	ppb	3.6	953.44	200000	
27	Al	45	He	91.685	ppb	5.2	458.91	200000	
28	Si	45	H2	223.204	ppb	8.5	1969.00	10000	
39	K	45	He	1749.240	ppb	1.4	28059.86	200000	
40	Ca	45	H2	174.216	ppb	2.0	14725.94	200000	
51	V	89	He	3.310	ppb	5.9	781.16	1000	
52	Cr	89	He	1.697	ppb	6.7	385.94	2000	
55	Mn	89	He	4.846	ppb	7.6	491.26	2000	
56	Fe	89	H2	216.727	ppb	1.6	75096.69	100000	
59	Co	89	He	0.267	ppb	18.0	102.23	1000	
60	Ni	89	He	6.937	ppb	8.3	731.16	1000	
63	Cu	89	He	98.256	ppb	0.8	26940.11	2000	
66	Zn	89	He	187.134	ppb	2.4	6984.23	2000	
75	As	89	He	0.557	ppb	13.7	21.33	1000	
78	Se	89	H2	0.154	ppb	54.8	2.83	1000	
88	Sr	89	He	0.739	ppb	22.4	115.56	2000	
95	Mo	89	He	54.582	ppb	1.8	9379.10	1000	
107	Ag	89	He	0.159	ppb	24.2	102.23	100	
111	Cd	89	He	0.237	ppb	45.1	19.26	1000	
118	Sn	159	He	46.734	ppb	2.2	8165.00	1000	
121	Sb	159	No Gas	0.741	ppb	13.4	1194.72	1000	
137	Ba	159	No Gas	5.963	ppb	11.6	3507.72	2000	
182	W	159	No Gas	0.159	ppb	48.6	310.35	1000	
205	Tl	209	No Gas	0.159	ppb	4.7	450.51	1000	
208	Pb	209	No Gas	516.852	ppb	18.6	1874066.48	2000	
232	Th	209	No Gas	2.273	ppb	20.5	8940.12	1000	
238	U	209	No Gas	0.101	ppb	24.1	373.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1258550.30	9.9	1537409.87	81.86	29.5	120.4	
Sc	45	No Gas	3241152.92	13.8	3373253.08	96.08	29.5	120.4	
Sc	45	H2	371325.01	1.8	415670.69	89.33	29.5	120.4	
Sc	45	He	75936.32	0.4	81171.76	93.55	29.5	120.4	
Ge	72	No Gas	768949.69	8.3	779333.11	98.67	29.5	120.4	
Ge	72	H2	140031.69	1.1	153246.58	91.38	29.5	120.4	
Ge	72	He	60699.81	0.6	63135.03	96.14	29.5	120.4	
Y	89	H2	2478256.11	1.7	2642116.11	93.8	29.5	120.4	
Y	89	He	524326.40	0.1	544041.92	96.38	29.5	120.4	
Tb	159	No Gas	8344097.93	13.3	8117023.84	102.8	29.5	120.4	
Tb	159	He	2893960.72	0.1	2866479.19	100.96	29.5	120.4	
Bi	209	No Gas	4525053.02	12.2	4424692.92	102.27	29.5	120.4	

Sample Report

Sample Name SN5594-003

File Name 189SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:32:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.083	ppb	41.8	34.45	100	
11	B	6	No Gas	61.044	ppb	2.6	9723.61	1000	
23	Na	45	He	558.828	ppb	3.0	17182.76	200000	
24	Mg	45	He	324.462	ppb	4.3	4254.27	200000	
27	Al	45	He	24.220	ppb	25.4	152.23	200000	
28	Si	45	H2	66.484	ppb	15.8	734.16	10000	
39	K	45	He	166.090	ppb	13.2	11791.19	200000	
40	Ca	45	H2	2576.560	ppb	1.0	189514.51	200000	
51	V	89	He	4.927	ppb	9.5	1027.85	1000	
52	Cr	89	He	2.084	ppb	2.2	455.26	2000	
55	Mn	89	He	3.855	ppb	7.4	383.94	2000	
56	Fe	89	H2	176.569	ppb	0.6	61466.18	100000	
59	Co	89	He	0.118	ppb	62.1	48.89	1000	
60	Ni	89	He	1.683	ppb	19.8	203.34	1000	
63	Cu	89	He	126.345	ppb	0.5	33703.80	2000	
66	Zn	89	He	3779.770	ppb	0.3	136532.45	2000	
75	As	89	He	0.326	ppb	27.9	14.00	1000	
78	Se	89	H2	0.157	ppb	24.0	2.83	1000	
88	Sr	89	He	1.436	ppb	9.7	213.34	2000	
95	Mo	89	He	34.803	ppb	1.3	5881.48	1000	
107	Ag	89	He	0.033	ppb	55.6	28.89	100	
111	Cd	89	He	2.539	ppb	3.3	191.49	1000	
118	Sn	159	He	41.860	ppb	1.9	7233.33	1000	
121	Sb	159	No Gas	0.071	ppb	27.7	203.56	1000	
137	Ba	159	No Gas	12.660	ppb	7.6	7523.80	2000	
182	W	159	No Gas	-0.014	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.035	ppb	39.2	123.47	1000	
208	Pb	209	No Gas	1625.749	ppb	6.9	6108485.46	2000	
232	Th	209	No Gas	0.146	ppb	20.5	747.53	1000	
238	U	209	No Gas	0.057	ppb	21.2	213.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1286259.76	1.7	1537409.87	83.66	29.5	120.4	
Sc	45	No Gas	3212273.43	2.5	3373253.08	95.23	29.5	120.4	
Sc	45	H2	363608.98	1.1	415670.69	87.48	29.5	120.4	
Sc	45	He	74273.25	0.6	81171.76	91.5	29.5	120.4	
Ge	72	No Gas	770458.36	2.0	779333.11	98.86	29.5	120.4	
Ge	72	H2	135022.97	1.5	153246.58	88.11	29.5	120.4	
Ge	72	He	58496.42	0.6	63135.03	92.65	29.5	120.4	
Y	89	H2	2430112.60	1.2	2642116.11	91.98	29.5	120.4	
Y	89	He	511862.68	0.3	544041.92	94.09	29.5	120.4	
Tb	159	No Gas	8385193.42	1.9	8117023.84	103.3	29.5	120.4	
Tb	159	He	2859289.58	0.5	2866479.19	99.75	29.5	120.4	
Bi	209	No Gas	4623273.06	2.0	4424692.92	104.49	29.5	120.4	

Sample Report

Sample Name SN5717-001

File Name 190SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:35:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.043	ppb	4.9	1058.97	100	
11	B	6	No Gas	79.139	ppb	5.1	11489.38	1000	
23	Na	45	He	715.593	ppb	1.9	20126.46	200000	
24	Mg	45	He	40994.124	ppb	0.8	459352.81	200000	
27	Al	45	He	111057.558	ppb	1.1	481383.31	200000	
28	Si	45	H2	2612.746	ppb	1.8	19529.72	10000	
39	K	45	He	14480.337	ppb	0.3	151128.33	200000	
40	Ca	45	H2	32463.829	ppb	0.9	2294613.35	200000	
51	V	89	He	189.685	ppb	0.5	33371.52	1000	
52	Cr	89	He	137.970	ppb	1.2	29779.21	2000	
55	Mn	89	He	4783.194	ppb	0.3	491455.22	2000	
56	Fe	89	H2	220477.819	ppb	0.2	70598763.78	100000	
59	Co	89	He	89.904	ppb	2.1	32835.95	1000	
60	Ni	89	He	203.413	ppb	1.2	21085.42	1000	
63	Cu	89	He	221.324	ppb	0.7	62536.30	2000	
66	Zn	89	He	796.196	ppb	0.3	30671.29	2000	
75	As	89	He	80.113	ppb	1.9	2522.51	1000	
78	Se	89	H2	2.164	ppb	20.6	35.00	1000	
88	Sr	89	He	95.201	ppb	3.2	14620.52	2000	
95	Mo	89	He	18.131	ppb	4.5	3322.75	1000	
107	Ag	89	He	0.386	ppb	1.8	242.23	100	
111	Cd	89	He	2.356	ppb	1.2	189.26	1000	
118	Sn	159	He	40.649	ppb	3.7	6982.06	1000	
121	Sb	159	No Gas	1.189	ppb	17.5	1868.88	1000	
137	Ba	159	No Gas	450.637	ppb	7.8	264908.64	2000	
182	W	159	No Gas	0.217	ppb	21.6	377.10	1000	
205	Tl	209	No Gas	3.250	ppb	8.9	8495.68	1000	
208	Pb	209	No Gas	175.579	ppb	8.1	632485.15	2000	
232	Th	209	No Gas	38.942	ppb	10.2	146941.50	1000	
238	U	209	No Gas	6.750	ppb	9.6	23889.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1195567.39	3.1	1537409.87	77.77	29.5	120.4	
Sc	45	No Gas	3125063.21	3.3	3373253.08	92.64	29.5	120.4	
Sc	45	H2	352370.10	1.4	415670.69	84.77	29.5	120.4	
Sc	45	He	73208.60	0.9	81171.76	90.19	29.5	120.4	
Ge	72	No Gas	742614.05	3.5	779333.11	95.29	29.5	120.4	
Ge	72	H2	128291.35	0.9	153246.58	83.72	29.5	120.4	
Ge	72	He	57277.30	0.1	63135.03	90.72	29.5	120.4	
Y	89	H2	2565896.98	0.4	2642116.11	97.12	29.5	120.4	
Y	89	He	544954.30	0.2	544041.92	100.17	29.5	120.4	
Tb	159	No Gas	8317682.58	2.9	8117023.84	102.47	29.5	120.4	
Tb	159	He	2841385.52	0.2	2866479.19	99.12	29.5	120.4	
Bi	209	No Gas	4434681.50	3.1	4424692.92	100.23	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	191_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:37:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.392	ppb	5.4	25109.15	25	97.57	89.8	110.2	
11	B	6	No Gas	26.746	ppb	3.0	18798.35	25	106.98	89.8	110.2	
23	Na	45	He	4986.798	ppb	2.2	507972.70	5000	99.74	89.8	110.2	
24	Mg	45	He	4854.703	ppb	2.3	269673.70	5000	97.09	89.8	110.2	
27	Al	45	He	474.612	ppb	0.5	10237.37	500	94.92	89.8	110.2	
28	Si	45	H2	477.171	ppb	1.7	17987.92	500	95.43	89.8	110.2	
39	K	45	He	4926.403	ppb	1.6	247743.50	5000	98.53	89.8	110.2	
40	Ca	45	H2	4935.956	ppb	1.3	1758090.60	5000	98.72	89.8	110.2	
51	V	89	He	23.782	ppb	2.9	19346.08	25	95.13	89.8	110.2	
52	Cr	89	He	24.108	ppb	1.5	23967.89	25	96.43	89.8	110.2	
55	Mn	89	He	24.189	ppb	2.8	11455.95	25	96.76	89.8	110.2	
56	Fe	89	H2	4862.669	ppb	1.2	7222849.94	5000	97.25	89.8	110.2	
59	Co	89	He	24.436	ppb	1.6	41100.26	25	97.74	89.8	110.2	
60	Ni	89	He	24.567	ppb	0.0	11745.39	25	98.27	89.8	110.2	
63	Cu	89	He	24.523	ppb	2.4	32083.19	25	98.09	89.8	110.2	
66	Zn	89	He	24.348	ppb	4.1	4369.73	25	97.39	89.8	110.2	
75	As	89	He	24.154	ppb	4.5	3499.16	25	96.62	89.8	110.2	
78	Se	89	H2	24.131	ppb	0.9	1784.54	25	96.52	89.8	110.2	
88	Sr	89	He	24.006	ppb	2.6	16974.35	25	96.02	89.8	110.2	
95	Mo	89	He	24.311	ppb	2.5	19849.44	25	97.24	89.8	110.2	
107	Ag	89	He	18.764	ppb	1.3	51813.08	25	75.06	89.8	110.2	> +/- 10%
111	Cd	89	He	24.942	ppb	2.9	9173.94	25	99.77	89.8	110.2	
118	Sn	159	He	23.042	ppb	0.7	19316.67	25	92.17	89.8	110.2	
121	Sb	159	No Gas	23.368	ppb	3.1	169666.34	25	93.47	89.8	110.2	
137	Ba	159	No Gas	23.192	ppb	3.2	66231.21	25	92.77	89.8	110.2	
182	W	159	No Gas	22.904	ppb	4.4	132362.63	25	91.62	89.8	110.2	
205	Tl	209	No Gas	23.530	ppb	4.1	301369.94	25	94.12	89.8	110.2	
208	Pb	209	No Gas	23.328	ppb	4.3	413095.48	25	93.31	89.8	110.2	
232	Th	209	No Gas	22.770	ppb	4.8	422136.16	25	91.08	89.8	110.2	
238	U	209	No Gas	22.733	ppb	4.8	395472.72	25	90.93	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1186907.40	1.0	1537409.87	77.2	29.5	120.4	
Sc	45	No Gas	3073694.34	0.8	3373253.08	91.12	29.5	120.4	
Sc	45	H2	355076.15	1.6	415670.69	85.42	29.5	120.4	
Sc	45	He	72540.90	1.9	81171.76	89.37	29.5	120.4	
Ge	72	No Gas	730931.49	0.7	779333.11	93.79	29.5	120.4	
Ge	72	H2	132696.65	0.8	153246.58	86.59	29.5	120.4	
Ge	72	He	58307.09	1.4	63135.03	92.35	29.5	120.4	
Y	89	H2	2378446.75	1.1	2642116.11	90.02	29.5	120.4	
Y	89	He	502025.89	1.7	544041.92	92.28	29.5	120.4	
Tb	159	No Gas	8068006.62	0.8	8117023.84	99.4	29.5	120.4	
Tb	159	He	2792085.55	1.4	2866479.19	97.4	29.5	120.4	
Bi	209	No Gas	4352798.58	0.9	4424692.92	98.38	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	192_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:40:34 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.046	ppb	52.0	63.34	0.2	
11	B	6	No Gas	3.953	ppb	2.7	3438.31	4	Failed DoD
23	Na	45	He	43.230	ppb	11.3	9329.99	200	
24	Mg	45	He	-1.160	ppb	N/A	464.48	20	
27	Al	45	He	0.279	ppb	141.1	47.78	20	
28	Si	45	H2	5.842	ppb	14.2	427.15	100	
39	K	45	He	26.254	ppb	53.1	10559.18	200	
40	Ca	45	H2	4.163	ppb	4.9	3074.88	20	
51	V	89	He	0.436	ppb	13.0	543.37	1	
52	Cr	89	He	0.097	ppb	26.2	123.98	1	
55	Mn	89	He	0.220	ppb	19.0	110.65	0.4	Failed DoD
56	Fe	89	H2	3.195	ppb	10.9	12349.16	20	
59	Co	89	He	0.013	ppb	107.0	28.89	0.2	
60	Ni	89	He	-0.047	ppb	N/A	15.56	0.4	
63	Cu	89	He	-0.104	ppb	N/A	246.68	0.6	
66	Zn	89	He	0.082	ppb	67.0	72.23	2	
75	As	89	He	0.058	ppb	57.2	12.33	1	
78	Se	89	H2	0.069	ppb	26.2	5.50	1	
88	Sr	89	He	0.011	ppb	73.5	13.34	1	
95	Mo	89	He	-0.006	ppb	N/A	107.78	1	
107	Ag	89	He	0.007	ppb	61.2	27.78	0.2	
111	Cd	89	He	0.006	ppb	143.0	2.96	0.2	
118	Sn	159	He	0.351	ppb	11.7	357.79	1	
121	Sb	159	No Gas	0.017	ppb	63.9	220.25	0.2	
137	Ba	159	No Gas	0.049	ppb	29.3	156.84	0.4	
182	W	159	No Gas	0.084	ppb	6.9	604.03	1	
205	Tl	209	No Gas	0.022	ppb	24.7	310.35	0.2	
208	Pb	209	No Gas	0.081	ppb	5.2	1615.21	0.2	
232	Th	209	No Gas	0.264	ppb	39.9	5083.51	1	
238	U	209	No Gas	0.022	ppb	33.3	383.77	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1204197.62	1.4	1537409.87	78.33	29.5	120.4	
Sc	45	No Gas	2989861.66	1.4	3373253.08	88.63	29.5	120.4	
Sc	45	H2	345039.98	2.5	415670.69	83.01	29.5	120.4	
Sc	45	He	68638.83	4.8	81171.76	84.56	29.5	120.4	
Ge	72	No Gas	718398.20	1.4	779333.11	92.18	29.5	120.4	
Ge	72	H2	128368.41	1.5	153246.58	83.77	29.5	120.4	
Ge	72	He	54860.73	3.3	63135.03	86.89	29.5	120.4	
Y	89	H2	2349833.58	1.8	2642116.11	88.94	29.5	120.4	
Y	89	He	481735.09	4.1	544041.92	88.55	29.5	120.4	
Tb	159	No Gas	8095297.03	0.5	8117023.84	99.73	29.5	120.4	
Tb	159	He	2760641.69	4.0	2866479.19	96.31	29.5	120.4	
Bi	209	No Gas	4370942.87	0.8	4424692.92	98.79	29.5	120.4	

Sample Report

Sample Name SN5717-005

File Name 193SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:43:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.609	ppb	12.0	1363.45	100	
11	B	6	No Gas	86.688	ppb	3.0	12335.65	1000	
23	Na	45	He	714.381	ppb	3.9	21927.90	200000	
24	Mg	45	He	48855.375	ppb	2.0	597151.31	200000	
27	Al	45	He	126387.237	ppb	2.3	597677.31	200000	
28	Si	45	H2	3254.438	ppb	3.6	25583.16	10000	
39	K	45	He	16879.991	ppb	1.9	190400.79	200000	
40	Ca	45	H2	40678.012	ppb	3.2	3030583.88	200000	
51	V	89	He	206.337	ppb	0.8	39267.82	1000	
52	Cr	89	He	162.967	ppb	1.6	38059.33	2000	
55	Mn	89	He	5489.793	ppb	1.7	610421.09	2000	
56	Fe	89	H2	267299.112	ppb	2.4	90299002.49	100000	
59	Co	89	He	97.805	ppb	1.4	38658.05	1000	
60	Ni	89	He	259.039	ppb	1.5	29047.58	1000	
63	Cu	89	He	284.551	ppb	1.2	86884.24	2000	
66	Zn	89	He	918.327	ppb	2.0	38272.19	2000	
75	As	89	He	87.221	ppb	1.3	2971.98	1000	
78	Se	89	H2	2.765	ppb	12.7	47.00	1000	
88	Sr	89	He	110.949	ppb	2.1	18437.37	2000	
95	Mo	89	He	18.295	ppb	1.4	3628.40	1000	
107	Ag	89	He	0.739	ppb	5.1	491.14	100	
111	Cd	89	He	2.797	ppb	3.5	242.97	1000	
118	Sn	159	He	42.412	ppb	4.3	7573.51	1000	
121	Sb	159	No Gas	13.878	ppb	3.4	21070.03	1000	
137	Ba	159	No Gas	528.713	ppb	1.2	314309.28	2000	
182	W	159	No Gas	0.388	ppb	14.9	587.34	1000	
205	Tl	209	No Gas	3.369	ppb	3.4	8903.02	1000	
208	Pb	209	No Gas	6131.756	ppb	2.0	22326196.40	2000	
232	Th	209	No Gas	45.350	ppb	1.4	173037.06	1000	
238	U	209	No Gas	7.889	ppb	1.9	28233.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1177124.62	0.7	1537409.87	76.57	29.5	120.4	
Sc	45	No Gas	3165694.47	3.2	3373253.08	93.85	29.5	120.4	
Sc	45	H2	371647.20	2.7	415670.69	89.41	29.5	120.4	
Sc	45	He	79892.49	2.3	81171.76	98.42	29.5	120.4	
Ge	72	No Gas	745655.41	1.4	779333.11	95.68	29.5	120.4	
Ge	72	H2	133717.80	0.8	153246.58	87.26	29.5	120.4	
Ge	72	He	61365.32	1.4	63135.03	97.2	29.5	120.4	
Y	89	H2	2707722.24	1.6	2642116.11	102.48	29.5	120.4	
Y	89	He	589852.45	1.5	544041.92	108.42	29.5	120.4	
Tb	159	No Gas	8397100.71	2.5	8117023.84	103.45	29.5	120.4	
Tb	159	He	2956709.33	1.8	2866479.19	103.15	29.5	120.4	
Bi	209	No Gas	4475250.15	1.6	4424692.92	101.14	29.5	120.4	

Sample Report

Sample Name SN5717-005L

File Name 194SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:45:45 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.006	ppb	3.3	272.23	100	
11	B	6	No Gas	111.051	ppb	2.4	3868.42	1000	
23	Na	45	He	694.405	ppb	11.5	8919.35	200000	
24	Mg	45	He	51969.453	ppb	1.5	124241.78	200000	
27	Al	45	He	136085.254	ppb	2.0	125428.91	200000	
28	Si	45	H2	3202.339	ppb	8.5	5367.00	10000	
39	K	45	He	18253.589	ppb	3.2	48444.82	200000	
40	Ca	45	H2	41030.431	ppb	2.2	630235.23	200000	
51	V	89	He	226.476	ppb	3.0	8120.43	1000	
52	Cr	89	He	179.619	ppb	2.7	7750.73	2000	
55	Mn	89	He	6130.579	ppb	1.0	125531.84	2000	
56	Fe	89	H2	288133.174	ppb	1.6	18488757.07	100000	
59	Co	89	He	113.057	ppb	2.6	8234.10	1000	
60	Ni	89	He	283.411	ppb	6.5	5881.46	1000	
63	Cu	89	He	319.557	ppb	2.8	18292.56	2000	
66	Zn	89	He	1022.536	ppb	2.1	7898.07	2000	
75	As	89	He	94.816	ppb	3.3	598.41	1000	
78	Se	89	H2	2.877	ppb	39.7	9.67	1000	
88	Sr	89	He	121.661	ppb	3.3	3727.30	2000	
95	Mo	89	He	19.436	ppb	6.2	808.95	1000	
107	Ag	89	He	0.884	ppb	5.3	116.67	100	
111	Cd	89	He	3.140	ppb	6.7	51.11	1000	
118	Sn	159	He	43.791	ppb	1.8	1590.16	1000	
121	Sb	159	No Gas	13.677	ppb	12.5	4222.09	1000	
137	Ba	159	No Gas	547.017	ppb	3.5	64949.88	2000	
182	W	159	No Gas	0.220	ppb	43.7	173.53	1000	
205	Tl	209	No Gas	3.132	ppb	3.5	1692.00	1000	
208	Pb	209	No Gas	6165.712	ppb	3.7	4529189.84	2000	
232	Th	209	No Gas	44.133	ppb	4.4	34111.42	1000	
238	U	209	No Gas	7.791	ppb	5.7	5627.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234582.18	0.4	1537409.87	80.3	29.5	120.4	
Sc	45	No Gas	3334683.66	0.4	3373253.08	98.86	29.5	120.4	
Sc	45	H2	382082.80	1.4	415670.69	91.92	29.5	120.4	
Sc	45	He	77830.16	2.3	81171.76	95.88	29.5	120.4	
Ge	72	No Gas	778734.39	0.4	779333.11	99.92	29.5	120.4	
Ge	72	H2	140702.97	1.9	153246.58	91.81	29.5	120.4	
Ge	72	He	61735.07	1.3	63135.03	97.78	29.5	120.4	
Y	89	H2	2570397.71	1.1	2642116.11	97.29	29.5	120.4	
Y	89	He	543033.34	1.6	544041.92	99.81	29.5	120.4	
Tb	159	No Gas	8385680.08	0.3	8117023.84	103.31	29.5	120.4	
Tb	159	He	2896671.20	1.1	2866479.19	101.05	29.5	120.4	
Bi	209	No Gas	4515422.45	0.3	4424692.92	102.05	29.5	120.4	

Sample Report

Sample Name SN5717-005A

File Name 195SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:48:18 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.773	ppb	6.0	3497.22	100	
11	B	6	No Gas	276.001	ppb	5.6	40802.96	1000	
23	Na	45	He	10583.519	ppb	1.0	233302.29	200000	
24	Mg	45	He	50638.613	ppb	0.7	599268.43	200000	
27	Al	45	He	130974.637	ppb	0.6	599719.17	200000	
28	Si	45	H2	8472.717	ppb	10.3	65325.02	10000	
39	K	45	He	26785.053	ppb	0.3	286322.93	200000	
40	Ca	45	H2	43018.357	ppb	10.5	3160452.63	200000	
51	V	89	He	249.680	ppb	2.1	46393.74	1000	
52	Cr	89	He	208.287	ppb	0.9	47546.78	2000	
55	Mn	89	He	5508.017	ppb	0.9	598772.33	2000	
56	Fe	89	H2	278920.791	ppb	9.9	91372944.72	100000	
59	Co	89	He	106.615	ppb	1.5	41196.40	1000	
60	Ni	89	He	275.496	ppb	0.5	30200.01	1000	
63	Cu	89	He	311.902	ppb	1.2	93059.35	2000	
66	Zn	89	He	979.387	ppb	1.1	39901.35	2000	
75	As	89	He	130.627	ppb	1.1	4349.16	1000	
78	Se	89	H2	49.622	ppb	11.4	809.82	1000	
88	Sr	89	He	156.209	ppb	1.6	25378.60	2000	
95	Mo	89	He	64.337	ppb	3.1	12131.31	1000	
107	Ag	89	He	10.642	ppb	2.0	6760.83	100	
111	Cd	89	He	11.973	ppb	2.6	1013.02	1000	
118	Sn	159	He	90.757	ppb	0.7	15721.91	1000	
121	Sb	159	No Gas	23.265	ppb	4.6	34288.28	1000	
137	Ba	159	No Gas	538.998	ppb	4.2	311688.32	2000	
182	W	159	No Gas	46.244	ppb	3.4	54186.64	1000	
205	Tl	209	No Gas	12.984	ppb	3.6	32795.73	1000	
208	Pb	209	No Gas	5948.222	ppb	4.7	20748883.00	2000	
232	Th	209	No Gas	53.295	ppb	5.1	194822.76	1000	
238	U	209	No Gas	17.156	ppb	4.4	58817.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273659.28	1.1	1537409.87	82.84	29.5	120.4	
Sc	45	No Gas	3322604.65	1.1	3373253.08	98.5	29.5	120.4	
Sc	45	H2	368330.19	7.9	415670.69	88.61	29.5	120.4	
Sc	45	He	77334.04	0.8	81171.76	95.27	29.5	120.4	
Ge	72	No Gas	761159.57	1.7	779333.11	97.67	29.5	120.4	
Ge	72	H2	133636.11	5.8	153246.58	87.2	29.5	120.4	
Ge	72	He	60086.44	0.6	63135.03	95.17	29.5	120.4	
Y	89	H2	2637185.82	6.9	2642116.11	99.81	29.5	120.4	
Y	89	He	576614.04	1.0	544041.92	105.99	29.5	120.4	
Tb	159	No Gas	8171035.50	1.7	8117023.84	100.67	29.5	120.4	
Tb	159	He	2881807.49	0.6	2866479.19	100.53	29.5	120.4	
Bi	209	No Gas	4288383.65	1.3	4424692.92	96.92	29.5	120.4	

Sample Report

Sample Name SN5717-005S

File Name 196SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:50:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.446	ppb	3.4	11597.24	100	
11	B	6	No Gas	505.831	ppb	4.1	74168.31	1000	
23	Na	45	He	7187.852	ppb	1.9	161533.58	200000	
24	Mg	45	He	48095.993	ppb	2.4	573416.99	200000	
27	Al	45	He	127982.664	ppb	2.5	590353.41	200000	
28	Si	45	H2	3021.565	ppb	1.3	24124.15	10000	
39	K	45	He	26434.963	ppb	2.2	284815.74	200000	
40	Ca	45	H2	41970.998	ppb	2.6	3170977.87	200000	
51	V	89	He	632.568	ppb	1.7	116425.37	1000	
52	Cr	89	He	330.103	ppb	1.3	74856.33	2000	
55	Mn	89	He	7463.875	ppb	2.3	806195.04	2000	
56	Fe	89	H2	250054.946	ppb	2.8	84443442.97	100000	
59	Co	89	He	537.197	ppb	1.4	206227.73	1000	
60	Ni	89	He	649.527	ppb	1.8	70686.61	1000	
63	Cu	89	He	494.799	ppb	1.6	146433.05	2000	
66	Zn	89	He	1375.594	ppb	1.5	55661.79	2000	
75	As	89	He	182.791	ppb	2.6	6044.32	1000	
78	Se	89	H2	88.267	ppb	5.4	1484.85	1000	
88	Sr	89	He	542.854	ppb	2.6	87608.05	2000	
95	Mo	89	He	103.225	ppb	2.7	19260.82	1000	
107	Ag	89	He	44.467	ppb	1.6	28035.26	100	
111	Cd	89	He	212.570	ppb	2.4	17849.25	1000	
118	Sn	159	He	453.417	ppb	3.5	77870.60	1000	
121	Sb	159	No Gas	24.781	ppb	3.6	37045.93	1000	
137	Ba	159	No Gas	2318.780	ppb	3.4	1360503.18	2000	
182	W	159	No Gas	50.750	ppb	0.3	60340.60	1000	
205	Tl	209	No Gas	96.059	ppb	3.8	244128.39	1000	
208	Pb	209	No Gas	630.315	ppb	1.4	2214407.43	2000	
232	Th	209	No Gas	127.485	ppb	3.5	468976.61	1000	
238	U	209	No Gas	98.038	ppb	2.7	338454.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273937.21	0.9	1537409.87	82.86	29.5	120.4	
Sc	45	No Gas	3359266.86	0.8	3373253.08	99.59	29.5	120.4	
Sc	45	H2	376881.84	3.1	415670.69	90.67	29.5	120.4	
Sc	45	He	77924.74	1.7	81171.76	96	29.5	120.4	
Ge	72	No Gas	769303.48	1.1	779333.11	98.71	29.5	120.4	
Ge	72	H2	136902.47	1.4	153246.58	89.33	29.5	120.4	
Ge	72	He	59839.33	1.7	63135.03	94.78	29.5	120.4	
Y	89	H2	2707394.62	2.6	2642116.11	102.47	29.5	120.4	
Y	89	He	573018.53	1.5	544041.92	105.33	29.5	120.4	
Tb	159	No Gas	8290894.46	1.1	8117023.84	102.14	29.5	120.4	
Tb	159	He	2868749.05	2.0	2866479.19	100.08	29.5	120.4	
Bi	209	No Gas	4318975.60	1.3	4424692.92	97.61	29.5	120.4	

Sample Report

Sample Name SN5717-005P

File Name 197SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:53:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.803	ppb	8.7	11314.78	100	
11	B	6	No Gas	481.514	ppb	7.2	69801.34	1000	
23	Na	45	He	7044.240	ppb	1.6	158244.86	200000	
24	Mg	45	He	53779.803	ppb	1.2	640445.97	200000	
27	Al	45	He	135901.080	ppb	1.0	626241.22	200000	
28	Si	45	H2	2724.625	ppb	19.6	21540.72	10000	
39	K	45	He	25350.128	ppb	0.8	273279.85	200000	
40	Ca	45	H2	44487.939	ppb	18.4	3330415.33	200000	
51	V	89	He	624.762	ppb	0.7	114952.57	1000	
52	Cr	89	He	339.910	ppb	0.6	77049.41	2000	
55	Mn	89	He	7225.855	ppb	0.2	780264.34	2000	
56	Fe	89	H2	279084.018	ppb	18.2	92933402.63	100000	
59	Co	89	He	535.716	ppb	0.7	205583.84	1000	
60	Ni	89	He	668.134	ppb	1.0	72686.86	1000	
63	Cu	89	He	539.630	ppb	0.9	159603.31	2000	
66	Zn	89	He	1454.415	ppb	0.5	58825.88	2000	
75	As	89	He	190.029	ppb	1.3	6281.77	1000	
78	Se	89	H2	85.261	ppb	15.3	1418.51	1000	
88	Sr	89	He	542.865	ppb	0.4	87585.49	2000	
95	Mo	89	He	110.116	ppb	0.6	20532.71	1000	
107	Ag	89	He	44.022	ppb	1.1	27745.79	100	
111	Cd	89	He	209.737	ppb	0.1	17606.73	1000	
118	Sn	159	He	436.689	ppb	0.2	75250.11	1000	
121	Sb	159	No Gas	22.367	ppb	8.2	33251.63	1000	
137	Ba	159	No Gas	2284.739	ppb	8.8	1332480.49	2000	
182	W	159	No Gas	48.754	ppb	9.8	57602.46	1000	
205	Tl	209	No Gas	92.773	ppb	8.0	235955.36	1000	
208	Pb	209	No Gas	569.344	ppb	8.3	2001147.55	2000	
232	Th	209	No Gas	128.065	ppb	9.6	471254.75	1000	
238	U	209	No Gas	94.144	ppb	10.2	325036.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260677.05	3.6	1537409.87	82	29.5	120.4	
Sc	45	No Gas	3356277.05	3.9	3373253.08	99.5	29.5	120.4	
Sc	45	H2	379366.41	13.2	415670.69	91.27	29.5	120.4	
Sc	45	He	77831.02	1.3	81171.76	95.88	29.5	120.4	
Ge	72	No Gas	776251.84	3.4	779333.11	99.6	29.5	120.4	
Ge	72	H2	137850.91	10.3	153246.58	89.95	29.5	120.4	
Ge	72	He	59987.94	0.7	63135.03	95.02	29.5	120.4	
Y	89	H2	2709979.78	12.7	2642116.11	102.57	29.5	120.4	
Y	89	He	572730.69	0.3	544041.92	105.27	29.5	120.4	
Tb	159	No Gas	8256719.25	3.5	8117023.84	101.72	29.5	120.4	
Tb	159	He	2876992.04	0.8	2866479.19	100.37	29.5	120.4	
Bi	209	No Gas	4329645.75	3.8	4424692.92	97.85	29.5	120.4	

Sample Report

Sample Name SN5717-007

File Name 198SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:56:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.512	ppb	12.5	1311.22	100	
11	B	6	No Gas	110.846	ppb	2.0	15214.02	1000	
23	Na	45	He	1095.916	ppb	2.9	26159.62	200000	
24	Mg	45	He	103157.655	ppb	2.9	1084415.48	200000	
27	Al	45	He	115465.659	ppb	3.2	469865.08	200000	
28	Si	45	H2	3418.618	ppb	1.4	24610.71	10000	
39	K	45	He	18702.131	ppb	2.9	180512.56	200000	
40	Ca	45	H2	279877.464	ppb	2.2	19091016.38	200000	
51	V	89	He	210.021	ppb	0.9	35546.87	1000	
52	Cr	89	He	159.482	ppb	1.8	33130.62	2000	
55	Mn	89	He	5522.066	ppb	2.1	546152.86	2000	
56	Fe	89	H2	238399.040	ppb	2.1	74961080.94	100000	
59	Co	89	He	102.577	ppb	1.7	36064.14	1000	
60	Ni	89	He	258.016	ppb	2.3	25735.49	1000	
63	Cu	89	He	310.709	ppb	2.7	84341.19	2000	
66	Zn	89	He	915.174	ppb	1.4	33928.67	2000	
75	As	89	He	91.599	ppb	4.5	2775.25	1000	
78	Se	89	H2	3.045	ppb	6.4	48.17	1000	
88	Sr	89	He	347.955	ppb	2.5	51419.23	2000	
95	Mo	89	He	18.788	ppb	4.8	3310.53	1000	
107	Ag	89	He	0.598	ppb	4.2	355.58	100	
111	Cd	89	He	2.887	ppb	5.0	222.97	1000	
118	Sn	159	He	43.019	ppb	4.1	7136.62	1000	
121	Sb	159	No Gas	1.877	ppb	4.1	2773.41	1000	
137	Ba	159	No Gas	557.824	ppb	3.6	313653.65	2000	
182	W	159	No Gas	0.390	ppb	17.3	557.30	1000	
205	Tl	209	No Gas	4.423	ppb	4.4	10946.93	1000	
208	Pb	209	No Gas	484.541	ppb	4.2	1653873.62	2000	
232	Th	209	No Gas	52.369	ppb	3.4	187304.93	1000	
238	U	209	No Gas	6.975	ppb	4.4	23401.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1150063.42	1.8	1537409.87	74.81	29.5	120.4	
Sc	45	No Gas	3073501.73	1.6	3373253.08	91.11	29.5	120.4	
Sc	45	H2	340278.95	0.9	415670.69	81.86	29.5	120.4	
Sc	45	He	68756.96	2.2	81171.76	84.71	29.5	120.4	
Ge	72	No Gas	711198.52	1.5	779333.11	91.26	29.5	120.4	
Ge	72	H2	122976.75	1.4	153246.58	80.25	29.5	120.4	
Ge	72	He	54159.52	1.1	63135.03	85.78	29.5	120.4	
Y	89	H2	2519947.85	1.1	2642116.11	95.38	29.5	120.4	
Y	89	He	524668.17	1.3	544041.92	96.44	29.5	120.4	
Tb	159	No Gas	7943749.33	0.7	8117023.84	97.87	29.5	120.4	
Tb	159	He	2747245.69	2.1	2866479.19	95.84	29.5	120.4	
Bi	209	No Gas	4196651.71	1.0	4424692.92	94.85	29.5	120.4	

Sample Report

Sample Name SN5717-007L

File Name 199SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:58:40 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	7.297	ppb	23.7	303.34	100	
11	B	6	No Gas	134.481	ppb	7.6	4199.65	1000	
23	Na	45	He	991.504	ppb	10.7	8709.05	200000	
24	Mg	45	He	110279.636	ppb	1.4	224399.58	200000	
27	Al	45	He	125016.208	ppb	1.4	98334.32	200000	
28	Si	45	H2	3365.371	ppb	1.7	5183.69	10000	
39	K	45	He	20297.898	ppb	1.8	44970.89	200000	
40	Ca	45	H2	281739.162	ppb	0.5	3973997.93	200000	
51	V	89	He	239.410	ppb	2.5	7425.61	1000	
52	Cr	89	He	179.130	ppb	1.8	6701.75	2000	
55	Mn	89	He	6417.682	ppb	1.6	113911.39	2000	
56	Fe	89	H2	259349.845	ppb	0.4	15529274.67	100000	
59	Co	89	He	109.825	ppb	2.3	6933.36	1000	
60	Ni	89	He	298.676	ppb	2.9	5373.45	1000	
63	Cu	89	He	364.763	ppb	0.8	18055.73	2000	
66	Zn	89	He	1082.709	ppb	0.8	7249.95	2000	
75	As	89	He	101.105	ppb	7.4	553.07	1000	
78	Se	89	H2	2.476	ppb	27.6	7.83	1000	
88	Sr	89	He	393.386	ppb	5.1	10432.15	2000	
95	Mo	89	He	20.289	ppb	9.0	728.94	1000	
107	Ag	89	He	0.712	ppb	2.2	83.34	100	
111	Cd	89	He	3.676	ppb	21.6	51.85	1000	
118	Sn	159	He	47.252	ppb	7.5	1546.81	1000	
121	Sb	159	No Gas	1.643	ppb	13.5	567.31	1000	
137	Ba	159	No Gas	546.599	ppb	7.6	62161.32	2000	
182	W	159	No Gas	0.050	ppb	366.5	126.81	1000	
205	Tl	209	No Gas	3.798	ppb	12.2	1989.06	1000	
208	Pb	209	No Gas	470.264	ppb	6.3	335878.14	2000	
232	Th	209	No Gas	46.574	ppb	6.7	34974.73	1000	
238	U	209	No Gas	6.622	ppb	7.9	4649.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1146079.96	1.8	1537409.87	74.55	29.5	120.4	
Sc	45	No Gas	3004526.90	1.7	3373253.08	89.07	29.5	120.4	
Sc	45	H2	351689.09	1.3	415670.69	84.61	29.5	120.4	
Sc	45	He	66418.81	3.4	81171.76	81.83	29.5	120.4	
Ge	72	No Gas	712261.99	2.3	779333.11	91.39	29.5	120.4	
Ge	72	H2	129100.10	1.6	153246.58	84.24	29.5	120.4	
Ge	72	He	53065.51	3.7	63135.03	84.05	29.5	120.4	
Y	89	H2	2398167.77	0.6	2642116.11	90.77	29.5	120.4	
Y	89	He	470850.03	3.6	544041.92	86.55	29.5	120.4	
Tb	159	No Gas	8038328.84	1.6	8117023.84	99.03	29.5	120.4	
Tb	159	He	2618371.59	3.5	2866479.19	91.34	29.5	120.4	
Bi	209	No Gas	4392206.27	2.3	4424692.92	99.27	29.5	120.4	

Sample Report

Sample Name SN5717-007A

File Name 200SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:01:18 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.572	ppb	9.8	3079.34	100	
11	B	6	No Gas	290.748	ppb	7.5	38308.16	1000	
23	Na	45	He	10887.072	ppb	0.6	210539.93	200000	
24	Mg	45	He	100250.925	ppb	0.6	1041000.88	200000	
27	Al	45	He	112342.893	ppb	0.5	451593.38	200000	
28	Si	45	H2	8124.534	ppb	5.7	57298.12	10000	
39	K	45	He	27682.866	ppb	0.2	259466.27	200000	
40	Ca	45	H2	276228.443	ppb	1.5	18561858.33	200000	
51	V	89	He	247.012	ppb	0.5	41311.46	1000	
52	Cr	89	He	199.081	ppb	0.8	40899.38	2000	
55	Mn	89	He	5385.740	ppb	0.3	526904.35	2000	
56	Fe	89	H2	235416.437	ppb	0.9	72953987.25	100000	
59	Co	89	He	106.634	ppb	1.9	37082.38	1000	
60	Ni	89	He	266.624	ppb	1.7	26304.24	1000	
63	Cu	89	He	327.156	ppb	0.4	87826.64	2000	
66	Zn	89	He	973.170	ppb	1.0	35682.10	2000	
75	As	89	He	133.756	ppb	1.5	4007.35	1000	
78	Se	89	H2	46.480	ppb	3.6	717.99	1000	
88	Sr	89	He	381.882	ppb	0.6	55823.06	2000	
95	Mo	89	He	65.138	ppb	1.5	11053.76	1000	
107	Ag	89	He	10.321	ppb	1.8	5901.48	100	
111	Cd	89	He	12.425	ppb	2.0	945.97	1000	
118	Sn	159	He	87.485	ppb	1.3	14521.64	1000	
121	Sb	159	No Gas	11.307	ppb	9.4	16151.28	1000	
137	Ba	159	No Gas	549.018	ppb	9.2	306869.28	2000	
182	W	159	No Gas	46.989	ppb	9.5	53218.75	1000	
205	Tl	209	No Gas	13.871	ppb	9.2	34230.38	1000	
208	Pb	209	No Gas	467.496	ppb	8.5	1593666.02	2000	
232	Th	209	No Gas	59.447	ppb	8.6	212308.53	1000	
238	U	209	No Gas	16.220	ppb	10.8	54319.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1137301.47	2.7	1537409.87	73.98	29.5	120.4	
Sc	45	No Gas	2968204.22	2.8	3373253.08	87.99	29.5	120.4	
Sc	45	H2	335233.51	1.4	415670.69	80.65	29.5	120.4	
Sc	45	He	67887.85	0.4	81171.76	83.63	29.5	120.4	
Ge	72	No Gas	693384.22	3.1	779333.11	88.97	29.5	120.4	
Ge	72	H2	122512.96	0.7	153246.58	79.94	29.5	120.4	
Ge	72	He	53665.18	0.8	63135.03	85	29.5	120.4	
Y	89	H2	2483396.88	0.8	2642116.11	93.99	29.5	120.4	
Y	89	He	518897.17	0.1	544041.92	95.38	29.5	120.4	
Tb	159	No Gas	7907786.68	2.3	8117023.84	97.42	29.5	120.4	
Tb	159	He	2760855.96	0.1	2866479.19	96.32	29.5	120.4	
Bi	209	No Gas	4197003.26	2.8	4424692.92	94.85	29.5	120.4	

Sample Report

Sample Name SN5717-007S

File Name 201SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:03:49 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	55.199	ppb	6.2	10726.54	100	
11	B	6	No Gas	586.029	ppb	5.7	75417.14	1000	
23	Na	45	He	7850.848	ppb	2.5	158932.15	200000	
24	Mg	45	He	95445.815	ppb	1.8	1027821.41	200000	
27	Al	45	He	146228.486	ppb	1.9	609553.79	200000	
28	Si	45	H2	3696.931	ppb	3.3	27106.24	10000	
39	K	45	He	33211.130	ppb	1.9	320885.67	200000	
40	Ca	45	H2	204549.035	ppb	1.4	14222324.09	200000	
51	V	89	He	686.537	ppb	1.5	117619.53	1000	
52	Cr	89	He	365.681	ppb	1.6	77195.59	2000	
55	Mn	89	He	5986.838	ppb	1.5	602078.10	2000	
56	Fe	89	H2	269597.035	ppb	0.6	86119038.51	100000	
59	Co	89	He	554.475	ppb	3.3	198149.75	1000	
60	Ni	89	He	729.073	ppb	2.0	73861.68	1000	
63	Cu	89	He	551.075	ppb	1.2	151788.26	2000	
66	Zn	89	He	1485.950	ppb	1.0	55974.12	2000	
75	As	89	He	184.863	ppb	1.2	5691.45	1000	
78	Se	89	H2	87.009	ppb	0.3	1385.18	1000	
88	Sr	89	He	768.998	ppb	2.0	115540.01	2000	
95	Mo	89	He	127.923	ppb	0.4	22196.45	1000	
107	Ag	89	He	48.898	ppb	3.2	28697.80	100	
111	Cd	89	He	224.092	ppb	2.7	17518.07	1000	
118	Sn	159	He	492.010	ppb	2.0	82110.80	1000	
121	Sb	159	No Gas	24.467	ppb	6.2	35459.86	1000	
137	Ba	159	No Gas	2409.333	ppb	6.6	1370363.01	2000	
182	W	159	No Gas	50.576	ppb	6.4	58286.19	1000	
205	Tl	209	No Gas	100.302	ppb	5.1	251319.16	1000	
208	Pb	209	No Gas	620.011	ppb	6.4	2146744.05	2000	
232	Th	209	No Gas	148.721	ppb	7.7	539184.95	1000	
238	U	209	No Gas	104.212	ppb	7.0	354589.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1120022.01	1.4	1537409.87	72.85	29.5	120.4	
Sc	45	No Gas	2997709.74	0.9	3373253.08	88.87	29.5	120.4	
Sc	45	H2	346834.19	0.8	415670.69	83.44	29.5	120.4	
Sc	45	He	70410.42	1.1	81171.76	86.74	29.5	120.4	
Ge	72	No Gas	701870.84	0.9	779333.11	90.06	29.5	120.4	
Ge	72	H2	124567.05	1.3	153246.58	81.29	29.5	120.4	
Ge	72	He	54772.16	1.2	63135.03	86.75	29.5	120.4	
Y	89	H2	2559755.53	0.2	2642116.11	96.88	29.5	120.4	
Y	89	He	533441.58	1.0	544041.92	98.05	29.5	120.4	
Tb	159	No Gas	8039719.67	1.1	8117023.84	99.05	29.5	120.4	
Tb	159	He	2786967.28	1.1	2866479.19	97.23	29.5	120.4	
Bi	209	No Gas	4259329.65	1.8	4424692.92	96.26	29.5	120.4	

Sample Report

Sample Name SN5717-007P

File Name 202SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:06:27 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.082	ppb	7.7	10317.35	100	
11	B	6	No Gas	592.103	ppb	5.9	76215.50	1000	
23	Na	45	He	7768.463	ppb	1.8	155725.37	200000	
24	Mg	45	He	100331.615	ppb	1.0	1069485.11	200000	
27	Al	45	He	135397.878	ppb	1.6	558680.66	200000	
28	Si	45	H2	3669.226	ppb	2.2	26328.92	10000	
39	K	45	He	34404.928	ppb	1.3	328708.00	200000	
40	Ca	45	H2	274437.603	ppb	2.1	18673223.06	200000	
51	V	89	He	646.249	ppb	0.9	110773.61	1000	
52	Cr	89	He	340.041	ppb	0.6	71813.72	2000	
55	Mn	89	He	5611.275	ppb	0.5	564531.16	2000	
56	Fe	89	H2	245719.157	ppb	1.0	77570216.65	100000	
59	Co	89	He	520.491	ppb	0.6	186095.64	1000	
60	Ni	89	He	653.716	ppb	0.4	66260.73	1000	
63	Cu	89	He	495.430	ppb	0.3	136558.01	2000	
66	Zn	89	He	1272.264	ppb	0.7	47950.91	2000	
75	As	89	He	174.786	ppb	1.8	5383.64	1000	
78	Se	89	H2	86.347	ppb	1.2	1358.51	1000	
88	Sr	89	He	786.038	ppb	0.7	118153.80	2000	
95	Mo	89	He	99.398	ppb	0.3	17280.34	1000	
107	Ag	89	He	45.267	ppb	1.4	26581.22	100	
111	Cd	89	He	213.233	ppb	0.7	16677.41	1000	
118	Sn	159	He	443.247	ppb	0.5	74884.91	1000	
121	Sb	159	No Gas	21.132	ppb	8.3	30699.06	1000	
137	Ba	159	No Gas	2340.175	ppb	7.9	1333670.17	2000	
182	W	159	No Gas	41.345	ppb	8.6	47758.03	1000	
205	Tl	209	No Gas	97.512	ppb	8.2	244881.64	1000	
208	Pb	209	No Gas	558.037	ppb	6.8	1937249.89	2000	
232	Th	209	No Gas	144.224	ppb	9.2	524081.69	1000	
238	U	209	No Gas	99.295	ppb	8.5	338659.60	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1121101.86	3.0	1537409.87	72.92	29.5	120.4	
Sc	45	No Gas	2987468.82	3.1	3373253.08	88.56	29.5	120.4	
Sc	45	H2	339423.65	0.5	415670.69	81.66	29.5	120.4	
Sc	45	He	69694.20	1.1	81171.76	85.86	29.5	120.4	
Ge	72	No Gas	698977.40	3.3	779333.11	89.69	29.5	120.4	
Ge	72	H2	124873.86	1.8	153246.58	81.49	29.5	120.4	
Ge	72	He	54733.45	0.7	63135.03	86.69	29.5	120.4	
Y	89	H2	2529672.66	0.2	2642116.11	95.74	29.5	120.4	
Y	89	He	533614.43	0.7	544041.92	98.08	29.5	120.4	
Tb	159	No Gas	8063725.30	2.9	8117023.84	99.34	29.5	120.4	
Tb	159	He	2820795.55	1.3	2866479.19	98.41	29.5	120.4	
Bi	209	No Gas	4273719.93	3.2	4424692.92	96.59	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	203_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:09:02 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.611	ppb	8.0	23978.33	25	98.44	89.8	110.2	
11	B	6	No Gas	26.964	ppb	4.1	17941.67	25	107.86	89.8	110.2	
23	Na	45	He	4804.543	ppb	0.4	487525.34	5000	96.09	89.8	110.2	
24	Mg	45	He	4720.648	ppb	0.2	261130.27	5000	94.41	89.8	110.2	
27	Al	45	He	473.220	ppb	6.6	10159.50	500	94.64	89.8	110.2	
28	Si	45	H2	461.777	ppb	2.6	16845.23	500	92.36	89.8	110.2	
39	K	45	He	4788.580	ppb	1.1	240043.72	5000	95.77	89.8	110.2	
40	Ca	45	H2	4968.007	ppb	0.9	1711630.50	5000	99.36	89.8	110.2	
51	V	89	He	22.857	ppb	0.6	18740.82	25	91.43	89.8	110.2	
52	Cr	89	He	23.297	ppb	1.0	23331.61	25	93.19	89.8	110.2	
55	Mn	89	He	24.044	ppb	4.0	11469.30	25	96.18	89.8	110.2	
56	Fe	89	H2	4811.388	ppb	1.7	6996552.61	5000	96.23	89.8	110.2	
59	Co	89	He	24.338	ppb	2.3	41225.50	25	97.35	89.8	110.2	
60	Ni	89	He	23.369	ppb	1.0	11253.81	25	93.48	89.8	110.2	
63	Cu	89	He	23.931	ppb	1.8	31545.27	25	95.72	89.8	110.2	
66	Zn	89	He	23.770	ppb	1.4	4299.72	25	95.08	89.8	110.2	
75	As	89	He	23.131	ppb	3.1	3376.11	25	92.52	89.8	110.2	
78	Se	89	H2	24.127	ppb	2.1	1746.70	25	96.51	89.8	110.2	
88	Sr	89	He	23.565	ppb	1.0	16785.29	25	94.26	89.8	110.2	
95	Mo	89	He	23.895	ppb	2.8	19652.56	25	95.58	89.8	110.2	
107	Ag	89	He	18.298	ppb	1.8	50885.08	25	73.19	89.8	110.2	> +/- 10%
111	Cd	89	He	24.583	ppb	0.8	9108.70	25	98.33	89.8	110.2	
118	Sn	159	He	22.568	ppb	2.2	19299.90	25	90.27	89.8	110.2	
121	Sb	159	No Gas	23.076	ppb	5.3	166363.34	25	92.3	89.8	110.2	
137	Ba	159	No Gas	23.474	ppb	5.0	66573.45	25	93.9	89.8	110.2	
182	W	159	No Gas	23.118	ppb	6.0	132640.54	25	92.47	89.8	110.2	
205	Tl	209	No Gas	23.697	ppb	5.0	302205.38	25	94.79	89.8	110.2	
208	Pb	209	No Gas	23.738	ppb	5.3	418529.56	25	94.95	89.8	110.2	
232	Th	209	No Gas	23.196	ppb	5.3	428179.67	25	92.78	89.8	110.2	
238	U	209	No Gas	23.280	ppb	5.1	403262.92	25	93.12	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1124429.53	2.0	1537409.87	73.14	29.5	120.4	
Sc	45	No Gas	2988619.79	2.4	3373253.08	88.6	29.5	120.4	
Sc	45	H2	343440.37	1.3	415670.69	82.62	29.5	120.4	
Sc	45	He	72212.43	0.3	81171.76	88.96	29.5	120.4	
Ge	72	No Gas	709980.70	2.7	779333.11	91.1	29.5	120.4	
Ge	72	H2	129484.01	1.0	153246.58	84.49	29.5	120.4	
Ge	72	He	57552.09	0.7	63135.03	91.16	29.5	120.4	
Y	89	H2	2328766.50	1.8	2642116.11	88.14	29.5	120.4	
Y	89	He	505607.45	1.3	544041.92	92.94	29.5	120.4	
Tb	159	No Gas	8018415.23	2.5	8117023.84	98.79	29.5	120.4	
Tb	159	He	2847710.62	0.2	2866479.19	99.35	29.5	120.4	
Bi	209	No Gas	4336970.57	2.5	4424692.92	98.02	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	204_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:11:39 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.100	ppb	23.1	113.34	0.2	Failed DoD
11	B	6	No Gas	2.823	ppb	4.1	2521.41	4	Failed DoD
23	Na	45	He	13.235	ppb	41.7	6311.76	200	
24	Mg	45	He	0.796	ppb	188.0	557.83	20	
27	Al	45	He	3.449	ppb	46.4	111.12	20	
28	Si	45	H2	3.404	ppb	57.6	333.71	100	
39	K	45	He	22.952	ppb	62.7	10164.09	200	
40	Ca	45	H2	11.540	ppb	4.5	5554.65	20	Failed DoD
51	V	89	He	0.831	ppb	11.5	831.17	1	Failed DoD
52	Cr	89	He	0.111	ppb	6.5	134.64	1	
55	Mn	89	He	0.439	ppb	12.5	207.30	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	12.450	ppb	2.7	25651.59	20	Failed DoD
59	Co	89	He	0.032	ppb	52.2	60.01	0.2	
60	Ni	89	He	0.005	ppb	382.9	38.89	0.4	
63	Cu	89	He	-0.065	ppb	N/A	290.01	0.6	
66	Zn	89	He	0.139	ppb	26.7	80.00	2	
75	As	89	He	0.063	ppb	4.6	12.67	1	
78	Se	89	H2	0.082	ppb	42.1	6.33	1	
88	Sr	89	He	0.025	ppb	60.0	22.22	1	
95	Mo	89	He	-0.038	ppb	N/A	81.12	1	
107	Ag	89	He	0.009	ppb	12.4	34.44	0.2	
111	Cd	89	He	0.022	ppb	14.2	8.52	0.2	
118	Sn	159	He	0.364	ppb	11.2	364.46	1	
121	Sb	159	No Gas	0.023	ppb	18.2	253.62	0.2	
137	Ba	159	No Gas	0.084	ppb	6.1	253.62	0.4	
182	W	159	No Gas	0.090	ppb	20.9	627.39	1	
205	Tl	209	No Gas	0.032	ppb	29.0	430.49	0.2	
208	Pb	209	No Gas	0.172	ppb	6.1	3173.73	0.2	Failed DoD
232	Th	209	No Gas	0.248	ppb	30.4	4672.80	1	
238	U	209	No Gas	0.022	ppb	28.5	380.43	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1140466.87	0.4	1537409.87	74.18	29.5	120.4	
Sc	45	No Gas	2936127.33	1.5	3373253.08	87.04	29.5	120.4	
Sc	45	H2	340766.32	2.5	415670.69	81.98	29.5	120.4	
Sc	45	He	67113.52	8.1	81171.76	82.68	29.5	120.4	
Ge	72	No Gas	704449.87	0.7	779333.11	90.39	29.5	120.4	
Ge	72	H2	126914.04	2.1	153246.58	82.82	29.5	120.4	
Ge	72	He	53458.28	7.2	63135.03	84.67	29.5	120.4	
Y	89	H2	2325907.44	1.8	2642116.11	88.03	29.5	120.4	
Y	89	He	473845.91	7.4	544041.92	87.1	29.5	120.4	
Tb	159	No Gas	7957434.88	1.4	8117023.84	98.03	29.5	120.4	
Tb	159	He	2728866.99	7.7	2866479.19	95.2	29.5	120.4	
Bi	209	No Gas	4277979.29	1.5	4424692.92	96.68	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	205_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:14:15 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.762	ppb	9.1	24413.51	25	99.05	89.8	110.2	
11	B	6	No Gas	25.266	ppb	6.8	17055.03	25	101.06	89.8	110.2	
23	Na	45	He	4862.904	ppb	1.2	497506.61	5000	97.26	89.8	110.2	
24	Mg	45	He	4735.108	ppb	1.0	264115.56	5000	94.7	89.8	110.2	
27	Al	45	He	465.804	ppb	1.7	10085.03	500	93.16	89.8	110.2	
28	Si	45	H2	479.994	ppb	2.4	18228.64	500	96	89.8	110.2	
39	K	45	He	4897.911	ppb	0.6	247354.91	5000	97.96	89.8	110.2	
40	Ca	45	H2	4952.648	ppb	2.2	1777293.74	5000	99.05	89.8	110.2	
51	V	89	He	23.832	ppb	0.5	19547.50	25	95.33	89.8	110.2	
52	Cr	89	He	23.797	ppb	1.2	23853.10	25	95.19	89.8	110.2	
55	Mn	89	He	23.784	ppb	1.2	11357.84	25	95.14	89.8	110.2	
56	Fe	89	H2	4819.880	ppb	2.0	7232195.27	5000	96.4	89.8	110.2	
59	Co	89	He	24.507	ppb	1.3	41555.35	25	98.03	89.8	110.2	
60	Ni	89	He	24.358	ppb	2.5	11738.65	25	97.43	89.8	110.2	
63	Cu	89	He	24.389	ppb	1.1	32173.28	25	97.56	89.8	110.2	
66	Zn	89	He	23.968	ppb	4.7	4338.62	25	95.87	89.8	110.2	
75	As	89	He	23.592	ppb	0.9	3447.14	25	94.37	89.8	110.2	
78	Se	89	H2	23.951	ppb	3.0	1789.04	25	95.8	89.8	110.2	
88	Sr	89	He	23.842	ppb	1.2	16998.83	25	95.37	89.8	110.2	
95	Mo	89	He	24.449	ppb	0.8	20127.71	25	97.8	89.8	110.2	
107	Ag	89	He	18.572	ppb	0.5	51700.20	25	74.29	89.8	110.2	> +/- 10%
111	Cd	89	He	24.708	ppb	1.1	9163.56	25	98.83	89.8	110.2	
118	Sn	159	He	23.047	ppb	2.3	19575.91	25	92.19	89.8	110.2	
121	Sb	159	No Gas	23.142	ppb	6.5	168005.94	25	92.57	89.8	110.2	
137	Ba	159	No Gas	23.041	ppb	7.0	65795.61	25	92.16	89.8	110.2	
182	W	159	No Gas	22.968	ppb	7.3	132704.08	25	91.87	89.8	110.2	
205	Tl	209	No Gas	23.561	ppb	7.2	302102.75	25	94.24	89.8	110.2	
208	Pb	209	No Gas	23.430	ppb	7.0	415363.45	25	93.72	89.8	110.2	
232	Th	209	No Gas	22.629	ppb	8.6	419855.65	25	90.52	89.8	110.2	
238	U	209	No Gas	22.848	ppb	8.2	397819.53	25	91.39	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1139085.80	3.5	1537409.87	74.09	29.5	120.4	
Sc	45	No Gas	3057586.49	2.9	3373253.08	90.64	29.5	120.4	
Sc	45	H2	357774.83	1.5	415670.69	86.07	29.5	120.4	
Sc	45	He	72819.33	1.0	81171.76	89.71	29.5	120.4	
Ge	72	No Gas	732206.85	3.2	779333.11	93.95	29.5	120.4	
Ge	72	H2	134316.36	0.7	153246.58	87.65	29.5	120.4	
Ge	72	He	57907.39	0.5	63135.03	91.72	29.5	120.4	
Y	89	H2	2402796.17	1.1	2642116.11	90.94	29.5	120.4	
Y	89	He	506043.61	0.3	544041.92	93.02	29.5	120.4	
Tb	159	No Gas	8077988.91	3.0	8117023.84	99.52	29.5	120.4	
Tb	159	He	2828839.85	0.5	2866479.19	98.69	29.5	120.4	
Bi	209	No Gas	4364155.09	3.5	4424692.92	98.63	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	206_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:16:53 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.101	ppb	13.0	116.67	0.2	Failed DoD
11	B	6	No Gas	2.235	ppb	2.5	2195.80	4	Failed DoD
23	Na	45	He	13.687	ppb	46.4	6612.25	200	
24	Mg	45	He	1.699	ppb	324.4	622.30	20	
27	Al	45	He	2.343	ppb	87.7	91.12	20	
28	Si	45	H2	4.621	ppb	25.3	393.78	100	
39	K	45	He	19.842	ppb	38.0	10404.12	200	
40	Ca	45	H2	7.049	ppb	4.9	4188.55	20	
51	V	89	He	0.617	ppb	4.2	685.60	1	Failed DoD
52	Cr	89	He	0.122	ppb	13.1	147.98	1	
55	Mn	89	He	0.336	ppb	58.6	165.31	0.4	Failed DoD
56	Fe	89	H2	6.263	ppb	2.0	17309.90	20	
59	Co	89	He	0.039	ppb	51.1	71.12	0.2	
60	Ni	89	He	0.005	ppb	590.9	40.00	0.4	
63	Cu	89	He	-0.094	ppb	N/A	261.12	0.6	
66	Zn	89	He	0.095	ppb	82.7	74.45	2	
75	As	89	He	0.088	ppb	33.5	16.33	1	
78	Se	89	H2	0.049	ppb	33.7	4.17	1	
88	Sr	89	He	0.029	ppb	78.4	25.56	1	
95	Mo	89	He	-0.006	ppb	N/A	107.78	1	
107	Ag	89	He	0.015	ppb	48.5	50.00	0.2	
111	Cd	89	He	0.023	ppb	72.8	9.26	0.2	
118	Sn	159	He	0.336	ppb	15.5	346.69	1	
121	Sb	159	No Gas	0.033	ppb	35.3	330.38	0.2	
137	Ba	159	No Gas	0.064	ppb	50.8	196.88	0.4	
182	W	159	No Gas	0.118	ppb	8.6	800.92	1	
205	Tl	209	No Gas	0.038	ppb	56.5	507.25	0.2	
208	Pb	209	No Gas	0.106	ppb	9.2	2062.39	0.2	Failed DoD
232	Th	209	No Gas	0.379	ppb	47.6	7150.25	1	
238	U	209	No Gas	0.032	ppb	25.7	553.97	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1170428.42	1.6	1537409.87	76.13	29.5	120.4	
Sc	45	No Gas	3009328.75	3.1	3373253.08	89.21	29.5	120.4	
Sc	45	H2	354805.40	1.1	415670.69	85.36	29.5	120.4	
Sc	45	He	69438.21	3.2	81171.76	85.54	29.5	120.4	
Ge	72	No Gas	721733.14	2.8	779333.11	92.61	29.5	120.4	
Ge	72	H2	133487.54	0.9	153246.58	87.11	29.5	120.4	
Ge	72	He	54836.58	2.4	63135.03	86.86	29.5	120.4	
Y	89	H2	2414447.85	0.6	2642116.11	91.38	29.5	120.4	
Y	89	He	483743.60	3.2	544041.92	88.92	29.5	120.4	
Tb	159	No Gas	8095459.95	3.8	8117023.84	99.73	29.5	120.4	
Tb	159	He	2773091.69	3.0	2866479.19	96.74	29.5	120.4	
Bi	209	No Gas	4364443.66	3.0	4424692.92	98.64	29.5	120.4	

Sample Report

Sample Name SN5717-008

File Name 207SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:19:26 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.034	ppb	2.7	972.29	100	
11	B	6	No Gas	94.918	ppb	4.6	12534.72	1000	
23	Na	45	He	1392.077	ppb	2.1	32355.77	200000	
24	Mg	45	He	252990.072	ppb	1.8	2704144.68	200000	
27	Al	45	He	88139.410	ppb	1.5	364832.59	200000	
28	Si	45	H2	3319.315	ppb	2.8	24255.07	10000	
39	K	45	He	16745.128	ppb	1.2	165388.37	200000	
40	Ca	45	H2	544173.021	ppb	0.6	37665768.60	200000	
51	V	89	He	180.436	ppb	0.8	30619.57	1000	
52	Cr	89	He	128.943	ppb	2.0	26833.80	2000	
55	Mn	89	He	4576.085	ppb	1.3	453323.79	2000	
56	Fe	89	H2	182292.806	ppb	0.2	57028658.32	100000	
59	Co	89	He	72.994	ppb	3.3	25703.03	1000	
60	Ni	89	He	180.731	ppb	0.7	18067.71	1000	
63	Cu	89	He	251.461	ppb	1.6	68449.23	2000	
66	Zn	89	He	597.265	ppb	3.5	22196.11	2000	
75	As	89	He	67.594	ppb	1.5	2052.71	1000	
78	Se	89	H2	1.767	ppb	12.3	28.00	1000	
88	Sr	89	He	442.784	ppb	1.0	65541.45	2000	
95	Mo	89	He	14.627	ppb	1.2	2608.12	1000	
107	Ag	89	He	0.502	ppb	8.9	301.13	100	
111	Cd	89	He	1.838	ppb	6.4	142.59	1000	
118	Sn	159	He	50.628	ppb	2.9	8658.67	1000	
121	Sb	159	No Gas	2.871	ppb	6.9	4342.25	1000	
137	Ba	159	No Gas	464.113	ppb	5.8	270132.99	2000	
182	W	159	No Gas	0.313	ppb	12.5	487.22	1000	
205	Tl	209	No Gas	2.727	ppb	7.4	6959.66	1000	
208	Pb	209	No Gas	602.817	ppb	7.2	2118661.01	2000	
232	Th	209	No Gas	35.488	ppb	8.7	130702.60	1000	
238	U	209	No Gas	6.640	ppb	11.4	22919.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1098520.20	2.2	1537409.87	71.45	29.5	120.4	
Sc	45	No Gas	3001870.59	2.3	3373253.08	88.99	29.5	120.4	
Sc	45	H2	345279.02	0.9	415670.69	83.07	29.5	120.4	
Sc	45	He	69911.12	1.2	81171.76	86.13	29.5	120.4	
Ge	72	No Gas	707730.97	2.6	779333.11	90.81	29.5	120.4	
Ge	72	H2	125452.35	0.9	153246.58	81.86	29.5	120.4	
Ge	72	He	55017.83	1.1	63135.03	87.14	29.5	120.4	
Y	89	H2	2506814.59	0.9	2642116.11	94.88	29.5	120.4	
Y	89	He	525453.78	1.0	544041.92	96.58	29.5	120.4	
Tb	159	No Gas	8229455.99	2.1	8117023.84	101.39	29.5	120.4	
Tb	159	He	2834851.69	0.6	2866479.19	98.9	29.5	120.4	
Bi	209	No Gas	4326455.68	3.0	4424692.92	97.78	29.5	120.4	

Sample Report

Sample Name SN5717-009

File Name 208SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:22:05 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.310	ppb	2.3	1210.09	100	
11	B	6	No Gas	125.167	ppb	4.6	16248.48	1000	
23	Na	45	He	1051.475	ppb	3.4	26276.65	200000	
24	Mg	45	He	73800.008	ppb	0.7	805743.72	200000	
27	Al	45	He	107867.130	ppb	1.4	455803.63	200000	
28	Si	45	H2	3535.592	ppb	5.3	25582.28	10000	
39	K	45	He	19962.349	ppb	1.7	199400.23	200000	
40	Ca	45	H2	238891.540	ppb	1.0	16385928.78	200000	
51	V	89	He	192.537	ppb	0.9	32801.14	1000	
52	Cr	89	He	167.164	ppb	0.5	34935.89	2000	
55	Mn	89	He	4133.956	ppb	1.3	411349.07	2000	
56	Fe	89	H2	208315.642	ppb	1.0	65444447.98	100000	
59	Co	89	He	82.569	ppb	1.6	29205.46	1000	
60	Ni	89	He	230.237	ppb	2.3	23108.64	1000	
63	Cu	89	He	280.728	ppb	1.2	76708.57	2000	
66	Zn	89	He	647.501	ppb	1.7	24168.30	2000	
75	As	89	He	59.770	ppb	3.6	1823.66	1000	
78	Se	89	H2	1.599	ppb	8.1	25.50	1000	
88	Sr	89	He	364.851	ppb	1.5	54244.30	2000	
95	Mo	89	He	11.643	ppb	4.3	2110.24	1000	
107	Ag	89	He	0.385	ppb	8.6	234.46	100	
111	Cd	89	He	1.830	ppb	7.0	142.60	1000	
118	Sn	159	He	49.486	ppb	4.3	8547.45	1000	
121	Sb	159	No Gas	3.400	ppb	7.5	5193.51	1000	
137	Ba	159	No Gas	521.908	ppb	4.8	307813.99	2000	
182	W	159	No Gas	0.233	ppb	41.3	397.12	1000	
205	Tl	209	No Gas	2.748	ppb	7.7	7170.10	1000	
208	Pb	209	No Gas	822.552	ppb	4.9	2956634.45	2000	
232	Th	209	No Gas	40.883	ppb	4.7	154024.80	1000	
238	U	209	No Gas	5.640	ppb	4.3	19931.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1094132.71	3.2	1537409.87	71.17	29.5	120.4	
Sc	45	No Gas	3040150.90	3.5	3373253.08	90.13	29.5	120.4	
Sc	45	H2	342147.60	0.4	415670.69	82.31	29.5	120.4	
Sc	45	He	71369.32	0.9	81171.76	87.92	29.5	120.4	
Ge	72	No Gas	720049.72	4.1	779333.11	92.39	29.5	120.4	
Ge	72	H2	125712.52	1.5	153246.58	82.03	29.5	120.4	
Ge	72	He	55691.58	0.9	63135.03	88.21	29.5	120.4	
Y	89	H2	2517434.09	0.2	2642116.11	95.28	29.5	120.4	
Y	89	He	527778.97	0.5	544041.92	97.01	29.5	120.4	
Tb	159	No Gas	8339593.00	2.8	8117023.84	102.74	29.5	120.4	
Tb	159	He	2862997.04	0.9	2866479.19	99.88	29.5	120.4	
Bi	209	No Gas	4423025.58	3.1	4424692.92	99.96	29.5	120.4	

Sample Report

Sample Name SN5717-012

File Name 209SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:24:38 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.794	ppb	7.8	1097.86	100	
11	B	6	No Gas	89.360	ppb	4.9	11642.86	1000	
23	Na	45	He	717.861	ppb	4.8	21018.83	200000	
24	Mg	45	He	51236.378	ppb	2.1	598082.14	200000	
27	Al	45	He	92205.481	ppb	1.5	416486.67	200000	
28	Si	45	H2	3099.026	ppb	0.8	24014.60	10000	
39	K	45	He	17005.866	ppb	1.7	183122.75	200000	
40	Ca	45	H2	78001.794	ppb	2.4	5722992.41	200000	
51	V	89	He	170.264	ppb	1.1	31215.40	1000	
52	Cr	89	He	137.460	ppb	1.4	30892.02	2000	
55	Mn	89	He	3327.072	ppb	1.6	355925.40	2000	
56	Fe	89	H2	226125.639	ppb	3.0	75365806.49	100000	
59	Co	89	He	82.759	ppb	4.2	31463.88	1000	
60	Ni	89	He	205.171	ppb	0.9	22147.07	1000	
63	Cu	89	He	275.182	ppb	2.1	80844.95	2000	
66	Zn	89	He	733.266	ppb	1.5	29416.21	2000	
75	As	89	He	93.858	ppb	2.6	3076.02	1000	
78	Se	89	H2	1.635	ppb	9.5	27.67	1000	
88	Sr	89	He	148.545	ppb	2.6	23745.62	2000	
95	Mo	89	He	27.594	ppb	2.9	5197.84	1000	
107	Ag	89	He	0.487	ppb	10.7	315.57	100	
111	Cd	89	He	1.701	ppb	2.2	142.60	1000	
118	Sn	159	He	49.475	ppb	1.5	8797.61	1000	
121	Sb	159	No Gas	4.182	ppb	3.4	6308.58	1000	
137	Ba	159	No Gas	479.083	ppb	2.4	280049.77	2000	
182	W	159	No Gas	0.159	ppb	13.6	307.01	1000	
205	Tl	209	No Gas	2.729	ppb	0.3	7049.84	1000	
208	Pb	209	No Gas	320.185	ppb	3.0	1139409.53	2000	
232	Th	209	No Gas	48.780	ppb	2.3	181866.20	1000	
238	U	209	No Gas	6.519	ppb	2.4	22799.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1079433.44	0.7	1537409.87	70.21	29.5	120.4	
Sc	45	No Gas	3060167.22	1.7	3373253.08	90.72	29.5	120.4	
Sc	45	H2	366013.41	2.2	415670.69	88.05	29.5	120.4	
Sc	45	He	76292.96	1.3	81171.76	93.99	29.5	120.4	
Ge	72	No Gas	728694.38	1.4	779333.11	93.5	29.5	120.4	
Ge	72	H2	133623.03	1.6	153246.58	87.19	29.5	120.4	
Ge	72	He	59677.06	0.8	63135.03	94.52	29.5	120.4	
Y	89	H2	2671743.31	2.1	2642116.11	101.12	29.5	120.4	
Y	89	He	567486.08	1.5	544041.92	104.31	29.5	120.4	
Tb	159	No Gas	8256604.25	1.6	8117023.84	101.72	29.5	120.4	
Tb	159	He	2946990.96	0.9	2866479.19	102.81	29.5	120.4	
Bi	209	No Gas	4373593.75	1.1	4424692.92	98.85	29.5	120.4	

Sample Report

Sample Name SN5717-018

File Name 210SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:27:22 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.394	ppb	10.5	907.84	100	
11	B	6	No Gas	43.543	ppb	3.5	6521.70	1000	
23	Na	45	He	360.825	ppb	3.8	14049.24	200000	
24	Mg	45	He	21370.120	ppb	0.6	260965.12	200000	
27	Al	45	He	117079.479	ppb	0.7	552433.67	200000	
28	Si	45	H2	3528.773	ppb	18.1	28902.85	10000	
39	K	45	He	8240.936	ppb	1.6	98323.11	200000	
40	Ca	45	H2	3359.533	ppb	14.2	263169.11	200000	
51	V	89	He	231.418	ppb	1.2	41925.47	1000	
52	Cr	89	He	130.758	ppb	1.5	29101.92	2000	
55	Mn	89	He	2634.487	ppb	0.6	279100.20	2000	
56	Fe	89	H2	201060.101	ppb	13.4	66983617.92	100000	
59	Co	89	He	60.325	ppb	0.3	22719.95	1000	
60	Ni	89	He	148.660	ppb	1.3	15899.58	1000	
63	Cu	89	He	156.488	ppb	1.4	45716.86	2000	
66	Zn	89	He	644.528	ppb	1.0	25613.12	2000	
75	As	89	He	72.609	ppb	1.2	2357.80	1000	
78	Se	89	H2	4.668	ppb	17.0	77.83	1000	
88	Sr	89	He	35.556	ppb	2.1	5634.70	2000	
95	Mo	89	He	16.852	ppb	2.6	3193.83	1000	
107	Ag	89	He	0.636	ppb	10.9	404.46	100	
111	Cd	89	He	2.540	ppb	4.8	210.37	1000	
118	Sn	159	He	58.884	ppb	1.8	10564.50	1000	
121	Sb	159	No Gas	2.425	ppb	3.2	3818.11	1000	
137	Ba	159	No Gas	332.911	ppb	3.3	200934.66	2000	
182	W	159	No Gas	0.408	ppb	16.0	620.71	1000	
205	Tl	209	No Gas	2.184	ppb	8.7	5841.24	1000	
208	Pb	209	No Gas	933.492	ppb	3.4	3433605.96	2000	
232	Th	209	No Gas	23.278	ppb	2.9	89815.02	1000	
238	U	209	No Gas	4.939	ppb	4.5	17859.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1172464.95	1.6	1537409.87	76.26	29.5	120.4	
Sc	45	No Gas	3372483.15	1.1	3373253.08	99.98	29.5	120.4	
Sc	45	H2	392004.70	10.7	415670.69	94.31	29.5	120.4	
Sc	45	He	79690.17	1.1	81171.76	98.17	29.5	120.4	
Ge	72	No Gas	796901.21	2.2	779333.11	102.25	29.5	120.4	
Ge	72	H2	142184.70	8.7	153246.58	92.78	29.5	120.4	
Ge	72	He	62363.79	1.1	63135.03	98.78	29.5	120.4	
Y	89	H2	2692316.21	9.5	2642116.11	101.9	29.5	120.4	
Y	89	He	561875.83	0.5	544041.92	103.28	29.5	120.4	
Tb	159	No Gas	8527506.54	0.9	8117023.84	105.06	29.5	120.4	
Tb	159	He	2977235.72	0.3	2866479.19	103.86	29.5	120.4	
Bi	209	No Gas	4522760.83	1.3	4424692.92	102.22	29.5	120.4	

Sample Report

Sample Name SN5717-018L

File Name 211SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:29:59 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.868	ppb	18.6	260.01	100	
11	B	6	No Gas	54.758	ppb	4.4	2228.04	1000	
23	Na	45	He	-29.538	ppb	N/A	5907.80	200000	
24	Mg	45	He	21811.536	ppb	4.7	53554.09	200000	
27	Al	45	He	123345.830	ppb	4.8	115983.76	200000	
28	Si	45	H2	3828.507	ppb	6.9	6610.41	10000	
39	K	45	He	8898.803	ppb	6.8	29657.48	200000	
40	Ca	45	H2	3441.780	ppb	1.8	56543.40	200000	
51	V	89	He	240.757	ppb	6.7	8668.50	1000	
52	Cr	89	He	135.884	ppb	4.9	5912.18	2000	
55	Mn	89	He	2771.023	ppb	4.6	57131.73	2000	
56	Fe	89	H2	207797.967	ppb	1.2	13738648.48	100000	
59	Co	89	He	64.028	ppb	3.2	4701.14	1000	
60	Ni	89	He	157.525	ppb	10.9	3306.07	1000	
63	Cu	89	He	163.172	ppb	3.4	9618.11	2000	
66	Zn	89	He	692.142	ppb	4.9	5403.46	2000	
75	As	89	He	75.182	ppb	6.0	478.73	1000	
78	Se	89	H2	5.015	ppb	20.4	17.00	1000	
88	Sr	89	He	39.126	ppb	6.1	1211.21	2000	
95	Mo	89	He	15.343	ppb	10.7	670.04	1000	
107	Ag	89	He	0.653	ppb	40.9	88.89	100	
111	Cd	89	He	2.835	ppb	4.6	46.67	1000	
118	Sn	159	He	61.153	ppb	6.3	2216.94	1000	
121	Sb	159	No Gas	2.515	ppb	5.9	847.63	1000	
137	Ba	159	No Gas	342.156	ppb	2.3	40215.75	2000	
182	W	159	No Gas	0.271	ppb	60.3	183.54	1000	
205	Tl	209	No Gas	2.417	ppb	10.8	1284.84	1000	
208	Pb	209	No Gas	971.403	ppb	0.5	698641.91	2000	
232	Th	209	No Gas	22.281	ppb	2.8	16941.91	1000	
238	U	209	No Gas	4.946	ppb	3.6	3497.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1204016.40	1.2	1537409.87	78.31	29.5	120.4	
Sc	45	No Gas	3387506.21	1.9	3373253.08	100.42	29.5	120.4	
Sc	45	H2	396164.22	0.5	415670.69	95.31	29.5	120.4	
Sc	45	He	79478.37	4.1	81171.76	97.91	29.5	120.4	
Ge	72	No Gas	791627.83	1.4	779333.11	101.58	29.5	120.4	
Ge	72	H2	148808.98	0.9	153246.58	97.1	29.5	120.4	
Ge	72	He	62906.81	2.6	63135.03	99.64	29.5	120.4	
Y	89	H2	2647872.31	1.1	2642116.11	100.22	29.5	120.4	
Y	89	He	547376.89	4.3	544041.92	100.61	29.5	120.4	
Tb	159	No Gas	8302169.88	1.9	8117023.84	102.28	29.5	120.4	
Tb	159	He	2934797.32	4.3	2866479.19	102.38	29.5	120.4	
Bi	209	No Gas	4419685.15	0.9	4424692.92	99.89	29.5	120.4	

Sample Report

Sample Name SN5717-018A

File Name 212SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:32:40 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	13.726	ppb	4.6	2953.74	100	
11	B	6	No Gas	237.424	ppb	4.9	34124.33	1000	
23	Na	45	He	10106.417	ppb	1.8	225936.68	200000	
24	Mg	45	He	22069.523	ppb	1.2	264905.83	200000	
27	Al	45	He	117632.991	ppb	1.5	545616.82	200000	
28	Si	45	H2	7989.006	ppb	2.6	65007.83	10000	
39	K	45	He	17996.826	ppb	1.3	198389.18	200000	
40	Ca	45	H2	4260.493	ppb	1.8	331989.69	200000	
51	V	89	He	272.691	ppb	1.6	48508.92	1000	
52	Cr	89	He	174.589	ppb	0.5	38174.30	2000	
55	Mn	89	He	2613.457	ppb	0.6	272098.26	2000	
56	Fe	89	H2	198903.640	ppb	1.1	65457881.41	100000	
59	Co	89	He	68.195	ppb	0.8	25239.92	1000	
60	Ni	89	He	163.940	ppb	1.9	17227.79	1000	
63	Cu	89	He	181.161	ppb	0.8	51947.27	2000	
66	Zn	89	He	739.925	ppb	1.6	28887.41	2000	
75	As	89	He	117.756	ppb	0.3	3754.92	1000	
78	Se	89	H2	52.734	ppb	4.3	864.82	1000	
88	Sr	89	He	84.084	ppb	0.5	13085.59	2000	
95	Mo	89	He	64.985	ppb	3.0	11735.44	1000	
107	Ag	89	He	11.008	ppb	1.6	6697.45	100	
111	Cd	89	He	11.981	ppb	1.0	970.79	1000	
118	Sn	159	He	104.888	ppb	3.2	18457.73	1000	
121	Sb	159	No Gas	12.690	ppb	3.1	19168.51	1000	
137	Ba	159	No Gas	343.832	ppb	3.8	203320.28	2000	
182	W	159	No Gas	48.100	ppb	5.2	57625.83	1000	
205	Tl	209	No Gas	12.095	ppb	4.9	31216.38	1000	
208	Pb	209	No Gas	920.447	ppb	4.5	3280865.72	2000	
232	Th	209	No Gas	32.383	ppb	6.4	120983.20	1000	
238	U	209	No Gas	14.519	ppb	4.7	50863.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1235066.05	2.7	1537409.87	80.33	29.5	120.4	
Sc	45	No Gas	3418871.62	2.0	3373253.08	101.35	29.5	120.4	
Sc	45	H2	386593.93	1.5	415670.69	93	29.5	120.4	
Sc	45	He	78344.53	1.3	81171.76	96.52	29.5	120.4	
Ge	72	No Gas	795077.24	2.5	779333.11	102.02	29.5	120.4	
Ge	72	H2	141883.86	0.9	153246.58	92.59	29.5	120.4	
Ge	72	He	61040.78	0.4	63135.03	96.68	29.5	120.4	
Y	89	H2	2637097.03	1.2	2642116.11	99.81	29.5	120.4	
Y	89	He	552200.55	0.2	544041.92	101.5	29.5	120.4	
Tb	159	No Gas	8357571.89	1.6	8117023.84	102.96	29.5	120.4	
Tb	159	He	2929694.68	0.8	2866479.19	102.21	29.5	120.4	
Bi	209	No Gas	4384346.48	2.0	4424692.92	99.09	29.5	120.4	

Sample Report

Sample Name SN5717-018S

File Name 213SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:35:17 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.814	ppb	5.4	10696.53	100	
11	B	6	No Gas	480.299	ppb	4.7	68425.75	1000	
23	Na	45	He	6713.451	ppb	1.4	155856.55	200000	
24	Mg	45	He	26449.768	ppb	0.9	325237.82	200000	
27	Al	45	He	120792.738	ppb	1.3	574174.88	200000	
28	Si	45	H2	4162.661	ppb	6.0	34313.64	10000	
39	K	45	He	19814.010	ppb	1.2	222724.03	200000	
40	Ca	45	H2	5915.273	ppb	2.6	464694.85	200000	
51	V	89	He	662.903	ppb	1.2	119675.63	1000	
52	Cr	89	He	310.688	ppb	1.1	69104.25	2000	
55	Mn	89	He	2573.619	ppb	0.5	272702.52	2000	
56	Fe	89	H2	177316.632	ppb	1.7	58473084.78	100000	
59	Co	89	He	512.684	ppb	0.7	193052.80	1000	
60	Ni	89	He	569.078	ppb	1.0	60752.57	1000	
63	Cu	89	He	369.784	ppb	0.4	107455.11	2000	
66	Zn	89	He	1019.020	ppb	1.9	40459.56	2000	
75	As	89	He	153.043	ppb	1.6	4965.76	1000	
78	Se	89	H2	91.449	ppb	4.5	1502.35	1000	
88	Sr	89	He	511.894	ppb	0.9	81040.12	2000	
95	Mo	89	He	104.317	ppb	1.2	19092.79	1000	
107	Ag	89	He	47.751	ppb	1.4	29532.87	100	
111	Cd	89	He	222.004	ppb	0.9	18287.26	1000	
118	Sn	159	He	486.655	ppb	1.4	86188.73	1000	
121	Sb	159	No Gas	37.012	ppb	6.7	56293.84	1000	
137	Ba	159	No Gas	2085.873	ppb	6.5	1246239.18	2000	
182	W	159	No Gas	52.903	ppb	5.0	64059.62	1000	
205	Tl	209	No Gas	93.496	ppb	5.7	244230.22	1000	
208	Pb	209	No Gas	980.813	ppb	6.3	3540222.28	2000	
232	Th	209	No Gas	81.847	ppb	6.4	309470.18	1000	
238	U	209	No Gas	94.135	ppb	6.1	333954.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237400.18	1.5	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3435261.29	3.8	3373253.08	101.84	29.5	120.4	
Sc	45	H2	390533.85	3.0	415670.69	93.95	29.5	120.4	
Sc	45	He	80285.65	1.5	81171.76	98.91	29.5	120.4	
Ge	72	No Gas	797541.46	3.8	779333.11	102.34	29.5	120.4	
Ge	72	H2	142440.27	2.4	153246.58	92.95	29.5	120.4	
Ge	72	He	62034.55	0.5	63135.03	98.26	29.5	120.4	
Y	89	H2	2642980.34	1.8	2642116.11	100.03	29.5	120.4	
Y	89	He	561992.87	1.0	544041.92	103.3	29.5	120.4	
Tb	159	No Gas	8454678.83	3.7	8117023.84	104.16	29.5	120.4	
Tb	159	He	2957026.10	0.7	2866479.19	103.16	29.5	120.4	
Bi	209	No Gas	4444012.76	3.7	4424692.92	100.44	29.5	120.4	

Sample Report

Sample Name SN5717-018P

File Name 214SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:37:58 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	54.718	ppb	2.2	11709.55	100	
11	B	6	No Gas	498.701	ppb	2.6	70780.21	1000	
23	Na	45	He	6878.642	ppb	0.5	162710.32	200000	
24	Mg	45	He	30787.641	ppb	0.9	385959.85	200000	
27	Al	45	He	134001.543	ppb	0.4	649575.33	200000	
28	Si	45	H2	4388.781	ppb	8.5	37067.69	10000	
39	K	45	He	20820.308	ppb	0.5	238112.49	200000	
40	Ca	45	H2	5499.073	ppb	1.3	442484.57	200000	
51	V	89	He	692.845	ppb	0.3	127057.68	1000	
52	Cr	89	He	334.199	ppb	0.4	75523.08	2000	
55	Mn	89	He	2793.935	ppb	0.6	300771.18	2000	
56	Fe	89	H2	219001.202	ppb	1.3	73941884.28	100000	
59	Co	89	He	538.704	ppb	0.9	206094.50	1000	
60	Ni	89	He	615.167	ppb	0.6	66719.50	1000	
63	Cu	89	He	407.284	ppb	0.7	120193.97	2000	
66	Zn	89	He	1092.297	ppb	1.2	44059.31	2000	
75	As	89	He	185.345	ppb	0.6	6108.01	1000	
78	Se	89	H2	96.330	ppb	2.6	1620.69	1000	
88	Sr	89	He	522.149	ppb	0.7	83980.58	2000	
95	Mo	89	He	106.680	ppb	1.5	19833.88	1000	
107	Ag	89	He	48.276	ppb	1.5	30332.48	100	
111	Cd	89	He	224.718	ppb	0.5	18805.75	1000	
118	Sn	159	He	482.909	ppb	1.2	86006.19	1000	
121	Sb	159	No Gas	51.964	ppb	3.5	78787.48	1000	
137	Ba	159	No Gas	2205.690	ppb	2.0	1314380.32	2000	
182	W	159	No Gas	51.456	ppb	2.8	62124.04	1000	
205	Tl	209	No Gas	97.961	ppb	2.4	253062.63	1000	
208	Pb	209	No Gas	897.357	ppb	2.8	3203650.87	2000	
232	Th	209	No Gas	100.101	ppb	3.3	374304.21	1000	
238	U	209	No Gas	97.624	ppb	3.7	342513.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232851.53	1.0	1537409.87	80.19	29.5	120.4	
Sc	45	No Gas	3443227.22	0.7	3373253.08	102.07	29.5	120.4	
Sc	45	H2	399734.45	1.7	415670.69	96.17	29.5	120.4	
Sc	45	He	81869.22	0.7	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	800442.27	1.1	779333.11	102.71	29.5	120.4	
Ge	72	H2	144729.91	1.4	153246.58	94.44	29.5	120.4	
Ge	72	He	63083.00	1.5	63135.03	99.92	29.5	120.4	
Y	89	H2	2705823.44	1.4	2642116.11	102.41	29.5	120.4	
Y	89	He	570958.32	0.6	544041.92	104.95	29.5	120.4	
Tb	159	No Gas	8419932.58	0.6	8117023.84	103.73	29.5	120.4	
Tb	159	He	2973809.33	0.5	2866479.19	103.74	29.5	120.4	
Bi	209	No Gas	4389368.80	0.8	4424692.92	99.2	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW1
File Name	215_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:40:36 AM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.041	ppb	36.5	58.89	0.1	
B	11	6	No Gas	2.305	ppb	13.7	2363.61	2	200.8 PB Fails DoD
Na	23	45	He	-20.706	ppb	N/A	3791.39	100	
Mg	24	45	He	-2.062	ppb	N/A	486.71	10	
Al	27	45	He	3.844	ppb	9.1	141.12	10	
Si	28	45	H2	4.820	ppb	29.7	457.18	50	
K	39	45	He	24.786	ppb	67.1	12264.81	100	
Ca	40	45	H2	1.579	ppb	29.0	2546.99	10	
V	51	89	He	0.070	ppb	20.6	294.46	0.5	
Cr	52	89	He	0.026	ppb	62.4	62.66	0.5	
Mn	55	89	He	0.261	ppb	6.5	146.64	0.2	200.8 PB Fails DoD
Fe	56	89	H2	16.388	ppb	12.6	35578.08	10	200.8 PB Fails DoD
Co	59	89	He	0.024	ppb	41.8	51.11	0.1	
Ni	60	89	He	-0.012	ppb	N/A	35.56	0.2	
Cu	63	89	He	-0.206	ppb	N/A	135.56	0.3	
Zn	66	89	He	0.088	ppb	60.4	82.23	1	
As	75	89	He	0.023	ppb	79.5	8.33	0.5	
Se	78	89	H2	0.023	ppb	87.7	2.33	0.5	
Sr	88	89	He	0.019	ppb	77.2	21.11	0.5	
Mo	95	89	He	-0.108	ppb	N/A	31.11	0.5	
Ag	107	89	He	0.002	ppb	151.0	16.67	0.1	
Cd	111	89	He	0.009	ppb	43.7	4.81	0.1	
Sn	118	159	He	0.062	ppb	25.0	124.45	0.5	
Sb	121	159	No Gas	0.003	ppb	227.0	116.80	0.1	
Ba	137	159	No Gas	0.261	ppb	15.7	777.56	0.2	200.8 PB Fails DoD
W	182	159	No Gas	0.008	ppb	114.9	163.52	0.5	
Tl	205	209	No Gas	0.022	ppb	21.3	313.70	0.1	
[Pb]	206	209	No Gas	0.167	ppb	10.3	784.24	0.1	200.8 PB Fails DoD
[Pb]	207	209	No Gas	0.168	ppb	10.8	690.79	0.1	200.8 PB Fails DoD
Pb	208	209	No Gas	0.159	ppb	11.8	2993.50	0.1	200.8 PB Fails DoD
Th	232	209	No Gas	0.046	ppb	14.2	1018.04	0.5	
U	238	209	No Gas	0.016	ppb	13.2	276.98	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234137.00	1.5	1537409.87	80.27	29.5	120.4	
Sc	45	No Gas	3472706.67	1.0	3373253.08	102.95	29.5	120.4	
Sc	45	H2	403465.11	3.9	415670.69	97.06	29.5	120.4	
Sc	45	He	80313.02	6.1	81171.76	98.94	29.5	120.4	
Ge	72	No Gas	805180.52	0.2	779333.11	103.32	29.5	120.4	
Ge	72	H2	150998.13	2.6	153246.58	98.53	29.5	120.4	
Ge	72	He	63529.49	4.5	63135.03	100.62	29.5	120.4	
Y	89	H2	2644369.30	4.2	2642116.11	100.09	29.5	120.4	
Y	89	He	543927.57	6.8	544041.92	99.98	29.5	120.4	
Tb	159	No Gas	8232164.81	0.5	8117023.84	101.42	29.5	120.4	
Tb	159	He	2878391.03	6.7	2866479.19	100.42	29.5	120.4	
Bi	209	No Gas	4361437.95	0.3	4424692.92	98.57	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW1
File Name	216_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:43:19 AM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High
Be	9	6	No Gas	49.550	ppb	4.1	11253.64	50	19.82	79.5	120.4
B	11	6	No Gas	991.068	ppb	3.7	148491.95	500	39.64	79.5	120.4
Na	23	45	He	14329.583	ppb	4.6	319821.49	7500	38.21	79.5	120.4
Mg	24	45	He	10167.574	ppb	4.8	123105.96	5000	40.67	79.5	120.4
Al	27	45	He	1896.940	ppb	7.3	8893.09	2000	18.97	79.5	120.4
Si	28	45	H2	2141.118	ppb	4.5	18198.48	1000	42.82	79.5	120.4
K	39	45	He	20687.081	ppb	4.9	227823.30	10000	41.37	79.5	120.4
Ca	40	45	H2	5103.925	ppb	3.3	410936.85	2500	40.83	79.5	120.4
V	51	89	He	512.911	ppb	4.0	87674.57	500	20.52	79.5	120.4
Cr	52	89	He	205.327	ppb	4.1	43231.16	200	20.53	79.5	120.4
Mn	55	89	He	510.530	ppb	3.9	51204.99	500	20.42	79.5	120.4
Fe	56	89	H2	1066.631	ppb	3.1	355350.01	1000	21.33	79.5	120.4
Co	59	89	He	529.985	ppb	4.4	188839.39	500	21.2	79.5	120.4
Ni	60	89	He	513.676	ppb	4.3	51899.15	500	20.55	79.5	120.4
Cu	63	89	He	264.657	ppb	5.3	72873.86	250	21.17	79.5	120.4
Zn	66	89	He	513.717	ppb	3.5	19338.45	500	20.55	79.5	120.4
As	75	89	He	212.635	ppb	4.9	6525.24	100	42.53	79.5	120.4
Se	78	89	H2	201.044	ppb	3.5	3257.57	100	40.21	79.5	120.4
Sr	88	89	He	1043.564	ppb	3.8	156347.21	500	41.74	79.5	120.4
Mo	95	89	He	207.323	ppb	3.7	35791.01	100	41.46	79.5	120.4
Ag	107	89	He	53.670	ppb	4.3	31405.99	50	21.47	79.5	120.4
Cd	111	89	He	513.756	ppb	4.5	40040.81	250	41.1	79.5	120.4
Sn	118	159	He	1012.276	ppb	4.6	171279.08	500	40.49	79.5	120.4
Sb	121	159	No Gas	200.369	ppb	2.5	292430.50	100	40.07	79.5	120.4
Ba	137	159	No Gas	1944.152	ppb	2.1	1116109.39	2000	19.44	79.5	120.4
W	182	159	No Gas	190.241	ppb	2.2	220959.49	100	38.05	79.5	120.4
Tl	205	209	No Gas	196.811	ppb	2.2	495960.03	100	39.36	79.5	120.4
Pb	208	209	No Gas	197.832	ppb	2.4	689159.19	100	39.57	79.5	120.4
Th	232	209	No Gas	188.777	ppb	3.0	688495.12	100	37.76	79.5	120.4
U	238	209	No Gas	188.417	ppb	2.9	644926.84	100	37.68	79.5	120.4

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)

Katahdin Analytical Services A0000401

Laboratory Control Sample (LCS) Report

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)
> +/- 20% (6020)□ > +/- 15% (EPA)
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> +/- 20% (6020)□ > +/- 15% (EPA)

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1308346.79	0.9	1537409.87	85.1	29.5	120.4	
Sc	45	No Gas	3446004.37	0.5	3373253.08	102.16	29.5	120.4	
Sc	45	H2	400041.30	2.9	415670.69	96.24	29.5	120.4	
Sc	45	He	78935.76	5.1	81171.76	97.25	29.5	120.4	
Ge	72	No Gas	794405.21	0.6	779333.11	101.93	29.5	120.4	
Ge	72	H2	149492.17	1.7	153246.58	97.55	29.5	120.4	
Ge	72	He	62143.09	2.9	63135.03	98.43	29.5	120.4	
Y	89	H2	2607560.62	2.8	2642116.11	98.69	29.5	120.4	
Y	89	He	532386.67	4.0	544041.92	97.86	29.5	120.4	
Tb	159	No Gas	8111182.03	0.6	8117023.84	99.93	29.5	120.4	
Tb	159	He	2830143.47	4.2	2866479.19	98.73	29.5	120.4	
Bi	209	No Gas	4281840.75	0.7	4424692.92	96.77	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	217_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:45:57 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.562	ppb	1.9	27948.78	25	102.25	89.8	110.2	
11	B	6	No Gas	28.254	ppb	1.3	21050.36	25	113.02	89.8	110.2	> +/- 10%
23	Na	45	He	4745.336	ppb	1.2	533595.21	5000	94.91	89.8	110.2	
24	Mg	45	He	4648.763	ppb	1.6	284918.33	5000	92.98	89.8	110.2	
27	Al	45	He	455.793	ppb	1.0	10845.58	500	91.16	89.8	110.2	
28	Si	45	H2	491.310	ppb	3.4	20286.96	500	98.26	89.8	110.2	
39	K	45	He	4854.552	ppb	1.2	269474.03	5000	97.09	89.8	110.2	
40	Ca	45	H2	4953.927	ppb	0.8	1933951.45	5000	99.08	89.8	110.2	
51	V	89	He	24.241	ppb	2.8	21266.70	25	96.96	89.8	110.2	
52	Cr	89	He	23.931	ppb	1.0	25660.56	25	95.72	89.8	110.2	
55	Mn	89	He	24.144	ppb	1.1	12334.50	25	96.58	89.8	110.2	
56	Fe	89	H2	4931.790	ppb	1.1	7795869.29	5000	98.64	89.8	110.2	
59	Co	89	He	24.428	ppb	0.9	44312.70	25	97.71	89.8	110.2	
60	Ni	89	He	24.433	ppb	2.1	12597.21	25	97.73	89.8	110.2	
63	Cu	89	He	24.404	ppb	1.9	34442.08	25	97.62	89.8	110.2	
66	Zn	89	He	24.256	ppb	2.0	4696.51	25	97.02	89.8	110.2	
75	As	89	He	24.258	ppb	1.5	3791.93	25	97.03	89.8	110.2	
78	Se	89	H2	24.816	ppb	2.3	1952.72	25	99.26	89.8	110.2	
88	Sr	89	He	24.098	ppb	1.8	18380.68	25	96.39	89.8	110.2	
95	Mo	89	He	23.928	ppb	0.4	21076.87	25	95.71	89.8	110.2	
107	Ag	89	He	18.183	ppb	0.5	54152.05	25	72.73	89.8	110.2	> +/- 10%
111	Cd	89	He	24.094	ppb	1.0	9559.77	25	96.38	89.8	110.2	
118	Sn	159	He	23.881	ppb	2.0	20793.28	25	95.52	89.8	110.2	
121	Sb	159	No Gas	25.086	ppb	1.5	176430.85	25	100.34	89.8	110.2	
137	Ba	159	No Gas	25.272	ppb	1.4	69914.78	25	101.09	89.8	110.2	
182	W	159	No Gas	23.806	ppb	0.9	133266.88	25	95.22	89.8	110.2	
205	Tl	209	No Gas	24.538	ppb	0.8	299672.22	25	98.15	89.8	110.2	
208	Pb	209	No Gas	24.372	ppb	1.6	411519.92	25	97.49	89.8	110.2	
232	Th	209	No Gas	23.999	ppb	1.8	424222.65	25	96	89.8	110.2	
238	U	209	No Gas	23.916	ppb	1.5	396717.17	25	95.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260602.56	0.3	1537409.87	82	29.5	120.4	
Sc	45	No Gas	3301694.99	0.7	3373253.08	97.88	29.5	120.4	
Sc	45	H2	389141.20	0.9	415670.69	93.62	29.5	120.4	
Sc	45	He	80015.49	1.0	81171.76	98.58	29.5	120.4	
Ge	72	No Gas	769670.05	1.3	779333.11	98.76	29.5	120.4	
Ge	72	H2	144568.92	0.7	153246.58	94.34	29.5	120.4	
Ge	72	He	62436.00	0.8	63135.03	98.89	29.5	120.4	
Y	89	H2	2531190.16	1.1	2642116.11	95.8	29.5	120.4	
Y	89	He	541386.94	0.6	544041.92	99.51	29.5	120.4	
Tb	159	No Gas	7816071.76	0.7	8117023.84	96.29	29.5	120.4	
Tb	159	He	2900293.60	1.1	2866479.19	101.18	29.5	120.4	
Bi	209	No Gas	4149762.17	0.3	4424692.92	93.79	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	218_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:48:40 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.075	ppb	4.7	101.11	0.2	
11	B	6	No Gas	2.762	ppb	2.3	2839.26	4	Failed DoD
23	Na	45	He	-0.099	ppb	N/A	5784.29	200	
24	Mg	45	He	-1.020	ppb	N/A	524.49	20	
27	Al	45	He	0.437	ppb	210.1	56.67	20	
28	Si	45	H2	4.366	ppb	37.0	410.47	100	
39	K	45	He	24.357	ppb	19.1	11649.52	200	
40	Ca	45	H2	4.801	ppb	1.8	3620.60	20	
51	V	89	He	1.464	ppb	10.7	1460.13	1	Fail All Methods□ Failed DoD
52	Cr	89	He	0.119	ppb	4.4	157.97	1	
55	Mn	89	He	0.170	ppb	21.8	96.65	0.4	
56	Fe	89	H2	4.462	ppb	7.3	15235.23	20	
59	Co	89	He	0.027	ppb	16.8	55.56	0.2	
60	Ni	89	He	-0.037	ppb	N/A	22.22	0.4	
63	Cu	89	He	-0.109	ppb	N/A	263.35	0.6	
66	Zn	89	He	0.083	ppb	28.1	78.89	2	
75	As	89	He	0.106	ppb	30.4	20.67	1	
78	Se	89	H2	0.100	ppb	26.3	8.33	1	
88	Sr	89	He	0.032	ppb	57.6	30.00	1	
95	Mo	89	He	0.006	ppb	301.2	127.78	1	
107	Ag	89	He	0.007	ppb	86.9	32.22	0.2	
111	Cd	89	He	0.026	ppb	34.1	11.11	0.2	
118	Sn	159	He	0.749	ppb	4.2	715.60	1	Failed DoD
121	Sb	159	No Gas	0.031	ppb	27.7	327.04	0.2	
137	Ba	159	No Gas	0.068	ppb	40.3	216.91	0.4	
182	W	159	No Gas	0.129	ppb	17.3	884.36	1	
205	Tl	209	No Gas	0.032	ppb	13.4	440.50	0.2	
208	Pb	209	No Gas	0.120	ppb	8.2	2336.04	0.2	Failed DoD
232	Th	209	No Gas	0.230	ppb	32.2	4502.58	1	
238	U	209	No Gas	0.018	ppb	26.3	323.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1304437.83	2.6	1537409.87	84.85	29.5	120.4	
Sc	45	No Gas	3373891.14	0.6	3373253.08	100.02	29.5	120.4	
Sc	45	H2	378966.29	0.5	415670.69	91.17	29.5	120.4	
Sc	45	He	76204.71	1.6	81171.76	93.88	29.5	120.4	
Ge	72	No Gas	795908.86	1.0	779333.11	102.13	29.5	120.4	
Ge	72	H2	141426.61	1.3	153246.58	92.29	29.5	120.4	
Ge	72	He	59897.22	1.6	63135.03	94.87	29.5	120.4	
Y	89	H2	2519931.09	0.2	2642116.11	95.38	29.5	120.4	
Y	89	He	526272.00	1.0	544041.92	96.73	29.5	120.4	
Tb	159	No Gas	8313032.03	0.4	8117023.84	102.41	29.5	120.4	
Tb	159	He	2875583.88	1.4	2866479.19	100.32	29.5	120.4	
Bi	209	No Gas	4419379.85	0.3	4424692.92	99.88	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/22/2020

METHOD: **ICP-MS**
- ☐ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED 07/24/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG22A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

AP 7/23/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG22A	07/22/2020	13:31	AP
CalStd	1	LNG22A	07/22/2020	13:34	AP
ICV	1	LNG22A	07/22/2020	13:37	AP
ICB	1	LNG22A	07/22/2020	13:40	AP
PQL	1	LNG22A	07/22/2020	13:42	AP
ICSA	1	LNG22A	07/22/2020	13:45	AP
ICSAB	1	LNG22A	07/22/2020	13:48	AP
LRS1	1	LNG22A	07/22/2020	13:50	AP
LRS2	1	LNG22A	07/22/2020	13:53	AP
RINSE	1	LNG22A	07/22/2020	13:55	AP
RINSE	1	LNG22A	07/22/2020	13:58	AP
ICSAB	1	LNG22A	07/22/2020	14:04	AP
RINSE	1	LNG22A	07/22/2020	14:07	AP
CCV	1	LNG22A	07/22/2020	14:10	AP
CCB	1	LNG22A	07/22/2020	14:13	AP
CCV	1	LNG22A	07/22/2020	14:15	AP
CCB	1	LNG22A	07/22/2020	14:18	AP
PBSNG20IMS2	5	LNG22A	07/22/2020	14:20	AP
LCSONG20IMS2	5	LNG22A	07/22/2020	14:23	AP
SN5717-014	5	LNG22A	07/22/2020	14:25	AP
SN5717-015	5	LNG22A	07/22/2020	14:28	AP
SN5717-016	5	LNG22A	07/22/2020	14:31	AP
CCV	1	LNG22A	07/22/2020	14:33	AP
CCB	1	LNG22A	07/22/2020	14:36	AP
PQL	1	LNG22A	07/22/2020	14:39	AP
RINSE	1	LNG22A	07/22/2020	14:41	AP
RINSE	1	LNG22A	07/22/2020	14:44	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A.b
Acq. Date-Time	7/22/2020 11:20:52 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

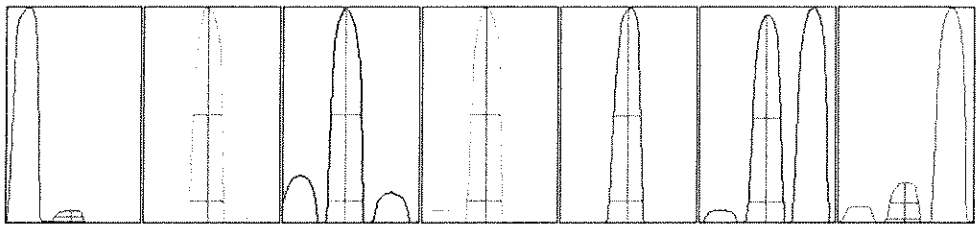
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2620	26199.93	0.523	5.000	
9	1145	11446.67	0.658	5.000	
24	47682	476823.35	0.300	5.000	
59	8832	88318.55	0.387	5.000	
115	154524	1545238.49	0.187	5.000	
205	9718	97182.38	0.626	5.000	
208	21494	214937.46	0.332	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2601	2630	2629	2630	2610
9	1154	1136	1138	1149	1146
24	47440	47813	47739	47684	47736
59	8832	8797	8882	8844	8804
115	154320	154825	154852	154362	154261
205	9619	9713	9778	9729	9752
208	21370	21497	21521	21544	21537

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4292.65	7.00	6.90 - 7.10	
9	1875.72	8.95	8.90 - 9.10	
24	74178.17	23.90	23.90 - 24.10	
59	14147.94	58.95	58.90 - 59.10	
115	261453.84	115.00	114.90 - 115.10	
205	16204.13	205.00	204.90 - 205.10	
208	35584.67	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.63	0.726	0.900	
9	0.64	0.755	0.900	
24	0.68	0.778	0.900	
59	0.65	0.765	0.900	
115	0.61	0.752	0.900	
205	0.63	0.771	0.900	
208	0.63	0.746	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	12.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	494	4935.77	0.665	5.000	
89	76949	769494.88	1.526	5.000	
205	8062	80618.36	1.094	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	488	492	495	496	496
89	75412	76214	76961	77918	78242
205	7929	8027	8075	8142	8136

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.6 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1665	16650.59	0.407	5.000	
89	16031	160310.91	0.495	5.000	
205	4562	45622.36	0.613	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1661	1668	1674	1656	1667
89	16037	15947	15960	16073	16138
205	4562	4538	4540	4565	4607

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.2 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:31:38 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	48.89	15.8
11	B	6	No Gas	2143.57	1.8
23	Na	45	He	3380.84	7.3
24	Mg	45	He	706.74	7.1
27	Al	45	He	32.22	12.0
28	Si	45	H2	497.23	26.0
39	K	45	He	12248.15	0.7
40	Ca	45	H2	1132.31	10.3
51	V	89	He	292.24	8.1
52	Cr	89	He	71.99	13.9
55	Mn	89	He	16.00	45.1
56	Fe	89	H2	3934.92	5.2
59	Co	89	He	13.33	50.0
60	Ni	89	He	98.89	7.8
63	Cu	89	He	225.57	5.6
66	Zn	89	He	60.00	14.7
75	As	89	He	5.00	40.0
78	Se	89	H2	0.67	43.3
88	Sr	89	He	3.33	100.1
95	Mo	89	He	12.22	41.7
107	Ag	89	He	11.11	96.4
111	Cd	89	He	0.37	173.2
118	Sn	159	He	54.45	3.5
121	Sb	159	No Gas	50.06	60.0
137	Ba	159	No Gas	30.04	88.2
182	W	159	No Gas	33.37	69.3
205	Tl	209	No Gas	50.06	20.0
208	Pb	209	No Gas	206.89	11.2
232	Th	209	No Gas	76.76	39.8
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1605283.87	1.4
Sc	45	No Gas	3885855.82	0.9
Sc	45	H2	456147.33	0.8
Sc	45	He	93201.95	0.3
Ge	72	No Gas	853395.25	0.2
Ge	72	H2	164020.04	0.7
Ge	72	He	70436.76	0.4
Y	89	H2	2800847.42	0.4
Y	89	He	596189.55	0.3
Tb	159	No Gas	7843787.66	0.6
Tb	159	He	2988340.23	0.5
Bi	209	No Gas	3902449.55	0.2

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:34:47 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	73240.86	2.4
11	B	6	No Gas	49746.44	2.0
23	Na	45	He	1239442.79	0.2
24	Mg	45	He	680472.25	0.7
27	Al	45	He	26574.29	1.4
28	Si	45	H2	50337.25	1.7
39	K	45	He	624507.89	0.7
40	Ca	45	H2	4644980.90	1.0
51	V	89	He	49320.61	1.9
52	Cr	89	He	60414.43	0.9
55	Mn	89	He	27700.04	0.7
56	Fe	89	H2	18295455.64	0.1
59	Co	89	He	103259.00	0.9
60	Ni	89	He	27977.56	1.1
63	Cu	89	He	79203.56	0.3
66	Zn	89	He	10489.85	2.2
75	As	89	He	8711.35	0.5
78	Se	89	H2	4372.82	0.9
88	Sr	89	He	41760.96	0.5
95	Mo	89	He	47963.80	1.0
107	Ag	89	He	161932.28	0.2
111	Cd	89	He	20254.47	0.5
118	Sn	159	He	44479.63	1.3
121	Sb	159	No Gas	375179.23	1.1
137	Ba	159	No Gas	146190.82	1.9
182	W	159	No Gas	267847.27	2.3
205	Tl	209	No Gas	575083.67	0.9
208	Pb	209	No Gas	786187.04	1.5
232	Th	209	No Gas	786365.36	2.8
238	U	209	No Gas	737059.98	2.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1641641.68	0.9	1605283.87	102.26	29.5	120.4	
Sc	45	No Gas	3937568.29	1.4	3885855.82	101.33	29.5	120.4	
Sc	45	H2	458468.96	2.2	456147.33	100.51	29.5	120.4	
Sc	45	He	91476.66	0.5	93201.95	98.15	29.5	120.4	
Ge	72	No Gas	862482.32	1.8	853395.25	101.06	29.5	120.4	
Ge	72	H2	164836.16	2.0	164020.04	100.5	29.5	120.4	
Ge	72	He	68545.12	0.4	70436.76	97.31	29.5	120.4	
Y	89	H2	2844940.44	2.3	2800847.42	101.57	29.5	120.4	
Y	89	He	585894.67	0.7	596189.55	98.27	29.5	120.4	
Tb	159	No Gas	7958658.77	0.9	7843787.66	101.46	29.5	120.4	
Tb	159	He	2970395.34	0.7	2988340.23	99.4	29.5	120.4	
Bi	209	No Gas	3921217.83	1.0	3902449.55	100.48	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:37:34 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.115	ppb	5.4	30192.21	20	100.57	89.6	110.4	
11	B	6	No Gas	18.276	ppb	7.7	20029.96	20	91.38	89.6	110.4	
23	Na	45	He	4144.415	ppb	0.1	513230.46	4000	103.61	89.6	110.4	
24	Mg	45	He	4044.925	ppb	0.1	274377.07	4000	101.12	89.6	110.4	
27	Al	45	He	381.884	ppb	1.0	10120.60	400	95.47	89.6	110.4	
28	Si	45	H2	427.652	ppb	2.1	21456.73	400	106.91	89.6	110.4	
39	K	45	He	4032.271	ppb	0.7	257790.39	4000	100.81	89.6	110.4	
40	Ca	45	H2	4031.495	ppb	2.8	1842664.35	4000	100.79	89.6	110.4	
51	V	89	He	19.894	ppb	1.5	19845.68	20	99.47	89.6	110.4	
52	Cr	89	He	20.394	ppb	0.8	24745.07	20	101.97	89.6	110.4	
55	Mn	89	He	20.520	ppb	0.9	11404.57	20	102.6	89.6	110.4	
56	Fe	89	H2	4037.339	ppb	2.0	7259591.11	4000	100.93	89.6	110.4	
59	Co	89	He	20.320	ppb	0.7	42072.00	20	101.6	89.6	110.4	
60	Ni	89	He	20.274	ppb	1.9	11429.49	20	101.37	89.6	110.4	
63	Cu	89	He	20.386	ppb	1.3	32505.32	20	101.93	89.6	110.4	
66	Zn	89	He	20.602	ppb	3.8	4367.53	20	103.01	89.6	110.4	
75	As	89	He	20.145	ppb	2.7	3521.50	20	100.72	89.6	110.4	
78	Se	89	H2	20.500	ppb	1.8	1761.70	20	102.5	89.6	110.4	
88	Sr	89	He	19.664	ppb	2.3	16467.12	20	98.32	89.6	110.4	
95	Mo	89	He	39.622	ppb	0.0	38106.19	40	99.06	89.6	110.4	
107	Ag	89	He	20.606	ppb	1.4	66906.56	20	103.03	89.6	110.4	
111	Cd	89	He	20.669	ppb	1.2	8393.80	20	103.34	89.6	110.4	
118	Sn	159	He	19.754	ppb	2.6	17647.73	20	98.77	89.6	110.4	
121	Sb	159	No Gas	20.023	ppb	7.5	150799.73	20	100.12	89.6	110.4	
137	Ba	159	No Gas	20.494	ppb	7.3	60159.07	20	102.47	89.6	110.4	
182	W	159	No Gas	19.882	ppb	6.6	106943.12	20	99.41	89.6	110.4	
205	Tl	209	No Gas	20.396	ppb	7.2	239186.71	20	101.98	89.6	110.4	
208	Pb	209	No Gas	20.212	ppb	6.4	324222.93	20	101.06	89.6	110.4	
232	Th	209	No Gas	20.052	ppb	7.5	321545.37	20	100.26	89.6	110.4	
238	U	209	No Gas	19.851	ppb	7.2	298343.82	20	99.26	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682607.27	4.0	1605283.87	104.82	29.5	120.4	
Sc	45	No Gas	3940493.17	5.1	3885855.82	101.41	29.5	120.4	
Sc	45	H2	451003.69	1.7	456147.33	98.87	29.5	120.4	
Sc	45	He	91051.66	0.3	93201.95	97.69	29.5	120.4	
Ge	72	No Gas	864774.80	4.3	853395.25	101.33	29.5	120.4	
Ge	72	H2	164049.54	1.5	164020.04	100.02	29.5	120.4	
Ge	72	He	69353.61	0.3	70436.76	98.46	29.5	120.4	
Y	89	H2	2794494.53	1.0	2800847.42	99.77	29.5	120.4	
Y	89	He	587314.76	0.5	596189.55	98.51	29.5	120.4	
Tb	159	No Gas	8006933.01	5.2	7843787.66	102.08	29.5	120.4	
Tb	159	He	2977719.78	0.6	2988340.23	99.64	29.5	120.4	
Bi	209	No Gas	4006782.92	5.1	3902449.55	102.67	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:40:15 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.073	ppb	16.8	158.89	0.2	
11	B	6	No Gas	0.078	ppb	120.9	2290.26	4	
23	Na	45	He	4.311	ppb	13.3	3771.35	200	
24	Mg	45	He	-1.628	ppb	N/A	571.17	20	
27	Al	45	He	-0.122	ppb	N/A	27.78	20	
28	Si	45	H2	2.249	ppb	51.7	594.00	100	
39	K	45	He	4.560	ppb	45.3	12044.68	200	
40	Ca	45	H2	0.981	ppb	15.6	1549.03	20	
51	V	89	He	-0.009	ppb	N/A	276.68	1	
52	Cr	89	He	-0.005	ppb	N/A	64.66	1	
55	Mn	89	He	0.007	ppb	252.7	19.33	0.4	
56	Fe	89	H2	1.192	ppb	8.7	5981.27	20	
59	Co	89	He	0.007	ppb	0.7	26.67	0.2	
60	Ni	89	He	0.004	ppb	217.4	98.89	0.4	
63	Cu	89	He	0.023	ppb	53.2	256.68	0.6	
66	Zn	89	He	-0.036	ppb	N/A	51.11	2	
75	As	89	He	-0.009	ppb	N/A	3.33	1	
78	Se	89	H2	0.075	ppb	15.8	7.00	1	
88	Sr	89	He	0.004	ppb	97.4	6.67	1	
95	Mo	89	He	0.153	ppb	12.1	157.78	1	
107	Ag	89	He	0.006	ppb	90.3	30.00	0.2	
111	Cd	89	He	0.005	ppb	59.6	2.22	0.2	
118	Sn	159	He	0.098	ppb	4.5	140.01	1	
121	Sb	159	No Gas	0.041	ppb	66.2	353.76	0.2	
137	Ba	159	No Gas	0.021	ppb	44.8	90.10	0.4	
182	W	159	No Gas	0.084	ppb	26.2	480.55	1	
205	Tl	209	No Gas	0.036	ppb	61.7	467.21	0.2	
208	Pb	209	No Gas	0.039	ppb	70.9	830.96	0.2	
232	Th	209	No Gas	0.048	ppb	46.0	841.02	1	
238	U	209	No Gas	0.033	ppb	44.5	497.27	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659322.12	2.7	1605283.87	103.37	29.5	120.4	
Sc	45	No Gas	3836280.83	2.1	3885855.82	98.72	29.5	120.4	
Sc	45	H2	445365.21	0.3	456147.33	97.64	29.5	120.4	
Sc	45	He	89576.71	0.9	93201.95	96.11	29.5	120.4	
Ge	72	No Gas	841984.60	3.2	853395.25	98.66	29.5	120.4	
Ge	72	H2	161215.64	1.0	164020.04	98.29	29.5	120.4	
Ge	72	He	67899.84	0.6	70436.76	96.4	29.5	120.4	
Y	89	H2	2754697.93	0.9	2800847.42	98.35	29.5	120.4	
Y	89	He	581550.17	0.4	596189.55	97.54	29.5	120.4	
Tb	159	No Gas	7908543.35	2.4	7843787.66	100.83	29.5	120.4	
Tb	159	He	2951248.88	0.8	2988340.23	98.76	29.5	120.4	
Bi	209	No Gas	3972271.24	3.0	3902449.55	101.79	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:42:54 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.218	ppb	9.0	372.24	0.2	109	79.5	120.4
11	B	6	No Gas	3.606	ppb	11.2	5660.19	4	90.15	79.5	120.4
23	Na	45	He	218.750	ppb	1.5	29907.74	200	109.38	79.5	120.4
24	Mg	45	He	19.965	ppb	8.6	2020.29	20	99.82	79.5	120.4
27	Al	45	He	18.993	ppb	17.0	527.81	20	94.96	79.5	120.4
28	Si	45	H2	99.116	ppb	1.7	5290.22	100	99.12	79.5	120.4
39	K	45	He	213.748	ppb	2.8	24740.18	200	106.87	79.5	120.4
40	Ca	45	H2	22.587	ppb	0.4	11311.58	20	112.94	79.5	120.4
51	V	89	He	1.189	ppb	2.5	1446.79	1	118.9	79.5	120.4
52	Cr	89	He	1.060	ppb	1.2	1343.82	1	106	79.5	120.4
55	Mn	89	He	0.541	ppb	9.5	313.95	0.4	135.25	79.5	120.4
56	Fe	89	H2	21.757	ppb	1.0	42712.46	20	108.78	79.5	120.4
59	Co	89	He	0.196	ppb	13.8	415.59	0.2	98	79.5	120.4
60	Ni	89	He	0.450	ppb	6.0	346.68	0.4	112.5	79.5	120.4
63	Cu	89	He	0.641	ppb	3.7	1228.99	0.6	106.83	79.5	120.4
66	Zn	89	He	2.097	ppb	8.8	494.47	2	104.85	79.5	120.4
75	As	89	He	0.914	ppb	7.5	163.35	1	91.4	79.5	120.4
78	Se	89	H2	1.110	ppb	9.2	95.33	1	111	79.5	120.4
88	Sr	89	He	0.949	ppb	5.2	792.28	1	94.9	79.5	120.4
95	Mo	89	He	1.049	ppb	0.9	1013.41	1	104.9	79.5	120.4
107	Ag	89	He	0.210	ppb	13.7	687.82	0.2	105	79.5	120.4
111	Cd	89	He	0.220	ppb	8.4	88.89	0.2	110	79.5	120.4
118	Sn	159	He	1.134	ppb	5.1	1063.42	1	113.4	79.5	120.4
121	Sb	159	No Gas	0.212	ppb	14.0	1658.63	0.2	106	79.5	120.4
137	Ba	159	No Gas	0.373	ppb	19.7	1127.98	0.4	93.25	79.5	120.4
182	W	159	No Gas	0.954	ppb	8.1	5190.20	1	95.4	79.5	120.4
205	Tl	209	No Gas	0.192	ppb	14.3	2306.12	0.2	96	79.5	120.4
208	Pb	209	No Gas	0.216	ppb	7.1	3694.36	0.2	108	79.5	120.4
232	Th	209	No Gas	0.205	ppb	9.2	3387.61	0.2	102.5	79.5	120.4
238	U	209	No Gas	0.199	ppb	4.1	3017.10	0.2	99.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1654936.50	3.3	1605283.87	103.09	29.5	120.4	
Sc	45	No Gas	3888768.66	3.8	3885855.82	100.07	29.5	120.4	
Sc	45	H2	445915.04	1.3	456147.33	97.76	29.5	120.4	
Sc	45	He	90116.88	0.1	93201.95	96.69	29.5	120.4	
Ge	72	No Gas	851633.74	3.5	853395.25	99.79	29.5	120.4	
Ge	72	H2	162591.39	1.5	164020.04	99.13	29.5	120.4	
Ge	72	He	68630.87	0.3	70436.76	97.44	29.5	120.4	
Y	89	H2	2773937.90	1.3	2800847.42	99.04	29.5	120.4	
Y	89	He	583340.63	0.1	596189.55	97.84	29.5	120.4	
Tb	159	No Gas	8047356.55	4.1	7843787.66	102.6	29.5	120.4	
Tb	159	He	2974097.01	0.3	2988340.23	99.52	29.5	120.4	
Bi	209	No Gas	4028168.05	4.1	3902449.55	103.22	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:45:24 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.008	ppb	144.9	57.78	0.2	-50	50	
B	11	6	No Gas	0.206	ppb	132.2	2250.25	4	-50	100	
Na	23	45	He	96772.045	ppb	0.6	11207721.28	100000	80	120	
Mg	24	45	He	97235.848	ppb	0.6	6191784.21	100000	80	120	
Al	27	45	He	92025.096	ppb	0.5	2287891.46	100000	80	120	
Si	28	45	H2	5.121	ppb	73.1	694.13	100	-50	50	
K	39	45	He	95710.139	ppb	0.7	5501978.10	100000	80	120	
Ca	40	45	H2	99865.834	ppb	0.8	42681100.47	100000	80	120	
V	51	89	He	0.040	ppb	85.0	314.46	1	-50	100	
Cr	52	89	He	0.271	ppb	6.3	383.27	0.78	-100	100	
Mn	55	89	He	0.457	ppb	14.9	259.29	0.0826	100	100	
Fe	56	89	H2	96989.033	ppb	1.4	166297980.46	100000	80	120	
Co	59	89	He	0.291	ppb	15.3	591.17	0.2	-50	100	
Ni	60	89	He	0.280	ppb	15.4	244.46	0.114	100	100	
Cu	63	89	He	0.448	ppb	8.6	896.73	-0.043	100	100	
Zn	66	89	He	0.566	ppb	30.9	171.12	-0.7632	100	100	
As	75	89	He	0.053	ppb	27.6	13.67	1	-50	100	
Se	78	89	H2	0.092	ppb	24.7	8.17	1	-50	100	
Sr	88	89	He	0.723	ppb	12.8	585.59	0.0578	100	100	
Mo	95	89	He	1979.509	ppb	0.8	1831857.18	2000	80	120	
Ag	107	89	He	0.019	ppb	14.8	70.00	0.2	-50	50	
Cd	111	89	He	0.322	ppb	16.4	125.93	0.268	100	100	
Sn	118	159	He	0.325	ppb	8.1	338.91	-0.24	100	100	
Sb	121	159	No Gas	0.148	ppb	8.4	1144.67	0.089	100	100	
Ba	137	159	No Gas	0.157	ppb	13.2	480.55	-0.0794	100	100	
W	182	159	No Gas	0.199	ppb	18.1	1081.26	0.32	-100	100	
Tl	205	209	No Gas	0.007	ppb	17.1	120.14	0.2	-50	50	
Pb	208	209	No Gas	0.094	ppb	5.6	1605.17	0.03	100	100	
Th	232	209	No Gas	0.017	ppb	16.6	323.71	0.2	-50	50	
U	238	209	No Gas	0.004	ppb	81.5	60.07	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1549640.19	3.2	1605283.87	96.53	29.5	120.4	
Sc	45	No Gas	3692085.58	2.9	3885855.82	95.01	29.5	120.4	
Sc	45	H2	421831.57	0.2	456147.33	92.48	29.5	120.4	
Sc	45	He	85682.99	0.4	93201.95	91.93	29.5	120.4	
Ge	72	No Gas	815369.06	2.5	853395.25	95.54	29.5	120.4	
Ge	72	H2	151149.15	1.6	164020.04	92.15	29.5	120.4	
Ge	72	He	64885.49	0.9	70436.76	92.12	29.5	120.4	
Y	89	H2	2665949.26	1.0	2800847.42	95.18	29.5	120.4	
Y	89	He	565330.49	0.9	596189.55	94.82	29.5	120.4	
Tb	159	No Gas	7832446.62	1.8	7843787.66	99.86	29.5	120.4	
Tb	159	He	2935078.46	0.7	2988340.23	98.22	29.5	120.4	
Bi	209	No Gas	3747520.15	2.3	3902449.55	96.03	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:48:04 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	18.848	ppb	4.3	24637.70	20	79.5	120.4	
11	B	6	No Gas	18.779	ppb	3.9	17869.65	20	79.5	120.4	
23	Na	45	He	95153.154	ppb	0.9	11514768.95	100000	79.5	120.4	
24	Mg	45	He	95357.189	ppb	1.0	6344594.63	100000	79.5	120.4	
27	Al	45	He	89743.610	ppb	0.9	2331297.88	100000	79.5	120.4	
28	Si	45	H2	472.595	ppb	2.6	22713.48	500	79.5	120.4	
39	K	45	He	93594.031	ppb	1.2	5621897.41	100000	79.5	120.4	
40	Ca	45	H2	98416.173	ppb	1.0	43160300.47	100000	79.5	120.4	
51	V	89	He	19.823	ppb	1.3	19409.51	20	79.5	120.4	
52	Cr	89	He	19.345	ppb	0.7	23045.20	20	79.5	120.4	
55	Mn	89	He	19.805	ppb	0.9	10804.86	20	79.5	120.4	
56	Fe	89	H2	96374.972	ppb	0.8	168783015.40	100000	79.5	120.4	
59	Co	89	He	19.238	ppb	3.2	39094.62	20	79.5	120.4	
60	Ni	89	He	19.647	ppb	2.0	10873.48	20	79.5	120.4	
63	Cu	89	He	19.222	ppb	0.4	30094.24	20	79.5	120.4	
66	Zn	89	He	18.701	ppb	1.0	3897.35	20	79.5	120.4	
75	As	89	He	19.771	ppb	0.5	3392.46	20	79.5	120.4	
78	Se	89	H2	19.549	ppb	0.6	1637.02	20	79.5	120.4	
88	Sr	89	He	19.659	ppb	0.0	16157.78	20	79.5	120.4	
95	Mo	89	He	1991.238	ppb	0.7	1879093.29	2000	79.5	120.4	
107	Ag	89	He	13.603	ppb	1.3	43353.49	20	79.5	120.4	> +/- 10%
111	Cd	89	He	19.474	ppb	0.2	7762.68	20	79.5	120.4	
118	Sn	159	He	19.535	ppb	0.7	17437.33	20	79.5	120.4	
121	Sb	159	No Gas	18.616	ppb	4.0	133595.32	20	79.5	120.4	
137	Ba	159	No Gas	19.350	ppb	5.2	54143.29	20	79.5	120.4	
182	W	159	No Gas	19.621	ppb	4.5	100553.17	20	79.5	120.4	
205	Tl	209	No Gas	19.531	ppb	4.5	209026.94	20	79.5	120.4	
208	Pb	209	No Gas	19.819	ppb	2.9	289867.86	20	79.5	120.4	
232	Th	209	No Gas	20.775	ppb	4.9	304107.01	20	79.5	120.4	
238	U	209	No Gas	20.329	ppb	4.0	278775.44	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1460638.11	5.9	1605283.87	90.99	29.5	120.4	
Sc	45	No Gas	3513586.43	5.4	3885855.82	90.42	29.5	120.4	
Sc	45	H2	432848.95	0.5	456147.33	94.89	29.5	120.4	
Sc	45	He	89534.34	1.5	93201.95	96.06	29.5	120.4	
Ge	72	No Gas	768724.52	8.1	853395.25	90.08	29.5	120.4	
Ge	72	H2	153101.03	1.5	164020.04	93.34	29.5	120.4	
Ge	72	He	66862.59	0.7	70436.76	94.93	29.5	120.4	
Y	89	H2	2722849.86	0.7	2800847.42	97.22	29.5	120.4	
Y	89	He	576490.79	1.1	596189.55	96.7	29.5	120.4	
Tb	159	No Gas	7596958.22	6.2	7843787.66	96.85	29.5	120.4	
Tb	159	He	2974831.31	1.1	2988340.23	99.55	29.5	120.4	
Bi	209	No Gas	3640909.53	6.2	3902449.55	93.3	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:50:48 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	98.951	ppb	4.9	146113.59	100	98.95	89.5	110.4	
11	B	6	No Gas	466.715	ppb	5.7	449800.60	500	93.34	89.5	110.4	
51	V	89	He	1024.004	ppb	1.5	993046.66	1000	102.4	89.5	110.4	
52	Cr	89	He	2024.062	ppb	1.7	2415170.10	2000	101.2	89.5	110.4	
55	Mn	89	He	2036.067	ppb	1.6	1114515.06	2000	101.8	89.5	110.4	
59	Co	89	He	1022.742	ppb	1.2	2087905.31	1000	102.27	89.5	110.4	
60	Ni	89	He	1044.204	ppb	1.3	575742.76	1000	104.42	89.5	110.4	
63	Cu	89	He	1985.334	ppb	1.8	3100607.28	2000	99.27	89.5	110.4	
66	Zn	89	He	2036.574	ppb	1.2	420149.48	2000	101.83	89.5	110.4	
75	As	89	He	1013.502	ppb	1.3	174488.60	1000	101.35	89.5	110.4	
78	Se	89	H2	964.800	ppb	12.5	88108.11	1000	96.48	89.5	110.4	
88	Sr	89	He	2009.693	ppb	1.4	1659334.37	2000	100.48	89.5	110.4	
95	Mo	89	He	1016.617	ppb	1.8	963927.70	1000	101.66	89.5	110.4	
107	Ag	89	He	109.355	ppb	1.8	350116.33	100	109.36	89.5	110.4	
111	Cd	89	He	1050.896	ppb	1.7	420860.84	1000	105.09	89.5	110.4	
118	Sn	159	He	989.516	ppb	1.8	884672.13	1000	98.95	89.5	110.4	
121	Sb	159	No Gas	933.222	ppb	4.7	7375009.33	1000	93.32	89.5	110.4	
137	Ba	159	No Gas	1899.197	ppb	4.4	5848266.55	2000	94.96	89.5	110.4	
182	W	159	No Gas	982.569	ppb	5.2	5543733.49	1000	98.26	89.5	110.4	
205	Tl	209	No Gas	963.254	ppb	3.3	11996700.55	1000	96.33	89.5	110.4	
208	Pb	209	No Gas	1894.697	ppb	3.8	32253087.78	2000	94.73	89.5	110.4	
232	Th	209	No Gas	960.273	ppb	5.1	16352260.75	1000	96.03	89.5	110.4	
238	U	209	No Gas	938.148	ppb	4.9	14975067.56	1000	93.81	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1656139.36	1.9	1605283.87	103.17	29.5	120.4	
Sc	45	No Gas	4015410.32	1.9	3885855.82	103.33	29.5	120.4	
Ge	72	No Gas	889094.50	2.2	853395.25	104.18	29.5	120.4	
Tb	159	No Gas	8386348.49	1.5	7843787.66	106.92	29.5	120.4	
Bi	209	No Gas	4246969.89	1.3	3902449.55	108.83	29.5	120.4	
Sc	45	H2	475713.67	10.2	456147.33	104.29	29.5	120.4	
Ge	72	H2	170827.72	8.8	164020.04	104.15	29.5	120.4	
Y	89	H2	2996886.29	10.6	2800847.42	107	29.5	120.4	
Sc	45	He	89272.72	2.0	93201.95	95.78	29.5	120.4	
Ge	72	He	68254.67	1.6	70436.76	96.9	29.5	120.4	
Y	89	He	579307.69	1.5	596189.55	97.17	29.5	120.4	
Tb	159	He	2989251.80	1.3	2988340.23	100.03	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:53:14 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.593	ppb	58.4	840.06	100	
11	B	6	No Gas	9.383	ppb	16.0	10135.03	1000	
23	Na	45	He	194722.043	ppb	0.9	23378068.49	200000	
24	Mg	45	He	196479.864	ppb	0.9	12970918.97	200000	
27	Al	45	He	189631.639	ppb	0.6	4888110.79	200000	
28	Si	45	H2	9753.535	ppb	1.5	462131.79	10000	
39	K	45	He	194247.893	ppb	0.7	11565439.43	200000	
40	Ca	45	H2	199004.524	ppb	1.2	87779409.80	200000	
51	V	89	He	0.077	ppb	35.7	353.35	1000	
52	Cr	89	He	1.479	ppb	4.2	1807.79	2000	
55	Mn	89	He	7.716	ppb	0.8	4177.87	2000	
56	Fe	89	H2	97111.661	ppb	0.8	168947376.42	100000	
59	Co	89	He	0.718	ppb	7.6	1455.74	1000	
60	Ni	89	He	2.061	ppb	7.9	1214.54	1000	
63	Cu	89	He	1.257	ppb	5.3	2150.25	2000	
66	Zn	89	He	2.779	ppb	5.5	622.26	2000	
75	As	89	He	0.353	ppb	18.1	64.68	1000	
78	Se	89	H2	0.915	ppb	11.5	76.67	1000	
88	Sr	89	He	1.226	ppb	2.3	1001.19	2000	
95	Mo	89	He	1.816	ppb	8.0	1707.95	1000	
107	Ag	89	He	0.115	ppb	7.6	374.47	100	
111	Cd	89	He	0.178	ppb	14.7	70.74	1000	
118	Sn	159	He	1.276	ppb	8.4	1156.76	1000	
121	Sb	159	No Gas	3.234	ppb	81.8	23875.78	1000	
137	Ba	159	No Gas	5.971	ppb	77.0	17162.54	2000	
182	W	159	No Gas	4.951	ppb	64.1	26044.38	1000	
205	Tl	209	No Gas	2.139	ppb	67.7	23018.46	1000	
208	Pb	209	No Gas	5.322	ppb	79.1	78410.32	2000	
232	Th	209	No Gas	6.751	ppb	74.4	99313.80	1000	
238	U	209	No Gas	5.228	ppb	81.2	72082.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1494572.08	1.6	1605283.87	93.1	29.5	120.4	
Sc	45	No Gas	3672783.72	1.1	3885855.82	94.52	29.5	120.4	
Sc	45	H2	435347.91	1.4	456147.33	95.44	29.5	120.4	
Sc	45	He	88838.73	1.3	93201.95	95.32	29.5	120.4	
Ge	72	No Gas	795532.98	2.0	853395.25	93.22	29.5	120.4	
Ge	72	H2	152099.27	1.9	164020.04	92.73	29.5	120.4	
Ge	72	He	66110.86	0.7	70436.76	93.86	29.5	120.4	
Y	89	H2	2704779.84	1.0	2800847.42	96.57	29.5	120.4	
Y	89	He	570798.29	0.7	596189.55	95.74	29.5	120.4	
Tb	159	No Gas	7770343.29	1.2	7843787.66	99.06	29.5	120.4	
Tb	159	He	2893004.92	0.7	2988340.23	96.81	29.5	120.4	
Bi	209	No Gas	3636986.20	1.7	3902449.55	93.2	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:55:52 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.078	ppb	23.7	177.78	100	
11	B	6	No Gas	1.122	ppb	10.0	3517.22	1000	
23	Na	45	He	200.486	ppb	7.2	28934.50	200000	
24	Mg	45	He	29.598	ppb	10.9	2784.91	200000	
27	Al	45	He	31.859	ppb	4.9	903.40	200000	
28	Si	45	H2	3.349	ppb	84.0	684.11	10000	
39	K	45	He	66.737	ppb	8.0	16590.44	200000	
40	Ca	45	H2	55.827	ppb	11.7	27729.34	200000	
51	V	89	He	0.411	ppb	21.9	713.38	1000	
52	Cr	89	He	0.140	ppb	5.8	247.96	2000	
55	Mn	89	He	0.168	ppb	15.6	112.65	2000	
56	Fe	89	H2	37.653	ppb	10.3	74981.50	100000	
59	Co	89	He	0.052	ppb	33.6	124.46	1000	
60	Ni	89	He	0.234	ppb	31.7	235.57	1000	
63	Cu	89	He	1.292	ppb	3.4	2341.39	2000	
66	Zn	89	He	0.515	ppb	1.7	172.23	2000	
75	As	89	He	0.090	ppb	13.1	21.33	1000	
78	Se	89	H2	0.287	ppb	26.6	26.50	1000	
88	Sr	89	He	0.094	ppb	42.0	84.45	2000	
95	Mo	89	He	0.562	ppb	14.6	571.15	1000	
107	Ag	89	He	0.016	ppb	41.5	65.56	100	
111	Cd	89	He	0.074	ppb	27.7	31.48	1000	
118	Sn	159	He	0.515	ppb	13.7	523.36	1000	
121	Sb	159	No Gas	0.150	ppb	29.2	1188.04	1000	
137	Ba	159	No Gas	0.267	ppb	43.9	817.60	2000	
182	W	159	No Gas	0.324	ppb	4.4	1785.44	1000	
205	Tl	209	No Gas	0.153	ppb	28.6	1848.90	1000	
208	Pb	209	No Gas	0.343	ppb	19.7	5706.95	2000	
232	Th	209	No Gas	0.174	ppb	23.1	2866.87	1000	
238	U	209	No Gas	0.130	ppb	25.7	1962.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1771573.71	1.4	1605283.87	110.36	29.5	120.4	
Sc	45	No Gas	3935609.72	1.6	3885855.82	101.28	29.5	120.4	
Sc	45	H2	469804.69	1.6	456147.33	102.99	29.5	120.4	
Sc	45	He	94216.79	1.2	93201.95	101.09	29.5	120.4	
Ge	72	No Gas	861139.33	0.8	853395.25	100.91	29.5	120.4	
Ge	72	H2	167639.71	0.7	164020.04	102.21	29.5	120.4	
Ge	72	He	71710.64	1.3	70436.76	101.81	29.5	120.4	
Y	89	H2	2926653.22	0.9	2800847.42	104.49	29.5	120.4	
Y	89	He	606520.89	1.9	596189.55	101.73	29.5	120.4	
Tb	159	No Gas	8044292.45	1.0	7843787.66	102.56	29.5	120.4	
Tb	159	He	3037041.24	1.3	2988340.23	101.63	29.5	120.4	
Bi	209	No Gas	4000490.19	1.2	3902449.55	102.51	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:58:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	29.6	121.12	100	
11	B	6	No Gas	0.285	ppb	79.5	2623.67	1000	
23	Na	45	He	101.987	ppb	6.0	16738.29	200000	
24	Mg	45	He	10.296	ppb	10.0	1464.62	200000	
27	Al	45	He	10.439	ppb	4.3	324.46	200000	
28	Si	45	H2	1.860	ppb	167.0	604.02	10000	
39	K	45	He	25.422	ppb	20.7	14274.09	200000	
40	Ca	45	H2	18.445	ppb	8.8	9893.81	200000	
51	V	89	He	0.561	ppb	4.5	873.40	1000	
52	Cr	89	He	0.096	ppb	20.2	194.63	2000	
55	Mn	89	He	0.175	ppb	22.3	117.31	2000	
56	Fe	89	H2	15.486	ppb	8.0	33195.98	100000	
59	Co	89	He	0.045	ppb	27.0	111.12	1000	
60	Ni	89	He	0.175	ppb	24.2	203.35	1000	
63	Cu	89	He	0.795	ppb	3.8	1541.25	2000	
66	Zn	89	He	0.580	ppb	20.7	187.79	2000	
75	As	89	He	0.080	ppb	37.4	19.67	1000	
78	Se	89	H2	0.183	ppb	17.8	17.17	1000	
88	Sr	89	He	0.047	ppb	36.3	44.44	2000	
95	Mo	89	He	0.318	ppb	24.2	331.13	1000	
107	Ag	89	He	0.015	ppb	37.6	61.11	100	
111	Cd	89	He	0.055	ppb	17.6	23.70	1000	
118	Sn	159	He	0.301	ppb	21.5	330.02	1000	
121	Sb	159	No Gas	0.043	ppb	31.8	387.11	1000	
137	Ba	159	No Gas	0.055	ppb	26.5	200.23	2000	
182	W	159	No Gas	0.121	ppb	25.7	710.82	1000	
205	Tl	209	No Gas	0.034	ppb	6.8	460.53	1000	
208	Pb	209	No Gas	0.114	ppb	5.3	2105.78	2000	
232	Th	209	No Gas	0.048	ppb	16.3	874.35	1000	
238	U	209	No Gas	0.026	ppb	13.5	403.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1748799.38	3.6	1605283.87	108.94	29.5	120.4	
Sc	45	No Gas	4109153.69	3.2	3885855.82	105.75	29.5	120.4	
Sc	45	H2	467117.77	0.9	456147.33	102.41	29.5	120.4	
Sc	45	He	96168.89	0.8	93201.95	103.18	29.5	120.4	
Ge	72	No Gas	897071.30	3.5	853395.25	105.12	29.5	120.4	
Ge	72	H2	169778.49	1.6	164020.04	103.51	29.5	120.4	
Ge	72	He	72211.00	0.5	70436.76	102.52	29.5	120.4	
Y	89	H2	2920585.35	0.2	2800847.42	104.28	29.5	120.4	
Y	89	He	611274.20	0.8	596189.55	102.53	29.5	120.4	
Tb	159	No Gas	8308163.62	3.4	7843787.66	105.92	29.5	120.4	
Tb	159	He	3048476.62	0.4	2988340.23	102.01	29.5	120.4	
Bi	209	No Gas	4130588.62	4.0	3902449.55	105.85	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	017ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:04:51 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	19.070	ppb	7.8	26451.52	20	79.5	120.4	
11	B	6	No Gas	19.243	ppb	8.4	19386.90	20	79.5	120.4	
23	Na	45	He	95287.944	ppb	1.3	11742408.77	100000	79.5	120.4	
24	Mg	45	He	95589.713	ppb	1.4	6476583.79	100000	79.5	120.4	
27	Al	45	He	90025.527	ppb	1.3	2381514.63	100000	79.5	120.4	
28	Si	45	H2	498.093	ppb	0.4	23799.68	500	79.5	120.4	
39	K	45	He	93692.871	ppb	1.2	5731271.27	100000	79.5	120.4	
40	Ca	45	H2	101379.256	ppb	1.4	44249104.34	100000	79.5	120.4	
51	V	89	He	19.672	ppb	2.3	19356.17	20	79.5	120.4	
52	Cr	89	He	19.682	ppb	1.4	23557.27	20	79.5	120.4	
55	Mn	89	He	19.915	ppb	0.3	10918.92	20	79.5	120.4	
56	Fe	89	H2	99086.585	ppb	2.1	173315367.60	100000	79.5	120.4	
59	Co	89	He	19.792	ppb	2.1	40418.23	20	79.5	120.4	
60	Ni	89	He	19.422	ppb	2.1	10803.41	20	79.5	120.4	
63	Cu	89	He	19.321	ppb	2.0	30393.71	20	79.5	120.4	
66	Zn	89	He	18.720	ppb	3.7	3919.59	20	79.5	120.4	
75	As	89	He	19.611	ppb	0.8	3381.78	20	79.5	120.4	
78	Se	89	H2	20.528	ppb	2.7	1717.03	20	79.5	120.4	
88	Sr	89	He	20.124	ppb	2.8	16625.04	20	79.5	120.4	
95	Mo	89	He	1996.173	ppb	1.6	1892934.66	2000	79.5	120.4	
107	Ag	89	He	18.779	ppb	2.0	60138.41	20	79.5	120.4	
111	Cd	89	He	19.823	ppb	1.7	7939.81	20	79.5	120.4	
118	Sn	159	He	19.507	ppb	1.2	17593.11	20	79.5	120.4	
121	Sb	159	No Gas	18.238	ppb	7.8	144283.07	20	79.5	120.4	
137	Ba	159	No Gas	18.418	ppb	6.6	56797.68	20	79.5	120.4	
182	W	159	No Gas	18.777	ppb	9.5	106018.26	20	79.5	120.4	
205	Tl	209	No Gas	19.365	ppb	6.5	225713.51	20	79.5	120.4	
208	Pb	209	No Gas	19.074	ppb	7.1	303973.68	20	79.5	120.4	
232	Th	209	No Gas	19.506	ppb	9.2	310728.07	20	79.5	120.4	
238	U	209	No Gas	19.222	ppb	8.4	286993.83	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1554944.43	3.0	1605283.87	96.86	29.5	120.4	
Sc	45	No Gas	3996568.07	3.3	3885855.82	102.85	29.5	120.4	
Sc	45	H2	430822.48	1.4	456147.33	94.45	29.5	120.4	
Sc	45	He	91181.06	1.8	93201.95	97.83	29.5	120.4	
Ge	72	No Gas	872225.08	3.5	853395.25	102.21	29.5	120.4	
Ge	72	H2	153567.05	1.6	164020.04	93.63	29.5	120.4	
Ge	72	He	67607.89	1.4	70436.76	95.98	29.5	120.4	
Y	89	H2	2719966.64	1.6	2800847.42	97.11	29.5	120.4	
Y	89	He	579332.22	1.1	596189.55	97.17	29.5	120.4	
Tb	159	No Gas	8401443.56	3.1	7843787.66	107.11	29.5	120.4	
Tb	159	He	3005939.57	1.1	2988340.23	100.59	29.5	120.4	
Bi	209	No Gas	3978329.02	3.5	3902449.55	101.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:07:39 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.047	ppb	22.3	121.11	100	
11	B	6	No Gas	0.148	ppb	68.6	2383.61	1000	
23	Na	45	He	97.121	ppb	9.8	16027.68	200000	
24	Mg	45	He	21.543	ppb	39.3	2258.41	200000	
27	Al	45	He	20.942	ppb	39.4	614.53	200000	
28	Si	45	H2	1.875	ppb	66.8	610.69	10000	
39	K	45	He	39.915	ppb	13.3	15139.79	200000	
40	Ca	45	H2	20.509	ppb	6.7	10990.16	200000	
51	V	89	He	0.414	ppb	9.8	723.38	1000	
52	Cr	89	He	0.053	ppb	50.2	141.31	2000	
55	Mn	89	He	0.082	ppb	19.8	63.99	2000	
56	Fe	89	H2	25.763	ppb	4.4	52999.21	100000	
59	Co	89	He	0.024	ppb	52.5	64.45	1000	
60	Ni	89	He	0.154	ppb	27.3	191.12	1000	
63	Cu	89	He	0.577	ppb	8.1	1182.32	2000	
66	Zn	89	He	0.508	ppb	15.6	172.23	2000	
75	As	89	He	0.050	ppb	38.5	14.33	1000	
78	Se	89	H2	0.069	ppb	23.5	7.00	1000	
88	Sr	89	He	0.016	ppb	10.9	17.78	2000	
95	Mo	89	He	1.868	ppb	14.8	1882.45	1000	
107	Ag	89	He	0.010	ppb	26.1	45.56	100	
111	Cd	89	He	0.017	ppb	23.7	7.78	1000	
118	Sn	159	He	0.093	ppb	21.1	140.01	1000	
121	Sb	159	No Gas	0.026	ppb	48.5	266.97	1000	
137	Ba	159	No Gas	0.028	ppb	36.0	120.13	2000	
182	W	159	No Gas	0.061	ppb	6.7	387.10	1000	
205	Tl	209	No Gas	0.027	ppb	37.4	390.45	1000	
208	Pb	209	No Gas	0.054	ppb	7.6	1147.99	2000	
232	Th	209	No Gas	0.047	ppb	1.0	881.02	1000	
238	U	209	No Gas	0.022	ppb	38.5	360.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1675693.45	3.3	1605283.87	104.39	29.5	120.4	
Sc	45	No Gas	4126899.98	2.9	3885855.82	106.2	29.5	120.4	
Sc	45	H2	472420.61	0.9	456147.33	103.57	29.5	120.4	
Sc	45	He	95743.95	2.8	93201.95	102.73	29.5	120.4	
Ge	72	No Gas	909325.84	2.7	853395.25	106.55	29.5	120.4	
Ge	72	H2	169757.42	0.5	164020.04	103.5	29.5	120.4	
Ge	72	He	72270.33	2.3	70436.76	102.6	29.5	120.4	
Y	89	H2	2948537.73	1.6	2800847.42	105.27	29.5	120.4	
Y	89	He	611967.74	2.3	596189.55	102.65	29.5	120.4	
Tb	159	No Gas	8532520.29	2.6	7843787.66	108.78	29.5	120.4	
Tb	159	He	3052656.65	2.8	2988340.23	102.15	29.5	120.4	
Bi	209	No Gas	4230016.17	3.2	3902449.55	108.39	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	019_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:10:20 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.503	ppb	5.1	34849.42	25	94.01	89.8	110.2	
11	B	6	No Gas	23.474	ppb	5.5	24800.78	25	93.9	89.8	110.2	
23	Na	45	He	5108.900	ppb	1.8	670023.70	5000	102.18	89.8	110.2	
24	Mg	45	He	4948.419	ppb	1.4	355763.04	5000	98.97	89.8	110.2	
27	Al	45	He	481.164	ppb	3.8	13509.04	500	96.23	89.8	110.2	
28	Si	45	H2	461.143	ppb	1.5	25280.83	500	92.23	89.8	110.2	
39	K	45	He	4933.720	ppb	1.1	331637.49	5000	98.67	89.8	110.2	
40	Ca	45	H2	4738.805	ppb	1.1	2370656.23	5000	94.78	89.8	110.2	
51	V	89	He	25.117	ppb	2.1	26293.00	25	100.47	89.8	110.2	
52	Cr	89	He	24.858	ppb	1.1	31732.35	25	99.43	89.8	110.2	
55	Mn	89	He	25.029	ppb	0.6	14639.61	25	100.12	89.8	110.2	
56	Fe	89	H2	4785.071	ppb	0.5	9402135.76	5000	95.7	89.8	110.2	
59	Co	89	He	24.752	ppb	0.9	53944.68	25	99.01	89.8	110.2	
60	Ni	89	He	25.433	ppb	0.6	15067.45	25	101.73	89.8	110.2	
63	Cu	89	He	24.991	ppb	1.1	41891.34	25	99.96	89.8	110.2	
66	Zn	89	He	24.972	ppb	1.9	5560.21	25	99.89	89.8	110.2	
75	As	89	He	24.676	ppb	0.5	4539.58	25	98.7	89.8	110.2	
78	Se	89	H2	24.177	ppb	1.8	2270.42	25	96.71	89.8	110.2	
88	Sr	89	He	23.455	ppb	1.4	20672.79	25	93.82	89.8	110.2	
95	Mo	89	He	24.838	ppb	1.1	25151.58	25	99.35	89.8	110.2	
107	Ag	89	He	24.563	ppb	0.5	83953.08	25	98.25	89.8	110.2	
111	Cd	89	He	24.740	ppb	0.9	10575.70	25	98.96	89.8	110.2	
118	Sn	159	He	24.406	ppb	1.7	22537.24	25	97.62	89.8	110.2	
121	Sb	159	No Gas	23.723	ppb	5.4	190917.27	25	94.89	89.8	110.2	
137	Ba	159	No Gas	23.655	ppb	3.8	74208.73	25	94.62	89.8	110.2	
182	W	159	No Gas	23.540	ppb	3.4	135305.95	25	94.16	89.8	110.2	
205	Tl	209	No Gas	23.973	ppb	3.3	296388.44	25	95.89	89.8	110.2	
208	Pb	209	No Gas	23.761	ppb	4.1	401641.06	25	95.04	89.8	110.2	
232	Th	209	No Gas	23.450	ppb	5.4	396350.53	25	93.8	89.8	110.2	
238	U	209	No Gas	23.611	ppb	4.3	374069.35	25	94.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1661591.31	2.5	1605283.87	103.51	29.5	120.4	
Sc	45	No Gas	4241927.56	2.6	3885855.82	109.16	29.5	120.4	
Sc	45	H2	493554.65	1.1	456147.33	108.2	29.5	120.4	
Sc	45	He	96563.95	1.8	93201.95	103.61	29.5	120.4	
Ge	72	No Gas	918040.53	1.7	853395.25	107.58	29.5	120.4	
Ge	72	H2	174554.34	1.1	164020.04	106.42	29.5	120.4	
Ge	72	He	73241.43	1.2	70436.76	103.98	29.5	120.4	
Y	89	H2	3053545.70	0.6	2800847.42	109.02	29.5	120.4	
Y	89	He	618246.09	0.8	596189.55	103.7	29.5	120.4	
Tb	159	No Gas	8542218.28	2.8	7843787.66	108.9	29.5	120.4	
Tb	159	He	3079891.00	1.1	2988340.23	103.06	29.5	120.4	
Bi	209	No Gas	4216559.80	2.8	3902449.55	108.05	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	020_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:13:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	17.9	117.78	0.2	
11	B	6	No Gas	0.199	ppb	60.1	2408.07	4	
23	Na	45	He	69.891	ppb	50.4	12845.58	200	
24	Mg	45	He	21.388	ppb	166.2	2308.44	20	Fail All Methods□ Failed DoD
27	Al	45	He	17.806	ppb	162.1	542.41	20	Failed DoD
28	Si	45	H2	0.745	ppb	86.2	563.97	100	
39	K	45	He	29.833	ppb	106.4	14867.24	200	
40	Ca	45	H2	3.814	ppb	11.9	3059.33	20	
51	V	89	He	0.279	ppb	47.5	595.59	1	
52	Cr	89	He	0.063	ppb	130.5	156.64	1	
55	Mn	89	He	0.096	ppb	84.3	73.32	0.4	
56	Fe	89	H2	6.788	ppb	4.6	17129.68	20	
59	Co	89	He	0.046	ppb	151.5	115.57	0.2	
60	Ni	89	He	0.118	ppb	75.7	173.34	0.4	
63	Cu	89	He	0.185	ppb	49.6	545.59	0.6	
66	Zn	89	He	0.243	ppb	100.7	116.67	2	
75	As	89	He	0.047	ppb	98.0	14.00	1	
78	Se	89	H2	0.071	ppb	25.0	7.17	1	
88	Sr	89	He	0.056	ppb	162.1	53.34	1	
95	Mo	89	He	0.524	ppb	99.8	547.88	1	Failed DoD
107	Ag	89	He	0.020	ppb	132.9	81.11	0.2	
111	Cd	89	He	0.041	ppb	150.1	18.15	0.2	
118	Sn	159	He	0.104	ppb	53.6	152.23	1	
121	Sb	159	No Gas	0.019	ppb	39.4	200.23	0.2	
137	Ba	159	No Gas	0.014	ppb	65.9	76.75	0.4	
182	W	159	No Gas	0.065	ppb	13.1	403.80	1	
205	Tl	209	No Gas	0.014	ppb	57.0	223.59	0.2	
208	Pb	209	No Gas	0.034	ppb	34.9	784.22	0.2	
232	Th	209	No Gas	0.033	ppb	14.6	637.40	1	
238	U	209	No Gas	0.018	ppb	26.9	283.65	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1660226.35	1.7	1605283.87	103.42	29.5	120.4	
Sc	45	No Gas	4156079.89	1.1	3885855.82	106.95	29.5	120.4	
Sc	45	H2	481796.34	0.6	456147.33	105.62	29.5	120.4	
Sc	45	He	98199.97	1.0	93201.95	105.36	29.5	120.4	
Ge	72	No Gas	908764.87	1.8	853395.25	106.49	29.5	120.4	
Ge	72	H2	171051.03	0.4	164020.04	104.29	29.5	120.4	
Ge	72	He	73852.03	0.1	70436.76	104.85	29.5	120.4	
Y	89	H2	2968952.21	0.8	2800847.42	106	29.5	120.4	
Y	89	He	622052.13	0.7	596189.55	104.34	29.5	120.4	
Tb	159	No Gas	8376072.10	1.6	7843787.66	106.79	29.5	120.4	
Tb	159	He	3083738.15	0.5	2988340.23	103.19	29.5	120.4	
Bi	209	No Gas	4152536.97	1.9	3902449.55	106.41	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	021_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:15:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.481	ppb	8.5	34640.05	25	93.92	89.8	110.2	
11	B	6	No Gas	22.813	ppb	9.5	24041.87	25	91.25	89.8	110.2	
23	Na	45	He	5085.753	ppb	3.5	669504.05	5000	101.72	89.8	110.2	
24	Mg	45	He	4948.200	ppb	3.8	357049.69	5000	98.96	89.8	110.2	
27	Al	45	He	478.496	ppb	5.1	13485.67	500	95.7	89.8	110.2	
28	Si	45	H2	466.891	ppb	3.7	25150.42	500	93.38	89.8	110.2	
39	K	45	He	4955.621	ppb	3.3	334294.33	5000	99.11	89.8	110.2	
40	Ca	45	H2	4834.584	ppb	1.3	2376841.62	5000	96.69	89.8	110.2	
51	V	89	He	25.069	ppb	4.3	26052.54	25	100.28	89.8	110.2	
52	Cr	89	He	25.048	ppb	3.7	31744.37	25	100.19	89.8	110.2	
55	Mn	89	He	25.051	ppb	4.3	14546.18	25	100.2	89.8	110.2	
56	Fe	89	H2	4841.430	ppb	1.4	9417589.96	5000	96.83	89.8	110.2	
59	Co	89	He	25.487	ppb	3.4	55149.60	25	101.95	89.8	110.2	
60	Ni	89	He	25.502	ppb	1.2	15004.10	25	102.01	89.8	110.2	
63	Cu	89	He	25.089	ppb	2.3	41758.78	25	100.36	89.8	110.2	
66	Zn	89	He	25.209	ppb	5.4	5571.30	25	100.84	89.8	110.2	
75	As	89	He	24.777	ppb	3.6	4525.23	25	99.11	89.8	110.2	
78	Se	89	H2	24.137	ppb	0.7	2244.08	25	96.55	89.8	110.2	
88	Sr	89	He	24.107	ppb	0.2	21104.59	25	96.43	89.8	110.2	
95	Mo	89	He	24.518	ppb	4.1	24646.31	25	98.07	89.8	110.2	
107	Ag	89	He	24.655	ppb	2.0	83675.53	25	98.62	89.8	110.2	
111	Cd	89	He	24.690	ppb	3.1	10478.97	25	98.76	89.8	110.2	
118	Sn	159	He	24.705	ppb	1.7	22551.71	25	98.82	89.8	110.2	
121	Sb	159	No Gas	23.089	ppb	8.3	184265.23	25	92.36	89.8	110.2	
137	Ba	159	No Gas	23.594	ppb	7.5	73390.51	25	94.38	89.8	110.2	
182	W	159	No Gas	22.552	ppb	7.2	128524.85	25	90.21	89.8	110.2	
205	Tl	209	No Gas	23.500	ppb	5.9	287750.87	25	94	89.8	110.2	
208	Pb	209	No Gas	23.320	ppb	8.1	390269.98	25	93.28	89.8	110.2	
232	Th	209	No Gas	22.674	ppb	8.5	379470.06	25	90.7	89.8	110.2	
238	U	209	No Gas	22.839	ppb	8.6	358192.40	25	91.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1655049.62	3.5	1605283.87	103.1	29.5	120.4	
Sc	45	No Gas	4240727.45	2.8	3885855.82	109.13	29.5	120.4	
Sc	45	H2	485045.15	1.3	456147.33	106.34	29.5	120.4	
Sc	45	He	96965.37	2.7	93201.95	104.04	29.5	120.4	
Ge	72	No Gas	919608.33	3.7	853395.25	107.76	29.5	120.4	
Ge	72	H2	174803.04	1.3	164020.04	106.57	29.5	120.4	
Ge	72	He	73304.45	1.6	70436.76	104.07	29.5	120.4	
Y	89	H2	3023301.29	1.3	2800847.42	107.94	29.5	120.4	
Y	89	He	614064.62	1.9	596189.55	103	29.5	120.4	
Tb	159	No Gas	8477144.80	3.2	7843787.66	108.07	29.5	120.4	
Tb	159	He	3044952.49	2.2	2988340.23	101.89	29.5	120.4	
Bi	209	No Gas	4179996.26	3.9	3902449.55	107.11	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	022_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:18:10 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	35.9	193.34	0.2	
11	B	6	No Gas	0.391	ppb	28.4	2608.11	4	
23	Na	45	He	48.372	ppb	2.5	10011.42	200	
24	Mg	45	He	15.430	ppb	15.9	1878.04	20	Failed DoD
27	Al	45	He	9.005	ppb	8.9	291.12	20	
28	Si	45	H2	1.815	ppb	59.9	620.71	100	
39	K	45	He	18.915	ppb	39.6	14182.40	200	
40	Ca	45	H2	14.926	ppb	3.9	8490.64	20	Failed DoD
51	V	89	He	0.187	ppb	11.3	500.03	1	
52	Cr	89	He	0.054	ppb	15.1	144.64	1	
55	Mn	89	He	0.088	ppb	18.9	68.66	0.4	
56	Fe	89	H2	15.712	ppb	2.7	34336.82	20	Failed DoD
59	Co	89	He	0.034	ppb	38.2	88.89	0.2	
60	Ni	89	He	0.102	ppb	32.2	163.34	0.4	
63	Cu	89	He	0.108	ppb	14.9	416.69	0.6	
66	Zn	89	He	0.067	ppb	128.5	77.78	2	
75	As	89	He	0.044	ppb	40.8	13.33	1	
78	Se	89	H2	0.072	ppb	4.5	7.33	1	
88	Sr	89	He	0.053	ppb	27.9	50.00	1	
95	Mo	89	He	0.267	ppb	15.8	285.57	1	
107	Ag	89	He	0.014	ppb	38.9	58.89	0.2	
111	Cd	89	He	0.032	ppb	51.6	14.07	0.2	
118	Sn	159	He	0.098	ppb	28.6	146.67	1	
121	Sb	159	No Gas	0.070	ppb	29.7	614.04	0.2	
137	Ba	159	No Gas	0.050	ppb	35.7	186.88	0.4	
182	W	159	No Gas	0.105	ppb	48.7	637.40	1	
205	Tl	209	No Gas	0.045	ppb	17.7	600.69	0.2	
208	Pb	209	No Gas	0.083	ppb	11.8	1601.83	0.2	
232	Th	209	No Gas	0.120	ppb	28.3	2092.53	1	
238	U	209	No Gas	0.072	ppb	33.9	1127.99	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1670112.91	3.3	1605283.87	104.04	29.5	120.4	
Sc	45	No Gas	4220485.70	3.3	3885855.82	108.61	29.5	120.4	
Sc	45	H2	482138.57	1.0	456147.33	105.7	29.5	120.4	
Sc	45	He	98483.64	2.4	93201.95	105.67	29.5	120.4	
Ge	72	No Gas	918053.32	3.0	853395.25	107.58	29.5	120.4	
Ge	72	H2	173427.28	1.6	164020.04	105.74	29.5	120.4	
Ge	72	He	73616.52	1.6	70436.76	104.51	29.5	120.4	
Y	89	H2	2982921.46	0.3	2800847.42	106.5	29.5	120.4	
Y	89	He	622470.27	2.6	596189.55	104.41	29.5	120.4	
Tb	159	No Gas	8449718.28	3.5	7843787.66	107.72	29.5	120.4	
Tb	159	He	3087323.04	2.7	2988340.23	103.31	29.5	120.4	
Bi	209	No Gas	4149074.19	3.2	3902449.55	106.32	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS2
File Name	023_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:20:47 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.228	ppb	29.9	120.00	0.5	
B	11	6	No Gas	1.904	ppb	59.9	2614.77	10	
Na	23	45	He	266.521	ppb	1.2	10505.60	500	
Mg	24	45	He	30.526	ppb	0.7	1175.69	50	
Al	27	45	He	15.904	ppb	18.9	123.34	50	
Si	28	45	H2	16.771	ppb	36.5	700.80	250	
K	39	45	He	102.022	ppb	34.4	14063.97	500	
Ca	40	45	H2	66.374	ppb	3.1	7672.32	50	PB 6020 Fails DoD
V	51	89	He	3.181	ppb	10.8	948.96	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.023	ppb	9.9	331.94	2.5	
Mn	55	89	He	1.530	ppb	10.0	193.30	1	PB 6020 Fails DoD
Fe	56	89	H2	52.264	ppb	3.1	24244.52	50	PB 6020 Fails DoD
Co	59	89	He	0.180	ppb	8.1	91.12	0.5	
Ni	60	89	He	1.138	ppb	21.1	233.35	1	PB 6020 Fails DoD
Cu	63	89	He	1.401	ppb	9.6	692.26	1.5	
Zn	66	89	He	4.379	ppb	20.1	252.24	5	
As	75	89	He	0.449	ppb	29.9	21.33	2.5	
Se	78	89	H2	0.314	ppb	44.6	6.50	2.5	
Sr	88	89	He	0.224	ppb	43.8	42.22	2.5	
Mo	95	89	He	0.548	ppb	34.0	122.23	2.5	
Ag	107	89	He	0.033	ppb	59.5	33.33	0.5	
Cd	111	89	He	0.069	ppb	74.9	6.30	0.5	
Sn	118	159	He	43.383	ppb	1.2	7974.85	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.165	ppb	50.9	323.70	0.5	
Ba	137	159	No Gas	0.427	ppb	36.8	303.68	1	
W	182	159	No Gas	0.226	ppb	11.0	297.00	2.5	
Tl	205	209	No Gas	0.129	ppb	54.9	377.10	0.5	
Pb	208	209	No Gas	1.405	ppb	12.2	4996.00	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.243	ppb	21.8	911.05	2.5	
U	238	209	No Gas	0.106	ppb	71.6	343.72	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682164.18	2.9	1605283.87	104.79	29.5	120.4	
Sc	45	No Gas	4275393.47	3.1	3885855.82	110.02	29.5	120.4	
Sc	45	H2	481668.30	1.6	456147.33	105.59	29.5	120.4	
Sc	45	He	97000.19	2.9	93201.95	104.08	29.5	120.4	
Ge	72	No Gas	926424.87	3.4	853395.25	108.56	29.5	120.4	
Ge	72	H2	168859.55	1.7	164020.04	102.95	29.5	120.4	
Ge	72	He	72152.58	2.6	70436.76	102.44	29.5	120.4	
Y	89	H2	2983336.41	1.4	2800847.42	106.52	29.5	120.4	
Y	89	He	611122.01	3.0	596189.55	102.5	29.5	120.4	
Tb	159	No Gas	8572101.68	3.1	7843787.66	109.29	29.5	120.4	
Tb	159	He	3051420.82	3.3	2988340.23	102.11	29.5	120.4	
Bi	209	No Gas	4235729.49	2.6	3902449.55	108.54	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG20IMS2
File Name	024LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:23:17 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	42.212	ppb	9.3	12500.26	50	16.88	79.5	120.4	
B	11	6	No Gas	438.299	ppb	9.3	86203.21	500	17.53	79.5	120.4	
Na	23	45	He	7160.276	ppb	0.9	192546.73	7500	19.09	79.5	120.4	
Mg	24	45	He	4859.174	ppb	1.8	71266.66	5000	19.44	79.5	120.4	
Al	27	45	He	1723.425	ppb	0.9	9801.48	2000	17.23	79.5	120.4	
Si	28	45	H2	950.891	ppb	2.7	10355.38	1000	19.02	79.5	120.4	
K	39	45	He	9503.579	ppb	1.3	137121.86	10000	19.01	79.5	120.4	
Ca	40	45	H2	2429.401	ppb	1.0	235404.64	2500	19.44	79.5	120.4	
V	51	89	He	478.446	ppb	0.7	99161.46	500	19.14	79.5	120.4	
Cr	52	89	He	195.381	ppb	0.5	49763.27	200	19.54	79.5	120.4	
Mn	55	89	He	485.719	ppb	0.3	56682.81	500	19.43	79.5	120.4	
Fe	56	89	H2	1032.335	ppb	0.6	396914.62	1000	20.65	79.5	120.4	
Co	59	89	He	490.587	ppb	0.3	213464.09	500	19.62	79.5	120.4	
Ni	60	89	He	497.153	ppb	1.3	58511.94	500	19.89	79.5	120.4	
Cu	63	89	He	243.095	ppb	0.6	81147.69	250	19.45	79.5	120.4	
Zn	66	89	He	466.982	ppb	1.0	20592.47	500	18.68	79.5	120.4	
As	75	89	He	96.225	ppb	2.3	3535.51	100	19.24	79.5	120.4	
Se	78	89	H2	94.495	ppb	1.7	1719.03	100	18.9	79.5	120.4	
Sr	88	89	He	459.670	ppb	1.5	80893.79	500	18.39	79.5	120.4	
Mo	95	89	He	96.120	ppb	1.3	19438.84	100	19.22	79.5	120.4	
Ag	107	89	He	48.645	ppb	0.3	33205.87	50	19.46	79.5	120.4	
Cd	111	89	He	236.817	ppb	0.5	20214.79	250	18.95	79.5	120.4	
Sn	118	159	He	505.370	ppb	0.3	92842.40	500	20.21	79.5	120.4	
Sb	121	159	No Gas	85.740	ppb	10.4	142004.67	100	17.15	79.5	120.4	
Ba	137	159	No Gas	1681.530	ppb	10.2	1084868.19	2000	16.82	79.5	120.4	DoD
W	182	159	No Gas	85.100	ppb	10.7	100626.35	100	17.02	79.5	120.4	
Tl	205	209	No Gas	88.151	ppb	9.7	221761.15	100	17.63	79.5	120.4	
[Pb]	206	209	No Gas	88.283	ppb	8.9	75892.70	100	17.66	79.5	120.4	
[Pb]	207	209	No Gas	87.020	ppb	9.2	65765.51	100	17.4	79.5	120.4	
Pb	208	209	No Gas	87.676	ppb	9.2	301679.68	100	17.54	79.5	120.4	
Th	232	209	No Gas	83.255	ppb	10.4	286404.58	100	16.65	79.5	120.4	
U	238	209	No Gas	84.359	ppb	11.3	271854.35	100	16.87	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1656231.23	2.6	1605283.87	103.17	29.5	120.4	
Sc	45	No Gas	4348618.15	3.4	3885855.82	111.91	29.5	120.4	
Sc	45	H2	475808.65	0.6	456147.33	104.31	29.5	120.4	
Sc	45	He	97672.29	1.3	93201.95	104.8	29.5	120.4	
Ge	72	No Gas	942767.29	2.1	853395.25	110.47	29.5	120.4	
Ge	72	H2	168702.78	1.1	164020.04	102.85	29.5	120.4	
Ge	72	He	72649.83	0.7	70436.76	103.14	29.5	120.4	
Y	89	H2	2957628.41	0.5	2800847.42	105.6	29.5	120.4	
Y	89	He	617255.88	0.7	596189.55	103.53	29.5	120.4	
Tb	159	No Gas	8805446.61	4.1	7843787.66	112.26	29.5	120.4	
Tb	159	He	3069083.43	0.9	2988340.23	102.7	29.5	120.4	
Bi	209	No Gas	4298061.61	4.0	3902449.55	110.14	29.5	120.4	

Sample Report

Sample Name SN5717-014

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:25:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.423	ppb	15.6	1220.09	100	
11	B	6	No Gas	46.303	ppb	13.7	9999.37	1000	
23	Na	45	He	540.920	ppb	3.6	18926.95	200000	
24	Mg	45	He	22462.854	ppb	1.0	347141.76	200000	
27	Al	45	He	91891.825	ppb	1.7	553221.46	200000	
28	Si	45	H2	2776.604	ppb	4.4	31019.74	10000	
39	K	45	He	7761.013	ppb	1.4	121457.16	200000	
40	Ca	45	H2	8531.065	ppb	1.1	873555.97	200000	
51	V	89	He	174.771	ppb	2.6	39916.49	1000	
52	Cr	89	He	109.535	ppb	2.0	30619.47	2000	
55	Mn	89	He	3299.832	ppb	1.5	422097.72	2000	
56	Fe	89	H2	154880.906	ppb	0.6	65348568.77	100000	
59	Co	89	He	60.731	ppb	3.9	28980.84	1000	
60	Ni	89	He	154.798	ppb	2.1	20050.53	1000	
63	Cu	89	He	139.671	ppb	1.7	51224.77	2000	
66	Zn	89	He	491.993	ppb	3.5	23773.17	2000	
75	As	89	He	53.590	ppb	3.4	2160.74	1000	
78	Se	89	H2	2.085	ppb	5.7	42.83	1000	
88	Sr	89	He	54.338	ppb	1.8	10491.19	2000	
95	Mo	89	He	12.226	ppb	1.8	2723.70	1000	
107	Ag	89	He	0.254	ppb	17.8	202.23	100	
111	Cd	89	He	1.799	ppb	2.4	168.89	1000	
118	Sn	159	He	42.065	ppb	1.6	7893.73	1000	
121	Sb	159	No Gas	1.157	ppb	12.6	1858.87	1000	
137	Ba	159	No Gas	349.749	ppb	11.3	212774.34	2000	
182	W	159	No Gas	0.601	ppb	16.1	704.14	1000	
205	Tl	209	No Gas	2.022	ppb	9.7	4819.65	1000	
208	Pb	209	No Gas	194.889	ppb	11.8	627813.63	2000	
232	Th	209	No Gas	29.136	ppb	10.6	93998.08	1000	
238	U	209	No Gas	5.333	ppb	14.2	16094.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1501068.02	8.5	1605283.87	93.51	29.5	120.4	
Sc	45	No Gas	4207591.82	5.9	3885855.82	108.28	29.5	120.4	
Sc	45	H2	504601.58	0.6	456147.33	110.62	29.5	120.4	
Sc	45	He	103761.09	2.3	93201.95	111.33	29.5	120.4	
Ge	72	No Gas	906155.29	7.2	853395.25	106.18	29.5	120.4	
Ge	72	H2	176368.84	0.8	164020.04	107.53	29.5	120.4	
Ge	72	He	76747.53	2.3	70436.76	108.96	29.5	120.4	
Y	89	H2	3279727.29	0.2	2800847.42	117.1	29.5	120.4	
Y	89	He	676928.81	2.8	596189.55	113.54	29.5	120.4	
Tb	159	No Gas	8317455.92	6.3	7843787.66	106.04	29.5	120.4	
Tb	159	He	3114204.57	2.1	2988340.23	104.21	29.5	120.4	
Bi	209	No Gas	4035893.88	6.6	3902449.55	103.42	29.5	120.4	

Sample Report

Sample Name SN5717-015

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:28:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.164	ppb	2.2	1465.68	100	
11	B	6	No Gas	32.418	ppb	2.4	7843.48	1000	
23	Na	45	He	501.549	ppb	3.9	18439.15	200000	
24	Mg	45	He	29841.514	ppb	1.7	476793.40	200000	
27	Al	45	He	103584.591	ppb	1.1	645199.12	200000	
28	Si	45	H2	2159.612	ppb	4.9	24795.09	10000	
39	K	45	He	6975.479	ppb	2.8	114343.33	200000	
40	Ca	45	H2	9909.864	ppb	1.1	1037334.33	200000	
51	V	89	He	169.621	ppb	0.8	39960.83	1000	
52	Cr	89	He	126.014	ppb	0.5	36309.88	2000	
55	Mn	89	He	4092.676	ppb	0.3	539759.89	2000	
56	Fe	89	H2	201923.256	ppb	0.7	87289822.58	100000	
59	Co	89	He	84.633	ppb	0.6	41639.94	1000	
60	Ni	89	He	201.974	ppb	1.9	26940.00	1000	
63	Cu	89	He	192.922	ppb	0.9	72849.32	2000	
66	Zn	89	He	571.795	ppb	1.7	28484.22	2000	
75	As	89	He	67.846	ppb	1.8	2819.93	1000	
78	Se	89	H2	2.357	ppb	4.3	49.50	1000	
88	Sr	89	He	52.727	ppb	0.6	10492.13	2000	
95	Mo	89	He	17.362	ppb	5.1	3980.75	1000	
107	Ag	89	He	0.274	ppb	23.3	224.45	100	
111	Cd	89	He	2.015	ppb	10.0	194.82	1000	
118	Sn	159	He	41.983	ppb	2.4	8019.31	1000	
121	Sb	159	No Gas	1.075	ppb	8.6	1805.48	1000	
137	Ba	159	No Gas	376.356	ppb	4.1	238743.59	2000	
182	W	159	No Gas	0.356	ppb	23.2	450.51	1000	
205	Tl	209	No Gas	1.947	ppb	6.7	4792.95	1000	
208	Pb	209	No Gas	242.255	ppb	4.9	806536.98	2000	
232	Th	209	No Gas	33.820	ppb	4.2	112721.04	1000	
238	U	209	No Gas	5.382	ppb	4.3	16803.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1540207.17	0.5	1605283.87	95.95	29.5	120.4	
Sc	45	No Gas	4434269.37	1.8	3885855.82	114.11	29.5	120.4	
Sc	45	H2	515966.44	1.1	456147.33	113.11	29.5	120.4	
Sc	45	He	107338.19	1.5	93201.95	115.17	29.5	120.4	
Ge	72	No Gas	960760.55	1.2	853395.25	112.58	29.5	120.4	
Ge	72	H2	178039.35	1.2	164020.04	108.55	29.5	120.4	
Ge	72	He	78051.80	0.5	70436.76	110.81	29.5	120.4	
Y	89	H2	3360278.94	0.5	2800847.42	119.97	29.5	120.4	
Y	89	He	697744.82	0.4	596189.55	117.03	29.5	120.4	
Tb	159	No Gas	8632667.79	1.6	7843787.66	110.06	29.5	120.4	
Tb	159	He	3169993.18	0.1	2988340.23	106.08	29.5	120.4	
Bi	209	No Gas	4152030.48	2.0	3902449.55	106.4	29.5	120.4	

Sample Report

Sample Name SN5717-016

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:31:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.619	ppb	1.0	1218.99	100	
11	B	6	No Gas	39.962	ppb	8.6	8501.67	1000	
23	Na	45	He	477.310	ppb	1.2	17570.19	200000	
24	Mg	45	He	27241.559	ppb	1.1	431232.72	200000	
27	Al	45	He	89844.335	ppb	0.8	554341.84	200000	
28	Si	45	H2	2361.159	ppb	2.7	27281.34	10000	
39	K	45	He	7329.114	ppb	1.4	118314.94	200000	
40	Ca	45	H2	7106.858	ppb	1.6	750298.40	200000	
51	V	89	He	159.828	ppb	1.9	37065.08	1000	
52	Cr	89	He	127.793	ppb	1.1	36225.56	2000	
55	Mn	89	He	2105.803	ppb	0.7	273236.78	2000	
56	Fe	89	H2	156833.947	ppb	2.2	67304558.85	100000	
59	Co	89	He	68.821	ppb	1.2	33314.84	1000	
60	Ni	89	He	164.697	ppb	1.4	21635.15	1000	
63	Cu	89	He	147.099	ppb	0.4	54711.31	2000	
66	Zn	89	He	396.557	ppb	0.5	19457.48	2000	
75	As	89	He	48.979	ppb	2.2	2004.37	1000	
78	Se	89	H2	1.832	ppb	11.7	38.33	1000	
88	Sr	89	He	47.369	ppb	2.1	9274.57	2000	
95	Mo	89	He	8.570	ppb	6.1	1940.21	1000	
107	Ag	89	He	0.118	ppb	15.6	102.22	100	
111	Cd	89	He	0.881	ppb	19.6	84.08	1000	
118	Sn	159	He	44.443	ppb	2.2	8368.46	1000	
121	Sb	159	No Gas	0.489	ppb	8.5	804.26	1000	
137	Ba	159	No Gas	395.287	ppb	4.7	236138.41	2000	
182	W	159	No Gas	0.309	ppb	7.4	373.76	1000	
205	Tl	209	No Gas	2.091	ppb	10.2	4802.94	1000	
208	Pb	209	No Gas	88.014	ppb	5.7	273806.99	2000	
232	Th	209	No Gas	34.347	ppb	3.7	106994.08	1000	
238	U	209	No Gas	4.383	ppb	4.3	12790.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1427183.99	4.2	1605283.87	88.91	29.5	120.4	
Sc	45	No Gas	4202651.72	5.7	3885855.82	108.15	29.5	120.4	
Sc	45	H2	520213.49	1.8	456147.33	114.05	29.5	120.4	
Sc	45	He	106311.57	0.7	93201.95	114.07	29.5	120.4	
Ge	72	No Gas	894494.16	4.1	853395.25	104.82	29.5	120.4	
Ge	72	H2	175945.16	1.8	164020.04	107.27	29.5	120.4	
Ge	72	He	77368.32	0.7	70436.76	109.84	29.5	120.4	
Y	89	H2	3336442.13	1.5	2800847.42	119.12	29.5	120.4	
Y	89	He	686463.03	0.5	596189.55	115.14	29.5	120.4	
Tb	159	No Gas	8143073.49	5.4	7843787.66	103.82	29.5	120.4	
Tb	159	He	3126022.60	0.7	2988340.23	104.61	29.5	120.4	
Bi	209	No Gas	3885353.03	6.0	3902449.55	99.56	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	028_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:33:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.735	ppb	6.7	34546.54	25	98.94	89.8	110.2	
11	B	6	No Gas	24.753	ppb	6.9	24521.46	25	99.01	89.8	110.2	
23	Na	45	He	5046.637	ppb	2.0	685290.99	5000	100.93	89.8	110.2	
24	Mg	45	He	4906.322	ppb	0.6	365209.97	5000	98.13	89.8	110.2	
27	Al	45	He	480.943	ppb	0.8	13983.92	500	96.19	89.8	110.2	
28	Si	45	H2	470.614	ppb	1.9	25648.33	500	94.12	89.8	110.2	
39	K	45	He	4945.865	ppb	0.1	344161.06	5000	98.92	89.8	110.2	
40	Ca	45	H2	4930.094	ppb	2.0	2452744.63	5000	98.6	89.8	110.2	
51	V	89	He	25.360	ppb	0.9	27148.12	25	101.44	89.8	110.2	
52	Cr	89	He	25.314	ppb	1.1	33048.40	25	101.26	89.8	110.2	
55	Mn	89	He	25.545	ppb	0.5	15281.49	25	102.18	89.8	110.2	
56	Fe	89	H2	4983.578	ppb	1.6	9763746.53	5000	99.67	89.8	110.2	
59	Co	89	He	25.315	ppb	1.6	56425.37	25	101.26	89.8	110.2	
60	Ni	89	He	26.155	ppb	1.1	15843.93	25	104.62	89.8	110.2	
63	Cu	89	He	25.149	ppb	1.1	43112.85	25	100.6	89.8	110.2	
66	Zn	89	He	25.125	ppb	5.0	5720.27	25	100.5	89.8	110.2	
75	As	89	He	25.088	ppb	1.2	4719.99	25	100.35	89.8	110.2	
78	Se	89	H2	24.312	ppb	2.6	2276.42	25	97.25	89.8	110.2	
88	Sr	89	He	23.669	ppb	1.6	21337.10	25	94.68	89.8	110.2	
95	Mo	89	He	24.282	ppb	1.7	25144.90	25	97.13	89.8	110.2	
107	Ag	89	He	17.760	ppb	0.8	62081.65	25	71.04	89.8	110.2	> +/- 10%
111	Cd	89	He	24.386	ppb	1.4	10661.32	25	97.54	89.8	110.2	
118	Sn	159	He	24.603	ppb	1.0	22926.83	25	98.41	89.8	110.2	
121	Sb	159	No Gas	23.492	ppb	6.1	192614.57	25	93.97	89.8	110.2	
137	Ba	159	No Gas	23.681	ppb	5.8	75675.56	25	94.72	89.8	110.2	
182	W	159	No Gas	22.603	ppb	7.5	132285.15	25	90.41	89.8	110.2	
205	Tl	209	No Gas	23.093	ppb	6.7	285470.66	25	92.37	89.8	110.2	
208	Pb	209	No Gas	23.435	ppb	6.5	396141.51	25	93.74	89.8	110.2	
232	Th	209	No Gas	22.946	ppb	7.3	387875.50	25	91.78	89.8	110.2	
238	U	209	No Gas	22.740	ppb	7.1	360247.15	25	90.96	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1565144.05	2.0	1605283.87	97.5	29.5	120.4	
Sc	45	No Gas	4462804.68	3.3	3885855.82	114.85	29.5	120.4	
Sc	45	H2	490891.85	1.4	456147.33	107.62	29.5	120.4	
Sc	45	He	99962.08	0.4	93201.95	107.25	29.5	120.4	
Ge	72	No Gas	957568.10	1.7	853395.25	112.21	29.5	120.4	
Ge	72	H2	173717.05	2.2	164020.04	105.91	29.5	120.4	
Ge	72	He	75105.00	0.8	70436.76	106.63	29.5	120.4	
Y	89	H2	3045112.09	1.3	2800847.42	108.72	29.5	120.4	
Y	89	He	632301.83	0.6	596189.55	106.06	29.5	120.4	
Tb	159	No Gas	8704215.91	2.8	7843787.66	110.97	29.5	120.4	
Tb	159	He	3107873.98	0.4	2988340.23	104	29.5	120.4	
Bi	209	No Gas	4218297.37	2.6	3902449.55	108.09	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	029_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:36:27 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.047	ppb	16.6	115.56	0.2	
11	B	6	No Gas	0.231	ppb	22.0	2355.83	4	
23	Na	45	He	14.813	ppb	11.2	5634.02	200	
24	Mg	45	He	4.380	ppb	12.3	1084.56	20	
27	Al	45	He	0.601	ppb	80.9	52.23	20	
28	Si	45	H2	1.469	ppb	77.8	610.69	100	
39	K	45	He	7.940	ppb	81.3	13687.12	200	
40	Ca	45	H2	3.642	ppb	52.5	3017.24	20	
51	V	89	He	0.106	ppb	0.8	420.02	1	
52	Cr	89	He	0.023	ppb	64.0	105.98	1	
55	Mn	89	He	0.069	ppb	27.7	57.99	0.4	
56	Fe	89	H2	14.616	ppb	52.0	32565.45	20	Failed DoD
59	Co	89	He	0.010	ppb	37.6	35.56	0.2	
60	Ni	89	He	-0.007	ppb	N/A	100.00	0.4	
63	Cu	89	He	-0.002	ppb	N/A	234.45	0.6	
66	Zn	89	He	0.049	ppb	140.0	74.45	2	
75	As	89	He	0.020	ppb	53.0	9.00	1	
78	Se	89	H2	0.053	ppb	32.6	5.67	1	
88	Sr	89	He	0.008	ppb	23.5	11.11	1	
95	Mo	89	He	0.067	ppb	33.1	82.22	1	
107	Ag	89	He	0.004	ppb	37.1	24.44	0.2	
111	Cd	89	He	0.004	ppb	62.8	2.22	0.2	
118	Sn	159	He	0.046	ppb	42.4	98.89	1	
121	Sb	159	No Gas	0.019	ppb	36.5	203.57	0.2	
137	Ba	159	No Gas	0.020	ppb	43.9	93.44	0.4	
182	W	159	No Gas	0.039	ppb	24.9	256.96	1	
205	Tl	209	No Gas	0.019	ppb	21.9	290.33	0.2	
208	Pb	209	No Gas	0.024	ppb	13.7	620.71	0.2	
232	Th	209	No Gas	0.032	ppb	7.1	624.06	1	
238	U	209	No Gas	0.014	ppb	11.1	220.25	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1602980.92	2.3	1605283.87	99.86	29.5	120.4	
Sc	45	No Gas	4302524.40	2.9	3885855.82	110.72	29.5	120.4	
Sc	45	H2	488837.47	0.5	456147.33	107.17	29.5	120.4	
Sc	45	He	100113.91	1.8	93201.95	107.42	29.5	120.4	
Ge	72	No Gas	934488.30	3.7	853395.25	109.5	29.5	120.4	
Ge	72	H2	173816.09	0.8	164020.04	105.97	29.5	120.4	
Ge	72	He	74554.07	1.9	70436.76	105.85	29.5	120.4	
Y	89	H2	3013733.32	0.1	2800847.42	107.6	29.5	120.4	
Y	89	He	629027.28	2.1	596189.55	105.51	29.5	120.4	
Tb	159	No Gas	8513208.69	3.0	7843787.66	108.53	29.5	120.4	
Tb	159	He	3080656.90	1.7	2988340.23	103.09	29.5	120.4	
Bi	209	No Gas	4180207.40	3.1	3902449.55	107.12	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/24/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED 07/30/20 KATAHDIN ANALYTICAL METALS SECTION

FILE NAME: LNG24A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by AP (initials) on 7/24/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (17:24) fails high for Cu (0.933 ug/L) ; Closing PQL (22:14) fails low for Ni and high for Pb (0.352 ug/L)

ICSA (17:26) fails high for Mn (0.52 ug/L) Cu (0.751 ug/L)

CCB fails at 20:53 for Be (0.114 ug/L) Ca (12.785 ug/L) Ni (-0.32 ug/L) Ba (0.262 ug/L)

CCBs fails at 21:26 for Ca (28.152 ug/L) Fe (10.36 ug/L) Ni (-0.325 ug/L) Pb (0.132 ug/L), 21:58 for Ni (-0.252 ug/L) Pb (0.188 ug/L)

For high failing ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

100x diln.: 0.1 mL of sample (pipet M27) + 9.9mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG24A	07/24/2020	17:13	AP
CalStd	1	LNG24A	07/24/2020	17:16	AP
ICV	1	LNG24A	07/24/2020	17:19	AP
ICB	1	LNG24A	07/24/2020	17:21	AP
PQL	1	LNG24A	07/24/2020	17:24	AP
ICSA	1	LNG24A	07/24/2020	17:26	AP
ICSAB	1	LNG24A	07/24/2020	17:29	AP
LRS1	1	LNG24A	07/24/2020	17:32	AP
LRS2	1	LNG24A	07/24/2020	17:34	AP
RINSE	1	LNG24A	07/24/2020	17:37	AP
RINSE	1	LNG24A	07/24/2020	17:40	AP
CCV	1	LNG24A	07/24/2020	17:42	AP
CCB	1	LNG24A	07/24/2020	17:45	AP
missed	1	LNG24A	07/24/2020	17:47	AP
SN5980-002	1	LNG24A	07/24/2020	17:50	AP
SN5980-003	1	LNG24A	07/24/2020	17:53	AP
SN5980-004	1	LNG24A	07/24/2020	17:55	AP
SN5980-005	1	LNG24A	07/24/2020	17:58	AP
SN5980-001	1	LNG24A	07/24/2020	18:00	AP
SN5980-006	1	LNG24A	07/24/2020	18:03	AP
SN5980-007	1	LNG24A	07/24/2020	18:05	AP
SN5980-008	1	LNG24A	07/24/2020	18:08	AP
SN5980-009	1	LNG24A	07/24/2020	18:11	AP
CCV	1	LNG24A	07/24/2020	18:13	AP
CCB	1	LNG24A	07/24/2020	18:16	AP
SN5980-010	1	LNG24A	07/24/2020	18:18	AP
UNDIGESTED LCS TE	5	LNG24A	07/24/2020	18:21	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	18:24	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	18:26	AP
SN5286-001R	1	LNG24A	07/24/2020	18:29	AP
SN5286-002R	1	LNG24A	07/24/2020	18:31	AP
PBWNG13IMW1	5	LNG24A	07/24/2020	18:34	AP
LCSWNG13IMW1	5	LNG24A	07/24/2020	18:37	AP
SN5589-007	5	LNG24A	07/24/2020	18:39	AP
PBWNG17IMW1	5	LNG24A	07/24/2020	18:42	AP
CCV	1	LNG24A	07/24/2020	18:44	AP
CCB	1	LNG24A	07/24/2020	18:47	AP
LCSWNG17IMW1	5	LNG24A	07/24/2020	18:50	AP
SN5772-003R	5	LNG24A	07/24/2020	18:53	AP
PBSNG20IMS1	5	LNG24A	07/24/2020	18:55	AP
LCSONG20IMS1	5	LNG24A	07/24/2020	18:58	AP
SN5515-001R	10	LNG24A	07/24/2020	19:00	AP
SN5515-001R	20	LNG24A	07/24/2020	19:03	AP
PBWNG20IMW1	5	LNG24A	07/24/2020	19:06	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
LCSWNG20IMW1	5	LNG24A	07/24/2020	19:08	AP
SN5920-001	5	LNG24A	07/24/2020	19:11	AP
SN5920-002	5	LNG24A	07/24/2020	19:13	AP
CCV	1	LNG24A	07/24/2020	19:16	AP
CCB	1	LNG24A	07/24/2020	19:19	AP
SN5920-003	5	LNG24A	07/24/2020	19:21	AP
PBSNG21IMW2	5	LNG24A	07/24/2020	19:24	AP
LCSWNG21IMW2	5	LNG24A	07/24/2020	19:27	AP
SN5717-020	5	LNG24A	07/24/2020	19:29	AP
SN5830-002	5	LNG24A	07/24/2020	19:32	AP
SN5832-001	5	LNG24A	07/24/2020	19:35	AP
SN5832-002	5	LNG24A	07/24/2020	19:37	AP
SN5832-003	5	LNG24A	07/24/2020	19:40	AP
SN5832-004	5	LNG24A	07/24/2020	19:43	AP
SN5859-001	5	LNG24A	07/24/2020	19:45	AP
CCV	1	LNG24A	07/24/2020	19:48	AP
CCB	1	LNG24A	07/24/2020	19:51	AP
SN5859-002	5	LNG24A	07/24/2020	19:53	AP
SN5859-003	5	LNG24A	07/24/2020	19:56	AP
SN5897-001	5	LNG24A	07/24/2020	19:58	AP
SN5897-002	5	LNG24A	07/24/2020	20:01	AP
SN5897-002L	25	LNG24A	07/24/2020	20:03	AP
SN5897-002A	5	LNG24A	07/24/2020	20:06	AP
SN5897-002S	5	LNG24A	07/24/2020	20:08	AP
SN5897-002P	5	LNG24A	07/24/2020	20:11	AP
SN5946-001	5	LNG24A	07/24/2020	20:14	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	20:16	AP
CCV	1	LNG24A	07/24/2020	20:19	AP
CCB	1	LNG24A	07/24/2020	20:21	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	20:24	AP
SN5286-001R	1	LNG24A	07/24/2020	20:27	AP
SN5286-002R	1	LNG24A	07/24/2020	20:29	AP
SN5907-001	100	LNG24A	07/24/2020	20:32	AP
SN5923-001	1	LNG24A	07/24/2020	20:35	AP
SN5997-001	1	LNG24A	07/24/2020	20:37	AP
SN5997-001L	5	LNG24A	07/24/2020	20:40	AP
SN5997-001A	1	LNG24A	07/24/2020	20:43	AP
SN5997-001S	1	LNG24A	07/24/2020	20:45	AP
SN5997-001P	1	LNG24A	07/24/2020	20:48	AP
CCV	1	LNG24A	07/24/2020	20:51	AP
CCB	1	LNG24A	07/24/2020	20:53	AP
PBWNG22IMW2	5	LNG24A	07/24/2020	20:56	AP
LCSWNG22IMW2	5	LNG24A	07/24/2020	20:59	AP
SN5920-004	5	LNG24A	07/24/2020	21:01	AP
PBSNG23IMS1	5	LNG24A	07/24/2020	21:04	AP
LCSONG23IMS1	5	LNG24A	07/24/2020	21:07	AP
LC2ONG23IMS1	5	LNG24A	07/24/2020	21:09	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6056-005	5	LNG24A	07/24/2020	21:12	AP
SN6056-006	5	LNG24A	07/24/2020	21:15	AP
SN6056-007	5	LNG24A	07/24/2020	21:17	AP
SN6056-008	5	LNG24A	07/24/2020	21:20	AP
CCV	1	LNG24A	07/24/2020	21:23	AP
CCB	1	LNG24A	07/24/2020	21:26	AP
SN6056-009	5	LNG24A	07/24/2020	21:28	AP
SN6056-009L	25	LNG24A	07/24/2020	21:31	AP
SN6056-009A	5	LNG24A	07/24/2020	21:34	AP
SN6056-009S	5	LNG24A	07/24/2020	21:36	AP
SN6056-009P	5	LNG24A	07/24/2020	21:39	AP
SN6056-010	5	LNG24A	07/24/2020	21:42	AP
SN6056-011	5	LNG24A	07/24/2020	21:44	AP
SN6056-012	5	LNG24A	07/24/2020	21:47	AP
SN6056-013	5	LNG24A	07/24/2020	21:50	AP
SN6056-014	5	LNG24A	07/24/2020	21:52	AP
CCV	1	LNG24A	07/24/2020	21:55	AP
CCB	1	LNG24A	07/24/2020	21:58	AP
SN6056-015	5	LNG24A	07/24/2020	22:01	AP
SN6056-016	5	LNG24A	07/24/2020	22:03	AP
SN6056-017	5	LNG24A	07/24/2020	22:06	AP
CCV	1	LNG24A	07/24/2020	22:08	AP
CCB	1	LNG24A	07/24/2020	22:11	AP
PQL	1	LNG24A	07/24/2020	22:14	AP
RINSE	1	LNG24A	07/24/2020	22:17	AP
RINSE	1	LNG24A	07/24/2020	22:19	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq. Date-Time	7/24/2020 4:41:08 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

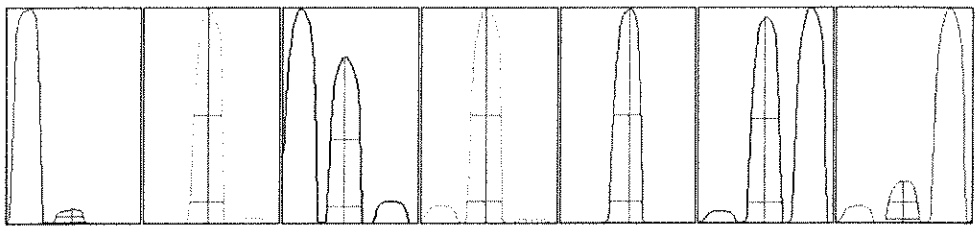
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	4432	44321.35	0.771	5.000	
9	1161	11608.37	0.925	5.000	
24	48564	485644.47	0.299	5.000	
59	9076	90755.10	0.378	5.000	
115	151195	1511950.56	0.395	5.000	
205	9665	96645.71	0.587	5.000	
208	21345	213446.86	0.560	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	4484	4447	4400	4423	4406
9	1151	1166	1150	1161	1176
24	48420	48394	48641	48673	48694
59	9036	9058	9070	9088	9127
115	150453	150647	151531	151597	151747
205	9662	9632	9682	9599	9749
208	21209	21234	21489	21414	21377

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	7328.00	7.00	6.90 - 7.10	
9	1929.84	8.95	8.90 - 9.10	
24	76565.05	23.90	23.90 - 24.10	
59	14388.91	58.95	58.90 - 59.10	
115	254344.15	115.05	114.90 - 115.10	
205	16055.77	205.00	204.90 - 205.10	
208	35395.17	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.706	0.900	
9	0.62	0.739	0.900	
24	0.67	0.773	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.63	0.764	0.900	
208	0.63	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	12.4 V
Extract 2	-125.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	543	5428.54	1.623	5.000	
89	81836	818356.85	1.327	5.000	
205	8500	84996.41	0.414	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	531	541	546	555	541
89	80111	81553	82148	82429	82937
205	8450	8542	8499	8522	8485

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.6 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1730	17299.49	0.939	5.000	
89	17530	175302.74	0.724	5.000	
205	4780	47799.55	0.593	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1730	1713	1715	1741	1751
89	17435	17445	17434	17653	17685
205	4765	4746	4770	4810	4809

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.2 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:13:00 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	32.22	6.0
11	B	6	No Gas	1895.75	7.5
23	Na	45	He	10849.49	3.0
24	Mg	45	He	891.20	3.0
27	Al	45	He	20.00	33.4
28	Si	45	H2	560.63	1.8
39	K	45	He	12795.01	1.8
40	Ca	45	H2	876.73	7.6
51	V	89	He	361.13	15.4
52	Cr	89	He	72.66	15.7
55	Mn	89	He	12.00	44.1
56	Fe	89	H2	2496.33	9.9
59	Co	89	He	15.56	24.7
60	Ni	89	He	323.35	4.5
63	Cu	89	He	492.25	3.9
66	Zn	89	He	74.45	27.4
75	As	89	He	7.00	28.6
78	Se	89	H2	0.83	69.3
88	Sr	89	He	6.66	86.6
95	Mo	89	He	2.22	86.6
107	Ag	89	He	14.45	26.7
111	Cd	89	He	0.37	173.2
118	Sn	159	He	66.67	31.2
121	Sb	159	No Gas	36.71	56.8
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	23.36	137.8
205	Tl	209	No Gas	140.16	28.6
208	Pb	209	No Gas	223.59	23.0
232	Th	209	No Gas	93.44	24.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1881686.03	0.6
Sc	45	No Gas	3915123.71	0.9
Sc	45	H2	507902.10	3.4
Sc	45	He	102593.00	2.7
Ge	72	No Gas	852546.94	0.2
Ge	72	H2	193980.16	2.8
Ge	72	He	77385.19	1.8
Y	89	H2	3089458.15	2.9
Y	89	He	678154.65	3.0
Tb	159	No Gas	7727080.72	1.1
Tb	159	He	3280980.40	3.2
Bi	209	No Gas	3977089.87	0.9

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:16:01 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	67502.29	2.9
11	B	6	No Gas	45358.57	0.9
23	Na	45	He	1125490.00	0.5
24	Mg	45	He	624674.37	1.0
27	Al	45	He	24971.38	0.6
28	Si	45	H2	52561.46	1.0
39	K	45	He	603436.61	0.4
40	Ca	45	H2	4660697.01	1.1
51	V	89	He	46795.15	0.1
52	Cr	89	He	56590.09	0.8
55	Mn	89	He	26977.50	0.6
56	Fe	89	H2	18067101.26	0.9
59	Co	89	He	97479.57	1.0
60	Ni	89	He	26403.45	2.3
63	Cu	89	He	74433.98	0.3
66	Zn	89	He	9826.01	1.0
75	As	89	He	8412.13	0.8
78	Se	89	H2	4414.17	0.8
88	Sr	89	He	42557.76	1.5
95	Mo	89	He	45670.27	1.1
107	Ag	89	He	153875.52	0.6
111	Cd	89	He	20006.34	0.9
118	Sn	159	He	44445.21	0.8
121	Sb	159	No Gas	320641.43	3.0
137	Ba	159	No Gas	123351.38	2.7
182	W	159	No Gas	230565.80	3.6
205	Tl	209	No Gas	501343.10	2.6
208	Pb	209	No Gas	694163.43	3.0
232	Th	209	No Gas	698065.23	3.5
238	U	209	No Gas	660958.09	4.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1921569.14	0.6	1881686.03	102.12	29.5	120.4	
Sc	45	No Gas	3909481.43	0.6	3915123.71	99.86	29.5	120.4	
Sc	45	H2	504747.77	0.4	507902.1	99.38	29.5	120.4	
Sc	45	He	97531.06	0.3	102593	95.07	29.5	120.4	
Ge	72	No Gas	855194.93	0.6	852546.94	100.31	29.5	120.4	
Ge	72	H2	190993.11	1.1	193980.16	98.46	29.5	120.4	
Ge	72	He	74746.31	0.4	77385.19	96.59	29.5	120.4	
Y	89	H2	3116398.06	1.1	3089458.15	100.87	29.5	120.4	
Y	89	He	655460.68	0.1	678154.65	96.65	29.5	120.4	
Tb	159	No Gas	7802752.94	0.5	7727080.72	100.98	29.5	120.4	
Tb	159	He	3257769.19	0.1	3280980.4	99.29	29.5	120.4	
Bi	209	No Gas	3989935.89	0.7	3977089.87	100.32	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:19:02 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.308	ppb	9.0	26839.01	20	101.54	89.6	110.4	
11	B	6	No Gas	18.860	ppb	7.6	17922.78	20	94.3	89.6	110.4	
23	Na	45	He	4100.386	ppb	0.6	473255.47	4000	102.51	89.6	110.4	
24	Mg	45	He	4025.915	ppb	1.2	255045.65	4000	100.65	89.6	110.4	
27	Al	45	He	391.943	ppb	1.9	9917.09	400	97.99	89.6	110.4	
28	Si	45	H2	432.375	ppb	0.9	23040.75	400	108.09	89.6	110.4	
39	K	45	He	4014.472	ppb	0.2	252570.40	4000	100.36	89.6	110.4	
40	Ca	45	H2	3973.945	ppb	1.7	1852319.40	4000	99.35	89.6	110.4	
51	V	89	He	20.121	ppb	0.7	19163.63	20	100.6	89.6	110.4	
52	Cr	89	He	20.465	ppb	0.9	23354.28	20	102.32	89.6	110.4	
55	Mn	89	He	20.838	ppb	1.7	11321.83	20	104.19	89.6	110.4	
56	Fe	89	H2	3948.943	ppb	2.5	7184436.53	4000	98.72	89.6	110.4	
59	Co	89	He	20.275	ppb	0.5	39792.17	20	101.38	89.6	110.4	
60	Ni	89	He	20.522	ppb	0.7	11092.51	20	102.61	89.6	110.4	
63	Cu	89	He	20.518	ppb	0.8	31025.17	20	102.59	89.6	110.4	
66	Zn	89	He	20.156	ppb	0.8	4029.62	20	100.78	89.6	110.4	
75	As	89	He	20.560	ppb	1.6	3485.49	20	102.8	89.6	110.4	
78	Se	89	H2	20.170	ppb	1.8	1793.37	20	100.85	89.6	110.4	
88	Sr	89	He	19.756	ppb	2.3	16928.72	20	98.78	89.6	110.4	
95	Mo	89	He	40.064	ppb	1.8	36827.10	40	100.16	89.6	110.4	
107	Ag	89	He	20.697	ppb	0.2	64112.90	20	103.48	89.6	110.4	
111	Cd	89	He	20.603	ppb	1.1	8297.44	20	103.02	89.6	110.4	
118	Sn	159	He	19.990	ppb	1.6	17887.94	20	99.95	89.6	110.4	
121	Sb	159	No Gas	19.688	ppb	9.2	128352.62	20	98.44	89.6	110.4	
137	Ba	159	No Gas	19.783	ppb	8.6	49620.80	20	98.92	89.6	110.4	
182	W	159	No Gas	19.382	ppb	10.1	90842.74	20	96.91	89.6	110.4	
205	Tl	209	No Gas	20.503	ppb	9.3	210825.97	20	102.52	89.6	110.4	
208	Pb	209	No Gas	19.827	ppb	8.5	282367.61	20	99.14	89.6	110.4	
232	Th	209	No Gas	19.945	ppb	9.5	285489.78	20	99.72	89.6	110.4	
238	U	209	No Gas	19.627	ppb	9.6	265949.72	20	98.14	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1882886.82	3.0	1881686.03	100.06	29.5	120.4	
Sc	45	No Gas	3918917.09	3.9	3915123.71	100.1	29.5	120.4	
Sc	45	H2	504756.38	2.1	507902.1	99.38	29.5	120.4	
Sc	45	He	98716.83	1.0	102593	96.22	29.5	120.4	
Ge	72	No Gas	858014.60	2.5	852546.94	100.64	29.5	120.4	
Ge	72	H2	190817.99	0.2	193980.16	98.37	29.5	120.4	
Ge	72	He	75705.89	0.5	77385.19	97.83	29.5	120.4	
Y	89	H2	3138177.70	2.2	3089458.15	101.58	29.5	120.4	
Y	89	He	659673.25	0.7	678154.65	97.27	29.5	120.4	
Tb	159	No Gas	7948454.60	3.8	7727080.72	102.86	29.5	120.4	
Tb	159	He	3271947.49	0.5	3280980.4	99.72	29.5	120.4	
Bi	209	No Gas	4099612.54	4.0	3977089.87	103.08	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:21:41 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.057	ppb	29.5	105.56	0.2	
11	B	6	No Gas	0.503	ppb	38.7	2273.59	4	
23	Na	45	He	1.378	ppb	138.7	10522.15	200	
24	Mg	45	He	-2.210	ppb	N/A	713.40	20	
27	Al	45	He	0.479	ppb	86.8	31.11	20	
28	Si	45	H2	0.973	ppb	123.2	600.69	100	
39	K	45	He	0.641	ppb	281.7	12263.18	200	
40	Ca	45	H2	1.354	ppb	2.7	1483.46	20	
51	V	89	He	-0.083	ppb	N/A	272.24	1	
52	Cr	89	He	-0.010	ppb	N/A	59.32	1	
55	Mn	89	He	0.010	ppb	82.4	16.67	0.4	
56	Fe	89	H2	2.570	ppb	4.1	7022.86	20	
59	Co	89	He	0.000	ppb	1819.2	15.56	0.2	
60	Ni	89	He	-0.143	ppb	N/A	237.79	0.4	
63	Cu	89	He	0.032	ppb	105.0	521.14	0.6	
66	Zn	89	He	-0.072	ppb	N/A	57.78	2	
75	As	89	He	-0.008	ppb	N/A	5.33	1	
78	Se	89	H2	0.016	ppb	84.4	2.17	1	
88	Sr	89	He	-0.001	ppb	N/A	5.56	1	
95	Mo	89	He	0.171	ppb	20.0	157.79	1	
107	Ag	89	He	0.006	ppb	64.3	32.22	0.2	
111	Cd	89	He	0.005	ppb	159.1	2.22	0.2	
118	Sn	159	He	0.071	ppb	73.0	127.79	1	
121	Sb	159	No Gas	0.024	ppb	27.6	190.21	0.2	
137	Ba	159	No Gas	0.025	ppb	35.9	73.42	0.4	
182	W	159	No Gas	0.052	ppb	60.3	260.30	1	
205	Tl	209	No Gas	0.024	ppb	6.9	387.10	0.2	
208	Pb	209	No Gas	0.022	ppb	15.2	537.28	0.2	
232	Th	209	No Gas	0.046	ppb	16.2	740.85	1	
238	U	209	No Gas	0.021	ppb	12.8	276.98	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841311.05	0.4	1881686.03	97.85	29.5	120.4	
Sc	45	No Gas	3786276.74	1.3	3915123.71	96.71	29.5	120.4	
Sc	45	H2	498730.53	1.1	507902.1	98.19	29.5	120.4	
Sc	45	He	97952.29	1.3	102593	95.48	29.5	120.4	
Ge	72	No Gas	835863.08	1.9	852546.94	98.04	29.5	120.4	
Ge	72	H2	187819.55	1.2	193980.16	96.82	29.5	120.4	
Ge	72	He	74710.41	0.7	77385.19	96.54	29.5	120.4	
Y	89	H2	3053927.60	1.0	3089458.15	98.85	29.5	120.4	
Y	89	He	653526.53	1.3	678154.65	96.37	29.5	120.4	
Tb	159	No Gas	7709154.33	1.8	7727080.72	99.77	29.5	120.4	
Tb	159	He	3223734.74	1.3	3280980.4	98.26	29.5	120.4	
Bi	209	No Gas	4005113.07	1.9	3977089.87	100.7	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:24:16 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.200	ppb	20.1	303.35	0.2	100	79.5	120.4
11	B	6	No Gas	3.805	ppb	9.1	5244.46	4	95.12	79.5	120.4
23	Na	45	He	228.917	ppb	2.7	35871.37	200	114.46	79.5	120.4
24	Mg	45	He	19.220	ppb	12.3	2049.18	20	96.1	79.5	120.4
27	Al	45	He	20.031	ppb	8.1	518.92	20	100.16	79.5	120.4
28	Si	45	H2	94.581	ppb	6.0	5300.20	100	94.58	79.5	120.4
39	K	45	He	209.155	ppb	1.5	24555.12	200	104.58	79.5	120.4
40	Ca	45	H2	21.944	ppb	6.9	10737.77	20	109.72	79.5	120.4
51	V	89	He	1.284	ppb	14.2	1524.58	1	128.4	79.5	120.4
52	Cr	89	He	1.049	ppb	1.8	1241.17	1	104.9	79.5	120.4
55	Mn	89	He	0.416	ppb	6.2	233.29	0.4	104	79.5	120.4
56	Fe	89	H2	23.115	ppb	5.2	43023.56	20	115.57	79.5	120.4
59	Co	89	He	0.211	ppb	13.9	422.26	0.2	105.5	79.5	120.4
60	Ni	89	He	0.383	ppb	10.9	506.69	0.4	95.75	79.5	120.4
63	Cu	89	He	0.933	ppb	6.8	1833.52	0.6	155.5	79.5	120.4
66	Zn	89	He	2.103	ppb	3.6	476.69	2	105.15	79.5	120.4
75	As	89	He	1.007	ppb	7.8	174.02	1	100.7	79.5	120.4
78	Se	89	H2	0.987	ppb	9.5	85.33	1	98.7	79.5	120.4
88	Sr	89	He	1.035	ppb	8.8	876.73	1	103.5	79.5	120.4
95	Mo	89	He	1.123	ppb	3.8	1015.63	1	112.3	79.5	120.4
107	Ag	89	He	0.218	ppb	8.8	677.82	0.2	109	79.5	120.4
111	Cd	89	He	0.224	ppb	6.0	88.89	0.2	112	79.5	120.4
118	Sn	159	He	1.139	ppb	3.2	1063.42	1	113.9	79.5	120.4
121	Sb	159	No Gas	0.206	ppb	20.2	1358.25	0.2	103	79.5	120.4
137	Ba	159	No Gas	0.427	ppb	15.1	1071.24	0.4	106.75	79.5	120.4
182	W	159	No Gas	1.006	ppb	8.2	4672.74	1	100.6	79.5	120.4
205	Tl	209	No Gas	0.210	ppb	16.4	2276.10	0.2	105	79.5	120.4
208	Pb	209	No Gas	0.225	ppb	3.6	3397.33	0.2	112.5	79.5	120.4
232	Th	209	No Gas	0.259	ppb	3.3	3764.78	0.2	129.5	79.5	120.4
238	U	209	No Gas	0.192	ppb	9.7	2579.83	0.2	96	79.5	120.4

QC Flag
Failed DoD

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1923469.77	0.8	1881686.03	102.22	29.5	120.4	
Sc	45	No Gas	3842597.57	0.8	3915123.71	98.15	29.5	120.4	
Sc	45	H2	489247.15	4.8	507902.1	96.33	29.5	120.4	
Sc	45	He	97593.17	0.9	102593	95.13	29.5	120.4	
Ge	72	No Gas	848119.85	1.3	852546.94	99.48	29.5	120.4	
Ge	72	H2	185277.17	3.9	193980.16	95.51	29.5	120.4	
Ge	72	He	74019.00	0.3	77385.19	95.65	29.5	120.4	
Y	89	H2	3031936.33	4.4	3089458.15	98.14	29.5	120.4	
Y	89	He	647814.80	0.6	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	7821809.40	1.2	7727080.72	101.23	29.5	120.4	
Tb	159	He	3216718.01	1.6	3280980.4	98.04	29.5	120.4	
Bi	209	No Gas	4055537.89	1.4	3977089.87	101.97	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:26:51 PM
Sample Type	ICSA
Total Dilution	1.0000
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass

Analyte Table:

Name	Mass	ISTD	Tune Step	Tune Mode	Conc.	Units	Det.	CPS	Ratio	Integ Time
[Li]	7	6	1	No Gas	116.028	ppb	Pulse	109257.29	0.0611	0.0999
Be	9	6	1	No Gas	0.028	ppb	Pulse	65.56	0.0000	0.3000
B	11	6	1	No Gas	0.365	ppb	Pulse	2098.01	0.0012	0.3000
Sb	121	159	1	No Gas	0.165	ppb	Pulse	1111.29	0.0001	0.0999
Ba	137	159	1	No Gas	0.163	ppb	Pulse	420.48	0.0001	0.0999
W	182	159	1	No Gas	0.209	ppb	Pulse	1001.16	0.0001	0.0999
Tl	205	209	1	No Gas	0.009	ppb	Pulse	226.92	0.0001	0.0999
[Pb]	206	209	1	No Gas	0.068	ppb	Pulse	307.01	0.0001	0.0999
[Pb]	207	209	1	No Gas	0.087	ppb	Pulse	307.01	0.0001	0.0999
Pb	208	209	1	No Gas	0.085	ppb	Pulse	1364.89	0.0004	0.0999
Th	232	209	1	No Gas	0.037	ppb	Pulse	600.69	0.0002	0.0999
U	238	209	1	No Gas	0.005	ppb	Pulse	70.08	0.0000	0.0999
Si	28	45	2	H2	5.615	ppb	Pulse	790.90	0.0017	0.0999
Ca	40	45	2	H2	97945.288	ppb	Analog	42490864.37	90.4270	0.3000
Fe	56	89	2	H2	96464.178	ppb	Analog	165386936.11	55.9247	0.0999
Se	78	89	2	H2	0.078	ppb	Pulse	7.33	0.0000	2.0001
Na	23	45	3	He	101176.764	ppb	Analog	10286230.35	115.7916	0.0999
Mg	24	45	3	He	101202.852	ppb	Analog	5751294.15	64.7414	0.1500
Al	27	45	3	He	97196.564	ppb	Analog	2208949.80	24.8671	0.3000
K	39	45	3	He	97416.537	ppb	Analog	5257550.66	59.1821	0.2001
V	51	89	3	He	0.034	ppb	Pulse	351.13	0.0006	0.3000
Cr	52	89	3	He	0.293	ppb	Pulse	369.94	0.0006	0.5001
Mn	55	89	3	He	0.520	ppb	Pulse	269.29	0.0004	0.5001
Co	59	89	3	He	0.305	ppb	Pulse	560.06	0.0009	0.1500
Ni	60	89	3	He	0.116	ppb	Pulse	344.46	0.0006	0.3000
Cu	63	89	3	He	0.751	ppb	Pulse	1460.14	0.0024	0.3000
Zn	66	89	3	He	0.526	ppb	Pulse	161.12	0.0003	0.3000
As	75	89	3	He	0.065	ppb	Pulse	16.33	0.0000	0.9999
Sr	88	89	3	He	0.810	ppb	Pulse	641.15	0.0011	0.3000
Mo	95	89	3	He	2114.343	ppb	Analog	1778699.78	2.9463	0.3000
Ag	107	89	3	He	0.027	ppb	Pulse	90.01	0.0001	0.3000
Cd	111	89	3	He	0.358	ppb	Pulse	132.60	0.0002	0.9000
Sn	118	159	3	He	0.388	ppb	Pulse	393.35	0.0001	0.3000

ISTD Table:

Name	Mass	ISTD Conc.	Units	Det.	Tune Step	Tune Mode	CPS	CPS RSD
Li	6	1	ppb	Analog	1	No Gas	1788832.90	0.9
Sc	45	1	ppb	Analog	1	No Gas	3769213.51	0.7
Ge	72	1	ppb	Pulse	1	No Gas	831279.97	0.8
Tb	159	1	ppb	Analog	1	No Gas	7905431.55	0.4
Bi	209	1	ppb	Analog	1	No Gas	3890679.26	0.3
Sc	45	1	ppb	Pulse	2	H2	469893.26	0.5
Ge	72	1	ppb	Pulse	2	H2	174741.38	1.5
Y	89	1	ppb	Analog	2	H2	2957468.95	1.0
Sc	45	1	ppb	Pulse	3	He	88885.87	2.7
Ge	72	1	ppb	Pulse	3	He	67975.61	2.2
Y	89	1	ppb	Pulse	3	He	603985.91	2.4
Tb	159	1	ppb	Analog	3	He	3125184.43	2.5
Bi	209	1	ppb	Analog	3	He	1785607.96	2.2

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:29:29 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.266	ppb	1.9	23693.39	20	79.5	120.4	
11	B	6	No Gas	20.783	ppb	3.5	17294.23	20	79.5	120.4	
23	Na	45	He	97298.408	ppb	4.0	10268265.82	100000	79.5	120.4	
24	Mg	45	He	96860.913	ppb	4.6	5712881.17	100000	79.5	120.4	
27	Al	45	He	92943.980	ppb	4.7	2192346.72	100000	79.5	120.4	
28	Si	45	H2	463.937	ppb	1.9	22532.95	500	79.5	120.4	
39	K	45	He	93389.437	ppb	4.0	5232108.85	100000	79.5	120.4	
40	Ca	45	H2	97685.991	ppb	0.9	41547806.05	100000	79.5	120.4	
51	V	89	He	19.758	ppb	4.4	17829.58	20	79.5	120.4	
52	Cr	89	He	20.187	ppb	4.9	21816.85	20	79.5	120.4	
55	Mn	89	He	19.735	ppb	3.9	10158.49	20	79.5	120.4	
56	Fe	89	H2	95228.334	ppb	0.5	162998067.33	100000	79.5	120.4	
59	Co	89	He	19.823	ppb	5.5	36841.98	20	79.5	120.4	
60	Ni	89	He	19.247	ppb	5.9	9870.47	20	79.5	120.4	
63	Cu	89	He	19.595	ppb	5.3	28077.82	20	79.5	120.4	
66	Zn	89	He	20.080	ppb	7.0	3800.66	20	79.5	120.4	
75	As	89	He	20.072	ppb	3.9	3223.40	20	79.5	120.4	
78	Se	89	H2	19.500	ppb	0.3	1631.52	20	79.5	120.4	
88	Sr	89	He	20.087	ppb	2.7	16307.97	20	79.5	120.4	
95	Mo	89	He	2054.763	ppb	4.4	1789077.77	2000	79.5	120.4	
107	Ag	89	He	19.562	ppb	3.5	57409.78	20	79.5	120.4	
111	Cd	89	He	20.008	ppb	5.0	7631.11	20	79.5	120.4	
118	Sn	159	He	19.256	ppb	4.4	17093.61	20	79.5	120.4	
121	Sb	159	No Gas	19.663	ppb	2.3	127974.68	20	79.5	120.4	
137	Ba	159	No Gas	20.074	ppb	2.5	50263.99	20	79.5	120.4	
182	W	159	No Gas	20.443	ppb	2.0	95652.09	20	79.5	120.4	
205	Tl	209	No Gas	20.613	ppb	1.8	202547.18	20	79.5	120.4	
208	Pb	209	No Gas	20.513	ppb	1.9	279116.55	20	79.5	120.4	
232	Th	209	No Gas	21.322	ppb	2.9	291707.24	20	79.5	120.4	
238	U	209	No Gas	21.019	ppb	2.7	272233.34	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1662402.72	1.4	1881686.03	88.35	29.5	120.4	
Sc	45	No Gas	3605738.16	2.5	3915123.71	92.1	29.5	120.4	
Sc	45	H2	460676.27	1.5	507902.1	90.7	29.5	120.4	
Sc	45	He	92293.53	3.4	102593	89.96	29.5	120.4	
Ge	72	No Gas	807331.66	1.8	852546.94	94.7	29.5	120.4	
Ge	72	H2	171822.68	1.6	193980.16	88.58	29.5	120.4	
Ge	72	He	70832.22	2.4	77385.19	91.53	29.5	120.4	
Y	89	H2	2952330.82	1.0	3089458.15	95.56	29.5	120.4	
Y	89	He	625462.29	3.5	678154.65	92.23	29.5	120.4	
Tb	159	No Gas	7914497.04	2.3	7727080.72	102.43	29.5	120.4	
Tb	159	He	3248608.91	3.5	3280980.4	99.01	29.5	120.4	
Bi	209	No Gas	3907124.59	2.0	3977089.87	98.24	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:32:11 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	104.956	ppb	2.6	135725.96	100	104.96	89.5	110.4	
11	B	6	No Gas	490.873	ppb	3.3	410272.68	500	98.17	89.5	110.4	
51	V	89	He	1016.899	ppb	1.0	918085.99	1000	101.69	89.5	110.4	
52	Cr	89	He	2027.483	ppb	0.6	2226814.42	2000	101.37	89.5	110.4	
55	Mn	89	He	2007.160	ppb	0.5	1051756.59	2000	100.36	89.5	110.4	
59	Co	89	He	1017.142	ppb	1.1	1926362.61	1000	101.71	89.5	110.4	
60	Ni	89	He	1052.454	ppb	0.7	533885.07	1000	105.25	89.5	110.4	
63	Cu	89	He	1985.579	ppb	0.7	2853997.53	2000	99.28	89.5	110.4	
66	Zn	89	He	2072.485	ppb	0.9	392880.42	2000	103.62	89.5	110.4	
75	As	89	He	1014.457	ppb	0.6	165699.00	1000	101.45	89.5	110.4	
78	Se	89	H2	1016.637	ppb	3.9	87140.66	1000	101.66	89.5	110.4	
88	Sr	89	He	1993.216	ppb	0.7	1648095.60	2000	99.66	89.5	110.4	
95	Mo	89	He	1026.151	ppb	0.6	910624.89	1000	102.62	89.5	110.4	
107	Ag	89	He	110.605	ppb	0.9	330701.82	100	110.6	89.5	110.4	> +/- 10%
111	Cd	89	He	1047.209	ppb	0.6	407103.71	1000	104.72	89.5	110.4	
118	Sn	159	He	976.915	ppb	0.2	870993.67	1000	97.69	89.5	110.4	
121	Sb	159	No Gas	961.506	ppb	2.3	6618258.23	1000	96.15	89.5	110.4	
137	Ba	159	No Gas	1964.766	ppb	2.2	5202706.53	2000	98.24	89.5	110.4	
182	W	159	No Gas	1016.831	ppb	2.1	5033038.07	1000	101.68	89.5	110.4	
205	Tl	209	No Gas	981.300	ppb	1.3	10715099.30	1000	98.13	89.5	110.4	
208	Pb	209	No Gas	1937.836	ppb	1.5	29297348.46	2000	96.89	89.5	110.4	
232	Th	209	No Gas	1004.584	ppb	2.0	15276578.75	1000	100.46	89.5	110.4	
238	U	209	No Gas	978.859	ppb	2.3	14096233.03	1000	97.89	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841098.35	0.9	1881686.03	97.84	29.5	120.4	
Sc	45	No Gas	3948146.63	0.5	3915123.71	100.84	29.5	120.4	
Ge	72	No Gas	883094.38	0.1	852546.94	103.58	29.5	120.4	
Tb	159	No Gas	8375370.01	0.7	7727080.72	108.39	29.5	120.4	
Bi	209	No Gas	4345439.82	0.4	3977089.87	109.26	29.5	120.4	
Sc	45	H2	477440.07	4.5	507902.1	94	29.5	120.4	
Ge	72	H2	182263.16	3.7	193980.16	93.96	29.5	120.4	
Y	89	H2	3028896.89	3.6	3089458.15	98.04	29.5	120.4	
Sc	45	He	94755.94	0.9	102593	92.36	29.5	120.4	
Ge	72	He	73231.33	0.6	77385.19	94.63	29.5	120.4	
Y	89	He	636849.38	0.6	678154.65	93.91	29.5	120.4	
Tb	159	He	3272217.59	0.4	3280980.4	99.73	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS2
File Name	014SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:34:42 PM
Sample Type	Sample
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.255	ppb	23.5	302.24				100	
11	B	6	No Gas	11.382	ppb	11.8	9489.02				100	
23	Na	45	He	196781.367	ppb	3.3	21676874.65				100	
24	Mg	45	He	197105.781	ppb	3.6	12140325.79				100	
27	Al	45	He	193693.161	ppb	3.6	4771636.77				100	
28	Si	45	H2	9315.914	ppb	1.1	459359.41				100	
39	K	45	He	192559.354	ppb	2.8	11254985.58				100	
40	Ca	45	H2	194327.006	ppb	1.5	85762528.16				100	
51	V	89	He	0.096	ppb	234.0	427.81				100	
52	Cr	89	He	1.670	ppb	27.5	1915.20				100	
55	Mn	89	He	7.903	ppb	7.9	4196.56				100	
56	Fe	89	H2	95634.266	ppb	1.0	167005678.13				100	
59	Co	89	He	0.818	ppb	35.8	1571.37				100	
60	Ni	89	He	1.981	ppb	10.1	1322.33				100	
63	Cu	89	He	1.466	ppb	34.3	2584.92				100	
66	Zn	89	He	2.443	ppb	15.2	538.92				100	
75	As	89	He	0.447	ppb	55.9	79.68				100	
78	Se	89	H2	0.702	ppb	5.5	60.67				100	
88	Sr	89	He	1.491	ppb	38.4	1243.49				100	
95	Mo	89	He	2.013	ppb	21.7	1802.47				100	
107	Ag	89	He	0.128	ppb	38.7	398.91				100	
111	Cd	89	He	0.257	ppb	93.8	99.26				100	
118	Sn	159	He	1.395	ppb	18.3	1293.46				100	
121	Sb	159	No Gas	0.864	ppb	23.1	5667.61				100	
137	Ba	159	No Gas	1.682	ppb	18.1	4232.08				100	
182	W	159	No Gas	1.825	ppb	12.3	8569.10				100	
205	Tl	209	No Gas	0.728	ppb	29.2	7130.09				100	
208	Pb	209	No Gas	1.505	ppb	24.9	20239.44				100	
232	Th	209	No Gas	1.794	ppb	31.4	24125.28				100	
238	U	209	No Gas	0.827	ppb	31.6	10489.78				100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1541932.76	1.7	1881686.03	81.94	29.5	120.4	
Sc	45	No Gas	3611270.00	1.0	3915123.71	92.24	29.5	120.4	
Ge	72	No Gas	793851.05	1.0	852546.94	93.12	29.5	120.4	
Tb	159	No Gas	7926284.60	1.4	7727080.72	102.58	29.5	120.4	
Bi	209	No Gas	3821340.40	1.2	3977089.87	96.08	29.5	120.4	
Sc	45	H2	478039.09	1.5	507902.1	94.12	29.5	120.4	
Ge	72	H2	176594.89	1.0	193980.16	91.04	29.5	120.4	
Y	89	H2	3012324.72	1.8	3089458.15	97.5	29.5	120.4	
Sc	45	He	96381.41	4.1	102593	93.95	29.5	120.4	
Ge	72	He	72838.11	3.1	77385.19	94.12	29.5	120.4	
Y	89	He	644738.89	3.5	678154.65	95.07	29.5	120.4	
Tb	159	He	3240489.78	3.0	3280980.4	98.77	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:42:37 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.077	ppb	6.4	32745.62	25	96.31	89.8	110.2	
11	B	6	No Gas	24.361	ppb	4.2	23257.08	25	97.44	89.8	110.2	
23	Na	45	He	4958.049	ppb	1.9	587025.73	5000	99.16	89.8	110.2	
24	Mg	45	He	4793.145	ppb	2.2	312521.63	5000	95.86	89.8	110.2	
27	Al	45	He	485.294	ppb	3.8	12639.37	500	97.06	89.8	110.2	
28	Si	45	H2	464.055	ppb	1.5	25126.88	500	92.81	89.8	110.2	
39	K	45	He	4782.742	ppb	2.6	307403.47	5000	95.65	89.8	110.2	
40	Ca	45	H2	4787.558	ppb	0.9	2271281.74	5000	95.75	89.8	110.2	
51	V	89	He	24.334	ppb	3.2	23640.52	25	97.34	89.8	110.2	
52	Cr	89	He	24.560	ppb	2.0	28668.44	25	98.24	89.8	110.2	
55	Mn	89	He	24.952	ppb	1.7	13873.65	25	99.81	89.8	110.2	
56	Fe	89	H2	4840.930	ppb	0.7	8988732.37	5000	96.82	89.8	110.2	
59	Co	89	He	24.721	ppb	1.3	49653.12	25	98.88	89.8	110.2	
60	Ni	89	He	24.672	ppb	1.9	13583.71	25	98.69	89.8	110.2	
63	Cu	89	He	25.103	ppb	1.5	38737.95	25	100.41	89.8	110.2	
66	Zn	89	He	24.527	ppb	3.8	5002.19	25	98.11	89.8	110.2	
75	As	89	He	24.502	ppb	2.6	4249.79	25	98.01	89.8	110.2	
78	Se	89	H2	23.916	ppb	2.5	2169.91	25	95.66	89.8	110.2	
88	Sr	89	He	23.459	ppb	2.1	20571.56	25	93.84	89.8	110.2	
95	Mo	89	He	24.881	ppb	1.6	23410.72	25	99.52	89.8	110.2	
107	Ag	89	He	24.824	ppb	1.9	78695.92	25	99.3	89.8	110.2	
111	Cd	89	He	24.575	ppb	2.9	10127.58	25	98.3	89.8	110.2	
118	Sn	159	He	24.016	ppb	2.9	22232.31	25	96.06	89.8	110.2	
121	Sb	159	No Gas	24.327	ppb	4.8	165434.82	25	97.31	89.8	110.2	
137	Ba	159	No Gas	24.880	ppb	4.0	65091.58	25	99.52	89.8	110.2	
182	W	159	No Gas	23.943	ppb	4.7	117079.59	25	95.77	89.8	110.2	
205	Tl	209	No Gas	24.172	ppb	3.2	257556.90	25	96.69	89.8	110.2	
208	Pb	209	No Gas	24.325	ppb	5.0	358838.44	25	97.3	89.8	110.2	
232	Th	209	No Gas	24.292	ppb	6.9	360244.61	25	97.17	89.8	110.2	
238	U	209	No Gas	23.928	ppb	5.6	335972.43	25	95.71	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1935971.03	1.8	1881686.03	102.88	29.5	120.4	
Sc	45	No Gas	4058156.14	1.7	3915123.71	103.65	29.5	120.4	
Sc	45	H2	513691.53	1.0	507902.1	101.14	29.5	120.4	
Sc	45	He	101668.83	1.4	102593	99.1	29.5	120.4	
Ge	72	No Gas	900139.75	1.3	852546.94	105.58	29.5	120.4	
Ge	72	H2	190859.46	0.2	193980.16	98.39	29.5	120.4	
Ge	72	He	77228.25	1.1	77385.19	99.8	29.5	120.4	
Y	89	H2	3201945.24	0.2	3089458.15	103.64	29.5	120.4	
Y	89	He	675255.16	1.4	678154.65	99.57	29.5	120.4	
Tb	159	No Gas	8274975.36	1.0	7727080.72	107.09	29.5	120.4	
Tb	159	He	3387911.89	1.3	3280980.4	103.26	29.5	120.4	
Bi	209	No Gas	4239102.60	1.2	3977089.87	106.59	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:45:11 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.110	ppb	30.7	178.90	0.2	Failed DoD
11	B	6	No Gas	1.113	ppb	4.9	2871.49	4	
23	Na	45	He	24.662	ppb	29.7	13898.95	200	
24	Mg	45	He	1.431	ppb	352.7	995.69	20	
27	Al	45	He	3.295	ppb	90.9	107.79	20	
28	Si	45	H2	1.161	ppb	172.0	640.73	100	
39	K	45	He	7.277	ppb	125.6	13400.25	200	
40	Ca	45	H2	2.374	ppb	3.4	2048.00	20	
51	V	89	He	0.155	ppb	32.5	517.81	1	
52	Cr	89	He	0.028	ppb	112.1	107.32	1	
55	Mn	89	He	0.079	ppb	17.6	56.66	0.4	
56	Fe	89	H2	6.436	ppb	3.5	14857.68	20	
59	Co	89	He	0.033	ppb	25.8	82.23	0.2	
60	Ni	89	He	-0.067	ppb	N/A	291.12	0.4	
63	Cu	89	He	0.341	ppb	13.5	1026.74	0.6	Failed DoD
66	Zn	89	He	0.045	ppb	147.9	84.45	2	
75	As	89	He	0.018	ppb	170.9	10.33	1	
78	Se	89	H2	0.064	ppb	12.5	6.83	1	
88	Sr	89	He	0.021	ppb	60.8	25.56	1	
95	Mo	89	He	0.158	ppb	15.2	153.34	1	
107	Ag	89	He	0.009	ppb	44.8	44.45	0.2	
111	Cd	89	He	0.019	ppb	87.0	8.52	0.2	
118	Sn	159	He	0.067	ppb	66.7	131.12	1	
121	Sb	159	No Gas	0.070	ppb	38.5	513.92	0.2	
137	Ba	159	No Gas	0.071	ppb	28.5	200.22	0.4	
182	W	159	No Gas	0.101	ppb	14.9	520.59	1	
205	Tl	209	No Gas	0.060	ppb	40.4	780.91	0.2	
208	Pb	209	No Gas	0.113	ppb	31.4	1895.51	0.2	Failed DoD
232	Th	209	No Gas	0.092	ppb	19.4	1451.73	1	
238	U	209	No Gas	0.047	ppb	44.1	654.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1900884.16	0.7	1881686.03	101.02	29.5	120.4	
Sc	45	No Gas	4095714.89	0.1	3915123.71	104.61	29.5	120.4	
Sc	45	H2	522988.05	1.1	507902.1	102.97	29.5	120.4	
Sc	45	He	103711.63	1.5	102593	101.09	29.5	120.4	
Ge	72	No Gas	897216.83	0.7	852546.94	105.24	29.5	120.4	
Ge	72	H2	197900.57	1.0	193980.16	102.02	29.5	120.4	
Ge	72	He	79345.51	0.8	77385.19	102.53	29.5	120.4	
Y	89	H2	3271730.39	0.5	3089458.15	105.9	29.5	120.4	
Y	89	He	686535.85	1.1	678154.65	101.24	29.5	120.4	
Tb	159	No Gas	8268609.25	0.4	7727080.72	107.01	29.5	120.4	
Tb	159	He	3378528.14	2.1	3280980.4	102.97	29.5	120.4	
Bi	209	No Gas	4213319.58	0.5	3977089.87	105.94	29.5	120.4	

Sample Report

Sample Name missed

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:47:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	13.1	73.33	100	
11	B	6	No Gas	-0.139	ppb	N/A	2180.25	1000	
23	Na	45	He	1095.572	ppb	113.1	9483.74	200000	
24	Mg	45	He	511.268	ppb	107.3	2189.23	200000	
27	Al	45	He	69.314	ppb	96.8	120.00	200000	
28	Si	45	H2	18.924	ppb	91.0	43.38	10000	
39	K	45	He	1033.270	ppb	129.7	5262.01	200000	
40	Ca	45	H2	199.703	ppb	21.7	2445.93	200000	
51	V	89	He	-0.145	ppb	N/A	35.56	1000	
52	Cr	89	He	0.767	ppb	107.2	64.66	2000	
55	Mn	89	He	1.781	ppb	104.5	66.66	2000	
56	Fe	89	H2	540.478	ppb	24.8	24419.44	100000	
59	Co	89	He	0.574	ppb	112.1	73.34	1000	
60	Ni	89	He	12.183	ppb	122.1	416.69	1000	
63	Cu	89	He	3.735	ppb	117.5	475.58	2000	
66	Zn	89	He	0.704	ppb	88.7	33.34	2000	
75	As	89	He	0.434	ppb	113.0	6.67	1000	
78	Se	89	H2	1.138	ppb	51.9	2.50	1000	
88	Sr	89	He	0.250	ppb	93.5	18.89	2000	
95	Mo	89	He	0.646	ppb	78.1	48.89	1000	
107	Ag	89	He	0.086	ppb	101.0	24.45	100	
111	Cd	89	He	0.273	ppb	103.4	6.67	1000	
118	Sn	159	He	1.737	ppb	126.1	86.67	1000	
121	Sb	159	No Gas	0.014	ppb	41.1	153.50	1000	
137	Ba	159	No Gas	0.009	ppb	73.3	46.72	2000	
182	W	159	No Gas	0.043	ppb	16.0	276.98	1000	
205	Tl	209	No Gas	0.009	ppb	20.7	283.65	1000	
208	Pb	209	No Gas	0.030	ppb	31.7	774.21	2000	
232	Th	209	No Gas	0.020	ppb	25.3	467.20	1000	
238	U	209	No Gas	0.005	ppb	30.6	86.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2341816.97	15.6	1881686.03	124.45	29.5	120.4	6020/DoD
Sc	45	No Gas	5013852.69	15.7	3915123.71	128.06	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	13286.51	47.9	507902.1	2.62	29.5	120.4	6020/DoD□ EPA
Sc	45	He	27335.44	132.6	102593	26.64	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	1056074.75	17.4	852546.94	123.87	29.5	120.4	6020/DoD
Ge	72	H2	5297.22	47.9	193980.16	2.73	29.5	120.4	6020/DoD□ EPA
Ge	72	He	19834.71	130.5	77385.19	25.63	29.5	120.4	6020/DoD□ EPA
Y	89	H2	83832.24	44.5	3089458.15	2.71	29.5	120.4	6020/DoD□ EPA
Y	89	He	172416.18	132.4	678154.65	25.42	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	9851205.96	15.5	7727080.72	127.49	29.5	120.4	6020/DoD□ EPA
Tb	159	He	838432.26	131.6	3280980.4	25.55	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	4972585.17	16.6	3977089.87	125.03	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5980-002

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:50:25 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	11.4	68.89	100	
11	B	6	No Gas	18.673	ppb	9.5	16766.89	1000	
23	Na	45	He	42165.018	ppb	0.6	4635049.78	200000	
24	Mg	45	He	7386.534	ppb	0.6	454068.31	200000	
27	Al	45	He	7.895	ppb	18.2	212.23	200000	
28	Si	45	H2	6847.596	ppb	1.5	341564.03	10000	
39	K	45	He	4940.108	ppb	0.8	299267.30	200000	
40	Ca	45	H2	57709.129	ppb	0.2	25752963.50	200000	
51	V	89	He	-0.159	ppb	N/A	198.90	1000	
52	Cr	89	He	0.098	ppb	14.6	178.64	2000	
55	Mn	89	He	0.718	ppb	9.5	391.93	2000	
56	Fe	89	H2	26.637	ppb	6.1	49456.04	100000	
59	Co	89	He	0.033	ppb	46.9	77.79	1000	
60	Ni	89	He	2.453	ppb	3.3	1566.81	1000	
63	Cu	89	He	103.177	ppb	1.1	150563.25	2000	
66	Zn	89	He	47.910	ppb	2.4	9263.38	2000	
75	As	89	He	0.734	ppb	4.2	128.01	1000	
78	Se	89	H2	0.033	ppb	26.9	3.67	1000	
88	Sr	89	He	207.362	ppb	1.0	173564.66	2000	
95	Mo	89	He	0.188	ppb	12.0	171.12	1000	
107	Ag	89	He	0.014	ppb	5.0	55.56	100	
111	Cd	89	He	0.028	ppb	34.7	11.48	1000	
118	Sn	159	He	0.201	ppb	32.3	248.90	1000	
121	Sb	159	No Gas	0.675	ppb	1.6	4512.48	1000	
137	Ba	159	No Gas	2.613	ppb	7.2	6665.73	2000	
182	W	159	No Gas	0.081	ppb	20.2	407.13	1000	
205	Tl	209	No Gas	0.005	ppb	68.9	193.55	1000	
208	Pb	209	No Gas	1.164	ppb	6.0	16843.31	2000	
232	Th	209	No Gas	0.021	ppb	16.4	393.78	1000	
238	U	209	No Gas	0.332	ppb	5.6	4509.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778431.12	3.7	1881686.03	94.51	29.5	120.4	
Sc	45	No Gas	3860232.75	3.1	3915123.71	98.6	29.5	120.4	
Sc	45	H2	483344.21	1.0	507902.1	95.16	29.5	120.4	
Sc	45	He	95932.25	0.9	102593	93.51	29.5	120.4	
Ge	72	No Gas	846221.68	3.1	852546.94	99.26	29.5	120.4	
Ge	72	H2	181794.51	0.7	193980.16	93.72	29.5	120.4	
Ge	72	He	73826.97	0.9	77385.19	95.4	29.5	120.4	
Y	89	H2	3042409.57	0.7	3089458.15	98.48	29.5	120.4	
Y	89	He	644663.43	0.8	678154.65	95.06	29.5	120.4	
Tb	159	No Gas	8060990.16	2.8	7727080.72	104.32	29.5	120.4	
Tb	159	He	3301007.07	0.6	3280980.4	100.61	29.5	120.4	
Bi	209	No Gas	4108172.04	2.6	3977089.87	103.3	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:53:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	40.1	73.34	100	
11	B	6	No Gas	19.730	ppb	6.4	17643.49	1000	
23	Na	45	He	42042.733	ppb	0.4	4698009.51	200000	
24	Mg	45	He	7422.513	ppb	1.0	463802.64	200000	
27	Al	45	He	1.692	ppb	46.5	61.11	200000	
28	Si	45	H2	7001.658	ppb	2.4	342903.50	10000	
39	K	45	He	4927.784	ppb	0.5	303486.64	200000	
40	Ca	45	H2	58862.262	ppb	2.2	25792818.78	200000	
51	V	89	He	-0.065	ppb	N/A	286.68	1000	
52	Cr	89	He	0.048	ppb	33.3	122.65	2000	
55	Mn	89	He	0.405	ppb	10.8	227.30	2000	
56	Fe	89	H2	9.483	ppb	4.6	18753.31	100000	
59	Co	89	He	0.037	ppb	8.4	86.67	1000	
60	Ni	89	He	2.893	ppb	9.6	1801.30	1000	
63	Cu	89	He	136.934	ppb	0.6	200658.24	2000	
66	Zn	89	He	95.488	ppb	2.5	18480.55	2000	
75	As	89	He	0.757	ppb	9.9	132.35	1000	
78	Se	89	H2	0.058	ppb	18.8	5.67	1000	
88	Sr	89	He	209.401	ppb	1.0	176132.56	2000	
95	Mo	89	He	0.100	ppb	38.1	92.23	1000	
107	Ag	89	He	0.024	ppb	21.9	85.56	100	
111	Cd	89	He	0.018	ppb	54.9	7.41	1000	
118	Sn	159	He	0.103	ppb	11.5	161.12	1000	
121	Sb	159	No Gas	0.730	ppb	8.6	4966.44	1000	
137	Ba	159	No Gas	2.497	ppb	7.0	6498.86	2000	
182	W	159	No Gas	0.098	ppb	23.2	500.57	1000	
205	Tl	209	No Gas	0.023	ppb	48.3	390.45	1000	
208	Pb	209	No Gas	1.321	ppb	6.7	19390.80	2000	
232	Th	209	No Gas	0.031	ppb	12.7	550.64	1000	
238	U	209	No Gas	0.332	ppb	8.2	4589.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778590.92	1.6	1881686.03	94.52	29.5	120.4	
Sc	45	No Gas	3884904.09	1.9	3915123.71	99.23	29.5	120.4	
Sc	45	H2	474815.52	3.0	507902.1	93.49	29.5	120.4	
Sc	45	He	97513.06	0.6	102593	95.05	29.5	120.4	
Ge	72	No Gas	854192.20	1.8	852546.94	100.19	29.5	120.4	
Ge	72	H2	179633.21	2.3	193980.16	92.6	29.5	120.4	
Ge	72	He	74688.20	0.2	77385.19	96.51	29.5	120.4	
Y	89	H2	2975237.77	2.5	3089458.15	96.3	29.5	120.4	
Y	89	He	647831.52	0.8	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	8222208.07	1.8	7727080.72	106.41	29.5	120.4	
Tb	159	He	3317860.75	0.1	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4173378.91	2.7	3977089.87	104.94	29.5	120.4	

Sample Report

Sample Name SN5980-004

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:55:38 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	53.4	83.34	100	
11	B	6	No Gas	20.720	ppb	6.0	18975.26	1000	
23	Na	45	He	42728.012	ppb	3.4	4895212.80	200000	
24	Mg	45	He	7633.963	ppb	4.0	489014.70	200000	
27	Al	45	He	1.579	ppb	18.0	60.00	200000	
28	Si	45	H2	6963.396	ppb	1.8	356335.39	10000	
39	K	45	He	5146.778	ppb	3.1	324455.54	200000	
40	Ca	45	H2	59959.259	ppb	1.1	27453260.70	200000	
51	V	89	He	-0.035	ppb	N/A	321.13	1000	
52	Cr	89	He	0.035	ppb	51.1	110.65	2000	
55	Mn	89	He	0.477	ppb	4.3	271.29	2000	
56	Fe	89	H2	13.343	ppb	2.5	26507.87	100000	
59	Co	89	He	0.047	ppb	47.1	106.67	1000	
60	Ni	89	He	5.509	ppb	6.0	3218.27	1000	
63	Cu	89	He	259.755	ppb	4.1	388465.48	2000	
66	Zn	89	He	213.732	ppb	4.2	42175.78	2000	
75	As	89	He	0.556	ppb	14.9	101.01	1000	
78	Se	89	H2	0.032	ppb	26.0	3.67	1000	
88	Sr	89	He	214.531	ppb	3.6	184389.74	2000	
95	Mo	89	He	0.074	ppb	16.8	70.01	1000	
107	Ag	89	He	0.025	ppb	28.5	91.11	100	
111	Cd	89	He	0.048	ppb	25.1	19.63	1000	
118	Sn	159	He	0.142	ppb	3.1	200.01	1000	
121	Sb	159	No Gas	0.690	ppb	14.0	4726.12	1000	
137	Ba	159	No Gas	2.629	ppb	8.4	6896.20	2000	
182	W	159	No Gas	0.080	ppb	17.9	417.14	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	123.47	1000	
208	Pb	209	No Gas	1.447	ppb	3.9	21477.88	2000	
232	Th	209	No Gas	0.007	ppb	58.4	200.23	1000	
238	U	209	No Gas	0.300	ppb	8.2	4188.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1830158.73	1.3	1881686.03	97.26	29.5	120.4	
Sc	45	No Gas	3960858.06	2.2	3915123.71	101.17	29.5	120.4	
Sc	45	H2	495953.62	1.3	507902.1	97.65	29.5	120.4	
Sc	45	He	100042.60	2.8	102593	97.51	29.5	120.4	
Ge	72	No Gas	868011.49	2.1	852546.94	101.81	29.5	120.4	
Ge	72	H2	186199.77	2.0	193980.16	95.99	29.5	120.4	
Ge	72	He	76391.29	2.2	77385.19	98.72	29.5	120.4	
Y	89	H2	3102248.65	1.1	3089458.15	100.41	29.5	120.4	
Y	89	He	662443.79	3.1	678154.65	97.68	29.5	120.4	
Tb	159	No Gas	8288027.52	2.4	7727080.72	107.26	29.5	120.4	
Tb	159	He	3383454.98	3.0	3280980.4	103.12	29.5	120.4	
Bi	209	No Gas	4222160.97	2.6	3977089.87	106.16	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:58:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	83.0	58.89	100	
11	B	6	No Gas	20.918	ppb	2.7	18561.32	1000	
23	Na	45	He	41472.415	ppb	1.1	4663041.00	200000	
24	Mg	45	He	7478.083	ppb	0.7	470183.08	200000	
27	Al	45	He	1.806	ppb	10.1	64.45	200000	
28	Si	45	H2	6879.574	ppb	0.9	350849.44	10000	
39	K	45	He	4928.567	ppb	1.4	305400.15	200000	
40	Ca	45	H2	58352.051	ppb	1.3	26624107.66	200000	
51	V	89	He	0.068	ppb	24.1	412.24	1000	
52	Cr	89	He	0.042	ppb	39.5	117.31	2000	
55	Mn	89	He	0.608	ppb	7.6	338.61	2000	
56	Fe	89	H2	8.628	ppb	5.3	18068.41	100000	
59	Co	89	He	0.025	ppb	15.8	64.45	1000	
60	Ni	89	He	17.839	ppb	1.3	9601.40	1000	
63	Cu	89	He	169.186	ppb	1.0	250186.85	2000	
66	Zn	89	He	192.694	ppb	0.3	37583.70	2000	
75	As	89	He	0.655	ppb	7.6	116.68	1000	
78	Se	89	H2	0.036	ppb	14.7	4.00	1000	
88	Sr	89	He	210.165	ppb	1.0	178476.66	2000	
95	Mo	89	He	0.079	ppb	25.7	74.45	1000	
107	Ag	89	He	0.067	ppb	13.4	220.01	100	
111	Cd	89	He	0.032	ppb	25.6	13.33	1000	
118	Sn	159	He	0.139	ppb	23.1	195.56	1000	
121	Sb	159	No Gas	0.713	ppb	3.3	4619.27	1000	
137	Ba	159	No Gas	2.867	ppb	3.0	7103.21	2000	
182	W	159	No Gas	0.068	ppb	15.3	337.05	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	2.024	ppb	2.0	28427.68	2000	
232	Th	209	No Gas	0.011	ppb	23.9	246.95	1000	
238	U	209	No Gas	0.347	ppb	0.9	4616.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773479.05	2.5	1881686.03	94.25	29.5	120.4	
Sc	45	No Gas	3704745.24	5.6	3915123.71	94.63	29.5	120.4	
Sc	45	H2	494257.40	1.6	507902.1	97.31	29.5	120.4	
Sc	45	He	98124.15	1.1	102593	95.64	29.5	120.4	
Ge	72	No Gas	824691.38	4.8	852546.94	96.73	29.5	120.4	
Ge	72	H2	183614.17	1.6	193980.16	94.66	29.5	120.4	
Ge	72	He	75501.98	0.3	77385.19	97.57	29.5	120.4	
Y	89	H2	3109946.74	1.4	3089458.15	100.66	29.5	120.4	
Y	89	He	654079.81	0.8	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7828894.95	5.4	7727080.72	101.32	29.5	120.4	
Tb	159	He	3354393.35	0.3	3280980.4	102.24	29.5	120.4	
Bi	209	No Gas	4007559.97	4.7	3977089.87	100.77	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:00:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	52.6	55.56	100	
11	B	6	No Gas	19.345	ppb	5.1	17920.50	1000	
23	Na	45	He	43305.426	ppb	2.4	4787214.75	200000	
24	Mg	45	He	7575.873	ppb	2.6	468319.50	200000	
27	Al	45	He	2.284	ppb	79.6	74.45	200000	
28	Si	45	H2	6821.025	ppb	0.9	349600.18	10000	
39	K	45	He	5030.219	ppb	2.4	306248.89	200000	
40	Ca	45	H2	57382.005	ppb	1.6	26311859.05	200000	
51	V	89	He	0.099	ppb	38.1	435.58	1000	
52	Cr	89	He	0.094	ppb	10.0	173.97	2000	
55	Mn	89	He	0.952	ppb	7.9	516.59	2000	
56	Fe	89	H2	46.705	ppb	1.5	87055.67	100000	
59	Co	89	He	0.067	ppb	28.8	142.24	1000	
60	Ni	89	He	18.634	ppb	6.0	9873.83	1000	
63	Cu	89	He	231.403	ppb	3.1	337345.71	2000	
66	Zn	89	He	168.692	ppb	3.3	32458.57	2000	
75	As	89	He	0.533	ppb	12.0	94.68	1000	
78	Se	89	H2	0.047	ppb	41.9	5.00	1000	
88	Sr	89	He	212.028	ppb	3.2	177597.10	2000	
95	Mo	89	He	0.075	ppb	37.4	70.00	1000	
107	Ag	89	He	0.111	ppb	6.4	348.90	100	
111	Cd	89	He	0.036	ppb	34.2	14.44	1000	
118	Sn	159	He	0.187	ppb	9.6	236.68	1000	
121	Sb	159	No Gas	0.710	ppb	2.1	4903.07	1000	
137	Ba	159	No Gas	2.478	ppb	5.8	6542.30	2000	
182	W	159	No Gas	0.051	ppb	21.1	273.65	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	146.84	1000	
208	Pb	209	No Gas	2.868	ppb	3.3	42729.45	2000	
232	Th	209	No Gas	0.007	ppb	24.7	200.23	1000	
238	U	209	No Gas	0.343	ppb	0.6	4846.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1838228.24	0.7	1881686.03	97.69	29.5	120.4	
Sc	45	No Gas	3933916.72	0.8	3915123.71	100.48	29.5	120.4	
Sc	45	H2	496695.12	1.1	507902.1	97.79	29.5	120.4	
Sc	45	He	96511.96	2.4	102593	94.07	29.5	120.4	
Ge	72	No Gas	862642.42	0.9	852546.94	101.18	29.5	120.4	
Ge	72	H2	186293.71	1.5	193980.16	96.04	29.5	120.4	
Ge	72	He	74388.50	2.0	77385.19	96.13	29.5	120.4	
Y	89	H2	3122254.77	1.6	3089458.15	101.06	29.5	120.4	
Y	89	He	645433.64	2.4	678154.65	95.17	29.5	120.4	
Tb	159	No Gas	8336254.60	1.3	7727080.72	107.88	29.5	120.4	
Tb	159	He	3317832.48	2.4	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4259294.30	1.5	3977089.87	107.1	29.5	120.4	

Sample Report

Sample Name	SN5980-006
File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:03:23 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	141.4	41.11	100	
11	B	6	No Gas	19.445	ppb	3.2	18047.38	1000	
23	Na	45	He	42782.118	ppb	0.2	4797311.31	200000	
24	Mg	45	He	7674.093	ppb	0.5	481194.68	200000	
27	Al	45	He	6.699	ppb	39.9	186.68	200000	
28	Si	45	H2	6908.462	ppb	1.0	355950.70	10000	
39	K	45	He	5125.709	ppb	0.4	316297.99	200000	
40	Ca	45	H2	59135.670	ppb	1.3	27259028.48	200000	
51	V	89	He	0.096	ppb	35.3	438.91	1000	
52	Cr	89	He	0.072	ppb	10.5	151.30	2000	
55	Mn	89	He	0.775	ppb	6.5	429.27	2000	
56	Fe	89	H2	14.563	ppb	2.0	28737.98	100000	
59	Co	89	He	0.056	ppb	37.7	124.46	1000	
60	Ni	89	He	13.517	ppb	3.2	7363.30	1000	
63	Cu	89	He	246.432	ppb	0.2	364885.03	2000	
66	Zn	89	He	227.532	ppb	1.0	44446.14	2000	
75	As	89	He	0.604	ppb	11.4	108.34	1000	
78	Se	89	H2	0.030	ppb	50.9	3.50	1000	
88	Sr	89	He	214.914	ppb	0.4	182856.77	2000	
95	Mo	89	He	0.078	ppb	5.2	73.34	1000	
107	Ag	89	He	0.039	ppb	21.4	133.34	100	
111	Cd	89	He	0.052	ppb	18.2	21.11	1000	
118	Sn	159	He	0.058	ppb	47.1	122.23	1000	
121	Sb	159	No Gas	0.650	ppb	6.4	4559.21	1000	
137	Ba	159	No Gas	2.459	ppb	6.8	6592.34	2000	
182	W	159	No Gas	0.072	ppb	15.0	387.11	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	106.79	1000	
208	Pb	209	No Gas	2.216	ppb	4.4	33414.59	2000	
232	Th	209	No Gas	0.004	ppb	88.3	163.52	1000	
238	U	209	No Gas	0.295	ppb	3.5	4202.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842440.72	1.3	1881686.03	97.91	29.5	120.4	
Sc	45	No Gas	3973341.25	2.4	3915123.71	101.49	29.5	120.4	
Sc	45	H2	499305.70	1.4	507902.1	98.31	29.5	120.4	
Sc	45	He	97858.63	0.3	102593	95.39	29.5	120.4	
Ge	72	No Gas	870052.42	0.4	852546.94	102.05	29.5	120.4	
Ge	72	H2	185150.92	0.8	193980.16	95.45	29.5	120.4	
Ge	72	He	75215.51	0.2	77385.19	97.2	29.5	120.4	
Y	89	H2	3106283.15	1.1	3089458.15	100.54	29.5	120.4	
Y	89	He	655278.84	0.5	678154.65	96.63	29.5	120.4	
Tb	159	No Gas	8460322.03	2.0	7727080.72	109.49	29.5	120.4	
Tb	159	He	3362272.59	0.4	3280980.4	102.48	29.5	120.4	
Bi	209	No Gas	4302429.83	1.7	3977089.87	108.18	29.5	120.4	

Sample Report

Sample Name	SN5980-007
File Name	026SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:05:56 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	77.3	54.45	100	
11	B	6	No Gas	21.088	ppb	6.5	19394.73	1000	
23	Na	45	He	42744.334	ppb	1.4	4744010.77	200000	
24	Mg	45	He	7657.893	ppb	1.7	475262.71	200000	
27	Al	45	He	2.381	ppb	32.0	77.78	200000	
28	Si	45	H2	6854.418	ppb	2.1	350565.28	10000	
39	K	45	He	5040.604	ppb	1.4	308062.69	200000	
40	Ca	45	H2	57900.689	ppb	2.0	26494606.27	200000	
51	V	89	He	0.129	ppb	33.8	462.25	1000	
52	Cr	89	He	0.023	ppb	52.2	94.65	2000	
55	Mn	89	He	0.621	ppb	8.7	340.61	2000	
56	Fe	89	H2	11.995	ppb	2.3	24013.94	100000	
59	Co	89	He	0.173	ppb	26.8	346.69	1000	
60	Ni	89	He	13.206	ppb	5.4	7087.62	1000	
63	Cu	89	He	200.828	ppb	2.5	292764.99	2000	
66	Zn	89	He	222.989	ppb	2.7	42873.35	2000	
75	As	89	He	0.710	ppb	11.8	124.01	1000	
78	Se	89	H2	0.038	ppb	10.6	4.17	1000	
88	Sr	89	He	210.546	ppb	2.6	176315.16	2000	
95	Mo	89	He	0.073	ppb	24.0	67.78	1000	
107	Ag	89	He	0.086	ppb	5.0	273.35	100	
111	Cd	89	He	0.061	ppb	9.1	24.45	1000	
118	Sn	159	He	0.165	ppb	26.2	217.79	1000	
121	Sb	159	No Gas	0.657	ppb	3.8	4569.22	1000	
137	Ba	159	No Gas	2.497	ppb	13.0	6632.46	2000	
182	W	159	No Gas	0.059	ppb	15.3	320.37	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	2.763	ppb	6.4	41446.21	2000	
232	Th	209	No Gas	0.006	ppb	17.4	193.56	1000	
238	U	209	No Gas	0.369	ppb	14.5	5233.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841381.09	1.5	1881686.03	97.86	29.5	120.4	
Sc	45	No Gas	3943353.58	1.7	3915123.71	100.72	29.5	120.4	
Sc	45	H2	495698.08	1.2	507902.1	97.6	29.5	120.4	
Sc	45	He	96863.28	0.8	102593	94.42	29.5	120.4	
Ge	72	No Gas	869552.20	1.5	852546.94	101.99	29.5	120.4	
Ge	72	H2	185429.22	1.5	193980.16	95.59	29.5	120.4	
Ge	72	He	74179.70	1.0	77385.19	95.86	29.5	120.4	
Y	89	H2	3093708.24	1.6	3089458.15	100.14	29.5	120.4	
Y	89	He	645107.92	1.5	678154.65	95.13	29.5	120.4	
Tb	159	No Gas	8396157.10	1.8	7727080.72	108.66	29.5	120.4	
Tb	159	He	3322489.57	1.2	3280980.4	101.27	29.5	120.4	
Bi	209	No Gas	4290905.18	2.3	3977089.87	107.89	29.5	120.4	

Sample Report

Sample Name SN5980-008

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:08:34 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	64.9	40.00	100	
11	B	6	No Gas	21.595	ppb	15.2	18133.20	1000	
23	Na	45	He	41836.870	ppb	1.1	4690233.71	200000	
24	Mg	45	He	7493.153	ppb	1.3	469734.22	200000	
27	Al	45	He	1.813	ppb	46.4	64.45	200000	
28	Si	45	H2	6960.287	ppb	1.2	352838.38	10000	
39	K	45	He	4983.281	ppb	0.8	307773.08	200000	
40	Ca	45	H2	59067.660	ppb	0.8	26791624.32	200000	
51	V	89	He	0.118	ppb	34.7	458.91	1000	
52	Cr	89	He	0.035	ppb	50.8	109.31	2000	
55	Mn	89	He	0.406	ppb	5.4	229.96	2000	
56	Fe	89	H2	5.456	ppb	1.3	12262.37	100000	
59	Co	89	He	0.032	ppb	26.0	77.78	1000	
60	Ni	89	He	10.291	ppb	5.1	5669.13	1000	
63	Cu	89	He	223.460	ppb	1.4	330258.83	2000	
66	Zn	89	He	215.234	ppb	1.9	41963.96	2000	
75	As	89	He	0.526	ppb	10.6	95.01	1000	
78	Se	89	H2	0.034	ppb	69.5	3.83	1000	
88	Sr	89	He	209.625	ppb	0.6	178009.82	2000	
95	Mo	89	He	0.051	ppb	28.5	48.89	1000	
107	Ag	89	He	0.032	ppb	22.3	113.34	100	
111	Cd	89	He	0.055	ppb	12.8	22.22	1000	
118	Sn	159	He	0.071	ppb	33.5	134.45	1000	
121	Sb	159	No Gas	0.746	ppb	19.0	4625.99	1000	
137	Ba	159	No Gas	2.867	ppb	22.8	6769.36	2000	
182	W	159	No Gas	0.065	ppb	38.2	307.01	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	66.75	1000	
208	Pb	209	No Gas	2.025	ppb	17.2	27068.51	2000	
232	Th	209	No Gas	0.005	ppb	81.2	156.84	1000	
238	U	209	No Gas	0.336	ppb	15.5	4245.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1701708.25	11.7	1881686.03	90.44	29.5	120.4	
Sc	45	No Gas	3556170.89	14.8	3915123.71	90.83	29.5	120.4	
Sc	45	H2	491279.03	0.9	507902.1	96.73	29.5	120.4	
Sc	45	He	97840.94	1.4	102593	95.37	29.5	120.4	
Ge	72	No Gas	784744.91	14.8	852546.94	92.05	29.5	120.4	
Ge	72	H2	184844.78	1.2	193980.16	95.29	29.5	120.4	
Ge	72	He	75286.54	1.4	77385.19	97.29	29.5	120.4	
Y	89	H2	3086348.35	0.7	3089458.15	99.9	29.5	120.4	
Y	89	He	654056.04	1.4	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7629541.69	15.1	7727080.72	98.74	29.5	120.4	
Tb	159	He	3378060.05	1.0	3280980.4	102.96	29.5	120.4	
Bi	209	No Gas	3880714.59	15.6	3977089.87	97.58	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:11:06 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.016	ppb	60.3	51.11	100	
11	B	6	No Gas	19.573	ppb	4.9	17892.68	1000	
23	Na	45	He	42614.181	ppb	0.8	4757629.70	200000	
24	Mg	45	He	7625.623	ppb	0.4	476078.37	200000	
27	Al	45	He	3.609	ppb	14.5	108.89	200000	
28	Si	45	H2	6989.211	ppb	1.1	350238.27	10000	
39	K	45	He	5114.264	ppb	0.4	314242.91	200000	
40	Ca	45	H2	60611.413	ppb	1.2	27175127.09	200000	
51	V	89	He	0.139	ppb	10.8	475.58	1000	
52	Cr	89	He	0.051	ppb	42.0	126.64	2000	
55	Mn	89	He	0.434	ppb	6.4	243.29	2000	
56	Fe	89	H2	8.120	ppb	0.3	16875.59	100000	
59	Co	89	He	0.073	ppb	7.2	155.57	1000	
60	Ni	89	He	6.105	ppb	3.0	3468.32	1000	
63	Cu	89	He	193.057	ppb	0.5	283586.68	2000	
66	Zn	89	He	197.676	ppb	1.5	38303.38	2000	
75	As	89	He	0.674	ppb	7.7	119.01	1000	
78	Se	89	H2	0.033	ppb	56.2	3.67	1000	
88	Sr	89	He	214.029	ppb	0.5	180589.90	2000	
95	Mo	89	He	0.060	ppb	42.8	56.67	1000	
107	Ag	89	He	0.023	ppb	33.2	83.33	100	
111	Cd	89	He	0.072	ppb	28.2	28.89	1000	
118	Sn	159	He	0.040	ppb	49.8	105.56	1000	
121	Sb	159	No Gas	0.648	ppb	14.0	4469.07	1000	
137	Ba	159	No Gas	2.632	ppb	5.8	6942.91	2000	
182	W	159	No Gas	0.062	ppb	8.1	330.37	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	1.881	ppb	6.3	28056.88	2000	
232	Th	209	No Gas	0.003	ppb	95.0	150.17	1000	
238	U	209	No Gas	0.336	ppb	11.0	4736.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1816397.20	1.3	1881686.03	96.53	29.5	120.4	
Sc	45	No Gas	3872740.73	1.8	3915123.71	98.92	29.5	120.4	
Sc	45	H2	485648.02	0.7	507902.1	95.62	29.5	120.4	
Sc	45	He	97432.28	0.4	102593	94.97	29.5	120.4	
Ge	72	No Gas	859639.83	1.6	852546.94	100.83	29.5	120.4	
Ge	72	H2	182133.49	0.6	193980.16	93.89	29.5	120.4	
Ge	72	He	74101.80	0.5	77385.19	95.76	29.5	120.4	
Y	89	H2	3058651.64	0.2	3089458.15	99	29.5	120.4	
Y	89	He	649842.75	0.1	678154.65	95.83	29.5	120.4	
Tb	159	No Gas	8330882.58	2.3	7727080.72	107.81	29.5	120.4	
Tb	159	He	3358171.86	0.2	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4255191.97	2.2	3977089.87	106.99	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:13:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.379	ppb	6.9	30253.55	25	93.52	89.8	110.2	
11	B	6	No Gas	23.322	ppb	8.4	21252.94	25	93.29	89.8	110.2	
23	Na	45	He	5152.453	ppb	1.5	562303.88	5000	103.05	89.8	110.2	
24	Mg	45	He	4976.930	ppb	1.0	299297.77	5000	99.54	89.8	110.2	
27	Al	45	He	479.705	ppb	1.5	11525.04	500	95.94	89.8	110.2	
28	Si	45	H2	461.673	ppb	0.9	23040.86	500	92.33	89.8	110.2	
39	K	45	He	4813.505	ppb	1.3	285304.18	5000	96.27	89.8	110.2	
40	Ca	45	H2	4880.974	ppb	0.5	2134044.62	5000	97.62	89.8	110.2	
51	V	89	He	24.479	ppb	2.3	22344.99	25	97.92	89.8	110.2	
52	Cr	89	He	24.655	ppb	0.9	27042.16	25	98.62	89.8	110.2	
55	Mn	89	He	24.808	ppb	1.8	12960.27	25	99.23	89.8	110.2	
56	Fe	89	H2	4863.523	ppb	0.5	8500385.61	5000	97.27	89.8	110.2	
59	Co	89	He	24.617	ppb	1.9	46455.17	25	98.47	89.8	110.2	
60	Ni	89	He	24.627	ppb	0.7	12740.68	25	98.51	89.8	110.2	
63	Cu	89	He	25.100	ppb	2.7	36391.56	25	100.4	89.8	110.2	
66	Zn	89	He	25.282	ppb	0.9	4843.23	25	101.13	89.8	110.2	
75	As	89	He	24.395	ppb	1.3	3975.68	25	97.58	89.8	110.2	
78	Se	89	H2	24.313	ppb	1.8	2076.39	25	97.25	89.8	110.2	
88	Sr	89	He	23.640	ppb	0.9	19477.68	25	94.56	89.8	110.2	
95	Mo	89	He	25.195	ppb	2.6	22273.17	25	100.78	89.8	110.2	
107	Ag	89	He	25.383	ppb	1.3	75612.05	25	101.53	89.8	110.2	
111	Cd	89	He	25.519	ppb	1.4	9882.58	25	102.08	89.8	110.2	
118	Sn	159	He	23.571	ppb	0.8	21432.10	25	94.28	89.8	110.2	
121	Sb	159	No Gas	23.339	ppb	8.3	161022.81	25	93.36	89.8	110.2	
137	Ba	159	No Gas	23.530	ppb	8.8	62442.37	25	94.12	89.8	110.2	
182	W	159	No Gas	23.407	ppb	10.1	116078.78	25	93.63	89.8	110.2	
205	Tl	209	No Gas	24.000	ppb	9.0	261936.85	25	96	89.8	110.2	
208	Pb	209	No Gas	24.107	ppb	8.4	364368.75	25	96.43	89.8	110.2	
232	Th	209	No Gas	23.661	ppb	10.0	359460.40	25	94.64	89.8	110.2	
238	U	209	No Gas	23.784	ppb	8.8	342180.06	25	95.14	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842827.46	2.7	1881686.03	97.93	29.5	120.4	
Sc	45	No Gas	3810947.12	3.6	3915123.71	97.34	29.5	120.4	
Sc	45	H2	473401.52	0.6	507902.1	93.21	29.5	120.4	
Sc	45	He	93767.90	1.0	102593	91.4	29.5	120.4	
Ge	72	No Gas	857017.51	3.7	852546.94	100.52	29.5	120.4	
Ge	72	H2	178813.37	0.4	193980.16	92.18	29.5	120.4	
Ge	72	He	72523.87	0.3	77385.19	93.72	29.5	120.4	
Y	89	H2	3013949.94	0.3	3089458.15	97.56	29.5	120.4	
Y	89	He	634407.47	0.6	678154.65	93.55	29.5	120.4	
Tb	159	No Gas	8407759.18	3.5	7727080.72	108.81	29.5	120.4	
Tb	159	He	3326899.43	0.5	3280980.4	101.4	29.5	120.4	
Bi	209	No Gas	4350678.18	3.7	3977089.87	109.39	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:16:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	53.4	87.78	0.2	
11	B	6	No Gas	0.544	ppb	17.4	2266.93	4	
23	Na	45	He	39.932	ppb	13.7	13902.11	200	
24	Mg	45	He	-1.125	ppb	N/A	731.18	20	
27	Al	45	He	0.368	ppb	63.7	26.67	20	
28	Si	45	H2	0.299	ppb	46.9	543.95	100	
39	K	45	He	4.002	ppb	223.0	11674.59	200	
40	Ca	45	H2	8.450	ppb	1.7	4565.33	20	
51	V	89	He	0.096	ppb	32.1	415.58	1	
52	Cr	89	He	0.002	ppb	583.1	68.66	1	
55	Mn	89	He	0.015	ppb	124.2	18.67	0.4	
56	Fe	89	H2	2.381	ppb	4.4	6635.74	20	
59	Co	89	He	0.008	ppb	139.8	28.89	0.2	
60	Ni	89	He	-0.193	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.217	ppb	23.3	754.49	0.6	
66	Zn	89	He	0.070	ppb	53.6	81.11	2	
75	As	89	He	-0.011	ppb	N/A	4.67	1	
78	Se	89	H2	0.031	ppb	48.7	3.50	1	
88	Sr	89	He	0.027	ppb	68.9	27.78	1	
95	Mo	89	He	0.088	ppb	18.5	77.78	1	
107	Ag	89	He	0.000	ppb	627.3	14.45	0.2	
111	Cd	89	He	0.008	ppb	132.6	3.33	0.2	
118	Sn	159	He	0.025	ppb	36.3	87.78	1	
121	Sb	159	No Gas	0.023	ppb	13.3	193.55	0.2	
137	Ba	159	No Gas	0.016	ppb	61.0	56.73	0.4	
182	W	159	No Gas	0.041	ppb	5.9	223.59	1	
205	Tl	209	No Gas	0.011	ppb	24.9	276.98	0.2	
208	Pb	209	No Gas	0.021	ppb	27.5	550.62	0.2	
232	Th	209	No Gas	0.067	ppb	9.1	1111.30	1	
238	U	209	No Gas	0.016	ppb	13.7	226.92	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809766.02	2.8	1881686.03	96.18	29.5	120.4	
Sc	45	No Gas	3773656.15	3.6	3915123.71	96.39	29.5	120.4	
Sc	45	H2	479226.70	1.3	507902.1	94.35	29.5	120.4	
Sc	45	He	91863.02	4.4	102593	89.54	29.5	120.4	
Ge	72	No Gas	847782.64	3.5	852546.94	99.44	29.5	120.4	
Ge	72	H2	180855.50	0.7	193980.16	93.23	29.5	120.4	
Ge	72	He	71533.82	3.7	77385.19	92.44	29.5	120.4	
Y	89	H2	3029958.26	0.7	3089458.15	98.07	29.5	120.4	
Y	89	He	619770.68	4.6	678154.65	91.39	29.5	120.4	
Tb	159	No Gas	8303100.29	3.8	7727080.72	107.45	29.5	120.4	
Tb	159	He	3217690.71	4.3	3280980.4	98.07	29.5	120.4	
Bi	209	No Gas	4330710.82	4.5	3977089.87	108.89	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:18:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	59.6	55.56	100	
11	B	6	No Gas	19.745	ppb	6.9	17333.14	1000	
23	Na	45	He	41386.508	ppb	1.3	4466271.48	200000	
24	Mg	45	He	7432.758	ppb	1.3	448524.67	200000	
27	Al	45	He	1.773	ppb	17.4	61.11	200000	
28	Si	45	H2	7002.213	ppb	2.8	335345.17	10000	
39	K	45	He	4946.948	ppb	1.3	294174.22	200000	
40	Ca	45	H2	59588.371	ppb	3.1	25531725.18	200000	
51	V	89	He	0.152	ppb	47.9	473.36	1000	
52	Cr	89	He	0.044	ppb	41.4	115.98	2000	
55	Mn	89	He	0.344	ppb	8.1	189.97	2000	
56	Fe	89	H2	6.746	ppb	1.7	13878.96	100000	
59	Co	89	He	0.031	ppb	20.6	73.34	1000	
60	Ni	89	He	8.986	ppb	5.0	4816.57	1000	
63	Cu	89	He	221.522	ppb	0.9	316041.92	2000	
66	Zn	89	He	210.195	ppb	2.3	39559.11	2000	
75	As	89	He	0.620	ppb	9.9	107.01	1000	
78	Se	89	H2	0.035	ppb	55.1	3.67	1000	
88	Sr	89	He	207.133	ppb	0.6	169786.67	2000	
95	Mo	89	He	0.061	ppb	14.0	55.56	1000	
107	Ag	89	He	0.032	ppb	18.2	108.89	100	
111	Cd	89	He	0.049	ppb	38.5	19.26	1000	
118	Sn	159	He	0.192	ppb	18.2	241.12	1000	
121	Sb	159	No Gas	0.629	ppb	0.8	4255.45	1000	
137	Ba	159	No Gas	2.534	ppb	4.9	6552.29	2000	
182	W	159	No Gas	0.070	ppb	18.1	363.75	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.291	ppb	4.8	33755.66	2000	
232	Th	209	No Gas	0.046	ppb	13.6	780.90	1000	
238	U	209	No Gas	0.296	ppb	8.8	4122.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1745263.44	0.5	1881686.03	92.75	29.5	120.4	
Sc	45	No Gas	3704255.45	0.9	3915123.71	94.61	29.5	120.4	
Sc	45	H2	464317.70	2.4	507902.1	91.42	29.5	120.4	
Sc	45	He	94183.34	1.6	102593	91.8	29.5	120.4	
Ge	72	No Gas	826960.63	1.0	852546.94	97	29.5	120.4	
Ge	72	H2	174902.51	0.9	193980.16	90.17	29.5	120.4	
Ge	72	He	72308.32	0.5	77385.19	93.44	29.5	120.4	
Y	89	H2	2940454.00	2.3	3089458.15	95.18	29.5	120.4	
Y	89	He	631319.86	0.9	678154.65	93.09	29.5	120.4	
Tb	159	No Gas	8161365.64	0.7	7727080.72	105.62	29.5	120.4	
Tb	159	He	3312891.79	0.6	3280980.4	100.97	29.5	120.4	
Bi	209	No Gas	4207775.75	1.8	3977089.87	105.8	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	UNDIGESTED LCS TEST
File Name	032LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:21:28 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.327	ppb	6.8	13811.52	50	20.53	79.5	120.4	
B	11	6	No Gas	528.962	ppb	7.3	93296.56	500	21.16	79.5	120.4	
Na	23	45	He	9428.917	ppb	1.7	208329.28	7500	25.14	79.5	120.4	6020□ DoD
Mg	24	45	He	5952.505	ppb	0.5	70938.08	5000	23.81	79.5	120.4	DoD
Al	27	45	He	2144.204	ppb	1.3	10123.91	2000	21.44	79.5	120.4	
Si	28	45	H2	1094.166	ppb	2.3	11036.47	1000	21.88	0	200	
K	39	45	He	11413.759	ppb	1.5	138951.17	10000	22.83	79.5	120.4	
Ca	40	45	H2	2933.249	ppb	0.9	253537.78	2500	23.47	79.5	120.4	
V	51	89	He	569.533	ppb	1.0	101197.63	500	22.78	79.5	120.4	
Cr	52	89	He	232.964	ppb	1.2	50273.02	200	23.3	79.5	120.4	DoD
Mn	55	89	He	581.830	ppb	0.7	59838.43	500	23.27	79.5	120.4	DoD
Fe	56	89	H2	1168.560	ppb	0.7	406349.15	1000	23.37	79.5	120.4	
Co	59	89	He	578.884	ppb	1.0	215148.78	500	23.16	79.5	120.4	DoD
Ni	60	89	He	592.467	ppb	1.2	59239.46	500	23.7	79.5	120.4	DoD
Cu	63	89	He	293.200	ppb	1.6	83133.89	250	23.46	79.5	120.4	
Zn	66	89	He	599.034	ppb	0.6	22349.66	500	23.96	79.5	120.4	DoD
As	75	89	He	118.246	ppb	2.1	3795.94	100	23.65	79.5	120.4	DoD
Se	78	89	H2	112.189	ppb	1.0	1895.54	100	22.44	79.5	120.4	
Sr	88	89	He	569.593	ppb	0.3	92428.10	500	22.78	79.5	120.4	
Mo	95	89	He	118.594	ppb	2.7	20650.63	100	23.72	79.5	120.4	DoD
Ag	107	89	He	61.468	ppb	1.1	36075.43	50	24.59	79.5	120.4	6020□ DoD
Cd	111	89	He	303.379	ppb	1.3	23144.27	250	24.27	79.5	120.4	6020□ DoD
Sn	118	159	He	558.438	ppb	0.9	100650.73	500	22.34	79.5	120.4	
Sb	121	159	No Gas	109.717	ppb	7.7	152316.27	100	21.94	79.5	120.4	
Ba	137	159	No Gas	2150.159	ppb	8.8	1147760.79	2000	21.5	79.5	120.4	
W	182	159	No Gas	113.538	ppb	7.8	113348.47	100	22.71	79.5	120.4	
Tl	205	209	No Gas	114.339	ppb	8.6	253476.18	100	22.87	79.5	120.4	
[Pb]	206	209	No Gas	114.743	ppb	7.9	88040.79	100	22.95	79.5	120.4	
[Pb]	207	209	No Gas	114.903	ppb	7.9	77269.23	100	22.98	79.5	120.4	
Pb	208	209	No Gas	113.950	ppb	8.2	349837.01	100	22.79	79.5	120.4	
Th	232	209	No Gas	112.879	ppb	10.5	348226.66	100	22.58	79.5	120.4	
U	238	209	No Gas	112.648	ppb	9.0	329116.24	100	22.53	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1913019.11	2.3	1881686.03	101.67	29.5	120.4	
Sc	45	No Gas	3736818.59	3.8	3915123.71	95.45	29.5	120.4	
Sc	45	H2	466659.33	1.0	507902.1	91.88	29.5	120.4	
Sc	45	He	92109.83	1.3	102593	89.78	29.5	120.4	
Ge	72	No Gas	851017.70	3.2	852546.94	99.82	29.5	120.4	
Ge	72	H2	175742.23	0.9	193980.16	90.6	29.5	120.4	
Ge	72	He	71396.68	1.0	77385.19	92.26	29.5	120.4	
Y	89	H2	2981391.52	1.1	3089458.15	96.5	29.5	120.4	
Y	89	He	624874.92	1.2	678154.65	92.14	29.5	120.4	
Tb	159	No Gas	8459115.29	3.7	7727080.72	109.47	29.5	120.4	
Tb	159	He	3305682.45	1.0	3280980.4	100.75	29.5	120.4	
Bi	209	No Gas	4417907.96	3.7	3977089.87	111.08	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW11
File Name	033_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:24:04 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.043	ppb	27.6	85.56	0.1	
B	11	6	No Gas	2.426	ppb	4.9	3806.19	2	200.8 PB Fails DoD
Na	23	45	He	40.446	ppb	5.2	14293.12	100	
Mg	24	45	He	2.115	ppb	85.2	944.54	10	
Al	27	45	He	3.858	ppb	27.2	111.12	10	
Si	28	45	H2	17.438	ppb	17.8	1351.57	50	
K	39	45	He	-5.458	ppb	N/A	11417.87	100	
Ca	40	45	H2	6.179	ppb	3.5	3464.99	10	
V	51	89	He	0.456	ppb	14.0	747.82	0.5	
Cr	52	89	He	0.287	ppb	3.2	381.27	0.5	
Mn	55	89	He	0.375	ppb	2.3	206.63	0.2	200.8 PB Fails DoD
Fe	56	89	H2	3.936	ppb	5.5	9183.26	10	
Co	59	89	He	0.060	ppb	15.9	126.67	0.1	
Ni	60	89	He	-0.062	ppb	N/A	271.12	0.2	
Cu	63	89	He	0.322	ppb	8.8	920.07	0.3	200.8 PB Fails DoD
Zn	66	89	He	39.917	ppb	2.0	7595.67	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.017	ppb	74.9	9.33	0.5	
Se	78	89	H2	0.040	ppb	52.7	4.17	0.5	
Sr	88	89	He	0.064	ppb	38.6	58.89	0.5	
Mo	95	89	He	0.081	ppb	12.2	73.34	0.5	
Ag	107	89	He	0.007	ppb	68.2	35.56	0.1	
Cd	111	89	He	0.026	ppb	94.3	10.37	0.1	
Sn	118	159	He	0.325	ppb	12.2	362.24	0.5	
Sb	121	159	No Gas	0.025	ppb	30.1	213.57	0.1	
Ba	137	159	No Gas	0.524	ppb	8.8	1411.65	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.050	ppb	7.2	273.64	0.5	
Tl	205	209	No Gas	0.019	ppb	19.2	360.41	0.1	
[Pb]	206	209	No Gas	0.047	ppb	3.6	266.97	0.1	
[Pb]	207	209	No Gas	0.046	ppb	23.1	210.24	0.1	
Pb	208	209	No Gas	0.048	ppb	6.4	974.44	0.1	
Th	232	209	No Gas	0.111	ppb	13.0	1812.15	0.5	
U	238	209	No Gas	0.015	ppb	4.7	213.58	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1808600.60	1.6	1881686.03	96.12	29.5	120.4	
Sc	45	No Gas	3782994.03	2.4	3915123.71	96.63	29.5	120.4	
Sc	45	H2	466548.48	2.0	507902.1	91.86	29.5	120.4	
Sc	45	He	93966.04	0.5	102593	91.59	29.5	120.4	
Ge	72	No Gas	857696.15	2.1	852546.94	100.6	29.5	120.4	
Ge	72	H2	180246.87	2.4	193980.16	92.92	29.5	120.4	
Ge	72	He	73056.70	0.4	77385.19	94.41	29.5	120.4	
Y	89	H2	2971746.51	1.7	3089458.15	96.19	29.5	120.4	
Y	89	He	633492.69	0.2	678154.65	93.41	29.5	120.4	
Tb	159	No Gas	8421805.57	2.4	7727080.72	108.99	29.5	120.4	
Tb	159	He	3321401.10	0.2	3280980.4	101.23	29.5	120.4	
Bi	209	No Gas	4398287.92	2.7	3977089.87	110.59	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	034_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:26:36 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	43.702	ppb	6.7	58828.13	50	87.4	79.5	120.4	
B	11	6	No Gas	439.983	ppb	7.3	382821.37	500	88	79.5	120.4	
Na	23	45	He	7047.578	ppb	1.4	761335.37	7500	93.97	79.5	120.4	
Mg	24	45	He	5035.581	ppb	1.1	301181.45	5000	100.71	79.5	120.4	
Al	27	45	He	1858.693	ppb	0.1	44367.55	2000	92.93	79.5	120.4	
Si	28	45	H2	974.518	ppb	3.9	47534.85	1000	97.45	79.5	120.4	
K	39	45	He	9634.897	ppb	1.1	556346.81	10000	96.35	79.5	120.4	
Ca	40	45	H2	2432.081	ppb	1.1	1052149.38	2500	97.28	79.5	120.4	
V	51	89	He	480.471	ppb	0.1	430793.17	500	96.09	79.5	120.4	
Cr	52	89	He	193.983	ppb	0.2	211557.87	200	96.99	79.5	120.4	
Mn	55	89	He	491.455	ppb	0.6	255645.07	500	98.29	79.5	120.4	
Fe	56	89	H2	977.789	ppb	0.4	1692288.53	1000	97.78	79.5	120.4	
Co	59	89	He	487.732	ppb	0.7	916959.98	500	97.55	79.5	120.4	
Ni	60	89	He	495.597	ppb	0.3	249726.14	500	99.12	79.5	120.4	
Cu	63	89	He	241.505	ppb	0.5	344992.90	250	96.6	79.5	120.4	
Zn	66	89	He	501.425	ppb	0.7	94412.01	500	100.28	79.5	120.4	
As	75	89	He	99.032	ppb	0.6	16063.01	100	99.03	79.5	120.4	
Se	78	89	H2	96.081	ppb	0.9	8114.15	100	96.08	79.5	120.4	
Sr	88	89	He	483.568	ppb	0.4	396922.32	500	96.71	79.5	120.4	
Mo	95	89	He	100.959	ppb	0.3	88939.45	100	100.96	79.5	120.4	
Ag	107	89	He	50.453	ppb	0.8	149751.93	50	100.91	79.5	120.4	
Cd	111	89	He	253.970	ppb	0.9	98007.58	250	101.59	79.5	120.4	
Sn	118	159	He	469.773	ppb	0.6	425211.63	500	93.95	79.5	120.4	
Sb	121	159	No Gas	93.044	ppb	7.7	637331.35	100	93.04	79.5	120.4	
Ba	137	159	No Gas	1833.337	ppb	8.1	4830275.47	2000	91.67	79.5	120.4	
W	182	159	No Gas	96.276	ppb	8.2	474183.57	100	96.28	79.5	120.4	
Tl	205	209	No Gas	95.654	ppb	5.2	1029175.90	100	95.65	79.5	120.4	
Pb	208	209	No Gas	97.442	ppb	8.3	1450589.20	100	97.44	79.5	120.4	
Th	232	209	No Gas	96.772	ppb	9.7	1448467.62	100	96.77	79.5	120.4	
U	238	209	No Gas	95.496	ppb	9.0	1353677.94	100	95.5	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1917212.20	2.0	1881686.03	101.89	29.5	120.4	
Sc	45	No Gas	3743286.20	3.5	3915123.71	95.61	29.5	120.4	
Sc	45	H2	468235.92	1.0	507902.1	92.19	29.5	120.4	
Sc	45	He	93262.65	1.0	102593	90.91	29.5	120.4	
Ge	72	No Gas	845717.74	3.5	852546.94	99.2	29.5	120.4	
Ge	72	H2	175819.61	1.3	193980.16	90.64	29.5	120.4	
Ge	72	He	72363.86	0.4	77385.19	93.51	29.5	120.4	
Y	89	H2	2981074.41	0.4	3089458.15	96.49	29.5	120.4	
Y	89	He	632179.30	0.4	678154.65	93.22	29.5	120.4	
Tb	159	No Gas	8346003.90	2.9	7727080.72	108.01	29.5	120.4	
Tb	159	He	3321799.05	0.5	3280980.4	101.24	29.5	120.4	
Bi	209	No Gas	4286575.23	3.6	3977089.87	107.78	29.5	120.4	

Sample Report

Sample Name SN5286-001R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:29:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.133	ppb	27.2	195.56	100	
11	B	6	No Gas	8.629	ppb	8.5	8704.02	1000	
23	Na	45	He	1454.195	ppb	4.1	161121.46	200000	
24	Mg	45	He	1160.635	ppb	2.6	68435.57	200000	
27	Al	45	He	13.412	ppb	15.2	330.02	200000	
28	Si	45	H2	5098.274	ppb	2.5	244003.59	10000	
39	K	45	He	634.741	ppb	3.5	46434.16	200000	
40	Ca	45	H2	4203.492	ppb	1.6	1799754.66	200000	
51	V	89	He	0.748	ppb	7.0	987.86	1000	
52	Cr	89	He	0.245	ppb	24.5	327.28	2000	
55	Mn	89	He	1.043	ppb	5.0	542.58	2000	
56	Fe	89	H2	23.821	ppb	0.3	43364.75	100000	
59	Co	89	He	0.110	ppb	30.3	215.57	1000	
60	Ni	89	He	-0.124	ppb	N/A	234.45	1000	
63	Cu	89	He	0.469	ppb	11.2	1104.53	2000	
66	Zn	89	He	1.686	ppb	6.1	378.91	2000	
75	As	89	He	0.272	ppb	11.3	49.67	1000	
78	Se	89	H2	0.175	ppb	3.9	15.50	1000	
88	Sr	89	He	9.577	ppb	4.9	7709.09	2000	
95	Mo	89	He	0.269	ppb	25.3	235.57	1000	
107	Ag	89	He	0.009	ppb	97.2	38.89	100	
111	Cd	89	He	0.033	ppb	32.8	12.96	1000	
118	Sn	159	He	0.883	ppb	15.8	852.28	1000	
121	Sb	159	No Gas	0.115	ppb	44.4	817.63	1000	
137	Ba	159	No Gas	2.650	ppb	33.7	6934.12	2000	
182	W	159	No Gas	0.251	ppb	18.8	1248.12	1000	
205	Tl	209	No Gas	0.099	ppb	53.9	1238.17	1000	
208	Pb	209	No Gas	0.117	ppb	33.8	2025.72	2000	
232	Th	209	No Gas	0.383	ppb	22.6	5968.31	1000	
238	U	209	No Gas	0.124	ppb	33.0	1792.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773096.33	2.0	1881686.03	94.23	29.5	120.4	
Sc	45	No Gas	3712944.82	2.6	3915123.71	94.84	29.5	120.4	
Sc	45	H2	463581.34	0.5	507902.1	91.27	29.5	120.4	
Sc	45	He	91143.66	1.8	102593	88.84	29.5	120.4	
Ge	72	No Gas	841586.65	2.6	852546.94	98.71	29.5	120.4	
Ge	72	H2	177437.73	0.9	193980.16	91.47	29.5	120.4	
Ge	72	He	71402.37	2.0	77385.19	92.27	29.5	120.4	
Y	89	H2	2966171.14	0.5	3089458.15	96.01	29.5	120.4	
Y	89	He	619807.45	2.1	678154.65	91.4	29.5	120.4	
Tb	159	No Gas	8278548.00	3.0	7727080.72	107.14	29.5	120.4	
Tb	159	He	3267126.30	2.1	3280980.4	99.58	29.5	120.4	
Bi	209	No Gas	4371998.56	2.9	3977089.87	109.93	29.5	120.4	

Sample Report

Sample Name SN5286-002R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:31:45 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	68.3	88.89	100	
11	B	6	No Gas	3.517	ppb	15.3	4510.94	1000	
23	Na	45	He	1363.699	ppb	1.1	153609.80	200000	
24	Mg	45	He	1047.770	ppb	1.3	62628.91	200000	
27	Al	45	He	15.145	ppb	9.1	375.57	200000	
28	Si	45	H2	4817.122	ppb	0.7	228990.26	10000	
39	K	45	He	519.577	ppb	1.6	40572.27	200000	
40	Ca	45	H2	4000.978	ppb	0.8	1701210.22	200000	
51	V	89	He	0.849	ppb	3.7	1084.52	1000	
52	Cr	89	He	0.206	ppb	4.3	289.28	2000	
55	Mn	89	He	0.565	ppb	5.1	301.28	2000	
56	Fe	89	H2	9.298	ppb	0.9	18258.72	100000	
59	Co	89	He	0.052	ppb	45.9	111.12	1000	
60	Ni	89	He	-0.117	ppb	N/A	240.01	1000	
63	Cu	89	He	0.359	ppb	11.3	958.96	2000	
66	Zn	89	He	1.742	ppb	13.4	392.24	2000	
75	As	89	He	0.205	ppb	31.4	39.34	1000	
78	Se	89	H2	0.042	ppb	20.7	4.33	1000	
88	Sr	89	He	10.314	ppb	1.7	8366.18	2000	
95	Mo	89	He	0.157	ppb	11.1	138.90	1000	
107	Ag	89	He	0.005	ppb	34.8	27.78	100	
111	Cd	89	He	0.019	ppb	39.9	7.41	1000	
118	Sn	159	He	0.244	ppb	13.0	285.57	1000	
121	Sb	159	No Gas	0.050	ppb	99.6	380.46	1000	
137	Ba	159	No Gas	1.937	ppb	28.5	5084.09	2000	
182	W	159	No Gas	0.079	ppb	51.7	413.82	1000	
205	Tl	209	No Gas	0.030	ppb	140.9	490.62	1000	
208	Pb	209	No Gas	0.065	ppb	62.3	1238.13	2000	
232	Th	209	No Gas	0.067	ppb	73.8	1138.14	1000	
238	U	209	No Gas	0.045	ppb	95.1	667.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1737784.30	1.9	1881686.03	92.35	29.5	120.4	
Sc	45	No Gas	3670029.88	1.9	3915123.71	93.74	29.5	120.4	
Sc	45	H2	460388.62	1.7	507902.1	90.65	29.5	120.4	
Sc	45	He	92257.08	0.8	102593	89.93	29.5	120.4	
Ge	72	No Gas	838759.03	2.2	852546.94	98.38	29.5	120.4	
Ge	72	H2	175397.25	1.4	193980.16	90.42	29.5	120.4	
Ge	72	He	71571.70	0.4	77385.19	92.49	29.5	120.4	
Y	89	H2	2944778.97	1.0	3089458.15	95.32	29.5	120.4	
Y	89	He	624306.68	0.3	678154.65	92.06	29.5	120.4	
Tb	159	No Gas	8245936.33	2.1	7727080.72	106.71	29.5	120.4	
Tb	159	He	3285965.51	0.0	3280980.4	100.15	29.5	120.4	
Bi	209	No Gas	4358451.06	2.8	3977089.87	109.59	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW1
File Name	037_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:34:25 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.130	ppb	15.5	65.56	0.5	
B	11	6	No Gas	6.197	ppb	10.6	2901.50	10	
Na	23	45	He	185.900	ppb	12.9	13561.53	500	
Mg	24	45	He	-0.699	ppb	N/A	786.75	50	
Al	27	45	He	53.650	ppb	5.3	268.90	50	PB 6020 Fails DoD
Si	28	45	H2	21.556	ppb	48.9	697.46	250	
K	39	45	He	-40.156	ppb	N/A	10962.68	500	
Ca	40	45	H2	43.621	ppb	3.2	4407.52	50	
V	51	89	He	5.738	ppb	7.1	1343.45	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	0.516	ppb	29.7	177.31	2.5	
Mn	55	89	He	2.083	ppb	12.4	223.96	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	15.703	ppb	7.5	7704.00	50	
Co	59	89	He	0.076	ppb	138.1	42.22	0.5	
Ni	60	89	He	-0.723	ppb	N/A	225.57	1	
Cu	63	89	He	4.843	ppb	9.5	1811.30	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	2.923	ppb	11.4	176.67	5	
As	75	89	He	0.331	ppb	32.8	17.00	2.5	
Se	78	89	H2	0.304	ppb	13.8	5.83	2.5	
Sr	88	89	He	0.458	ppb	7.9	80.00	2.5	
Mo	95	89	He	0.283	ppb	17.4	51.11	2.5	
Ag	107	89	He	0.025	ppb	94.1	27.78	0.5	
Cd	111	89	He	0.079	ppb	84.5	6.30	0.5	
Sn	118	159	He	2.053	ppb	7.1	436.69	2.5	
Sb	121	159	No Gas	0.042	ppb	85.5	96.78	0.5	
Ba	137	159	No Gas	0.263	ppb	25.5	153.50	1	
W	182	159	No Gas	0.164	ppb	22.2	186.88	2.5	
Tl	205	209	No Gas	-0.004	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.176	ppb	19.3	784.22	0.5	
Th	232	209	No Gas	0.278	ppb	16.8	954.44	2.5	
U	238	209	No Gas	0.006	ppb	66.1	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1851631.11	2.7	1881686.03	98.4	29.5	120.4	
Sc	45	No Gas	3647038.47	4.0	3915123.71	93.15	29.5	120.4	
Sc	45	H2	450687.80	1.8	507902.1	88.74	29.5	120.4	
Sc	45	He	91439.52	1.7	102593	89.13	29.5	120.4	
Ge	72	No Gas	832295.58	1.2	852546.94	97.62	29.5	120.4	
Ge	72	H2	170555.05	1.6	193980.16	87.92	29.5	120.4	
Ge	72	He	70251.78	1.1	77385.19	90.78	29.5	120.4	
Y	89	H2	2927774.05	1.3	3089458.15	94.77	29.5	120.4	
Y	89	He	621995.20	1.2	678154.65	91.72	29.5	120.4	
Tb	159	No Gas	8394441.82	3.5	7727080.72	108.64	29.5	120.4	
Tb	159	He	3300763.01	1.0	3280980.4	100.6	29.5	120.4	
Bi	209	No Gas	4394589.96	3.1	3977089.87	110.5	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW1
File Name	038LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:37:05 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.759	ppb	3.3	12588.07	50	19.1	79.5	120.4	
B	11	6	No Gas	495.188	ppb	6.1	85620.53	500	19.81	79.5	120.4	
Na	23	45	He	7899.366	ppb	0.6	176996.18	7500	21.06	79.5	120.4	
Mg	24	45	He	5375.095	ppb	0.8	64448.04	5000	21.5	79.5	120.4	
Al	27	45	He	2012.510	ppb	1.4	9549.09	2000	20.13	79.5	120.4	
Si	28	45	H2	1012.247	ppb	6.1	10204.91	1000	20.24	0	200	
K	39	45	He	10097.979	ppb	1.0	124873.64	10000	20.2	79.5	120.4	
Ca	40	45	H2	2629.903	ppb	0.6	226487.00	2500	21.04	79.5	120.4	
V	51	89	He	518.233	ppb	0.8	92545.71	500	20.73	79.5	120.4	
Cr	52	89	He	211.845	ppb	0.2	45937.14	200	21.18	79.5	120.4	
Mn	55	89	He	524.603	ppb	0.5	54206.25	500	20.98	79.5	120.4	
Fe	56	89	H2	1083.611	ppb	0.8	376337.28	1000	21.67	79.5	120.4	
Co	59	89	He	530.404	ppb	0.4	198061.23	500	21.22	79.5	120.4	
Ni	60	89	He	535.531	ppb	0.4	53828.59	500	21.42	79.5	120.4	
Cu	63	89	He	266.534	ppb	0.3	75973.17	250	21.32	79.5	120.4	
Zn	66	89	He	533.793	ppb	2.6	20017.19	500	21.35	79.5	120.4	
As	75	89	He	105.476	ppb	2.1	3402.79	100	21.1	79.5	120.4	
Se	78	89	H2	98.562	ppb	1.6	1662.53	100	19.71	79.5	120.4	
Sr	88	89	He	504.939	ppb	0.7	82319.68	500	20.2	79.5	120.4	
Mo	95	89	He	108.780	ppb	0.9	19033.81	100	21.76	79.5	120.4	
Ag	107	89	He	55.046	ppb	1.0	32460.78	50	22.02	79.5	120.4	
Cd	111	89	He	270.432	ppb	0.8	20726.33	250	21.63	79.5	120.4	
Sn	118	159	He	485.917	ppb	0.8	88668.75	500	19.44	79.5	120.4	
Sb	121	159	No Gas	100.738	ppb	6.2	142648.68	100	20.15	79.5	120.4	
Ba	137	159	No Gas	2005.007	ppb	6.3	1091914.94	2000	20.05	79.5	120.4	
W	182	159	No Gas	106.182	ppb	5.4	108142.50	100	21.24	79.5	120.4	
Tl	205	209	No Gas	106.630	ppb	6.5	238614.37	100	21.33	79.5	120.4	
[Pb]	206	209	No Gas	105.956	ppb	8.6	82008.58	100	21.19	79.5	120.4	
[Pb]	207	209	No Gas	106.889	ppb	6.7	72542.99	100	21.38	79.5	120.4	
Pb	208	209	No Gas	106.223	ppb	7.0	329107.97	100	21.24	79.5	120.4	
Th	232	209	No Gas	105.673	ppb	6.8	329195.52	100	21.14	79.5	120.4	
U	238	209	No Gas	104.791	ppb	7.2	309007.63	100	20.96	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1872376.67	2.3	1881686.03	99.51	29.5	120.4	
Sc	45	No Gas	3745985.20	3.3	3915123.71	95.68	29.5	120.4	
Sc	45	H2	464772.10	0.9	507902.1	91.51	29.5	120.4	
Sc	45	He	92555.40	0.6	102593	90.22	29.5	120.4	
Ge	72	No Gas	868154.90	2.4	852546.94	101.83	29.5	120.4	
Ge	72	H2	173827.30	1.7	193980.16	89.61	29.5	120.4	
Ge	72	He	71628.38	0.5	77385.19	92.56	29.5	120.4	
Y	89	H2	2976244.37	0.9	3089458.15	96.34	29.5	120.4	
Y	89	He	627762.25	0.5	678154.65	92.57	29.5	120.4	
Tb	159	No Gas	8624334.18	3.4	7727080.72	111.61	29.5	120.4	
Tb	159	He	3346282.87	0.2	3280980.4	101.99	29.5	120.4	
Bi	209	No Gas	4456858.05	3.6	3977089.87	112.06	29.5	120.4	

Sample Report

Sample Name SN5589-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:39:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.151	ppb	48.3	70.00	100	
11	B	6	No Gas	30.529	ppb	8.9	6887.42	1000	
23	Na	45	He	10752.862	ppb	2.1	231848.37	200000	
24	Mg	45	He	8657.809	ppb	3.2	100888.23	200000	
27	Al	45	He	15.434	ppb	13.7	88.89	200000	
28	Si	45	H2	3100.433	ppb	1.0	29948.39	10000	
39	K	45	He	416.723	ppb	4.1	15851.68	200000	
40	Ca	45	H2	10818.457	ppb	0.5	921287.94	200000	
51	V	89	He	2.938	ppb	18.7	842.28	1000	
52	Cr	89	He	0.458	ppb	29.1	163.31	2000	
55	Mn	89	He	1230.722	ppb	1.7	124916.90	2000	
56	Fe	89	H2	27740.360	ppb	0.7	9586127.35	100000	
59	Co	89	He	13.428	ppb	2.5	4941.24	1000	
60	Ni	89	He	36.961	ppb	4.8	3924.03	1000	
63	Cu	89	He	4.198	ppb	8.3	1615.71	2000	
66	Zn	89	He	53.098	ppb	2.7	2016.89	2000	
75	As	89	He	2.551	ppb	10.2	87.01	1000	
78	Se	89	H2	0.239	ppb	25.2	4.83	1000	
88	Sr	89	He	34.006	ppb	3.2	5452.39	2000	
95	Mo	89	He	0.260	ppb	24.7	46.67	1000	
107	Ag	89	He	0.012	ppb	52.9	20.00	100	
111	Cd	89	He	0.050	ppb	46.8	4.07	1000	
118	Sn	159	He	1.544	ppb	5.5	346.69	1000	
121	Sb	159	No Gas	0.397	ppb	3.7	604.02	1000	
137	Ba	159	No Gas	4.561	ppb	2.3	2503.02	2000	
182	W	159	No Gas	0.237	ppb	30.8	266.97	1000	
205	Tl	209	No Gas	0.049	ppb	78.1	270.31	1000	
208	Pb	209	No Gas	0.186	ppb	21.4	834.28	2000	
232	Th	209	No Gas	0.819	ppb	19.7	2690.01	1000	
238	U	209	No Gas	0.069	ppb	46.5	206.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1829225.02	1.4	1881686.03	97.21	29.5	120.4	
Sc	45	No Gas	3754199.07	1.4	3915123.71	95.89	29.5	120.4	
Sc	45	H2	460806.80	0.4	507902.1	90.73	29.5	120.4	
Sc	45	He	90417.83	1.9	102593	88.13	29.5	120.4	
Ge	72	No Gas	871667.07	2.0	852546.94	102.24	29.5	120.4	
Ge	72	H2	173220.23	0.4	193980.16	89.3	29.5	120.4	
Ge	72	He	70970.45	1.1	77385.19	91.71	29.5	120.4	
Y	89	H2	2979647.12	0.5	3089458.15	96.45	29.5	120.4	
Y	89	He	616824.14	1.5	678154.65	90.96	29.5	120.4	
Tb	159	No Gas	8627061.26	1.2	7727080.72	111.65	29.5	120.4	
Tb	159	He	3315118.56	1.2	3280980.4	101.04	29.5	120.4	
Bi	209	No Gas	4500646.37	1.8	3977089.87	113.16	29.5	120.4	

Sample Report

Sample Name PBWNG17IMW1

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:42:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	56.8	50.00	100	
11	B	6	No Gas	4.473	ppb	18.0	2532.54	1000	
23	Na	45	He	140.437	ppb	7.9	12706.48	200000	
24	Mg	45	He	-13.098	ppb	N/A	646.73	200000	
27	Al	45	He	6.560	ppb	33.4	48.89	200000	
28	Si	45	H2	16.719	ppb	51.4	654.07	10000	
39	K	45	He	-34.923	ppb	N/A	11104.38	200000	
40	Ca	45	H2	47.148	ppb	0.5	4709.83	200000	
51	V	89	He	3.655	ppb	4.8	978.96	1000	
52	Cr	89	He	0.361	ppb	17.4	144.64	2000	
55	Mn	89	He	1.687	ppb	12.6	183.97	2000	
56	Fe	89	H2	21.721	ppb	4.8	9827.64	100000	
59	Co	89	He	0.058	ppb	49.4	35.56	1000	
60	Ni	89	He	-0.793	ppb	N/A	218.90	1000	
63	Cu	89	He	3.799	ppb	11.2	1521.26	2000	
66	Zn	89	He	3.513	ppb	22.6	198.90	2000	
75	As	89	He	0.226	ppb	15.1	13.67	1000	
78	Se	89	H2	0.132	ppb	77.4	3.00	1000	
88	Sr	89	He	0.031	ppb	74.8	11.11	2000	
95	Mo	89	He	0.135	ppb	31.9	25.56	1000	
107	Ag	89	He	0.032	ppb	28.2	32.22	100	
111	Cd	89	He	0.034	ppb	88.1	2.96	1000	
118	Sn	159	He	1.573	ppb	24.2	353.37	1000	
121	Sb	159	No Gas	0.030	ppb	45.5	83.43	1000	
137	Ba	159	No Gas	0.360	ppb	33.4	210.24	2000	
182	W	159	No Gas	0.083	ppb	45.2	110.12	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.167	ppb	13.4	777.55	2000	
232	Th	209	No Gas	0.115	ppb	14.7	467.20	1000	
238	U	209	No Gas	0.008	ppb	21.9	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794812.07	2.4	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3698832.22	2.8	3915123.71	94.48	29.5	120.4	
Sc	45	H2	451565.74	1.3	507902.1	88.91	29.5	120.4	
Sc	45	He	92091.87	1.2	102593	89.76	29.5	120.4	
Ge	72	No Gas	846479.29	1.3	852546.94	99.29	29.5	120.4	
Ge	72	H2	170775.26	1.8	193980.16	88.04	29.5	120.4	
Ge	72	He	71319.68	0.9	77385.19	92.16	29.5	120.4	
Y	89	H2	2952126.79	0.9	3089458.15	95.55	29.5	120.4	
Y	89	He	623360.64	0.9	678154.65	91.92	29.5	120.4	
Tb	159	No Gas	8634619.73	2.7	7727080.72	111.74	29.5	120.4	
Tb	159	He	3330376.44	0.6	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4505633.97	2.7	3977089.87	113.29	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:44:58 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.589	ppb	10.8	28991.00	25	94.36	89.8	110.2	
11	B	6	No Gas	24.172	ppb	10.6	20862.34	25	96.69	89.8	110.2	
23	Na	45	He	5095.640	ppb	1.8	551013.40	5000	101.91	89.8	110.2	
24	Mg	45	He	4900.341	ppb	1.8	291957.57	5000	98.01	89.8	110.2	
27	Al	45	He	482.853	ppb	1.5	11492.81	500	96.57	89.8	110.2	
28	Si	45	H2	445.263	ppb	2.6	21787.60	500	89.05	89.8	110.2	> +/- 10%
39	K	45	He	4796.745	ppb	1.7	281700.35	5000	95.93	89.8	110.2	
40	Ca	45	H2	4826.826	ppb	1.2	2067104.69	5000	96.54	89.8	110.2	
51	V	89	He	24.411	ppb	3.8	22171.40	25	97.64	89.8	110.2	
52	Cr	89	He	24.592	ppb	4.0	26832.46	25	98.37	89.8	110.2	
55	Mn	89	He	24.577	ppb	2.0	12775.48	25	98.31	89.8	110.2	
56	Fe	89	H2	4765.732	ppb	1.4	8323306.45	5000	95.31	89.8	110.2	
59	Co	89	He	24.646	ppb	1.3	46283.50	25	98.58	89.8	110.2	
60	Ni	89	He	24.350	ppb	2.8	12536.01	25	97.4	89.8	110.2	
63	Cu	89	He	24.795	ppb	3.3	35772.28	25	99.18	89.8	110.2	
66	Zn	89	He	25.285	ppb	2.5	4819.89	25	101.14	89.8	110.2	
75	As	89	He	23.997	ppb	1.9	3891.31	25	95.99	89.8	110.2	
78	Se	89	H2	23.910	ppb	2.2	2040.39	25	95.64	89.8	110.2	
88	Sr	89	He	23.378	ppb	2.3	19165.06	25	93.51	89.8	110.2	
95	Mo	89	He	25.163	ppb	2.9	22132.98	25	100.65	89.8	110.2	
107	Ag	89	He	25.799	ppb	2.2	76464.06	25	103.2	89.8	110.2	
111	Cd	89	He	25.163	ppb	4.3	9693.55	25	100.65	89.8	110.2	
118	Sn	159	He	23.492	ppb	3.5	21611.21	25	93.97	89.8	110.2	
121	Sb	159	No Gas	23.090	ppb	9.9	163703.09	25	92.36	89.8	110.2	
137	Ba	159	No Gas	23.455	ppb	9.7	63975.08	25	93.82	89.8	110.2	
182	W	159	No Gas	23.478	ppb	8.6	119720.68	25	93.91	89.8	110.2	
205	Tl	209	No Gas	23.878	ppb	9.1	269616.31	25	95.51	89.8	110.2	
208	Pb	209	No Gas	23.766	ppb	9.8	371519.22	25	95.06	89.8	110.2	
232	Th	209	No Gas	23.624	ppb	11.2	371162.65	25	94.5	89.8	110.2	
238	U	209	No Gas	23.698	ppb	10.3	352557.55	25	94.79	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752098.64	3.3	1881686.03	93.11	29.5	120.4	
Sc	45	No Gas	3778384.01	3.5	3915123.71	96.51	29.5	120.4	
Sc	45	H2	463728.13	1.1	507902.1	91.3	29.5	120.4	
Sc	45	He	92900.25	1.5	102593	90.55	29.5	120.4	
Ge	72	No Gas	866180.65	3.4	852546.94	101.6	29.5	120.4	
Ge	72	H2	176442.82	1.9	193980.16	90.96	29.5	120.4	
Ge	72	He	72398.66	1.3	77385.19	93.56	29.5	120.4	
Y	89	H2	3011895.04	0.9	3089458.15	97.49	29.5	120.4	
Y	89	He	631338.88	1.7	678154.65	93.1	29.5	120.4	
Tb	159	No Gas	8644671.61	3.7	7727080.72	111.88	29.5	120.4	
Tb	159	He	3367241.41	1.9	3280980.4	102.63	29.5	120.4	
Bi	209	No Gas	4502300.11	4.2	3977089.87	113.21	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:47:37 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	34.9	93.34	0.2	
11	B	6	No Gas	0.746	ppb	23.3	2345.83	4	
23	Na	45	He	-2.520	ppb	N/A	9653.99	200	
24	Mg	45	He	-2.104	ppb	N/A	688.95	20	
27	Al	45	He	0.305	ppb	114.0	25.56	20	
28	Si	45	H2	1.084	ppb	80.4	573.98	100	
39	K	45	He	-4.892	ppb	N/A	11424.45	200	
40	Ca	45	H2	4.750	ppb	65.0	2882.92	20	
51	V	89	He	-0.067	ppb	N/A	278.90	1	
52	Cr	89	He	0.001	ppb	1104.8	69.32	1	
55	Mn	89	He	0.021	ppb	49.2	22.00	0.4	
56	Fe	89	H2	3.461	ppb	34.8	8472.70	20	
59	Co	89	He	0.010	ppb	34.5	33.34	0.2	
60	Ni	89	He	-0.266	ppb	N/A	168.89	0.4	Failed DoD
63	Cu	89	He	0.027	ppb	49.1	500.03	0.6	
66	Zn	89	He	0.037	ppb	319.4	76.67	2	
75	As	89	He	-0.012	ppb	N/A	4.67	1	
78	Se	89	H2	0.043	ppb	36.6	4.50	1	
88	Sr	89	He	0.006	ppb	103.8	11.11	1	
95	Mo	89	He	0.068	ppb	3.1	62.23	1	
107	Ag	89	He	0.007	ppb	94.6	33.34	0.2	
111	Cd	89	He	0.003	ppb	150.8	1.48	0.2	
118	Sn	159	He	0.030	ppb	6.8	95.56	1	
121	Sb	159	No Gas	0.018	ppb	20.1	166.86	0.2	
137	Ba	159	No Gas	0.020	ppb	57.9	66.74	0.4	
182	W	159	No Gas	0.053	ppb	13.3	286.99	1	
205	Tl	209	No Gas	0.008	ppb	62.6	240.27	0.2	
208	Pb	209	No Gas	0.023	ppb	15.9	597.35	0.2	
232	Th	209	No Gas	0.057	ppb	11.2	981.14	1	
238	U	209	No Gas	0.016	ppb	37.7	236.94	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1746346.04	2.9	1881686.03	92.81	29.5	120.4	
Sc	45	No Gas	3764984.62	3.6	3915123.71	96.17	29.5	120.4	
Sc	45	H2	471809.95	0.9	507902.1	92.89	29.5	120.4	
Sc	45	He	93765.61	0.4	102593	91.4	29.5	120.4	
Ge	72	No Gas	853742.86	3.9	852546.94	100.14	29.5	120.4	
Ge	72	H2	178681.31	1.5	193980.16	92.11	29.5	120.4	
Ge	72	He	72857.13	0.2	77385.19	94.15	29.5	120.4	
Y	89	H2	3009209.83	0.9	3089458.15	97.4	29.5	120.4	
Y	89	He	635287.21	0.6	678154.65	93.68	29.5	120.4	
Tb	159	No Gas	8425275.64	3.8	7727080.72	109.04	29.5	120.4	
Tb	159	He	3330615.65	0.2	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4416349.16	4.1	3977089.87	111.04	29.5	120.4	

Sample Report

Sample Name LCSWNG17IMW1

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:50:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.851	ppb	5.0	13507.85	100	
11	B	6	No Gas	524.377	ppb	4.9	89570.46	1000	
23	Na	45	He	8467.346	ppb	1.6	188311.55	200000	
24	Mg	45	He	5765.628	ppb	0.9	68817.41	200000	
27	Al	45	He	2126.110	ppb	1.6	10049.44	200000	
28	Si	45	H2	1057.276	ppb	4.2	10555.76	10000	
39	K	45	He	10897.568	ppb	2.0	133336.76	200000	
40	Ca	45	H2	2840.396	ppb	0.7	242673.89	200000	
51	V	89	He	557.793	ppb	1.8	98644.46	1000	
52	Cr	89	He	225.938	ppb	2.3	48523.85	2000	
55	Mn	89	He	563.410	ppb	3.1	57657.78	2000	
56	Fe	89	H2	1141.868	ppb	1.3	394870.83	100000	
59	Co	89	He	569.294	ppb	2.0	210568.48	1000	
60	Ni	89	He	574.493	ppb	2.0	57176.34	1000	
63	Cu	89	He	283.710	ppb	2.1	80073.80	2000	
66	Zn	89	He	578.749	ppb	2.1	21490.53	2000	
75	As	89	He	110.814	ppb	2.4	3541.18	1000	
78	Se	89	H2	110.518	ppb	3.7	1856.71	1000	
88	Sr	89	He	547.140	ppb	2.0	88353.84	2000	
95	Mo	89	He	117.893	ppb	2.1	20432.54	1000	
107	Ag	89	He	59.207	ppb	1.7	34584.85	100	
111	Cd	89	He	293.825	ppb	1.5	22308.42	1000	
118	Sn	159	He	529.371	ppb	2.2	96122.74	1000	
121	Sb	159	No Gas	109.045	ppb	5.6	152829.25	1000	
137	Ba	159	No Gas	2126.820	ppb	5.3	1146485.25	2000	
182	W	159	No Gas	113.980	ppb	5.4	114878.13	1000	
205	Tl	209	No Gas	114.518	ppb	3.9	255883.23	1000	
208	Pb	209	No Gas	113.216	ppb	4.9	350248.14	2000	
232	Th	209	No Gas	113.913	ppb	6.0	354257.73	1000	
238	U	209	No Gas	112.264	ppb	6.2	330514.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1850887.52	1.0	1881686.03	98.36	29.5	120.4	
Sc	45	No Gas	3695606.52	2.2	3915123.71	94.39	29.5	120.4	
Sc	45	H2	461201.60	0.5	507902.1	90.81	29.5	120.4	
Sc	45	He	92223.11	1.7	102593	89.89	29.5	120.4	
Ge	72	No Gas	854074.05	2.1	852546.94	100.18	29.5	120.4	
Ge	72	H2	172651.26	0.7	193980.16	89	29.5	120.4	
Ge	72	He	71269.90	1.8	77385.19	92.1	29.5	120.4	
Y	89	H2	2964415.28	0.3	3089458.15	95.95	29.5	120.4	
Y	89	He	621969.05	1.8	678154.65	91.71	29.5	120.4	
Tb	159	No Gas	8530661.47	2.0	7727080.72	110.4	29.5	120.4	
Tb	159	He	3330789.29	1.6	3280980.4	101.52	29.5	120.4	
Bi	209	No Gas	4445999.13	2.1	3977089.87	111.79	29.5	120.4	

Sample Report

Sample Name SN5772-003R

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:53:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.215	ppb	26.5	80.00	100	
11	B	6	No Gas	614.128	ppb	10.9	95003.98	1000	
23	Na	45	He	126597.959	ppb	1.0	2656458.87	200000	
24	Mg	45	He	8718.907	ppb	0.9	102771.06	200000	
27	Al	45	He	555.616	ppb	1.7	2617.01	200000	
28	Si	45	H2	10206.928	ppb	2.8	96088.38	10000	
39	K	45	He	954.483	ppb	2.2	21992.01	200000	
40	Ca	45	H2	72589.729	ppb	0.9	6092247.06	200000	
51	V	89	He	5.088	ppb	2.1	1221.21	1000	
52	Cr	89	He	2.009	ppb	5.1	494.59	2000	
55	Mn	89	He	18.394	ppb	1.2	1881.12	2000	
56	Fe	89	H2	538.820	ppb	0.8	185994.29	100000	
59	Co	89	He	0.318	ppb	21.5	131.12	1000	
60	Ni	89	He	0.413	ppb	98.7	335.57	1000	
63	Cu	89	He	4.242	ppb	9.8	1631.27	2000	
66	Zn	89	He	5.980	ppb	14.2	287.79	2000	
75	As	89	He	0.461	ppb	53.7	21.00	1000	
78	Se	89	H2	1.304	ppb	7.1	22.50	1000	
88	Sr	89	He	1101.475	ppb	0.9	176734.09	2000	
95	Mo	89	He	0.608	ppb	11.3	106.67	1000	
107	Ag	89	He	0.029	ppb	39.5	30.00	100	
111	Cd	89	He	0.064	ppb	147.6	5.18	1000	
118	Sn	159	He	1.650	ppb	8.0	367.80	1000	
121	Sb	159	No Gas	0.163	ppb	32.3	253.62	1000	
137	Ba	159	No Gas	45.523	ppb	10.2	23326.45	2000	
182	W	159	No Gas	0.294	ppb	5.3	307.01	1000	
205	Tl	209	No Gas	0.065	ppb	64.0	283.66	1000	
208	Pb	209	No Gas	0.606	ppb	17.8	1995.64	2000	
232	Th	209	No Gas	0.802	ppb	18.0	2442.98	1000	
238	U	209	No Gas	3.703	ppb	17.7	10215.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1690839.79	8.4	1881686.03	89.86	29.5	120.4	
Sc	45	No Gas	3508447.31	8.7	3915123.71	89.61	29.5	120.4	
Sc	45	H2	454490.09	0.6	507902.1	89.48	29.5	120.4	
Sc	45	He	91427.67	0.7	102593	89.12	29.5	120.4	
Ge	72	No Gas	814621.23	9.4	852546.94	95.55	29.5	120.4	
Ge	72	H2	171393.06	0.4	193980.16	88.36	29.5	120.4	
Ge	72	He	71303.60	0.9	77385.19	92.14	29.5	120.4	
Y	89	H2	2939085.05	0.5	3089458.15	95.13	29.5	120.4	
Y	89	He	617884.08	0.2	678154.65	91.11	29.5	120.4	
Tb	159	No Gas	8148333.70	9.1	7727080.72	105.45	29.5	120.4	
Tb	159	He	3332826.93	0.4	3280980.4	101.58	29.5	120.4	
Bi	209	No Gas	4209907.36	9.4	3977089.87	105.85	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS1
File Name	045_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:55:40 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.079	ppb	17.3	51.12	0.5	
B	11	6	No Gas	11.017	ppb	8.4	3627.25	10	PB 6020 Fails DoD
Na	23	45	He	136.985	ppb	9.9	12596.28	500	
Mg	24	45	He	-3.729	ppb	N/A	755.63	50	
Al	27	45	He	17.077	ppb	40.2	97.78	50	
Si	28	45	H2	9.295	ppb	117.4	594.01	250	
K	39	45	He	-7.655	ppb	N/A	11376.17	500	
Ca	40	45	H2	64.599	ppb	6.2	6252.70	50	PB 6020 Fails DoD
V	51	89	He	4.873	ppb	10.2	1187.87	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.031	ppb	3.4	287.28	2.5	
Mn	55	89	He	1.407	ppb	9.3	154.64	1	PB 6020 Fails DoD
Fe	56	89	H2	34.953	ppb	2.3	14450.18	50	
Co	59	89	He	0.070	ppb	43.2	40.00	0.5	
Ni	60	89	He	-0.334	ppb	N/A	263.35	1	
Cu	63	89	He	3.484	ppb	6.3	1425.68	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	3.680	ppb	24.6	204.45	5	
As	75	89	He	0.292	ppb	67.1	15.67	2.5	
Se	78	89	H2	0.221	ppb	59.4	4.50	2.5	
Sr	88	89	He	0.320	ppb	24.4	57.78	2.5	
Mo	95	89	He	0.213	ppb	28.1	38.89	2.5	
Ag	107	89	He	0.013	ppb	28.5	21.11	0.5	
Cd	111	89	He	0.030	ppb	103.8	2.59	0.5	
Sn	118	159	He	41.575	ppb	2.3	7644.70	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.050	ppb	19.6	113.46	0.5	
Ba	137	159	No Gas	0.413	ppb	20.6	243.60	1	
W	182	159	No Gas	0.072	ppb	60.0	100.11	2.5	
Tl	205	209	No Gas	-0.006	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.276	ppb	15.8	1127.95	0.5	
Th	232	209	No Gas	0.131	ppb	11.6	523.94	2.5	
U	238	209	No Gas	0.011	ppb	18.2	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1810305.65	1.0	1881686.03	96.21	29.5	120.4	
Sc	45	No Gas	3726847.47	1.2	3915123.71	95.19	29.5	120.4	
Sc	45	H2	458168.88	1.8	507902.1	90.21	29.5	120.4	
Sc	45	He	91845.86	1.7	102593	89.52	29.5	120.4	
Ge	72	No Gas	865178.32	0.8	852546.94	101.48	29.5	120.4	
Ge	72	H2	171378.89	1.3	193980.16	88.35	29.5	120.4	
Ge	72	He	71231.45	1.2	77385.19	92.05	29.5	120.4	
Y	89	H2	2971303.28	1.3	3089458.15	96.18	29.5	120.4	
Y	89	He	620630.07	1.6	678154.65	91.52	29.5	120.4	
Tb	159	No Gas	8736699.66	1.1	7727080.72	113.07	29.5	120.4	
Tb	159	He	3345231.20	1.7	3280980.4	101.96	29.5	120.4	
Bi	209	No Gas	4546186.60	1.7	3977089.87	114.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG20IMS1
File Name	046LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:58:13 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.558	ppb	4.2	12312.31	50	19.42	79.5	120.4	
B	11	6	No Gas	502.842	ppb	2.3	83687.52	500	20.11	79.5	120.4	
Na	23	45	He	7667.161	ppb	1.7	171764.39	7500	20.45	79.5	120.4	
Mg	24	45	He	5241.419	ppb	1.7	62747.11	5000	20.97	79.5	120.4	
Al	27	45	He	1886.011	ppb	2.0	8933.10	2000	18.86	79.5	120.4	
Si	28	45	H2	904.687	ppb	4.3	9119.69	1000	18.09	79.5	120.4	
K	39	45	He	9947.464	ppb	0.9	122964.90	10000	19.89	79.5	120.4	
Ca	40	45	H2	2558.925	ppb	0.7	219022.73	2500	20.47	79.5	120.4	
V	51	89	He	496.416	ppb	1.7	88789.49	500	19.86	79.5	120.4	
Cr	52	89	He	204.769	ppb	1.9	44468.74	200	20.48	79.5	120.4	
Mn	55	89	He	515.474	ppb	0.2	53349.21	500	20.62	79.5	120.4	
Fe	56	89	H2	1046.584	ppb	1.7	365317.25	1000	20.93	79.5	120.4	
Co	59	89	He	514.051	ppb	1.1	192243.78	500	20.56	79.5	120.4	
Ni	60	89	He	518.764	ppb	1.2	52229.15	500	20.75	79.5	120.4	
Cu	63	89	He	257.983	ppb	1.6	73656.50	250	20.64	79.5	120.4	
Zn	66	89	He	512.569	ppb	0.6	19253.91	500	20.5	79.5	120.4	
As	75	89	He	100.386	ppb	0.8	3244.40	100	20.08	79.5	120.4	
Se	78	89	H2	96.689	ppb	1.6	1638.85	100	19.34	79.5	120.4	
Sr	88	89	He	489.763	ppb	1.0	79964.93	500	19.59	79.5	120.4	
Mo	95	89	He	105.834	ppb	2.1	18544.25	100	21.17	79.5	120.4	
Ag	107	89	He	53.478	ppb	0.6	31584.27	50	21.39	79.5	120.4	
Cd	111	89	He	262.241	ppb	1.6	20128.03	250	20.98	79.5	120.4	
Sn	118	159	He	514.248	ppb	1.3	94930.19	500	20.57	79.5	120.4	
Sb	121	159	No Gas	102.414	ppb	7.0	142092.86	100	20.48	79.5	120.4	
Ba	137	159	No Gas	2027.619	ppb	6.6	1082125.68	2000	20.28	79.5	120.4	
W	182	159	No Gas	109.435	ppb	7.0	109176.14	100	21.89	79.5	120.4	
Tl	205	209	No Gas	110.019	ppb	5.1	241117.19	100	22	79.5	120.4	
[Pb]	206	209	No Gas	109.092	ppb	6.5	82679.25	100	21.82	79.5	120.4	
[Pb]	207	209	No Gas	108.610	ppb	6.0	72160.47	100	21.72	79.5	120.4	
Pb	208	209	No Gas	108.515	ppb	5.8	329196.96	100	21.7	79.5	120.4	
Th	232	209	No Gas	110.059	ppb	6.4	335594.83	100	22.01	79.5	120.4	
U	238	209	No Gas	108.979	ppb	6.0	314671.99	100	21.8	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1802187.23	4.0	1881686.03	95.78	29.5	120.4	
Sc	45	No Gas	3616120.34	6.6	3915123.71	92.36	29.5	120.4	
Sc	45	H2	461862.51	0.4	507902.1	90.94	29.5	120.4	
Sc	45	He	92399.04	1.6	102593	90.06	29.5	120.4	
Ge	72	No Gas	851671.33	4.9	852546.94	99.9	29.5	120.4	
Ge	72	H2	171883.88	0.1	193980.16	88.61	29.5	120.4	
Ge	72	He	72186.68	1.4	77385.19	93.28	29.5	120.4	
Y	89	H2	2990635.48	0.5	3089458.15	96.8	29.5	120.4	
Y	89	He	628774.14	1.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8463453.21	6.4	7727080.72	109.53	29.5	120.4	
Tb	159	He	3385674.78	1.1	3280980.4	103.19	29.5	120.4	
Bi	209	No Gas	4366822.30	6.0	3977089.87	109.8	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:00:52 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.627	ppb	17.1	224.45	100	
11	B	6	No Gas	325.409	ppb	5.1	26857.78	1000	
23	Na	45	He	1936.370	ppb	3.7	28824.09	200000	
24	Mg	45	He	29851.626	ppb	0.8	168920.72	200000	
27	Al	45	He	35605.609	ppb	0.3	80244.35	200000	
28	Si	45	H2	2533.668	ppb	1.6	12028.72	10000	
39	K	45	He	9268.683	ppb	0.7	60478.44	200000	
40	Ca	45	H2	204982.603	ppb	0.4	8367086.40	200000	
51	V	89	He	73.290	ppb	2.6	6685.15	1000	
52	Cr	89	He	372.925	ppb	0.3	39436.80	2000	
55	Mn	89	He	9396.269	ppb	0.2	473297.93	2000	
56	Fe	89	H2	295682.493	ppb	0.4	49863275.27	100000	
59	Co	89	He	44.969	ppb	2.1	8200.80	1000	
60	Ni	89	He	234.527	ppb	0.6	11721.95	1000	
63	Cu	89	He	3441.335	ppb	0.4	475854.54	2000	
66	Zn	89	He	4086.864	ppb	0.3	74528.30	2000	
75	As	89	He	49.535	ppb	3.1	784.11	1000	
78	Se	89	H2	39.229	ppb	2.3	323.99	1000	
88	Sr	89	He	1388.583	ppb	1.0	110374.23	2000	
95	Mo	89	He	114.812	ppb	3.2	9796.09	1000	
107	Ag	89	He	21.434	ppb	2.1	6173.87	100	
111	Cd	89	He	6.820	ppb	0.8	255.19	1000	
118	Sn	159	He	303.052	ppb	1.1	27430.84	1000	
121	Sb	159	No Gas	11.652	ppb	9.3	8258.42	1000	
137	Ba	159	No Gas	2649.444	ppb	4.9	718979.63	2000	
182	W	159	No Gas	21.111	ppb	8.2	10733.08	1000	
205	Tl	209	No Gas	0.573	ppb	16.4	897.70	1000	
208	Pb	209	No Gas	248.985	ppb	4.6	433404.83	2000	
232	Th	209	No Gas	1.967	ppb	8.6	3561.16	1000	
238	U	209	No Gas	20.127	ppb	6.1	33348.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1709584.03	1.0	1881686.03	90.85	29.5	120.4	
Sc	45	No Gas	3629404.09	0.7	3915123.71	92.7	29.5	120.4	
Sc	45	H2	442093.00	0.2	507902.1	87.04	29.5	120.4	
Sc	45	He	88070.69	0.9	102593	85.84	29.5	120.4	
Ge	72	No Gas	834412.95	1.5	852546.94	97.87	29.5	120.4	
Ge	72	H2	164444.72	0.6	193980.16	84.77	29.5	120.4	
Ge	72	He	68424.16	1.3	77385.19	88.42	29.5	120.4	
Y	89	H2	2908729.28	0.1	3089458.15	94.15	29.5	120.4	
Y	89	He	612162.10	0.7	678154.65	90.27	29.5	120.4	
Tb	159	No Gas	8584228.06	0.6	7727080.72	111.09	29.5	120.4	
Tb	159	He	3313886.76	1.0	3280980.4	101	29.5	120.4	
Bi	209	No Gas	5001292.21	0.8	3977089.87	125.75	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5515-001R

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:03:25 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.832	ppb	29.5	136.67	100	
11	B	6	No Gas	332.351	ppb	9.7	14311.98	1000	
23	Na	45	He	2027.431	ppb	3.4	19621.77	200000	
24	Mg	45	He	31763.654	ppb	1.1	90656.39	200000	
27	Al	45	He	37515.577	ppb	0.3	42482.95	200000	
28	Si	45	H2	2712.678	ppb	3.4	6689.12	10000	
39	K	45	He	9529.047	ppb	2.2	36603.52	200000	
40	Ca	45	H2	215616.885	ppb	1.8	4416731.53	200000	
51	V	89	He	73.069	ppb	0.7	3511.67	1000	
52	Cr	89	He	391.679	ppb	0.4	20830.91	2000	
55	Mn	89	He	9910.920	ppb	0.5	250697.04	2000	
56	Fe	89	H2	311079.926	ppb	1.3	26319446.23	100000	
59	Co	89	He	47.184	ppb	2.9	4327.68	1000	
60	Ni	89	He	233.693	ppb	1.7	6012.62	1000	
63	Cu	89	He	3638.563	ppb	0.7	252863.41	2000	
66	Zn	89	He	4213.347	ppb	0.8	38616.50	2000	
75	As	89	He	50.936	ppb	9.2	408.05	1000	
78	Se	89	H2	39.105	ppb	6.7	162.49	1000	
88	Sr	89	He	1444.916	ppb	0.5	57677.15	2000	
95	Mo	89	He	121.381	ppb	2.2	5201.18	1000	
107	Ag	89	He	22.008	ppb	4.6	3189.38	100	
111	Cd	89	He	7.796	ppb	5.6	146.67	1000	
118	Sn	159	He	315.378	ppb	1.2	14419.28	1000	
121	Sb	159	No Gas	11.606	ppb	10.6	4208.70	1000	
137	Ba	159	No Gas	2731.225	ppb	10.4	377282.81	2000	
182	W	159	No Gas	21.886	ppb	16.8	5671.01	1000	
205	Tl	209	No Gas	0.310	ppb	30.8	363.74	1000	
208	Pb	209	No Gas	268.029	ppb	8.7	228761.21	2000	
232	Th	209	No Gas	0.585	ppb	23.4	617.38	1000	
238	U	209	No Gas	21.450	ppb	11.7	17408.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1683346.07	3.4	1881686.03	89.46	29.5	120.4	
Sc	45	No Gas	3666159.57	4.4	3915123.71	93.64	29.5	120.4	
Sc	45	H2	443709.79	1.1	507902.1	87.36	29.5	120.4	
Sc	45	He	88489.62	0.9	102593	86.25	29.5	120.4	
Ge	72	No Gas	842244.46	3.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	167680.79	1.7	193980.16	86.44	29.5	120.4	
Ge	72	He	69916.69	1.1	77385.19	90.35	29.5	120.4	
Y	89	H2	2918663.25	1.1	3089458.15	94.47	29.5	120.4	
Y	89	He	614811.83	0.4	678154.65	90.66	29.5	120.4	
Tb	159	No Gas	8762440.43	4.1	7727080.72	113.4	29.5	120.4	
Tb	159	He	3340319.50	0.4	3280980.4	101.81	29.5	120.4	
Bi	209	No Gas	4911973.57	4.0	3977089.87	123.51	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBWNG20IMW1
File Name	049_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:06:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.032	ppb	91.5	35.56	0.5	
B	11	6	No Gas	6.170	ppb	33.1	2549.20	10	
Na	23	45	He	45.861	ppb	18.6	10472.17	500	
Mg	24	45	He	-18.214	ppb	N/A	573.39	50	
Al	27	45	He	9.721	ppb	49.9	62.22	50	
Si	28	45	H2	11.267	ppb	36.5	597.34	250	
K	39	45	He	-30.816	ppb	N/A	10897.61	500	
Ca	40	45	H2	42.798	ppb	3.7	4303.03	50	
V	51	89	He	0.802	ppb	14.3	468.91	2.5	
Cr	52	89	He	0.345	ppb	17.7	139.31	2.5	
Mn	55	89	He	1.370	ppb	22.3	149.31	1	PB 6020 Fails DoD
Fe	56	89	H2	32.699	ppb	1.6	13511.54	50	
Co	59	89	He	0.028	ppb	184.8	24.44	0.5	
Ni	60	89	He	-1.093	ppb	N/A	186.67	1	PB 6020 Fails DoD
Cu	63	89	He	2.739	ppb	8.0	1207.88	1.5	PB 6020 Fails DoD
Zn	66	89	He	2.522	ppb	2.4	160.01	5	
As	75	89	He	0.136	ppb	47.5	10.67	2.5	
Se	78	89	H2	0.133	ppb	22.4	3.00	2.5	
Sr	88	89	He	0.136	ppb	22.8	27.78	2.5	
Mo	95	89	He	0.125	ppb	15.7	23.33	2.5	
Ag	107	89	He	0.012	ppb	45.8	20.00	0.5	
Cd	111	89	He	0.020	ppb	43.2	1.85	0.5	
Sn	118	159	He	1.380	ppb	5.4	318.91	2.5	
Sb	121	159	No Gas	0.037	ppb	67.4	90.10	0.5	
Ba	137	159	No Gas	1.430	ppb	62.2	760.88	1	PB 6020 Fails DoD
W	182	159	No Gas	0.056	ppb	61.3	83.43	2.5	
Tl	205	209	No Gas	-0.038	ppb	N/A	70.08	0.5	
Pb	208	209	No Gas	0.220	ppb	38.2	911.04	0.5	
Th	232	209	No Gas	0.100	ppb	39.1	407.14	2.5	
U	238	209	No Gas	0.024	ppb	80.2	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1637241.48	6.9	1881686.03	87.01	29.5	120.4	
Sc	45	No Gas	3557206.59	8.0	3915123.71	90.86	29.5	120.4	
Sc	45	H2	447033.60	0.8	507902.1	88.02	29.5	120.4	
Sc	45	He	90002.44	1.0	102593	87.73	29.5	120.4	
Ge	72	No Gas	812366.41	9.3	852546.94	95.29	29.5	120.4	
Ge	72	H2	168307.35	0.6	193980.16	86.77	29.5	120.4	
Ge	72	He	70569.94	0.9	77385.19	91.19	29.5	120.4	
Y	89	H2	2936424.50	0.1	3089458.15	95.05	29.5	120.4	
Y	89	He	615476.55	1.4	678154.65	90.76	29.5	120.4	
Tb	159	No Gas	8459546.40	8.0	7727080.72	109.48	29.5	120.4	
Tb	159	He	3334140.64	1.0	3280980.4	101.62	29.5	120.4	
Bi	209	No Gas	4405576.93	8.8	3977089.87	110.77	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG20IMW1
File Name	050LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:08:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.715	ppb	7.8	12630.33	50	20.29	79.5	120.4	
B	11	6	No Gas	529.882	ppb	7.3	86506.72	500	21.2	79.5	120.4	
Na	23	45	He	8181.968	ppb	1.1	180231.59	7500	21.82	79.5	120.4	
Mg	24	45	He	5643.564	ppb	0.2	66615.67	5000	22.57	79.5	120.4	
Al	27	45	He	2038.406	ppb	2.7	9525.74	2000	20.38	79.5	120.4	
Si	28	45	H2	1022.105	ppb	1.6	10131.60	1000	20.44	0	200	
K	39	45	He	10565.230	ppb	1.0	128173.11	10000	21.13	79.5	120.4	
Ca	40	45	H2	2713.322	ppb	0.8	229751.46	2500	21.71	79.5	120.4	
V	51	89	He	543.694	ppb	0.5	95876.40	500	21.75	79.5	120.4	
Cr	52	89	He	224.397	ppb	0.1	48054.41	200	22.44	79.5	120.4	
Mn	55	89	He	553.186	ppb	0.9	56453.75	500	22.13	79.5	120.4	
Fe	56	89	H2	1125.257	ppb	0.9	391845.33	1000	22.51	79.5	120.4	
Co	59	89	He	564.330	ppb	0.3	208126.52	500	22.57	79.5	120.4	
Ni	60	89	He	578.723	ppb	1.1	57424.02	500	23.15	79.5	120.4	
Cu	63	89	He	284.745	ppb	0.7	80133.03	250	22.78	79.5	120.4	
Zn	66	89	He	564.100	ppb	2.3	20884.07	500	22.56	79.5	120.4	
As	75	89	He	110.927	ppb	1.8	3534.51	100	22.18	79.5	120.4	
Se	78	89	H2	105.423	ppb	1.8	1783.37	100	21.08	79.5	120.4	
Sr	88	89	He	535.334	ppb	1.0	86197.96	500	21.41	79.5	120.4	
Mo	95	89	He	116.227	ppb	0.8	20084.36	100	23.24	79.5	120.4	DoD
Ag	107	89	He	59.978	ppb	1.6	34926.83	50	23.99	79.5	120.4	DoD
Cd	111	89	He	287.101	ppb	1.0	21731.99	250	22.97	79.5	120.4	
Sn	118	159	He	514.214	ppb	0.8	94320.46	500	20.57	79.5	120.4	
Sb	121	159	No Gas	101.835	ppb	9.1	149524.29	100	20.37	79.5	120.4	
Ba	137	159	No Gas	2020.089	ppb	9.7	1140575.96	2000	20.2	79.5	120.4	
W	182	159	No Gas	107.783	ppb	8.6	113810.26	100	21.56	79.5	120.4	
Tl	205	209	No Gas	108.365	ppb	7.9	252375.41	100	21.67	79.5	120.4	
[Pb]	206	209	No Gas	108.002	ppb	10.0	87000.08	100	21.6	79.5	120.4	
[Pb]	207	209	No Gas	107.979	ppb	7.8	76272.18	100	21.6	79.5	120.4	
Pb	208	209	No Gas	107.600	ppb	9.0	346901.78	100	21.52	79.5	120.4	
Th	232	209	No Gas	108.094	ppb	10.7	350271.53	100	21.62	79.5	120.4	
U	238	209	No Gas	107.105	ppb	10.1	328589.59	100	21.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1770750.91	2.2	1881686.03	94.1	29.5	120.4	
Sc	45	No Gas	3799028.53	3.3	3915123.71	97.03	29.5	120.4	
Sc	45	H2	457037.87	1.2	507902.1	89.99	29.5	120.4	
Sc	45	He	91172.20	0.8	102593	88.87	29.5	120.4	
Ge	72	No Gas	875948.99	3.3	852546.94	102.74	29.5	120.4	
Ge	72	H2	170813.22	0.1	193980.16	88.06	29.5	120.4	
Ge	72	He	71282.04	0.8	77385.19	92.11	29.5	120.4	
Y	89	H2	2984826.44	0.4	3089458.15	96.61	29.5	120.4	
Y	89	He	620010.87	0.9	678154.65	91.43	29.5	120.4	
Tb	159	No Gas	8948514.10	3.4	7727080.72	115.81	29.5	120.4	
Tb	159	He	3363909.71	0.5	3280980.4	102.53	29.5	120.4	
Bi	209	No Gas	4640064.07	3.6	3977089.87	116.67	29.5	120.4	

Sample Report

Sample Name SN5920-001

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:11:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.119	ppb	27.3	58.89	100	
11	B	6	No Gas	16.822	ppb	2.7	4410.82	1000	
23	Na	45	He	11619.957	ppb	1.5	249464.50	200000	
24	Mg	45	He	5455.673	ppb	1.6	63804.90	200000	
27	Al	45	He	55.550	ppb	10.8	274.46	200000	
28	Si	45	H2	11093.059	ppb	0.1	104680.60	10000	
39	K	45	He	1597.808	ppb	2.0	28761.02	200000	
40	Ca	45	H2	6675.357	ppb	0.4	562525.30	200000	
51	V	89	He	2.178	ppb	4.5	710.04	1000	
52	Cr	89	He	0.573	ppb	14.8	187.97	2000	
55	Mn	89	He	2103.002	ppb	1.0	213399.09	2000	
56	Fe	89	H2	8432.091	ppb	0.3	2902257.60	100000	
59	Co	89	He	13.840	ppb	0.9	5090.18	1000	
60	Ni	89	He	10.041	ppb	1.1	1280.10	1000	
63	Cu	89	He	2.676	ppb	1.1	1192.32	2000	
66	Zn	89	He	5.209	ppb	7.7	258.90	2000	
75	As	89	He	5.627	ppb	1.3	184.35	1000	
78	Se	89	H2	0.340	ppb	23.0	6.50	1000	
88	Sr	89	He	41.413	ppb	5.1	6638.51	2000	
95	Mo	89	He	0.758	ppb	4.2	132.23	1000	
107	Ag	89	He	0.025	ppb	49.2	27.78	100	
111	Cd	89	He	0.069	ppb	43.9	5.56	1000	
118	Sn	159	He	1.846	ppb	10.9	404.46	1000	
121	Sb	159	No Gas	0.132	ppb	19.7	236.93	1000	
137	Ba	159	No Gas	14.774	ppb	4.1	8352.04	2000	
182	W	159	No Gas	0.250	ppb	27.2	290.33	1000	
205	Tl	209	No Gas	0.055	ppb	93.4	293.66	1000	
208	Pb	209	No Gas	0.180	ppb	9.4	840.95	2000	
232	Th	209	No Gas	0.782	ppb	10.0	2639.90	1000	
238	U	209	No Gas	0.088	ppb	28.5	270.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744859.19	2.1	1881686.03	92.73	29.5	120.4	
Sc	45	No Gas	3782001.35	2.1	3915123.71	96.6	29.5	120.4	
Sc	45	H2	455746.27	0.8	507902.1	89.73	29.5	120.4	
Sc	45	He	90295.92	1.4	102593	88.01	29.5	120.4	
Ge	72	No Gas	874047.04	1.6	852546.94	102.52	29.5	120.4	
Ge	72	H2	170626.95	1.0	193980.16	87.96	29.5	120.4	
Ge	72	He	70912.09	1.1	77385.19	91.64	29.5	120.4	
Y	89	H2	2966041.49	0.6	3089458.15	96.01	29.5	120.4	
Y	89	He	616639.50	1.2	678154.65	90.93	29.5	120.4	
Tb	159	No Gas	8928031.95	1.8	7727080.72	115.54	29.5	120.4	
Tb	159	He	3343441.93	1.2	3280980.4	101.9	29.5	120.4	
Bi	209	No Gas	4624510.08	1.9	3977089.87	116.28	29.5	120.4	

Sample Report

Sample Name SN5920-002

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:13:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.113	ppb	45.0	55.56	100	
11	B	6	No Gas	12.011	ppb	5.5	3521.66	1000	
23	Na	45	He	9794.093	ppb	2.7	215665.49	200000	
24	Mg	45	He	5493.776	ppb	1.9	65423.86	200000	
27	Al	45	He	14.382	ppb	12.6	85.56	200000	
28	Si	45	H2	5239.000	ppb	1.1	49621.14	10000	
39	K	45	He	2131.730	ppb	1.3	35247.54	200000	
40	Ca	45	H2	13008.357	ppb	0.8	1093655.30	200000	
51	V	89	He	1.848	ppb	5.8	661.15	1000	
52	Cr	89	He	0.455	ppb	18.0	165.30	2000	
55	Mn	89	He	811.482	ppb	3.3	83405.10	2000	
56	Fe	89	H2	4319.663	ppb	1.1	1489591.34	100000	
59	Co	89	He	2.555	ppb	14.9	962.33	1000	
60	Ni	89	He	2.344	ppb	9.9	531.14	1000	
63	Cu	89	He	2.251	ppb	13.1	1087.86	2000	
66	Zn	89	He	8.554	ppb	1.3	386.69	2000	
75	As	89	He	4.151	ppb	13.9	139.35	1000	
78	Se	89	H2	0.190	ppb	15.2	4.00	1000	
88	Sr	89	He	47.457	ppb	3.3	7703.54	2000	
95	Mo	89	He	0.717	ppb	19.8	126.67	1000	
107	Ag	89	He	0.017	ppb	90.1	23.33	100	
111	Cd	89	He	0.059	ppb	15.5	4.81	1000	
118	Sn	159	He	1.124	ppb	22.7	275.57	1000	
121	Sb	159	No Gas	0.161	ppb	54.7	266.97	1000	
137	Ba	159	No Gas	6.863	ppb	26.3	3714.80	2000	
182	W	159	No Gas	0.586	ppb	8.2	617.38	1000	
205	Tl	209	No Gas	0.013	ppb	586.0	183.55	1000	
208	Pb	209	No Gas	0.218	ppb	55.8	921.06	2000	
232	Th	209	No Gas	0.155	ppb	66.8	584.02	1000	
238	U	209	No Gas	0.081	ppb	123.7	236.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682595.15	1.6	1881686.03	89.42	29.5	120.4	
Sc	45	No Gas	3611849.77	2.9	3915123.71	92.25	29.5	120.4	
Sc	45	H2	455006.42	0.6	507902.1	89.59	29.5	120.4	
Sc	45	He	91971.17	1.6	102593	89.65	29.5	120.4	
Ge	72	No Gas	842266.63	3.1	852546.94	98.79	29.5	120.4	
Ge	72	H2	168773.67	0.9	193980.16	87.01	29.5	120.4	
Ge	72	He	71313.06	1.0	77385.19	92.15	29.5	120.4	
Y	89	H2	2969426.20	0.8	3089458.15	96.11	29.5	120.4	
Y	89	He	624727.58	1.8	678154.65	92.12	29.5	120.4	
Tb	159	No Gas	8559443.41	2.7	7727080.72	110.77	29.5	120.4	
Tb	159	He	3377887.13	1.4	3280980.4	102.95	29.5	120.4	
Bi	209	No Gas	4449705.49	3.0	3977089.87	111.88	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:16:24 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.850	ppb	7.9	29428.52	25	99.4	89.8	110.2	
11	B	6	No Gas	24.916	ppb	7.7	20668.72	25	99.66	89.8	110.2	
23	Na	45	He	5169.954	ppb	1.0	554495.08	5000	103.4	89.8	110.2	
24	Mg	45	He	4970.752	ppb	1.4	293787.06	5000	99.42	89.8	110.2	
27	Al	45	He	470.788	ppb	1.9	11116.91	500	94.16	89.8	110.2	
28	Si	45	H2	453.557	ppb	0.7	21957.94	500	90.71	89.8	110.2	
39	K	45	He	4840.659	ppb	1.5	281917.27	5000	96.81	89.8	110.2	
40	Ca	45	H2	4835.682	ppb	1.9	2049757.68	5000	96.71	89.8	110.2	
51	V	89	He	24.332	ppb	0.2	21918.77	25	97.33	89.8	110.2	
52	Cr	89	He	25.163	ppb	1.3	27231.13	25	100.65	89.8	110.2	
55	Mn	89	He	24.638	ppb	0.4	12700.76	25	98.55	89.8	110.2	
56	Fe	89	H2	4804.847	ppb	1.4	8320350.16	5000	96.1	89.8	110.2	
59	Co	89	He	25.223	ppb	1.7	46968.14	25	100.89	89.8	110.2	
60	Ni	89	He	25.429	ppb	0.2	12970.87	25	101.72	89.8	110.2	
63	Cu	89	He	25.129	ppb	1.2	35951.56	25	100.52	89.8	110.2	
66	Zn	89	He	25.592	ppb	2.0	4836.57	25	102.37	89.8	110.2	
75	As	89	He	24.525	ppb	1.2	3943.66	25	98.1	89.8	110.2	
78	Se	89	H2	23.670	ppb	3.0	2002.72	25	94.68	89.8	110.2	
88	Sr	89	He	23.622	ppb	1.3	19204.06	25	94.49	89.8	110.2	
95	Mo	89	He	25.351	ppb	1.7	22115.20	25	101.4	89.8	110.2	
107	Ag	89	He	26.209	ppb	0.5	77033.06	25	104.84	89.8	110.2	
111	Cd	89	He	25.807	ppb	0.3	9861.46	25	103.23	89.8	110.2	
118	Sn	159	He	23.261	ppb	0.7	21350.88	25	93.04	89.8	110.2	
121	Sb	159	No Gas	23.195	ppb	9.8	168348.67	25	92.78	89.8	110.2	
137	Ba	159	No Gas	23.723	ppb	9.6	66238.45	25	94.89	89.8	110.2	
182	W	159	No Gas	23.761	ppb	8.6	124043.08	25	95.04	89.8	110.2	
205	Tl	209	No Gas	24.230	ppb	7.9	279345.22	25	96.92	89.8	110.2	
208	Pb	209	No Gas	24.135	ppb	9.0	385185.48	25	96.54	89.8	110.2	
232	Th	209	No Gas	24.026	ppb	8.0	385619.31	25	96.1	89.8	110.2	
238	U	209	No Gas	24.159	ppb	9.4	366998.37	25	96.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686115.81	2.0	1881686.03	89.61	29.5	120.4	
Sc	45	No Gas	3791856.88	3.0	3915123.71	96.85	29.5	120.4	
Sc	45	H2	459029.55	1.3	507902.1	90.38	29.5	120.4	
Sc	45	He	92158.72	1.3	102593	89.83	29.5	120.4	
Ge	72	No Gas	870662.35	2.9	852546.94	102.12	29.5	120.4	
Ge	72	H2	173561.88	0.3	193980.16	89.47	29.5	120.4	
Ge	72	He	71719.82	0.2	77385.19	92.68	29.5	120.4	
Y	89	H2	2986338.14	0.9	3089458.15	96.66	29.5	120.4	
Y	89	He	625952.34	0.2	678154.65	92.3	29.5	120.4	
Tb	159	No Gas	8847471.95	3.3	7727080.72	114.5	29.5	120.4	
Tb	159	He	3358240.71	0.1	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4594067.97	3.6	3977089.87	115.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:19:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.051	ppb	20.4	91.12	0.2	
11	B	6	No Gas	0.844	ppb	11.4	2406.95	4	
23	Na	45	He	-10.409	ppb	N/A	8678.98	200	
24	Mg	45	He	-2.495	ppb	N/A	655.62	20	
27	Al	45	He	0.086	ppb	568.6	20.00	20	
28	Si	45	H2	1.603	ppb	102.6	600.68	100	
39	K	45	He	-6.145	ppb	N/A	11186.08	200	
40	Ca	45	H2	2.101	ppb	6.9	1732.39	20	
51	V	89	He	-0.170	ppb	N/A	185.56	1	
52	Cr	89	He	-0.004	ppb	N/A	63.32	1	
55	Mn	89	He	0.054	ppb	45.8	39.32	0.4	
56	Fe	89	H2	2.271	ppb	7.7	6411.93	20	
59	Co	89	He	0.011	ppb	127.8	35.56	0.2	
60	Ni	89	He	-0.259	ppb	N/A	171.12	0.4	Failed DoD
63	Cu	89	He	-0.009	ppb	N/A	445.58	0.6	
66	Zn	89	He	0.075	ppb	25.4	83.34	2	
75	As	89	He	0.009	ppb	244.4	8.00	1	
78	Se	89	H2	0.012	ppb	29.5	1.83	1	
88	Sr	89	He	0.010	ppb	60.7	14.44	1	
95	Mo	89	He	0.076	ppb	29.2	68.89	1	
107	Ag	89	He	0.005	ppb	66.6	28.89	0.2	
111	Cd	89	He	0.010	ppb	86.6	4.07	0.2	
118	Sn	159	He	0.019	ppb	155.1	85.56	1	
121	Sb	159	No Gas	0.019	ppb	17.7	176.87	0.2	
137	Ba	159	No Gas	0.023	ppb	37.1	76.75	0.4	
182	W	159	No Gas	0.057	ppb	17.2	310.35	1	
205	Tl	209	No Gas	0.016	ppb	36.5	333.71	0.2	
208	Pb	209	No Gas	0.020	ppb	18.7	567.31	0.2	
232	Th	209	No Gas	0.108	ppb	10.5	1788.80	1	
238	U	209	No Gas	0.021	ppb	38.3	317.02	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1732743.96	3.0	1881686.03	92.08	29.5	120.4	
Sc	45	No Gas	3805595.67	3.6	3915123.71	97.2	29.5	120.4	
Sc	45	H2	472622.84	1.3	507902.1	93.05	29.5	120.4	
Sc	45	He	92379.88	0.4	102593	90.05	29.5	120.4	
Ge	72	No Gas	861880.72	3.7	852546.94	101.09	29.5	120.4	
Ge	72	H2	179558.89	0.7	193980.16	92.57	29.5	120.4	
Ge	72	He	72619.95	0.6	77385.19	93.84	29.5	120.4	
Y	89	H2	3014323.85	1.0	3089458.15	97.57	29.5	120.4	
Y	89	He	631017.63	0.3	678154.65	93.05	29.5	120.4	
Tb	159	No Gas	8553647.37	3.7	7727080.72	110.7	29.5	120.4	
Tb	159	He	3330175.37	0.2	3280980.4	101.5	29.5	120.4	
Bi	209	No Gas	4471469.17	3.8	3977089.87	112.43	29.5	120.4	

Sample Report

Sample Name SN5920-003

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:21:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.126	ppb	44.4	61.11	100	
11	B	6	No Gas	29.794	ppb	9.4	6471.67	1000	
23	Na	45	He	15036.095	ppb	1.0	320202.50	200000	
24	Mg	45	He	6770.606	ppb	0.7	79036.67	200000	
27	Al	45	He	13.965	ppb	24.5	82.23	200000	
28	Si	45	H2	4071.755	ppb	1.1	37898.94	10000	
39	K	45	He	864.381	ppb	0.9	20745.73	200000	
40	Ca	45	H2	10569.514	ppb	1.1	870837.66	200000	
51	V	89	He	1.464	ppb	30.9	584.48	1000	
52	Cr	89	He	0.557	ppb	13.5	184.63	2000	
55	Mn	89	He	1040.159	ppb	0.2	105471.60	2000	
56	Fe	89	H2	15490.956	ppb	0.7	5238662.59	100000	
59	Co	89	He	25.348	ppb	3.7	9301.51	1000	
60	Ni	89	He	65.391	ppb	1.7	6708.53	1000	
63	Cu	89	He	2.093	ppb	11.2	1028.97	2000	
66	Zn	89	He	78.081	ppb	3.7	2931.54	2000	
75	As	89	He	3.448	ppb	6.5	115.34	1000	
78	Se	89	H2	0.225	ppb	34.9	4.50	1000	
88	Sr	89	He	45.630	ppb	2.1	7306.63	2000	
95	Mo	89	He	0.196	ppb	32.2	35.55	1000	
107	Ag	89	He	0.019	ppb	16.7	24.44	100	
111	Cd	89	He	0.050	ppb	74.8	4.07	1000	
118	Sn	159	He	1.212	ppb	9.1	286.68	1000	
121	Sb	159	No Gas	0.081	ppb	7.6	153.51	1000	
137	Ba	159	No Gas	11.165	ppb	10.0	6038.10	2000	
182	W	159	No Gas	0.240	ppb	23.2	266.97	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	0.118	ppb	12.9	617.36	2000	
232	Th	209	No Gas	0.438	ppb	6.0	1475.09	1000	
238	U	209	No Gas	0.017	ppb	65.9	50.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1750600.81	2.5	1881686.03	93.03	29.5	120.4	
Sc	45	No Gas	3681495.22	2.8	3915123.71	94.03	29.5	120.4	
Sc	45	H2	445855.07	1.1	507902.1	87.78	29.5	120.4	
Sc	45	He	90346.24	0.9	102593	88.06	29.5	120.4	
Ge	72	No Gas	853722.37	2.4	852546.94	100.14	29.5	120.4	
Ge	72	H2	170005.50	2.6	193980.16	87.64	29.5	120.4	
Ge	72	He	71340.89	1.0	77385.19	92.19	29.5	120.4	
Y	89	H2	2915371.05	0.7	3089458.15	94.37	29.5	120.4	
Y	89	He	616117.46	0.6	678154.65	90.85	29.5	120.4	
Tb	159	No Gas	8541320.57	2.5	7727080.72	110.54	29.5	120.4	
Tb	159	He	3314930.89	0.5	3280980.4	101.03	29.5	120.4	
Bi	209	No Gas	4465687.93	3.1	3977089.87	112.29	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	056_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:24:24 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.068	ppb	106.2	46.67	0.5	
B	11	6	No Gas	3.718	ppb	16.2	2354.71	10	
Na	23	45	He	45.745	ppb	10.5	10595.70	500	
Mg	24	45	He	-11.921	ppb	N/A	653.40	50	
Al	27	45	He	9.317	ppb	43.7	61.11	50	
Si	28	45	H2	22.590	ppb	21.7	714.14	250	
K	39	45	He	-54.984	ppb	N/A	10762.58	500	
Ca	40	45	H2	33.866	ppb	3.3	3630.60	50	
V	51	89	He	1.514	ppb	13.7	595.59	2.5	
Cr	52	89	He	0.385	ppb	15.3	148.64	2.5	
Mn	55	89	He	0.853	ppb	39.1	97.32	1	
Fe	56	89	H2	15.965	ppb	8.0	7850.93	50	
Co	59	89	He	0.016	ppb	302.6	20.00	0.5	
Ni	60	89	He	-1.033	ppb	N/A	193.34	1	PB 6020 Fails DoD
Cu	63	89	He	1.819	ppb	12.2	955.62	1.5	PB 6020 Fails DoD
Zn	66	89	He	14.442	ppb	9.1	598.93	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.072	ppb	50.6	8.67	2.5	
Se	78	89	H2	0.073	ppb	84.0	2.00	2.5	
Sr	88	89	He	0.074	ppb	117.4	17.78	2.5	
Mo	95	89	He	0.098	ppb	21.2	18.89	2.5	
Ag	107	89	He	0.004	ppb	357.8	15.56	0.5	
Cd	111	89	He	0.005	ppb	332.1	0.74	0.5	
Sn	118	159	He	1.023	ppb	26.7	254.46	2.5	
Sb	121	159	No Gas	0.015	ppb	144.1	63.40	0.5	
Ba	137	159	No Gas	0.194	ppb	13.4	123.47	1	
W	182	159	No Gas	0.023	ppb	87.0	50.06	2.5	
Tl	205	209	No Gas	-0.034	ppb	N/A	83.43	0.5	
Pb	208	209	No Gas	0.064	ppb	30.3	460.53	0.5	
Th	232	209	No Gas	0.081	ppb	23.2	367.08	2.5	
U	238	209	No Gas	0.011	ppb	42.9	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752221.57	1.9	1881686.03	93.12	29.5	120.4	
Sc	45	No Gas	3775386.48	2.5	3915123.71	96.43	29.5	120.4	
Sc	45	H2	455085.41	1.2	507902.1	89.6	29.5	120.4	
Sc	45	He	91100.88	1.7	102593	88.8	29.5	120.4	
Ge	72	No Gas	866775.01	2.9	852546.94	101.67	29.5	120.4	
Ge	72	H2	169491.37	1.4	193980.16	87.38	29.5	120.4	
Ge	72	He	70721.42	1.8	77385.19	91.39	29.5	120.4	
Y	89	H2	2951431.22	1.2	3089458.15	95.53	29.5	120.4	
Y	89	He	618070.08	1.5	678154.65	91.14	29.5	120.4	
Tb	159	No Gas	8835323.34	2.5	7727080.72	114.34	29.5	120.4	
Tb	159	He	3342464.15	1.5	3280980.4	101.87	29.5	120.4	
Bi	209	No Gas	4579504.66	3.0	3977089.87	115.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	057LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:27:06 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.044	ppb	3.8	13134.15	50	20.82	79.5	120.4	
B	11	6	No Gas	529.237	ppb	3.5	87560.46	500	21.17	79.5	120.4	
Na	23	45	He	8135.469	ppb	1.5	179368.45	7500	21.69	79.5	120.4	
Mg	24	45	He	5564.197	ppb	1.1	65727.47	5000	22.26	79.5	120.4	
Al	27	45	He	2004.774	ppb	0.5	9375.60	2000	20.05	79.5	120.4	
Si	28	45	H2	991.928	ppb	3.1	9834.34	1000	19.84	0	200	
K	39	45	He	10391.842	ppb	0.9	126327.97	10000	20.78	79.5	120.4	
Ca	40	45	H2	2653.800	ppb	1.3	224441.10	2500	21.23	79.5	120.4	
V	51	89	He	535.605	ppb	0.7	94839.38	500	21.42	79.5	120.4	
Cr	52	89	He	217.130	ppb	1.1	46688.77	200	21.71	79.5	120.4	
Mn	55	89	He	541.491	ppb	0.9	55482.87	500	21.66	79.5	120.4	
Fe	56	89	H2	1078.823	ppb	1.1	376062.78	1000	21.58	79.5	120.4	
Co	59	89	He	549.594	ppb	0.2	203515.78	500	21.98	79.5	120.4	
Ni	60	89	He	557.499	ppb	0.4	55556.42	500	22.3	79.5	120.4	
Cu	63	89	He	278.250	ppb	0.7	78632.56	250	22.26	79.5	120.4	
Zn	66	89	He	560.871	ppb	2.0	20850.60	500	22.43	79.5	120.4	
As	75	89	He	107.454	ppb	1.3	3437.81	100	21.49	79.5	120.4	
Se	78	89	H2	103.309	ppb	1.9	1749.03	100	20.66	79.5	120.4	
Sr	88	89	He	514.229	ppb	0.8	83136.91	500	20.57	79.5	120.4	
Mo	95	89	He	111.391	ppb	1.6	19328.68	100	22.28	79.5	120.4	
Ag	107	89	He	58.000	ppb	0.5	33915.35	50	23.2	79.5	120.4	
Cd	111	89	He	276.892	ppb	0.5	21044.94	250	22.15	79.5	120.4	
Sn	118	159	He	499.059	ppb	0.4	91372.05	500	19.96	79.5	120.4	
Sb	121	159	No Gas	103.030	ppb	4.0	149412.81	100	20.61	79.5	120.4	
Ba	137	159	No Gas	2050.585	ppb	4.2	1143665.31	2000	20.51	79.5	120.4	
W	182	159	No Gas	107.459	ppb	3.9	112057.25	100	21.49	79.5	120.4	
Tl	205	209	No Gas	110.078	ppb	4.8	252980.62	100	22.02	79.5	120.4	
[Pb]	206	209	No Gas	108.285	ppb	5.2	86111.78	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	108.705	ppb	4.5	75772.37	100	21.74	79.5	120.4	
Pb	208	209	No Gas	108.121	ppb	4.7	344079.38	100	21.62	79.5	120.4	
Th	232	209	No Gas	108.371	ppb	4.9	346723.89	100	21.67	79.5	120.4	
U	238	209	No Gas	108.508	ppb	6.0	328611.37	100	21.7	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1793011.78	1.2	1881686.03	95.29	29.5	120.4	
Sc	45	No Gas	3792854.34	2.0	3915123.71	96.88	29.5	120.4	
Sc	45	H2	456428.00	0.7	507902.1	89.87	29.5	120.4	
Sc	45	He	91224.88	0.5	102593	88.92	29.5	120.4	
Ge	72	No Gas	875735.46	1.7	852546.94	102.72	29.5	120.4	
Ge	72	H2	172139.51	1.6	193980.16	88.74	29.5	120.4	
Ge	72	He	71598.82	0.7	77385.19	92.52	29.5	120.4	
Y	89	H2	2987112.58	0.6	3089458.15	96.69	29.5	120.4	
Y	89	He	622538.18	0.7	678154.65	91.8	29.5	120.4	
Tb	159	No Gas	8823935.63	1.6	7727080.72	114.19	29.5	120.4	
Tb	159	He	3357533.67	0.3	3280980.4	102.33	29.5	120.4	
Bi	209	No Gas	4573238.44	2.1	3977089.87	114.99	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:29:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.120	ppb	28.0	61.11	100	
11	B	6	No Gas	8.518	ppb	6.8	3187.13	1000	
23	Na	45	He	242.708	ppb	8.2	14900.97	200000	
24	Mg	45	He	19.711	ppb	23.5	1035.67	200000	
27	Al	45	He	95.376	ppb	7.2	468.92	200000	
28	Si	45	H2	116.645	ppb	9.3	1605.21	10000	
39	K	45	He	88.267	ppb	20.0	12519.91	200000	
40	Ca	45	H2	108.958	ppb	1.4	9994.97	200000	
51	V	89	He	1.744	ppb	25.5	644.49	1000	
52	Cr	89	He	0.984	ppb	5.0	279.95	2000	
55	Mn	89	He	5.565	ppb	0.8	584.58	2000	
56	Fe	89	H2	125.910	ppb	2.7	45869.21	100000	
59	Co	89	He	0.153	ppb	18.8	71.12	1000	
60	Ni	89	He	0.368	ppb	146.4	335.57	1000	
63	Cu	89	He	2.329	ppb	16.7	1113.42	2000	
66	Zn	89	He	23.391	ppb	6.4	941.18	2000	
75	As	89	He	0.359	ppb	10.2	18.00	1000	
78	Se	89	H2	0.220	ppb	35.7	4.50	1000	
88	Sr	89	He	0.386	ppb	30.0	68.89	2000	
95	Mo	89	He	0.357	ppb	24.9	64.45	1000	
107	Ag	89	He	0.032	ppb	49.4	32.22	100	
111	Cd	89	He	0.039	ppb	36.5	3.33	1000	
118	Sn	159	He	1.379	ppb	18.2	320.01	1000	
121	Sb	159	No Gas	0.109	ppb	41.5	203.56	1000	
137	Ba	159	No Gas	2.148	ppb	4.1	1234.78	2000	
182	W	159	No Gas	0.231	ppb	21.6	270.31	1000	
205	Tl	209	No Gas	0.035	ppb	56.6	246.95	1000	
208	Pb	209	No Gas	3.855	ppb	11.9	12653.29	2000	
232	Th	209	No Gas	0.962	ppb	19.6	3264.10	1000	
238	U	209	No Gas	0.037	ppb	31.6	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794755.50	5.9	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3864360.34	9.3	3915123.71	98.7	29.5	120.4	
Sc	45	H2	457607.48	0.8	507902.1	90.1	29.5	120.4	
Sc	45	He	92377.74	1.7	102593	90.04	29.5	120.4	
Ge	72	No Gas	880584.68	7.4	852546.94	103.29	29.5	120.4	
Ge	72	H2	169769.99	1.1	193980.16	87.52	29.5	120.4	
Ge	72	He	71733.65	1.4	77385.19	92.7	29.5	120.4	
Y	89	H2	2976735.82	0.7	3089458.15	96.35	29.5	120.4	
Y	89	He	626298.47	1.0	678154.65	92.35	29.5	120.4	
Tb	159	No Gas	8991530.28	8.4	7727080.72	116.36	29.5	120.4	
Tb	159	He	3349347.90	0.8	3280980.4	102.08	29.5	120.4	
Bi	209	No Gas	4651524.12	8.6	3977089.87	116.96	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:32:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	14.8	62.23	100	
11	B	6	No Gas	381.007	ppb	7.4	60418.30	1000	
23	Na	45	He	114927.589	ppb	1.1	2402825.56	200000	
24	Mg	45	He	14441.774	ppb	0.8	169024.80	200000	
27	Al	45	He	48.435	ppb	4.7	243.35	200000	
28	Si	45	H2	10136.194	ppb	1.3	93788.42	10000	
39	K	45	He	274.248	ppb	11.3	14392.46	200000	
40	Ca	45	H2	133458.532	ppb	1.0	11007526.78	200000	
51	V	89	He	1.952	ppb	27.8	664.48	1000	
52	Cr	89	He	0.665	ppb	21.5	205.96	2000	
55	Mn	89	He	319.294	ppb	0.6	32139.85	2000	
56	Fe	89	H2	21.498	ppb	1.7	9664.16	100000	
59	Co	89	He	0.725	ppb	13.1	277.80	1000	
60	Ni	89	He	1.661	ppb	39.6	453.36	1000	
63	Cu	89	He	2.513	ppb	20.0	1137.87	2000	
66	Zn	89	He	24.627	ppb	4.4	963.40	2000	
75	As	89	He	0.181	ppb	122.3	12.00	1000	
78	Se	89	H2	0.174	ppb	36.5	3.67	1000	
88	Sr	89	He	1833.340	ppb	0.9	291106.29	2000	
95	Mo	89	He	0.726	ppb	25.7	125.56	1000	
107	Ag	89	He	0.020	ppb	35.4	24.45	100	
111	Cd	89	He	0.070	ppb	56.3	5.56	1000	
118	Sn	159	He	1.178	ppb	7.1	283.35	1000	
121	Sb	159	No Gas	0.054	ppb	82.0	120.14	1000	
137	Ba	159	No Gas	33.654	ppb	9.1	18837.66	2000	
182	W	159	No Gas	0.080	ppb	26.8	110.12	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	143.50	1000	
208	Pb	209	No Gas	0.341	ppb	8.2	1338.19	2000	
232	Th	209	No Gas	0.140	ppb	18.8	553.96	1000	
238	U	209	No Gas	3.828	ppb	9.4	11565.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706339.61	2.4	1881686.03	90.68	29.5	120.4	
Sc	45	No Gas	3773385.05	3.3	3915123.71	96.38	29.5	120.4	
Sc	45	H2	446686.20	0.9	507902.1	87.95	29.5	120.4	
Sc	45	He	91063.77	0.9	102593	88.76	29.5	120.4	
Ge	72	No Gas	875919.05	2.8	852546.94	102.74	29.5	120.4	
Ge	72	H2	169673.49	1.4	193980.16	87.47	29.5	120.4	
Ge	72	He	70546.45	0.6	77385.19	91.16	29.5	120.4	
Y	89	H2	2926195.03	0.9	3089458.15	94.72	29.5	120.4	
Y	89	He	611489.06	0.8	678154.65	90.17	29.5	120.4	
Tb	159	No Gas	8860174.80	2.9	7727080.72	114.66	29.5	120.4	
Tb	159	He	3345790.96	0.7	3280980.4	101.98	29.5	120.4	
Bi	209	No Gas	4565423.39	2.7	3977089.87	114.79	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:35:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	39.5	50.00	100	
11	B	6	No Gas	2186.275	ppb	2.4	327254.81	1000	
23	Na	45	He	1272872.922	ppb	0.5	26958548.85	200000	>LDR
24	Mg	45	He	261607.181	ppb	0.5	3099164.78	200000	
27	Al	45	He	11.914	ppb	33.5	74.45	200000	
28	Si	45	H2	8725.794	ppb	4.2	83372.46	10000	
39	K	45	He	8147.257	ppb	0.8	103011.27	200000	
40	Ca	45	H2	496829.799	ppb	1.0	42273052.70	200000	
51	V	89	He	5.777	ppb	12.0	1352.33	1000	
52	Cr	89	He	0.995	ppb	2.2	280.62	2000	
55	Mn	89	He	31.867	ppb	1.6	3276.47	2000	
56	Fe	89	H2	182.914	ppb	0.9	65659.04	100000	
59	Co	89	He	0.538	ppb	9.6	213.35	1000	
60	Ni	89	He	8.499	ppb	3.5	1140.09	1000	
63	Cu	89	He	4.741	ppb	1.9	1784.62	2000	
66	Zn	89	He	22.375	ppb	4.1	897.84	2000	
75	As	89	He	0.435	ppb	19.9	20.33	1000	
78	Se	89	H2	1.382	ppb	11.9	24.17	1000	
88	Sr	89	He	7120.059	ppb	0.5	1151393.17	2000	
95	Mo	89	He	0.494	ppb	30.9	87.78	1000	
107	Ag	89	He	0.057	ppb	19.6	46.67	100	
111	Cd	89	He	0.112	ppb	46.7	8.89	1000	
118	Sn	159	He	1.503	ppb	4.5	341.13	1000	
121	Sb	159	No Gas	0.110	ppb	39.9	193.55	1000	
137	Ba	159	No Gas	16.099	ppb	1.0	8675.79	2000	
182	W	159	No Gas	0.051	ppb	69.2	76.75	1000	
205	Tl	209	No Gas	-0.015	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	1.867	ppb	4.1	5736.92	2000	
232	Th	209	No Gas	0.084	ppb	18.8	347.06	1000	
238	U	209	No Gas	8.588	ppb	2.7	24083.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1647402.83	0.5	1881686.03	87.55	29.5	120.4	
Sc	45	No Gas	3659947.14	0.2	3915123.71	93.48	29.5	120.4	
Sc	45	H2	460780.49	1.4	507902.1	90.72	29.5	120.4	
Sc	45	He	92580.64	0.4	102593	90.24	29.5	120.4	
Ge	72	No Gas	845351.38	0.2	852546.94	99.16	29.5	120.4	
Ge	72	H2	170688.84	1.8	193980.16	87.99	29.5	120.4	
Ge	72	He	71652.49	1.0	77385.19	92.59	29.5	120.4	
Y	89	H2	2982115.71	1.5	3089458.15	96.53	29.5	120.4	
Y	89	He	622739.18	0.8	678154.65	91.83	29.5	120.4	
Tb	159	No Gas	8508112.79	0.5	7727080.72	110.11	29.5	120.4	
Tb	159	He	3332356.83	0.6	3280980.4	101.57	29.5	120.4	
Bi	209	No Gas	4232103.15	0.9	3977089.87	106.41	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:37:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	62.2	61.11	100	
11	B	6	No Gas	2163.780	ppb	4.6	349179.23	1000	
23	Na	45	He	1206551.601	ppb	0.6	26204648.94	200000	>LDR
24	Mg	45	He	220736.084	ppb	0.6	2681655.52	200000	
27	Al	45	He	87.471	ppb	3.4	443.36	200000	
28	Si	45	H2	8375.970	ppb	0.4	81499.01	10000	
39	K	45	He	10855.195	ppb	1.4	136801.53	200000	
40	Ca	45	H2	555730.987	ppb	0.3	48145654.28	200000	
51	V	89	He	7.037	ppb	2.5	1590.15	1000	
52	Cr	89	He	5.817	ppb	4.5	1329.16	2000	
55	Mn	89	He	238.473	ppb	0.7	24688.44	2000	
56	Fe	89	H2	6638.947	ppb	0.7	2319648.24	100000	
59	Co	89	He	2.386	ppb	2.8	906.76	1000	
60	Ni	89	He	9.666	ppb	4.5	1267.88	1000	
63	Cu	89	He	5.475	ppb	1.7	2010.22	2000	
66	Zn	89	He	25.209	ppb	9.0	1012.30	2000	
75	As	89	He	1.100	ppb	24.5	42.00	1000	
78	Se	89	H2	0.344	ppb	39.7	6.67	1000	
88	Sr	89	He	9044.283	ppb	0.3	1476801.21	2000	
95	Mo	89	He	0.838	ppb	1.5	148.90	1000	
107	Ag	89	He	0.064	ppb	44.8	51.11	100	
111	Cd	89	He	0.082	ppb	35.9	6.67	1000	
118	Sn	159	He	1.198	ppb	7.7	287.79	1000	
121	Sb	159	No Gas	0.089	ppb	34.0	170.19	1000	
137	Ba	159	No Gas	18.025	ppb	9.6	10048.38	2000	
182	W	159	No Gas	0.065	ppb	62.8	93.44	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	83.42	1000	
208	Pb	209	No Gas	3.372	ppb	5.4	10433.36	2000	
232	Th	209	No Gas	0.056	ppb	10.1	273.65	1000	
238	U	209	No Gas	6.034	ppb	7.9	17358.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1777309.14	2.3	1881686.03	94.45	29.5	120.4	
Sc	45	No Gas	3877319.03	2.6	3915123.71	99.03	29.5	120.4	
Sc	45	H2	469191.21	0.2	507902.1	92.38	29.5	120.4	
Sc	45	He	94940.13	0.9	102593	92.54	29.5	120.4	
Ge	72	No Gas	875107.58	2.2	852546.94	102.65	29.5	120.4	
Ge	72	H2	174003.58	0.9	193980.16	89.7	29.5	120.4	
Ge	72	He	72247.35	1.1	77385.19	93.36	29.5	120.4	
Y	89	H2	3010297.41	0.3	3089458.15	97.44	29.5	120.4	
Y	89	He	628813.93	0.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8815817.72	2.5	7727080.72	114.09	29.5	120.4	
Tb	159	He	3358153.63	0.7	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4347631.64	3.0	3977089.87	109.32	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:40:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.097	ppb	103.6	53.34	100	
11	B	6	No Gas	2337.026	ppb	11.9	364561.61	1000	
23	Na	45	He	1235819.546	ppb	1.3	26821218.19	200000	>LDR
24	Mg	45	He	225454.844	ppb	1.4	2737028.61	200000	
27	Al	45	He	55.559	ppb	18.6	287.79	200000	
28	Si	45	H2	8486.305	ppb	1.5	81827.53	10000	
39	K	45	He	11236.807	ppb	0.9	141103.03	200000	
40	Ca	45	H2	569929.909	ppb	0.7	48935104.27	200000	
51	V	89	He	6.935	ppb	9.2	1571.26	1000	
52	Cr	89	He	3.758	ppb	6.7	881.21	2000	
55	Mn	89	He	257.089	ppb	0.8	26587.48	2000	
56	Fe	89	H2	7226.943	ppb	0.6	2519358.04	100000	
59	Co	89	He	3.050	ppb	5.8	1153.46	1000	
60	Ni	89	He	8.566	ppb	5.8	1156.76	1000	
63	Cu	89	He	4.846	ppb	2.4	1830.19	2000	
66	Zn	89	He	21.988	ppb	0.7	891.18	2000	
75	As	89	He	0.698	ppb	18.8	29.00	1000	
78	Se	89	H2	0.178	ppb	53.0	3.83	1000	
88	Sr	89	He	9123.306	ppb	0.9	1488132.18	2000	
95	Mo	89	He	0.775	ppb	4.7	137.79	1000	
107	Ag	89	He	0.022	ppb	25.9	26.67	100	
111	Cd	89	He	0.034	ppb	23.9	2.96	1000	
118	Sn	159	He	0.934	ppb	8.7	240.01	1000	
121	Sb	159	No Gas	0.083	ppb	27.2	156.84	1000	
137	Ba	159	No Gas	20.127	ppb	15.5	10723.06	2000	
182	W	159	No Gas	0.051	ppb	35.2	76.75	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.922	ppb	12.0	5797.04	2000	
232	Th	209	No Gas	0.034	ppb	55.3	196.89	1000	
238	U	209	No Gas	6.364	ppb	14.7	17505.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1729003.66	8.4	1881686.03	91.89	29.5	120.4	
Sc	45	No Gas	3747467.23	9.3	3915123.71	95.72	29.5	120.4	
Sc	45	H2	464995.29	1.0	507902.1	91.55	29.5	120.4	
Sc	45	He	94883.09	1.5	102593	92.48	29.5	120.4	
Ge	72	No Gas	842248.24	10.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	172855.44	0.4	193980.16	89.11	29.5	120.4	
Ge	72	He	72444.31	1.3	77385.19	93.62	29.5	120.4	
Y	89	H2	3003630.01	0.5	3089458.15	97.22	29.5	120.4	
Y	89	He	628188.98	1.2	678154.65	92.63	29.5	120.4	
Tb	159	No Gas	8498552.37	9.9	7727080.72	109.98	29.5	120.4	
Tb	159	He	3362151.75	1.0	3280980.4	102.47	29.5	120.4	
Bi	209	No Gas	4193350.57	10.5	3977089.87	105.44	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:43:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.056	ppb	114.4	46.67	100	
11	B	6	No Gas	703.360	ppb	4.7	120750.08	1000	
23	Na	45	He	356269.602	ppb	0.5	7762372.30	200000	
24	Mg	45	He	46075.355	ppb	0.5	561689.97	200000	
27	Al	45	He	21.526	ppb	12.4	123.34	200000	
28	Si	45	H2	7216.041	ppb	4.1	70894.71	10000	
39	K	45	He	3337.668	ppb	0.7	50384.10	200000	
40	Ca	45	H2	160552.499	ppb	1.7	14029772.29	200000	
51	V	89	He	8.281	ppb	7.2	1822.41	1000	
52	Cr	89	He	0.926	ppb	3.8	269.95	2000	
55	Mn	89	He	64.642	ppb	0.1	6739.74	2000	
56	Fe	89	H2	202.755	ppb	1.2	74363.42	100000	
59	Co	89	He	0.470	ppb	29.5	191.13	1000	
60	Ni	89	He	-0.140	ppb	N/A	287.79	1000	
63	Cu	89	He	3.413	ppb	3.9	1433.47	2000	
66	Zn	89	He	47.144	ppb	5.4	1844.64	2000	
75	As	89	He	0.877	ppb	12.3	35.00	1000	
78	Se	89	H2	0.491	ppb	47.2	9.33	1000	
88	Sr	89	He	1739.889	ppb	0.9	285779.11	2000	
95	Mo	89	He	0.833	ppb	14.8	148.90	1000	
107	Ag	89	He	0.020	ppb	80.0	25.56	100	
111	Cd	89	He	0.043	ppb	101.6	3.70	1000	
118	Sn	159	He	1.246	ppb	6.6	302.24	1000	
121	Sb	159	No Gas	0.162	ppb	28.4	290.33	1000	
137	Ba	159	No Gas	51.094	ppb	4.7	29746.29	2000	
182	W	159	No Gas	0.064	ppb	32.1	96.77	1000	
205	Tl	209	No Gas	-0.039	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	0.130	ppb	31.8	687.44	2000	
232	Th	209	No Gas	0.032	ppb	23.1	216.91	1000	
238	U	209	No Gas	3.520	ppb	9.1	10943.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1870712.13	2.0	1881686.03	99.42	29.5	120.4	
Sc	45	No Gas	4017057.57	2.7	3915123.71	102.6	29.5	120.4	
Sc	45	H2	473274.44	1.4	507902.1	93.18	29.5	120.4	
Sc	45	He	95153.85	0.3	102593	92.75	29.5	120.4	
Ge	72	No Gas	923537.90	2.3	852546.94	108.33	29.5	120.4	
Ge	72	H2	175313.47	1.1	193980.16	90.38	29.5	120.4	
Ge	72	He	73372.42	0.5	77385.19	94.81	29.5	120.4	
Y	89	H2	3057678.19	0.8	3089458.15	98.97	29.5	120.4	
Y	89	He	632526.92	0.4	678154.65	93.27	29.5	120.4	
Tb	159	No Gas	9208050.07	2.3	7727080.72	119.17	29.5	120.4	
Tb	159	He	3422088.77	0.7	3280980.4	104.3	29.5	120.4	
Bi	209	No Gas	4697354.43	2.2	3977089.87	118.11	29.5	120.4	

Sample Report

Sample Name SN5859-001

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:45:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.098	ppb	78.5	57.78	100	
11	B	6	No Gas	36.522	ppb	3.7	8066.97	1000	
23	Na	45	He	23102.446	ppb	1.2	509168.39	200000	
24	Mg	45	He	9915.850	ppb	0.6	120676.26	200000	
27	Al	45	He	12.523	ppb	19.9	78.89	200000	
28	Si	45	H2	5797.133	ppb	0.6	56474.16	10000	
39	K	45	He	2648.794	ppb	0.7	42138.05	200000	
40	Ca	45	H2	50387.545	ppb	1.6	4358513.83	200000	
51	V	89	He	8.634	ppb	2.1	1894.64	1000	
52	Cr	89	He	0.607	ppb	14.4	201.30	2000	
55	Mn	89	He	693.472	ppb	0.7	72527.60	2000	
56	Fe	89	H2	193.904	ppb	1.2	71226.07	100000	
59	Co	89	He	0.979	ppb	5.4	384.48	1000	
60	Ni	89	He	1.296	ppb	16.3	434.47	1000	
63	Cu	89	He	3.856	ppb	12.7	1566.81	2000	
66	Zn	89	He	19.218	ppb	5.2	796.72	2000	
75	As	89	He	3.511	ppb	0.5	121.01	1000	
78	Se	89	H2	0.126	ppb	92.4	3.00	1000	
88	Sr	89	He	223.507	ppb	0.7	36886.95	2000	
95	Mo	89	He	0.358	ppb	11.7	65.56	1000	
107	Ag	89	He	0.001	ppb	223.9	14.44	100	
111	Cd	89	He	0.014	ppb	150.8	1.48	1000	
118	Sn	159	He	0.892	ppb	28.6	236.68	1000	
121	Sb	159	No Gas	0.079	ppb	62.2	163.52	1000	
137	Ba	159	No Gas	19.185	ppb	2.2	11220.64	2000	
182	W	159	No Gas	0.048	ppb	87.3	80.09	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	70.08	1000	
208	Pb	209	No Gas	0.094	ppb	32.1	580.66	2000	
232	Th	209	No Gas	0.032	ppb	32.0	220.25	1000	
238	U	209	No Gas	0.783	ppb	2.7	2476.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1871948.68	0.4	1881686.03	99.48	29.5	120.4	
Sc	45	No Gas	3980161.30	0.6	3915123.71	101.66	29.5	120.4	
Sc	45	H2	468445.91	1.3	507902.1	92.23	29.5	120.4	
Sc	45	He	94487.03	0.5	102593	92.1	29.5	120.4	
Ge	72	No Gas	919360.11	1.3	852546.94	107.84	29.5	120.4	
Ge	72	H2	175476.61	0.3	193980.16	90.46	29.5	120.4	
Ge	72	He	73691.20	0.8	77385.19	95.23	29.5	120.4	
Y	89	H2	3058076.67	0.8	3089458.15	98.98	29.5	120.4	
Y	89	He	635455.61	0.5	678154.65	93.7	29.5	120.4	
Tb	159	No Gas	9237170.21	0.9	7727080.72	119.54	29.5	120.4	
Tb	159	He	3427399.64	0.5	3280980.4	104.46	29.5	120.4	
Bi	209	No Gas	4770006.24	0.8	3977089.87	119.94	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:48:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.552	ppb	5.0	31599.66	25	102.21	89.8	110.2	
11	B	6	No Gas	27.153	ppb	3.6	23367.41	25	108.61	89.8	110.2	
23	Na	45	He	5237.152	ppb	0.9	559763.01	5000	104.74	89.8	110.2	
24	Mg	45	He	5017.999	ppb	1.0	295607.68	5000	100.36	89.8	110.2	
27	Al	45	He	473.020	ppb	2.2	11132.48	500	94.6	89.8	110.2	
28	Si	45	H2	463.555	ppb	1.8	22730.06	500	92.71	89.8	110.2	
39	K	45	He	4786.285	ppb	0.6	277989.36	5000	95.73	89.8	110.2	
40	Ca	45	H2	4870.245	ppb	0.8	2092256.09	5000	97.4	89.8	110.2	
51	V	89	He	24.721	ppb	2.6	22170.30	25	98.88	89.8	110.2	
52	Cr	89	He	24.934	ppb	0.4	26869.21	25	99.74	89.8	110.2	
55	Mn	89	He	24.919	ppb	0.5	12790.83	25	99.68	89.8	110.2	
56	Fe	89	H2	4816.005	ppb	0.7	8447550.48	5000	96.32	89.8	110.2	
59	Co	89	He	24.623	ppb	0.9	45657.00	25	98.49	89.8	110.2	
60	Ni	89	He	24.794	ppb	0.4	12600.60	25	99.18	89.8	110.2	
63	Cu	89	He	24.953	ppb	0.3	35551.64	25	99.81	89.8	110.2	
66	Zn	89	He	25.631	ppb	1.4	4823.23	25	102.52	89.8	110.2	
75	As	89	He	24.168	ppb	1.6	3869.96	25	96.67	89.8	110.2	
78	Se	89	H2	23.770	ppb	1.1	2037.56	25	95.08	89.8	110.2	
88	Sr	89	He	23.453	ppb	0.1	18985.96	25	93.81	89.8	110.2	
95	Mo	89	He	25.484	ppb	0.3	22136.33	25	101.94	89.8	110.2	
107	Ag	89	He	26.200	ppb	0.6	76680.98	25	104.8	89.8	110.2	
111	Cd	89	He	25.588	ppb	0.5	9736.55	25	102.35	89.8	110.2	
118	Sn	159	He	22.936	ppb	0.8	21262.88	25	91.74	89.8	110.2	
121	Sb	159	No Gas	23.731	ppb	5.1	175698.46	25	94.92	89.8	110.2	
137	Ba	159	No Gas	24.286	ppb	5.4	69166.48	25	97.14	89.8	110.2	
182	W	159	No Gas	24.829	ppb	4.3	132198.66	25	99.32	89.8	110.2	
205	Tl	209	No Gas	24.762	ppb	5.1	291402.78	25	99.05	89.8	110.2	
208	Pb	209	No Gas	24.932	ppb	4.5	406319.97	25	99.73	89.8	110.2	
232	Th	209	No Gas	24.881	ppb	4.9	407681.63	25	99.52	89.8	110.2	
238	U	209	No Gas	25.025	ppb	5.6	388148.19	25	100.1	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1760387.82	2.1	1881686.03	93.55	29.5	120.4	
Sc	45	No Gas	3877909.26	2.9	3915123.71	99.05	29.5	120.4	
Sc	45	H2	465138.12	0.7	507902.1	91.58	29.5	120.4	
Sc	45	He	91854.91	1.0	102593	89.53	29.5	120.4	
Ge	72	No Gas	883440.48	3.2	852546.94	103.62	29.5	120.4	
Ge	72	H2	176011.94	2.0	193980.16	90.74	29.5	120.4	
Ge	72	He	71515.40	0.3	77385.19	92.41	29.5	120.4	
Y	89	H2	3024800.61	0.9	3089458.15	97.91	29.5	120.4	
Y	89	He	623304.05	0.2	678154.65	91.91	29.5	120.4	
Tb	159	No Gas	9013312.99	2.4	7727080.72	116.65	29.5	120.4	
Tb	159	He	3391599.64	0.5	3280980.4	103.37	29.5	120.4	
Bi	209	No Gas	4685305.45	2.8	3977089.87	117.81	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:51:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.039	ppb	16.4	75.56	0.2	
11	B	6	No Gas	1.755	ppb	10.2	3070.44	4	
23	Na	45	He	51.319	ppb	7.1	15111.45	200	
24	Mg	45	He	-0.804	ppb	N/A	751.19	20	
27	Al	45	He	0.185	ppb	40.5	22.22	20	
28	Si	45	H2	1.846	ppb	40.8	590.67	100	
39	K	45	He	-9.278	ppb	N/A	10947.69	200	
40	Ca	45	H2	5.043	ppb	3.3	2911.52	20	
51	V	89	He	0.076	ppb	23.2	400.02	1	
52	Cr	89	He	0.000	ppb	N/A	66.66	1	
55	Mn	89	He	0.032	ppb	31.1	27.33	0.4	
56	Fe	89	H2	1.350	ppb	18.5	4719.40	20	
59	Co	89	He	-0.004	ppb	N/A	6.67	0.2	
60	Ni	89	He	-0.356	ppb	N/A	121.11	0.4	Failed DoD
63	Cu	89	He	-0.062	ppb	N/A	365.57	0.6	
66	Zn	89	He	0.086	ppb	115.4	84.45	2	
75	As	89	He	-0.007	ppb	N/A	5.33	1	
78	Se	89	H2	0.020	ppb	29.5	2.50	1	
88	Sr	89	He	0.032	ppb	19.1	32.22	1	
95	Mo	89	He	0.046	ppb	10.0	42.22	1	
107	Ag	89	He	0.001	ppb	361.1	16.67	0.2	
111	Cd	89	He	0.004	ppb	113.3	1.85	0.2	
118	Sn	159	He	0.005	ppb	572.0	73.33	1	
121	Sb	159	No Gas	0.022	ppb	48.3	196.88	0.2	
137	Ba	159	No Gas	0.019	ppb	87.8	66.74	0.4	
182	W	159	No Gas	0.045	ppb	11.8	253.62	1	
205	Tl	209	No Gas	0.010	ppb	18.8	280.32	0.2	
208	Pb	209	No Gas	0.011	ppb	11.2	430.49	0.2	
232	Th	209	No Gas	0.051	ppb	18.4	921.07	1	
238	U	209	No Gas	0.020	ppb	19.8	310.35	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706210.44	2.7	1881686.03	90.67	29.5	120.4	
Sc	45	No Gas	3721119.61	2.7	3915123.71	95.04	29.5	120.4	
Sc	45	H2	456262.05	0.4	507902.1	89.83	29.5	120.4	
Sc	45	He	91843.31	1.1	102593	89.52	29.5	120.4	
Ge	72	No Gas	848365.94	1.9	852546.94	99.51	29.5	120.4	
Ge	72	H2	173109.13	1.0	193980.16	89.24	29.5	120.4	
Ge	72	He	71678.17	0.4	77385.19	92.63	29.5	120.4	
Y	89	H2	2964302.17	0.5	3089458.15	95.95	29.5	120.4	
Y	89	He	623568.50	0.4	678154.65	91.95	29.5	120.4	
Tb	159	No Gas	8658977.30	3.1	7727080.72	112.06	29.5	120.4	
Tb	159	He	3351006.41	0.6	3280980.4	102.13	29.5	120.4	
Bi	209	No Gas	4569808.55	3.3	3977089.87	114.9	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/27/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNG27A

REVIEWED 07/30/20 KATAHDIN ANALYTICAL METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by AP (initials) on 7/27/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

AP 7/29/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

50x diln.: 0.20 mL of sample (pipet M27) + 9.8 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG27A	07/27/2020	16:21	AP
CalStd	1	LNG27A	07/27/2020	16:24	AP
ICV	1	LNG27A	07/27/2020	16:27	AP
ICB	1	LNG27A	07/27/2020	16:30	AP
PQL	1	LNG27A	07/27/2020	16:32	AP
ICSA	1	LNG27A	07/27/2020	16:35	AP
ICSAB	1	LNG27A	07/27/2020	16:38	AP
LRS1	1	LNG27A	07/27/2020	16:40	AP
LRS2	1	LNG27A	07/27/2020	16:43	AP
RINSE	1	LNG27A	07/27/2020	16:46	AP
RINSE	1	LNG27A	07/27/2020	16:48	AP
CCV	1	LNG27A	07/27/2020	16:51	AP
CCB	1	LNG27A	07/27/2020	16:54	AP
PBSNG06IMS1	5	LNG27A	07/27/2020	16:57	AP
PBSNG07IMS1	5	LNG27A	07/27/2020	16:59	AP
PBWNF29IMW1	5	LNG27A	07/27/2020	17:02	AP
LCSWNF26IMW2	5	LNG27A	07/27/2020	17:04	AP
SN5124-002	5	LNG27A	07/27/2020	17:07	AP
SN5124-002L	25	LNG27A	07/27/2020	17:10	AP
SN5124-002A	5	LNG27A	07/27/2020	17:12	AP
SN5014-002	5	LNG27A	07/27/2020	17:15	AP
SN5014-002L	25	LNG27A	07/27/2020	17:18	AP
SN5014-002A	5	LNG27A	07/27/2020	17:20	AP
CCV	1	LNG27A	07/27/2020	17:23	AP
CCB	1	LNG27A	07/27/2020	17:26	AP
SN5014-002S	5	LNG27A	07/27/2020	17:28	AP
SN5014-002P	5	LNG27A	07/27/2020	17:31	AP
SN5980-001	1	LNG27A	07/27/2020	17:33	AP
SN5980-002	1	LNG27A	07/27/2020	17:36	AP
SN5980-003	1	LNG27A	07/27/2020	17:39	AP
SN5980-004	1	LNG27A	07/27/2020	17:41	AP
SN5980-005	1	LNG27A	07/27/2020	17:44	AP
SN5980-006	1	LNG27A	07/27/2020	17:47	AP
SN5980-007	1	LNG27A	07/27/2020	17:49	AP
SN5980-008	1	LNG27A	07/27/2020	17:52	AP
CCV	1	LNG27A	07/27/2020	17:55	AP
CCB	1	LNG27A	07/27/2020	17:57	AP
SN5980-009	1	LNG27A	07/27/2020	18:00	AP
SN5980-010	1	LNG27A	07/27/2020	18:03	AP
SN5515-001R	50	LNG27A	07/27/2020	18:05	AP
PBWNG21IMW2	5	LNG27A	07/27/2020	18:08	AP
LCSWNG21IMW2	5	LNG27A	07/27/2020	18:11	AP
SN5717-020	5	LNG27A	07/27/2020	18:13	AP
SN5830-002	5	LNG27A	07/27/2020	18:16	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5832-001	5	LNG27A	07/27/2020	18:19	AP
SN5832-002	5	LNG27A	07/27/2020	18:21	AP
SN5832-003	5	LNG27A	07/27/2020	18:24	AP
CCV	1	LNG27A	07/27/2020	18:27	AP
CCB	1	LNG27A	07/27/2020	18:29	AP
SN5832-004	5	LNG27A	07/27/2020	18:32	AP
SN5897-001	5	LNG27A	07/27/2020	18:35	AP
SN5897-002	5	LNG27A	07/27/2020	18:37	AP
SN5897-002L	25	LNG27A	07/27/2020	18:40	AP
SN5897-002A	5	LNG27A	07/27/2020	18:43	AP
SN5897-002S	5	LNG27A	07/27/2020	18:45	AP
SN5897-002P	5	LNG27A	07/27/2020	18:48	AP
SN5946-001	5	LNG27A	07/27/2020	18:51	AP
PBWNG22IMW1	1	LNG27A	07/27/2020	18:53	AP
LCSWNG22IMW1	5	LNG27A	07/27/2020	18:56	AP
CCV	1	LNG27A	07/27/2020	18:59	AP
CCB	1	LNG27A	07/27/2020	19:01	AP
SN5923-001	1	LNG27A	07/27/2020	19:04	AP
PBSNG23IMS1	5	LNG27A	07/27/2020	19:07	AP
LCSONG23IMS1	5	LNG27A	07/27/2020	19:09	AP
LC2ONG23IMS1	5	LNG27A	07/27/2020	19:12	AP
SN6056-005	5	LNG27A	07/27/2020	19:15	AP
SN6056-006	5	LNG27A	07/27/2020	19:17	AP
SN6056-007	5	LNG27A	07/27/2020	19:20	AP
SN6056-008	5	LNG27A	07/27/2020	19:23	AP
SN6056-009	5	LNG27A	07/27/2020	19:25	AP
SN6056-009L	25	LNG27A	07/27/2020	19:28	AP
CCV	1	LNG27A	07/27/2020	19:31	AP
CCB	1	LNG27A	07/27/2020	19:33	AP
SN6056-009A	5	LNG27A	07/27/2020	19:36	AP
SN6056-009S	5	LNG27A	07/27/2020	19:39	AP
SN6056-009P	5	LNG27A	07/27/2020	19:41	AP
SN6056-010	5	LNG27A	07/27/2020	19:44	AP
SN6056-011	5	LNG27A	07/27/2020	19:47	AP
SN6056-012	5	LNG27A	07/27/2020	19:49	AP
SN6056-013	5	LNG27A	07/27/2020	19:52	AP
SN6056-014	5	LNG27A	07/27/2020	19:54	AP
SN6056-015	5	LNG27A	07/27/2020	19:57	AP
SN6056-016	5	LNG27A	07/27/2020	20:00	AP
CCV	1	LNG27A	07/27/2020	20:02	AP
CCB	1	LNG27A	07/27/2020	20:05	AP
SN6056-017	5	LNG27A	07/27/2020	20:07	AP
PBWNG23IMW1	1	LNG27A	07/27/2020	20:10	AP
LCSWNG23IMW1	5	LNG27A	07/27/2020	20:13	AP
SN5815-002	1	LNG27A	07/27/2020	20:15	AP
SN5815-002R	1	LNG27A	07/27/2020	20:18	AP
SN5815-007	1	LNG27A	07/27/2020	20:20	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-014	1	LNG27A	07/27/2020	20:23	AP
SN6032-001	1	LNG27A	07/27/2020	20:26	AP
RINSE	1	LNG27A	07/27/2020	20:28	AP
RINSE	1	LNG27A	07/27/2020	20:31	AP
CCV	1	LNG27A	07/27/2020	20:34	AP
CCB	1	LNG27A	07/27/2020	20:36	AP
SN6071-001	1	LNG27A	07/27/2020	20:39	AP
PBWNG23IMW2	5	LNG27A	07/27/2020	20:41	AP
LCSWNG23IMW2	5	LNG27A	07/27/2020	20:44	AP
SN5815-004	5	LNG27A	07/27/2020	20:47	AP
SN5815-009	5	LNG27A	07/27/2020	20:50	AP
SN5815-016	5	LNG27A	07/27/2020	20:52	AP
SN5815-036	5	LNG27A	07/27/2020	20:55	AP
SN6059-001	5	LNG27A	07/27/2020	20:58	AP
SN6059-001L	25	LNG27A	07/27/2020	21:00	AP
SN6059-001A	5	LNG27A	07/27/2020	21:03	AP
CCV	1	LNG27A	07/27/2020	21:06	AP
CCB	1	LNG27A	07/27/2020	21:08	AP
SN6059-001S	5	LNG27A	07/27/2020	21:11	AP
SN6059-001P	5	LNG27A	07/27/2020	21:13	AP
SN6059-002	5	LNG27A	07/27/2020	21:16	AP
SN6059-003	5	LNG27A	07/27/2020	21:19	AP
SN6090-001	5	LNG27A	07/27/2020	21:21	AP
PBWNG24IMW1	1	LNG27A	07/27/2020	21:24	AP
LCSWNG24IMW1	5	LNG27A	07/27/2020	21:27	AP
SN6091-001	1	LNG27A	07/27/2020	21:29	AP
SN6091-002	1	LNG27A	07/27/2020	21:32	AP
SN6091-003	1	LNG27A	07/27/2020	21:35	AP
CCV	1	LNG27A	07/27/2020	21:37	AP
CCB	1	LNG27A	07/27/2020	21:40	AP
SN6092-001	1	LNG27A	07/27/2020	21:43	AP
SN6092-001L	5	LNG27A	07/27/2020	21:45	AP
SN6092-001A	1	LNG27A	07/27/2020	21:48	AP
SN6092-001S	1	LNG27A	07/27/2020	21:51	AP
SN6092-001P	1	LNG27A	07/27/2020	21:54	AP
PBWNG24IMW2	5	LNG27A	07/27/2020	21:56	AP
LCSWNG24IMW2	5	LNG27A	07/27/2020	21:59	AP
SN6090-002	5	LNG27A	07/27/2020	22:01	AP
SN6090-003	5	LNG27A	07/27/2020	22:04	AP
SN6090-004	5	LNG27A	07/27/2020	22:07	AP
CCV	1	LNG27A	07/27/2020	22:10	AP
CCB	1	LNG27A	07/27/2020	22:12	AP
SN6090-005	5	LNG27A	07/27/2020	22:15	AP
SN6090-006	5	LNG27A	07/27/2020	22:17	AP
SN6090-007	5	LNG27A	07/27/2020	22:20	AP
SN6090-008	5	LNG27A	07/27/2020	22:23	AP
SN6090-009	5	LNG27A	07/27/2020	22:25	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6090-010S	5	LNG27A	07/27/2020	22:28	AP
SN6090-010P	5	LNG27A	07/27/2020	22:30	AP
PBWNG24IMW3	5	LNG27A	07/27/2020	22:33	AP
LCSWNG24IMW3	5	LNG27A	07/27/2020	22:36	AP
SN6124-001	5	LNG27A	07/27/2020	22:38	AP
CCV	1	LNG27A	07/27/2020	22:41	AP
CCB	1	LNG27A	07/27/2020	22:43	AP
SN6124-003	5	LNG27A	07/27/2020	22:46	AP
SN6124-005	5	LNG27A	07/27/2020	22:49	AP
SN6124-005L	25	LNG27A	07/27/2020	22:52	AP
SN6124-005A	5	LNG27A	07/27/2020	22:54	AP
SN6124-005S	5	LNG27A	07/27/2020	22:57	AP
SN6124-005P	5	LNG27A	07/27/2020	23:00	AP
PBWNG27IMW1	5	LNG27A	07/27/2020	23:02	AP
LCSWNG27IMW1	5	LNG27A	07/27/2020	23:05	AP
SN6146-001	5	LNG27A	07/27/2020	23:08	AP
PBWNG27IMW2	5	LNG27A	07/27/2020	23:10	AP
CCV	1	LNG27A	07/27/2020	23:13	AP
CCB	1	LNG27A	07/27/2020	23:16	AP
LCSWNG27IMW2	5	LNG27A	07/27/2020	23:18	AP
SN6090-010R	5	LNG27A	07/27/2020	23:21	AP
SN6090-010RL	25	LNG27A	07/27/2020	23:24	AP
SN6090-010RA	5	LNG27A	07/27/2020	23:26	AP
SN6146-002	5	LNG27A	07/27/2020	23:29	AP
SN6146-003	5	LNG27A	07/27/2020	23:32	AP
SN6146-004	5	LNG27A	07/27/2020	23:35	AP
SN6146-004L	25	LNG27A	07/27/2020	23:37	AP
SN6146-004A	5	LNG27A	07/27/2020	23:40	AP
SN6146-004S	5	LNG27A	07/27/2020	23:42	AP
CCV	1	LNG27A	07/27/2020	23:45	AP
CCB	1	LNG27A	07/27/2020	23:48	AP
SN6146-004P	5	LNG27A	07/27/2020	23:51	AP
SN6146-005	5	LNG27A	07/27/2020	23:53	AP
SN6146-006	5	LNG27A	07/27/2020	23:56	AP
SN6146-007	5	LNG27A	07/27/2020	23:58	AP
PBSNG27IMS1	5	LNG27A	07/28/2020	00:01	AP
LCSONG27IMS1	5	LNG27A	07/28/2020	00:04	AP
SN6056-018	5	LNG27A	07/28/2020	00:07	AP
SN6056-018L	25	LNG27A	07/28/2020	00:09	AP
SN6056-018A	5	LNG27A	07/28/2020	00:12	AP
SN6056-018S	5	LNG27A	07/28/2020	00:14	AP
CCV	1	LNG27A	07/28/2020	00:17	AP
CCB	1	LNG27A	07/28/2020	00:20	AP
SN6056-018P	5	LNG27A	07/28/2020	00:23	AP
SN6056-019	5	LNG27A	07/28/2020	00:25	AP
SN6056-020	5	LNG27A	07/28/2020	00:28	AP
CCV	1	LNG27A	07/28/2020	00:30	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1	LNG27A	07/28/2020	00:33	AP
PQL	1	LNG27A	07/28/2020	00:36	AP
RINSE	1	LNG27A	07/28/2020	00:38	AP
RINSE	1	LNG27A	07/28/2020	00:41	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG27A.b
Acq. Date-Time	7/27/2020 3:23:34 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

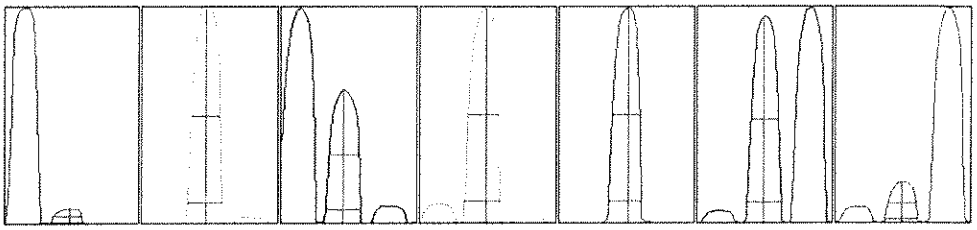
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2553	25527.18	0.536	5.000	
9	842	8418.07	0.581	5.000	
24	33917	339169.64	0.800	5.000	
59	6703	67034.72	0.535	5.000	
115	125260	1252597.85	0.708	5.000	
205	8266	82657.86	0.816	5.000	
208	18460	184597.99	1.075	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2557	2570	2548	2555	2533
9	846	837	839	848	839
24	33464	33914	33956	34104	34147
59	6643	6710	6728	6733	6703
115	123910	125163	125104	126046	126076
205	8167	8242	8262	8329	8328
208	18156	18426	18442	18643	18633

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4187.84	7.00	6.90 - 7.10	
9	1352.67	8.95	8.90 - 9.10	
24	53176.41	23.90	23.90 - 24.10	
59	10625.56	59.00	58.90 - 59.10	
115	210387.17	115.05	114.90 - 115.10	
205	13962.60	205.00	204.90 - 205.10	
208	30859.99	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.718	0.900	
9	0.64	0.751	0.900	
24	0.67	0.775	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.62	0.762	0.900	
208	0.62	0.733	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	12.4 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	412	4119.14	1.159	5.000	
89	63687	636867.78	1.342	5.000	
205	7210	72095.29	0.526	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	404	412	415	415	414
89	62375	63376	63841	64365	64476
205	7149	7208	7228	7211	7252

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.6 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1316	13160.82	0.942	5.000	
89	13812	138121.24	0.918	5.000	
205	4300	42999.01	0.339	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1305	1313	1329	1304	1329
89	13658	13705	13843	13956	13897
205	4287	4296	4286	4316	4315

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.2 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:21:17 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	37.78	13.5
11	B	6	No Gas	1447.91	4.9
23	Na	45	He	8642.19	3.3
24	Mg	45	He	615.62	5.1
27	Al	45	He	20.00	44.1
28	Si	45	H2	483.89	8.6
39	K	45	He	10945.99	2.9
40	Ca	45	H2	1101.19	2.8
51	V	89	He	173.34	8.8
52	Cr	89	He	71.32	20.7
55	Mn	89	He	27.33	25.7
56	Fe	89	H2	6431.98	1.8
59	Co	89	He	22.22	45.8
60	Ni	89	He	342.24	10.3
63	Cu	89	He	141.12	19.2
66	Zn	89	He	64.45	37.4
75	As	89	He	3.33	45.8
78	Se	89	H2	0.17	173.2
88	Sr	89	He	6.67	50.0
95	Mo	89	He	11.11	17.3
107	Ag	89	He	16.67	34.6
111	Cd	89	He	0.37	173.2
118	Sn	159	He	56.67	10.2
121	Sb	159	No Gas	26.69	57.3
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	63.40	32.9
205	Tl	209	No Gas	110.12	50.6
208	Pb	209	No Gas	196.88	19.3
232	Th	209	No Gas	100.11	20.0
238	U	209	No Gas	6.67	86.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1483357.64	1.0
Sc	45	No Gas	3141192.51	0.7
Sc	45	H2	418309.46	2.0
Sc	45	He	85440.95	0.7
Ge	72	No Gas	694668.88	1.1
Ge	72	H2	157206.79	1.4
Ge	72	He	64721.85	0.3
Y	89	H2	2572670.23	1.1
Y	89	He	574051.42	0.5
Tb	159	No Gas	6821698.44	0.4
Tb	159	He	2982140.20	0.3
Bi	209	No Gas	3547037.46	0.7

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:24:26 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	53677.02	0.9
11	B	6	No Gas	35620.19	1.8
23	Na	45	He	940406.72	0.2
24	Mg	45	He	519311.68	0.4
27	Al	45	He	21208.56	0.4
28	Si	45	H2	41988.46	1.7
39	K	45	He	495993.07	0.3
40	Ca	45	H2	3687380.64	0.9
51	V	89	He	37980.88	1.1
52	Cr	89	He	46599.76	0.5
55	Mn	89	He	22215.38	1.6
56	Fe	89	H2	14357346.95	0.7
59	Co	89	He	78360.45	1.1
60	Ni	89	He	21464.84	2.2
63	Cu	89	He	60334.39	0.4
66	Zn	89	He	8084.86	1.4
75	As	89	He	6702.69	1.6
78	Se	89	H2	3452.44	1.9
88	Sr	89	He	35176.94	1.2
95	Mo	89	He	37651.45	0.6
107	Ag	89	He	129052.87	0.5
111	Cd	89	He	16995.94	1.1
118	Sn	159	He	37895.22	1.3
121	Sb	159	No Gas	281577.40	0.9
137	Ba	159	No Gas	111276.29	0.5
182	W	159	No Gas	209547.07	0.8
205	Tl	209	No Gas	453668.28	0.3
208	Pb	209	No Gas	625855.81	1.3
232	Th	209	No Gas	643461.33	1.7
238	U	209	No Gas	601070.87	1.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1444605.42	1.0	1483357.64	97.39	29.5	120.4	
Sc	45	No Gas	3103944.23	0.7	3141192.51	98.81	29.5	120.4	
Sc	45	H2	404200.40	0.8	418309.46	96.63	29.5	120.4	
Sc	45	He	80155.11	1.6	85440.95	93.81	29.5	120.4	
Ge	72	No Gas	689532.18	1.1	694668.88	99.26	29.5	120.4	
Ge	72	H2	151559.26	1.4	157206.79	96.41	29.5	120.4	
Ge	72	He	61423.83	1.3	64721.85	94.9	29.5	120.4	
Y	89	H2	2522718.20	1.1	2572670.23	98.06	29.5	120.4	
Y	89	He	543887.00	1.4	574051.42	94.75	29.5	120.4	
Tb	159	No Gas	6892845.18	1.2	6821698.44	101.04	29.5	120.4	
Tb	159	He	2893308.43	1.2	2982140.2	97.02	29.5	120.4	
Bi	209	No Gas	3555161.39	1.0	3547037.46	100.23	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:27:28 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.472	ppb	4.8	22462.50	20	102.36	89.6	110.4	
11	B	6	No Gas	18.669	ppb	5.2	14481.04	20	93.34	89.6	110.4	
23	Na	45	He	4031.577	ppb	2.1	400006.44	4000	100.79	89.6	110.4	
24	Mg	45	He	3955.828	ppb	1.8	214375.94	4000	98.9	89.6	110.4	
27	Al	45	He	371.367	ppb	0.5	8218.20	400	92.84	89.6	110.4	
28	Si	45	H2	415.412	ppb	1.5	17891.31	400	103.85	89.6	110.4	
39	K	45	He	3935.044	ppb	0.8	209834.47	4000	98.38	89.6	110.4	
40	Ca	45	H2	4024.591	ppb	0.9	1499462.62	4000	100.61	89.6	110.4	
51	V	89	He	20.142	ppb	1.4	15879.47	20	100.71	89.6	110.4	
52	Cr	89	He	20.013	ppb	1.9	19275.62	20	100.06	89.6	110.4	
55	Mn	89	He	20.197	ppb	1.5	9270.04	20	100.98	89.6	110.4	
56	Fe	89	H2	4035.384	ppb	1.3	5832564.13	4000	100.88	89.6	110.4	
59	Co	89	He	20.514	ppb	3.4	33163.36	20	102.57	89.6	110.4	
60	Ni	89	He	20.313	ppb	2.0	9193.33	20	101.56	89.6	110.4	
63	Cu	89	He	20.217	ppb	1.4	25239.07	20	101.08	89.6	110.4	
66	Zn	89	He	20.854	ppb	1.0	3513.91	20	104.27	89.6	110.4	
75	As	89	He	20.560	ppb	1.9	2843.94	20	102.8	89.6	110.4	
78	Se	89	H2	20.491	ppb	1.1	1423.51	20	102.46	89.6	110.4	
88	Sr	89	He	19.620	ppb	2.9	14238.94	20	98.1	89.6	110.4	
95	Mo	89	He	39.823	ppb	2.2	30924.62	40	99.56	89.6	110.4	
107	Ag	89	He	20.348	ppb	1.5	54163.08	20	101.74	89.6	110.4	
111	Cd	89	He	20.122	ppb	2.5	7053.76	20	100.61	89.6	110.4	
118	Sn	159	He	19.417	ppb	0.8	15115.62	20	97.08	89.6	110.4	
121	Sb	159	No Gas	20.167	ppb	5.9	114847.90	20	100.84	89.6	110.4	
137	Ba	159	No Gas	19.797	ppb	5.9	44560.60	20	98.98	89.6	110.4	
182	W	159	No Gas	19.617	ppb	5.4	83181.91	20	98.08	89.6	110.4	
205	Tl	209	No Gas	20.900	ppb	6.7	193585.02	20	104.5	89.6	110.4	
208	Pb	209	No Gas	20.315	ppb	6.2	259637.01	20	101.58	89.6	110.4	
232	Th	209	No Gas	19.775	ppb	7.5	259699.14	20	98.87	89.6	110.4	
238	U	209	No Gas	19.837	ppb	6.1	243390.95	20	99.18	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1475931.10	2.1	1483357.64	99.5	29.5	120.4	
Sc	45	No Gas	3144287.51	3.2	3141192.51	100.1	29.5	120.4	
Sc	45	H2	408227.63	0.2	418309.46	97.59	29.5	120.4	
Sc	45	He	83500.55	1.2	85440.95	97.73	29.5	120.4	
Ge	72	No Gas	697280.60	3.8	694668.88	100.38	29.5	120.4	
Ge	72	H2	154725.68	1.6	157206.79	98.42	29.5	120.4	
Ge	72	He	62826.50	0.2	64721.85	97.07	29.5	120.4	
Y	89	H2	2538091.94	0.9	2572670.23	98.66	29.5	120.4	
Y	89	He	560794.38	0.8	574051.42	97.69	29.5	120.4	
Tb	159	No Gas	6979373.65	3.8	6821698.44	102.31	29.5	120.4	
Tb	159	He	2964676.17	0.9	2982140.2	99.41	29.5	120.4	
Bi	209	No Gas	3634265.72	4.0	3547037.46	102.46	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:30:08 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.067	ppb	23.6	111.12	0.2	
11	B	6	No Gas	0.528	ppb	40.9	1804.62	4	
23	Na	45	He	-1.170	ppb	N/A	8164.75	200	
24	Mg	45	He	-0.034	ppb	N/A	588.95	20	
27	Al	45	He	0.183	ppb	334.6	23.33	20	
28	Si	45	H2	0.352	ppb	722.6	480.55	100	
39	K	45	He	0.674	ppb	1308.0	10520.87	200	
40	Ca	45	H2	2.301	ppb	40.9	1910.21	20	
51	V	89	He	-0.028	ppb	N/A	145.56	1	
52	Cr	89	He	-0.007	ppb	N/A	62.66	1	
55	Mn	89	He	-0.002	ppb	N/A	25.33	0.4	
56	Fe	89	H2	3.070	ppb	30.4	10612.48	20	
59	Co	89	He	-0.001	ppb	N/A	20.00	0.2	
60	Ni	89	He	-0.076	ppb	N/A	296.68	0.4	
63	Cu	89	He	-0.006	ppb	N/A	128.89	0.6	
66	Zn	89	He	0.026	ppb	328.3	66.67	2	
75	As	89	He	0.031	ppb	77.9	7.33	1	
78	Se	89	H2	0.110	ppb	15.2	7.67	1	
88	Sr	89	He	0.000	ppb	1374.2	6.67	1	
95	Mo	89	He	0.196	ppb	5.7	161.12	1	
107	Ag	89	He	0.005	ppb	146.9	27.78	0.2	
111	Cd	89	He	0.009	ppb	5.9	3.33	0.2	
118	Sn	159	He	0.087	ppb	16.1	122.23	1	
121	Sb	159	No Gas	0.025	ppb	32.1	170.19	0.2	
137	Ba	159	No Gas	0.012	ppb	42.1	40.04	0.4	
182	W	159	No Gas	0.075	ppb	13.0	380.43	1	
205	Tl	209	No Gas	0.026	ppb	29.1	353.73	0.2	
208	Pb	209	No Gas	0.025	ppb	27.9	520.59	0.2	
232	Th	209	No Gas	0.066	ppb	20.8	961.12	1	
238	U	209	No Gas	0.020	ppb	18.9	246.95	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1473623.57	2.8	1483357.64	99.34	29.5	120.4	
Sc	45	No Gas	3109806.18	3.4	3141192.51	99	29.5	120.4	
Sc	45	H2	403252.38	0.7	418309.46	96.4	29.5	120.4	
Sc	45	He	81969.15	5.2	85440.95	95.94	29.5	120.4	
Ge	72	No Gas	691524.97	4.0	694668.88	99.55	29.5	120.4	
Ge	72	H2	152136.00	0.9	157206.79	96.77	29.5	120.4	
Ge	72	He	63117.81	3.9	64721.85	97.52	29.5	120.4	
Y	89	H2	2499411.28	0.2	2572670.23	97.15	29.5	120.4	
Y	89	He	555077.98	5.4	574051.42	96.69	29.5	120.4	
Tb	159	No Gas	6913489.97	4.1	6821698.44	101.35	29.5	120.4	
Tb	159	He	2938186.93	5.5	2982140.2	98.53	29.5	120.4	
Bi	209	No Gas	3596690.18	4.5	3547037.46	101.4	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:32:47 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.225	ppb	22.8	283.35	0.2	112.5	79.5	120.4	
11	B	6	No Gas	4.051	ppb	4.6	4259.67	4	101.28	79.5	120.4	
23	Na	45	He	218.829	ppb	5.0	28770.52	200	109.41	79.5	120.4	
24	Mg	45	He	20.501	ppb	7.0	1655.78	20	102.5	79.5	120.4	
27	Al	45	He	18.774	ppb	13.8	420.02	20	93.87	79.5	120.4	
28	Si	45	H2	102.458	ppb	8.4	4645.98	100	102.46	79.5	120.4	
39	K	45	He	201.860	ppb	3.3	20261.94	200	100.93	79.5	120.4	
40	Ca	45	H2	22.187	ppb	1.4	9099.91	20	110.94	79.5	120.4	
51	V	89	He	1.262	ppb	2.1	1118.98	1	126.2	79.5	120.4	Failed DoD
52	Cr	89	He	1.034	ppb	4.6	1029.86	1	103.4	79.5	120.4	
55	Mn	89	He	0.450	ppb	4.6	225.29	0.4	112.5	79.5	120.4	
56	Fe	89	H2	21.675	ppb	4.7	37223.88	20	108.38	79.5	120.4	
59	Co	89	He	0.225	ppb	8.9	373.37	0.2	112.5	79.5	120.4	
60	Ni	89	He	0.410	ppb	21.8	496.69	0.4	102.5	79.5	120.4	
63	Cu	89	He	0.714	ppb	7.6	993.40	0.6	119	79.5	120.4	
66	Zn	89	He	2.193	ppb	9.0	412.24	2	109.65	79.5	120.4	
75	As	89	He	1.067	ppb	4.0	146.02	1	106.7	79.5	120.4	
78	Se	89	H2	1.140	ppb	5.5	78.50	1	114	79.5	120.4	
88	Sr	89	He	1.023	ppb	4.7	725.60	1	102.3	79.5	120.4	
95	Mo	89	He	1.063	ppb	3.0	810.05	1	106.3	79.5	120.4	
107	Ag	89	He	0.197	ppb	5.2	524.48	0.2	98.5	79.5	120.4	
111	Cd	89	He	0.217	ppb	15.5	74.08	0.2	108.5	79.5	120.4	
118	Sn	159	He	1.099	ppb	9.9	885.62	1	109.9	79.5	120.4	
121	Sb	159	No Gas	0.209	ppb	14.6	1218.09	0.2	104.5	79.5	120.4	
137	Ba	159	No Gas	0.412	ppb	11.5	941.11	0.4	103	79.5	120.4	
182	W	159	No Gas	1.033	ppb	8.0	4445.73	1	103.3	79.5	120.4	
205	Tl	209	No Gas	0.209	ppb	2.5	2069.16	0.2	104.5	79.5	120.4	
208	Pb	209	No Gas	0.222	ppb	4.7	3063.60	0.2	111	79.5	120.4	
232	Th	209	No Gas	0.250	ppb	2.1	3424.33	0.2	125	79.5	120.4	Failed DoD
238	U	209	No Gas	0.207	ppb	5.7	2576.55	0.2	103.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1471942.98	1.7	1483357.64	99.23	29.5	120.4	
Sc	45	No Gas	3122592.30	2.5	3141192.51	99.41	29.5	120.4	
Sc	45	H2	397940.12	1.0	418309.46	95.13	29.5	120.4	
Sc	45	He	80925.42	2.6	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	695757.14	2.8	694668.88	100.16	29.5	120.4	
Ge	72	H2	150271.07	2.1	157206.79	95.59	29.5	120.4	
Ge	72	He	60991.22	2.1	64721.85	94.24	29.5	120.4	
Y	89	H2	2510863.28	1.5	2572670.23	97.6	29.5	120.4	
Y	89	He	543717.21	2.9	574051.42	94.72	29.5	120.4	
Tb	159	No Gas	6985945.94	2.7	6821698.44	102.41	29.5	120.4	
Tb	159	He	2894083.95	2.8	2982140.2	97.05	29.5	120.4	
Bi	209	No Gas	3669170.08	3.0	3547037.46	103.44	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:35:30 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.022	ppb	25.8	57.78	0.2	-50	50	
B	11	6	No Gas	0.472	ppb	32.4	1656.82	4	-50	100	
Na	23	45	He	98444.567	ppb	1.3	8810681.10	100000	80	120	
Mg	24	45	He	101869.862	ppb	1.2	5068937.29	100000	80	120	
Al	27	45	He	93327.606	ppb	1.2	1896776.48	100000	80	120	
Si	28	45	H2	2.930	ppb	75.6	553.97	100	-50	50	
K	39	45	He	96134.049	ppb	0.9	4488691.56	100000	80	120	
Ca	40	45	H2	101196.788	ppb	1.4	35053500.59	100000	80	120	
V	51	89	He	0.181	ppb	23.2	292.24	1	-50	100	
Cr	52	89	He	0.395	ppb	3.5	422.60	0.78	-100	100	
Mn	55	89	He	0.501	ppb	2.5	241.29	0.0826	100	100	DoD
Fe	56	89	H2	98471.876	ppb	1.4	136756885.40	100000	80	120	
Co	59	89	He	0.298	ppb	12.4	473.37	0.2	-50	100	
Ni	60	89	He	0.323	ppb	32.5	447.80	0.114	100	100	
Cu	63	89	He	0.546	ppb	6.0	768.94	-0.043	100	100	
Zn	66	89	He	0.461	ppb	22.5	131.12	-0.7632	100	100	
As	75	89	He	0.081	ppb	15.4	13.67	1	-50	100	
Se	78	89	H2	0.087	ppb	51.5	6.00	1	-50	100	
Sr	88	89	He	0.812	ppb	7.7	561.14	0.0578	100	100	
Mo	95	89	He	2077.932	ppb	0.9	1520448.95	2000	80	120	
Ag	107	89	He	0.015	ppb	76.0	53.33	0.2	-50	50	
Cd	111	89	He	0.309	ppb	8.7	102.59	0.268	100	100	
Sn	118	159	He	0.366	ppb	8.9	331.13	-0.24	100	100	
Sb	121	159	No Gas	0.158	ppb	16.6	951.10	0.089	100	100	
Ba	137	159	No Gas	0.201	ppb	19.2	477.21	-0.0794	100	100	
W	182	159	No Gas	0.208	ppb	17.4	967.79	0.32	-100	100	
Tl	205	209	No Gas	0.000	ppb	2162.5	110.12	0.2	-50	50	
Pb	208	209	No Gas	0.094	ppb	3.7	1361.56	0.03	100	100	
Th	232	209	No Gas	0.023	ppb	25.0	397.12	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	153.5	16.68	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1381833.79	2.4	1483357.64	93.16	29.5	120.4	
Sc	45	No Gas	3114966.97	3.1	3141192.51	99.17	29.5	120.4	
Sc	45	H2	379841.36	1.1	418309.46	90.8	29.5	120.4	
Sc	45	He	76876.01	1.6	85440.95	89.98	29.5	120.4	
Ge	72	No Gas	693165.86	2.6	694668.88	99.78	29.5	120.4	
Ge	72	H2	141016.09	0.8	157206.79	89.7	29.5	120.4	
Ge	72	He	58437.29	0.9	64721.85	90.29	29.5	120.4	
Y	89	H2	2441381.64	1.0	2572670.23	94.9	29.5	120.4	
Y	89	He	528570.16	1.3	574051.42	92.08	29.5	120.4	
Tb	159	No Gas	7150594.75	2.5	6821698.44	104.82	29.5	120.4	
Tb	159	He	2888153.50	1.0	2982140.2	96.85	29.5	120.4	
Bi	209	No Gas	3510054.33	2.3	3547037.46	98.96	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:38:13 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.179	ppb	4.5	20331.53	20	79.5	120.4	
11	B	6	No Gas	20.377	ppb	5.3	14393.18	20	79.5	120.4	
23	Na	45	He	96442.338	ppb	0.5	8994781.86	100000	79.5	120.4	
24	Mg	45	He	99295.067	ppb	0.2	5148702.98	100000	79.5	120.4	
27	Al	45	He	90492.652	ppb	0.5	1916511.20	100000	79.5	120.4	
28	Si	45	H2	458.887	ppb	6.9	19077.29	500	79.5	120.4	
39	K	45	He	93391.144	ppb	0.3	4544266.59	100000	79.5	120.4	
40	Ca	45	H2	96094.682	ppb	8.3	34583447.26	100000	79.5	120.4	
51	V	89	He	19.818	ppb	1.6	15206.49	20	79.5	120.4	
52	Cr	89	He	19.758	ppb	1.0	18518.06	20	79.5	120.4	
55	Mn	89	He	19.877	ppb	0.8	8877.88	20	79.5	120.4	
56	Fe	89	H2	93815.111	ppb	8.6	134929099.35	100000	79.5	120.4	
59	Co	89	He	20.017	ppb	2.2	31490.60	20	79.5	120.4	
60	Ni	89	He	19.487	ppb	0.4	8594.05	20	79.5	120.4	
63	Cu	89	He	19.031	ppb	0.6	23125.29	20	79.5	120.4	
66	Zn	89	He	20.127	ppb	4.9	3301.62	20	79.5	120.4	
75	As	89	He	20.186	ppb	0.8	2717.23	20	79.5	120.4	
78	Se	89	H2	19.548	ppb	8.7	1352.67	20	79.5	120.4	
88	Sr	89	He	20.343	ppb	1.6	14364.64	20	79.5	120.4	
95	Mo	89	He	2048.571	ppb	0.8	1547482.49	2000	79.5	120.4	
107	Ag	89	He	19.069	ppb	1.2	49390.63	20	79.5	120.4	
111	Cd	89	He	19.433	ppb	1.3	6628.73	20	79.5	120.4	
118	Sn	159	He	19.773	ppb	0.7	15405.99	20	79.5	120.4	
121	Sb	159	No Gas	19.416	ppb	3.5	116650.36	20	79.5	120.4	
137	Ba	159	No Gas	18.804	ppb	5.3	44637.93	20	79.5	120.4	
182	W	159	No Gas	20.344	ppb	5.6	90958.67	20	79.5	120.4	
205	Tl	209	No Gas	19.869	ppb	5.0	184015.18	20	79.5	120.4	
208	Pb	209	No Gas	20.044	ppb	5.2	256094.63	20	79.5	120.4	
232	Th	209	No Gas	20.970	ppb	5.1	275398.65	20	79.5	120.4	
238	U	209	No Gas	20.813	ppb	5.6	255248.09	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1355568.24	2.9	1483357.64	91.39	29.5	120.4	
Sc	45	No Gas	3118878.90	3.2	3141192.51	99.29	29.5	120.4	
Sc	45	H2	395773.34	5.4	418309.46	94.61	29.5	120.4	
Sc	45	He	80100.55	0.7	85440.95	93.75	29.5	120.4	
Ge	72	No Gas	695099.87	2.8	694668.88	100.06	29.5	120.4	
Ge	72	H2	146620.83	5.7	157206.79	93.27	29.5	120.4	
Ge	72	He	60850.84	0.7	64721.85	94.02	29.5	120.4	
Y	89	H2	2536094.13	5.5	2572670.23	98.58	29.5	120.4	
Y	89	He	545661.21	0.9	574051.42	95.05	29.5	120.4	
Tb	159	No Gas	7357603.57	3.1	6821698.44	107.86	29.5	120.4	
Tb	159	He	2967276.38	0.8	2982140.2	99.5	29.5	120.4	
Bi	209	No Gas	3631526.97	3.6	3547037.46	102.38	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:40:55 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	103.193	ppb	3.9	113601.61	100	103.19	89.5	110.4	
11	B	6	No Gas	485.686	ppb	4.3	342281.65	500	97.14	89.5	110.4	
51	V	89	He	1026.250	ppb	0.8	779770.40	1000	102.63	89.5	110.4	
52	Cr	89	He	2036.837	ppb	0.8	1903866.12	2000	101.84	89.5	110.4	
55	Mn	89	He	2071.287	ppb	0.5	923318.66	2000	103.56	89.5	110.4	
59	Co	89	He	1047.676	ppb	0.7	1648733.64	1000	104.77	89.5	110.4	
60	Ni	89	He	1068.844	ppb	1.0	454277.36	1000	106.88	89.5	110.4	
63	Cu	89	He	2009.747	ppb	0.7	2430347.27	2000	100.49	89.5	110.4	
66	Zn	89	He	2089.906	ppb	0.3	336864.60	2000	104.5	89.5	110.4	
75	As	89	He	1038.210	ppb	0.5	139716.58	1000	103.82	89.5	110.4	
78	Se	89	H2	1004.606	ppb	2.9	69632.23	1000	100.46	89.5	110.4	
88	Sr	89	He	2033.521	ppb	0.1	1436732.77	2000	101.68	89.5	110.4	
95	Mo	89	He	1048.213	ppb	0.4	792576.29	1000	104.82	89.5	110.4	
107	Ag	89	He	111.120	ppb	0.6	288009.74	100	111.12	89.5	110.4	> +/- 10%
111	Cd	89	He	1045.135	ppb	0.6	356818.90	1000	104.51	89.5	110.4	
118	Sn	159	He	995.403	ppb	0.4	769801.97	1000	99.54	89.5	110.4	
121	Sb	159	No Gas	953.177	ppb	3.1	5962443.27	1000	95.32	89.5	110.4	
137	Ba	159	No Gas	1901.364	ppb	3.2	4700529.84	2000	95.07	89.5	110.4	
182	W	159	No Gas	993.715	ppb	3.0	4625370.31	1000	99.37	89.5	110.4	
205	Tl	209	No Gas	957.347	ppb	3.0	9799470.69	1000	95.73	89.5	110.4	
208	Pb	209	No Gas	1905.281	ppb	2.9	26901627.29	2000	95.26	89.5	110.4	
232	Th	209	No Gas	962.138	ppb	3.4	13968978.28	1000	96.21	89.5	110.4	
238	U	209	No Gas	958.295	ppb	3.3	12998441.22	1000	95.83	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1482742.95	2.3	1483357.64	99.96	29.5	120.4	
Sc	45	No Gas	3330517.14	1.9	3141192.51	106.03	29.5	120.4	
Ge	72	No Gas	748309.16	1.1	694668.88	107.72	29.5	120.4	
Tb	159	No Gas	7659483.50	1.8	6821698.44	112.28	29.5	120.4	
Bi	209	No Gas	4012855.89	1.8	3547037.46	113.13	29.5	120.4	
Sc	45	H2	399356.89	5.0	418309.46	95.47	29.5	120.4	
Ge	72	H2	148750.93	6.7	157206.79	94.62	29.5	120.4	
Y	89	H2	2530579.34	6.2	2572670.23	98.36	29.5	120.4	
Sc	45	He	80100.29	0.3	85440.95	93.75	29.5	120.4	
Ge	72	He	61909.84	0.3	64721.85	95.66	29.5	120.4	
Y	89	He	546167.43	0.7	574051.42	95.14	29.5	120.4	
Tb	159	He	2955907.21	0.3	2982140.2	99.12	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:43:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.320	ppb	31.4	344.46	100	
11	B	6	No Gas	12.213	ppb	10.1	8840.79	1000	
23	Na	45	He	198790.799	ppb	1.0	19689667.10	200000	
24	Mg	45	He	204836.528	ppb	0.9	11284072.33	200000	>LDR
27	Al	45	He	190726.576	ppb	0.7	4291675.67	200000	
28	Si	45	H2	9656.240	ppb	1.7	397291.33	10000	
39	K	45	He	194451.191	ppb	0.8	10040871.33	200000	
40	Ca	45	H2	203017.403	ppb	1.2	74079842.79	200000	>LDR
51	V	89	He	0.131	ppb	56.3	274.46	1000	
52	Cr	89	He	1.592	ppb	5.5	1616.47	2000	
55	Mn	89	He	7.957	ppb	1.2	3712.49	2000	
56	Fe	89	H2	100320.822	ppb	0.2	143456895.18	100000	>LDR
59	Co	89	He	0.741	ppb	12.4	1233.48	1000	
60	Ni	89	He	2.124	ppb	7.1	1275.66	1000	
63	Cu	89	He	1.244	ppb	9.1	1702.39	2000	
66	Zn	89	He	2.193	ppb	10.4	431.14	2000	
75	As	89	He	0.329	ppb	14.3	49.34	1000	
78	Se	89	H2	1.342	ppb	57.6	93.17	1000	
88	Sr	89	He	1.294	ppb	2.6	956.74	2000	
95	Mo	89	He	1.722	ppb	4.1	1363.45	1000	
107	Ag	89	He	0.112	ppb	19.8	318.90	100	
111	Cd	89	He	0.161	ppb	27.5	57.41	1000	
118	Sn	159	He	1.393	ppb	8.6	1150.09	1000	
121	Sb	159	No Gas	1.277	ppb	39.6	7494.16	1000	
137	Ba	159	No Gas	2.320	ppb	42.2	5373.91	2000	
182	W	159	No Gas	2.519	ppb	21.1	11007.22	1000	
205	Tl	209	No Gas	0.937	ppb	35.0	8392.53	1000	
208	Pb	209	No Gas	2.118	ppb	40.7	26044.70	2000	
232	Th	209	No Gas	3.470	ppb	53.2	43699.74	1000	
238	U	209	No Gas	1.742	ppb	61.1	20475.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1307448.97	0.6	1483357.64	88.14	29.5	120.4	
Sc	45	No Gas	3091077.01	0.7	3141192.51	98.4	29.5	120.4	
Sc	45	H2	400189.76	3.0	418309.46	95.67	29.5	120.4	
Sc	45	He	85102.62	0.4	85440.95	99.6	29.5	120.4	
Ge	72	No Gas	677011.35	0.7	694668.88	97.46	29.5	120.4	
Ge	72	H2	145452.02	2.4	157206.79	92.52	29.5	120.4	
Ge	72	He	63020.80	1.3	64721.85	97.37	29.5	120.4	
Y	89	H2	2513599.37	2.1	2572670.23	97.7	29.5	120.4	
Y	89	He	567513.13	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7132215.80	1.3	6821698.44	104.55	29.5	120.4	
Tb	159	He	2999314.12	0.4	2982140.2	100.58	29.5	120.4	
Bi	209	No Gas	3454647.36	1.5	3547037.46	97.4	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:46:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	27.7	152.23	100	
11	B	6	No Gas	2.517	ppb	5.8	3462.76	1000	
23	Na	45	He	142.693	ppb	10.9	23508.54	200000	
24	Mg	45	He	27.849	ppb	10.2	2220.34	200000	
27	Al	45	He	28.329	ppb	5.2	680.04	200000	
28	Si	45	H2	2.522	ppb	80.2	610.70	10000	
39	K	45	He	55.998	ppb	2.1	14262.43	200000	
40	Ca	45	H2	31.485	ppb	7.9	13535.80	200000	
51	V	89	He	0.223	ppb	13.4	361.13	1000	
52	Cr	89	He	0.114	ppb	21.7	187.97	2000	
55	Mn	89	He	0.114	ppb	10.3	82.65	2000	
56	Fe	89	H2	23.521	ppb	6.8	42588.91	100000	
59	Co	89	He	0.100	ppb	27.0	193.35	1000	
60	Ni	89	He	0.017	ppb	404.3	358.91	1000	
63	Cu	89	He	0.355	ppb	11.6	607.81	2000	
66	Zn	89	He	0.137	ppb	16.2	90.00	2000	
75	As	89	He	0.110	ppb	27.8	19.33	1000	
78	Se	89	H2	0.141	ppb	16.9	10.50	1000	
88	Sr	89	He	0.113	ppb	3.7	93.34	2000	
95	Mo	89	He	0.592	ppb	4.9	494.47	1000	
107	Ag	89	He	0.015	ppb	20.8	58.89	100	
111	Cd	89	He	0.067	ppb	17.8	25.18	1000	
118	Sn	159	He	0.388	ppb	9.9	370.02	1000	
121	Sb	159	No Gas	0.040	ppb	21.0	280.31	1000	
137	Ba	159	No Gas	0.028	ppb	67.6	83.42	2000	
182	W	159	No Gas	0.191	ppb	35.0	951.11	1000	
205	Tl	209	No Gas	0.033	ppb	18.4	450.52	1000	
208	Pb	209	No Gas	0.113	ppb	5.0	1782.05	2000	
232	Th	209	No Gas	0.031	ppb	25.4	550.63	1000	
238	U	209	No Gas	0.019	ppb	9.5	260.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1596645.90	2.8	1483357.64	107.64	29.5	120.4	
Sc	45	No Gas	3482637.18	3.3	3141192.51	110.87	29.5	120.4	
Sc	45	H2	431843.65	0.7	418309.46	103.24	29.5	120.4	
Sc	45	He	88017.99	0.6	85440.95	103.02	29.5	120.4	
Ge	72	No Gas	764489.46	2.8	694668.88	110.05	29.5	120.4	
Ge	72	H2	161437.63	1.9	157206.79	102.69	29.5	120.4	
Ge	72	He	67348.13	0.6	64721.85	104.06	29.5	120.4	
Y	89	H2	2682029.51	0.3	2572670.23	104.25	29.5	120.4	
Y	89	He	589124.14	0.8	574051.42	102.63	29.5	120.4	
Tb	159	No Gas	7626315.86	3.4	6821698.44	111.79	29.5	120.4	
Tb	159	He	3069151.55	0.9	2982140.2	102.92	29.5	120.4	
Bi	209	No Gas	3929717.81	3.5	3547037.46	110.79	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:48:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	18.8	127.78	100	
11	B	6	No Gas	1.680	ppb	6.6	2763.69	1000	
23	Na	45	He	52.400	ppb	12.9	14306.40	200000	
24	Mg	45	He	2.055	ppb	55.9	753.41	200000	
27	Al	45	He	3.973	ppb	20.4	113.34	200000	
28	Si	45	H2	0.336	ppb	408.7	517.25	10000	
39	K	45	He	11.512	ppb	37.4	11919.67	200000	
40	Ca	45	H2	5.488	ppb	21.3	3321.63	200000	
51	V	89	He	0.195	ppb	14.5	336.69	1000	
52	Cr	89	He	0.013	ppb	200.5	85.99	2000	
55	Mn	89	He	0.038	ppb	61.9	45.99	2000	
56	Fe	89	H2	8.165	ppb	6.9	19234.54	100000	
59	Co	89	He	0.029	ppb	48.3	71.12	1000	
60	Ni	89	He	-0.054	ppb	N/A	325.57	1000	
63	Cu	89	He	0.242	ppb	14.0	458.91	2000	
66	Zn	89	He	0.106	ppb	54.7	84.45	2000	
75	As	89	He	0.066	ppb	41.6	13.00	1000	
78	Se	89	H2	0.097	ppb	34.8	7.33	1000	
88	Sr	89	He	0.023	ppb	10.8	24.44	2000	
95	Mo	89	He	0.243	ppb	12.8	208.90	1000	
107	Ag	89	He	0.001	ppb	559.1	18.89	100	
111	Cd	89	He	0.024	ppb	7.3	9.26	1000	
118	Sn	159	He	0.119	ppb	42.4	153.34	1000	
121	Sb	159	No Gas	0.114	ppb	106.3	714.31	1000	
137	Ba	159	No Gas	0.213	ppb	110.2	520.70	2000	
182	W	159	No Gas	0.216	ppb	56.9	1031.29	1000	
205	Tl	209	No Gas	0.123	ppb	111.2	1312.08	1000	
208	Pb	209	No Gas	0.252	ppb	86.9	3582.11	2000	
232	Th	209	No Gas	0.097	ppb	103.0	1442.34	1000	
238	U	209	No Gas	0.112	ppb	114.9	1452.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559939.18	1.0	1483357.64	105.16	29.5	120.4	
Sc	45	No Gas	3379704.61	1.2	3141192.51	107.59	29.5	120.4	
Sc	45	H2	434707.92	1.8	418309.46	103.92	29.5	120.4	
Sc	45	He	88239.61	0.3	85440.95	103.28	29.5	120.4	
Ge	72	No Gas	748683.04	0.3	694668.88	107.78	29.5	120.4	
Ge	72	H2	163203.20	0.7	157206.79	103.81	29.5	120.4	
Ge	72	He	67031.14	0.3	64721.85	103.57	29.5	120.4	
Y	89	H2	2693159.39	1.7	2572670.23	104.68	29.5	120.4	
Y	89	He	587753.95	0.1	574051.42	102.39	29.5	120.4	
Tb	159	No Gas	7318490.59	1.1	6821698.44	107.28	29.5	120.4	
Tb	159	He	3057766.00	0.2	2982140.2	102.54	29.5	120.4	
Bi	209	No Gas	3790688.32	0.8	3547037.46	106.87	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:51:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.651	ppb	6.2	27129.44	25	94.6	89.8	110.2	
11	B	6	No Gas	24.213	ppb	6.2	19193.30	25	96.85	89.8	110.2	
23	Na	45	He	5007.642	ppb	0.3	502789.59	5000	100.15	89.8	110.2	
24	Mg	45	He	4844.992	ppb	0.5	266655.91	5000	96.9	89.8	110.2	
27	Al	45	He	478.447	ppb	2.4	10752.19	500	95.69	89.8	110.2	
28	Si	45	H2	460.019	ppb	2.9	20423.87	500	92	89.8	110.2	
39	K	45	He	4849.527	ppb	0.2	260218.16	5000	96.99	89.8	110.2	
40	Ca	45	H2	4897.838	ppb	0.9	1885458.03	5000	97.96	89.8	110.2	
51	V	89	He	24.964	ppb	1.3	19989.22	25	99.86	89.8	110.2	
52	Cr	89	He	24.460	ppb	0.9	23961.22	25	97.84	89.8	110.2	
55	Mn	89	He	25.074	ppb	0.5	11706.74	25	100.3	89.8	110.2	
56	Fe	89	H2	4949.127	ppb	0.9	7442020.09	5000	98.98	89.8	110.2	
59	Co	89	He	25.059	ppb	1.3	41231.80	25	100.24	89.8	110.2	
60	Ni	89	He	24.892	ppb	1.3	11388.33	25	99.57	89.8	110.2	
63	Cu	89	He	25.057	ppb	0.4	31802.59	25	100.23	89.8	110.2	
66	Zn	89	He	25.211	ppb	3.3	4309.71	25	100.84	89.8	110.2	
75	As	89	He	24.618	ppb	1.7	3465.15	25	98.47	89.8	110.2	
78	Se	89	H2	25.129	ppb	0.3	1816.54	25	100.52	89.8	110.2	
88	Sr	89	He	23.723	ppb	0.9	17521.74	25	94.89	89.8	110.2	
95	Mo	89	He	25.002	ppb	0.9	19765.98	25	100.01	89.8	110.2	
107	Ag	89	He	24.456	ppb	0.6	66251.96	25	97.82	89.8	110.2	
111	Cd	89	He	24.329	ppb	1.2	8681.01	25	97.32	89.8	110.2	
118	Sn	159	He	23.858	ppb	1.0	18904.89	25	95.43	89.8	110.2	
121	Sb	159	No Gas	23.978	ppb	4.2	145222.85	25	95.91	89.8	110.2	
137	Ba	159	No Gas	23.946	ppb	5.3	57310.75	25	95.78	89.8	110.2	
182	W	159	No Gas	23.496	ppb	5.5	105915.26	25	93.98	89.8	110.2	
205	Tl	209	No Gas	24.074	ppb	5.0	235008.19	25	96.3	89.8	110.2	
208	Pb	209	No Gas	23.898	ppb	5.5	321808.72	25	95.59	89.8	110.2	
232	Th	209	No Gas	23.582	ppb	5.8	326418.18	25	94.33	89.8	110.2	
238	U	209	No Gas	23.578	ppb	6.5	304785.23	25	94.31	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1543934.68	2.5	1483357.64	104.08	29.5	120.4	
Sc	45	No Gas	3369565.07	2.7	3141192.51	107.27	29.5	120.4	
Sc	45	H2	421855.07	0.7	418309.46	100.85	29.5	120.4	
Sc	45	He	84834.37	0.4	85440.95	99.29	29.5	120.4	
Ge	72	No Gas	748315.12	2.9	694668.88	107.72	29.5	120.4	
Ge	72	H2	157744.59	0.5	157206.79	100.34	29.5	120.4	
Ge	72	He	64409.35	1.0	64721.85	99.52	29.5	120.4	
Y	89	H2	2641000.96	0.8	2572670.23	102.66	29.5	120.4	
Y	89	He	570736.37	0.8	574051.42	99.42	29.5	120.4	
Tb	159	No Gas	7416926.70	2.5	6821698.44	108.73	29.5	120.4	
Tb	159	He	3019849.92	0.8	2982140.2	101.26	29.5	120.4	
Bi	209	No Gas	3827007.92	2.6	3547037.46	107.89	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:54:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	48.1	148.89	0.2	
11	B	6	No Gas	1.018	ppb	25.1	2252.48	4	
23	Na	45	He	18.722	ppb	8.3	10826.11	200	
24	Mg	45	He	0.595	ppb	257.1	668.96	20	
27	Al	45	He	1.453	ppb	45.6	54.45	20	
28	Si	45	H2	-1.798	ppb	N/A	417.14	100	
39	K	45	He	3.961	ppb	166.0	11489.50	200	
40	Ca	45	H2	3.591	ppb	18.3	2547.00	20	
51	V	89	He	0.138	ppb	28.0	292.23	1	
52	Cr	89	He	0.008	ppb	107.9	81.32	1	
55	Mn	89	He	0.039	ppb	47.2	46.66	0.4	
56	Fe	89	H2	6.368	ppb	12.3	16414.61	20	
59	Co	89	He	0.005	ppb	187.6	31.11	0.2	
60	Ni	89	He	-0.102	ppb	N/A	305.57	0.4	
63	Cu	89	He	0.158	ppb	19.1	352.24	0.6	
66	Zn	89	He	-0.005	ppb	N/A	65.56	2	
75	As	89	He	0.054	ppb	24.7	11.33	1	
78	Se	89	H2	0.115	ppb	7.9	8.67	1	
88	Sr	89	He	0.010	ppb	64.3	14.44	1	
95	Mo	89	He	0.147	ppb	27.4	132.23	1	
107	Ag	89	He	0.005	ppb	48.8	32.22	0.2	
111	Cd	89	He	0.014	ppb	20.1	5.56	0.2	
118	Sn	159	He	0.087	ppb	22.0	128.89	1	
121	Sb	159	No Gas	0.032	ppb	26.5	220.25	0.2	
137	Ba	159	No Gas	0.034	ppb	21.8	96.77	0.4	
182	W	159	No Gas	0.082	ppb	17.5	437.16	1	
205	Tl	209	No Gas	0.031	ppb	24.8	417.14	0.2	
208	Pb	209	No Gas	0.060	ppb	14.3	1017.84	0.2	
232	Th	209	No Gas	0.147	ppb	9.3	2152.62	1	
238	U	209	No Gas	0.034	ppb	17.4	450.52	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1545827.48	2.5	1483357.64	104.21	29.5	120.4	
Sc	45	No Gas	3395481.43	3.7	3141192.51	108.1	29.5	120.4	
Sc	45	H2	430903.93	6.1	418309.46	103.01	29.5	120.4	
Sc	45	He	88076.74	2.0	85440.95	103.08	29.5	120.4	
Ge	72	No Gas	747880.22	3.1	694668.88	107.66	29.5	120.4	
Ge	72	H2	162797.76	3.9	157206.79	103.56	29.5	120.4	
Ge	72	He	66979.55	0.8	64721.85	103.49	29.5	120.4	
Y	89	H2	2686037.45	5.9	2572670.23	104.41	29.5	120.4	
Y	89	He	591452.08	1.7	574051.42	103.03	29.5	120.4	
Tb	159	No Gas	7413936.97	3.9	6821698.44	108.68	29.5	120.4	
Tb	159	He	3074533.70	2.1	2982140.2	103.1	29.5	120.4	
Bi	209	No Gas	3840482.66	4.1	3547037.46	108.27	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG06IMS1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:57:00 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.166	ppb	35.3	78.89	0.5	
B	11	6	No Gas	5.252	ppb	3.9	2324.72	10	
Na	23	45	He	162.425	ppb	5.2	11911.56	500	
Mg	24	45	He	15.465	ppb	46.0	788.97	50	
Al	27	45	He	15.453	ppb	39.1	90.00	50	
Si	28	45	H2	11.345	ppb	41.7	580.66	250	
K	39	45	He	59.667	ppb	105.7	11601.18	500	
Ca	40	45	H2	63.707	ppb	7.4	5962.58	50	PB 6020 Fails DoD
V	51	89	He	4.048	ppb	8.3	818.95	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.805	ppb	9.2	229.29	2.5	
Mn	55	89	He	5.639	ppb	6.2	555.25	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	39.466	ppb	3.0	18506.28	50	
Co	59	89	He	0.148	ppb	8.6	71.12	0.5	
Ni	60	89	He	0.571	ppb	108.5	393.35	1	
Cu	63	89	He	2.916	ppb	13.7	881.17	1.5	PB 6020 Fails DoD
Zn	66	89	He	6.435	ppb	5.0	282.24	5	PB 6020 Fails DoD
As	75	89	He	0.330	ppb	4.8	12.67	2.5	
Se	78	89	H2	0.723	ppb	44.0	10.67	2.5	
Sr	88	89	He	0.225	ppb	36.2	40.00	2.5	
Mo	95	89	He	0.595	ppb	17.8	105.56	2.5	
Ag	107	89	He	0.033	ppb	59.2	34.45	0.5	
Cd	111	89	He	0.135	ppb	35.5	10.00	0.5	
Sn	118	159	He	40.526	ppb	1.6	6472.86	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	32.4	200.23	0.5	
Ba	137	159	No Gas	0.241	ppb	46.2	130.15	1	
W	182	159	No Gas	0.359	ppb	11.9	390.44	2.5	
Tl	205	209	No Gas	0.055	ppb	62.8	226.92	0.5	
Pb	208	209	No Gas	0.459	ppb	1.9	1458.34	0.5	
Th	232	209	No Gas	0.346	ppb	9.6	1074.58	2.5	
U	238	209	No Gas	0.057	ppb	44.3	156.84	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577533.99	1.9	1483357.64	106.35	29.5	120.4	
Sc	45	No Gas	3367926.84	2.6	3141192.51	107.22	29.5	120.4	
Sc	45	H2	418250.64	0.9	418309.46	99.99	29.5	120.4	
Sc	45	He	85721.05	0.8	85440.95	100.33	29.5	120.4	
Ge	72	No Gas	748011.27	2.5	694668.88	107.68	29.5	120.4	
Ge	72	H2	157640.14	0.9	157206.79	100.28	29.5	120.4	
Ge	72	He	64726.67	0.9	64721.85	100.01	29.5	120.4	
Y	89	H2	2647144.81	0.5	2572670.23	102.89	29.5	120.4	
Y	89	He	573743.83	1.0	574051.42	99.95	29.5	120.4	
Tb	159	No Gas	7384013.43	2.5	6821698.44	108.24	29.5	120.4	
Tb	159	He	3025172.32	1.3	2982140.2	101.44	29.5	120.4	
Bi	209	No Gas	3849682.72	2.8	3547037.46	108.53	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	020_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:59:38 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.198	ppb	32.3	86.67	0.5	
B	11	6	No Gas	5.098	ppb	9.6	2295.82	10	
Na	23	45	He	113.812	ppb	21.0	10922.94	500	
Mg	24	45	He	13.523	ppb	72.0	766.75	50	
Al	27	45	He	15.205	ppb	20.0	88.89	50	
Si	28	45	H2	3.500	ppb	302.2	513.91	250	
K	39	45	He	77.915	ppb	35.2	11771.31	500	
Ca	40	45	H2	62.345	ppb	3.2	5869.21	50	PB 6020 Fails DoD
V	51	89	He	3.932	ppb	7.6	797.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.901	ppb	12.2	247.29	2.5	
Mn	55	89	He	1.666	ppb	11.2	182.64	1	PB 6020 Fails DoD
Fe	56	89	H2	33.449	ppb	4.4	16578.21	50	
Co	59	89	He	0.081	ppb	14.6	48.89	0.5	
Ni	60	89	He	0.830	ppb	17.7	414.47	1	
Cu	63	89	He	2.558	ppb	7.3	787.83	1.5	PB 6020 Fails DoD
Zn	66	89	He	8.738	ppb	7.2	358.91	5	PB 6020 Fails DoD
As	75	89	He	0.521	ppb	17.8	18.00	2.5	
Se	78	89	H2	0.463	ppb	15.4	6.83	2.5	
Sr	88	89	He	0.286	ppb	16.2	48.89	2.5	
Mo	95	89	He	0.534	ppb	5.9	95.56	2.5	
Ag	107	89	He	0.010	ppb	190.4	22.22	0.5	
Cd	111	89	He	0.093	ppb	9.4	7.04	0.5	
Sn	118	159	He	43.400	ppb	3.0	6905.35	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.076	ppb	48.5	123.47	0.5	
Ba	137	159	No Gas	0.274	ppb	24.7	146.83	1	
W	182	159	No Gas	0.132	ppb	50.2	190.21	2.5	
Tl	205	209	No Gas	0.056	ppb	43.5	230.26	0.5	
Pb	208	209	No Gas	0.714	ppb	9.2	2152.50	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.109	ppb	37.0	413.81	2.5	
U	238	209	No Gas	0.028	ppb	78.1	80.09	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573862.43	2.3	1483357.64	106.1	29.5	120.4	
Sc	45	No Gas	3391258.59	2.7	3141192.51	107.96	29.5	120.4	
Sc	45	H2	419140.15	1.2	418309.46	100.2	29.5	120.4	
Sc	45	He	85583.11	0.2	85440.95	100.17	29.5	120.4	
Ge	72	No Gas	758631.67	1.8	694668.88	109.21	29.5	120.4	
Ge	72	H2	157275.71	1.2	157206.79	100.04	29.5	120.4	
Ge	72	He	65365.19	0.2	64721.85	100.99	29.5	120.4	
Y	89	H2	2629501.00	1.2	2572670.23	102.21	29.5	120.4	
Y	89	He	571551.70	0.2	574051.42	99.56	29.5	120.4	
Tb	159	No Gas	7496627.74	2.9	6821698.44	109.89	29.5	120.4	
Tb	159	He	3015659.68	0.4	2982140.2	101.12	29.5	120.4	
Bi	209	No Gas	3863262.61	3.0	3547037.46	108.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF29IMW1
File Name	021_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:02:20 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.105	ppb	34.3	64.45	0.5	
B	11	6	No Gas	2.453	ppb	4.1	1889.08	10	
Na	23	45	He	103.472	ppb	15.0	10759.31	500	
Mg	24	45	He	61.363	ppb	38.4	1302.38	50	PB 6020 Fails DoD
Al	27	45	He	47.387	ppb	57.8	235.57	50	
Si	28	45	H2	15.206	ppb	92.0	620.71	250	
K	39	45	He	82.467	ppb	26.6	11864.61	500	
Ca	40	45	H2	46.854	ppb	21.7	4732.09	50	
V	51	89	He	3.820	ppb	3.9	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.457	ppb	13.8	161.30	2.5	
Mn	55	89	He	1.072	ppb	15.4	127.98	1	PB 6020 Fails DoD
Fe	56	89	H2	28.111	ppb	25.4	15168.64	50	
Co	59	89	He	0.134	ppb	15.0	66.67	0.5	
Ni	60	89	He	-0.514	ppb	N/A	296.68	1	
Cu	63	89	He	1.894	ppb	5.4	623.37	1.5	PB 6020 Fails DoD
Zn	66	89	He	3.306	ppb	23.8	176.67	5	
As	75	89	He	0.506	ppb	22.4	17.67	2.5	
Se	78	89	H2	0.422	ppb	30.0	6.33	2.5	
Sr	88	89	He	0.239	ppb	57.2	42.22	2.5	
Mo	95	89	He	0.789	ppb	34.7	136.67	2.5	
Ag	107	89	He	0.016	ppb	57.5	25.56	0.5	
Cd	111	89	He	0.186	ppb	24.1	13.71	0.5	
Sn	118	159	He	0.939	ppb	12.2	206.68	2.5	
Sb	121	159	No Gas	0.063	ppb	44.2	106.79	0.5	
Ba	137	159	No Gas	0.300	ppb	7.4	160.18	1	
W	182	159	No Gas	0.098	ppb	45.0	160.18	2.5	
Tl	205	209	No Gas	0.021	ppb	13.0	160.18	0.5	
Pb	208	209	No Gas	0.206	ppb	9.3	774.21	0.5	
Th	232	209	No Gas	0.107	ppb	27.8	407.13	2.5	
U	238	209	No Gas	0.023	ppb	37.5	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562708.37	3.5	1483357.64	105.35	29.5	120.4	
Sc	45	No Gas	3426858.74	3.7	3141192.51	109.09	29.5	120.4	
Sc	45	H2	423208.83	1.4	418309.46	101.17	29.5	120.4	
Sc	45	He	85908.58	0.7	85440.95	100.55	29.5	120.4	
Ge	72	No Gas	756002.16	3.0	694668.88	108.83	29.5	120.4	
Ge	72	H2	158297.10	1.4	157206.79	100.69	29.5	120.4	
Ge	72	He	65520.74	0.2	64721.85	101.23	29.5	120.4	
Y	89	H2	2661227.62	0.8	2572670.23	103.44	29.5	120.4	
Y	89	He	574847.31	0.1	574051.42	100.14	29.5	120.4	
Tb	159	No Gas	7502371.00	3.3	6821698.44	109.98	29.5	120.4	
Tb	159	He	3034186.48	0.2	2982140.2	101.75	29.5	120.4	
Bi	209	No Gas	3862038.39	3.4	3547037.46	108.88	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF26IMW2
File Name	022LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:04:55 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	38.895	ppb	6.3	9277.72	50	15.56	79.5	120.4	6020□ DoD
B	11	6	No Gas	489.959	ppb	5.0	75775.01	500	19.6	79.5	120.4	
Na	23	45	He	8240.949	ppb	1.1	175753.30	7500	21.98	79.5	120.4	
Mg	24	45	He	5340.001	ppb	1.4	60816.00	5000	21.36	79.5	120.4	
Al	27	45	He	1515.315	ppb	2.0	6997.50	2000	15.15	79.5	120.4	6020□ DoD
Si	28	45	H2	988.428	ppb	6.3	9096.30	1000	19.77	0	200	
K	39	45	He	10632.925	ppb	1.0	123381.84	10000	21.27	79.5	120.4	
Ca	40	45	H2	2798.362	ppb	0.8	217382.19	2500	22.39	79.5	120.4	
V	51	89	He	408.574	ppb	0.5	66717.32	500	16.34	79.5	120.4	DoD
Cr	52	89	He	163.895	ppb	0.7	32914.08	200	16.39	79.5	120.4	DoD
Mn	55	89	He	404.942	ppb	0.9	38725.16	500	16.2	79.5	120.4	DoD
Fe	56	89	H2	902.497	ppb	0.7	281825.65	1000	18.05	79.5	120.4	
Co	59	89	He	416.576	ppb	0.5	140564.86	500	16.66	79.5	120.4	DoD
Ni	60	89	He	419.920	ppb	0.9	38584.05	500	16.8	79.5	120.4	DoD
Cu	63	89	He	208.137	ppb	1.1	54099.79	250	16.65	79.5	120.4	DoD
Zn	66	89	He	413.802	ppb	0.6	14362.29	500	16.55	79.5	120.4	DoD
As	75	89	He	108.779	ppb	2.0	3141.71	100	21.76	79.5	120.4	
Se	78	89	H2	106.903	ppb	3.6	1567.85	100	21.38	79.5	120.4	
Sr	88	89	He	507.563	ppb	1.0	76884.96	500	20.3	79.5	120.4	
Mo	95	89	He	106.261	ppb	2.1	17235.86	100	21.25	79.5	120.4	
Ag	107	89	He	40.694	ppb	1.6	22627.26	50	16.28	79.5	120.4	DoD
Cd	111	89	He	262.299	ppb	0.8	19198.90	250	20.98	79.5	120.4	
Sn	118	159	He	510.921	ppb	0.7	82059.19	500	20.44	79.5	120.4	
Sb	121	159	No Gas	103.605	ppb	4.3	128168.88	100	20.72	79.5	120.4	
Ba	137	159	No Gas	1566.788	ppb	4.1	765879.99	2000	15.67	79.5	120.4	6020□ DoD
W	182	159	No Gas	100.689	ppb	5.7	92717.49	100	20.14	79.5	120.4	
Tl	205	209	No Gas	104.429	ppb	5.0	206861.51	100	20.89	79.5	120.4	
[Pb]	206	209	No Gas	104.114	ppb	5.5	71700.10	100	20.82	79.5	120.4	
[Pb]	207	209	No Gas	106.103	ppb	4.8	63666.32	100	21.22	79.5	120.4	
Pb	208	209	No Gas	105.166	ppb	4.5	287417.74	100	21.03	79.5	120.4	
Th	232	209	No Gas	99.815	ppb	5.2	280400.25	100	19.96	79.5	120.4	
U	238	209	No Gas	100.638	ppb	6.3	263976.09	100	20.13	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1600048.95	1.8	1483357.64	107.87	29.5	120.4	
Sc	45	No Gas	3470176.51	1.6	3141192.51	110.47	29.5	120.4	
Sc	45	H2	423679.82	1.0	418309.46	101.28	29.5	120.4	
Sc	45	He	87072.14	0.7	85440.95	101.91	29.5	120.4	
Ge	72	No Gas	775902.97	1.8	694668.88	111.69	29.5	120.4	
Ge	72	H2	159147.55	1.5	157206.79	101.23	29.5	120.4	
Ge	72	He	66577.52	0.2	64721.85	102.87	29.5	120.4	
Y	89	H2	2679371.26	0.7	2572670.23	104.15	29.5	120.4	
Y	89	He	585431.47	0.2	574051.42	101.98	29.5	120.4	
Tb	159	No Gas	7573021.00	1.7	6821698.44	111.01	29.5	120.4	
Tb	159	He	3067482.98	0.3	2982140.2	102.86	29.5	120.4	
Bi	209	No Gas	3882074.20	2.3	3547037.46	109.45	29.5	120.4	

Sample Report

Sample Name SN5124-002

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:07:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.124	ppb	18.6	65.56	100	
11	B	6	No Gas	113.279	ppb	6.3	17492.24	1000	
23	Na	45	He	212653.052	ppb	1.5	4106232.34	200000	
24	Mg	45	He	15886.014	ppb	1.8	170920.54	200000	
27	Al	45	He	18.381	ppb	32.0	100.00	200000	
28	Si	45	H2	5826.514	ppb	2.2	48633.11	10000	
39	K	45	He	1559.700	ppb	2.2	26268.99	200000	
40	Ca	45	H2	52400.623	ppb	2.2	3847287.10	200000	
51	V	89	He	1.611	ppb	16.7	416.69	1000	
52	Cr	89	He	0.293	ppb	25.0	124.65	2000	
55	Mn	89	He	442.943	ppb	2.1	40195.62	2000	
56	Fe	89	H2	159.964	ppb	2.9	52991.97	100000	
59	Co	89	He	1.757	ppb	11.0	584.50	1000	
60	Ni	89	He	3.435	ppb	16.3	627.82	1000	
63	Cu	89	He	1.733	ppb	12.4	563.37	2000	
66	Zn	89	He	3.585	ppb	30.5	180.01	2000	
75	As	89	He	0.454	ppb	30.5	15.67	1000	
78	Se	89	H2	0.595	ppb	27.1	8.50	1000	
88	Sr	89	He	336.592	ppb	2.7	48384.71	2000	
95	Mo	89	He	0.499	ppb	47.7	87.78	1000	
107	Ag	89	He	0.020	ppb	62.5	26.67	100	
111	Cd	89	He	0.207	ppb	77.2	14.82	1000	
118	Sn	159	He	1.057	ppb	5.1	222.23	1000	
121	Sb	159	No Gas	0.136	ppb	21.3	196.89	1000	
137	Ba	159	No Gas	16.396	ppb	7.7	7991.34	2000	
182	W	159	No Gas	0.224	ppb	32.6	276.98	1000	
205	Tl	209	No Gas	0.042	ppb	101.4	200.23	1000	
208	Pb	209	No Gas	0.187	ppb	2.7	717.48	2000	
232	Th	209	No Gas	0.826	ppb	11.3	2402.92	1000	
238	U	209	No Gas	0.079	ppb	16.2	210.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1496223.31	3.4	1483357.64	100.87	29.5	120.4	
Sc	45	No Gas	3389818.92	4.0	3141192.51	107.92	29.5	120.4	
Sc	45	H2	402494.77	1.5	418309.46	96.22	29.5	120.4	
Sc	45	He	82831.00	1.0	85440.95	96.95	29.5	120.4	
Ge	72	No Gas	756048.82	2.9	694668.88	108.84	29.5	120.4	
Ge	72	H2	151208.54	0.8	157206.79	96.18	29.5	120.4	
Ge	72	He	63365.48	1.1	64721.85	97.9	29.5	120.4	
Y	89	H2	2560357.61	1.0	2572670.23	99.52	29.5	120.4	
Y	89	He	555667.36	1.3	574051.42	96.8	29.5	120.4	
Tb	159	No Gas	7544666.00	3.3	6821698.44	110.6	29.5	120.4	
Tb	159	He	2989196.38	1.6	2982140.2	100.24	29.5	120.4	
Bi	209	No Gas	3831262.17	3.4	3547037.46	108.01	29.5	120.4	

Sample Report

Sample Name SN5124-002L

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:10:13 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.321	ppb	59.7	52.23	100	
11	B	6	No Gas	129.479	ppb	6.9	5101.06	1000	
23	Na	45	He	225928.120	ppb	1.2	891354.27	200000	
24	Mg	45	He	16914.097	ppb	1.2	37379.73	200000	
27	Al	45	He	46.630	ppb	32.4	61.12	200000	
28	Si	45	H2	6025.291	ppb	1.8	10796.27	10000	
39	K	45	He	1595.952	ppb	1.2	14007.24	200000	
40	Ca	45	H2	54238.187	ppb	0.4	825432.68	200000	
51	V	89	He	4.511	ppb	31.0	314.46	1000	
52	Cr	89	He	0.447	ppb	80.4	87.99	2000	
55	Mn	89	He	466.434	ppb	1.7	8684.45	2000	
56	Fe	89	H2	188.761	ppb	3.1	17881.32	100000	
59	Co	89	He	1.258	ppb	4.7	104.46	1000	
60	Ni	89	He	-1.700	ppb	N/A	308.90	1000	
63	Cu	89	He	2.435	ppb	20.3	262.23	2000	
66	Zn	89	He	5.893	ppb	52.1	103.34	2000	
75	As	89	He	0.125	ppb	246.0	4.00	1000	
78	Se	89	H2	0.633	ppb	72.2	2.00	1000	
88	Sr	89	He	362.585	ppb	0.4	10673.42	2000	
95	Mo	89	He	0.603	ppb	46.0	30.00	1000	
107	Ag	89	He	-0.040	ppb	N/A	12.22	100	
111	Cd	89	He	0.183	ppb	89.6	2.96	1000	
118	Sn	159	He	0.827	ppb	59.0	83.33	1000	
121	Sb	159	No Gas	0.219	ppb	28.8	83.43	1000	
137	Ba	159	No Gas	16.653	ppb	9.2	1631.92	2000	
182	W	159	No Gas	0.373	ppb	118.3	136.82	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.218	ppb	26.4	337.05	2000	
232	Th	209	No Gas	0.041	ppb	200.4	133.48	1000	
238	U	209	No Gas	0.081	ppb	23.2	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1488483.13	2.0	1483357.64	100.35	29.5	120.4	
Sc	45	No Gas	3366188.70	3.4	3141192.51	107.16	29.5	120.4	
Sc	45	H2	416625.78	0.7	418309.46	99.6	29.5	120.4	
Sc	45	He	83981.65	1.0	85440.95	98.29	29.5	120.4	
Ge	72	No Gas	751611.50	3.2	694668.88	108.2	29.5	120.4	
Ge	72	H2	157080.72	0.6	157206.79	99.92	29.5	120.4	
Ge	72	He	64851.64	0.8	64721.85	100.2	29.5	120.4	
Y	89	H2	2631164.98	0.6	2572670.23	102.27	29.5	120.4	
Y	89	He	568536.61	0.4	574051.42	99.04	29.5	120.4	
Tb	159	No Gas	7534632.11	3.5	6821698.44	110.45	29.5	120.4	
Tb	159	He	3013423.95	0.1	2982140.2	101.05	29.5	120.4	
Bi	209	No Gas	3902031.19	3.4	3547037.46	110.01	29.5	120.4	

Sample Report

Sample Name SN5124-002A

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:12:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.732	ppb	12.8	2245.81	100	
11	B	6	No Gas	330.979	ppb	8.4	44881.78	1000	
23	Na	45	He	230184.631	ppb	0.8	4380547.63	200000	
24	Mg	45	He	17454.650	ppb	0.3	185064.82	200000	
27	Al	45	He	945.966	ppb	1.1	4102.96	200000	
28	Si	45	H2	10881.110	ppb	2.9	88776.11	10000	
39	K	45	He	11756.971	ppb	0.2	126809.79	200000	
40	Ca	45	H2	54866.307	ppb	1.0	3954952.30	200000	
51	V	89	He	55.177	ppb	2.6	8558.44	1000	
52	Cr	89	He	53.474	ppb	0.4	10076.45	2000	
55	Mn	89	He	480.569	ppb	0.7	42921.08	2000	
56	Fe	89	H2	1240.251	ppb	0.7	362501.19	100000	
59	Co	89	He	12.373	ppb	4.8	3920.84	1000	
60	Ni	89	He	25.510	ppb	5.1	2495.87	1000	
63	Cu	89	He	33.194	ppb	3.0	8172.67	2000	
66	Zn	89	He	112.949	ppb	2.9	3706.18	2000	
75	As	89	He	54.824	ppb	2.7	1480.58	1000	
78	Se	89	H2	52.948	ppb	3.6	731.66	1000	
88	Sr	89	He	401.114	ppb	0.6	56753.36	2000	
95	Mo	89	He	54.272	ppb	2.4	8228.33	1000	
107	Ag	89	He	10.785	ppb	4.8	5613.57	100	
111	Cd	89	He	11.014	ppb	2.7	753.36	1000	
118	Sn	159	He	50.907	ppb	1.8	7945.93	1000	
121	Sb	159	No Gas	11.236	ppb	10.4	12857.14	1000	
137	Ba	159	No Gas	39.068	ppb	12.4	17628.04	2000	
182	W	159	No Gas	54.666	ppb	11.9	46491.84	1000	
205	Tl	209	No Gas	11.241	ppb	12.2	20589.76	1000	
208	Pb	209	No Gas	11.225	ppb	11.2	28407.55	2000	
232	Th	209	No Gas	11.183	ppb	10.2	29029.71	1000	
238	U	209	No Gas	11.375	ppb	13.4	27447.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1391595.30	4.4	1483357.64	93.81	29.5	120.4	
Sc	45	No Gas	3091260.66	7.2	3141192.51	98.41	29.5	120.4	
Sc	45	H2	395090.49	0.6	418309.46	94.45	29.5	120.4	
Sc	45	He	81641.19	0.5	85440.95	95.55	29.5	120.4	
Ge	72	No Gas	692612.33	5.5	694668.88	99.7	29.5	120.4	
Ge	72	H2	149091.57	1.5	157206.79	94.84	29.5	120.4	
Ge	72	He	62069.45	0.2	64721.85	95.9	29.5	120.4	
Y	89	H2	2524125.65	0.4	2572670.23	98.11	29.5	120.4	
Y	89	He	546821.35	0.5	574051.42	95.26	29.5	120.4	
Tb	159	No Gas	7021451.70	6.8	6821698.44	102.93	29.5	120.4	
Tb	159	He	2961970.79	0.3	2982140.2	99.32	29.5	120.4	
Bi	209	No Gas	3587103.36	6.5	3547037.46	101.13	29.5	120.4	

Sample Report

Sample Name SN5014-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:15:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	133.5	47.78	100	
11	B	6	No Gas	54.688	ppb	2.8	9022.00	1000	
23	Na	45	He	131622.315	ppb	1.2	2508685.10	200000	
24	Mg	45	He	8222.772	ppb	0.2	87503.91	200000	
27	Al	45	He	8.947	ppb	35.9	57.78	200000	
28	Si	45	H2	3010.401	ppb	1.0	25270.25	10000	
39	K	45	He	2641.041	ppb	1.7	36598.75	200000	
40	Ca	45	H2	31760.035	ppb	1.6	2324679.69	200000	
51	V	89	He	2.677	ppb	9.3	576.70	1000	
52	Cr	89	He	0.334	ppb	15.0	131.31	2000	
55	Mn	89	He	539.690	ppb	0.5	48566.74	2000	
56	Fe	89	H2	423.047	ppb	1.8	129688.87	100000	
59	Co	89	He	2.529	ppb	14.0	824.53	1000	
60	Ni	89	He	1.820	ppb	30.3	484.47	1000	
63	Cu	89	He	1.412	ppb	8.3	480.03	2000	
66	Zn	89	He	6.089	ppb	20.8	260.01	2000	
75	As	89	He	1.244	ppb	24.9	37.00	1000	
78	Se	89	H2	0.369	ppb	44.0	5.33	1000	
88	Sr	89	He	165.077	ppb	1.6	23540.88	2000	
95	Mo	89	He	0.499	ppb	32.2	86.67	1000	
107	Ag	89	He	0.005	ppb	129.5	18.89	100	
111	Cd	89	He	0.059	ppb	47.7	4.44	1000	
118	Sn	159	He	0.711	ppb	17.6	167.79	1000	
121	Sb	159	No Gas	0.085	ppb	61.8	133.48	1000	
137	Ba	159	No Gas	18.915	ppb	4.2	9126.60	2000	
182	W	159	No Gas	0.121	ppb	47.1	180.21	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.113	ppb	31.2	517.25	2000	
232	Th	209	No Gas	0.108	ppb	29.6	407.13	1000	
238	U	209	No Gas	0.055	ppb	9.5	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465918.37	2.1	1483357.64	98.82	29.5	120.4	
Sc	45	No Gas	3253281.84	2.9	3141192.51	103.57	29.5	120.4	
Sc	45	H2	401146.05	1.6	418309.46	95.9	29.5	120.4	
Sc	45	He	81651.32	0.4	85440.95	95.56	29.5	120.4	
Ge	72	No Gas	731819.54	3.1	694668.88	105.35	29.5	120.4	
Ge	72	H2	150214.21	0.8	157206.79	95.55	29.5	120.4	
Ge	72	He	63154.26	0.3	64721.85	97.58	29.5	120.4	
Y	89	H2	2561371.99	0.6	2572670.23	99.56	29.5	120.4	
Y	89	He	551011.08	0.6	574051.42	95.99	29.5	120.4	
Tb	159	No Gas	7463705.72	2.8	6821698.44	109.41	29.5	120.4	
Tb	159	He	2985454.95	0.6	2982140.2	100.11	29.5	120.4	
Bi	209	No Gas	3826044.95	2.8	3547037.46	107.87	29.5	120.4	

Sample Report

Sample Name SN5014-002L

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:18:12 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	999.4	40.00	100	
11	B	6	No Gas	71.322	ppb	9.0	3508.32	1000	
23	Na	45	He	141993.543	ppb	0.4	563741.31	200000	
24	Mg	45	He	8602.027	ppb	0.5	19321.02	200000	
27	Al	45	He	22.866	ppb	50.1	40.00	200000	
28	Si	45	H2	3327.541	ppb	5.2	6068.01	10000	
39	K	45	He	2764.505	ppb	3.2	16397.02	200000	
40	Ca	45	H2	34002.487	ppb	0.9	508605.87	200000	
51	V	89	He	7.240	ppb	5.1	400.02	1000	
52	Cr	89	He	0.451	ppb	20.6	87.99	2000	
55	Mn	89	He	570.010	ppb	1.2	10588.05	2000	
56	Fe	89	H2	450.184	ppb	1.0	33172.55	100000	
59	Co	89	He	3.368	ppb	25.7	242.24	1000	
60	Ni	89	He	-3.051	ppb	N/A	284.46	1000	
63	Cu	89	He	2.090	ppb	29.2	244.46	2000	
66	Zn	89	He	8.898	ppb	4.7	123.34	2000	
75	As	89	He	1.738	ppb	54.9	13.00	1000	
78	Se	89	H2	0.291	ppb	60.2	1.00	1000	
88	Sr	89	He	165.817	ppb	4.3	4875.49	2000	
95	Mo	89	He	0.747	ppb	50.6	34.44	1000	
107	Ag	89	He	-0.060	ppb	N/A	10.00	100	
111	Cd	89	He	0.053	ppb	149.8	1.11	1000	
118	Sn	159	He	0.987	ppb	59.9	88.90	1000	
121	Sb	159	No Gas	0.182	ppb	82.5	73.41	1000	
137	Ba	159	No Gas	19.764	ppb	5.2	1922.29	2000	
182	W	159	No Gas	0.078	ppb	259.8	83.43	1000	
205	Tl	209	No Gas	-0.168	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	0.180	ppb	40.1	313.68	2000	
232	Th	209	No Gas	0.001	ppb	6932.4	110.13	1000	
238	U	209	No Gas	0.037	ppb	80.8	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1508599.55	2.4	1483357.64	101.7	29.5	120.4	
Sc	45	No Gas	3327368.79	2.8	3141192.51	105.93	29.5	120.4	
Sc	45	H2	409159.92	0.5	418309.46	97.81	29.5	120.4	
Sc	45	He	84032.82	0.4	85440.95	98.35	29.5	120.4	
Ge	72	No Gas	739632.75	2.9	694668.88	106.47	29.5	120.4	
Ge	72	H2	156460.76	1.0	157206.79	99.53	29.5	120.4	
Ge	72	He	64949.19	0.2	64721.85	100.35	29.5	120.4	
Y	89	H2	2602890.56	0.2	2572670.23	101.17	29.5	120.4	
Y	89	He	567530.05	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7481093.22	3.0	6821698.44	109.67	29.5	120.4	
Tb	159	He	3030525.02	0.4	2982140.2	101.62	29.5	120.4	
Bi	209	No Gas	3881873.01	3.6	3547037.46	109.44	29.5	120.4	

Sample Report

Sample Name SN5014-002A

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:20:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.855	ppb	4.3	2383.61	100	
11	B	6	No Gas	260.792	ppb	0.8	37378.15	1000	
23	Na	45	He	151228.456	ppb	1.4	2856259.65	200000	
24	Mg	45	He	9827.989	ppb	1.6	103568.64	200000	
27	Al	45	He	963.878	ppb	0.5	4145.21	200000	
28	Si	45	H2	8270.520	ppb	2.0	67312.64	10000	
39	K	45	He	13077.225	ppb	2.2	138679.94	200000	
40	Ca	45	H2	35157.349	ppb	1.4	2524520.61	200000	
51	V	89	He	56.848	ppb	1.7	8785.27	1000	
52	Cr	89	He	53.514	ppb	2.1	10052.46	2000	
55	Mn	89	He	601.185	ppb	2.1	53517.75	2000	
56	Fe	89	H2	1536.983	ppb	1.3	444574.53	100000	
59	Co	89	He	14.101	ppb	7.8	4449.92	1000	
60	Ni	89	He	24.781	ppb	3.4	2425.85	1000	
63	Cu	89	He	33.982	ppb	2.7	8336.13	2000	
66	Zn	89	He	115.148	ppb	5.3	3765.08	2000	
75	As	89	He	54.242	ppb	2.2	1460.24	1000	
78	Se	89	H2	52.026	ppb	1.4	713.99	1000	
88	Sr	89	He	227.691	ppb	3.0	32116.15	2000	
95	Mo	89	He	53.517	ppb	2.2	8088.24	1000	
107	Ag	89	He	10.893	ppb	2.3	5652.49	100	
111	Cd	89	He	11.141	ppb	0.6	759.66	1000	
118	Sn	159	He	50.469	ppb	5.3	7901.49	1000	
121	Sb	159	No Gas	10.723	ppb	1.8	12787.00	1000	
137	Ba	159	No Gas	41.439	ppb	0.3	19499.40	2000	
182	W	159	No Gas	52.524	ppb	1.6	46571.95	1000	
205	Tl	209	No Gas	10.801	ppb	2.6	20810.33	1000	
208	Pb	209	No Gas	10.863	ppb	1.2	28918.74	2000	
232	Th	209	No Gas	10.624	ppb	1.9	28978.97	1000	
238	U	209	No Gas	10.893	ppb	2.0	27668.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455655.86	1.2	1483357.64	98.13	29.5	120.4	
Sc	45	No Gas	3183534.86	1.4	3141192.51	101.35	29.5	120.4	
Sc	45	H2	393544.60	1.0	418309.46	94.08	29.5	120.4	
Sc	45	He	80951.33	1.0	85440.95	94.75	29.5	120.4	
Ge	72	No Gas	717928.14	0.9	694668.88	103.35	29.5	120.4	
Ge	72	H2	149191.35	0.6	157206.79	94.9	29.5	120.4	
Ge	72	He	62498.53	0.5	64721.85	96.56	29.5	120.4	
Y	89	H2	2506593.95	0.8	2572670.23	97.43	29.5	120.4	
Y	89	He	545140.63	0.6	574051.42	94.96	29.5	120.4	
Tb	159	No Gas	7281450.59	1.4	6821698.44	106.74	29.5	120.4	
Tb	159	He	2971532.94	0.7	2982140.2	99.64	29.5	120.4	
Bi	209	No Gas	3754206.16	1.2	3547037.46	105.84	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:23:30 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.376	ppb	4.9	26625.20	25	97.5	89.8	110.2	
11	B	6	No Gas	24.562	ppb	6.7	18512.37	25	98.25	89.8	110.2	
23	Na	45	He	5086.074	ppb	0.2	495526.71	5000	101.72	89.8	110.2	
24	Mg	45	He	4923.787	ppb	0.1	263015.04	5000	98.48	89.8	110.2	
27	Al	45	He	468.679	ppb	0.6	10222.87	500	93.74	89.8	110.2	
28	Si	45	H2	467.151	ppb	2.7	19732.15	500	93.43	89.8	110.2	
39	K	45	He	4803.624	ppb	0.7	250273.75	5000	96.07	89.8	110.2	
40	Ca	45	H2	4911.474	ppb	1.0	1799805.51	5000	98.23	89.8	110.2	
51	V	89	He	24.472	ppb	1.6	19148.05	25	97.89	89.8	110.2	
52	Cr	89	He	24.520	ppb	0.2	23466.48	25	98.08	89.8	110.2	
55	Mn	89	He	24.727	ppb	1.1	11278.48	25	98.91	89.8	110.2	
56	Fe	89	H2	4893.385	ppb	1.4	7144235.70	5000	97.87	89.8	110.2	
59	Co	89	He	25.216	ppb	1.0	40532.06	25	100.86	89.8	110.2	
60	Ni	89	He	24.933	ppb	1.8	11142.58	25	99.73	89.8	110.2	
63	Cu	89	He	24.771	ppb	0.9	30715.62	25	99.08	89.8	110.2	
66	Zn	89	He	24.920	ppb	5.1	4161.88	25	99.68	89.8	110.2	
75	As	89	He	24.538	ppb	2.1	3374.11	25	98.15	89.8	110.2	
78	Se	89	H2	24.426	ppb	1.0	1714.53	25	97.7	89.8	110.2	
88	Sr	89	He	23.518	ppb	0.9	16968.79	25	94.07	89.8	110.2	
95	Mo	89	He	25.296	ppb	1.7	19535.62	25	101.18	89.8	110.2	
107	Ag	89	He	25.051	ppb	0.1	66298.90	25	100.2	89.8	110.2	
111	Cd	89	He	24.324	ppb	0.3	8478.29	25	97.3	89.8	110.2	
118	Sn	159	He	23.575	ppb	1.6	18661.25	25	94.3	89.8	110.2	
121	Sb	159	No Gas	23.660	ppb	7.5	144143.92	25	94.64	89.8	110.2	
137	Ba	159	No Gas	23.686	ppb	6.9	57041.62	25	94.74	89.8	110.2	
182	W	159	No Gas	23.465	ppb	6.8	106437.59	25	93.86	89.8	110.2	
205	Tl	209	No Gas	23.898	ppb	6.0	234792.98	25	95.59	89.8	110.2	
208	Pb	209	No Gas	24.109	ppb	6.6	326726.53	25	96.44	89.8	110.2	
232	Th	209	No Gas	23.430	ppb	7.6	326343.21	25	93.72	89.8	110.2	
238	U	209	No Gas	23.997	ppb	7.6	312172.91	25	95.99	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470459.81	3.7	1483357.64	99.13	29.5	120.4	
Sc	45	No Gas	3264973.38	3.5	3141192.51	103.94	29.5	120.4	
Sc	45	H2	401584.48	0.7	418309.46	96	29.5	120.4	
Sc	45	He	82340.75	0.8	85440.95	96.37	29.5	120.4	
Ge	72	No Gas	729974.99	3.2	694668.88	105.08	29.5	120.4	
Ge	72	H2	150071.46	2.0	157206.79	95.46	29.5	120.4	
Ge	72	He	63502.49	0.4	64721.85	98.12	29.5	120.4	
Y	89	H2	2564298.03	1.1	2572670.23	99.67	29.5	120.4	
Y	89	He	557564.15	0.4	574051.42	97.13	29.5	120.4	
Tb	159	No Gas	7468926.35	3.5	6821698.44	109.49	29.5	120.4	
Tb	159	He	3016463.29	0.1	2982140.2	101.15	29.5	120.4	
Bi	209	No Gas	3853138.73	3.1	3547037.46	108.63	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:26:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	8.7	90.00	0.2	
11	B	6	No Gas	0.955	ppb	7.8	2179.13	4	
23	Na	45	He	5.411	ppb	89.5	9186.41	200	
24	Mg	45	He	2.573	ppb	65.4	757.85	20	
27	Al	45	He	-0.249	ppb	N/A	14.44	20	
28	Si	45	H2	-0.020	ppb	N/A	480.55	100	
39	K	45	He	-2.925	ppb	N/A	10799.21	200	
40	Ca	45	H2	1.163	ppb	9.2	1539.03	20	
51	V	89	He	0.093	ppb	8.7	246.68	1	
52	Cr	89	He	0.003	ppb	325.8	73.99	1	
55	Mn	89	He	0.003	ppb	1210.2	28.66	0.4	
56	Fe	89	H2	1.251	ppb	20.6	8428.60	20	
59	Co	89	He	0.000	ppb	9781.3	22.22	0.2	
60	Ni	89	He	-0.289	ppb	N/A	212.23	0.4	Failed DoD
63	Cu	89	He	0.035	ppb	43.3	185.56	0.6	
66	Zn	89	He	0.106	ppb	96.1	82.23	2	
75	As	89	He	0.026	ppb	106.9	7.00	1	
78	Se	89	H2	0.065	ppb	16.4	4.83	1	
88	Sr	89	He	0.005	ppb	199.7	10.00	1	
95	Mo	89	He	0.084	ppb	38.7	77.78	1	
107	Ag	89	He	0.001	ppb	201.0	20.00	0.2	
111	Cd	89	He	0.004	ppb	86.6	1.85	0.2	
118	Sn	159	He	0.028	ppb	102.9	80.01	1	
121	Sb	159	No Gas	0.031	ppb	15.6	216.91	0.2	
137	Ba	159	No Gas	0.019	ppb	80.5	60.07	0.4	
182	W	159	No Gas	0.061	ppb	22.0	347.06	1	
205	Tl	209	No Gas	0.013	ppb	24.7	250.28	0.2	
208	Pb	209	No Gas	0.019	ppb	30.4	477.20	0.2	
232	Th	209	No Gas	0.048	ppb	10.4	780.90	1	
238	U	209	No Gas	0.018	ppb	29.8	243.61	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525208.28	1.7	1483357.64	102.82	29.5	120.4	
Sc	45	No Gas	3352657.80	2.6	3141192.51	106.73	29.5	120.4	
Sc	45	H2	416582.72	0.6	418309.46	99.59	29.5	120.4	
Sc	45	He	85478.49	1.0	85440.95	100.04	29.5	120.4	
Ge	72	No Gas	740152.82	2.6	694668.88	106.55	29.5	120.4	
Ge	72	H2	157299.41	1.0	157206.79	100.06	29.5	120.4	
Ge	72	He	65245.14	0.7	64721.85	100.81	29.5	120.4	
Y	89	H2	2623830.54	0.7	2572670.23	101.99	29.5	120.4	
Y	89	He	571782.93	1.5	574051.42	99.6	29.5	120.4	
Tb	159	No Gas	7469585.44	3.1	6821698.44	109.5	29.5	120.4	
Tb	159	He	3025691.76	0.9	2982140.2	101.46	29.5	120.4	
Bi	209	No Gas	3881647.16	3.3	3547037.46	109.43	29.5	120.4	

Sample Report

Sample Name SN5014-002S

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:28:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.325	ppb	3.1	11402.63	100	
11	B	6	No Gas	555.951	ppb	5.3	79927.98	1000	
23	Na	45	He	141739.851	ppb	1.5	2729954.54	200000	
24	Mg	45	He	13552.257	ppb	1.9	145375.46	200000	
27	Al	45	He	1932.853	ppb	3.4	8452.79	200000	
28	Si	45	H2	4219.673	ppb	0.6	34844.64	10000	
39	K	45	He	13225.211	ppb	1.9	142871.41	200000	
40	Ca	45	H2	35516.127	ppb	1.3	2570493.54	200000	
51	V	89	He	535.692	ppb	0.7	82562.97	1000	
52	Cr	89	He	212.012	ppb	0.9	40191.49	2000	
55	Mn	89	He	1090.647	ppb	1.0	98460.07	2000	
56	Fe	89	H2	1536.466	ppb	1.4	449467.75	100000	
59	Co	89	He	546.683	ppb	0.8	174210.54	1000	
60	Ni	89	He	548.640	ppb	1.3	47509.16	1000	
63	Cu	89	He	269.459	ppb	1.0	66108.10	2000	
66	Zn	89	He	546.468	ppb	3.2	17891.98	2000	
75	As	89	He	111.929	ppb	3.3	3053.00	1000	
78	Se	89	H2	106.422	ppb	4.0	1476.51	1000	
88	Sr	89	He	688.979	ppb	0.6	98563.86	2000	
95	Mo	89	He	111.111	ppb	1.1	17021.15	1000	
107	Ag	89	He	54.302	ppb	1.6	28510.67	100	
111	Cd	89	He	271.975	ppb	2.1	18800.17	1000	
118	Sn	159	He	518.952	ppb	1.0	81645.76	1000	
121	Sb	159	No Gas	105.532	ppb	3.9	127310.05	1000	
137	Ba	159	No Gas	2030.708	ppb	4.1	967960.89	2000	
182	W	159	No Gas	105.657	ppb	4.7	94878.17	1000	
205	Tl	209	No Gas	105.239	ppb	4.1	204051.84	1000	
208	Pb	209	No Gas	106.644	ppb	5.1	285230.34	2000	
232	Th	209	No Gas	104.088	ppb	5.3	286161.88	1000	
238	U	209	No Gas	104.934	ppb	5.4	269422.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1491556.97	2.6	1483357.64	100.55	29.5	120.4	
Sc	45	No Gas	3243843.62	2.2	3141192.51	103.27	29.5	120.4	
Sc	45	H2	396681.13	1.4	418309.46	94.83	29.5	120.4	
Sc	45	He	82540.90	1.6	85440.95	96.61	29.5	120.4	
Ge	72	No Gas	729004.30	1.5	694668.88	104.94	29.5	120.4	
Ge	72	H2	149228.81	0.4	157206.79	94.93	29.5	120.4	
Ge	72	He	63390.88	0.4	64721.85	97.94	29.5	120.4	
Y	89	H2	2535125.76	1.1	2572670.23	98.54	29.5	120.4	
Y	89	He	552911.61	0.4	574051.42	96.32	29.5	120.4	
Tb	159	No Gas	7385443.43	2.0	6821698.44	108.26	29.5	120.4	
Tb	159	He	3004838.57	0.7	2982140.2	100.76	29.5	120.4	
Bi	209	No Gas	3799337.43	2.1	3547037.46	107.11	29.5	120.4	

Sample Report

Sample Name SN5014-002P

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:31:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.407	ppb	7.6	11982.02	100	
11	B	6	No Gas	582.863	ppb	6.9	84605.72	1000	
23	Na	45	He	149277.944	ppb	0.4	2911820.93	200000	
24	Mg	45	He	14136.782	ppb	1.2	153578.66	200000	
27	Al	45	He	1982.803	ppb	2.0	8785.23	200000	
28	Si	45	H2	4313.389	ppb	1.5	36182.39	10000	
39	K	45	He	13883.961	ppb	0.8	151394.73	200000	
40	Ca	45	H2	37485.540	ppb	1.0	2756171.77	200000	
51	V	89	He	559.041	ppb	0.7	86760.32	1000	
52	Cr	89	He	224.920	ppb	0.3	42935.63	2000	
55	Mn	89	He	1140.000	ppb	0.9	103636.87	2000	
56	Fe	89	H2	1600.221	ppb	1.0	475028.56	100000	
59	Co	89	He	574.232	ppb	0.5	184283.58	1000	
60	Ni	89	He	568.701	ppb	0.3	49581.83	1000	
63	Cu	89	He	279.963	ppb	1.3	69162.63	2000	
66	Zn	89	He	571.395	ppb	1.8	18837.71	2000	
75	As	89	He	116.596	ppb	1.2	3202.72	1000	
78	Se	89	H2	111.259	ppb	1.4	1567.52	1000	
88	Sr	89	He	719.787	ppb	0.8	103700.63	2000	
95	Mo	89	He	117.208	ppb	2.1	18080.28	1000	
107	Ag	89	He	56.967	ppb	0.4	30120.88	100	
111	Cd	89	He	281.095	ppb	1.0	19569.02	1000	
118	Sn	159	He	543.637	ppb	0.1	85670.50	1000	
121	Sb	159	No Gas	108.063	ppb	6.9	132938.07	1000	
137	Ba	159	No Gas	2086.891	ppb	7.5	1014241.73	2000	
182	W	159	No Gas	107.360	ppb	7.8	98298.45	1000	
205	Tl	209	No Gas	110.651	ppb	6.5	216555.18	1000	
208	Pb	209	No Gas	110.153	ppb	6.5	297415.54	2000	
232	Th	209	No Gas	108.426	ppb	7.2	300875.92	1000	
238	U	209	No Gas	108.381	ppb	7.9	280832.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1507718.12	2.7	1483357.64	101.64	29.5	120.4	
Sc	45	No Gas	3303998.23	4.2	3141192.51	105.18	29.5	120.4	
Sc	45	H2	402994.08	1.6	418309.46	96.34	29.5	120.4	
Sc	45	He	83593.52	0.6	85440.95	97.84	29.5	120.4	
Ge	72	No Gas	740133.13	4.0	694668.88	106.54	29.5	120.4	
Ge	72	H2	151892.24	1.2	157206.79	96.62	29.5	120.4	
Ge	72	He	63504.66	0.5	64721.85	98.12	29.5	120.4	
Y	89	H2	2573955.79	1.5	2572670.23	100.05	29.5	120.4	
Y	89	He	556814.26	0.8	574051.42	97	29.5	120.4	
Tb	159	No Gas	7540987.81	4.0	6821698.44	110.54	29.5	120.4	
Tb	159	He	3009837.24	0.4	2982140.2	100.93	29.5	120.4	
Bi	209	No Gas	3839189.73	3.9	3547037.46	108.24	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:33:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	53.5	68.89	100	
11	B	6	No Gas	22.690	ppb	5.1	17223.03	1000	
23	Na	45	He	43092.060	ppb	0.3	4251486.02	200000	
24	Mg	45	He	7518.450	ppb	0.4	412497.63	200000	
27	Al	45	He	1.543	ppb	48.4	54.45	200000	
28	Si	45	H2	6936.471	ppb	4.7	298214.06	10000	
39	K	45	He	5011.609	ppb	0.4	267933.84	200000	
40	Ca	45	H2	58763.566	ppb	4.9	22394609.11	200000	
51	V	89	He	0.101	ppb	84.9	250.01	1000	
52	Cr	89	He	0.090	ppb	15.4	157.30	2000	
55	Mn	89	He	0.914	ppb	7.3	448.59	2000	
56	Fe	89	H2	44.861	ppb	4.7	74077.02	100000	
59	Co	89	He	0.097	ppb	30.5	180.01	1000	
60	Ni	89	He	18.520	ppb	1.8	8469.51	1000	
63	Cu	89	He	233.196	ppb	1.1	291709.31	2000	
66	Zn	89	He	166.811	ppb	0.7	27860.82	2000	
75	As	89	He	0.674	ppb	8.7	97.01	1000	
78	Se	89	H2	0.058	ppb	16.7	4.33	1000	
88	Sr	89	He	211.879	ppb	1.3	154798.81	2000	
95	Mo	89	He	0.077	ppb	29.5	71.11	1000	
107	Ag	89	He	0.115	ppb	1.5	324.46	100	
111	Cd	89	He	0.058	ppb	38.4	20.74	1000	
118	Sn	159	He	0.247	ppb	33.0	254.46	1000	
121	Sb	159	No Gas	0.738	ppb	11.0	4595.91	1000	
137	Ba	159	No Gas	2.914	ppb	7.5	7149.91	2000	
182	W	159	No Gas	0.094	ppb	24.9	503.91	1000	
205	Tl	209	No Gas	0.019	ppb	19.6	307.01	1000	
208	Pb	209	No Gas	2.882	ppb	6.8	39284.55	2000	
232	Th	209	No Gas	0.131	ppb	7.3	1932.32	1000	
238	U	209	No Gas	0.374	ppb	7.5	4879.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470646.44	3.1	1483357.64	99.14	29.5	120.4	
Sc	45	No Gas	3378198.26	4.1	3141192.51	107.55	29.5	120.4	
Sc	45	H2	418428.84	4.5	418309.46	100.03	29.5	120.4	
Sc	45	He	84637.25	0.8	85440.95	99.06	29.5	120.4	
Ge	72	No Gas	743519.83	3.2	694668.88	107.03	29.5	120.4	
Ge	72	H2	153306.53	1.9	157206.79	97.52	29.5	120.4	
Ge	72	He	64379.45	0.8	64721.85	99.47	29.5	120.4	
Y	89	H2	2646363.01	3.9	2572670.23	102.86	29.5	120.4	
Y	89	He	564765.30	1.2	574051.42	98.38	29.5	120.4	
Tb	159	No Gas	7598684.19	3.9	6821698.44	111.39	29.5	120.4	
Tb	159	He	3041324.36	1.0	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3858279.84	4.2	3547037.46	108.77	29.5	120.4	

Sample Report

Sample Name SN5980-002

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:36:38 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	88.8	47.78	100	
11	B	6	No Gas	21.085	ppb	3.4	16388.72	1000	
23	Na	45	He	43651.777	ppb	4.0	4380044.63	200000	
24	Mg	45	He	7581.949	ppb	4.6	423019.82	200000	
27	Al	45	He	3.541	ppb	14.9	101.11	200000	
28	Si	45	H2	7050.298	ppb	3.0	303301.31	10000	
39	K	45	He	5069.146	ppb	4.5	275482.41	200000	
40	Ca	45	H2	60001.301	ppb	2.7	22882821.88	200000	
51	V	89	He	0.098	ppb	26.1	251.12	1000	
52	Cr	89	He	0.046	ppb	33.0	115.98	2000	
55	Mn	89	He	0.707	ppb	18.6	357.28	2000	
56	Fe	89	H2	21.844	ppb	4.1	39562.80	100000	
59	Co	89	He	0.056	ppb	37.6	115.57	1000	
60	Ni	89	He	2.193	ppb	11.8	1316.78	1000	
63	Cu	89	He	106.107	ppb	4.9	134636.84	2000	
66	Zn	89	He	50.300	ppb	2.9	8565.11	2000	
75	As	89	He	0.726	ppb	11.2	105.68	1000	
78	Se	89	H2	0.041	ppb	41.8	3.17	1000	
88	Sr	89	He	213.597	ppb	4.4	158212.46	2000	
95	Mo	89	He	0.053	ppb	60.9	53.34	1000	
107	Ag	89	He	0.014	ppb	14.1	54.45	100	
111	Cd	89	He	0.013	ppb	66.1	4.81	1000	
118	Sn	159	He	0.151	ppb	24.4	178.90	1000	
121	Sb	159	No Gas	0.703	ppb	5.3	4345.56	1000	
137	Ba	159	No Gas	2.734	ppb	2.0	6659.13	2000	
182	W	159	No Gas	0.050	ppb	13.3	297.00	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.158	ppb	3.7	15831.60	2000	
232	Th	209	No Gas	0.028	ppb	11.4	490.56	1000	
238	U	209	No Gas	0.353	ppb	2.0	4579.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1495463.89	1.7	1483357.64	100.82	29.5	120.4	
Sc	45	No Gas	3355479.42	1.7	3141192.51	106.82	29.5	120.4	
Sc	45	H2	418238.82	1.4	418309.46	99.98	29.5	120.4	
Sc	45	He	86155.77	3.3	85440.95	100.84	29.5	120.4	
Ge	72	No Gas	738161.15	1.8	694668.88	106.26	29.5	120.4	
Ge	72	H2	157301.50	0.9	157206.79	100.06	29.5	120.4	
Ge	72	He	65525.42	1.2	64721.85	101.24	29.5	120.4	
Y	89	H2	2651103.25	1.2	2572670.23	103.05	29.5	120.4	
Y	89	He	573090.07	3.2	574051.42	99.83	29.5	120.4	
Tb	159	No Gas	7523896.48	1.8	6821698.44	110.29	29.5	120.4	
Tb	159	He	3064004.05	2.9	2982140.2	102.75	29.5	120.4	
Bi	209	No Gas	3833975.69	2.0	3547037.46	108.09	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:39:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	56.1	46.67	100	
11	B	6	No Gas	21.176	ppb	4.0	16929.35	1000	
23	Na	45	He	43600.737	ppb	3.7	4364631.98	200000	
24	Mg	45	He	7672.674	ppb	3.7	427119.26	200000	
27	Al	45	He	1.652	ppb	15.3	57.78	200000	
28	Si	45	H2	7034.852	ppb	1.1	309042.87	10000	
39	K	45	He	5091.673	ppb	3.6	276037.69	200000	
40	Ca	45	H2	59529.040	ppb	0.4	23182481.88	200000	
51	V	89	He	0.134	ppb	33.8	280.01	1000	
52	Cr	89	He	0.013	ppb	66.7	83.98	2000	
55	Mn	89	He	0.355	ppb	4.5	192.64	2000	
56	Fe	89	H2	5.214	ppb	4.2	14800.95	100000	
59	Co	89	He	0.022	ppb	87.3	57.78	1000	
60	Ni	89	He	2.812	ppb	12.2	1587.93	1000	
63	Cu	89	He	142.932	ppb	3.3	180929.82	2000	
66	Zn	89	He	96.473	ppb	3.8	16325.66	2000	
75	As	89	He	0.686	ppb	13.5	99.68	1000	
78	Se	89	H2	0.031	ppb	20.7	2.50	1000	
88	Sr	89	He	215.335	ppb	2.6	159167.96	2000	
95	Mo	89	He	0.049	ppb	36.2	50.00	1000	
107	Ag	89	He	0.023	ppb	36.4	80.00	100	
111	Cd	89	He	0.030	ppb	50.4	11.11	1000	
118	Sn	159	He	0.084	ppb	28.9	125.56	1000	
121	Sb	159	No Gas	0.698	ppb	11.8	4388.99	1000	
137	Ba	159	No Gas	2.568	ppb	9.7	6345.24	2000	
182	W	159	No Gas	0.046	ppb	13.5	283.66	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	100.11	1000	
208	Pb	209	No Gas	1.347	ppb	7.8	18632.82	2000	
232	Th	209	No Gas	0.016	ppb	39.5	340.39	1000	
238	U	209	No Gas	0.303	ppb	7.5	3988.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1539151.02	2.4	1483357.64	103.76	29.5	120.4	
Sc	45	No Gas	3444121.79	2.9	3141192.51	109.64	29.5	120.4	
Sc	45	H2	426992.83	1.4	418309.46	102.08	29.5	120.4	
Sc	45	He	85936.17	2.7	85440.95	100.58	29.5	120.4	
Ge	72	No Gas	753331.79	2.6	694668.88	108.44	29.5	120.4	
Ge	72	H2	159910.81	0.5	157206.79	101.72	29.5	120.4	
Ge	72	He	65148.45	2.6	64721.85	100.66	29.5	120.4	
Y	89	H2	2707359.25	0.9	2572670.23	105.24	29.5	120.4	
Y	89	He	571647.39	2.9	574051.42	99.58	29.5	120.4	
Tb	159	No Gas	7647619.82	2.7	6821698.44	112.11	29.5	120.4	
Tb	159	He	3053871.48	2.3	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3891287.19	2.9	3547037.46	109.71	29.5	120.4	

Sample Report

Sample Name SN5980-004

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:41:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	138.5	54.45	100	
11	B	6	No Gas	20.918	ppb	6.5	16957.13	1000	
23	Na	45	He	44228.246	ppb	0.2	4473884.40	200000	
24	Mg	45	He	7850.902	ppb	0.4	441622.91	200000	
27	Al	45	He	1.583	ppb	15.8	56.67	200000	
28	Si	45	H2	7150.341	ppb	1.3	312936.71	10000	
39	K	45	He	5290.212	ppb	0.4	289370.93	200000	
40	Ca	45	H2	62240.388	ppb	1.2	24147967.42	200000	
51	V	89	He	0.230	ppb	25.2	358.91	1000	
52	Cr	89	He	0.029	ppb	28.2	100.65	2000	
55	Mn	89	He	0.559	ppb	2.6	290.62	2000	
56	Fe	89	H2	10.499	ppb	4.9	22610.05	100000	
59	Co	89	He	0.040	ppb	47.0	88.90	1000	
60	Ni	89	He	5.490	ppb	2.0	2807.06	1000	
63	Cu	89	He	264.908	ppb	1.1	338500.64	2000	
66	Zn	89	He	217.264	ppb	1.7	37047.80	2000	
75	As	89	He	0.687	ppb	10.0	101.01	1000	
78	Se	89	H2	0.032	ppb	43.1	2.50	1000	
88	Sr	89	He	219.314	ppb	1.0	163675.74	2000	
95	Mo	89	He	0.083	ppb	19.5	77.78	1000	
107	Ag	89	He	0.031	ppb	11.1	102.23	100	
111	Cd	89	He	0.035	ppb	22.9	12.96	1000	
118	Sn	159	He	0.122	ppb	6.0	156.67	1000	
121	Sb	159	No Gas	0.679	ppb	9.0	4315.52	1000	
137	Ba	159	No Gas	2.556	ppb	7.7	6388.70	2000	
182	W	159	No Gas	0.051	ppb	22.4	310.35	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	1.473	ppb	4.4	20569.56	2000	
232	Th	209	No Gas	0.011	ppb	30.1	266.97	1000	
238	U	209	No Gas	0.328	ppb	8.7	4359.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559634.16	2.5	1483357.64	105.14	29.5	120.4	
Sc	45	No Gas	3473324.45	3.4	3141192.51	110.57	29.5	120.4	
Sc	45	H2	425405.96	0.3	418309.46	101.7	29.5	120.4	
Sc	45	He	86781.96	0.1	85440.95	101.57	29.5	120.4	
Ge	72	No Gas	759995.55	3.3	694668.88	109.4	29.5	120.4	
Ge	72	H2	159334.68	1.6	157206.79	101.35	29.5	120.4	
Ge	72	He	66059.93	0.3	64721.85	102.07	29.5	120.4	
Y	89	H2	2668555.70	0.3	2572670.23	103.73	29.5	120.4	
Y	89	He	576916.28	0.7	574051.42	100.5	29.5	120.4	
Tb	159	No Gas	7738442.59	3.6	6821698.44	113.44	29.5	120.4	
Tb	159	He	3072288.53	0.5	2982140.2	103.02	29.5	120.4	
Bi	209	No Gas	3928696.86	3.1	3547037.46	110.76	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:44:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	77.0	47.78	100	
11	B	6	No Gas	20.378	ppb	7.4	16633.51	1000	
23	Na	45	He	42484.113	ppb	0.4	4310892.15	200000	
24	Mg	45	He	7627.010	ppb	1.3	430337.73	200000	
27	Al	45	He	3.079	ppb	39.1	91.12	200000	
28	Si	45	H2	7126.674	ppb	2.2	310439.42	10000	
39	K	45	He	5038.751	ppb	1.2	276972.64	200000	
40	Ca	45	H2	60807.361	ppb	1.4	23482037.70	200000	
51	V	89	He	0.201	ppb	32.6	337.80	1000	
52	Cr	89	He	0.017	ppb	127.1	88.65	2000	
55	Mn	89	He	0.565	ppb	18.3	295.28	2000	
56	Fe	89	H2	6.147	ppb	4.9	15973.37	100000	
59	Co	89	He	0.041	ppb	20.0	91.12	1000	
60	Ni	89	He	17.652	ppb	0.5	8313.87	1000	
63	Cu	89	He	170.891	ppb	0.2	219759.83	2000	
66	Zn	89	He	193.066	ppb	1.0	33132.36	2000	
75	As	89	He	0.683	ppb	16.5	101.01	1000	
78	Se	89	H2	0.041	ppb	24.8	3.17	1000	
88	Sr	89	He	212.694	ppb	0.4	159710.38	2000	
95	Mo	89	He	0.044	ppb	24.7	46.67	1000	
107	Ag	89	He	0.064	ppb	17.3	193.34	100	
111	Cd	89	He	0.037	ppb	51.0	13.70	1000	
118	Sn	159	He	0.073	ppb	23.8	117.78	1000	
121	Sb	159	No Gas	0.674	ppb	7.2	4258.81	1000	
137	Ba	159	No Gas	2.613	ppb	3.7	6498.83	2000	
182	W	159	No Gas	0.033	ppb	39.3	226.92	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	1.913	ppb	8.1	26654.08	2000	
232	Th	209	No Gas	0.003	ppb	26.0	160.18	1000	
238	U	209	No Gas	0.348	ppb	8.2	4629.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1567120.63	2.9	1483357.64	105.65	29.5	120.4	
Sc	45	No Gas	3464735.24	4.5	3141192.51	110.3	29.5	120.4	
Sc	45	H2	423434.17	0.6	418309.46	101.23	29.5	120.4	
Sc	45	He	87048.60	1.0	85440.95	101.88	29.5	120.4	
Ge	72	No Gas	757611.02	3.6	694668.88	109.06	29.5	120.4	
Ge	72	H2	158483.47	1.2	157206.79	100.81	29.5	120.4	
Ge	72	He	65826.87	0.5	64721.85	101.71	29.5	120.4	
Y	89	H2	2663518.69	0.6	2572670.23	103.53	29.5	120.4	
Y	89	He	580441.06	0.2	574051.42	101.11	29.5	120.4	
Tb	159	No Gas	7694300.72	4.6	6821698.44	112.79	29.5	120.4	
Tb	159	He	3095687.66	0.2	2982140.2	103.81	29.5	120.4	
Bi	209	No Gas	3935498.90	4.7	3547037.46	110.95	29.5	120.4	

Sample Report

Sample Name SN5980-006

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:47:12 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	217.8	58.89	100	
11	B	6	No Gas	20.477	ppb	6.2	16657.93	1000	
23	Na	45	He	43789.650	ppb	0.5	4414112.76	200000	
24	Mg	45	He	7768.617	ppb	1.0	435467.92	200000	
27	Al	45	He	5.675	ppb	10.6	150.01	200000	
28	Si	45	H2	7153.383	ppb	1.5	312541.08	10000	
39	K	45	He	5162.364	ppb	1.0	281663.99	200000	
40	Ca	45	H2	61772.194	ppb	1.8	23925430.20	200000	
51	V	89	He	0.255	ppb	29.5	380.02	1000	
52	Cr	89	He	0.063	ppb	34.5	133.98	2000	
55	Mn	89	He	0.872	ppb	6.8	439.26	2000	
56	Fe	89	H2	12.447	ppb	2.1	25575.12	100000	
59	Co	89	He	0.047	ppb	23.0	100.01	1000	
60	Ni	89	He	13.929	ppb	2.0	6608.47	1000	
63	Cu	89	He	251.010	ppb	0.6	321494.53	2000	
66	Zn	89	He	228.111	ppb	0.6	38985.37	2000	
75	As	89	He	0.655	ppb	15.0	96.68	1000	
78	Se	89	H2	0.025	ppb	27.9	2.00	1000	
88	Sr	89	He	216.315	ppb	1.0	161811.64	2000	
95	Mo	89	He	0.025	ppb	54.3	31.11	1000	
107	Ag	89	He	0.036	ppb	16.2	116.67	100	
111	Cd	89	He	0.031	ppb	66.8	11.48	1000	
118	Sn	159	He	0.081	ppb	12.3	124.45	1000	
121	Sb	159	No Gas	0.687	ppb	7.1	4295.45	1000	
137	Ba	159	No Gas	2.659	ppb	6.8	6535.58	2000	
182	W	159	No Gas	0.050	ppb	8.7	300.34	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	2.253	ppb	7.4	30949.24	2000	
232	Th	209	No Gas	0.005	ppb	54.4	183.55	1000	
238	U	209	No Gas	0.302	ppb	4.4	3961.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562077.06	2.6	1483357.64	105.31	29.5	120.4	
Sc	45	No Gas	3433848.65	3.3	3141192.51	109.32	29.5	120.4	
Sc	45	H2	424720.42	1.0	418309.46	101.53	29.5	120.4	
Sc	45	He	86479.88	0.5	85440.95	101.22	29.5	120.4	
Ge	72	No Gas	752457.53	3.5	694668.88	108.32	29.5	120.4	
Ge	72	H2	158583.48	0.8	157206.79	100.88	29.5	120.4	
Ge	72	He	65601.77	0.4	64721.85	101.36	29.5	120.4	
Y	89	H2	2669416.30	0.7	2572670.23	103.76	29.5	120.4	
Y	89	He	578237.50	0.5	574051.42	100.73	29.5	120.4	
Tb	159	No Gas	7606174.96	3.5	6821698.44	111.5	29.5	120.4	
Tb	159	He	3091730.86	0.4	2982140.2	103.67	29.5	120.4	
Bi	209	No Gas	3882593.60	3.4	3547037.46	109.46	29.5	120.4	

Sample Report

Sample Name SN5980-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:49:54 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	176.3	46.67	100	
11	B	6	No Gas	22.436	ppb	14.9	16828.60	1000	
23	Na	45	He	43212.238	ppb	0.5	4400880.78	200000	
24	Mg	45	He	7652.978	ppb	0.4	433420.89	200000	
27	Al	45	He	2.628	ppb	55.6	81.12	200000	
28	Si	45	H2	7119.617	ppb	1.3	313170.63	10000	
39	K	45	He	5054.323	ppb	0.6	278836.67	200000	
40	Ca	45	H2	60515.571	ppb	1.1	23597864.92	200000	
51	V	89	He	0.352	ppb	16.7	456.69	1000	
52	Cr	89	He	0.015	ppb	12.5	85.99	2000	
55	Mn	89	He	0.631	ppb	11.5	324.61	2000	
56	Fe	89	H2	10.796	ppb	2.2	23151.35	100000	
59	Co	89	He	0.183	ppb	12.0	326.69	1000	
60	Ni	89	He	13.096	ppb	1.2	6218.27	1000	
63	Cu	89	He	203.414	ppb	0.3	259940.30	2000	
66	Zn	89	He	226.241	ppb	0.6	38574.37	2000	
75	As	89	He	0.708	ppb	5.1	104.01	1000	
78	Se	89	H2	0.038	ppb	76.9	3.00	1000	
88	Sr	89	He	213.219	ppb	0.2	159116.19	2000	
95	Mo	89	He	0.042	ppb	49.9	44.45	1000	
107	Ag	89	He	0.078	ppb	9.8	230.01	100	
111	Cd	89	He	0.047	ppb	33.4	17.41	1000	
118	Sn	159	He	0.120	ppb	26.0	155.56	1000	
121	Sb	159	No Gas	0.722	ppb	21.0	4115.27	1000	
137	Ba	159	No Gas	2.694	ppb	13.0	6084.92	2000	
182	W	159	No Gas	0.053	ppb	49.7	283.66	1000	
205	Tl	209	No Gas	-0.009	ppb	N/A	30.03	1000	
208	Pb	209	No Gas	2.931	ppb	15.3	36916.48	2000	
232	Th	209	No Gas	0.007	ppb	99.7	180.21	1000	
238	U	209	No Gas	0.394	ppb	12.2	4752.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465745.47	12.6	1483357.64	98.81	29.5	120.4	
Sc	45	No Gas	3204044.90	15.9	3141192.51	102	29.5	120.4	
Sc	45	H2	427596.18	1.4	418309.46	102.22	29.5	120.4	
Sc	45	He	87370.81	0.7	85440.95	102.26	29.5	120.4	
Ge	72	No Gas	692318.70	13.0	694668.88	99.66	29.5	120.4	
Ge	72	H2	158932.48	1.1	157206.79	101.1	29.5	120.4	
Ge	72	He	65736.87	0.4	64721.85	101.57	29.5	120.4	
Y	89	H2	2678933.11	1.0	2572670.23	104.13	29.5	120.4	
Y	89	He	576856.57	0.4	574051.42	100.49	29.5	120.4	
Tb	159	No Gas	7070926.49	15.2	6821698.44	103.65	29.5	120.4	
Tb	159	He	3092043.53	0.2	2982140.2	103.69	29.5	120.4	
Bi	209	No Gas	3606655.80	14.2	3547037.46	101.68	29.5	120.4	

Sample Report

Sample Name SN5980-008

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:52:29 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	38.89	100	
11	B	6	No Gas	19.656	ppb	8.0	15918.15	1000	
23	Na	45	He	43147.031	ppb	0.3	4343048.21	200000	
24	Mg	45	He	7638.736	ppb	0.6	427570.73	200000	
27	Al	45	He	2.617	ppb	5.6	80.00	200000	
28	Si	45	H2	7043.137	ppb	0.6	308585.64	10000	
39	K	45	He	5081.467	ppb	0.9	277009.90	200000	
40	Ca	45	H2	60365.379	ppb	0.7	23446106.87	200000	
51	V	89	He	0.279	ppb	21.5	395.58	1000	
52	Cr	89	He	0.008	ppb	123.8	79.32	2000	
55	Mn	89	He	0.389	ppb	8.2	209.30	2000	
56	Fe	89	H2	3.909	ppb	3.8	12579.61	100000	
59	Co	89	He	0.026	ppb	18.2	64.45	1000	
60	Ni	89	He	10.196	ppb	2.5	4889.92	1000	
63	Cu	89	He	230.391	ppb	0.4	292731.34	2000	
66	Zn	89	He	219.104	ppb	1.3	37148.18	2000	
75	As	89	He	0.488	ppb	3.6	72.34	1000	
78	Se	89	H2	0.020	ppb	38.6	1.67	1000	
88	Sr	89	He	214.434	ppb	1.1	159117.58	2000	
95	Mo	89	He	0.045	ppb	40.9	46.67	1000	
107	Ag	89	He	0.031	ppb	28.9	100.00	100	
111	Cd	89	He	0.032	ppb	24.3	11.85	1000	
118	Sn	159	He	0.045	ppb	60.6	95.56	1000	
121	Sb	159	No Gas	0.660	ppb	10.1	4118.55	1000	
137	Ba	159	No Gas	2.557	ppb	9.0	6275.12	2000	
182	W	159	No Gas	0.043	ppb	12.9	270.30	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	50.05	1000	
208	Pb	209	No Gas	1.813	ppb	4.7	24977.56	2000	
232	Th	209	No Gas	0.003	ppb	66.5	150.17	1000	
238	U	209	No Gas	0.312	ppb	9.2	4095.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1549510.25	2.5	1483357.64	104.46	29.5	120.4	
Sc	45	No Gas	3401071.37	3.0	3141192.51	108.27	29.5	120.4	
Sc	45	H2	425864.72	0.6	418309.46	101.81	29.5	120.4	
Sc	45	He	86350.90	0.1	85440.95	101.07	29.5	120.4	
Ge	72	No Gas	750431.43	3.0	694668.88	108.03	29.5	120.4	
Ge	72	H2	158486.65	0.6	157206.79	100.81	29.5	120.4	
Ge	72	He	65769.60	0.2	64721.85	101.62	29.5	120.4	
Y	89	H2	2662863.22	0.4	2572670.23	103.51	29.5	120.4	
Y	89	He	573592.62	0.0	574051.42	99.92	29.5	120.4	
Tb	159	No Gas	7599123.91	3.4	6821698.44	111.4	29.5	120.4	
Tb	159	He	3106874.09	0.4	2982140.2	104.18	29.5	120.4	
Bi	209	No Gas	3884142.94	3.0	3547037.46	109.5	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:55:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.178	ppb	2.2	27089.42	25	96.71	89.8	110.2	
11	B	6	No Gas	24.445	ppb	2.1	18911.78	25	97.78	89.8	110.2	
23	Na	45	He	5097.356	ppb	1.3	499789.44	5000	101.95	89.8	110.2	
24	Mg	45	He	4938.591	ppb	2.0	265489.90	5000	98.77	89.8	110.2	
27	Al	45	He	466.147	ppb	0.5	10234.01	500	93.23	89.8	110.2	
28	Si	45	H2	464.784	ppb	2.0	19852.57	500	92.96	89.8	110.2	
39	K	45	He	4770.072	ppb	0.9	250204.78	5000	95.4	89.8	110.2	
40	Ca	45	H2	4947.542	ppb	1.9	1832800.67	5000	98.95	89.8	110.2	
51	V	89	He	24.892	ppb	2.2	19396.23	25	99.57	89.8	110.2	
52	Cr	89	He	24.560	ppb	1.3	23413.76	25	98.24	89.8	110.2	
55	Mn	89	He	25.022	ppb	1.2	11369.19	25	100.09	89.8	110.2	
56	Fe	89	H2	4931.121	ppb	1.3	7245162.93	5000	98.62	89.8	110.2	
59	Co	89	He	24.797	ppb	2.6	39702.98	25	99.19	89.8	110.2	
60	Ni	89	He	24.608	ppb	2.2	10960.21	25	98.43	89.8	110.2	
63	Cu	89	He	24.862	ppb	1.0	30708.89	25	99.45	89.8	110.2	
66	Zn	89	He	24.479	ppb	1.2	4074.09	25	97.92	89.8	110.2	
75	As	89	He	24.943	ppb	1.1	3416.80	25	99.77	89.8	110.2	
78	Se	89	H2	24.857	ppb	1.0	1755.70	25	99.43	89.8	110.2	
88	Sr	89	He	23.619	ppb	1.0	16976.52	25	94.48	89.8	110.2	
95	Mo	89	He	24.865	ppb	2.4	19128.36	25	99.46	89.8	110.2	
107	Ag	89	He	25.226	ppb	1.6	66497.67	25	100.9	89.8	110.2	
111	Cd	89	He	24.777	ppb	1.8	8602.07	25	99.11	89.8	110.2	
118	Sn	159	He	23.455	ppb	1.0	18719.11	25	93.82	89.8	110.2	
121	Sb	159	No Gas	24.278	ppb	0.3	145512.83	25	97.11	89.8	110.2	
137	Ba	159	No Gas	24.243	ppb	3.5	57427.53	25	96.97	89.8	110.2	
182	W	159	No Gas	24.110	ppb	1.4	107587.32	25	96.44	89.8	110.2	
205	Tl	209	No Gas	24.755	ppb	1.3	240889.40	25	99.02	89.8	110.2	
208	Pb	209	No Gas	24.614	ppb	1.5	330429.90	25	98.46	89.8	110.2	
232	Th	209	No Gas	24.198	ppb	2.7	333925.35	25	96.79	89.8	110.2	
238	U	209	No Gas	24.670	ppb	1.7	317968.88	25	98.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1506433.84	1.1	1483357.64	101.56	29.5	120.4	
Sc	45	No Gas	3210860.09	0.9	3141192.51	102.22	29.5	120.4	
Sc	45	H2	405987.55	1.0	418309.46	97.05	29.5	120.4	
Sc	45	He	82874.79	0.8	85440.95	97	29.5	120.4	
Ge	72	No Gas	720595.58	0.5	694668.88	103.73	29.5	120.4	
Ge	72	H2	151632.22	1.3	157206.79	96.45	29.5	120.4	
Ge	72	He	63354.81	1.0	64721.85	97.89	29.5	120.4	
Y	89	H2	2580565.66	0.8	2572670.23	100.31	29.5	120.4	
Y	89	He	555403.06	0.5	574051.42	96.75	29.5	120.4	
Tb	159	No Gas	7335263.16	1.2	6821698.44	107.53	29.5	120.4	
Tb	159	He	3041214.16	0.8	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3811544.46	0.7	3547037.46	107.46	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:57:52 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.035	ppb	36.1	77.78	0.2	
11	B	6	No Gas	1.045	ppb	15.2	2220.25	4	
23	Na	45	He	27.633	ppb	7.3	11170.15	200	
24	Mg	45	He	1.243	ppb	118.7	671.18	20	
27	Al	45	He	-0.586	ppb	N/A	6.67	20	
28	Si	45	H2	2.047	ppb	121.5	563.97	100	
39	K	45	He	-1.603	ppb	N/A	10652.56	200	
40	Ca	45	H2	7.385	ppb	26.8	3872.92	20	
51	V	89	He	0.232	ppb	9.0	353.35	1	
52	Cr	89	He	-0.014	ppb	N/A	56.66	1	
55	Mn	89	He	-0.009	ppb	N/A	22.67	0.4	
56	Fe	89	H2	1.228	ppb	3.6	8311.74	20	
59	Co	89	He	0.018	ppb	95.0	51.11	0.2	
60	Ni	89	He	-0.286	ppb	N/A	211.12	0.4	Failed DoD
63	Cu	89	He	0.088	ppb	7.9	248.90	0.6	
66	Zn	89	He	0.073	ppb	87.6	75.56	2	
75	As	89	He	0.017	ppb	174.5	5.67	1	
78	Se	89	H2	0.031	ppb	58.8	2.33	1	
88	Sr	89	He	0.011	ppb	88.0	14.45	1	
95	Mo	89	He	0.073	ppb	18.6	67.78	1	
107	Ag	89	He	0.002	ppb	119.2	22.22	0.2	
111	Cd	89	He	0.004	ppb	85.9	1.85	0.2	
118	Sn	159	He	0.035	ppb	49.2	85.56	1	
121	Sb	159	No Gas	0.034	ppb	31.9	230.26	0.2	
137	Ba	159	No Gas	0.024	ppb	65.8	70.08	0.4	
182	W	159	No Gas	0.067	ppb	11.3	367.08	1	
205	Tl	209	No Gas	0.011	ppb	65.6	223.58	0.2	
208	Pb	209	No Gas	0.011	ppb	20.0	363.74	0.2	
232	Th	209	No Gas	0.144	ppb	21.4	2102.53	1	
238	U	209	No Gas	0.020	ppb	58.7	263.63	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509076.00	0.6	1483357.64	101.73	29.5	120.4	
Sc	45	No Gas	3218965.03	0.8	3141192.51	102.48	29.5	120.4	
Sc	45	H2	413103.88	0.6	418309.46	98.76	29.5	120.4	
Sc	45	He	83793.80	0.2	85440.95	98.07	29.5	120.4	
Ge	72	No Gas	717257.62	0.6	694668.88	103.25	29.5	120.4	
Ge	72	H2	155551.14	1.6	157206.79	98.95	29.5	120.4	
Ge	72	He	64244.37	0.4	64721.85	99.26	29.5	120.4	
Y	89	H2	2598508.15	0.8	2572670.23	101	29.5	120.4	
Y	89	He	565297.65	0.5	574051.42	98.48	29.5	120.4	
Tb	159	No Gas	7333279.54	0.9	6821698.44	107.5	29.5	120.4	
Tb	159	He	3052098.25	0.1	2982140.2	102.35	29.5	120.4	
Bi	209	No Gas	3838500.37	0.3	3547037.46	108.22	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:00:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	129.4	46.67	100	
11	B	6	No Gas	19.986	ppb	5.3	15590.02	1000	
23	Na	45	He	44025.706	ppb	1.0	4328422.38	200000	
24	Mg	45	He	7878.685	ppb	1.3	430738.41	200000	
27	Al	45	He	3.894	ppb	13.2	106.67	200000	
28	Si	45	H2	6955.953	ppb	5.3	299481.53	10000	
39	K	45	He	5275.188	ppb	0.9	280484.90	200000	
40	Ca	45	H2	61617.744	ppb	5.4	23515830.21	200000	
51	V	89	He	0.087	ppb	89.6	238.90	1000	
52	Cr	89	He	0.020	ppb	81.4	89.32	2000	
55	Mn	89	He	0.427	ppb	17.8	223.96	2000	
56	Fe	89	H2	6.692	ppb	7.4	16681.91	100000	
59	Co	89	He	0.064	ppb	16.8	126.68	1000	
60	Ni	89	He	6.555	ppb	2.6	3220.50	1000	
63	Cu	89	He	196.590	ppb	0.4	246352.03	2000	
66	Zn	89	He	201.262	ppb	0.4	33656.90	2000	
75	As	89	He	0.718	ppb	8.4	103.34	1000	
78	Se	89	H2	0.028	ppb	41.4	2.17	1000	
88	Sr	89	He	219.380	ppb	0.4	160537.35	2000	
95	Mo	89	He	0.058	ppb	21.9	56.67	1000	
107	Ag	89	He	0.018	ppb	4.3	64.45	100	
111	Cd	89	He	0.070	ppb	24.8	25.19	1000	
118	Sn	159	He	0.052	ppb	16.4	100.00	1000	
121	Sb	159	No Gas	0.646	ppb	5.2	3948.36	1000	
137	Ba	159	No Gas	2.707	ppb	7.9	6505.57	2000	
182	W	159	No Gas	0.040	ppb	15.6	250.29	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.914	ppb	7.7	25745.85	2000	
232	Th	209	No Gas	0.036	ppb	13.9	600.69	1000	
238	U	209	No Gas	0.348	ppb	7.1	4475.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1494212.10	2.5	1483357.64	100.73	29.5	120.4	
Sc	45	No Gas	3265133.09	3.1	3141192.51	103.95	29.5	120.4	
Sc	45	H2	418924.11	3.2	418309.46	100.15	29.5	120.4	
Sc	45	He	84350.10	0.7	85440.95	98.72	29.5	120.4	
Ge	72	No Gas	716388.35	2.0	694668.88	103.13	29.5	120.4	
Ge	72	H2	155753.11	3.4	157206.79	99.08	29.5	120.4	
Ge	72	He	64033.13	0.8	64721.85	98.94	29.5	120.4	
Y	89	H2	2647478.14	3.5	2572670.23	102.91	29.5	120.4	
Y	89	He	565667.84	0.2	574051.42	98.54	29.5	120.4	
Tb	159	No Gas	7436683.01	2.9	6821698.44	109.02	29.5	120.4	
Tb	159	He	3068851.97	0.2	2982140.2	102.91	29.5	120.4	
Bi	209	No Gas	3796119.11	2.9	3547037.46	107.02	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:03:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	58.9	74.45	100	
11	B	6	No Gas	19.627	ppb	3.6	15554.41	1000	
23	Na	45	He	42992.621	ppb	0.3	4212449.90	200000	
24	Mg	45	He	7713.451	ppb	0.3	420266.14	200000	
27	Al	45	He	3.117	ppb	33.4	88.89	200000	
28	Si	45	H2	7120.541	ppb	2.5	299557.57	10000	
39	K	45	He	5068.977	ppb	1.4	269003.28	200000	
40	Ca	45	H2	61133.407	ppb	1.9	22800816.88	200000	
51	V	89	He	0.227	ppb	17.2	348.91	1000	
52	Cr	89	He	0.022	ppb	13.9	91.32	2000	
55	Mn	89	He	0.388	ppb	12.7	205.30	2000	
56	Fe	89	H2	4.445	ppb	3.9	13020.58	100000	
59	Co	89	He	0.054	ppb	15.7	108.90	1000	
60	Ni	89	He	9.073	ppb	4.4	4317.49	1000	
63	Cu	89	He	226.667	ppb	0.8	283321.35	2000	
66	Zn	89	He	216.660	ppb	0.9	36137.67	2000	
75	As	89	He	0.600	ppb	5.3	86.68	1000	
78	Se	89	H2	0.026	ppb	47.4	2.00	1000	
88	Sr	89	He	213.065	ppb	0.7	155537.47	2000	
95	Mo	89	He	0.046	ppb	24.2	46.67	1000	
107	Ag	89	He	0.019	ppb	28.6	67.78	100	
111	Cd	89	He	0.040	ppb	0.6	14.44	1000	
118	Sn	159	He	0.133	ppb	11.1	164.45	1000	
121	Sb	159	No Gas	0.709	ppb	10.3	4388.93	1000	
137	Ba	159	No Gas	2.475	ppb	6.2	6038.19	2000	
182	W	159	No Gas	0.049	ppb	27.4	293.67	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.270	ppb	6.2	31059.67	2000	
232	Th	209	No Gas	0.015	ppb	15.9	317.03	1000	
238	U	209	No Gas	0.295	ppb	12.6	3848.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1514982.94	2.1	1483357.64	102.13	29.5	120.4	
Sc	45	No Gas	3312721.59	2.8	3141192.51	105.46	29.5	120.4	
Sc	45	H2	408979.59	1.3	418309.46	97.77	29.5	120.4	
Sc	45	He	84054.13	0.6	85440.95	98.38	29.5	120.4	
Ge	72	No Gas	727765.38	2.7	694668.88	104.76	29.5	120.4	
Ge	72	H2	153822.96	0.6	157206.79	97.85	29.5	120.4	
Ge	72	He	64046.95	0.9	64721.85	98.96	29.5	120.4	
Y	89	H2	2589094.63	1.0	2572670.23	100.64	29.5	120.4	
Y	89	He	564286.32	0.6	574051.42	98.3	29.5	120.4	
Tb	159	No Gas	7543199.61	2.5	6821698.44	110.58	29.5	120.4	
Tb	159	He	3061281.65	0.5	2982140.2	102.65	29.5	120.4	
Bi	209	No Gas	3864780.32	2.8	3547037.46	108.96	29.5	120.4	

Sample Report

Sample Name	SN5515-001R
File Name	045SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:05:52 PM
Sample Type	Sample
Total Dilution	50.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.144	ppb	11.1	110.00	100	
11	B	6	No Gas	401.155	ppb	5.3	7282.09	1000	
23	Na	45	He	3961.468	ppb	4.4	15625.83	200000	
24	Mg	45	He	38841.169	ppb	0.5	41225.86	200000	
27	Al	45	He	45436.693	ppb	0.6	19440.45	200000	
28	Si	45	H2	3341.484	ppb	6.6	3167.20	10000	
39	K	45	He	11837.262	ppb	1.7	21951.98	200000	
40	Ca	45	H2	276497.376	ppb	2.4	1993047.00	200000	
51	V	89	He	99.994	ppb	11.2	1691.27	1000	
52	Cr	89	He	487.477	ppb	0.7	9220.03	2000	
55	Mn	89	He	12465.895	ppb	0.3	111636.40	2000	
56	Fe	89	H2	398359.231	ppb	1.2	11537417.63	100000	
59	Co	89	He	60.223	ppb	5.1	1924.73	1000	
60	Ni	89	He	296.574	ppb	2.1	2857.06	1000	
63	Cu	89	He	4466.919	ppb	0.2	108627.95	2000	
66	Zn	89	He	5277.599	ppb	1.4	17144.41	2000	
75	As	89	He	67.271	ppb	11.0	185.02	1000	
78	Se	89	H2	50.748	ppb	3.5	70.83	1000	
88	Sr	89	He	1847.448	ppb	1.5	26223.50	2000	
95	Mo	89	He	143.963	ppb	2.2	2196.92	1000	
107	Ag	89	He	26.591	ppb	1.6	1400.13	100	
111	Cd	89	He	8.157	ppb	12.9	56.30	1000	
118	Sn	159	He	398.977	ppb	2.1	6337.27	1000	
121	Sb	159	No Gas	15.144	ppb	10.3	1888.91	1000	
137	Ba	159	No Gas	3412.778	ppb	5.2	165760.20	2000	
182	W	159	No Gas	25.928	ppb	1.7	2442.95	1000	
205	Tl	209	No Gas	0.188	ppb	57.2	166.85	1000	
208	Pb	209	No Gas	338.389	ppb	5.4	97728.55	2000	
232	Th	209	No Gas	0.744	ppb	13.4	337.05	1000	
238	U	209	No Gas	27.810	ppb	6.8	7704.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525927.28	3.2	1483357.64	102.87	29.5	120.4	
Sc	45	No Gas	3236322.01	4.2	3141192.51	103.03	29.5	120.4	
Sc	45	H2	395098.03	1.9	418309.46	94.45	29.5	120.4	
Sc	45	He	80829.89	0.6	85440.95	94.6	29.5	120.4	
Ge	72	No Gas	720094.77	2.9	694668.88	103.66	29.5	120.4	
Ge	72	H2	148567.80	0.5	157206.79	94.5	29.5	120.4	
Ge	72	He	61476.50	0.7	64721.85	94.99	29.5	120.4	
Y	89	H2	2544400.33	1.4	2572670.23	98.9	29.5	120.4	
Y	89	He	548497.32	0.2	574051.42	95.55	29.5	120.4	
Tb	159	No Gas	7530227.66	3.6	6821698.44	110.39	29.5	120.4	
Tb	159	He	3008203.18	0.5	2982140.2	100.87	29.5	120.4	
Bi	209	No Gas	4098294.35	3.6	3547037.46	115.54	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	046_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:08:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.058	ppb	124.7	48.89	0.5	
B	11	6	No Gas	5.375	ppb	20.9	2116.89	10	
Na	23	45	He	159.281	ppb	12.5	10989.72	500	
Mg	24	45	He	17.330	ppb	27.5	751.19	50	
Al	27	45	He	6.404	ppb	8.0	45.56	50	
Si	28	45	H2	18.712	ppb	31.2	597.34	250	
K	39	45	He	-2.848	ppb	N/A	10155.72	500	
Ca	40	45	H2	59.747	ppb	4.1	5251.16	50	PB 6020 Fails DoD
V	51	89	He	2.232	ppb	9.8	500.03	2.5	
Cr	52	89	He	0.227	ppb	44.8	109.31	2.5	
Mn	55	89	He	0.523	ppb	4.9	71.99	1	
Fe	56	89	H2	15.264	ppb	9.2	10529.03	50	
Co	59	89	He	-0.032	ppb	N/A	11.11	0.5	
Ni	60	89	He	-1.446	ppb	N/A	201.12	1	PB 6020 Fails DoD
Cu	63	89	He	1.724	ppb	2.6	546.70	1.5	PB 6020 Fails DoD
Zn	66	89	He	16.310	ppb	6.4	582.26	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.207	ppb	27.9	8.67	2.5	
Se	78	89	H2	0.135	ppb	46.3	2.00	2.5	
Sr	88	89	He	0.201	ppb	17.7	34.44	2.5	
Mo	95	89	He	0.071	ppb	78.5	21.11	2.5	
Ag	107	89	He	0.015	ppb	115.9	23.33	0.5	
Cd	111	89	He	0.000	ppb	3608.5	0.37	0.5	
Sn	118	159	He	0.993	ppb	22.4	212.23	2.5	
Sb	121	159	No Gas	0.006	ppb	199.7	36.71	0.5	
Ba	137	159	No Gas	0.285	ppb	17.8	150.17	1	
W	182	159	No Gas	-0.021	ppb	N/A	50.06	2.5	
Tl	205	209	No Gas	-0.037	ppb	N/A	46.72	0.5	
Pb	208	209	No Gas	0.068	ppb	11.9	400.45	0.5	
Th	232	209	No Gas	0.068	ppb	5.8	300.34	2.5	
U	238	209	No Gas	0.002	ppb	254.0	13.35	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1426962.21	3.0	1483357.64	96.2	29.5	120.4	
Sc	45	No Gas	3065488.24	3.0	3141192.51	97.59	29.5	120.4	
Sc	45	H2	388038.63	1.0	418309.46	92.76	29.5	120.4	
Sc	45	He	79501.46	0.6	85440.95	93.05	29.5	120.4	
Ge	72	No Gas	697357.61	2.8	694668.88	100.39	29.5	120.4	
Ge	72	H2	145972.90	0.7	157206.79	92.85	29.5	120.4	
Ge	72	He	61262.19	0.5	64721.85	94.65	29.5	120.4	
Y	89	H2	2485526.69	0.8	2572670.23	96.61	29.5	120.4	
Y	89	He	541739.07	0.3	574051.42	94.37	29.5	120.4	
Tb	159	No Gas	7399363.78	3.2	6821698.44	108.47	29.5	120.4	
Tb	159	He	2992963.74	0.7	2982140.2	100.36	29.5	120.4	
Bi	209	No Gas	3863970.22	3.5	3547037.46	108.94	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	047LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:11:12 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.660	ppb	3.6	11005.64	50	19.86	79.5	120.4	
B	11	6	No Gas	508.438	ppb	2.3	73055.03	500	20.34	79.5	120.4	
Na	23	45	He	8136.904	ppb	4.2	159946.23	7500	21.7	79.5	120.4	
Mg	24	45	He	5517.700	ppb	4.6	57859.63	5000	22.07	79.5	120.4	
Al	27	45	He	2034.151	ppb	3.6	8646.26	2000	20.34	79.5	120.4	
Si	28	45	H2	1063.235	ppb	5.2	9022.98	1000	21.26	0	200	
K	39	45	He	10630.712	ppb	3.3	113640.01	10000	21.26	79.5	120.4	
Ca	40	45	H2	2766.351	ppb	1.0	198945.22	2500	22.13	79.5	120.4	
V	51	89	He	543.740	ppb	3.7	82180.61	500	21.75	79.5	120.4	
Cr	52	89	He	220.136	ppb	2.7	40926.87	200	22.01	79.5	120.4	
Mn	55	89	He	556.612	ppb	2.5	49295.89	500	22.26	79.5	120.4	
Fe	56	89	H2	1118.155	ppb	0.5	327968.23	1000	22.36	79.5	120.4	
Co	59	89	He	567.072	ppb	2.5	177235.67	500	22.68	79.5	120.4	
Ni	60	89	He	568.833	ppb	2.6	48299.66	500	22.75	79.5	120.4	
Cu	63	89	He	278.761	ppb	2.3	67073.85	250	22.3	79.5	120.4	
Zn	66	89	He	573.152	ppb	3.9	18400.51	500	22.93	79.5	120.4	
As	75	89	He	110.211	ppb	1.6	2948.64	100	22.04	79.5	120.4	
Se	78	89	H2	106.480	ppb	3.1	1474.01	100	21.3	79.5	120.4	
Sr	88	89	He	534.206	ppb	2.5	74955.75	500	21.37	79.5	120.4	
Mo	95	89	He	114.361	ppb	3.3	17180.21	100	22.87	79.5	120.4	
Ag	107	89	He	57.431	ppb	2.2	29575.21	50	22.97	79.5	120.4	
Cd	111	89	He	273.458	ppb	3.6	18537.97	250	21.88	79.5	120.4	
Sn	118	159	He	519.176	ppb	3.2	81619.14	500	20.77	79.5	120.4	
Sb	121	159	No Gas	102.898	ppb	2.5	126155.91	100	20.58	79.5	120.4	
Ba	137	159	No Gas	2036.962	ppb	3.3	986807.18	2000	20.37	79.5	120.4	
W	182	159	No Gas	106.263	ppb	2.6	96992.80	100	21.25	79.5	120.4	
Tl	205	209	No Gas	108.399	ppb	1.8	214967.62	100	21.68	79.5	120.4	
[Pb]	206	209	No Gas	106.711	ppb	1.9	73580.46	100	21.34	79.5	120.4	
[Pb]	207	209	No Gas	108.255	ppb	2.9	65031.14	100	21.65	79.5	120.4	
Pb	208	209	No Gas	107.792	ppb	2.2	294915.96	100	21.56	79.5	120.4	
Th	232	209	No Gas	105.666	ppb	3.6	297168.86	100	21.13	79.5	120.4	
U	238	209	No Gas	106.351	ppb	3.6	279339.89	100	21.27	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486545.56	1.2	1483357.64	100.21	29.5	120.4	
Sc	45	No Gas	3127976.75	0.9	3141192.51	99.58	29.5	120.4	
Sc	45	H2	392226.88	0.9	418309.46	93.76	29.5	120.4	
Sc	45	He	80244.55	2.1	85440.95	93.92	29.5	120.4	
Ge	72	No Gas	717576.36	1.0	694668.88	103.3	29.5	120.4	
Ge	72	H2	146644.15	0.4	157206.79	93.28	29.5	120.4	
Ge	72	He	61459.16	1.9	64721.85	94.96	29.5	120.4	
Y	89	H2	2528306.92	0.8	2572670.23	98.28	29.5	120.4	
Y	89	He	542425.58	1.6	574051.42	94.49	29.5	120.4	
Tb	159	No Gas	7502076.07	0.8	6821698.44	109.97	29.5	120.4	
Tb	159	He	3003868.25	2.1	2982140.2	100.73	29.5	120.4	
Bi	209	No Gas	3883617.15	0.5	3547037.46	109.49	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:13:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	27.0	74.45	100	
11	B	6	No Gas	9.994	ppb	6.5	2915.95	1000	
23	Na	45	He	354.568	ppb	9.4	15001.14	200000	
24	Mg	45	He	32.177	ppb	8.1	928.99	200000	
27	Al	45	He	94.667	ppb	11.4	427.80	200000	
28	Si	45	H2	133.570	ppb	17.3	1531.78	10000	
39	K	45	He	96.791	ppb	38.5	11421.20	200000	
40	Ca	45	H2	131.656	ppb	16.9	10457.82	200000	
51	V	89	He	4.474	ppb	13.8	853.39	1000	
52	Cr	89	He	0.894	ppb	6.1	237.29	2000	
55	Mn	89	He	5.149	ppb	4.9	489.92	2000	
56	Fe	89	H2	127.722	ppb	2.8	43505.51	100000	
59	Co	89	He	0.136	ppb	45.8	64.45	1000	
60	Ni	89	He	-0.025	ppb	N/A	326.68	1000	
63	Cu	89	He	2.361	ppb	13.3	712.27	2000	
66	Zn	89	He	25.772	ppb	2.0	901.18	2000	
75	As	89	He	0.531	ppb	28.1	17.67	1000	
78	Se	89	H2	0.406	ppb	42.1	5.83	1000	
88	Sr	89	He	0.500	ppb	16.3	77.78	2000	
95	Mo	89	He	0.228	ppb	27.1	45.56	1000	
107	Ag	89	He	0.020	ppb	137.9	26.67	100	
111	Cd	89	He	0.054	ppb	34.2	4.07	1000	
118	Sn	159	He	1.503	ppb	9.3	297.79	1000	
121	Sb	159	No Gas	0.170	ppb	14.0	250.29	1000	
137	Ba	159	No Gas	2.760	ppb	16.1	1418.33	2000	
182	W	159	No Gas	0.188	ppb	7.9	253.62	1000	
205	Tl	209	No Gas	0.069	ppb	19.2	270.31	1000	
208	Pb	209	No Gas	3.669	ppb	5.7	10773.87	2000	
232	Th	209	No Gas	0.638	ppb	5.5	2002.40	1000	
238	U	209	No Gas	0.071	ppb	12.0	203.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517181.48	2.8	1483357.64	102.28	29.5	120.4	
Sc	45	No Gas	3320380.63	3.5	3141192.51	105.7	29.5	120.4	
Sc	45	H2	392705.09	0.7	418309.46	93.88	29.5	120.4	
Sc	45	He	81680.28	0.8	85440.95	95.6	29.5	120.4	
Ge	72	No Gas	755062.78	2.7	694668.88	108.69	29.5	120.4	
Ge	72	H2	147731.74	0.3	157206.79	93.97	29.5	120.4	
Ge	72	He	62415.42	0.7	64721.85	96.44	29.5	120.4	
Y	89	H2	2554606.37	0.9	2572670.23	99.3	29.5	120.4	
Y	89	He	551781.62	0.7	574051.42	96.12	29.5	120.4	
Tb	159	No Gas	7896363.01	3.1	6821698.44	115.75	29.5	120.4	
Tb	159	He	3050719.50	0.6	2982140.2	102.3	29.5	120.4	
Bi	209	No Gas	4088536.33	3.2	3547037.46	115.27	29.5	120.4	

Sample Report

Sample Name	SN5830-002
File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:16:34 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	263.0	42.22	100	
11	B	6	No Gas	381.197	ppb	6.6	54054.15	1000	
23	Na	45	He	116483.088	ppb	1.5	2201145.94	200000	
24	Mg	45	He	14633.841	ppb	1.2	153878.43	200000	
27	Al	45	He	52.176	ppb	2.2	242.23	200000	
28	Si	45	H2	10570.468	ppb	1.1	85878.26	10000	
39	K	45	He	321.162	ppb	15.6	13515.38	200000	
40	Ca	45	H2	137370.084	ppb	0.5	9856997.91	200000	
51	V	89	He	4.922	ppb	4.7	913.39	1000	
52	Cr	89	He	0.496	ppb	14.5	160.64	2000	
55	Mn	89	He	324.990	ppb	1.1	29019.09	2000	
56	Fe	89	H2	17.162	ppb	9.7	11287.17	100000	
59	Co	89	He	0.589	ppb	9.6	206.68	1000	
60	Ni	89	He	1.409	ppb	41.0	445.58	1000	
63	Cu	89	He	2.581	ppb	11.7	758.94	2000	
66	Zn	89	He	27.177	ppb	6.3	937.85	2000	
75	As	89	He	0.501	ppb	36.4	16.67	1000	
78	Se	89	H2	0.337	ppb	17.1	4.83	1000	
88	Sr	89	He	1868.803	ppb	0.5	264257.24	2000	
95	Mo	89	He	0.620	ppb	8.8	104.45	1000	
107	Ag	89	He	-0.001	ppb	N/A	15.56	100	
111	Cd	89	He	0.038	ppb	24.4	2.96	1000	
118	Sn	159	He	1.327	ppb	5.6	268.90	1000	
121	Sb	159	No Gas	0.068	ppb	25.6	116.80	1000	
137	Ba	159	No Gas	33.614	ppb	8.5	16802.68	2000	
182	W	159	No Gas	0.031	ppb	115.7	100.11	1000	
205	Tl	209	No Gas	-0.018	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.364	ppb	5.3	1244.76	2000	
232	Th	209	No Gas	0.127	ppb	10.1	480.55	1000	
238	U	209	No Gas	3.798	ppb	10.0	10235.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1459962.36	3.7	1483357.64	98.42	29.5	120.4	
Sc	45	No Gas	3242420.64	4.4	3141192.51	103.22	29.5	120.4	
Sc	45	H2	393351.07	0.8	418309.46	94.03	29.5	120.4	
Sc	45	He	80931.95	2.0	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	747567.29	3.5	694668.88	107.61	29.5	120.4	
Ge	72	H2	149080.31	1.9	157206.79	94.83	29.5	120.4	
Ge	72	He	62283.45	0.4	64721.85	96.23	29.5	120.4	
Y	89	H2	2534810.53	0.8	2572670.23	98.53	29.5	120.4	
Y	89	He	546536.30	0.2	574051.42	95.21	29.5	120.4	
Tb	159	No Gas	7750824.26	3.9	6821698.44	113.62	29.5	120.4	
Tb	159	He	3041033.84	0.3	2982140.2	101.97	29.5	120.4	
Bi	209	No Gas	3992899.97	4.0	3547037.46	112.57	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:19:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	225.8	41.12	100	
11	B	6	No Gas	2065.242	ppb	6.8	279344.07	1000	
23	Na	45	He	1271367.413	ppb	1.0	24390229.58	200000	>LDR
24	Mg	45	He	270939.058	ppb	1.0	2891580.72	200000	
27	Al	45	He	16.961	ppb	21.8	93.34	200000	
28	Si	45	H2	8912.484	ppb	1.7	72295.79	10000	
39	K	45	He	8147.025	ppb	1.3	91959.96	200000	
40	Ca	45	H2	510901.575	ppb	1.1	36565021.40	200000	
51	V	89	He	6.933	ppb	13.8	1223.43	1000	
52	Cr	89	He	1.074	ppb	15.5	269.29	2000	
55	Mn	89	He	33.030	ppb	1.6	2980.45	2000	
56	Fe	89	H2	175.570	ppb	2.1	56566.33	100000	
59	Co	89	He	0.588	ppb	17.8	206.68	1000	
60	Ni	89	He	8.158	ppb	7.8	1022.30	1000	
63	Cu	89	He	3.240	ppb	7.8	921.18	2000	
66	Zn	89	He	23.973	ppb	4.7	836.72	2000	
75	As	89	He	0.436	ppb	72.8	15.00	1000	
78	Se	89	H2	1.476	ppb	3.5	20.50	1000	
88	Sr	89	He	7213.520	ppb	0.6	1022756.38	2000	
95	Mo	89	He	0.553	ppb	2.1	94.45	1000	
107	Ag	89	He	0.023	ppb	63.2	27.78	100	
111	Cd	89	He	0.233	ppb	15.8	16.30	1000	
118	Sn	159	He	1.301	ppb	13.9	263.35	1000	
121	Sb	159	No Gas	0.128	ppb	3.4	190.21	1000	
137	Ba	159	No Gas	15.089	ppb	4.5	7460.48	2000	
182	W	159	No Gas	0.028	ppb	100.2	96.78	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.896	ppb	3.7	5266.32	2000	
232	Th	209	No Gas	0.092	ppb	45.2	357.07	1000	
238	U	209	No Gas	8.028	ppb	7.6	20543.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1422444.56	2.5	1483357.64	95.89	29.5	120.4	
Sc	45	No Gas	3205186.04	2.8	3141192.51	102.04	29.5	120.4	
Sc	45	H2	392327.32	1.3	418309.46	93.79	29.5	120.4	
Sc	45	He	82430.42	1.3	85440.95	96.48	29.5	120.4	
Ge	72	No Gas	724778.97	2.5	694668.88	104.33	29.5	120.4	
Ge	72	H2	146254.81	0.9	157206.79	93.03	29.5	120.4	
Ge	72	He	62309.91	1.1	64721.85	96.27	29.5	120.4	
Y	89	H2	2516491.61	0.8	2572670.23	97.82	29.5	120.4	
Y	89	He	548030.02	1.2	574051.42	95.47	29.5	120.4	
Tb	159	No Gas	7647927.94	2.9	6821698.44	112.11	29.5	120.4	
Tb	159	He	3023742.53	0.6	2982140.2	101.4	29.5	120.4	
Bi	209	No Gas	3789236.08	3.4	3547037.46	106.83	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:21:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	130.3	50.00	100	
11	B	6	No Gas	2091.223	ppb	5.2	301676.91	1000	
23	Na	45	He	1227892.620	ppb	0.8	23725542.62	200000	>LDR
24	Mg	45	He	231843.398	ppb	1.2	2492127.20	200000	
27	Al	45	He	93.994	ppb	4.8	432.25	200000	
28	Si	45	H2	8767.843	ppb	1.9	73590.70	10000	
39	K	45	He	11114.681	ppb	0.6	122485.91	200000	
40	Ca	45	H2	570965.030	ppb	1.9	42278153.54	200000	
51	V	89	He	8.801	ppb	5.9	1517.92	1000	
52	Cr	89	He	6.448	ppb	2.2	1286.50	2000	
55	Mn	89	He	243.436	ppb	1.0	21955.01	2000	
56	Fe	89	H2	6835.378	ppb	1.8	2021165.73	100000	
59	Co	89	He	2.708	ppb	11.4	882.31	1000	
60	Ni	89	He	10.407	ppb	9.3	1222.32	1000	
63	Cu	89	He	3.693	ppb	9.9	1037.85	2000	
66	Zn	89	He	34.093	ppb	2.1	1172.31	2000	
75	As	89	He	1.096	ppb	23.8	33.00	1000	
78	Se	89	H2	0.388	ppb	20.9	5.67	1000	
88	Sr	89	He	9215.906	ppb	0.5	1315811.38	2000	
95	Mo	89	He	0.599	ppb	42.0	102.23	1000	
107	Ag	89	He	0.003	ppb	479.0	17.78	100	
111	Cd	89	He	0.102	ppb	8.8	7.41	1000	
118	Sn	159	He	1.201	ppb	20.7	248.90	1000	
121	Sb	159	No Gas	0.099	ppb	29.9	156.84	1000	
137	Ba	159	No Gas	18.278	ppb	5.6	9160.08	2000	
182	W	159	No Gas	0.044	ppb	59.1	113.46	1000	
205	Tl	209	No Gas	-0.028	ppb	N/A	63.41	1000	
208	Pb	209	No Gas	3.292	ppb	6.8	9081.47	2000	
232	Th	209	No Gas	0.075	ppb	21.3	317.03	1000	
238	U	209	No Gas	5.640	ppb	8.3	14598.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1516824.15	2.4	1483357.64	102.26	29.5	120.4	
Sc	45	No Gas	3324304.97	4.2	3141192.51	105.83	29.5	120.4	
Sc	45	H2	405969.62	0.5	418309.46	97.05	29.5	120.4	
Sc	45	He	83020.29	1.0	85440.95	97.17	29.5	120.4	
Ge	72	No Gas	745296.44	3.8	694668.88	107.29	29.5	120.4	
Ge	72	H2	149173.78	1.0	157206.79	94.89	29.5	120.4	
Ge	72	He	62739.81	0.5	64721.85	96.94	29.5	120.4	
Y	89	H2	2590649.88	0.4	2572670.23	100.7	29.5	120.4	
Y	89	He	551847.66	0.3	574051.42	96.13	29.5	120.4	
Tb	159	No Gas	7757228.91	3.8	6821698.44	113.71	29.5	120.4	
Tb	159	He	3039832.14	0.3	2982140.2	101.93	29.5	120.4	
Bi	209	No Gas	3833078.18	3.8	3547037.46	108.06	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:24:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	511.5	41.11	100	
11	B	6	No Gas	2178.741	ppb	1.3	314595.47	1000	
23	Na	45	He	1230860.405	ppb	0.6	24131607.42	200000	>LDR
24	Mg	45	He	233340.015	ppb	0.9	2545074.54	200000	
27	Al	45	He	51.950	ppb	9.9	251.12	200000	
28	Si	45	H2	8850.668	ppb	4.4	73187.72	10000	
39	K	45	He	11241.660	ppb	0.7	125581.29	200000	
40	Ca	45	H2	589038.604	ppb	3.5	42983814.64	200000	
51	V	89	He	8.544	ppb	6.5	1483.47	1000	
52	Cr	89	He	3.535	ppb	9.1	739.22	2000	
55	Mn	89	He	260.856	ppb	0.6	23609.41	2000	
56	Fe	89	H2	7533.232	ppb	3.2	2180818.01	100000	
59	Co	89	He	2.829	ppb	2.5	924.55	1000	
60	Ni	89	He	8.749	ppb	11.5	1083.42	1000	
63	Cu	89	He	2.741	ppb	9.1	807.83	2000	
66	Zn	89	He	21.987	ppb	6.8	781.16	2000	
75	As	89	He	1.019	ppb	11.4	31.00	1000	
78	Se	89	H2	0.420	ppb	25.7	6.00	1000	
88	Sr	89	He	9310.040	ppb	0.6	1334048.25	2000	
95	Mo	89	He	0.735	ppb	12.4	123.34	1000	
107	Ag	89	He	0.010	ppb	153.2	21.11	100	
111	Cd	89	He	0.011	ppb	147.1	1.11	1000	
118	Sn	159	He	0.874	ppb	12.4	197.78	1000	
121	Sb	159	No Gas	0.076	ppb	21.4	126.81	1000	
137	Ba	159	No Gas	18.475	ppb	5.0	9246.82	2000	
182	W	159	No Gas	0.023	ppb	188.2	93.44	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.805	ppb	3.9	5082.74	2000	
232	Th	209	No Gas	0.044	ppb	33.2	230.26	1000	
238	U	209	No Gas	6.125	ppb	1.6	15887.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517338.86	0.8	1483357.64	102.29	29.5	120.4	
Sc	45	No Gas	3297968.82	0.5	3141192.51	104.99	29.5	120.4	
Sc	45	H2	400460.05	4.2	418309.46	95.73	29.5	120.4	
Sc	45	He	84237.56	0.8	85440.95	98.59	29.5	120.4	
Ge	72	No Gas	743080.45	0.1	694668.88	106.97	29.5	120.4	
Ge	72	H2	147104.75	3.8	157206.79	93.57	29.5	120.4	
Ge	72	He	62925.91	0.6	64721.85	97.23	29.5	120.4	
Y	89	H2	2538539.91	2.9	2572670.23	98.67	29.5	120.4	
Y	89	He	553864.06	1.0	574051.42	96.48	29.5	120.4	
Tb	159	No Gas	7738458.77	0.3	6821698.44	113.44	29.5	120.4	
Tb	159	He	3054002.80	0.9	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3833726.25	0.3	3547037.46	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:27:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.752	ppb	7.9	27463.52	25	95.01	89.8	110.2	
11	B	6	No Gas	30.570	ppb	5.6	24047.27	25	122.28	89.8	110.2	> +/- 10%
23	Na	45	He	5288.896	ppb	1.2	513909.66	5000	105.78	89.8	110.2	
24	Mg	45	He	5000.003	ppb	1.2	266540.48	5000	100	89.8	110.2	
27	Al	45	He	466.316	ppb	2.7	10150.61	500	93.26	89.8	110.2	
28	Si	45	H2	459.907	ppb	3.6	19812.41	500	91.98	89.8	110.2	
39	K	45	He	4801.272	ppb	0.5	249665.67	5000	96.03	89.8	110.2	
40	Ca	45	H2	4903.876	ppb	1.5	1831592.72	5000	98.08	89.8	110.2	
51	V	89	He	25.307	ppb	0.5	19805.61	25	101.23	89.8	110.2	
52	Cr	89	He	24.483	ppb	0.7	23443.75	25	97.93	89.8	110.2	
55	Mn	89	He	24.347	ppb	1.3	11111.69	25	97.39	89.8	110.2	
56	Fe	89	H2	4828.457	ppb	1.1	7219509.36	5000	96.57	89.8	110.2	
59	Co	89	He	24.730	ppb	2.5	39769.95	25	98.92	89.8	110.2	
60	Ni	89	He	24.457	ppb	3.3	10942.44	25	97.83	89.8	110.2	
63	Cu	89	He	24.841	ppb	1.3	30818.08	25	99.36	89.8	110.2	
66	Zn	89	He	24.777	ppb	3.2	4140.76	25	99.11	89.8	110.2	
75	As	89	He	24.398	ppb	0.5	3356.77	25	97.59	89.8	110.2	
78	Se	89	H2	23.987	ppb	1.5	1724.03	25	95.95	89.8	110.2	
88	Sr	89	He	23.761	ppb	0.5	17153.48	25	95.04	89.8	110.2	
95	Mo	89	He	24.945	ppb	2.5	19277.45	25	99.78	89.8	110.2	
107	Ag	89	He	25.085	ppb	0.4	66421.51	25	100.34	89.8	110.2	
111	Cd	89	He	24.471	ppb	0.9	8533.87	25	97.88	89.8	110.2	
118	Sn	159	He	23.268	ppb	1.3	18942.80	25	93.07	89.8	110.2	
121	Sb	159	No Gas	22.828	ppb	8.8	149497.17	25	91.31	89.8	110.2	
137	Ba	159	No Gas	23.359	ppb	9.8	60438.14	25	93.44	89.8	110.2	
182	W	159	No Gas	23.558	ppb	7.8	114885.12	25	94.23	89.8	110.2	
205	Tl	209	No Gas	23.819	ppb	7.3	252296.05	25	95.28	89.8	110.2	
208	Pb	209	No Gas	24.137	ppb	7.7	352653.96	25	96.55	89.8	110.2	
232	Th	209	No Gas	23.433	ppb	9.6	351695.00	25	93.73	89.8	110.2	
238	U	209	No Gas	23.903	ppb	9.0	335121.49	25	95.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1558652.39	4.8	1483357.64	105.08	29.5	120.4	
Sc	45	No Gas	3422110.17	5.2	3141192.51	108.94	29.5	120.4	
Sc	45	H2	409325.11	0.9	418309.46	97.85	29.5	120.4	
Sc	45	He	82179.98	0.9	85440.95	96.18	29.5	120.4	
Ge	72	No Gas	765434.39	5.7	694668.88	110.19	29.5	120.4	
Ge	72	H2	152951.51	1.4	157206.79	97.29	29.5	120.4	
Ge	72	He	63783.03	0.3	64721.85	98.55	29.5	120.4	
Y	89	H2	2625956.65	0.4	2572670.23	102.07	29.5	120.4	
Y	89	He	557858.18	0.6	574051.42	97.18	29.5	120.4	
Tb	159	No Gas	8040580.92	5.6	6821698.44	117.87	29.5	120.4	
Tb	159	He	3102344.50	0.6	2982140.2	104.03	29.5	120.4	
Bi	209	No Gas	4160696.02	5.8	3547037.46	117.3	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:29:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	3.8	100.00	0.2	
11	B	6	No Gas	3.916	ppb	16.8	3781.74	4	Failed DoD
23	Na	45	He	97.453	ppb	4.9	17647.18	200	
24	Mg	45	He	3.305	ppb	8.7	768.97	20	
27	Al	45	He	-0.274	ppb	N/A	13.33	20	
28	Si	45	H2	0.561	ppb	444.3	493.89	100	
39	K	45	He	-3.225	ppb	N/A	10379.14	200	
40	Ca	45	H2	4.761	ppb	1.1	2841.51	20	
51	V	89	He	0.293	ppb	5.6	395.58	1	
52	Cr	89	He	-0.011	ppb	N/A	58.66	1	
55	Mn	89	He	0.006	ppb	80.4	29.33	0.4	
56	Fe	89	H2	-0.318	ppb	N/A	6041.40	20	
59	Co	89	He	-0.002	ppb	N/A	17.78	0.2	
60	Ni	89	He	-0.395	ppb	N/A	161.12	0.4	Failed DoD
63	Cu	89	He	0.051	ppb	43.1	200.01	0.6	
66	Zn	89	He	-0.029	ppb	N/A	57.78	2	
75	As	89	He	0.003	ppb	352.2	3.67	1	
78	Se	89	H2	0.035	ppb	81.3	2.67	1	
88	Sr	89	He	0.060	ppb	33.2	50.00	1	
95	Mo	89	He	0.046	ppb	31.9	46.67	1	
107	Ag	89	He	0.003	ppb	94.2	24.44	0.2	
111	Cd	89	He	0.001	ppb	169.6	0.74	0.2	
118	Sn	159	He	0.029	ppb	57.1	81.12	1	
121	Sb	159	No Gas	0.034	ppb	49.8	213.58	0.2	
137	Ba	159	No Gas	0.034	ppb	8.8	90.10	0.4	
182	W	159	No Gas	0.068	ppb	19.7	347.06	1	
205	Tl	209	No Gas	0.018	ppb	14.3	276.98	0.2	
208	Pb	209	No Gas	0.019	ppb	45.4	447.17	0.2	
232	Th	209	No Gas	0.140	ppb	13.0	1925.68	1	
238	U	209	No Gas	0.031	ppb	25.6	390.45	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1345088.78	11.6	1483357.64	90.68	29.5	120.4	
Sc	45	No Gas	2910418.83	12.2	3141192.51	92.65	29.5	120.4	
Sc	45	H2	407349.80	1.0	418309.46	97.38	29.5	120.4	
Sc	45	He	82273.95	0.9	85440.95	96.29	29.5	120.4	
Ge	72	No Gas	649818.07	12.4	694668.88	93.54	29.5	120.4	
Ge	72	H2	153809.95	1.0	157206.79	97.84	29.5	120.4	
Ge	72	He	63402.52	1.0	64721.85	97.96	29.5	120.4	
Y	89	H2	2605476.90	0.7	2572670.23	101.28	29.5	120.4	
Y	89	He	557523.34	0.3	574051.42	97.12	29.5	120.4	
Tb	159	No Gas	6907807.74	12.4	6821698.44	101.26	29.5	120.4	
Tb	159	He	3060964.68	0.5	2982140.2	102.64	29.5	120.4	
Bi	209	No Gas	3610906.90	13.2	3547037.46	101.8	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP/KC **ANALYSIS DATE**: 8/04/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
AT 8/5/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNH04A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (14:49) fails low for B (0.550 ug/L)

Closing PQL (20:05) fails high for Na (370.493 ug/L) Cd (0.243 ug/L) and failed low for B (1.525 ug/L)

ICSA (14:51) fails low for Mn (0.498 ug/L), LRS1 (14:57) fails high for Ag (113.894 ug/L), CCV (19:14) failed high for B, CCV (19:46) failed high for Na (5562.452 ug/L) and had ISTD failure for Li, Sc in No Gas mode and Sc, Ge in Helium mode for 6020/DoD limits. Samples unaffected due to the failure because they were under analysis by EPA 200.8. CCB (19:49) fails low for B, Ca (13.94 ug/L), Mg (19.571 ug/L) and fails high for Na (417.181 ug/L). CCB (20:02) fails low for Na (184.967 ug/L) Mn (0.238 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH04A	08/04/2020	14:36	KC
CalStd	1	LNH04A	08/04/2020	14:40	KC
ICV	1	LNH04A	08/04/2020	14:43	KC
ICB	1	LNH04A	08/04/2020	14:46	KC
PQL	1	LNH04A	08/04/2020	14:49	KC
ICSA	1	LNH04A	08/04/2020	14:51	KC
ICSAB	1	LNH04A	08/04/2020	14:54	KC
LRS1	1	LNH04A	08/04/2020	14:57	KC
LRS2	1	LNH04A	08/04/2020	14:59	KC
RINSE	1	LNH04A	08/04/2020	15:02	KC
RINSE	1	LNH04A	08/04/2020	15:05	KC
CCV	1	LNH04A	08/04/2020	15:08	KC
CCB	1	LNH04A	08/04/2020	15:10	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:10	KC
PBWNG23IMW2	5	LNH04A	08/04/2020	17:13	KC
SN5815-004	5	LNH04A	08/04/2020	17:15	KC
LCSONG28IMS1	5	LNH04A	08/04/2020	17:18	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:22	KC
PBSNG28IMS1	5	LNH04A	08/04/2020	17:24	KC
SN6056-001	5	LNH04A	08/04/2020	17:27	KC
SN6056-002	5	LNH04A	08/04/2020	17:30	KC
SN6056-003	5	LNH04A	08/04/2020	17:32	KC
LCSWNG29IMW2	5	LNH04A	08/04/2020	17:35	KC
CCV	1	LNH04A	08/04/2020	17:38	KC
CCB	1	LNH04A	08/04/2020	17:40	KC
PBWNG29IMW2	5	LNH04A	08/04/2020	17:43	KC
SN5717-020R	5	LNH04A	08/04/2020	17:46	KC
SN5830-002R	5	LNH04A	08/04/2020	17:48	KC
SN5832-001R	5	LNH04A	08/04/2020	17:51	KC
SN5832-002R	5	LNH04A	08/04/2020	17:54	KC
SN5832-003R	5	LNH04A	08/04/2020	17:57	KC
SN5832-004R	5	LNH04A	08/04/2020	17:59	KC
SN5897-001R	5	LNH04A	08/04/2020	18:02	KC
SN6056-004	5	LNH04A	08/04/2020	18:05	KC
SN6061-002	5	LNH04A	08/04/2020	18:07	KC
CCV	1	LNH04A	08/04/2020	18:10	KC
CCB	1	LNH04A	08/04/2020	18:13	KC
LCSWNG30IMW1	1	LNH04A	08/04/2020	18:15	KC
PBWNG30IMW1	1	LNH04A	08/04/2020	18:18	KC
SN5923-001R	1	LNH04A	08/04/2020	18:21	KC
LCSWNG30IW2	5	LNH04A	08/04/2020	18:23	KC
PBWNG30IW3	5	LNH04A	08/04/2020	18:26	KC
SN5946-001R	5	LNH04A	08/04/2020	18:29	KC
LCSWNG30IMW3	5	LNH04A	08/04/2020	18:31	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNG30IMW3	5	LNH04A	08/04/2020	18:34	KC
SN5897-002R	5	LNH04A	08/04/2020	18:37	KC
LCSONG31IMS1	5	LNH04A	08/04/2020	18:39	KC
CCV	1	LNH04A	08/04/2020	18:42	KC
CCB	1	LNH04A	08/04/2020	18:45	KC
PBSNG31IMS1	5	LNH04A	08/04/2020	18:47	KC
SN6259-001	5	LNH04A	08/04/2020	18:50	KC
SN6259-001A	5	LNH04A	08/04/2020	18:53	KC
SN6259-001L	5	LNH04A	08/04/2020	18:55	KC
SN6259-001D	5	LNH04A	08/04/2020	18:58	KC
SN6259-001S	5	LNH04A	08/04/2020	19:01	KC
SN6259-002	5	LNH04A	08/04/2020	19:03	KC
SN6259-003	5	LNH04A	08/04/2020	19:06	KC
SN6259-004	5	LNH04A	08/04/2020	19:09	KC
LCSWNG31IMW1	1	LNH04A	08/04/2020	19:11	KC
CCV	1	LNH04A	08/04/2020	19:14	KC
CCB	1	LNH04A	08/04/2020	19:17	KC
PBWNG31IMW1	1	LNH04A	08/04/2020	19:19	KC
SN6071-001R	1	LNH04A	08/04/2020	19:22	KC
SN6071-002RA	1	LNH04A	08/04/2020	19:25	KC
SN6071-003RL	1	LNH04A	08/04/2020	19:27	KC
SN6071-004RP	1	LNH04A	08/04/2020	19:30	KC
SN6071-005RS	1	LNH04A	08/04/2020	19:33	KC
SN6310-001	1	LNH04A	08/04/2020	19:35	KC
SN6310-003	1	LNH04A	08/04/2020	19:38	KC
SN6347-001	1	LNH04A	08/04/2020	19:41	KC
SN6347-002	1	LNH04A	08/04/2020	19:43	KC
CCV	1	LNH04A	08/04/2020	19:46	KC
CCB	1	LNH04A	08/04/2020	19:49	KC
SN6347-003	1	LNH04A	08/04/2020	19:52	KC
SN6347-004	1	LNH04A	08/04/2020	19:54	KC
SN6349-001	1	LNH04A	08/04/2020	19:57	KC
CCV	1	LNH04A	08/04/2020	20:00	KC
CCB	1	LNH04A	08/04/2020	20:02	KC
PQL	1	LNH04A	08/04/2020	20:05	KC
RINSE	1	LNH04A	08/04/2020	20:07	KC
RINSE	1	LNH04A	08/04/2020	20:10	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq. Date-Time	8/4/2020 1:59:45 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

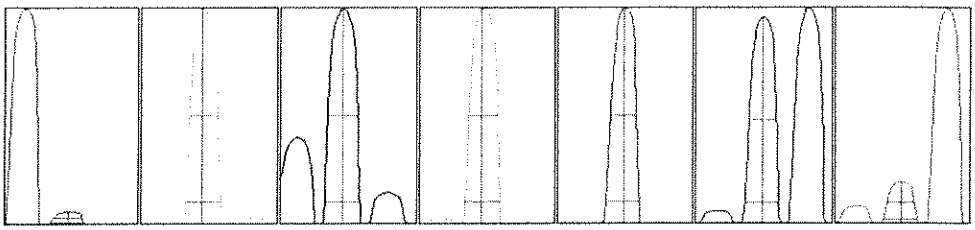
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	15287	152868.81	0.407	5.000	
9	6199	61986.07	0.517	5.000	
24	242790	2427898.98	0.188	5.000	
59	43961	439614.77	0.133	5.000	
115	469718	4697184.71	0.415	5.000	
205	25045	250446.03	0.721	5.000	
208	54819	548189.41	0.331	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	15388	15278	15219	15285	15265
9	6243	6193	6168	6218	6170
24	243427	242327	242646	242467	243082
59	43953	44021	43868	43970	43995
115	472930	468935	469961	467829	468937
205	24817	24899	25090	25177	25239
208	54777	55047	54917	54560	54794

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	24904.11	6.95	6.90 - 7.10	
9	10298.36	8.90	8.90 - 9.10	
24	385650.79	23.90	23.90 - 24.10	
59	71508.79	58.90	58.90 - 59.10	
115	829252.64	115.00	114.90 - 115.10	
205	42343.99	205.00	204.90 - 205.10	
208	92972.60	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.756	0.900	
24	0.65	0.772	0.900	
59	0.64	0.768	0.900	
115	0.59	0.744	0.900	
205	0.61	0.738	0.900	
208	0.61	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	3185	31854.68	1.519	5.000	
89	315279	3152788.75	1.753	5.000	
205	26625	266246.43	0.579	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	3120	3167	3177	3246	3217
89	306780	313481	316033	319491	320609
205	26407	26612	26562	26746	26795

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	9442	94419.88	0.896	5.000	
89	66467	664670.81	1.502	5.000	
205	12117	121168.79	0.759	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9313	9400	9496	9518	9483
89	64791	66312	66953	67055	67224
205	11970	12082	12181	12179	12172

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:36:32 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	5.56	34.7
11	B	6	No Gas	1674.60	3.0
23	Na	45	He	32546.17	1.7
24	Mg	45	He	71.12	44.3
27	Al	45	He	102.23	11.5
28	Si	45	H2	820.93	16.0
39	K	45	He	25419.56	1.8
40	Ca	45	H2	4992.15	4.9
51	V	89	He	193.34	21.0
52	Cr	89	He	904.53	1.6
55	Mn	89	He	145.31	21.5
56	Fe	89	H2	2709.95	6.3
59	Co	89	He	48.89	70.0
60	Ni	89	He	307.79	2.3
63	Cu	89	He	443.36	13.3
66	Zn	89	He	354.46	16.1
75	As	89	He	11.67	35.7
78	Se	89	H2	1.83	15.7
88	Sr	89	He	30.00	19.2
95	Mo	89	He	14.44	13.4
107	Ag	89	He	36.67	41.7
111	Cd	89	He	1.48	86.6
118	Sn	159	He	417.80	5.6
121	Sb	159	No Gas	206.90	20.1
137	Ba	159	No Gas	113.46	18.4
182	W	159	No Gas	46.72	32.7
205	Tl	209	No Gas	707.49	14.9
208	Pb	209	No Gas	427.15	19.5
232	Th	209	No Gas	220.25	15.7
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	8217096.81	0.9
Sc	45	No Gas	15952466.59	0.3
Sc	45	H2	1988810.56	1.0
Sc	45	He	477124.13	1.8
Ge	72	No Gas	2777617.47	0.3
Ge	72	H2	580378.32	0.4
Ge	72	He	274469.22	1.0
Y	89	H2	10106085.94	0.5
Y	89	He	2217336.32	1.8
Tb	159	No Gas	20085725.95	0.6
Tb	159	He	7863593.35	1.3
Bi	209	No Gas	9123990.23	0.8

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:40:11 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	384461.06	2.3
11	B	6	No Gas	260953.90	1.7
23	Na	45	He	8652114.62	0.4
24	Mg	45	He	4586873.58	0.3
27	Al	45	He	171092.53	1.0
28	Si	45	H2	278231.03	0.6
39	K	45	He	3714690.06	0.5
40	Ca	45	H2	25207833.23	0.5
51	V	89	He	286108.46	0.2
52	Cr	89	He	363692.60	0.3
55	Mn	89	He	159585.18	0.2
56	Fe	89	H2	93166381.43	0.1
59	Co	89	He	596835.02	0.6
60	Ni	89	He	165099.09	0.7
63	Cu	89	He	447291.80	0.4
66	Zn	89	He	50399.73	1.5
75	As	89	He	34250.67	1.5
78	Se	89	H2	17385.37	0.6
88	Sr	89	He	176553.29	0.2
95	Mo	89	He	204935.60	0.8
107	Ag	89	He	642851.72	0.6
111	Cd	89	He	76887.16	0.6
118	Sn	159	He	158560.17	0.5
121	Sb	159	No Gas	1003993.83	1.1
137	Ba	159	No Gas	393421.76	0.8
182	W	159	No Gas	785290.52	2.2
205	Tl	209	No Gas	1439334.65	2.0
208	Pb	209	No Gas	2024853.78	1.3
232	Th	209	No Gas	1969899.48	2.6
238	U	209	No Gas	1893012.23	2.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8274033.33	1.8	8217096.81	100.69	29.5	120.4	
Sc	45	No Gas	16078081.26	0.6	15952466.59	100.79	29.5	120.4	
Sc	45	H2	2009707.68	1.1	1988810.56	101.05	29.5	120.4	
Sc	45	He	482059.92	0.3	477124.13	101.03	29.5	120.4	
Ge	72	No Gas	2766585.37	0.8	2777617.47	99.6	29.5	120.4	
Ge	72	H2	589816.30	0.6	580378.32	101.63	29.5	120.4	
Ge	72	He	277754.05	0.7	274469.22	101.2	29.5	120.4	
Y	89	H2	10192705.99	0.3	10106085.94	100.86	29.5	120.4	
Y	89	He	2234021.86	0.3	2217336.32	100.75	29.5	120.4	
Tb	159	No Gas	20223042.20	1.1	20085725.95	100.68	29.5	120.4	
Tb	159	He	7939919.26	0.5	7863593.35	100.97	29.5	120.4	
Bi	209	No Gas	8965649.71	1.5	9123990.23	98.26	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:43:38 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.374	ppb	4.6	157417.07	20	101.87	89.6	110.4	
11	B	6	No Gas	20.090	ppb	4.7	106363.25	20	100.45	89.6	110.4	
23	Na	45	He	3928.251	ppb	0.2	3425193.35	4000	98.21	89.6	110.4	
24	Mg	45	He	3933.843	ppb	0.4	1807832.25	4000	98.35	89.6	110.4	
27	Al	45	He	373.016	ppb	1.3	64004.87	400	93.25	89.6	110.4	
28	Si	45	H2	431.558	ppb	0.5	118107.88	400	107.89	89.6	110.4	
39	K	45	He	3913.140	ppb	0.5	1472029.45	4000	97.83	89.6	110.4	
40	Ca	45	H2	3927.752	ppb	0.8	9703349.30	4000	98.19	89.6	110.4	
51	V	89	He	20.009	ppb	1.0	114914.74	20	100.04	89.6	110.4	
52	Cr	89	He	20.243	ppb	0.8	148185.07	20	101.21	89.6	110.4	
55	Mn	89	He	20.309	ppb	0.6	65080.50	20	101.54	89.6	110.4	
56	Fe	89	H2	3950.736	ppb	0.4	36111755.06	4000	98.77	89.6	110.4	
59	Co	89	He	20.344	ppb	1.2	243507.81	20	101.72	89.6	110.4	
60	Ni	89	He	20.563	ppb	1.2	68263.65	20	102.81	89.6	110.4	
63	Cu	89	He	20.521	ppb	1.2	184327.03	20	102.61	89.6	110.4	
66	Zn	89	He	20.518	ppb	0.3	20948.60	20	102.59	89.6	110.4	
75	As	89	He	19.977	ppb	0.9	13727.92	20	99.88	89.6	110.4	
78	Se	89	H2	20.435	ppb	1.0	6971.76	20	102.18	89.6	110.4	
88	Sr	89	He	19.556	ppb	0.8	69260.67	20	97.78	89.6	110.4	
95	Mo	89	He	40.321	ppb	0.6	165706.21	40	100.8	89.6	110.4	
107	Ag	89	He	20.890	ppb	1.0	269315.88	20	104.45	89.6	110.4	
111	Cd	89	He	20.778	ppb	1.0	32036.75	20	103.89	89.6	110.4	
118	Sn	159	He	19.566	ppb	1.7	62774.75	20	97.83	89.6	110.4	
121	Sb	159	No Gas	20.671	ppb	4.8	417044.46	20	103.35	89.6	110.4	
137	Ba	159	No Gas	20.417	ppb	4.0	161470.30	20	102.08	89.6	110.4	
182	W	159	No Gas	19.787	ppb	5.4	312227.37	20	98.94	89.6	110.4	
205	Tl	209	No Gas	21.541	ppb	4.8	634965.67	20	107.71	89.6	110.4	
208	Pb	209	No Gas	20.519	ppb	4.2	850558.53	20	102.6	89.6	110.4	
232	Th	209	No Gas	20.376	ppb	4.7	821668.88	20	101.88	89.6	110.4	
238	U	209	No Gas	20.317	ppb	4.2	787260.91	20	101.58	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8316526.34	2.3	8217096.81	101.21	29.5	120.4	
Sc	45	No Gas	16124199.67	2.0	15952466.59	101.08	29.5	120.4	
Sc	45	H2	1968785.10	1.5	1988810.56	98.99	29.5	120.4	
Sc	45	He	482967.81	0.4	477124.13	101.22	29.5	120.4	
Ge	72	No Gas	2810822.31	2.2	2777617.47	101.2	29.5	120.4	
Ge	72	H2	578138.43	1.6	580378.32	99.61	29.5	120.4	
Ge	72	He	276977.77	0.5	274469.22	100.91	29.5	120.4	
Y	89	H2	9999162.04	1.2	10106085.94	98.94	29.5	120.4	
Y	89	He	2240076.70	0.8	2217336.32	101.03	29.5	120.4	
Tb	159	No Gas	20328726.22	2.4	20085725.95	101.21	29.5	120.4	
Tb	159	He	8000016.62	0.6	7863593.35	101.73	29.5	120.4	
Bi	209	No Gas	9177829.69	1.8	9123990.23	100.59	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:46:21 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.008	ppb	17.9	64.45	0.2	
11	B	6	No Gas	0.498	ppb	15.1	4142.97	4	
23	Na	45	He	1.985	ppb	37.2	33803.72	200	
24	Mg	45	He	0.904	ppb	51.2	473.39	20	
27	Al	45	He	0.137	ppb	162.3	123.34	20	
28	Si	45	H2	0.288	ppb	109.7	884.34	100	
39	K	45	He	0.983	ppb	252.7	25458.00	200	
40	Ca	45	H2	1.054	ppb	4.7	7490.01	20	
51	V	89	He	-0.004	ppb	N/A	168.90	1	
52	Cr	89	He	0.011	ppb	62.5	974.53	1	
55	Mn	89	He	-0.009	ppb	N/A	116.65	0.4	
56	Fe	89	H2	1.563	ppb	3.6	16955.81	20	
59	Co	89	He	0.003	ppb	64.4	88.90	0.2	
60	Ni	89	He	-0.032	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.007	ppb	76.1	502.25	0.6	
66	Zn	89	He	0.028	ppb	161.4	378.91	2	
75	As	89	He	0.005	ppb	82.1	15.00	1	
78	Se	89	H2	0.033	ppb	32.9	13.00	1	
88	Sr	89	He	0.003	ppb	109.8	41.11	1	
95	Mo	89	He	0.096	ppb	4.6	401.13	1	
107	Ag	89	He	0.008	ppb	35.5	140.00	0.2	
111	Cd	89	He	0.005	ppb	80.6	8.89	0.2	
118	Sn	159	He	0.106	ppb	0.2	752.27	1	
121	Sb	159	No Gas	0.014	ppb	18.9	470.53	0.2	
137	Ba	159	No Gas	0.005	ppb	100.4	143.49	0.4	
182	W	159	No Gas	0.071	ppb	3.4	1121.30	1	
205	Tl	209	No Gas	0.006	ppb	85.9	864.34	0.2	
208	Pb	209	No Gas	0.014	ppb	29.3	974.44	0.2	
232	Th	209	No Gas	0.049	ppb	16.7	2092.52	1	
238	U	209	No Gas	0.012	ppb	24.7	460.53	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8046753.19	4.2	8217096.81	97.93	29.5	120.4	
Sc	45	No Gas	15220932.58	7.3	15952466.59	95.41	29.5	120.4	
Sc	45	H2	1955024.14	0.9	1988810.56	98.3	29.5	120.4	
Sc	45	He	471071.78	1.6	477124.13	98.73	29.5	120.4	
Ge	72	No Gas	2675657.91	4.8	2777617.47	96.33	29.5	120.4	
Ge	72	H2	572622.34	1.4	580378.32	98.66	29.5	120.4	
Ge	72	He	270968.66	0.6	274469.22	98.72	29.5	120.4	
Y	89	H2	9992575.77	0.7	10106085.94	98.88	29.5	120.4	
Y	89	He	2199290.43	1.2	2217336.32	99.19	29.5	120.4	
Tb	159	No Gas	19466142.63	6.4	20085725.95	96.92	29.5	120.4	
Tb	159	He	7885458.91	1.4	7863593.35	100.28	29.5	120.4	
Bi	209	No Gas	8846730.59	4.8	9123990.23	96.96	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:49:00 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.207	ppb	5.2	1619.04	0.2	103.5	79.5	120.4
11	B	6	No Gas	0.550	ppb	1.7	4605.33	4	13.75	79.5	120.4
23	Na	45	He	208.685	ppb	0.3	209846.95	200	104.34	79.5	120.4
24	Mg	45	He	21.014	ppb	3.9	9577.25	20	105.07	79.5	120.4
27	Al	45	He	18.588	ppb	7.5	3237.15	20	92.94	79.5	120.4
28	Si	45	H2	95.604	ppb	3.8	26644.71	100	95.6	79.5	120.4
39	K	45	He	204.833	ppb	1.1	99870.64	200	102.42	79.5	120.4
40	Ca	45	H2	19.770	ppb	0.7	53445.02	20	98.85	79.5	120.4
51	V	89	He	1.017	ppb	0.8	5984.82	1	101.7	79.5	120.4
52	Cr	89	He	1.040	ppb	1.3	8419.67	1	104	79.5	120.4
55	Mn	89	He	0.403	ppb	1.6	1425.15	0.4	100.75	79.5	120.4
56	Fe	89	H2	21.554	ppb	1.0	199588.59	20	107.77	79.5	120.4
59	Co	89	He	0.232	ppb	10.4	2802.73	0.2	116	79.5	120.4
60	Ni	89	He	0.367	ppb	8.4	1513.48	0.4	91.75	79.5	120.4
63	Cu	89	He	0.627	ppb	0.3	6029.29	0.6	104.5	79.5	120.4
66	Zn	89	He	1.967	ppb	5.0	2315.84	2	98.35	79.5	120.4
75	As	89	He	0.998	ppb	2.3	692.09	1	99.8	79.5	120.4
78	Se	89	H2	1.019	ppb	3.0	349.16	1	101.9	79.5	120.4
88	Sr	89	He	0.978	ppb	1.5	3469.46	1	97.8	79.5	120.4
95	Mo	89	He	1.052	ppb	3.5	4308.62	1	105.2	79.5	120.4
107	Ag	89	He	0.224	ppb	4.1	2904.85	0.2	112	79.5	120.4
111	Cd	89	He	0.205	ppb	3.1	315.19	0.2	102.5	79.5	120.4
118	Sn	159	He	0.999	ppb	3.7	3597.29	1	99.9	79.5	120.4
121	Sb	159	No Gas	0.222	ppb	5.7	4732.81	0.2	111	79.5	120.4
137	Ba	159	No Gas	0.405	ppb	10.2	3344.15	0.4	101.25	79.5	120.4
182	W	159	No Gas	1.186	ppb	2.7	18941.60	1	118.6	79.5	120.4
205	Tl	209	No Gas	0.205	ppb	11.7	6889.62	0.2	102.5	79.5	120.4
208	Pb	209	No Gas	0.215	ppb	3.4	9512.03	0.2	107.5	79.5	120.4
232	Th	209	No Gas	0.212	ppb	5.3	8963.30	0.2	106	79.5	120.4
238	U	209	No Gas	0.213	ppb	0.8	8435.58	0.2	106.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8392384.90	2.1	8217096.81	102.13	29.5	120.4	
Sc	45	No Gas	16134904.13	1.1	15952466.59	101.14	29.5	120.4	
Sc	45	H2	1957353.68	0.9	1988810.56	98.42	29.5	120.4	
Sc	45	He	475465.13	0.3	477124.13	99.65	29.5	120.4	
Ge	72	No Gas	2817344.28	1.3	2777617.47	101.43	29.5	120.4	
Ge	72	H2	571352.08	1.6	580378.32	98.44	29.5	120.4	
Ge	72	He	274266.17	0.5	274469.22	99.93	29.5	120.4	
Y	89	H2	9994530.53	1.2	10106085.94	98.9	29.5	120.4	
Y	89	He	2224480.66	0.7	2217336.32	100.32	29.5	120.4	
Tb	159	No Gas	20504829.14	1.1	20085725.95	102.09	29.5	120.4	
Tb	159	He	7974274.95	0.1	7863593.35	101.41	29.5	120.4	
Bi	209	No Gas	9366033.83	2.1	9123990.23	102.65	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:51:44 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.001	ppb	21.7	14.44	0.2	-50	50	
B	11	6	No Gas	1.839	ppb	5.0	10506.39	4	-50	100	
Na	23	45	He	97712.433	ppb	0.4	83662234.29	100000	80	120	
Mg	24	45	He	95522.869	ppb	0.5	43506781.02	100000	80	120	
Al	27	45	He	90063.201	ppb	0.3	15291832.41	100000	80	120	
Si	28	45	H2	11.481	ppb	2.9	3884.92	100	-50	50	
K	39	45	He	96822.077	ppb	0.4	35492426.02	100000	80	120	
Ca	40	45	H2	99196.614	ppb	0.9	242020280.84	100000	80	120	
V	51	89	He	0.011	ppb	41.8	251.12	1	-50	100	
Cr	52	89	He	0.284	ppb	4.1	2882.45	0.78	-100	100	
Mn	55	89	He	0.498	ppb	2.9	1683.80	0.0826	100	100	DoD
Fe	56	89	H2	96110.210	ppb	0.3	862347797.42	100000	80	120	
Co	59	89	He	0.304	ppb	3.7	3567.38	0.2	-50	100	
Ni	60	89	He	0.292	ppb	9.0	1233.43	0.114	100	100	
Cu	63	89	He	0.299	ppb	4.8	3028.22	-0.043	100	100	
Zn	66	89	He	0.526	ppb	6.7	856.72	-0.7632	100	100	
As	75	89	He	0.041	ppb	28.4	38.34	1	-50	100	
Se	78	89	H2	0.063	ppb	11.4	23.00	1	-50	100	
Sr	88	89	He	0.793	ppb	1.5	2744.82	0.0578	100	100	
Mo	95	89	He	1994.739	ppb	0.3	7930697.94	2000	80	120	
Ag	107	89	He	0.019	ppb	2.6	276.68	0.2	-50	50	
Cd	111	89	He	0.363	ppb	4.0	542.98	0.268	100	100	
Sn	118	159	He	0.259	ppb	4.4	1157.88	-0.24	100	100	
Sb	121	159	No Gas	0.167	ppb	5.8	3417.60	0.089	100	100	
Ba	137	159	No Gas	0.178	ppb	15.9	1451.70	-0.0794	100	100	
W	182	159	No Gas	0.199	ppb	9.5	3037.10	0.32	-100	100	
Tl	205	209	No Gas	-0.004	ppb	N/A	520.59	0.2	-50	50	
Pb	208	209	No Gas	0.089	ppb	3.6	3624.27	0.03	100	100	
Th	232	209	No Gas	0.012	ppb	20.5	630.72	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	35.5	43.38	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7748549.32	2.4	8217096.81	94.3	29.5	120.4	
Sc	45	No Gas	16030186.92	1.3	15952466.59	100.49	29.5	120.4	
Sc	45	H2	1945402.03	1.3	1988810.56	97.82	29.5	120.4	
Sc	45	He	478682.74	0.7	477124.13	100.33	29.5	120.4	
Ge	72	No Gas	2711631.40	1.8	2777617.47	97.62	29.5	120.4	
Ge	72	H2	533819.61	0.6	580378.32	91.98	29.5	120.4	
Ge	72	He	266186.24	0.5	274469.22	96.98	29.5	120.4	
Y	89	H2	9816662.57	1.3	10106085.94	97.14	29.5	120.4	
Y	89	He	2167209.19	0.2	2217336.32	97.74	29.5	120.4	
Tb	159	No Gas	19421245.40	2.0	20085725.95	96.69	29.5	120.4	
Tb	159	He	7409865.31	0.2	7863593.35	94.23	29.5	120.4	
Bi	209	No Gas	8038552.49	2.3	9123990.23	88.1	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:54:33 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.693	ppb	3.4	145883.02	20	79.5	120.4	
11	B	6	No Gas	21.033	ppb	2.5	101543.81	20	79.5	120.4	
23	Na	45	He	100883.689	ppb	0.2	85967304.28	100000	79.5	120.4	
24	Mg	45	He	98059.540	ppb	0.7	44450161.56	100000	79.5	120.4	
27	Al	45	He	91061.634	ppb	1.1	15387737.69	100000	79.5	120.4	
28	Si	45	H2	477.315	ppb	1.5	124581.10	500	79.5	120.4	
39	K	45	He	98832.434	ppb	0.9	36056509.84	100000	79.5	120.4	
40	Ca	45	H2	102667.628	ppb	3.1	241900194.17	100000	79.5	120.4	
51	V	89	He	21.070	ppb	0.8	115633.69	20	79.5	120.4	
52	Cr	89	He	20.917	ppb	1.2	146290.42	20	79.5	120.4	
55	Mn	89	He	20.662	ppb	0.9	63272.72	20	79.5	120.4	
56	Fe	89	H2	100851.084	ppb	3.2	869428971.68	100000	79.5	120.4	
59	Co	89	He	20.647	ppb	0.7	236183.65	20	79.5	120.4	
60	Ni	89	He	19.842	ppb	0.7	62958.99	20	79.5	120.4	
63	Cu	89	He	19.538	ppb	0.6	167741.71	20	79.5	120.4	
66	Zn	89	He	19.653	ppb	2.4	19188.29	20	79.5	120.4	
75	As	89	He	21.185	ppb	1.9	13911.47	20	79.5	120.4	
78	Se	89	H2	20.679	ppb	3.2	6654.45	20	79.5	120.4	
88	Sr	89	He	20.157	ppb	0.6	68216.65	20	79.5	120.4	
95	Mo	89	He	2072.738	ppb	0.4	8139773.49	2000	79.5	120.4	
107	Ag	89	He	18.637	ppb	0.5	229620.75	20	79.5	120.4	
111	Cd	89	He	19.181	ppb	0.3	28262.87	20	79.5	120.4	
118	Sn	159	He	20.760	ppb	0.2	59288.97	20	79.5	120.4	
121	Sb	159	No Gas	20.865	ppb	2.5	392528.15	20	79.5	120.4	
137	Ba	159	No Gas	20.380	ppb	1.2	150280.33	20	79.5	120.4	
182	W	159	No Gas	19.938	ppb	2.2	293402.20	20	79.5	120.4	
205	Tl	209	No Gas	21.335	ppb	3.1	532963.92	20	79.5	120.4	
208	Pb	209	No Gas	20.984	ppb	1.7	737184.29	20	79.5	120.4	
232	Th	209	No Gas	21.795	ppb	3.1	744774.83	20	79.5	120.4	
238	U	209	No Gas	21.642	ppb	2.7	710596.88	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7586295.77	1.9	8217096.81	92.32	29.5	120.4	
Sc	45	No Gas	16103724.20	0.8	15952466.59	100.95	29.5	120.4	
Sc	45	H2	1879241.52	1.7	1988810.56	94.49	29.5	120.4	
Sc	45	He	476409.81	0.4	477124.13	99.85	29.5	120.4	
Ge	72	No Gas	2700792.99	0.6	2777617.47	97.23	29.5	120.4	
Ge	72	H2	504923.91	1.4	580378.32	87	29.5	120.4	
Ge	72	He	266074.12	0.3	274469.22	96.94	29.5	120.4	
Y	89	H2	9435047.32	1.8	10106085.94	93.36	29.5	120.4	
Y	89	He	2140670.37	0.7	2217336.32	96.54	29.5	120.4	
Tb	159	No Gas	18943390.83	0.8	20085725.95	94.31	29.5	120.4	
Tb	159	He	7123910.80	0.6	7863593.35	90.59	29.5	120.4	
Bi	209	No Gas	7775646.31	1.5	9123990.23	85.22	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:57:23 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	107.001	ppb	0.7	764161.40	100	107	89.5	110.4	
11	B	6	No Gas	477.001	ppb	1.5	2298740.92	500	95.4	89.5	110.4	
51	V	89	He	1052.031	ppb	1.4	5541589.92	1000	105.2	89.5	110.4	
52	Cr	89	He	2088.028	ppb	1.6	13955919.19	2000	104.4	89.5	110.4	
55	Mn	89	He	2002.743	ppb	1.4	5882839.65	2000	100.14	89.5	110.4	
59	Co	89	He	1070.216	ppb	1.1	11766793.02	1000	107.02	89.5	110.4	
60	Ni	89	He	1076.250	ppb	1.4	3267663.53	1000	107.62	89.5	110.4	
63	Cu	89	He	2073.581	ppb	1.5	17070438.77	2000	103.68	89.5	110.4	
66	Zn	89	He	2020.437	ppb	1.3	1862984.49	2000	101.02	89.5	110.4	
75	As	89	He	1028.228	ppb	1.2	648601.11	1000	102.82	89.5	110.4	
78	Se	89	H2	955.327	ppb	1.5	314262.66	1000	95.53	89.5	110.4	
88	Sr	89	He	1919.511	ppb	1.1	6242518.17	2000	95.98	89.5	110.4	
95	Mo	89	He	1062.621	ppb	1.6	4011523.66	1000	106.26	89.5	110.4	
107	Ag	89	He	113.894	ppb	0.9	1348861.63	100	113.89	89.5	110.4	> +/- 10%
111	Cd	89	He	1033.946	ppb	0.9	1464575.43	1000	103.39	89.5	110.4	
118	Sn	159	He	999.438	ppb	0.5	2925919.92	1000	99.94	89.5	110.4	
121	Sb	159	No Gas	1024.141	ppb	0.2	20397937.43	1000	102.41	89.5	110.4	
137	Ba	159	No Gas	1967.386	ppb	0.5	15354967.66	2000	98.37	89.5	110.4	
182	W	159	No Gas	956.108	ppb	0.4	14899921.69	1000	95.61	89.5	110.4	
205	Tl	209	No Gas	1033.242	ppb	0.5	29438057.02	1000	103.32	89.5	110.4	
208	Pb	209	No Gas	1979.943	ppb	0.2	79367669.25	2000	99	89.5	110.4	
232	Th	209	No Gas	982.535	ppb	0.4	38326584.40	1000	98.25	89.5	110.4	
238	U	209	No Gas	970.660	ppb	1.3	36390699.42	1000	97.07	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7682088.54	0.3	8217096.81	93.49	29.5	120.4	
Sc	45	No Gas	16232413.30	0.8	15952466.59	101.75	29.5	120.4	
Ge	72	No Gas	2833621.75	0.3	2777617.47	102.02	29.5	120.4	
Tb	159	No Gas	20062807.62	0.9	20085725.95	99.89	29.5	120.4	
Bi	209	No Gas	8875394.35	0.6	9123990.23	97.28	29.5	120.4	
Sc	45	H2	1864682.34	1.5	1988810.56	93.76	29.5	120.4	
Ge	72	H2	511019.54	0.7	580378.32	88.05	29.5	120.4	
Y	89	H2	9645631.96	1.9	10106085.94	95.44	29.5	120.4	
Sc	45	He	446788.56	1.4	477124.13	93.64	29.5	120.4	
Ge	72	He	260332.83	0.9	274469.22	94.85	29.5	120.4	
Y	89	He	2058045.28	1.1	2217336.32	92.82	29.5	120.4	
Tb	159	He	7348541.69	0.7	7863593.35	93.45	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 2:59:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.038	ppb	13.0	263.34	100	
11	B	6	No Gas	8.789	ppb	11.2	41635.82	1000	
23	Na	45	He	196410.615	ppb	1.0	179523648.99	200000	
24	Mg	45	He	189486.903	ppb	1.0	92148144.18	200000	
27	Al	45	He	180205.771	ppb	1.9	32672867.57	200000	
28	Si	45	H2	8650.947	ppb	0.7	2312276.05	10000	
39	K	45	He	196926.736	ppb	2.1	77059280.13	200000	
40	Ca	45	H2	198865.952	ppb	0.7	482753517.25	200000	
51	V	89	He	0.347	ppb	100.2	2174.92	1000	
52	Cr	89	He	1.708	ppb	34.9	13359.85	2000	
55	Mn	89	He	7.714	ppb	5.9	24917.95	2000	
56	Fe	89	H2	97208.454	ppb	0.5	850119736.46	100000	
59	Co	89	He	0.783	ppb	41.2	9420.90	1000	
60	Ni	89	He	2.035	ppb	14.1	7060.15	1000	
63	Cu	89	He	1.353	ppb	41.7	12578.23	2000	
66	Zn	89	He	1.821	ppb	29.0	2190.38	2000	
75	As	89	He	0.436	ppb	71.9	310.39	1000	
78	Se	89	H2	0.415	ppb	1.8	137.32	1000	
88	Sr	89	He	1.471	ppb	38.1	5241.67	2000	
95	Mo	89	He	1.710	ppb	67.8	7025.02	1000	
107	Ag	89	He	0.116	ppb	24.4	1536.87	100	
111	Cd	89	He	0.240	ppb	115.4	368.22	1000	
118	Sn	159	He	1.453	ppb	11.5	4460.05	1000	
121	Sb	159	No Gas	0.567	ppb	6.7	10666.18	1000	
137	Ba	159	No Gas	1.059	ppb	2.1	7770.94	2000	
182	W	159	No Gas	1.291	ppb	3.0	18697.78	1000	
205	Tl	209	No Gas	0.389	ppb	14.4	9911.70	1000	
208	Pb	209	No Gas	0.809	ppb	8.1	27625.95	2000	
232	Th	209	No Gas	0.846	ppb	24.2	28021.28	1000	
238	U	209	No Gas	0.491	ppb	18.4	15527.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7283254.40	1.0	8217096.81	88.64	29.5	120.4	
Sc	45	No Gas	15559883.29	0.5	15952466.59	97.54	29.5	120.4	
Sc	45	H2	1935347.66	2.9	1988810.56	97.31	29.5	120.4	
Sc	45	He	511035.34	1.9	477124.13	107.11	29.5	120.4	
Ge	72	No Gas	2581065.46	0.9	2777617.47	92.92	29.5	120.4	
Ge	72	H2	499195.84	2.4	580378.32	86.01	29.5	120.4	
Ge	72	He	276421.32	2.1	274469.22	100.71	29.5	120.4	
Y	89	H2	9567143.16	2.1	10106085.94	94.67	29.5	120.4	
Y	89	He	2251059.76	1.8	2217336.32	101.52	29.5	120.4	
Tb	159	No Gas	18605837.92	0.6	20085725.95	92.63	29.5	120.4	
Tb	159	He	7052144.20	0.8	7863593.35	89.68	29.5	120.4	
Bi	209	No Gas	7463876.95	1.9	9123990.23	81.8	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 3:02:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	18.1	40.00	100	
11	B	6	No Gas	1.450	ppb	8.0	8832.99	1000	
23	Na	45	He	84.571	ppb	43.9	109847.81	200000	
24	Mg	45	He	46.634	ppb	71.1	22314.63	200000	
27	Al	45	He	39.562	ppb	70.2	7139.67	200000	
28	Si	45	H2	2.676	ppb	33.6	1571.85	10000	
39	K	45	He	73.924	ppb	45.0	54992.14	200000	
40	Ca	45	H2	54.386	ppb	7.9	142215.63	200000	
51	V	89	He	0.050	ppb	102.0	480.05	1000	
52	Cr	89	He	0.117	ppb	85.7	1753.32	2000	
55	Mn	89	He	0.118	ppb	102.4	519.96	2000	
56	Fe	89	H2	31.260	ppb	8.1	293065.66	100000	
59	Co	89	He	0.050	ppb	120.5	649.10	1000	
60	Ni	89	He	0.040	ppb	162.7	440.04	1000	
63	Cu	89	He	0.178	ppb	59.4	2023.93	2000	
66	Zn	89	He	0.081	ppb	170.5	435.58	2000	
75	As	89	He	0.079	ppb	54.7	65.34	1000	
78	Se	89	H2	0.095	ppb	10.1	34.83	1000	
88	Sr	89	He	0.088	ppb	108.8	341.16	2000	
95	Mo	89	He	0.390	ppb	45.9	1605.91	1000	
107	Ag	89	He	0.016	ppb	44.9	242.23	100	
111	Cd	89	He	0.054	ppb	104.2	84.82	1000	
118	Sn	159	He	0.382	ppb	12.0	1533.48	1000	
121	Sb	159	No Gas	0.059	ppb	15.1	1351.58	1000	
137	Ba	159	No Gas	0.034	ppb	17.9	367.08	2000	
182	W	159	No Gas	0.169	ppb	8.3	2626.57	1000	
205	Tl	209	No Gas	0.029	ppb	23.5	1428.35	1000	
208	Pb	209	No Gas	0.069	ppb	0.6	3003.51	2000	
232	Th	209	No Gas	0.046	ppb	15.7	1898.94	1000	
238	U	209	No Gas	0.026	ppb	12.3	937.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7934126.29	1.0	8217096.81	96.56	29.5	120.4	
Sc	45	No Gas	17446507.56	0.9	15952466.59	109.37	29.5	120.4	
Sc	45	H2	2010977.22	0.7	1988810.56	101.11	29.5	120.4	
Sc	45	He	500306.12	1.0	477124.13	104.86	29.5	120.4	
Ge	72	No Gas	2973943.61	0.6	2777617.47	107.07	29.5	120.4	
Ge	72	H2	549319.68	0.7	580378.32	94.65	29.5	120.4	
Ge	72	He	283459.57	0.6	274469.22	103.28	29.5	120.4	
Y	89	H2	10164485.69	0.6	10106085.94	100.58	29.5	120.4	
Y	89	He	2218331.42	1.5	2217336.32	100.04	29.5	120.4	
Tb	159	No Gas	19599113.59	1.4	20085725.95	97.58	29.5	120.4	
Tb	159	He	7463081.00	2.1	7863593.35	94.91	29.5	120.4	
Bi	209	No Gas	8402103.89	0.6	9123990.23	92.09	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 3:05:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	124.7	18.89	100	
11	B	6	No Gas	0.813	ppb	1.9	5676.87	1000	
23	Na	45	He	23.130	ppb	14.4	53087.13	200000	
24	Mg	45	He	8.518	ppb	16.5	3996.54	200000	
27	Al	45	He	7.348	ppb	14.4	1365.68	200000	
28	Si	45	H2	0.528	ppb	113.2	947.75	10000	
39	K	45	He	19.966	ppb	11.2	33227.05	200000	
40	Ca	45	H2	23.809	ppb	45.6	63226.79	200000	
51	V	89	He	0.013	ppb	61.1	263.35	1000	
52	Cr	89	He	0.038	ppb	5.3	1164.51	2000	
55	Mn	89	He	0.043	ppb	24.2	276.62	2000	
56	Fe	89	H2	14.760	ppb	44.9	138251.85	100000	
59	Co	89	He	0.012	ppb	13.1	191.13	1000	
60	Ni	89	He	-0.011	ppb	N/A	267.79	1000	
63	Cu	89	He	0.075	ppb	11.8	1092.31	2000	
66	Zn	89	He	0.000	ppb	4266.2	350.02	2000	
75	As	89	He	0.028	ppb	14.3	30.33	1000	
78	Se	89	H2	0.079	ppb	34.3	29.00	1000	
88	Sr	89	He	0.023	ppb	36.1	110.00	2000	
95	Mo	89	He	0.156	ppb	2.9	638.93	1000	
107	Ag	89	He	0.006	ppb	14.8	110.00	100	
111	Cd	89	He	0.011	ppb	33.7	17.78	1000	
118	Sn	159	He	0.158	ppb	14.6	870.06	1000	
121	Sb	159	No Gas	0.026	ppb	7.7	724.17	1000	
137	Ba	159	No Gas	0.007	ppb	63.0	170.19	2000	
182	W	159	No Gas	0.080	ppb	5.7	1301.52	1000	
205	Tl	209	No Gas	0.002	ppb	208.7	730.84	1000	
208	Pb	209	No Gas	0.021	ppb	13.4	1251.44	2000	
232	Th	209	No Gas	0.025	ppb	11.7	1164.70	1000	
238	U	209	No Gas	0.008	ppb	0.3	310.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7959901.50	0.6	8217096.81	96.87	29.5	120.4	
Sc	45	No Gas	17115808.33	0.6	15952466.59	107.29	29.5	120.4	
Sc	45	H2	1952941.49	0.4	1988810.56	98.2	29.5	120.4	
Sc	45	He	484660.11	1.4	477124.13	101.58	29.5	120.4	
Ge	72	No Gas	2935769.03	1.0	2777617.47	105.69	29.5	120.4	
Ge	72	H2	535710.32	0.7	580378.32	92.3	29.5	120.4	
Ge	72	He	279736.56	1.3	274469.22	101.92	29.5	120.4	
Y	89	H2	10033063.23	0.7	10106085.94	99.28	29.5	120.4	
Y	89	He	2188420.54	2.2	2217336.32	98.7	29.5	120.4	
Tb	159	No Gas	20210681.64	0.8	20085725.95	100.62	29.5	120.4	
Tb	159	He	7485579.82	1.9	7863593.35	95.19	29.5	120.4	
Bi	209	No Gas	8828077.04	0.3	9123990.23	96.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:08:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.750	ppb	1.6	187887.06	25	103	89.8	110.2	
11	B	6	No Gas	25.479	ppb	1.1	126981.44	25	101.92	89.8	110.2	
23	Na	45	He	5065.866	ppb	0.7	4443620.19	5000	101.32	89.8	110.2	
24	Mg	45	He	4962.063	ppb	1.0	2298981.06	5000	99.24	89.8	110.2	
27	Al	45	He	470.797	ppb	0.6	81416.75	500	94.16	89.8	110.2	
28	Si	45	H2	436.577	ppb	0.7	117454.71	500	87.32	89.8	110.2	> +/- 10%
39	K	45	He	4903.578	ppb	0.5	1853111.25	5000	98.07	89.8	110.2	
40	Ca	45	H2	4727.911	ppb	1.1	11479930.38	5000	94.56	89.8	110.2	
51	V	89	He	25.519	ppb	0.8	143433.37	25	102.08	89.8	110.2	
52	Cr	89	He	25.602	ppb	0.9	183234.66	25	102.41	89.8	110.2	
55	Mn	89	He	24.892	ppb	0.2	78061.34	25	99.57	89.8	110.2	
56	Fe	89	H2	4823.392	ppb	0.4	43641341.47	5000	96.47	89.8	110.2	
59	Co	89	He	25.642	ppb	1.1	300468.27	25	102.57	89.8	110.2	
60	Ni	89	He	25.595	ppb	1.5	83104.62	25	102.38	89.8	110.2	
63	Cu	89	He	25.888	ppb	0.2	227548.62	25	103.55	89.8	110.2	
66	Zn	89	He	25.197	ppb	1.5	25106.65	25	100.79	89.8	110.2	
75	As	89	He	25.245	ppb	1.1	16980.85	25	100.98	89.8	110.2	
78	Se	89	H2	23.864	ppb	0.9	8058.80	25	95.46	89.8	110.2	
88	Sr	89	He	23.458	ppb	0.6	81324.03	25	93.83	89.8	110.2	
95	Mo	89	He	25.072	ppb	0.6	100877.60	25	100.29	89.8	110.2	
107	Ag	89	He	25.180	ppb	0.4	317811.89	25	100.72	89.8	110.2	
111	Cd	89	He	24.759	ppb	0.5	37372.94	25	99.04	89.8	110.2	
118	Sn	159	He	24.639	ppb	0.9	74854.98	25	98.56	89.8	110.2	
121	Sb	159	No Gas	25.995	ppb	3.1	513698.67	25	103.98	89.8	110.2	
137	Ba	159	No Gas	25.282	ppb	2.8	195827.17	25	101.13	89.8	110.2	
182	W	159	No Gas	23.952	ppb	3.0	370273.17	25	95.81	89.8	110.2	
205	Tl	209	No Gas	25.497	ppb	2.4	714734.85	25	101.99	89.8	110.2	
208	Pb	209	No Gas	25.255	ppb	2.3	995622.95	25	101.02	89.8	110.2	
232	Th	209	No Gas	24.746	ppb	2.0	949198.28	25	98.98	89.8	110.2	
238	U	209	No Gas	24.903	ppb	2.6	917736.13	25	99.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7850079.65	2.3	8217096.81	95.53	29.5	120.4	
Sc	45	No Gas	16559013.43	3.6	15952466.59	103.8	29.5	120.4	
Sc	45	H2	1935511.25	2.0	1988810.56	97.32	29.5	120.4	
Sc	45	He	486922.47	0.3	477124.13	102.05	29.5	120.4	
Ge	72	No Gas	2841535.94	2.2	2777617.47	102.3	29.5	120.4	
Ge	72	H2	529063.11	1.4	580378.32	91.16	29.5	120.4	
Ge	72	He	277665.54	0.6	274469.22	101.16	29.5	120.4	
Y	89	H2	9898776.66	1.7	10106085.94	97.95	29.5	120.4	
Y	89	He	2192999.31	0.8	2217336.32	98.9	29.5	120.4	
Tb	159	No Gas	19914913.73	4.0	20085725.95	99.15	29.5	120.4	
Tb	159	He	7585636.41	0.1	7863593.35	96.47	29.5	120.4	
Bi	209	No Gas	8729509.00	3.4	9123990.23	95.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:10:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	42.5	168.89	0.2	
11	B	6	No Gas	0.808	ppb	10.4	5683.54	4	
23	Na	45	He	7.248	ppb	10.5	38758.72	200	
24	Mg	45	He	2.691	ppb	29.6	1293.49	20	
27	Al	45	He	1.292	ppb	34.4	321.12	20	
28	Si	45	H2	0.221	ppb	27.8	844.31	100	
39	K	45	He	6.972	ppb	19.9	27991.41	200	
40	Ca	45	H2	1.445	ppb	8.6	8240.49	20	
51	V	89	He	0.005	ppb	45.3	218.90	1	
52	Cr	89	He	0.016	ppb	20.1	993.20	1	
55	Mn	89	He	0.023	ppb	17.6	212.63	0.4	
56	Fe	89	H2	2.151	ppb	9.1	21818.10	20	
59	Co	89	He	0.004	ppb	33.4	100.01	0.2	
60	Ni	89	He	-0.053	ppb	N/A	131.11	0.4	
63	Cu	89	He	0.038	ppb	11.8	763.38	0.6	
66	Zn	89	He	0.026	ppb	61.6	371.13	2	
75	As	89	He	0.015	ppb	44.3	21.67	1	
78	Se	89	H2	0.039	ppb	22.1	14.67	1	
88	Sr	89	He	0.009	ppb	10.1	60.00	1	
95	Mo	89	He	0.116	ppb	13.9	473.36	1	
107	Ag	89	He	0.008	ppb	24.6	138.89	0.2	
111	Cd	89	He	0.007	ppb	40.7	12.59	0.2	
118	Sn	159	He	0.155	ppb	15.8	874.51	1	
121	Sb	159	No Gas	0.040	ppb	20.1	1001.15	0.2	
137	Ba	159	No Gas	0.011	ppb	85.3	200.22	0.4	
182	W	159	No Gas	0.117	ppb	10.2	1852.22	1	
205	Tl	209	No Gas	0.020	ppb	52.7	1271.48	0.2	
208	Pb	209	No Gas	0.024	ppb	30.2	1378.25	0.2	
232	Th	209	No Gas	0.111	ppb	22.2	4545.89	1	
238	U	209	No Gas	0.036	ppb	34.8	1354.96	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8007969.93	2.2	8217096.81	97.45	29.5	120.4	
Sc	45	No Gas	16372813.80	2.7	15952466.59	102.63	29.5	120.4	
Sc	45	H2	1906789.03	0.7	1988810.56	95.88	29.5	120.4	
Sc	45	He	477474.61	0.9	477124.13	100.07	29.5	120.4	
Ge	72	No Gas	2838626.70	2.0	2777617.47	102.2	29.5	120.4	
Ge	72	H2	519000.04	0.1	580378.32	89.42	29.5	120.4	
Ge	72	He	273897.10	0.4	274469.22	99.79	29.5	120.4	
Y	89	H2	9769290.82	0.5	10106085.94	96.67	29.5	120.4	
Y	89	He	2164631.41	0.4	2217336.32	97.62	29.5	120.4	
Tb	159	No Gas	19963534.98	2.4	20085725.95	99.39	29.5	120.4	
Tb	159	He	7607538.50	0.7	7863593.35	96.74	29.5	120.4	
Bi	209	No Gas	8919384.17	2.6	9123990.23	97.76	29.5	120.4	

Sample Report

Sample Name LCSWNG23IMW2

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:10:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	62.107	ppb	4.2	99233.37	100	
11	B	6	No Gas	609.585	ppb	4.3	658504.74	1000	
23	Na	45	He	9632.324	ppb	0.9	1585445.47	200000	
24	Mg	45	He	6850.683	ppb	1.1	588464.03	200000	
27	Al	45	He	2448.286	ppb	1.2	78490.42	200000	
28	Si	45	H2	1322.797	ppb	0.7	67728.88	10000	
39	K	45	He	12918.140	ppb	0.1	916428.34	200000	
40	Ca	45	H2	3280.573	ppb	0.2	1513596.99	200000	
51	V	89	He	653.903	ppb	0.2	699151.11	1000	
52	Cr	89	He	266.419	ppb	0.3	362196.59	2000	
55	Mn	89	He	661.847	ppb	0.6	394646.11	2000	
56	Fe	89	H2	1323.541	ppb	0.9	2275791.46	100000	
59	Co	89	He	679.196	ppb	0.6	1515453.23	1000	
60	Ni	89	He	669.727	ppb	0.1	412898.32	1000	
63	Cu	89	He	338.034	ppb	0.2	565134.15	2000	
66	Zn	89	He	640.985	ppb	0.5	120251.65	2000	
75	As	89	He	132.271	ppb	0.6	16942.81	1000	
78	Se	89	H2	131.184	ppb	0.7	8409.99	1000	
88	Sr	89	He	635.692	ppb	0.4	419557.02	2000	
95	Mo	89	He	138.146	ppb	0.7	105851.27	1000	
107	Ag	89	He	69.390	ppb	0.4	166797.09	100	
111	Cd	89	He	336.148	ppb	0.2	96625.71	1000	
118	Sn	159	He	623.136	ppb	0.7	385180.09	1000	
121	Sb	159	No Gas	132.052	ppb	3.4	559123.28	1000	
137	Ba	159	No Gas	2527.723	ppb	3.7	4192348.87	2000	
182	W	159	No Gas	131.304	ppb	4.0	434878.68	1000	
205	Tl	209	No Gas	136.035	ppb	3.6	854381.66	1000	
208	Pb	209	No Gas	132.866	ppb	4.3	1173417.33	2000	
232	Th	209	No Gas	130.235	ppb	5.3	1118860.88	1000	
238	U	209	No Gas	128.830	ppb	5.5	1063466.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8597661.00	1.9	8217096.81	104.63	29.5	120.4	
Sc	45	No Gas	16149731.35	2.2	15952466.59	101.24	29.5	120.4	
Sc	45	H2	1833864.72	1.1	1988810.56	92.21	29.5	120.4	
Sc	45	He	451345.53	0.5	477124.13	94.6	29.5	120.4	
Ge	72	No Gas	2792317.14	2.4	2777617.47	100.53	29.5	120.4	
Ge	72	H2	517686.20	1.6	580378.32	89.2	29.5	120.4	
Ge	72	He	256873.63	0.3	274469.22	93.59	29.5	120.4	
Y	89	H2	9395661.79	1.2	10106085.94	92.97	29.5	120.4	
Y	89	He	2088039.03	0.5	2217336.32	94.17	29.5	120.4	
Tb	159	No Gas	21323516.63	1.3	20085725.95	106.16	29.5	120.4	
Tb	159	He	7750393.15	0.8	7863593.35	98.56	29.5	120.4	
Bi	209	No Gas	9779356.41	2.2	9123990.23	107.18	29.5	120.4	

Sample Report

Sample Name PBWNG23IMW2

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:13:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	21.6	54.45	100	
11	B	6	No Gas	8.555	ppb	11.8	10712.15	1000	
23	Na	45	He	315.270	ppb	1.6	82216.33	200000	
24	Mg	45	He	9.898	ppb	14.3	924.55	200000	
27	Al	45	He	6.773	ppb	5.3	315.57	200000	
28	Si	45	H2	18.388	ppb	33.0	1725.36	10000	
39	K	45	He	-8.382	ppb	N/A	23628.93	200000	
40	Ca	45	H2	13.898	ppb	18.2	11287.05	200000	
51	V	89	He	0.399	ppb	19.9	615.60	1000	
52	Cr	89	He	0.372	ppb	8.6	1373.15	2000	
55	Mn	89	He	0.614	ppb	11.3	509.26	2000	
56	Fe	89	H2	4.165	ppb	8.0	9994.72	100000	
59	Co	89	He	0.120	ppb	31.1	317.80	1000	
60	Ni	89	He	-0.143	ppb	N/A	204.46	1000	
63	Cu	89	He	5.951	ppb	2.6	10490.94	2000	
66	Zn	89	He	5.025	ppb	3.3	1290.11	2000	
75	As	89	He	0.120	ppb	44.7	26.67	1000	
78	Se	89	H2	0.149	ppb	33.5	11.50	1000	
88	Sr	89	He	0.172	ppb	23.8	143.34	2000	
95	Mo	89	He	0.239	ppb	9.3	198.90	1000	
107	Ag	89	He	0.029	ppb	28.2	105.56	100	
111	Cd	89	He	0.070	ppb	18.4	21.85	1000	
118	Sn	159	He	1.419	ppb	9.8	1296.77	1000	
121	Sb	159	No Gas	0.276	ppb	1.3	1404.98	1000	
137	Ba	159	No Gas	1.675	ppb	13.9	2940.30	2000	
182	W	159	No Gas	0.220	ppb	14.1	787.57	1000	
205	Tl	209	No Gas	0.001	ppb	2417.1	777.57	1000	
208	Pb	209	No Gas	1.096	ppb	8.0	10219.77	2000	
232	Th	209	No Gas	0.764	ppb	9.2	6869.57	1000	
238	U	209	No Gas	0.079	ppb	32.1	667.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8375975.68	3.1	8217096.81	101.93	29.5	120.4	
Sc	45	No Gas	16262014.57	3.0	15952466.59	101.94	29.5	120.4	
Sc	45	H2	1892258.31	7.5	1988810.56	95.15	29.5	120.4	
Sc	45	He	454361.64	1.6	477124.13	95.23	29.5	120.4	
Ge	72	No Gas	2808844.52	3.1	2777617.47	101.12	29.5	120.4	
Ge	72	H2	532439.90	5.6	580378.32	91.74	29.5	120.4	
Ge	72	He	259103.36	1.4	274469.22	94.4	29.5	120.4	
Y	89	H2	9735592.86	7.5	10106085.94	96.33	29.5	120.4	
Y	89	He	2114498.49	1.6	2217336.32	95.36	29.5	120.4	
Tb	159	No Gas	21585613.57	1.9	20085725.95	107.47	29.5	120.4	
Tb	159	He	7807643.22	1.4	7863593.35	99.29	29.5	120.4	
Bi	209	No Gas	9862761.48	2.1	9123990.23	108.1	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:15:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	252.557	ppb	0.7	389666.87	100	
11	B	6	No Gas	1866.338	ppb	0.8	1943449.38	1000	
23	Na	45	He	15.675	ppb	24.9	33853.96	200000	
24	Mg	45	He	9.558	ppb	7.4	902.32	200000	
27	Al	45	He	1113.266	ppb	0.6	36319.31	200000	
28	Si	45	H2	121.719	ppb	4.6	7059.65	10000	
39	K	45	He	-15.337	ppb	N/A	23365.28	200000	
40	Ca	45	H2	17.638	ppb	1.3	12970.77	200000	
51	V	89	He	396.084	ppb	0.3	433493.37	1000	
52	Cr	89	He	732.605	ppb	0.4	1017790.02	2000	
55	Mn	89	He	1768.601	ppb	0.3	1079080.80	2000	
56	Fe	89	H2	3320.970	ppb	0.6	5858477.80	100000	
59	Co	89	He	809.630	ppb	0.3	1848780.77	1000	
60	Ni	89	He	1721.245	ppb	0.8	1085557.14	1000	
63	Cu	89	He	327.425	ppb	0.5	560233.49	2000	
66	Zn	89	He	1088.850	ppb	1.3	208824.34	2000	
75	As	89	He	222.687	ppb	0.7	29184.61	1000	
78	Se	89	H2	516.969	ppb	0.6	34020.35	1000	
88	Sr	89	He	107.393	ppb	1.2	72562.10	2000	
95	Mo	89	He	374.113	ppb	0.2	293341.42	1000	
107	Ag	89	He	842.000	ppb	1.1	2070917.11	100	>LDR
111	Cd	89	He	787.656	ppb	0.1	231715.62	1000	
118	Sn	159	He	1.438	ppb	3.6	1331.23	1000	
121	Sb	159	No Gas	301.927	ppb	0.1	1281511.06	1000	
137	Ba	159	No Gas	1930.115	ppb	0.7	3209530.88	2000	
182	W	159	No Gas	0.101	ppb	22.3	383.78	1000	
205	Tl	209	No Gas	569.360	ppb	0.6	3571658.77	1000	
208	Pb	209	No Gas	1021.329	ppb	1.1	9013277.32	2000	
232	Th	209	No Gas	0.126	ppb	22.0	1314.87	1000	
238	U	209	No Gas	0.021	ppb	113.5	180.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8298264.85	0.7	8217096.81	100.99	29.5	120.4	
Sc	45	No Gas	16115140.41	1.0	15952466.59	101.02	29.5	120.4	
Sc	45	H2	1870790.79	1.6	1988810.56	94.07	29.5	120.4	
Sc	45	He	458647.43	1.3	477124.13	96.13	29.5	120.4	
Ge	72	No Gas	2806732.73	0.7	2777617.47	101.05	29.5	120.4	
Ge	72	H2	531019.40	1.0	580378.32	91.5	29.5	120.4	
Ge	72	He	262734.14	0.3	274469.22	95.72	29.5	120.4	
Y	89	H2	9646451.74	1.8	10106085.94	95.45	29.5	120.4	
Y	89	He	2136968.70	0.4	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21373760.79	1.5	20085725.95	106.41	29.5	120.4	
Tb	159	He	7938905.09	0.1	7863593.35	100.96	29.5	120.4	
Bi	209	No Gas	9769566.20	1.0	9123990.23	107.08	29.5	120.4	

Sample Report

Sample Name LCSONG28IMS1

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:18:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.171	ppb	5.0	80559.59	100	
11	B	6	No Gas	506.013	ppb	3.9	549707.62	1000	
23	Na	45	He	7652.236	ppb	1.3	1289497.89	200000	
24	Mg	45	He	5452.238	ppb	1.7	477111.50	200000	
27	Al	45	He	1942.115	ppb	1.6	63440.41	200000	
28	Si	45	H2	988.485	ppb	2.2	51007.64	10000	
39	K	45	He	10501.062	ppb	1.4	763431.16	200000	
40	Ca	45	H2	2608.050	ppb	0.6	1209080.04	200000	
51	V	89	He	522.982	ppb	1.1	572352.12	1000	
52	Cr	89	He	215.837	ppb	1.6	300493.40	2000	
55	Mn	89	He	527.406	ppb	1.6	321910.42	2000	
56	Fe	89	H2	1066.627	ppb	0.5	1874993.08	100000	
59	Co	89	He	543.429	ppb	1.0	1241030.49	1000	
60	Ni	89	He	543.157	ppb	0.8	342793.95	1000	
63	Cu	89	He	271.066	ppb	0.9	463901.40	2000	
66	Zn	89	He	515.085	ppb	1.0	98972.76	2000	
75	As	89	He	104.712	ppb	0.7	13730.26	1000	
78	Se	89	H2	103.651	ppb	0.4	6792.18	1000	
88	Sr	89	He	506.847	ppb	1.7	342383.60	2000	
95	Mo	89	He	108.232	ppb	0.6	84877.86	1000	
107	Ag	89	He	55.603	ppb	0.6	136798.49	100	
111	Cd	89	He	270.014	ppb	1.0	79439.30	1000	
118	Sn	159	He	544.698	ppb	1.2	344653.65	1000	
121	Sb	159	No Gas	103.494	ppb	4.1	449166.24	1000	
137	Ba	159	No Gas	1982.191	ppb	4.3	3369343.00	2000	
182	W	159	No Gas	102.271	ppb	3.8	347185.81	1000	
205	Tl	209	No Gas	108.762	ppb	3.7	688410.47	1000	
208	Pb	209	No Gas	106.045	ppb	4.3	943768.32	2000	
232	Th	209	No Gas	104.291	ppb	4.5	902962.59	1000	
238	U	209	No Gas	105.413	ppb	5.2	876885.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8640513.54	1.7	8217096.81	105.15	29.5	120.4	
Sc	45	No Gas	16450602.52	2.5	15952466.59	103.12	29.5	120.4	
Sc	45	H2	1841240.99	0.6	1988810.56	92.58	29.5	120.4	
Sc	45	He	459786.99	1.3	477124.13	96.37	29.5	120.4	
Ge	72	No Gas	2826343.51	1.6	2777617.47	101.75	29.5	120.4	
Ge	72	H2	522434.64	0.5	580378.32	90.02	29.5	120.4	
Ge	72	He	262833.36	0.9	274469.22	95.76	29.5	120.4	
Y	89	H2	9602929.36	0.5	10106085.94	95.02	29.5	120.4	
Y	89	He	2137077.12	0.5	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21857578.28	1.7	20085725.95	108.82	29.5	120.4	
Tb	159	He	7932188.56	0.5	7863593.35	100.87	29.5	120.4	
Bi	209	No Gas	9851646.82	1.4	9123990.23	107.98	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	023LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:22:09 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	58.855	ppb	3.6	95756.04	50	23.54	79.5	120.4	
B	11	6	No Gas	577.808	ppb	3.0	635729.37	500	23.11	79.5	120.4	
Na	23	45	He	9101.228	ppb	1.7	1515872.45	7500	24.27	79.5	120.4	6020□ DoD
Mg	24	45	He	6470.890	ppb	1.1	561860.42	5000	25.88	79.5	120.4	6020□ DoD
Al	27	45	He	2309.201	ppb	1.6	74832.91	2000	23.09	79.5	120.4	
Si	28	45	H2	1162.673	ppb	1.9	61957.22	1000	23.25	0	200	
K	39	45	He	12114.548	ppb	0.6	870245.46	10000	24.23	79.5	120.4	6020□ DoD
Ca	40	45	H2	2952.589	ppb	1.7	1416043.97	2500	23.62	79.5	120.4	DoD
V	51	89	He	618.194	ppb	0.1	672417.36	500	24.73	79.5	120.4	6020□ DoD
Cr	52	89	He	253.641	ppb	0.2	350835.94	200	25.36	79.5	120.4	6020□ DoD
Mn	55	89	He	619.592	ppb	0.7	375860.75	500	24.78	79.5	120.4	6020□ DoD
Fe	56	89	H2	1182.697	ppb	1.6	2146576.45	1000	23.65	79.5	120.4	DoD
Co	59	89	He	645.688	ppb	0.9	1465576.66	500	25.83	79.5	120.4	6020□ DoD
Ni	60	89	He	642.008	ppb	0.6	402666.57	500	25.68	79.5	120.4	6020□ DoD
Cu	63	89	He	319.962	ppb	0.2	544198.01	250	25.6	79.5	120.4	6020□ DoD
Zn	66	89	He	608.988	ppb	0.7	116245.35	500	24.36	79.5	120.4	6020□ DoD
As	75	89	He	125.367	ppb	1.3	16337.02	100	25.07	79.5	120.4	6020□ DoD
Se	78	89	H2	118.758	ppb	1.4	8035.79	100	23.75	79.5	120.4	
Sr	88	89	He	599.982	ppb	0.7	402844.46	500	24	79.5	120.4	DoD
Mo	95	89	He	129.705	ppb	1.1	101102.67	100	25.94	79.5	120.4	6020□ DoD
Ag	107	89	He	65.889	ppb	0.4	161121.93	50	26.36	79.5	120.4	6020□ DoD
Cd	111	89	He	319.679	ppb	0.9	93482.99	250	25.57	79.5	120.4	6020□ DoD
Sn	118	159	He	590.381	ppb	0.5	371982.62	500	23.62	79.5	120.4	DoD
Sb	121	159	No Gas	124.479	ppb	3.4	532713.45	100	24.9	79.5	120.4	6020□ DoD
Ba	137	159	No Gas	2365.631	ppb	2.7	3965733.72	2000	23.66	79.5	120.4	DoD
W	182	159	No Gas	122.871	ppb	3.7	411315.12	100	24.57	79.5	120.4	6020□ DoD
Tl	205	209	No Gas	130.529	ppb	2.6	817821.95	100	26.11	79.5	120.4	6020□ DoD
[Pb]	206	209	No Gas	125.268	ppb	3.1	280798.48	100	25.05	79.5	120.4	6020□ DoD
[Pb]	207	209	No Gas	124.465	ppb	3.2	243257.24	100	24.89	79.5	120.4	6020□ DoD
Pb	208	209	No Gas	126.117	ppb	3.4	1111151.24	100	25.22	79.5	120.4	6020□ DoD
Th	232	209	No Gas	123.476	ppb	4.1	1058308.67	100	24.7	79.5	120.4	6020□ DoD
U	238	209	No Gas	122.524	ppb	4.1	1009069.44	100	24.5	79.5	120.4	6020□ DoD

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8753136.47	1.5	8217096.81	106.52	29.5	120.4	
Sc	45	No Gas	16328359.24	1.2	15952466.59	102.36	29.5	120.4	
Sc	45	H2	1905725.19	0.6	1988810.56	95.82	29.5	120.4	
Sc	45	He	456257.06	1.2	477124.13	95.63	29.5	120.4	
Ge	72	No Gas	2818020.31	1.9	2777617.47	101.45	29.5	120.4	
Ge	72	H2	536615.25	1.8	580378.32	92.46	29.5	120.4	
Ge	72	He	261561.88	0.8	274469.22	95.3	29.5	120.4	
Y	89	H2	9916963.59	0.8	10106085.94	98.13	29.5	120.4	
Y	89	He	2124154.27	0.4	2217336.32	95.8	29.5	120.4	
Tb	159	No Gas	21550305.79	1.0	20085725.95	107.29	29.5	120.4	
Tb	159	He	7899893.29	0.6	7863593.35	100.46	29.5	120.4	
Bi	209	No Gas	9753033.11	1.6	9123990.23	106.89	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG28IMS1
File Name	024_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:24:49 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.047	ppb	19.4	81.11	0.5	
B	11	6	No Gas	11.117	ppb	9.0	13695.86	10	PB 6020 Fails DoD
Na	23	45	He	-17.046	ppb	N/A	28018.19	500	
Mg	24	45	He	15.173	ppb	6.9	1369.06	50	
Al	27	45	He	13.795	ppb	5.6	537.81	50	
Si	28	45	H2	7.648	ppb	9.5	1174.69	250	
K	39	45	He	20.443	ppb	7.7	25444.61	500	
Ca	40	45	H2	25.365	ppb	2.7	16713.70	50	
V	51	89	He	0.326	ppb	25.7	533.37	2.5	
Cr	52	89	He	0.978	ppb	5.2	2189.11	2.5	
Mn	55	89	He	0.764	ppb	4.4	595.24	1	
Fe	56	89	H2	25.699	ppb	1.2	48849.10	50	
Co	59	89	He	0.144	ppb	26.6	368.92	0.5	
Ni	60	89	He	0.397	ppb	17.2	537.81	1	
Cu	63	89	He	0.497	ppb	10.1	1254.54	1.5	
Zn	66	89	He	3.047	ppb	26.9	907.84	5	
As	75	89	He	0.118	ppb	30.8	26.33	2.5	
Se	78	89	H2	0.152	ppb	10.6	12.00	2.5	
Sr	88	89	He	0.138	ppb	2.3	120.00	2.5	
Mo	95	89	He	0.240	ppb	4.7	198.90	2.5	
Ag	107	89	He	0.051	ppb	15.6	157.78	0.5	
Cd	111	89	He	0.067	ppb	26.7	20.74	0.5	
Sn	118	159	He	45.688	ppb	1.1	28908.52	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	23.2	824.28	0.5	
Ba	137	159	No Gas	1.432	ppb	33.3	2526.42	1	PB 6020 Fails DoD
W	182	159	No Gas	0.244	ppb	10.5	867.68	2.5	
Tl	205	209	No Gas	0.023	ppb	161.7	907.72	0.5	
Pb	208	209	No Gas	0.267	ppb	16.5	2829.96	0.5	
Th	232	209	No Gas	0.757	ppb	22.9	6776.23	2.5	
U	238	209	No Gas	0.110	ppb	44.2	914.40	0.5	

QC ISTD Table

Katahdin Analytical Services A0000613

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8567256.54	1.2	8217096.81	104.26	29.5	120.4	
Sc	45	No Gas	16074387.57	0.3	15952466.59	100.76	29.5	120.4	
Sc	45	H2	1883905.73	0.2	1988810.56	94.73	29.5	120.4	
Sc	45	He	450954.98	0.5	477124.13	94.52	29.5	120.4	
Ge	72	No Gas	2794993.49	1.0	2777617.47	100.63	29.5	120.4	
Ge	72	H2	531362.27	0.2	580378.32	91.55	29.5	120.4	
Ge	72	He	258235.86	0.8	274469.22	94.09	29.5	120.4	
Y	89	H2	9836562.26	0.7	10106085.94	97.33	29.5	120.4	
Y	89	He	2099307.31	1.4	2217336.32	94.68	29.5	120.4	
Tb	159	No Gas	21575522.73	0.4	20085725.95	107.42	29.5	120.4	
Tb	159	He	7827591.34	0.9	7863593.35	99.54	29.5	120.4	
Bi	209	No Gas	9820566.78	0.3	9123990.23	107.63	29.5	120.4	

Sample Report

Sample Name SN6056-001

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:27:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.547	ppb	5.4	8678.48	100	
11	B	6	No Gas	60.513	ppb	3.5	65529.63	1000	
23	Na	45	He	376.665	ppb	1.5	93873.15	200000	
24	Mg	45	He	30544.015	ppb	1.4	2689019.81	200000	
27	Al	45	He	112740.493	ppb	2.2	3699901.13	200000	
28	Si	45	H2	2768.574	ppb	1.5	145532.95	10000	
39	K	45	He	12355.430	ppb	1.7	899456.00	200000	
40	Ca	45	H2	27808.970	ppb	0.7	13214997.03	200000	
51	V	89	He	195.271	ppb	2.1	231184.67	1000	
52	Cr	89	He	145.435	ppb	1.3	219241.84	2000	
55	Mn	89	He	4430.226	ppb	2.3	2922458.68	2000	
56	Fe	89	H2	183450.083	ppb	0.7	349812450.13	100000	
59	Co	89	He	70.725	ppb	1.4	174683.68	1000	
60	Ni	89	He	193.185	ppb	1.3	132036.56	1000	
63	Cu	89	He	180.846	ppb	2.1	334793.49	2000	
66	Zn	89	He	838.810	ppb	1.9	174032.56	2000	
75	As	89	He	68.170	ppb	1.8	9669.09	1000	
78	Se	89	H2	3.762	ppb	5.0	269.49	1000	
88	Sr	89	He	76.897	ppb	2.9	56189.14	2000	
95	Mo	89	He	16.706	ppb	3.7	14178.92	1000	
107	Ag	89	He	0.595	ppb	4.0	1621.27	100	
111	Cd	89	He	3.146	ppb	3.2	1002.27	1000	
118	Sn	159	He	51.298	ppb	3.2	32770.61	1000	
121	Sb	159	No Gas	1.318	ppb	2.9	5794.39	1000	
137	Ba	159	No Gas	619.601	ppb	3.2	1027188.94	2000	
182	W	159	No Gas	0.520	ppb	7.8	1772.11	1000	
205	Tl	209	No Gas	2.762	ppb	7.7	17488.16	1000	
208	Pb	209	No Gas	313.047	ppb	2.8	2673118.28	2000	
232	Th	209	No Gas	26.976	ppb	2.6	224357.27	1000	
238	U	209	No Gas	8.040	ppb	5.3	64186.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414272.10	1.8	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	16382276.28	1.9	15952466.59	102.69	29.5	120.4	
Sc	45	H2	1893826.64	1.9	1988810.56	95.22	29.5	120.4	
Sc	45	He	462644.90	0.8	477124.13	96.97	29.5	120.4	
Ge	72	No Gas	2767794.29	1.7	2777617.47	99.65	29.5	120.4	
Ge	72	H2	515788.14	1.7	580378.32	88.87	29.5	120.4	
Ge	72	He	259776.88	0.6	274469.22	94.65	29.5	120.4	
Y	89	H2	10430929.52	1.7	10106085.94	103.21	29.5	120.4	
Y	89	He	2311003.27	1.1	2217336.32	104.22	29.5	120.4	
Tb	159	No Gas	21313525.93	1.6	20085725.95	106.11	29.5	120.4	
Tb	159	He	7918335.78	1.7	7863593.35	100.7	29.5	120.4	
Bi	209	No Gas	9454199.07	1.5	9123990.23	103.62	29.5	120.4	

Sample Report

Sample Name SN6056-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:30:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.839	ppb	5.1	9108.71	100	
11	B	6	No Gas	63.371	ppb	2.4	68352.58	1000	
23	Na	45	He	395.050	ppb	2.3	96432.89	200000	
24	Mg	45	He	32267.566	ppb	1.0	2826741.31	200000	
27	Al	45	He	118713.786	ppb	1.4	3876790.12	200000	
28	Si	45	H2	2356.790	ppb	1.4	123802.46	10000	
39	K	45	He	11727.522	ppb	1.8	850753.01	200000	
40	Ca	45	H2	32790.132	ppb	0.2	15554122.96	200000	
51	V	89	He	202.695	ppb	0.7	239804.35	1000	
52	Cr	89	He	147.020	ppb	1.0	221455.22	2000	
55	Mn	89	He	5184.177	ppb	0.9	3417477.23	2000	
56	Fe	89	H2	191409.471	ppb	0.5	368571248.27	100000	
59	Co	89	He	76.302	ppb	1.3	188314.34	1000	
60	Ni	89	He	184.529	ppb	0.4	126043.65	1000	
63	Cu	89	He	216.206	ppb	0.3	399898.64	2000	
66	Zn	89	He	993.500	ppb	1.6	205909.80	2000	
75	As	89	He	70.853	ppb	0.5	10042.05	1000	
78	Se	89	H2	4.319	ppb	4.7	312.32	1000	
88	Sr	89	He	83.602	ppb	1.8	61044.01	2000	
95	Mo	89	He	17.547	ppb	2.0	14880.84	1000	
107	Ag	89	He	0.631	ppb	3.5	1715.73	100	
111	Cd	89	He	3.900	ppb	0.8	1241.18	1000	
118	Sn	159	He	50.411	ppb	1.6	32045.57	1000	
121	Sb	159	No Gas	1.363	ppb	3.4	5961.33	1000	
137	Ba	159	No Gas	614.680	ppb	2.3	1014612.47	2000	
182	W	159	No Gas	0.533	ppb	9.5	1805.48	1000	
205	Tl	209	No Gas	2.837	ppb	5.5	18019.55	1000	
208	Pb	209	No Gas	253.150	ppb	3.4	2170958.91	2000	
232	Th	209	No Gas	26.828	ppb	4.3	224038.99	1000	
238	U	209	No Gas	8.700	ppb	4.3	69759.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8389790.95	1.6	8217096.81	102.1	29.5	120.4	
Sc	45	No Gas	16252937.99	0.9	15952466.59	101.88	29.5	120.4	
Sc	45	H2	1890615.16	1.0	1988810.56	95.06	29.5	120.4	
Sc	45	He	460355.02	0.8	477124.13	96.49	29.5	120.4	
Ge	72	No Gas	2767349.65	2.4	2777617.47	99.63	29.5	120.4	
Ge	72	H2	514796.66	1.0	580378.32	88.7	29.5	120.4	
Ge	72	He	259144.31	0.3	274469.22	94.42	29.5	120.4	
Y	89	H2	10533677.58	1.1	10106085.94	104.23	29.5	120.4	
Y	89	He	2309134.46	0.5	2217336.32	104.14	29.5	120.4	
Tb	159	No Gas	21215283.57	0.5	20085725.95	105.62	29.5	120.4	
Tb	159	He	7875383.98	0.5	7863593.35	100.15	29.5	120.4	
Bi	209	No Gas	9495985.13	1.9	9123990.23	104.08	29.5	120.4	

Sample Report

Sample Name SN6056-003

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:32:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.835	ppb	2.0	8953.06	100	
11	B	6	No Gas	61.934	ppb	2.5	65719.33	1000	
23	Na	45	He	403.730	ppb	1.4	97101.64	200000	
24	Mg	45	He	32785.013	ppb	0.9	2849632.29	200000	
27	Al	45	He	123748.440	ppb	1.1	4009670.46	200000	
28	Si	45	H2	2585.575	ppb	1.0	135181.04	10000	
39	K	45	He	12791.196	ppb	0.6	918495.98	200000	
40	Ca	45	H2	32343.356	ppb	0.3	15278967.83	200000	
51	V	89	He	213.740	ppb	1.0	251011.65	1000	
52	Cr	89	He	153.958	ppb	0.3	230173.43	2000	
55	Mn	89	He	4695.812	ppb	0.5	3072982.62	2000	
56	Fe	89	H2	194980.460	ppb	0.5	372888175.04	100000	
59	Co	89	He	77.564	ppb	0.8	190031.17	1000	
60	Ni	89	He	187.346	ppb	0.9	127025.58	1000	
63	Cu	89	He	183.233	ppb	0.7	336501.87	2000	
66	Zn	89	He	855.148	ppb	0.4	176000.86	2000	
75	As	89	He	71.782	ppb	1.4	10099.10	1000	
78	Se	89	H2	4.347	ppb	1.3	312.16	1000	
88	Sr	89	He	86.548	ppb	0.2	62735.34	2000	
95	Mo	89	He	17.499	ppb	1.9	14731.78	1000	
107	Ag	89	He	0.610	ppb	6.0	1646.83	100	
111	Cd	89	He	3.411	ppb	1.7	1077.83	1000	
118	Sn	159	He	54.805	ppb	0.6	34564.10	1000	
121	Sb	159	No Gas	1.278	ppb	3.1	5574.02	1000	
137	Ba	159	No Gas	613.893	ppb	1.5	1008093.76	2000	
182	W	159	No Gas	0.502	ppb	3.9	1695.35	1000	
205	Tl	209	No Gas	3.020	ppb	3.9	18975.82	1000	
208	Pb	209	No Gas	250.436	ppb	2.3	2129323.67	2000	
232	Th	209	No Gas	28.109	ppb	2.9	232747.78	1000	
238	U	209	No Gas	8.540	ppb	2.7	67897.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8247562.69	0.7	8217096.81	100.37	29.5	120.4	
Sc	45	No Gas	15985430.70	0.1	15952466.59	100.21	29.5	120.4	
Sc	45	H2	1882830.00	1.1	1988810.56	94.67	29.5	120.4	
Sc	45	He	456740.13	0.3	477124.13	95.73	29.5	120.4	
Ge	72	No Gas	2723166.38	0.3	2777617.47	98.04	29.5	120.4	
Ge	72	H2	504360.18	0.9	580378.32	86.9	29.5	120.4	
Ge	72	He	257722.23	0.6	274469.22	93.9	29.5	120.4	
Y	89	H2	10461881.72	1.2	10106085.94	103.52	29.5	120.4	
Y	89	He	2292266.04	0.4	2217336.32	103.38	29.5	120.4	
Tb	159	No Gas	21103607.60	0.6	20085725.95	105.07	29.5	120.4	
Tb	159	He	7820851.55	0.4	7863593.35	99.46	29.5	120.4	
Bi	209	No Gas	9411037.27	0.4	9123990.23	103.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:35:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.039	ppb	2.1	79850.60	50	20.42	79.5	120.4	
B	11	6	No Gas	498.979	ppb	2.5	528103.56	500	19.96	79.5	120.4	
Na	23	45	He	8243.336	ppb	0.7	1351631.51	7500	21.98	79.5	120.4	
Mg	24	45	He	5489.615	ppb	0.9	468241.44	5000	21.96	79.5	120.4	
Al	27	45	He	2022.728	ppb	0.6	64403.47	2000	20.23	79.5	120.4	
Si	28	45	H2	1004.144	ppb	1.0	51044.76	1000	20.08	0	200	
K	39	45	He	10729.725	ppb	0.8	759845.70	10000	21.46	79.5	120.4	
Ca	40	45	H2	2630.997	ppb	0.9	1201791.68	2500	21.05	79.5	120.4	
V	51	89	He	534.419	ppb	0.7	574488.01	500	21.38	79.5	120.4	
Cr	52	89	He	218.028	ppb	0.5	298150.87	200	21.8	79.5	120.4	
Mn	55	89	He	532.240	ppb	1.0	319093.83	500	21.29	79.5	120.4	
Fe	56	89	H2	1106.255	ppb	0.3	1934088.11	1000	22.13	79.5	120.4	
Co	59	89	He	555.547	ppb	0.9	1246176.69	500	22.22	79.5	120.4	
Ni	60	89	He	555.589	ppb	1.2	344396.23	500	22.22	79.5	120.4	
Cu	63	89	He	276.482	ppb	0.6	464793.13	250	22.12	79.5	120.4	
Zn	66	89	He	525.614	ppb	1.0	99193.92	500	21.02	79.5	120.4	
As	75	89	He	107.898	ppb	1.0	13897.46	100	21.58	79.5	120.4	
Se	78	89	H2	104.315	ppb	0.6	6798.85	100	20.86	79.5	120.4	
Sr	88	89	He	519.043	ppb	0.5	344404.49	500	20.76	79.5	120.4	
Mo	95	89	He	112.674	ppb	1.0	86792.95	100	22.54	79.5	120.4	
Ag	107	89	He	57.228	ppb	0.3	138304.92	50	22.89	79.5	120.4	
Cd	111	89	He	278.198	ppb	1.4	80394.00	250	22.26	79.5	120.4	
Sn	118	159	He	507.573	ppb	0.7	320872.62	500	20.3	79.5	120.4	
Sb	121	159	No Gas	107.088	ppb	0.7	456357.25	100	21.42	79.5	120.4	
Ba	137	159	No Gas	2052.508	ppb	0.9	3425922.00	2000	20.53	79.5	120.4	
W	182	159	No Gas	104.342	ppb	3.5	347809.61	100	20.87	79.5	120.4	
Tl	205	209	No Gas	111.730	ppb	3.5	695740.63	100	22.35	79.5	120.4	
[Pb]	206	209	No Gas	108.308	ppb	3.6	241284.90	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	107.050	ppb	3.2	207938.21	100	21.41	79.5	120.4	
Pb	208	209	No Gas	109.521	ppb	2.9	959030.38	100	21.9	79.5	120.4	
Th	232	209	No Gas	108.692	ppb	3.7	925898.07	100	21.74	79.5	120.4	
U	238	209	No Gas	109.969	ppb	3.5	900102.97	100	21.99	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414203.28	0.3	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	15977792.23	1.1	15952466.59	100.16	29.5	120.4	
Sc	45	H2	1814197.17	0.2	1988810.56	91.22	29.5	120.4	
Sc	45	He	448141.29	0.7	477124.13	93.93	29.5	120.4	
Ge	72	No Gas	2783970.90	0.6	2777617.47	100.23	29.5	120.4	
Ge	72	H2	513579.99	0.7	580378.32	88.49	29.5	120.4	
Ge	72	He	259076.02	1.2	274469.22	94.39	29.5	120.4	
Y	89	H2	9551147.48	0.5	10106085.94	94.51	29.5	120.4	
Y	89	He	2099230.89	0.8	2217336.32	94.67	29.5	120.4	
Tb	159	No Gas	21453039.96	0.3	20085725.95	106.81	29.5	120.4	
Tb	159	He	7924243.91	1.0	7863593.35	100.77	29.5	120.4	
Bi	209	No Gas	9691154.98	1.0	9123990.23	106.22	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:38:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.307	ppb	2.3	186364.53	25	97.23	89.8	110.2	
11	B	6	No Gas	24.783	ppb	2.4	129810.02	25	99.13	89.8	110.2	
23	Na	45	He	4936.336	ppb	0.4	4056498.54	5000	98.73	89.8	110.2	
24	Mg	45	He	4919.331	ppb	0.4	2134834.12	5000	98.39	89.8	110.2	
27	Al	45	He	472.805	ppb	1.1	76586.68	500	94.56	89.8	110.2	
28	Si	45	H2	462.569	ppb	0.6	120450.47	500	92.51	89.8	110.2	
39	K	45	He	4781.172	ppb	0.4	1692994.11	5000	95.62	89.8	110.2	
40	Ca	45	H2	4777.773	ppb	0.6	11234613.45	5000	95.56	89.8	110.2	
51	V	89	He	24.416	ppb	0.5	134610.44	25	97.66	89.8	110.2	
52	Cr	89	He	24.654	ppb	0.8	173094.86	25	98.62	89.8	110.2	
55	Mn	89	He	24.278	ppb	0.7	74675.88	25	97.11	89.8	110.2	
56	Fe	89	H2	4810.929	ppb	0.4	43014883.79	5000	96.22	89.8	110.2	
59	Co	89	He	24.770	ppb	0.4	284694.68	25	99.08	89.8	110.2	
60	Ni	89	He	24.880	ppb	0.9	79241.46	25	99.52	89.8	110.2	
63	Cu	89	He	25.311	ppb	0.6	218208.61	25	101.24	89.8	110.2	
66	Zn	89	He	24.445	ppb	0.8	23897.82	25	97.78	89.8	110.2	
75	As	89	He	24.331	ppb	0.5	16052.98	25	97.32	89.8	110.2	
78	Se	89	H2	24.536	ppb	0.5	8188.03	25	98.14	89.8	110.2	
88	Sr	89	He	23.538	ppb	0.2	80036.55	25	94.15	89.8	110.2	
95	Mo	89	He	24.932	ppb	0.5	98389.91	25	99.73	89.8	110.2	
107	Ag	89	He	25.531	ppb	0.3	316052.43	25	102.12	89.8	110.2	
111	Cd	89	He	25.390	ppb	0.7	37589.53	25	101.56	89.8	110.2	
118	Sn	159	He	23.290	ppb	0.2	75049.23	25	93.16	89.8	110.2	
121	Sb	159	No Gas	24.954	ppb	2.3	531308.95	25	99.82	89.8	110.2	
137	Ba	159	No Gas	24.650	ppb	2.7	205683.89	25	98.6	89.8	110.2	
182	W	159	No Gas	24.112	ppb	2.3	401583.83	25	96.45	89.8	110.2	
205	Tl	209	No Gas	25.279	ppb	2.7	790102.97	25	101.12	89.8	110.2	
208	Pb	209	No Gas	24.960	ppb	2.7	1097068.96	25	99.84	89.8	110.2	
232	Th	209	No Gas	24.443	ppb	2.5	1045307.58	25	97.77	89.8	110.2	
238	U	209	No Gas	24.488	ppb	3.1	1006170.52	25	97.95	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8249750.82	2.0	8217096.81	100.4	29.5	120.4	
Sc	45	No Gas	15955520.89	2.0	15952466.59	100.02	29.5	120.4	
Sc	45	H2	1874122.13	0.7	1988810.56	94.23	29.5	120.4	
Sc	45	He	456076.55	0.7	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2815387.61	2.3	2777617.47	101.36	29.5	120.4	
Ge	72	H2	546262.17	1.0	580378.32	94.12	29.5	120.4	
Ge	72	He	265997.74	1.0	274469.22	96.91	29.5	120.4	
Y	89	H2	9781356.95	0.6	10106085.94	96.79	29.5	120.4	
Y	89	He	2150865.44	0.8	2217336.32	97	29.5	120.4	
Tb	159	No Gas	21444543.57	1.8	20085725.95	106.77	29.5	120.4	
Tb	159	He	8043335.92	0.7	7863593.35	102.29	29.5	120.4	
Bi	209	No Gas	9730939.35	2.0	9123990.23	106.65	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:40:53 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.031	ppb	34.1	243.35	0.2	
11	B	6	No Gas	0.953	ppb	6.8	6555.06	4	
23	Na	45	He	-11.487	ppb	N/A	21409.69	200	
24	Mg	45	He	0.807	ppb	10.3	411.15	20	
27	Al	45	He	0.897	ppb	24.7	238.90	20	
28	Si	45	H2	-0.153	ppb	N/A	724.17	100	
39	K	45	He	-5.547	ppb	N/A	22023.58	200	
40	Ca	45	H2	0.845	ppb	14.5	6609.58	20	
51	V	89	He	0.002	ppb	73.4	195.57	1	
52	Cr	89	He	-0.007	ppb	N/A	823.88	1	
55	Mn	89	He	0.047	ppb	13.7	284.62	0.4	
56	Fe	89	H2	3.363	ppb	4.4	32888.30	20	
59	Co	89	He	0.006	ppb	27.4	120.01	0.2	
60	Ni	89	He	-0.046	ppb	N/A	153.34	0.4	
63	Cu	89	He	-0.007	ppb	N/A	370.02	0.6	
66	Zn	89	He	0.004	ppb	366.8	346.68	2	
75	As	89	He	0.012	ppb	1.9	19.00	1	
78	Se	89	H2	0.020	ppb	10.7	8.67	1	
88	Sr	89	He	0.006	ppb	83.7	48.89	1	
95	Mo	89	He	0.050	ppb	14.4	212.24	1	
107	Ag	89	He	0.006	ppb	18.7	113.34	0.2	
111	Cd	89	He	0.006	ppb	47.7	10.74	0.2	
118	Sn	159	He	0.119	ppb	29.5	805.61	1	
121	Sb	159	No Gas	0.039	ppb	17.4	1031.20	0.2	
137	Ba	159	No Gas	0.044	ppb	31.3	480.56	0.4	
182	W	159	No Gas	0.109	ppb	10.7	1852.20	1	
205	Tl	209	No Gas	0.016	ppb	85.8	1231.46	0.2	
208	Pb	209	No Gas	0.035	ppb	24.1	1988.97	0.2	
232	Th	209	No Gas	0.142	ppb	23.7	6268.63	1	
238	U	209	No Gas	0.044	ppb	52.6	1812.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8182758.83	0.4	8217096.81	99.58	29.5	120.4	
Sc	45	No Gas	15666200.75	0.7	15952466.59	98.21	29.5	120.4	
Sc	45	H2	1852246.57	1.1	1988810.56	93.13	29.5	120.4	
Sc	45	He	448993.70	0.5	477124.13	94.1	29.5	120.4	
Ge	72	No Gas	2757896.34	0.6	2777617.47	99.29	29.5	120.4	
Ge	72	H2	545237.82	1.7	580378.32	93.95	29.5	120.4	
Ge	72	He	263284.53	0.2	274469.22	95.92	29.5	120.4	
Y	89	H2	9844348.27	1.7	10106085.94	97.41	29.5	120.4	
Y	89	He	2143499.60	0.8	2217336.32	96.67	29.5	120.4	
Tb	159	No Gas	21225946.91	0.4	20085725.95	105.68	29.5	120.4	
Tb	159	He	8006611.20	0.8	7863593.35	101.82	29.5	120.4	
Bi	209	No Gas	9664263.82	0.5	9123990.23	105.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	031_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:43:35 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.021	ppb	16.7	37.78	0.5	
B	11	6	No Gas	3.532	ppb	5.2	5305.60	10	
Na	23	45	He	-47.697	ppb	N/A	23090.57	500	
Mg	24	45	He	9.416	ppb	10.5	875.65	50	
Al	27	45	He	6.763	ppb	12.0	313.35	50	
Si	28	45	H2	19.804	ppb	16.3	1742.03	250	
K	39	45	He	-21.531	ppb	N/A	22550.91	500	
Ca	40	45	H2	17.596	ppb	9.5	12581.53	50	
V	51	89	He	0.205	ppb	5.0	411.13	2.5	
Cr	52	89	He	0.400	ppb	6.4	1427.82	2.5	
Mn	55	89	He	1.690	ppb	5.4	1170.51	1	PB 6020 Fails DoD
Fe	56	89	H2	346.359	ppb	5.7	611629.96	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Co	59	89	He	0.044	ppb	26.7	146.68	0.5	
Ni	60	89	He	-0.119	ppb	N/A	222.23	1	
Cu	63	89	He	0.859	ppb	10.8	1896.86	1.5	
Zn	66	89	He	0.789	ppb	45.0	493.36	5	
As	75	89	He	0.108	ppb	47.2	25.33	2.5	
Se	78	89	H2	0.080	ppb	39.4	7.00	2.5	
Sr	88	89	He	0.039	ppb	11.9	55.56	2.5	
Mo	95	89	He	0.128	ppb	20.8	114.45	2.5	
Ag	107	89	He	0.023	ppb	51.1	92.23	0.5	
Cd	111	89	He	0.012	ppb	53.3	4.81	0.5	
Sn	118	159	He	0.765	ppb	16.2	916.73	2.5	
Sb	121	159	No Gas	0.065	ppb	3.4	490.56	0.5	
Ba	137	159	No Gas	0.245	ppb	28.2	523.93	1	
W	182	159	No Gas	0.115	ppb	16.9	427.16	2.5	
Tl	205	209	No Gas	-0.077	ppb	N/A	276.98	0.5	
Pb	208	209	No Gas	0.148	ppb	23.1	1752.00	0.5	
Th	232	209	No Gas	0.217	ppb	6.7	2092.52	2.5	
U	238	209	No Gas	0.030	ppb	46.5	253.62	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8205519.19	0.7	8217096.81	99.86	29.5	120.4	
Sc	45	No Gas	15720223.94	0.5	15952466.59	98.54	29.5	120.4	
Sc	45	H2	1818751.29	3.2	1988810.56	91.45	29.5	120.4	
Sc	45	He	451389.83	2.8	477124.13	94.61	29.5	120.4	
Ge	72	No Gas	2748144.90	0.6	2777617.47	98.94	29.5	120.4	
Ge	72	H2	522688.66	0.7	580378.32	90.06	29.5	120.4	
Ge	72	He	259385.03	1.8	274469.22	94.5	29.5	120.4	
Y	89	H2	9625871.99	2.1	10106085.94	95.25	29.5	120.4	
Y	89	He	2138229.53	2.0	2217336.32	96.43	29.5	120.4	
Tb	159	No Gas	21223388.85	0.7	20085725.95	105.66	29.5	120.4	
Tb	159	He	8032972.59	1.5	7863593.35	102.15	29.5	120.4	
Bi	209	No Gas	9725049.92	0.2	9123990.23	106.59	29.5	120.4	

Sample Report

Sample Name SN5717-020R

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:46:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	82.2	22.22	100	
11	B	6	No Gas	3.071	ppb	0.7	4924.33	1000	
23	Na	45	He	180.327	ppb	2.8	59140.22	200000	
24	Mg	45	He	45.514	ppb	5.4	3925.26	200000	
27	Al	45	He	117.365	ppb	2.9	3806.20	200000	
28	Si	45	H2	149.326	ppb	11.1	8429.19	10000	
39	K	45	He	108.791	ppb	8.7	31166.44	200000	
40	Ca	45	H2	73.314	ppb	1.0	38819.56	200000	
51	V	89	He	0.391	ppb	12.9	606.70	1000	
52	Cr	89	He	0.816	ppb	5.7	1979.78	2000	
55	Mn	89	He	4.261	ppb	3.7	2705.11	2000	
56	Fe	89	H2	145.103	ppb	1.1	260820.10	100000	
59	Co	89	He	0.096	ppb	5.9	264.47	1000	
60	Ni	89	He	0.741	ppb	8.6	754.50	1000	
63	Cu	89	He	0.772	ppb	5.1	1726.84	2000	
66	Zn	89	He	6.673	ppb	0.9	1599.04	2000	
75	As	89	He	0.099	ppb	33.5	24.00	1000	
78	Se	89	H2	0.056	ppb	24.1	5.50	1000	
88	Sr	89	He	0.354	ppb	9.2	264.46	2000	
95	Mo	89	He	0.147	ppb	18.9	127.78	1000	
107	Ag	89	He	0.022	ppb	53.0	87.78	100	
111	Cd	89	He	0.008	ppb	73.9	3.70	1000	
118	Sn	159	He	0.594	ppb	3.0	793.39	1000	
121	Sb	159	No Gas	0.072	ppb	15.1	530.61	1000	
137	Ba	159	No Gas	0.850	ppb	8.2	1545.16	2000	
182	W	159	No Gas	0.071	ppb	18.5	286.99	1000	
205	Tl	209	No Gas	-0.090	ppb	N/A	200.23	1000	
208	Pb	209	No Gas	3.744	ppb	3.8	33942.61	2000	
232	Th	209	No Gas	0.096	ppb	8.7	1077.94	1000	
238	U	209	No Gas	0.013	ppb	89.2	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8362222.45	1.4	8217096.81	101.77	29.5	120.4	
Sc	45	No Gas	16019545.75	0.8	15952466.59	100.42	29.5	120.4	
Sc	45	H2	1857469.68	1.1	1988810.56	93.4	29.5	120.4	
Sc	45	He	445623.85	0.8	477124.13	93.4	29.5	120.4	
Ge	72	No Gas	2791974.87	2.0	2777617.47	100.52	29.5	120.4	
Ge	72	H2	532047.83	1.7	580378.32	91.67	29.5	120.4	
Ge	72	He	257973.83	0.3	274469.22	93.99	29.5	120.4	
Y	89	H2	9734151.83	1.1	10106085.94	96.32	29.5	120.4	
Y	89	He	2110465.98	0.6	2217336.32	95.18	29.5	120.4	
Tb	159	No Gas	21525932.73	1.0	20085725.95	107.17	29.5	120.4	
Tb	159	He	7892781.06	0.7	7863593.35	100.37	29.5	120.4	
Bi	209	No Gas	9901607.82	1.5	9123990.23	108.52	29.5	120.4	

Sample Report

Sample Name	SN5830-002R
File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:48:51 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	41.2	31.11	100	
11	B	6	No Gas	436.909	ppb	4.9	449051.32	1000	
23	Na	45	He	140029.420	ppb	0.4	22669087.66	200000	
24	Mg	45	He	17637.762	ppb	0.7	1517493.12	200000	
27	Al	45	He	744.938	ppb	2.1	23990.89	200000	
28	Si	45	H2	12150.986	ppb	1.9	618471.51	10000	
39	K	45	He	425.831	ppb	2.0	53555.64	200000	
40	Ca	45	H2	156688.676	ppb	0.5	72371959.48	200000	
51	V	89	He	0.861	ppb	8.5	1110.09	1000	
52	Cr	89	He	0.448	ppb	15.8	1469.15	2000	
55	Mn	89	He	367.301	ppb	0.4	220666.42	2000	
56	Fe	89	H2	39.476	ppb	61.9	71331.02	100000	
59	Co	89	He	0.606	ppb	9.5	1409.06	1000	
60	Ni	89	He	2.466	ppb	8.0	1822.41	1000	
63	Cu	89	He	0.859	ppb	2.5	1866.86	2000	
66	Zn	89	He	3.426	ppb	13.1	981.18	2000	
75	As	89	He	0.172	ppb	8.0	33.33	1000	
78	Se	89	H2	0.094	ppb	21.2	7.83	1000	
88	Sr	89	He	2196.651	ppb	1.1	1460254.13	2000	
95	Mo	89	He	0.845	ppb	4.9	665.60	1000	
107	Ag	89	He	0.108	ppb	8.5	296.68	100	
111	Cd	89	He	0.090	ppb	13.2	27.41	1000	
118	Sn	159	He	0.618	ppb	2.8	798.95	1000	
121	Sb	159	No Gas	0.085	ppb	20.0	580.66	1000	
137	Ba	159	No Gas	42.075	ppb	4.5	70031.83	2000	
182	W	159	No Gas	0.042	ppb	23.5	190.21	1000	
205	Tl	209	No Gas	-0.103	ppb	N/A	110.13	1000	
208	Pb	209	No Gas	0.067	ppb	12.7	1014.49	2000	
232	Th	209	No Gas	0.070	ppb	8.8	807.60	1000	
238	U	209	No Gas	4.914	ppb	7.6	39175.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8172631.82	2.1	8217096.81	99.46	29.5	120.4	
Sc	45	No Gas	15903221.41	1.2	15952466.59	99.69	29.5	120.4	
Sc	45	H2	1841362.12	0.4	1988810.56	92.59	29.5	120.4	
Sc	45	He	452103.23	1.1	477124.13	94.76	29.5	120.4	
Ge	72	No Gas	2767608.11	2.3	2777617.47	99.64	29.5	120.4	
Ge	72	H2	515857.03	0.4	580378.32	88.88	29.5	120.4	
Ge	72	He	258068.93	0.8	274469.22	94.02	29.5	120.4	
Y	89	H2	9514198.97	0.5	10106085.94	94.14	29.5	120.4	
Y	89	He	2103217.38	1.1	2217336.32	94.85	29.5	120.4	
Tb	159	No Gas	21366988.01	1.7	20085725.95	106.38	29.5	120.4	
Tb	159	He	7804933.77	1.0	7863593.35	99.25	29.5	120.4	
Bi	209	No Gas	9450441.67	2.9	9123990.23	103.58	29.5	120.4	

Sample Report

Sample Name SN5832-001R

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:51:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	2.3	16.67	100	
11	B	6	No Gas	2411.085	ppb	0.9	2497542.25	1000	
23	Na	45	He	1594597.490	ppb	0.6	259561485.67	200000	>LDR
24	Mg	45	He	321717.918	ppb	0.2	27863434.86	200000	
27	Al	45	He	25.551	ppb	32.1	921.18	200000	
28	Si	45	H2	10702.565	ppb	1.2	544874.42	10000	
39	K	45	He	10199.854	ppb	1.1	734781.35	200000	
40	Ca	45	H2	612963.488	ppb	0.9	283096653.56	200000	
51	V	89	He	1.466	ppb	4.2	1743.51	1000	
52	Cr	89	He	1.082	ppb	2.4	2311.78	2000	
55	Mn	89	He	35.477	ppb	2.4	21210.14	2000	
56	Fe	89	H2	222.425	ppb	0.4	382849.08	100000	
59	Co	89	He	0.798	ppb	5.2	1820.26	1000	
60	Ni	89	He	10.672	ppb	5.3	6838.58	1000	
63	Cu	89	He	1.554	ppb	0.5	3003.76	2000	
66	Zn	89	He	8.026	ppb	0.8	1829.08	2000	
75	As	89	He	0.426	ppb	8.1	65.34	1000	
78	Se	89	H2	1.334	ppb	8.7	86.83	1000	
88	Sr	89	He	8630.799	ppb	0.2	5676904.64	2000	
95	Mo	89	He	0.527	ppb	5.8	415.58	1000	
107	Ag	89	He	0.073	ppb	11.9	210.01	100	
111	Cd	89	He	0.168	ppb	22.8	49.63	1000	
118	Sn	159	He	0.674	ppb	12.4	793.39	1000	
121	Sb	159	No Gas	0.198	ppb	18.1	977.79	1000	
137	Ba	159	No Gas	20.020	ppb	0.6	30719.67	2000	
182	W	159	No Gas	0.036	ppb	40.0	156.84	1000	
205	Tl	209	No Gas	-0.059	ppb	N/A	327.04	1000	
208	Pb	209	No Gas	2.660	ppb	0.5	20319.04	2000	
232	Th	209	No Gas	0.061	ppb	16.6	647.41	1000	
238	U	209	No Gas	10.715	ppb	1.6	75085.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8255559.02	1.5	8217096.81	100.47	29.5	120.4	
Sc	45	No Gas	15633162.51	1.3	15952466.59	98	29.5	120.4	
Sc	45	H2	1841301.78	1.1	1988810.56	92.58	29.5	120.4	
Sc	45	He	455118.09	0.8	477124.13	95.39	29.5	120.4	
Ge	72	No Gas	2625706.89	0.6	2777617.47	94.53	29.5	120.4	
Ge	72	H2	500441.04	0.7	580378.32	86.23	29.5	120.4	
Ge	72	He	254160.80	0.7	274469.22	92.6	29.5	120.4	
Y	89	H2	9353821.09	0.9	10106085.94	92.56	29.5	120.4	
Y	89	He	2081029.55	1.3	2217336.32	93.85	29.5	120.4	
Tb	159	No Gas	19652305.82	1.3	20085725.95	97.84	29.5	120.4	
Tb	159	He	7420953.01	1.1	7863593.35	94.37	29.5	120.4	
Bi	209	No Gas	8294041.56	1.0	9123990.23	90.9	29.5	120.4	

Sample Report

Sample Name SN5832-002R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:54:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	51.8	41.11	100	
11	B	6	No Gas	2109.277	ppb	1.2	2236314.65	1000	
23	Na	45	He	1337828.489	ppb	0.7	218222671.65	200000	>LDR
24	Mg	45	He	237113.779	ppb	0.3	20580308.86	200000	
27	Al	45	He	80.034	ppb	5.6	2685.90	200000	
28	Si	45	H2	8624.631	ppb	0.7	446687.59	10000	
39	K	45	He	11813.818	ppb	1.2	848900.45	200000	
40	Ca	45	H2	584903.802	ppb	0.3	274738024.80	200000	
51	V	89	He	1.408	ppb	3.2	1681.27	1000	
52	Cr	89	He	4.990	ppb	0.3	7590.68	2000	
55	Mn	89	He	253.494	ppb	0.7	150648.58	2000	
56	Fe	89	H2	6675.977	ppb	0.4	11645832.92	100000	
59	Co	89	He	2.852	ppb	4.1	6384.15	1000	
60	Ni	89	He	11.335	ppb	1.0	7244.36	1000	
63	Cu	89	He	1.309	ppb	3.4	2594.78	2000	
66	Zn	89	He	8.610	ppb	4.1	1936.87	2000	
75	As	89	He	0.722	ppb	2.3	103.01	1000	
78	Se	89	H2	0.183	ppb	10.4	13.67	1000	
88	Sr	89	He	9438.274	ppb	0.5	6204585.05	2000	
95	Mo	89	He	0.735	ppb	7.5	574.48	1000	
107	Ag	89	He	0.036	ppb	41.1	121.12	100	
111	Cd	89	He	0.073	ppb	27.5	22.22	1000	
118	Sn	159	He	0.557	ppb	21.2	725.61	1000	
121	Sb	159	No Gas	0.097	ppb	15.7	594.01	1000	
137	Ba	159	No Gas	19.895	ppb	1.2	31285.06	2000	
182	W	159	No Gas	0.055	ppb	54.2	220.25	1000	
205	Tl	209	No Gas	-0.086	ppb	N/A	186.87	1000	
208	Pb	209	No Gas	2.455	ppb	1.0	19147.11	2000	
232	Th	209	No Gas	0.034	ppb	18.1	460.53	1000	
238	U	209	No Gas	6.544	ppb	0.8	46756.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8450046.00	1.0	8217096.81	102.83	29.5	120.4	
Sc	45	No Gas	15918589.80	1.5	15952466.59	99.79	29.5	120.4	
Sc	45	H2	1872639.63	1.1	1988810.56	94.16	29.5	120.4	
Sc	45	He	456104.89	1.5	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2675418.50	1.1	2777617.47	96.32	29.5	120.4	
Ge	72	H2	501196.32	1.2	580378.32	86.36	29.5	120.4	
Ge	72	He	258000.60	0.9	274469.22	94	29.5	120.4	
Y	89	H2	9540578.16	1.2	10106085.94	94.4	29.5	120.4	
Y	89	He	2079991.65	1.4	2217336.32	93.81	29.5	120.4	
Tb	159	No Gas	20138855.53	1.2	20085725.95	100.26	29.5	120.4	
Tb	159	He	7438550.38	0.5	7863593.35	94.59	29.5	120.4	
Bi	209	No Gas	8456983.04	0.6	9123990.23	92.69	29.5	120.4	

Sample Report

Sample Name SN5832-003R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:57:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	57.6	37.78	100	
11	B	6	No Gas	2224.715	ppb	2.7	2343474.76	1000	
23	Na	45	He	1401878.749	ppb	0.6	231954916.75	200000	>LDR
24	Mg	45	He	249499.248	ppb	0.4	21965833.56	200000	
27	Al	45	He	78.492	ppb	7.3	2674.80	200000	
28	Si	45	H2	8963.491	ppb	6.7	462361.06	10000	
39	K	45	He	12347.637	ppb	1.2	899007.00	200000	
40	Ca	45	H2	614762.346	ppb	6.8	287608804.60	200000	
51	V	89	He	1.146	ppb	5.1	1411.24	1000	
52	Cr	89	He	4.043	ppb	1.7	6354.95	2000	
55	Mn	89	He	277.431	ppb	0.5	166022.38	2000	
56	Fe	89	H2	7737.380	ppb	6.2	13446952.42	100000	
59	Co	89	He	3.088	ppb	4.3	6957.81	1000	
60	Ni	89	He	11.199	ppb	2.3	7212.10	1000	
63	Cu	89	He	1.788	ppb	1.5	3416.09	2000	
66	Zn	89	He	7.809	ppb	2.4	1800.19	2000	
75	As	89	He	0.740	ppb	4.0	106.01	1000	
78	Se	89	H2	0.144	ppb	31.5	11.17	1000	
88	Sr	89	He	9794.834	ppb	0.5	6484057.34	2000	
95	Mo	89	He	0.749	ppb	6.6	588.92	1000	
107	Ag	89	He	0.014	ppb	26.2	68.89	100	
111	Cd	89	He	0.071	ppb	30.3	21.85	1000	
118	Sn	159	He	0.764	ppb	6.0	840.06	1000	
121	Sb	159	No Gas	0.117	ppb	7.1	687.46	1000	
137	Ba	159	No Gas	20.395	ppb	3.4	32623.14	2000	
182	W	159	No Gas	0.034	ppb	24.9	156.84	1000	
205	Tl	209	No Gas	-0.087	ppb	N/A	183.54	1000	
208	Pb	209	No Gas	1.915	ppb	6.9	15100.56	2000	
232	Th	209	No Gas	0.027	ppb	23.0	407.13	1000	
238	U	209	No Gas	6.561	ppb	4.7	47125.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8397634.21	1.5	8217096.81	102.2	29.5	120.4	
Sc	45	No Gas	16250971.02	1.8	15952466.59	101.87	29.5	120.4	
Sc	45	H2	1869561.61	5.4	1988810.56	94	29.5	120.4	
Sc	45	He	462640.72	0.6	477124.13	96.96	29.5	120.4	
Ge	72	No Gas	2708804.99	2.6	2777617.47	97.52	29.5	120.4	
Ge	72	H2	496121.02	4.0	580378.32	85.48	29.5	120.4	
Ge	72	He	260990.72	0.5	274469.22	95.09	29.5	120.4	
Y	89	H2	9522742.41	4.6	10106085.94	94.23	29.5	120.4	
Y	89	He	2094490.54	0.9	2217336.32	94.46	29.5	120.4	
Tb	159	No Gas	20493462.20	2.1	20085725.95	102.03	29.5	120.4	
Tb	159	He	7365005.93	0.4	7863593.35	93.66	29.5	120.4	
Bi	209	No Gas	8506718.92	2.1	9123990.23	93.23	29.5	120.4	

Sample Report

Sample Name SN5832-004R

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:59:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	33.3	21.11	100	
11	B	6	No Gas	654.378	ppb	3.5	712802.07	1000	
23	Na	45	He	372170.706	ppb	1.9	62882552.00	200000	
24	Mg	45	He	47543.606	ppb	1.9	4272725.80	200000	
27	Al	45	He	33.600	ppb	2.9	1226.77	200000	
28	Si	45	H2	7197.238	ppb	0.8	379953.20	10000	
39	K	45	He	3531.287	ppb	1.3	280422.07	200000	
40	Ca	45	H2	160505.919	ppb	0.4	76828444.41	200000	
51	V	89	He	1.107	ppb	7.9	1403.46	1000	
52	Cr	89	He	0.734	ppb	4.7	1899.79	2000	
55	Mn	89	He	64.865	ppb	0.4	39898.26	2000	
56	Fe	89	H2	206.410	ppb	0.5	370279.82	100000	
59	Co	89	He	0.536	ppb	10.8	1277.93	1000	
60	Ni	89	He	0.723	ppb	14.4	755.60	1000	
63	Cu	89	He	0.752	ppb	2.9	1722.40	2000	
66	Zn	89	He	30.959	ppb	1.7	6299.42	2000	
75	As	89	He	0.573	ppb	15.1	86.68	1000	
78	Se	89	H2	0.404	ppb	30.9	28.67	1000	
88	Sr	89	He	1756.580	ppb	1.0	1192014.60	2000	
95	Mo	89	He	0.720	ppb	3.0	581.15	1000	
107	Ag	89	He	0.015	ppb	60.2	72.23	100	
111	Cd	89	He	0.036	ppb	27.5	12.22	1000	
118	Sn	159	He	2.023	ppb	7.4	1644.61	1000	
121	Sb	159	No Gas	0.245	ppb	13.8	1284.84	1000	
137	Ba	159	No Gas	52.071	ppb	3.1	88321.28	2000	
182	W	159	No Gas	0.024	ppb	2.1	130.15	1000	
205	Tl	209	No Gas	-0.101	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	0.124	ppb	4.2	1485.03	2000	
232	Th	209	No Gas	0.011	ppb	19.9	313.69	1000	
238	U	209	No Gas	3.589	ppb	6.2	28404.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8670263.50	1.9	8217096.81	105.51	29.5	120.4	
Sc	45	No Gas	16851453.78	1.8	15952466.59	105.64	29.5	120.4	
Sc	45	H2	1908251.96	1.5	1988810.56	95.95	29.5	120.4	
Sc	45	He	472340.46	1.7	477124.13	99	29.5	120.4	
Ge	72	No Gas	2868652.83	1.9	2777617.47	103.28	29.5	120.4	
Ge	72	H2	514262.34	1.3	580378.32	88.61	29.5	120.4	
Ge	72	He	271909.71	1.3	274469.22	99.07	29.5	120.4	
Y	89	H2	9744303.44	1.5	10106085.94	96.42	29.5	120.4	
Y	89	He	2147092.50	0.9	2217336.32	96.83	29.5	120.4	
Tb	159	No Gas	21776692.45	1.3	20085725.95	108.42	29.5	120.4	
Tb	159	He	7671658.64	1.0	7863593.35	97.56	29.5	120.4	
Bi	209	No Gas	9374587.59	1.9	9123990.23	102.75	29.5	120.4	

Sample Report

Sample Name SN5897-001R

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:02:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	184.6	8.89	100	
11	B	6	No Gas	15.769	ppb	3.3	19680.76	1000	
23	Na	45	He	358.469	ppb	14.8	94181.37	200000	
24	Mg	45	He	32.683	ppb	30.4	3053.90	200000	
27	Al	45	He	6.644	ppb	9.3	328.91	200000	
28	Si	45	H2	21.056	ppb	33.2	1795.45	10000	
39	K	45	He	3.693	ppb	217.5	25825.05	200000	
40	Ca	45	H2	107.926	ppb	15.3	53637.11	200000	
51	V	89	He	0.277	ppb	10.0	503.36	1000	
52	Cr	89	He	0.296	ppb	17.1	1317.83	2000	
55	Mn	89	He	0.577	ppb	1.5	505.92	2000	
56	Fe	89	H2	3.611	ppb	17.8	8689.12	100000	
59	Co	89	He	0.001	ppb	593.0	51.11	1000	
60	Ni	89	He	-0.257	ppb	N/A	137.78	1000	
63	Cu	89	He	0.172	ppb	13.4	742.27	2000	
66	Zn	89	He	1.631	ppb	10.0	672.26	2000	
75	As	89	He	0.060	ppb	54.2	19.67	1000	
78	Se	89	H2	0.039	ppb	47.7	4.17	1000	
88	Sr	89	He	0.965	ppb	25.7	701.15	2000	
95	Mo	89	He	0.043	ppb	50.6	48.89	1000	
107	Ag	89	He	0.025	ppb	35.1	100.00	100	
111	Cd	89	He	0.002	ppb	145.8	2.22	1000	
118	Sn	159	He	2.432	ppb	3.3	1970.22	1000	
121	Sb	159	No Gas	0.032	ppb	16.1	370.42	1000	
137	Ba	159	No Gas	0.056	ppb	100.8	223.59	2000	
182	W	159	No Gas	0.007	ppb	85.4	76.75	1000	
205	Tl	209	No Gas	-0.108	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	0.007	ppb	104.1	530.60	2000	
232	Th	209	No Gas	0.014	ppb	55.1	367.08	1000	
238	U	209	No Gas	0.003	ppb	51.1	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9020287.78	3.0	8217096.81	109.77	29.5	120.4	
Sc	45	No Gas	17194237.59	2.1	15952466.59	107.78	29.5	120.4	
Sc	45	H2	1830423.72	10.7	1988810.56	92.04	29.5	120.4	
Sc	45	He	479648.39	2.7	477124.13	100.53	29.5	120.4	
Ge	72	No Gas	2955179.55	1.9	2777617.47	106.39	29.5	120.4	
Ge	72	H2	498849.91	7.8	580378.32	85.95	29.5	120.4	
Ge	72	He	276220.02	1.7	274469.22	100.64	29.5	120.4	
Y	89	H2	9436082.73	9.8	10106085.94	93.37	29.5	120.4	
Y	89	He	2197385.02	2.3	2217336.32	99.1	29.5	120.4	
Tb	159	No Gas	22209471.06	1.6	20085725.95	110.57	29.5	120.4	
Tb	159	He	7981030.37	2.1	7863593.35	101.49	29.5	120.4	
Bi	209	No Gas	9975353.54	1.1	9123990.23	109.33	29.5	120.4	

Sample Report

Sample Name SN6056-004

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:05:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	4.44	100	
11	B	6	No Gas	7.484	ppb	1.4	10064.96	1000	
23	Na	45	He	236.034	ppb	4.4	70933.11	200000	
24	Mg	45	He	21.351	ppb	11.7	1955.85	200000	
27	Al	45	He	203.436	ppb	2.6	6809.62	200000	
28	Si	45	H2	35.360	ppb	9.5	2656.54	10000	
39	K	45	He	53.703	ppb	22.1	28587.29	200000	
40	Ca	45	H2	84.856	ppb	5.3	45519.75	200000	
51	V	89	He	0.374	ppb	14.4	600.04	1000	
52	Cr	89	He	0.787	ppb	6.4	1980.45	2000	
55	Mn	89	He	0.825	ppb	17.4	647.90	2000	
56	Fe	89	H2	40.005	ppb	0.5	74842.27	100000	
59	Co	89	He	0.026	ppb	32.5	108.90	1000	
60	Ni	89	He	0.196	ppb	44.1	423.36	1000	
63	Cu	89	He	0.566	ppb	10.0	1406.80	2000	
66	Zn	89	He	3.463	ppb	9.1	1012.30	2000	
75	As	89	He	0.070	ppb	38.3	20.67	1000	
78	Se	89	H2	0.018	ppb	179.0	3.00	1000	
88	Sr	89	He	0.362	ppb	5.2	275.57	2000	
95	Mo	89	He	0.071	ppb	29.4	70.00	1000	
107	Ag	89	He	0.017	ppb	65.1	76.67	100	
111	Cd	89	He	0.000	ppb	2273.4	1.48	1000	
118	Sn	159	He	0.434	ppb	31.2	700.05	1000	
121	Sb	159	No Gas	0.043	ppb	49.6	413.81	1000	
137	Ba	159	No Gas	0.828	ppb	10.0	1541.80	2000	
182	W	159	No Gas	0.021	ppb	34.3	123.47	1000	
205	Tl	209	No Gas	-0.106	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	0.334	ppb	6.8	3480.75	2000	
232	Th	209	No Gas	0.016	ppb	50.4	383.77	1000	
238	U	209	No Gas	0.001	ppb	60.5	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8812202.31	0.7	8217096.81	107.24	29.5	120.4	
Sc	45	No Gas	16646006.04	0.5	15952466.59	104.35	29.5	120.4	
Sc	45	H2	1913082.78	0.1	1988810.56	96.19	29.5	120.4	
Sc	45	He	464849.96	1.3	477124.13	97.43	29.5	120.4	
Ge	72	No Gas	2903040.99	0.4	2777617.47	104.52	29.5	120.4	
Ge	72	H2	525551.48	0.5	580378.32	90.55	29.5	120.4	
Ge	72	He	270359.12	0.4	274469.22	98.5	29.5	120.4	
Y	89	H2	9872263.79	1.0	10106085.94	97.69	29.5	120.4	
Y	89	He	2154473.16	1.1	2217336.32	97.16	29.5	120.4	
Tb	159	No Gas	21989019.67	0.7	20085725.95	109.48	29.5	120.4	
Tb	159	He	7978729.40	0.7	7863593.35	101.46	29.5	120.4	
Bi	209	No Gas	9997267.54	1.0	9123990.23	109.57	29.5	120.4	

Sample Report

Sample Name SN6061-002

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:07:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	3.33	100	
11	B	6	No Gas	6.858	ppb	8.5	9207.78	1000	
23	Na	45	He	133.206	ppb	5.3	52721.72	200000	
24	Mg	45	He	12.223	ppb	1.9	1126.79	200000	
27	Al	45	He	8.387	ppb	15.2	368.91	200000	
28	Si	45	H2	15.081	ppb	5.5	1555.16	10000	
39	K	45	He	10.800	ppb	79.1	25004.05	200000	
40	Ca	45	H2	38.234	ppb	9.9	22703.40	200000	
51	V	89	He	0.286	ppb	6.6	491.14	1000	
52	Cr	89	He	0.429	ppb	6.9	1444.49	2000	
55	Mn	89	He	0.724	ppb	9.0	571.91	2000	
56	Fe	89	H2	4.808	ppb	1.3	11213.57	100000	
59	Co	89	He	0.005	ppb	25.5	57.78	1000	
60	Ni	89	He	-0.171	ppb	N/A	185.56	1000	
63	Cu	89	He	0.348	ppb	13.7	1006.74	2000	
66	Zn	89	He	2.188	ppb	11.0	748.94	2000	
75	As	89	He	0.087	ppb	40.6	22.33	1000	
78	Se	89	H2	0.013	ppb	85.9	2.67	1000	
88	Sr	89	He	0.206	ppb	9.5	165.56	2000	
95	Mo	89	He	0.038	ppb	27.3	43.33	1000	
107	Ag	89	He	0.011	ppb	23.0	62.22	100	
111	Cd	89	He	0.003	ppb	135.5	2.22	1000	
118	Sn	159	He	1.937	ppb	3.2	1623.49	1000	
121	Sb	159	No Gas	0.053	ppb	32.0	453.85	1000	
137	Ba	159	No Gas	0.815	ppb	4.6	1508.44	2000	
182	W	159	No Gas	0.016	ppb	53.9	106.79	1000	
205	Tl	209	No Gas	-0.109	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.074	ppb	13.9	1117.93	2000	
232	Th	209	No Gas	0.009	ppb	100.5	320.36	1000	
238	U	209	No Gas	0.004	ppb	121.1	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8654673.64	0.8	8217096.81	105.33	29.5	120.4	
Sc	45	No Gas	16208664.76	0.7	15952466.59	101.61	29.5	120.4	
Sc	45	H2	1876725.83	0.6	1988810.56	94.36	29.5	120.4	
Sc	45	He	455221.73	2.4	477124.13	95.41	29.5	120.4	
Ge	72	No Gas	2822330.17	0.8	2777617.47	101.61	29.5	120.4	
Ge	72	H2	519355.05	0.8	580378.32	89.49	29.5	120.4	
Ge	72	He	265107.40	1.7	274469.22	96.59	29.5	120.4	
Y	89	H2	9775265.54	0.3	10106085.94	96.73	29.5	120.4	
Y	89	He	2103333.39	1.9	2217336.32	94.86	29.5	120.4	
Tb	159	No Gas	21854113.01	1.3	20085725.95	108.8	29.5	120.4	
Tb	159	He	7825092.94	1.8	7863593.35	99.51	29.5	120.4	
Bi	209	No Gas	9861449.12	2.4	9123990.23	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:10:26 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.778	ppb	4.1	196135.46	25	95.11	89.8	110.2	
11	B	6	No Gas	23.912	ppb	4.4	134806.95	25	95.65	89.8	110.2	
23	Na	45	He	5122.394	ppb	0.7	4277442.14	5000	102.45	89.8	110.2	
24	Mg	45	He	5027.147	ppb	0.7	2217426.34	5000	100.54	89.8	110.2	
27	Al	45	He	480.844	ppb	0.7	79169.71	500	96.17	89.8	110.2	
28	Si	45	H2	468.393	ppb	1.5	124498.18	500	93.68	89.8	110.2	
39	K	45	He	4857.495	ppb	0.4	1747965.21	5000	97.15	89.8	110.2	
40	Ca	45	H2	4831.785	ppb	1.0	11598583.99	5000	96.64	89.8	110.2	
51	V	89	He	24.721	ppb	0.8	137042.10	25	98.88	89.8	110.2	
52	Cr	89	He	25.025	ppb	0.6	176657.49	25	100.1	89.8	110.2	
55	Mn	89	He	24.320	ppb	0.7	75222.06	25	97.28	89.8	110.2	
56	Fe	89	H2	4866.365	ppb	0.5	43807343.72	5000	97.33	89.8	110.2	
59	Co	89	He	25.185	ppb	1.2	291051.91	25	100.74	89.8	110.2	
60	Ni	89	He	24.759	ppb	0.9	79294.07	25	99.04	89.8	110.2	
63	Cu	89	He	25.203	ppb	0.3	218488.14	25	100.81	89.8	110.2	
66	Zn	89	He	25.153	ppb	2.1	24714.85	25	100.61	89.8	110.2	
75	As	89	He	24.315	ppb	0.6	16130.42	25	97.26	89.8	110.2	
78	Se	89	H2	24.701	ppb	2.5	8299.59	25	98.8	89.8	110.2	
88	Sr	89	He	23.378	ppb	0.3	79933.02	25	93.51	89.8	110.2	
95	Mo	89	He	25.092	ppb	1.1	99563.44	25	100.37	89.8	110.2	
107	Ag	89	He	25.702	ppb	1.2	319906.46	25	102.81	89.8	110.2	
111	Cd	89	He	25.552	ppb	0.6	38039.99	25	102.21	89.8	110.2	
118	Sn	159	He	23.685	ppb	1.3	75783.72	25	94.74	89.8	110.2	
121	Sb	159	No Gas	24.777	ppb	3.8	540025.74	25	99.11	89.8	110.2	
137	Ba	159	No Gas	24.089	ppb	4.2	205762.98	25	96.36	89.8	110.2	
182	W	159	No Gas	23.993	ppb	2.7	409109.56	25	95.97	89.8	110.2	
205	Tl	209	No Gas	24.943	ppb	4.5	801630.70	25	99.77	89.8	110.2	
208	Pb	209	No Gas	24.696	ppb	3.7	1116221.67	25	98.78	89.8	110.2	
232	Th	209	No Gas	23.708	ppb	4.1	1042473.12	25	94.83	89.8	110.2	
238	U	209	No Gas	24.146	ppb	3.4	1020267.67	25	96.58	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8877116.18	1.9	8217096.81	108.03	29.5	120.4	
Sc	45	No Gas	16334820.08	1.5	15952466.59	102.4	29.5	120.4	
Sc	45	H2	1913286.36	1.1	1988810.56	96.2	29.5	120.4	
Sc	45	He	463576.82	1.1	477124.13	97.16	29.5	120.4	
Ge	72	No Gas	2867065.97	1.5	2777617.47	103.22	29.5	120.4	
Ge	72	H2	542141.90	1.4	580378.32	93.41	29.5	120.4	
Ge	72	He	272390.10	0.7	274469.22	99.24	29.5	120.4	
Y	89	H2	9848130.49	0.2	10106085.94	97.45	29.5	120.4	
Y	89	He	2162817.10	1.3	2217336.32	97.54	29.5	120.4	
Tb	159	No Gas	21955468.28	1.7	20085725.95	109.31	29.5	120.4	
Tb	159	He	7987880.09	0.9	7863593.35	101.58	29.5	120.4	
Bi	209	No Gas	10007463.36	1.7	9123990.23	109.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:13:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	58.4	185.57	0.2	
11	B	6	No Gas	0.954	ppb	0.7	7003.03	4	
23	Na	45	He	11.016	ppb	7.7	40816.51	200	
24	Mg	45	He	0.883	ppb	37.1	457.82	20	
27	Al	45	He	-0.118	ppb	N/A	80.00	20	
28	Si	45	H2	-0.204	ppb	N/A	724.15	100	
39	K	45	He	1.680	ppb	150.9	25335.99	200	
40	Ca	45	H2	1.262	ppb	3.9	7713.48	20	
51	V	89	He	-0.007	ppb	N/A	148.89	1	
52	Cr	89	He	-0.002	ppb	N/A	865.21	1	
55	Mn	89	He	-0.007	ppb	N/A	119.31	0.4	
56	Fe	89	H2	1.438	ppb	10.8	15342.18	20	
59	Co	89	He	-0.002	ppb	N/A	28.89	0.2	
60	Ni	89	He	-0.067	ppb	N/A	85.56	0.4	
63	Cu	89	He	-0.015	ppb	N/A	302.24	0.6	
66	Zn	89	He	-0.029	ppb	N/A	316.68	2	
75	As	89	He	0.009	ppb	31.4	17.00	1	
78	Se	89	H2	0.021	ppb	21.5	8.83	1	
88	Sr	89	He	0.019	ppb	22.9	93.33	1	
95	Mo	89	He	0.055	ppb	14.0	232.23	1	
107	Ag	89	He	0.003	ppb	20.6	78.89	0.2	
111	Cd	89	He	0.002	ppb	97.9	4.08	0.2	
118	Sn	159	He	0.090	ppb	23.8	703.39	1	
121	Sb	159	No Gas	0.026	ppb	27.4	777.56	0.2	
137	Ba	159	No Gas	0.010	ppb	60.4	206.90	0.4	
182	W	159	No Gas	0.099	ppb	13.3	1708.72	1	
205	Tl	209	No Gas	0.005	ppb	269.0	924.40	0.2	
208	Pb	209	No Gas	0.014	ppb	38.9	1061.21	0.2	
232	Th	209	No Gas	0.093	ppb	24.8	4258.91	1	
238	U	209	No Gas	0.030	ppb	32.2	1254.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8734389.50	1.9	8217096.81	106.3	29.5	120.4	
Sc	45	No Gas	16195081.59	0.8	15952466.59	101.52	29.5	120.4	
Sc	45	H2	1884643.17	0.0	1988810.56	94.76	29.5	120.4	
Sc	45	He	464322.02	1.2	477124.13	97.32	29.5	120.4	
Ge	72	No Gas	2828200.29	0.8	2777617.47	101.82	29.5	120.4	
Ge	72	H2	531339.85	0.4	580378.32	91.55	29.5	120.4	
Ge	72	He	270842.54	0.8	274469.22	98.68	29.5	120.4	
Y	89	H2	9697175.90	0.3	10106085.94	95.95	29.5	120.4	
Y	89	He	2157670.11	1.1	2217336.32	97.31	29.5	120.4	
Tb	159	No Gas	21671276.34	0.8	20085725.95	107.89	29.5	120.4	
Tb	159	He	7890398.15	0.3	7863593.35	100.34	29.5	120.4	
Bi	209	No Gas	9829702.07	1.1	9123990.23	107.73	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: KC **ANALYSIS DATE**: 8/05/2020

REVIEWED

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH05A

8/6/20
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

ICV (16.06) fails high for Tl (22.150 ug/L)

Opening PQL (16:12) fails low for B (0.589 ug/L) Mn (0.289 ug/L) and high for Sb (0.246 ug/L) W (1.234 ug/L)

Closing PQL (20:05) fails high for Na (346.124 ug/L) W (1.249 ug/L) Th (0.248 ug/L) and failed low for B (1.002 ug/L)

LRS1 (16:20) fails high for Ag (114.399 ug/L).

CCB (18:13) fails for Na (132.745 ug/L).

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH05A	08/05/2020	15:59	KC
CalStd	1	LNH05A	08/05/2020	16:03	KC
ICV	1	LNH05A	08/05/2020	16:06	KC
ICB	1	LNH05A	08/05/2020	16:09	KC
PQL	1	LNH05A	08/05/2020	16:12	KC
ICSA	1	LNH05A	08/05/2020	16:14	KC
ICSAB	1	LNH05A	08/05/2020	16:17	KC
LRS1	1	LNH05A	08/05/2020	16:20	KC
LRS2	1	LNH05A	08/05/2020	16:22	KC
RINSE	1	LNH05A	08/05/2020	16:25	KC
RINSE	1	LNH05A	08/05/2020	16:28	KC
CCV	1	LNH05A	08/05/2020	16:30	KC
CCB	1	LNH05A	08/05/2020	16:33	KC
PBWNG13IMW2	5	LNH05A	08/05/2020	16:42	KC
LCSWNG13IMW2	5	LNH05A	08/05/2020	16:44	KC
SN5646-004	5	LNH05A	08/05/2020	16:47	KC
SN5646-005	5	LNH05A	08/05/2020	16:49	KC
PBSNH04IMS1	5	LNH05A	08/05/2020	16:52	KC
LCSONH04IMS1	5	LNH05A	08/05/2020	16:55	KC
SN5717-004	5	LNH05A	08/05/2020	16:57	KC
SN5717-010	5	LNH05A	08/05/2020	17:00	KC
SN5717-010L	25	LNH05A	08/05/2020	17:03	KC
SN5717-010A	5	LNH05A	08/05/2020	17:05	KC
CCV	1	LNH05A	08/05/2020	17:08	KC
CCB	1	LNH05A	08/05/2020	17:11	KC
SN5717-010S	5	LNH05A	08/05/2020	17:14	KC
SN5717-010P	5	LNH05A	08/05/2020	17:16	KC
SN5717-013	5	LNH05A	08/05/2020	17:19	KC
SN5717-017	5	LNH05A	08/05/2020	17:22	KC
PBWNG31IMW1	1	LNH05A	08/05/2020	17:25	KC
LCSWNG31IMW1	1	LNH05A	08/05/2020	17:27	KC
SN6310-003	5	LNH05A	08/05/2020	17:30	KC
RINSE	1	LNH05A	08/05/2020	17:33	KC
RINSE	1	LNH05A	08/05/2020	17:35	KC
RINSE	1	LNH05A	08/05/2020	17:38	KC
CCV	1	LNH05A	08/05/2020	17:41	KC
CCB	1	LNH05A	08/05/2020	17:43	KC
SN6032-001R	5	LNH05A	08/05/2020	17:46	KC
RINSE	1	LNH05A	08/05/2020	17:49	KC
RINSE	1	LNH05A	08/05/2020	17:51	KC
RINSE	1	LNH05A	08/05/2020	17:54	KC
SN6347-001	1	LNH05A	08/05/2020	17:57	KC
SN6347-002	1	LNH05A	08/05/2020	17:59	KC
SN6347-003	1	LNH05A	08/05/2020	18:02	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6347-004	1	LNH05A	08/05/2020	18:05	KC
SN6349-001	1	LNH05A	08/05/2020	18:08	KC
CCV	1	LNH05A	08/05/2020	18:10	KC
CCB	1	LNH05A	08/05/2020	18:13	KC
PQL	1	LNH05A	08/05/2020	18:16	KC
RINSE	1	LNH05A	08/05/2020	18:18	KC
RINSE	1	LNH05A	08/05/2020	18:21	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq. Date-Time	8/5/2020 3:08:17 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

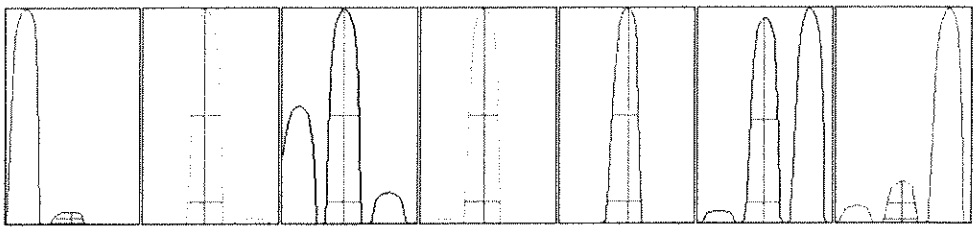
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	15542	155415.62	0.338	5.000	
9	5802	58021.74	0.460	5.000	
24	226601	2266009.72	1.011	5.000	
59	41569	415690.52	0.633	5.000	
115	474855	4748554.05	0.634	5.000	
205	26901	269014.58	0.391	5.000	
208	58658	586577.65	0.329	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	15611	15564	15556	15489	15489
9	5756	5808	5823	5811	5813
24	224289	224701	225991	229131	228892
59	41181	41421	41706	41713	41824
115	470653	474376	474222	476123	478903
205	26768	26997	26988	26811	26943
208	58399	58751	58915	58652	58572

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	25093.63	7.00	6.90 - 7.10	
9	9624.67	8.90	8.90 - 9.10	
24	358226.36	23.90	23.90 - 24.10	
59	67186.15	58.95	58.90 - 59.10	
115	837175.16	115.05	114.90 - 115.10	
205	45249.94	205.00	204.90 - 205.10	
208	99439.88	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.65	0.731	0.900	
9	0.64	0.759	0.900	
24	0.66	0.771	0.900	
59	0.64	0.770	0.900	
115	0.59	0.745	0.900	
205	0.62	0.739	0.900	
208	0.61	0.737	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	12.4 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2844	28435.16	1.792	5.000	
89	302990	3029901.25	2.022	5.000	
205	26536	265356.18	0.432	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2776	2821	2856	2849	2915
89	294020	300232	305716	304828	310154
205	26452	26385	26594	26579	26668

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	1.6 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	8841	88405.05	1.185	5.000	
89	63242	632415.77	1.678	5.000	
205	12503	125029.31	0.694	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8666	8831	8878	8939	8888
89	61676	62720	63548	64357	63907
205	12362	12543	12507	12595	12508

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	1.2 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

Sample Report

Sample Name CalBlank

File Name 006CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 3:59:51 PM

Sample Type CalBlk

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	17.78	1000	
11	B	6	No Gas	0.000	ppb	N/A	932.28	1000	
23	Na	45	He	0.000	ppb	N/A	37794.67	1000	
24	Mg	45	He	0.000	ppb	N/A	122.23	1000	
27	Al	45	He	0.000	ppb	N/A	429.67	1000	
28	Si	45	H2	0.000	ppb	N/A	533.94	1000	
39	K	45	He	0.000	ppb	N/A	21384.70	1000	
40	Ca	45	H2	0.000	ppb	N/A	15276.55	1000	
51	V	89	He	0.000	ppb	N/A	181.12	1000	
52	Cr	89	He	0.000	ppb	N/A	814.55	1000	
55	Mn	89	He	0.000	ppb	N/A	499.92	1000	
56	Fe	89	H2	0.000	ppb	N/A	6248.39	1000	
59	Co	89	He	0.000	ppb	N/A	60.00	1000	
60	Ni	89	He	0.000	ppb	N/A	301.12	1000	
63	Cu	89	He	0.000	ppb	N/A	415.58	1000	
66	Zn	89	He	0.000	ppb	N/A	787.83	1000	
75	As	89	He	0.000	ppb	N/A	11.33	1000	
78	Se	89	H2	0.000	ppb	N/A	0.83	1000	
88	Sr	89	He	0.000	ppb	N/A	38.89	1000	
95	Mo	89	He	0.000	ppb	N/A	16.67	1000	
107	Ag	89	He	0.000	ppb	N/A	26.67	1000	
111	Cd	89	He	0.000	ppb	N/A	1.48	1000	
118	Sn	159	He	0.000	ppb	N/A	373.35	1000	
121	Sb	159	No Gas	0.000	ppb	N/A	176.86	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	66.74	1000	
182	W	159	No Gas	0.000	ppb	N/A	63.40	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	724.17	1000	
208	Pb	209	No Gas	0.000	ppb	N/A	714.14	1000	
232	Th	209	No Gas	0.000	ppb	N/A	233.60	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8075153.20	0.2	8075153.2	100	29.5	120.4	
Sc	45	No Gas	15284588.74	0.4	15284588.74	100	29.5	120.4	
Sc	45	H2	1817402.03	1.2	1817402.03	100	29.5	120.4	
Sc	45	He	431380.74	2.5	431380.74	100	29.5	120.4	
Ge	72	No Gas	2712289.77	0.3	2712289.77	100	29.5	120.4	
Ge	72	H2	540643.15	0.9	540643.15	100	29.5	120.4	
Ge	72	He	259264.63	1.3	259264.63	100	29.5	120.4	
Y	89	H2	9628329.76	0.6	9628329.76	100	29.5	120.4	
Y	89	He	2093497.43	2.4	2093497.43	100	29.5	120.4	
Tb	159	No Gas	21312636.35	0.5	21312636.35	100	29.5	120.4	
Tb	159	He	7937819.95	2.1	7937819.95	100	29.5	120.4	
Bi	209	No Gas	9931051.85	0.3	9931051.85	100	29.5	120.4	

Sample Report

Sample Name CalStd

File Name 007CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:03:15 PM

Sample Type CalStd

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.000	ppb	2.9	335830.77	1000	
11	B	6	No Gas	50.000	ppb	3.3	227076.27	1000	
23	Na	45	He	10000.000	ppb	0.4	7600630.36	1000	
24	Mg	45	He	10000.000	ppb	0.7	4031515.98	1000	
27	Al	45	He	1000.000	ppb	0.3	149610.98	1000	
28	Si	45	H2	1000.000	ppb	4.9	241647.66	1000	
39	K	45	He	10000.000	ppb	0.6	3200118.23	1000	
40	Ca	45	H2	10000.000	ppb	4.6	22376865.78	1000	
51	V	89	He	50.000	ppb	0.3	255762.82	1000	
52	Cr	89	He	50.000	ppb	0.9	326527.65	1000	
55	Mn	89	He	50.000	ppb	0.8	141626.67	1000	
56	Fe	89	H2	10000.000	ppb	7.0	86440588.38	1000	
59	Co	89	He	50.000	ppb	0.3	538698.05	1000	
60	Ni	89	He	50.000	ppb	0.9	148687.50	1000	
63	Cu	89	He	50.000	ppb	0.4	406632.35	1000	
66	Zn	89	He	50.000	ppb	0.6	45337.94	1000	
75	As	89	He	50.000	ppb	0.4	31032.47	1000	
78	Se	89	H2	50.000	ppb	6.6	15852.12	1000	
88	Sr	89	He	50.000	ppb	0.8	160523.89	1000	
95	Mo	89	He	50.000	ppb	0.3	194511.80	1000	
107	Ag	89	He	50.000	ppb	0.3	618208.73	1000	
111	Cd	89	He	50.000	ppb	0.3	73788.59	1000	
118	Sn	159	He	50.000	ppb	0.6	151956.25	1000	
121	Sb	159	No Gas	50.000	ppb	2.1	975979.50	1000	
137	Ba	159	No Gas	50.000	ppb	3.4	380698.20	1000	
182	W	159	No Gas	50.000	ppb	3.8	791507.41	1000	
205	Tl	209	No Gas	50.000	ppb	3.1	1474589.64	1000	
208	Pb	209	No Gas	50.000	ppb	2.7	2073027.12	1000	
232	Th	209	No Gas	50.000	ppb	3.7	1999502.11	1000	
238	U	209	No Gas	50.000	ppb	3.0	1934113.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8166327.39	0.4	8075153.2	101.13	29.5	120.4	
Sc	45	No Gas	15707687.87	0.5	15284588.74	102.77	29.5	120.4	
Sc	45	H2	1938563.48	4.3	1817402.03	106.67	29.5	120.4	
Sc	45	He	441874.36	0.3	431380.74	102.43	29.5	120.4	
Ge	72	No Gas	2766696.13	0.2	2712289.77	102.01	29.5	120.4	
Ge	72	H2	568022.97	2.8	540643.15	105.06	29.5	120.4	
Ge	72	He	263597.65	0.3	259264.63	101.67	29.5	120.4	
Y	89	H2	10161642.22	5.4	9628329.76	105.54	29.5	120.4	
Y	89	He	2141142.73	0.5	2093497.43	102.28	29.5	120.4	
Tb	159	No Gas	21765448.28	0.3	21312636.35	102.12	29.5	120.4	
Tb	159	He	8128412.65	1.0	7937819.95	102.4	29.5	120.4	
Bi	209	No Gas	9963916.69	0.3	9931051.85	100.33	29.5	120.4	

Sample Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq Time	8/5/2020 4:06:51 PM
Sample Type	ICV
Total Dilution	1.0000
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	19.826	ppb	7.4	132049.52	20	
11	B	6	No Gas	20.325	ppb	7.3	92083.78	20	
23	Na	45	He	3977.037	ppb	0.2	3011255.92	4000	
24	Mg	45	He	3965.117	ppb	0.2	1580317.95	4000	
27	Al	45	He	368.018	ppb	1.8	54708.91	400	
28	Si	45	H2	426.420	ppb	1.4	96663.26	400	
39	K	45	He	3933.992	ppb	0.2	1257660.98	4000	
40	Ca	45	H2	4087.967	ppb	0.1	8563446.33	4000	
51	V	89	He	19.798	ppb	1.1	100810.87	20	
52	Cr	89	He	20.100	ppb	0.2	131023.73	20	
55	Mn	89	He	20.187	ppb	1.3	57159.39	20	
56	Fe	89	H2	4111.522	ppb	0.8	33732988.47	4000	
59	Co	89	He	20.326	ppb	1.8	217792.76	20	
60	Ni	89	He	20.484	ppb	0.9	60752.58	20	
63	Cu	89	He	20.370	ppb	1.1	164979.29	20	
66	Zn	89	He	19.860	ppb	3.5	18387.17	20	
75	As	89	He	19.743	ppb	1.5	12190.67	20	
78	Se	89	H2	20.494	ppb	0.4	6165.92	20	
88	Sr	89	He	19.360	ppb	0.7	61832.30	20	
95	Mo	89	He	40.440	ppb	0.5	156442.05	40	
107	Ag	89	He	20.097	ppb	0.8	247096.38	20	
111	Cd	89	He	20.146	ppb	0.7	29564.55	20	
118	Sn	159	He	19.987	ppb	0.5	61171.87	20	
121	Sb	159	No Gas	20.537	ppb	7.5	402011.36	20	
137	Ba	159	No Gas	20.084	ppb	7.4	153346.71	20	
182	W	159	No Gas	20.427	ppb	8.6	324147.42	20	
205	Tl	209	No Gas	22.150	ppb	6.5	662130.05	20	> +/- 10%
208	Pb	209	No Gas	20.241	ppb	7.3	850383.78	20	
232	Th	209	No Gas	20.828	ppb	8.3	843571.11	20	
238	U	209	No Gas	20.561	ppb	7.9	805430.62	20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8109260.80	2.9	8075153.2	100.42	29.5	120.4	
Sc	45	No Gas	15610781.90	2.5	15284588.74	102.13	29.5	120.4	
Sc	45	H2	1810486.26	1.3	1817402.03	99.62	29.5	120.4	
Sc	45	He	436820.70	0.2	431380.74	101.26	29.5	120.4	
Ge	72	No Gas	2771599.29	3.1	2712289.77	102.19	29.5	120.4	
Ge	72	H2	539161.15	0.9	540643.15	99.73	29.5	120.4	
Ge	72	He	261113.22	0.3	259264.63	100.71	29.5	120.4	
Y	89	H2	9619366.01	0.3	9628329.76	99.91	29.5	120.4	
Y	89	He	2129132.00	0.6	2093497.43	101.7	29.5	120.4	
Tb	159	No Gas	21853042.73	3.0	21312636.35	102.54	29.5	120.4	
Tb	159	He	8154936.75	0.3	7937819.95	102.74	29.5	120.4	
Bi	209	No Gas	10105957.89	2.8	9931051.85	101.76	29.5	120.4	

Sample Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq Time	8/5/2020 4:09:30 PM
Sample Type	ICB
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.014	ppb	38.3	112.23	0.2	
11	B	6	No Gas	0.384	ppb	6.0	2642.55	4	
23	Na	45	He	1.334	ppb	215.1	38803.41	200	
24	Mg	45	He	1.828	ppb	120.5	840.32	20	
27	Al	45	He	-1.378	ppb	N/A	235.57	20	
28	Si	45	H2	0.255	ppb	212.0	573.98	100	
39	K	45	He	0.461	ppb	349.1	21560.17	200	
40	Ca	45	H2	4.084	ppb	14.5	23150.74	20	
51	V	89	He	0.006	ppb	149.1	211.12	1	
52	Cr	89	He	0.008	ppb	122.6	870.54	1	
55	Mn	89	He	0.063	ppb	36.1	681.23	0.4	
56	Fe	89	H2	1.180	ppb	21.2	15465.94	20	
59	Co	89	He	0.006	ppb	149.5	126.68	0.2	
60	Ni	89	He	0.043	ppb	96.8	431.14	0.4	
63	Cu	89	He	0.031	ppb	36.9	668.93	0.6	
66	Zn	89	He	0.220	ppb	46.8	987.85	2	
75	As	89	He	0.009	ppb	58.9	16.67	1	
78	Se	89	H2	0.024	ppb	41.3	7.67	1	
88	Sr	89	He	0.010	ppb	126.3	71.11	1	
95	Mo	89	He	0.068	ppb	27.8	276.68	1	
107	Ag	89	He	0.013	ppb	84.5	182.23	0.2	
111	Cd	89	He	0.009	ppb	119.2	14.44	0.2	
118	Sn	159	He	0.070	ppb	25.9	595.59	1	
121	Sb	159	No Gas	0.008	ppb	29.0	333.71	0.2	
137	Ba	159	No Gas	0.017	ppb	90.1	193.55	0.4	
182	W	159	No Gas	0.053	ppb	9.2	897.69	1	
205	Tl	209	No Gas	0.006	ppb	121.0	911.05	0.2	
208	Pb	209	No Gas	0.019	ppb	19.4	1518.40	0.2	
232	Th	209	No Gas	0.047	ppb	18.3	2135.91	1	
238	U	209	No Gas	0.018	ppb	53.5	704.16	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8054237.70	0.7	8075153.2	99.74	29.5	120.4	
Sc	45	No Gas	15419374.88	1.4	15284588.74	100.88	29.5	120.4	
Sc	45	H2	1765922.47	3.0	1817402.03	97.17	29.5	120.4	
Sc	45	He	431702.65	0.8	431380.74	100.07	29.5	120.4	
Ge	72	No Gas	2740815.57	0.9	2712289.77	101.05	29.5	120.4	
Ge	72	H2	527360.72	1.5	540643.15	97.54	29.5	120.4	
Ge	72	He	260214.54	1.0	259264.63	100.37	29.5	120.4	
Y	89	H2	9377079.98	4.3	9628329.76	97.39	29.5	120.4	
Y	89	He	2112947.33	0.7	2093497.43	100.93	29.5	120.4	
Tb	159	No Gas	21517214.96	1.4	21312636.35	100.96	29.5	120.4	
Tb	159	He	8149155.30	0.3	7937819.95	102.66	29.5	120.4	
Bi	209	No Gas	9993289.92	0.6	9931051.85	100.63	29.5	120.4	

Sample Report

Sample Name PQL

File Name 010LICV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:12:05 PM

Sample Type LLICV

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.211	ppb	12.5	1404.56	0.2	
11	B	6	No Gas	0.589	ppb	6.5	3533.89	4	Failed DoD □ Failed 6020/EPA
23	Na	45	He	208.905	ppb	1.3	193029.68	200	
24	Mg	45	He	22.839	ppb	1.7	9159.13	20	
27	Al	45	He	17.334	ppb	2.6	2975.98	20	
28	Si	45	H2	101.736	ppb	3.0	23388.80	100	
39	K	45	He	205.396	ppb	0.5	85578.91	200	
40	Ca	45	H2	16.653	ppb	1.2	49872.02	20	
51	V	89	He	1.031	ppb	1.5	5416.80	1	
52	Cr	89	He	1.044	ppb	2.1	7580.03	1	
55	Mn	89	He	0.289	ppb	4.9	1319.83	0.4	Failed DoD
56	Fe	89	H2	22.167	ppb	1.6	187820.82	20	
59	Co	89	He	0.204	ppb	2.0	2247.01	0.2	
60	Ni	89	He	0.354	ppb	2.3	1347.90	0.4	
63	Cu	89	He	0.602	ppb	1.6	5276.74	0.6	
66	Zn	89	He	1.622	ppb	7.8	2234.70	2	
75	As	89	He	0.971	ppb	6.0	609.75	1	
78	Se	89	H2	1.066	ppb	1.8	321.16	1	
88	Sr	89	He	1.017	ppb	2.0	3280.52	1	
95	Mo	89	He	1.034	ppb	4.0	4011.85	1	
107	Ag	89	He	0.234	ppb	1.7	2895.97	0.2	
111	Cd	89	He	0.219	ppb	3.9	321.86	0.2	
118	Sn	159	He	1.023	ppb	0.8	3485.04	1	
121	Sb	159	No Gas	0.246	ppb	6.3	4926.38	0.2	Failed DoD
137	Ba	159	No Gas	0.430	ppb	5.6	3307.47	0.4	
182	W	159	No Gas	1.234	ppb	3.6	19396.20	1	Failed DoD
205	Tl	209	No Gas	0.223	ppb	4.9	7363.68	0.2	
208	Pb	209	No Gas	0.228	ppb	11.2	10236.42	0.2	
232	Th	209	No Gas	0.234	ppb	11.0	9657.83	0.2	
238	U	209	No Gas	0.221	ppb	11.0	8616.02	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8006029.71	1.6	8075153.2	99.14	29.5	120.4	
Sc	45	No Gas	15407427.93	1.8	15284588.74	100.8	29.5	120.4	
Sc	45	H2	1804361.07	0.4	1817402.03	99.28	29.5	120.4	
Sc	45	He	433658.64	0.3	431380.74	100.53	29.5	120.4	
Ge	72	No Gas	2751826.29	2.2	2712289.77	101.46	29.5	120.4	
Ge	72	H2	536566.28	0.8	540643.15	99.25	29.5	120.4	
Ge	72	He	260037.89	0.6	259264.63	100.3	29.5	120.4	
Y	89	H2	9606508.77	0.4	9628329.76	99.77	29.5	120.4	
Y	89	He	2126518.75	0.5	2093497.43	101.58	29.5	120.4	
Tb	159	No Gas	21551780.24	1.6	21312636.35	101.12	29.5	120.4	
Tb	159	He	8129259.60	0.9	7937819.95	102.41	29.5	120.4	
Bi	209	No Gas	10056373.52	2.4	9931051.85	101.26	29.5	120.4	

Sample Report

Sample Name ICSA

File Name 011ICSA.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:14:44 PM

Sample Type ICSA

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	36.7	81.11	0.2	
11	B	6	No Gas	1.836	ppb	7.0	8553.93	2.59	
23	Na	45	He	98931.476	ppb	0.4	72695301.91	100000	
24	Mg	45	He	96178.733	ppb	0.3	37657389.44	100000	
27	Al	45	He	90636.380	ppb	0.5	13131093.00	100000	
28	Si	45	H2	12.112	ppb	11.8	3233.96	100	
39	K	45	He	97696.072	ppb	0.4	30177592.96	100000	
40	Ca	45	H2	102559.249	ppb	0.6	212534034.61	100000	
51	V	89	He	0.012	ppb	46.7	238.90	0.84	
52	Cr	89	He	0.271	ppb	8.7	2501.11	0.72	
55	Mn	89	He	0.351	ppb	6.5	1446.48	0.4826	
56	Fe	89	H2	99704.631	ppb	0.6	794381560.24	100000	
59	Co	89	He	0.286	ppb	9.9	3029.44	0.8	
60	Ni	89	He	0.275	ppb	8.7	1082.31	0.514	
63	Cu	89	He	0.265	ppb	9.7	2485.87	0.557	
66	Zn	89	He	-0.101	ppb	N/A	688.93	1.2368	
75	As	89	He	0.048	ppb	6.4	40.00	3.5	
78	Se	89	H2	0.082	ppb	23.0	24.83	0.8	
88	Sr	89	He	0.782	ppb	2.4	2458.09	1.0578	
95	Mo	89	He	2009.471	ppb	1.4	7532526.55	2000	
107	Ag	89	He	0.016	ppb	7.8	214.45	0.2	
111	Cd	89	He	0.390	ppb	3.1	556.69	0.468	
118	Sn	159	He	0.252	ppb	8.9	1077.86	0.76	
121	Sb	159	No Gas	0.175	ppb	8.8	3430.94	0.289	
137	Ba	159	No Gas	0.179	ppb	12.7	1368.26	0.3206	
182	W	159	No Gas	0.197	ppb	4.4	3037.10	0.68	
205	Tl	209	No Gas	0.004	ppb	128.5	754.21	0.2	
208	Pb	209	No Gas	0.098	ppb	13.9	4281.76	0.23	
232	Th	209	No Gas	0.020	ppb	9.8	931.09	0.2	
238	U	209	No Gas	0.010	ppb	29.7	340.39	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7562326.38	2.4	8075153.2	93.65	29.5	120.4	
Sc	45	No Gas	15382916.75	2.1	15284588.74	100.64	29.5	120.4	
Sc	45	H2	1794141.55	1.3	1817402.03	98.72	29.5	120.4	
Sc	45	He	429164.39	0.7	431380.74	99.49	29.5	120.4	
Ge	72	No Gas	2669943.21	2.2	2712289.77	98.44	29.5	120.4	
Ge	72	H2	498566.52	1.1	540643.15	92.22	29.5	120.4	
Ge	72	He	250311.81	0.1	259264.63	96.55	29.5	120.4	
Y	89	H2	9343286.08	1.3	9628329.76	97.04	29.5	120.4	
Y	89	He	2063416.48	0.6	2093497.43	98.56	29.5	120.4	
Tb	159	No Gas	20812025.11	2.6	21312636.35	97.65	29.5	120.4	
Tb	159	He	7644001.07	1.0	7937819.95	96.3	29.5	120.4	
Bi	209	No Gas	8916850.81	2.6	9931051.85	89.79	29.5	120.4	

Sample Report

Sample Name ICSAB

File Name 012ICSB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:17:27 PM

Sample Type ICSB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	21.211	ppb	7.2	125027.48	20	
11	B	6	No Gas	21.765	ppb	7.3	87207.23	20	
23	Na	45	He	101614.741	ppb	0.3	75085094.12	100000	
24	Mg	45	He	98641.705	ppb	0.2	38838944.14	100000	
27	Al	45	He	90998.962	ppb	0.4	13257535.08	100000	
28	Si	45	H2	480.258	ppb	1.5	106339.41	500	
39	K	45	He	99259.274	ppb	0.5	30832247.12	100000	
40	Ca	45	H2	104747.883	ppb	0.6	214068803.47	100000	
51	V	89	He	21.285	ppb	1.1	103385.91	20	
52	Cr	89	He	21.036	ppb	1.1	130780.11	20	
55	Mn	89	He	20.796	ppb	0.8	56162.19	20	
56	Fe	89	H2	101823.466	ppb	1.0	795798003.30	100000	
59	Co	89	He	20.823	ppb	1.8	212846.34	20	
60	Ni	89	He	20.325	ppb	1.9	57507.81	20	
63	Cu	89	He	19.799	ppb	1.2	152985.77	20	
66	Zn	89	He	19.321	ppb	0.9	17089.89	20	
75	As	89	He	21.234	ppb	1.8	12507.32	20	
78	Se	89	H2	21.108	ppb	1.1	6050.38	20	
88	Sr	89	He	20.446	ppb	0.9	62292.09	20	
95	Mo	89	He	2102.534	ppb	1.0	7758424.19	2000	
107	Ag	89	He	19.094	ppb	1.3	223963.24	20	
111	Cd	89	He	19.463	ppb	0.8	27248.23	20	
118	Sn	159	He	20.557	ppb	1.3	57191.01	20	
121	Sb	159	No Gas	20.808	ppb	7.4	386673.87	20	
137	Ba	159	No Gas	20.654	ppb	7.8	149699.24	20	
182	W	159	No Gas	20.504	ppb	7.7	308942.07	20	
205	Tl	209	No Gas	21.779	ppb	7.8	565718.15	20	
208	Pb	209	No Gas	21.500	ppb	6.5	785181.15	20	
232	Th	209	No Gas	22.836	ppb	8.7	803759.89	20	
238	U	209	No Gas	22.552	ppb	7.9	767869.44	20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7176731.74	2.9	8075153.2	88.87	29.5	120.4	
Sc	45	No Gas	15470408.82	3.1	15284588.74	101.22	29.5	120.4	
Sc	45	H2	1769234.27	1.2	1817402.03	97.35	29.5	120.4	
Sc	45	He	431571.86	0.8	431380.74	100.04	29.5	120.4	
Ge	72	No Gas	2672289.38	2.9	2712289.77	98.53	29.5	120.4	
Ge	72	H2	476615.50	1.1	540643.15	88.16	29.5	120.4	
Ge	72	He	250955.48	0.6	259264.63	96.8	29.5	120.4	
Y	89	H2	9165010.94	1.4	9628329.76	95.19	29.5	120.4	
Y	89	He	2031265.67	1.2	2093497.43	97.03	29.5	120.4	
Tb	159	No Gas	20748317.89	3.3	21312636.35	97.35	29.5	120.4	
Tb	159	He	7414432.74	0.6	7937819.95	93.41	29.5	120.4	
Bi	209	No Gas	8785374.02	3.2	9931051.85	88.46	29.5	120.4	

Sample Report

Sample Name LRS1

File Name 013_LRS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:20:13 PM

Sample Type LRS

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	107.961	ppb	7.8	633815.74	100	
11	B	6	No Gas	497.014	ppb	7.4	1965657.26	500	
51	V	89	He	1070.283	ppb	0.5	5128004.09	1000	
52	Cr	89	He	2118.388	ppb	0.5	12934913.92	2000	
55	Mn	89	He	2067.293	ppb	0.4	5469045.64	2000	
59	Co	89	He	1081.030	ppb	0.5	10915630.67	1000	
60	Ni	89	He	1093.503	ppb	0.8	3041985.44	1000	
63	Cu	89	He	2105.925	ppb	0.6	16036611.71	2000	
66	Zn	89	He	2106.664	ppb	0.3	1759430.48	2000	
75	As	89	He	1041.108	ppb	0.4	605429.68	1000	
78	Se	89	H2	1032.913	ppb	0.1	292676.54	1000	
88	Sr	89	He	1954.080	ppb	0.3	5878807.76	2000	
95	Mo	89	He	1067.138	ppb	0.6	3890833.38	1000	
107	Ag	89	He	114.399	ppb	0.2	1325720.76	100	> +/- 10%
111	Cd	89	He	1037.358	ppb	0.5	1434905.20	1000	
118	Sn	159	He	1007.619	ppb	1.3	2871949.05	1000	
121	Sb	159	No Gas	1036.272	ppb	6.4	20255975.68	1000	
137	Ba	159	No Gas	1989.147	ppb	6.8	15166201.50	2000	
182	W	159	No Gas	986.357	ppb	7.0	15637101.66	1000	
205	Tl	209	No Gas	1047.823	ppb	6.2	31123320.35	1000	
208	Pb	209	No Gas	2022.628	ppb	6.4	84470545.90	2000	
232	Th	209	No Gas	1011.729	ppb	7.4	40758693.09	1000	
238	U	209	No Gas	993.523	ppb	7.8	38718792.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7144762.27	1.8	8075153.2	88.48	29.5	120.4	
Sc	45	No Gas	15792410.60	2.1	15284588.74	103.32	29.5	120.4	
Sc	45	H2	1710607.77	0.4	1817402.03	94.12	29.5	120.4	
Sc	45	He	421625.81	1.3	431380.74	97.74	29.5	120.4	
Ge	72	No Gas	2804633.49	2.2	2712289.77	103.4	29.5	120.4	
Ge	72	H2	470851.40	0.6	540643.15	87.09	29.5	120.4	
Ge	72	He	254437.04	0.5	259264.63	98.14	29.5	120.4	
Y	89	H2	9060538.55	1.0	9628329.76	94.1	29.5	120.4	
Y	89	He	2006894.36	0.1	2093497.43	95.86	29.5	120.4	
Tb	159	No Gas	21811895.23	1.4	21312636.35	102.34	29.5	120.4	
Tb	159	He	7642121.00	0.9	7937819.95	96.27	29.5	120.4	
Bi	209	No Gas	10047379.63	1.7	9931051.85	101.17	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:22:44 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.071	ppb	25.1	406.69	100	
11	B	6	No Gas	9.032	ppb	9.7	34249.66	1000	
23	Na	45	He	202358.422	ppb	0.6	159036360.76	200000	>LDR
24	Mg	45	He	195034.369	ppb	0.2	81704058.78	200000	
27	Al	45	He	186055.363	ppb	0.1	28838979.01	200000	
28	Si	45	H2	9172.243	ppb	0.6	2047238.23	10000	
39	K	45	He	202348.938	ppb	0.5	66844910.96	200000	>LDR
40	Ca	45	H2	211187.000	ppb	0.6	437074024.60	200000	>LDR
51	V	89	He	0.176	ppb	9.9	1078.98	1000	
52	Cr	89	He	1.462	ppb	2.3	10306.58	2000	
55	Mn	89	He	7.572	ppb	1.3	21782.17	2000	
56	Fe	89	H2	102283.000	ppb	0.6	795228847.50	100000	>LDR
59	Co	89	He	0.594	ppb	2.0	6428.66	1000	
60	Ni	89	He	1.889	ppb	3.0	5883.68	1000	
63	Cu	89	He	1.099	ppb	1.1	9311.24	2000	
66	Zn	89	He	1.037	ppb	0.3	1720.17	2000	
75	As	89	He	0.269	ppb	2.5	177.69	1000	
78	Se	89	H2	0.544	ppb	27.8	155.49	1000	
88	Sr	89	He	1.105	ppb	3.1	3569.49	2000	
95	Mo	89	He	1.099	ppb	4.6	4274.17	1000	
107	Ag	89	He	0.099	ppb	1.8	1243.44	100	
111	Cd	89	He	0.110	ppb	4.6	162.97	1000	
118	Sn	159	He	1.227	ppb	6.4	3688.43	1000	
121	Sb	159	No Gas	0.783	ppb	14.5	14347.41	1000	
137	Ba	159	No Gas	1.615	ppb	15.5	11474.70	2000	
182	W	159	No Gas	1.642	ppb	6.1	24149.74	1000	
205	Tl	209	No Gas	0.694	ppb	15.1	17602.23	1000	
208	Pb	209	No Gas	1.333	ppb	17.3	46549.95	2000	
232	Th	209	No Gas	1.313	ppb	31.6	44018.55	1000	
238	U	209	No Gas	0.875	ppb	33.0	28250.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6689803.63	2.2	8075153.2	82.84	29.5	120.4	
Sc	45	No Gas	15225325.10	3.0	15284588.74	99.61	29.5	120.4	
Sc	45	H2	1791683.85	2.3	1817402.03	98.58	29.5	120.4	
Sc	45	He	459163.42	2.1	431380.74	106.44	29.5	120.4	
Ge	72	No Gas	2551964.06	3.1	2712289.77	94.09	29.5	120.4	
Ge	72	H2	467429.31	2.0	540643.15	86.46	29.5	120.4	
Ge	72	He	260520.63	1.6	259264.63	100.48	29.5	120.4	
Y	89	H2	9116874.37	1.6	9628329.76	94.69	29.5	120.4	
Y	89	He	2131085.94	1.2	2093497.43	101.8	29.5	120.4	
Tb	159	No Gas	20142575.81	3.6	21312636.35	94.51	29.5	120.4	
Tb	159	He	7309758.36	0.2	7937819.95	92.09	29.5	120.4	
Bi	209	No Gas	8258733.65	3.9	9931051.85	83.16	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:25:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	21.0	61.11	100	
11	B	6	No Gas	1.084	ppb	1.7	5555.71	1000	
23	Na	45	He	59.245	ppb	5.7	85441.83	200000	
24	Mg	45	He	27.386	ppb	13.1	11407.71	200000	
27	Al	45	He	20.189	ppb	18.5	3531.70	200000	
28	Si	45	H2	1.808	ppb	9.4	967.78	10000	
39	K	45	He	50.451	ppb	5.7	38833.47	200000	
40	Ca	45	H2	32.104	ppb	5.6	84788.72	200000	
51	V	89	He	0.042	ppb	18.1	400.02	1000	
52	Cr	89	He	0.068	ppb	30.7	1271.17	2000	
55	Mn	89	He	-0.055	ppb	N/A	357.28	2000	
56	Fe	89	H2	22.712	ppb	9.2	196681.07	100000	
59	Co	89	He	0.032	ppb	46.3	402.26	1000	
60	Ni	89	He	-0.046	ppb	N/A	170.01	1000	
63	Cu	89	He	0.119	ppb	18.5	1386.79	2000	
66	Zn	89	He	-0.480	ppb	N/A	376.69	2000	
75	As	89	He	0.062	ppb	23.9	50.01	1000	
78	Se	89	H2	0.097	ppb	10.4	30.67	1000	
88	Sr	89	He	0.058	ppb	15.7	224.45	2000	
95	Mo	89	He	0.299	ppb	21.9	1178.99	1000	
107	Ag	89	He	0.008	ppb	26.9	124.45	100	
111	Cd	89	He	0.039	ppb	23.9	59.26	1000	
118	Sn	159	He	0.282	ppb	19.2	1195.65	1000	
121	Sb	159	No Gas	0.067	ppb	14.6	1478.41	1000	
137	Ba	159	No Gas	0.078	ppb	4.6	654.08	2000	
182	W	159	No Gas	0.186	ppb	12.4	2980.37	1000	
205	Tl	209	No Gas	0.056	ppb	15.4	2316.13	1000	
208	Pb	209	No Gas	0.108	ppb	3.9	5076.09	2000	
232	Th	209	No Gas	0.062	ppb	17.7	2659.99	1000	
238	U	209	No Gas	0.048	ppb	5.2	1822.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7760980.39	2.2	8075153.2	96.11	29.5	120.4	
Sc	45	No Gas	16522765.10	1.6	15284588.74	108.1	29.5	120.4	
Sc	45	H2	1864461.61	0.8	1817402.03	102.59	29.5	120.4	
Sc	45	He	452220.01	1.9	431380.74	104.83	29.5	120.4	
Ge	72	No Gas	2889062.06	2.2	2712289.77	106.52	29.5	120.4	
Ge	72	H2	519319.69	0.8	540643.15	96.06	29.5	120.4	
Ge	72	He	269554.34	0.7	259264.63	103.97	29.5	120.4	
Y	89	H2	9830162.11	1.0	9628329.76	102.1	29.5	120.4	
Y	89	He	2139216.36	0.9	2093497.43	102.18	29.5	120.4	
Tb	159	No Gas	21571091.34	0.5	21312636.35	101.21	29.5	120.4	
Tb	159	He	7865611.55	1.8	7937819.95	99.09	29.5	120.4	
Bi	209	No Gas	9726013.06	0.8	9931051.85	97.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:28:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	5.9	81.11	100	
11	B	6	No Gas	0.793	ppb	4.1	4167.43	1000	
23	Na	45	He	19.689	ppb	4.7	54908.30	200000	
24	Mg	45	He	6.482	ppb	10.1	2804.93	200000	
27	Al	45	He	3.172	ppb	21.9	942.29	200000	
28	Si	45	H2	0.239	ppb	116.9	594.10	10000	
39	K	45	He	14.049	ppb	6.2	27028.27	200000	
40	Ca	45	H2	2.514	ppb	61.7	20751.12	200000	
51	V	89	He	0.015	ppb	79.7	261.12	1000	
52	Cr	89	He	0.036	ppb	24.7	1069.19	2000	
55	Mn	89	He	-0.101	ppb	N/A	227.96	2000	
56	Fe	89	H2	4.939	ppb	22.8	46809.23	100000	
59	Co	89	He	0.017	ppb	16.2	240.02	1000	
60	Ni	89	He	-0.081	ppb	N/A	68.89	1000	
63	Cu	89	He	0.048	ppb	20.0	816.72	2000	
66	Zn	89	He	-0.536	ppb	N/A	327.80	2000	
75	As	89	He	0.025	ppb	5.8	27.33	1000	
78	Se	89	H2	0.046	ppb	11.3	14.83	1000	
88	Sr	89	He	0.023	ppb	32.4	112.22	2000	
95	Mo	89	He	0.161	ppb	7.5	642.26	1000	
107	Ag	89	He	0.003	ppb	53.0	65.56	100	
111	Cd	89	He	0.017	ppb	16.7	27.04	1000	
118	Sn	159	He	0.123	ppb	11.7	734.50	1000	
121	Sb	159	No Gas	0.114	ppb	2.5	2412.91	1000	
137	Ba	159	No Gas	0.211	ppb	11.5	1675.32	2000	
182	W	159	No Gas	0.163	ppb	6.0	2646.59	1000	
205	Tl	209	No Gas	0.100	ppb	4.9	3641.32	1000	
208	Pb	209	No Gas	0.206	ppb	6.1	9191.65	2000	
232	Th	209	No Gas	0.108	ppb	2.1	4529.24	1000	
238	U	209	No Gas	0.104	ppb	9.7	3988.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7517203.60	2.0	8075153.2	93.09	29.5	120.4	
Sc	45	No Gas	16442459.38	3.0	15284588.74	107.58	29.5	120.4	
Sc	45	H2	1835742.44	0.6	1817402.03	101.01	29.5	120.4	
Sc	45	He	452631.39	0.6	431380.74	104.93	29.5	120.4	
Ge	72	No Gas	2896900.89	2.7	2712289.77	106.81	29.5	120.4	
Ge	72	H2	507045.19	0.9	540643.15	93.79	29.5	120.4	
Ge	72	He	270177.11	1.0	259264.63	104.21	29.5	120.4	
Y	89	H2	9630456.16	0.3	9628329.76	100.02	29.5	120.4	
Y	89	He	2141052.17	0.9	2093497.43	102.27	29.5	120.4	
Tb	159	No Gas	21842809.12	1.8	21312636.35	102.49	29.5	120.4	
Tb	159	He	7903748.15	1.1	7937819.95	99.57	29.5	120.4	
Bi	209	No Gas	9882996.81	1.9	9931051.85	99.52	29.5	120.4	

Sample Report

Sample Name CCV

File Name 017_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:30:49 PM

Sample Type CCV

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.696	ppb	6.7	158316.39	25	
11	B	6	No Gas	25.740	ppb	7.3	107641.85	25	
23	Na	45	He	5165.666	ppb	2.6	3994573.10	5000	
24	Mg	45	He	5073.261	ppb	3.7	2070662.83	5000	
27	Al	45	He	480.761	ppb	3.9	73049.35	500	
28	Si	45	H2	470.885	ppb	0.5	107983.68	500	
39	K	45	He	5044.241	ppb	2.9	1645432.85	5000	
40	Ca	45	H2	5049.245	ppb	0.1	10700415.67	5000	
51	V	89	He	25.942	ppb	3.5	131648.96	25	
52	Cr	89	He	25.983	ppb	3.8	168616.21	25	
55	Mn	89	He	25.509	ppb	3.3	71882.09	25	
56	Fe	89	H2	5122.913	ppb	1.0	42070348.45	5000	
59	Co	89	He	26.233	ppb	3.3	280234.85	25	
60	Ni	89	He	26.145	ppb	3.4	77228.14	25	
63	Cu	89	He	26.219	ppb	3.2	211607.44	25	
66	Zn	89	He	25.908	ppb	2.7	23678.63	25	
75	As	89	He	25.350	ppb	4.7	15599.76	25	
78	Se	89	H2	25.420	ppb	1.1	7655.09	25	
88	Sr	89	He	23.835	ppb	2.7	75897.85	25	
95	Mo	89	He	25.320	ppb	3.3	97665.41	25	
107	Ag	89	He	25.374	ppb	2.8	311069.97	25	
111	Cd	89	He	24.850	ppb	2.8	36362.49	25	
118	Sn	159	He	24.909	ppb	3.3	72983.54	25	
121	Sb	159	No Gas	25.813	ppb	6.5	499200.08	25	
137	Ba	159	No Gas	25.345	ppb	6.3	191201.37	25	
182	W	159	No Gas	23.991	ppb	6.9	376250.81	25	
205	Tl	209	No Gas	25.569	ppb	8.1	738450.08	25	
208	Pb	209	No Gas	25.335	ppb	7.2	1028536.97	25	
232	Th	209	No Gas	24.918	ppb	5.7	975702.83	25	
238	U	209	No Gas	25.076	ppb	5.5	949658.77	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7495873.32	1.4	8075153.2	92.83	29.5	120.4	
Sc	45	No Gas	16314422.60	1.7	15284588.74	106.74	29.5	120.4	
Sc	45	H2	1832191.41	1.3	1817402.03	100.81	29.5	120.4	
Sc	45	He	447638.59	2.7	431380.74	103.77	29.5	120.4	
Ge	72	No Gas	2882722.72	2.7	2712289.77	106.28	29.5	120.4	
Ge	72	H2	515029.95	1.3	540643.15	95.26	29.5	120.4	
Ge	72	He	268251.73	1.3	259264.63	103.47	29.5	120.4	
Y	89	H2	9629259.86	1.3	9628329.76	100.01	29.5	120.4	
Y	89	He	2124094.39	2.8	2093497.43	101.46	29.5	120.4	
Tb	159	No Gas	21574698.57	1.7	21312636.35	101.23	29.5	120.4	
Tb	159	He	7821654.53	2.8	7937819.95	98.54	29.5	120.4	
Bi	209	No Gas	9762224.80	2.1	9931051.85	98.3	29.5	120.4	

Sample Report

Sample Name CCB

File Name 018_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:33:22 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	58.8	212.23	0.2	
11	B	6	No Gas	0.717	ppb	4.6	3899.57	4	
23	Na	45	He	4.572	ppb	25.1	42999.06	200	
24	Mg	45	He	3.089	ppb	22.6	1397.95	20	
27	Al	45	He	-0.417	ppb	N/A	392.24	20	
28	Si	45	H2	-0.127	ppb	N/A	507.24	100	
39	K	45	He	6.426	ppb	23.2	24433.27	200	
40	Ca	45	H2	-2.290	ppb	N/A	10517.63	20	
51	V	89	He	0.009	ppb	23.0	231.12	1	
52	Cr	89	He	0.016	ppb	19.0	935.87	1	
55	Mn	89	He	-0.111	ppb	N/A	197.97	0.4	
56	Fe	89	H2	2.805	ppb	5.1	29339.93	20	
59	Co	89	He	0.009	ppb	18.3	155.57	0.2	
60	Ni	89	He	-0.080	ppb	N/A	70.00	0.4	
63	Cu	89	He	0.016	ppb	35.2	560.03	0.6	
66	Zn	89	He	-0.547	ppb	N/A	317.79	2	
75	As	89	He	0.015	ppb	48.8	21.00	1	
78	Se	89	H2	0.049	ppb	11.9	15.50	1	
88	Sr	89	He	0.013	ppb	48.1	82.23	1	
95	Mo	89	He	0.127	ppb	15.7	510.03	1	
107	Ag	89	He	0.009	ppb	8.9	133.34	0.2	
111	Cd	89	He	0.009	ppb	10.7	14.07	0.2	
118	Sn	159	He	0.160	ppb	11.6	851.17	1	
121	Sb	159	No Gas	0.044	ppb	32.1	1061.23	0.2	
137	Ba	159	No Gas	0.030	ppb	58.2	297.00	0.4	
182	W	159	No Gas	0.129	ppb	5.7	2122.54	1	
205	Tl	209	No Gas	0.037	ppb	42.9	1832.19	0.2	
208	Pb	209	No Gas	0.033	ppb	26.2	2129.12	0.2	
232	Th	209	No Gas	0.122	ppb	31.1	5203.66	1	
238	U	209	No Gas	0.051	ppb	47.3	2009.12	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7609910.53	1.9	8075153.2	94.24	29.5	120.4	
Sc	45	No Gas	16354285.38	1.7	15284588.74	107	29.5	120.4	
Sc	45	H2	1825411.98	1.4	1817402.03	100.44	29.5	120.4	
Sc	45	He	450556.91	0.8	431380.74	104.45	29.5	120.4	
Ge	72	No Gas	2883488.15	1.9	2712289.77	106.31	29.5	120.4	
Ge	72	H2	512155.67	0.8	540643.15	94.73	29.5	120.4	
Ge	72	He	268916.78	0.8	259264.63	103.72	29.5	120.4	
Y	89	H2	9650195.59	1.6	9628329.76	100.23	29.5	120.4	
Y	89	He	2141957.43	0.5	2093497.43	102.31	29.5	120.4	
Tb	159	No Gas	21987752.45	1.2	21312636.35	103.17	29.5	120.4	
Tb	159	He	7986584.81	0.7	7937819.95	100.61	29.5	120.4	
Bi	209	No Gas	10099276.84	1.8	9931051.85	101.69	29.5	120.4	

Sample Report

Sample Name PBWNG13IMW2

File Name 019_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:42:00 PM

Sample Type PB

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	671.2	17.78	0.2	
11	B	6	No Gas	4.355	ppb	3.1	4403.04	4	
23	Na	45	He	17.693	ppb	48.8	41468.99	200	
24	Mg	45	He	15.984	ppb	18.6	1415.74	20	
27	Al	45	He	0.076	ppb	2930.9	450.03	20	
28	Si	45	H2	23.767	ppb	14.8	1558.49	100	
39	K	45	He	21.167	ppb	47.8	23310.27	200	
40	Ca	45	H2	-5.290	ppb	N/A	12643.86	20	
51	V	89	He	0.289	ppb	12.8	472.25	1	
52	Cr	89	He	0.380	ppb	5.6	1303.83	1	
55	Mn	89	He	-0.378	ppb	N/A	293.28	0.4	
56	Fe	89	H2	7.197	ppb	14.5	17597.45	20	
59	Co	89	He	0.012	ppb	54.8	86.67	0.2	
60	Ni	89	He	-0.347	ppb	N/A	100.00	0.4	
63	Cu	89	He	0.248	ppb	2.4	813.39	0.6	
66	Zn	89	He	-1.783	ppb	N/A	478.92	2	
75	As	89	He	0.134	ppb	35.5	27.67	1	
78	Se	89	H2	0.165	ppb	49.0	10.50	1	
88	Sr	89	He	0.021	ppb	187.8	52.22	1	
95	Mo	89	He	0.649	ppb	10.7	512.25	1	
107	Ag	89	He	0.017	ppb	46.5	67.78	0.2	
111	Cd	89	He	0.019	ppb	92.5	7.04	0.2	
118	Sn	159	He	1.153	ppb	18.3	1053.42	1	
121	Sb	159	No Gas	0.129	ppb	12.7	684.11	0.2	
137	Ba	159	No Gas	0.063	ppb	32.5	163.52	0.4	
182	W	159	No Gas	0.478	ppb	11.8	1575.18	1	
205	Tl	209	No Gas	-0.028	ppb	N/A	563.98	0.2	
208	Pb	209	No Gas	0.028	ppb	49.1	951.09	0.2	
232	Th	209	No Gas	0.245	ppb	13.0	2196.00	1	
238	U	209	No Gas	0.017	ppb	26.1	140.16	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7366112.94	0.8	8075153.2	91.22	29.5	120.4	
Sc	45	No Gas	15747690.68	0.7	15284588.74	103.03	29.5	120.4	
Sc	45	H2	1759141.36	1.0	1817402.03	96.79	29.5	120.4	
Sc	45	He	442807.84	1.5	431380.74	102.65	29.5	120.4	
Ge	72	No Gas	2776603.56	1.4	2712289.77	102.37	29.5	120.4	
Ge	72	H2	489702.18	1.0	540643.15	90.58	29.5	120.4	
Ge	72	He	261463.29	1.9	259264.63	100.85	29.5	120.4	
Y	89	H2	9377759.20	0.5	9628329.76	97.4	29.5	120.4	
Y	89	He	2102456.95	1.5	2093497.43	100.43	29.5	120.4	
Tb	159	No Gas	21732276.06	0.7	21312636.35	101.97	29.5	120.4	
Tb	159	He	7926645.71	1.6	7937819.95	99.86	29.5	120.4	
Bi	209	No Gas	9994749.19	0.8	9931051.85	100.64	29.5	120.4	

Sample Report

Sample Name LCSWNG13IMW2

File Name 020LCSW.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:44:31 PM

Sample Type LCSW

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	61.057	ppb	7.7	76915.99	50	6020□ DoD
11	B	6	No Gas	595.667	ppb	6.7	506159.65	500	
23	Na	45	He	8987.764	ppb	0.2	1394776.43	7500	DoD
24	Mg	45	He	6250.497	ppb	0.7	502917.73	5000	6020□ DoD
27	Al	45	He	2174.517	ppb	0.7	65167.12	2000	
28	Si	45	H2	1156.132	ppb	2.6	51724.46	1000	
39	K	45	He	12147.326	ppb	1.2	792213.63	10000	6020□ DoD
40	Ca	45	H2	3007.023	ppb	1.2	1250192.11	2500	DoD
51	V	89	He	619.507	ppb	0.4	617392.33	500	6020□ DoD
52	Cr	89	He	251.751	ppb	0.6	320434.17	200	6020□ DoD
55	Mn	89	He	618.185	ppb	0.2	340546.12	500	6020□ DoD
56	Fe	89	H2	1256.078	ppb	0.3	2018304.60	1000	6020□ DoD
59	Co	89	He	631.506	ppb	0.9	1325981.16	500	6020□ DoD
60	Ni	89	He	633.456	ppb	0.3	366706.47	500	6020□ DoD
63	Cu	89	He	314.951	ppb	0.7	499113.64	250	6020□ DoD
66	Zn	89	He	606.988	ppb	0.5	106155.26	500	6020□ DoD
75	As	89	He	124.011	ppb	0.5	15007.40	100	6020□ DoD
78	Se	89	H2	120.120	ppb	0.9	7057.97	100	DoD
88	Sr	89	He	581.653	ppb	0.3	363915.23	500	
95	Mo	89	He	125.605	ppb	0.7	95248.99	100	6020□ DoD
107	Ag	89	He	63.082	ppb	1.2	152028.32	50	6020□ DoD
111	Cd	89	He	303.758	ppb	0.3	87373.81	250	6020□ DoD
118	Sn	159	He	584.078	ppb	0.8	348068.96	500	DoD
121	Sb	159	No Gas	125.637	ppb	7.5	501839.42	100	6020□ DoD
137	Ba	159	No Gas	2382.730	ppb	6.8	3711556.35	2000	DoD
182	W	159	No Gas	119.961	ppb	8.2	388573.71	100	
205	Tl	209	No Gas	128.497	ppb	7.0	771494.87	100	6020□ DoD
206	[Pb]	209	No Gas	123.917	ppb	8.1	266886.18	100	6020□ DoD
207	[Pb]	209	No Gas	121.994	ppb	7.8	229343.76	100	6020□ DoD
208	Pb	209	No Gas	124.527	ppb	7.6	1050847.54	100	6020□ DoD
232	Th	209	No Gas	123.384	ppb	7.3	1004110.55	100	6020□ DoD
238	U	209	No Gas	122.221	ppb	7.6	961942.53	100	6020□ DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7666729.01	2.4	8075153.2	94.94	29.5	120.4	
Sc	45	No Gas	16085271.37	1.9	15284588.74	105.24	29.5	120.4	
Sc	45	H2	1778540.43	1.5	1817402.03	97.86	29.5	120.4	
Sc	45	He	440852.71	0.6	431380.74	102.2	29.5	120.4	
Ge	72	No Gas	2859137.97	2.4	2712289.77	105.41	29.5	120.4	
Ge	72	H2	486755.53	0.4	540643.15	90.03	29.5	120.4	
Ge	72	He	260997.14	0.5	259264.63	100.67	29.5	120.4	
Y	89	H2	9393173.05	1.2	9628329.76	97.56	29.5	120.4	
Y	89	He	2086618.60	0.8	2093497.43	99.67	29.5	120.4	
Tb	159	No Gas	22289028.84	2.2	21312636.35	104.58	29.5	120.4	
Tb	159	He	7981130.78	0.8	7937819.95	100.55	29.5	120.4	
Bi	209	No Gas	10150923.79	2.7	9931051.85	102.21	29.5	120.4	

Sample Report

Sample Name SN5646-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:47:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.053	ppb	59.6	81.12	100	
11	B	6	No Gas	38.284	ppb	3.8	32211.26	1000	
23	Na	45	He	77314.442	ppb	0.8	11693266.50	200000	
24	Mg	45	He	24136.185	ppb	1.1	1939785.22	200000	
27	Al	45	He	-0.805	ppb	N/A	421.13	200000	
28	Si	45	H2	2494.073	ppb	1.4	110741.79	10000	
39	K	45	He	2166.028	ppb	1.7	159079.31	200000	
40	Ca	45	H2	37170.888	ppb	1.2	15251095.19	200000	
51	V	89	He	0.415	ppb	19.5	591.14	1000	
52	Cr	89	He	0.409	ppb	19.5	1326.50	2000	
55	Mn	89	He	-0.036	ppb	N/A	477.26	2000	
56	Fe	89	H2	9.832	ppb	4.6	21818.20	100000	
59	Co	89	He	0.353	ppb	17.3	797.87	1000	
60	Ni	89	He	6.459	ppb	2.2	4021.83	1000	
63	Cu	89	He	1.511	ppb	3.4	2798.17	2000	
66	Zn	89	He	2.040	ppb	44.3	1133.43	2000	
75	As	89	He	1.364	ppb	3.8	175.69	1000	
78	Se	89	H2	0.802	ppb	12.6	47.83	1000	
88	Sr	89	He	177.780	ppb	0.8	110868.33	2000	
95	Mo	89	He	0.306	ppb	5.1	247.79	1000	
107	Ag	89	He	0.031	ppb	35.5	101.12	100	
111	Cd	89	He	0.107	ppb	20.4	32.22	1000	
118	Sn	159	He	1.026	ppb	4.4	974.52	1000	
121	Sb	159	No Gas	0.233	ppb	1.6	1114.62	1000	
137	Ba	159	No Gas	4.883	ppb	3.8	7674.17	2000	
182	W	159	No Gas	5.214	ppb	6.2	16923.33	1000	
205	Tl	209	No Gas	0.064	ppb	85.9	1111.30	1000	
208	Pb	209	No Gas	0.091	ppb	26.9	1481.71	2000	
232	Th	209	No Gas	0.700	ppb	19.2	5864.69	1000	
238	U	209	No Gas	0.128	ppb	30.7	1001.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7398939.67	2.1	8075153.2	91.63	29.5	120.4	
Sc	45	No Gas	16171594.04	2.5	15284588.74	105.8	29.5	120.4	
Sc	45	H2	1774564.24	1.4	1817402.03	97.64	29.5	120.4	
Sc	45	He	440442.14	0.6	431380.74	102.1	29.5	120.4	
Ge	72	No Gas	2847245.24	2.7	2712289.77	104.98	29.5	120.4	
Ge	72	H2	494015.89	1.6	540643.15	91.38	29.5	120.4	
Ge	72	He	261457.01	0.8	259264.63	100.85	29.5	120.4	
Y	89	H2	9382017.10	1.0	9628329.76	97.44	29.5	120.4	
Y	89	He	2079484.41	1.3	2093497.43	99.33	29.5	120.4	
Tb	159	No Gas	22250948.84	2.5	21312636.35	104.4	29.5	120.4	
Tb	159	He	7886022.31	0.5	7937819.95	99.35	29.5	120.4	
Bi	209	No Gas	9997688.27	2.5	9931051.85	100.67	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:49:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	18.7	51.11	100	
11	B	6	No Gas	28.741	ppb	7.0	24053.07	1000	
23	Na	45	He	12119.803	ppb	0.5	1857405.38	200000	
24	Mg	45	He	3157.758	ppb	0.6	252773.39	200000	
27	Al	45	He	17.668	ppb	12.7	966.73	200000	
28	Si	45	H2	3866.923	ppb	0.4	172051.25	10000	
39	K	45	He	356.155	ppb	2.7	44216.50	200000	
40	Ca	45	H2	5545.085	ppb	0.2	2296205.64	200000	
51	V	89	He	0.306	ppb	28.8	485.58	1000	
52	Cr	89	He	0.423	ppb	10.7	1349.16	2000	
55	Mn	89	He	6.362	ppb	3.9	3999.86	2000	
56	Fe	89	H2	12.490	ppb	4.4	26337.34	100000	
59	Co	89	He	0.345	ppb	9.3	784.52	1000	
60	Ni	89	He	2.860	ppb	0.6	1955.77	1000	
63	Cu	89	He	0.363	ppb	6.5	990.07	2000	
66	Zn	89	He	1.921	ppb	15.7	1118.98	2000	
75	As	89	He	1.257	ppb	4.8	163.35	1000	
78	Se	89	H2	0.180	ppb	16.7	11.50	1000	
88	Sr	89	He	38.276	ppb	0.5	23997.27	2000	
95	Mo	89	He	0.152	ppb	21.0	132.23	1000	
107	Ag	89	He	0.013	ppb	67.9	58.89	100	
111	Cd	89	He	0.037	ppb	51.5	12.22	1000	
118	Sn	159	He	1.158	ppb	2.4	1057.86	1000	
121	Sb	159	No Gas	0.061	ppb	35.9	423.81	1000	
137	Ba	159	No Gas	7.655	ppb	4.9	11882.00	2000	
182	W	159	No Gas	0.109	ppb	14.5	417.14	1000	
205	Tl	209	No Gas	-0.042	ppb	N/A	483.89	1000	
208	Pb	209	No Gas	0.012	ppb	53.7	824.28	2000	
232	Th	209	No Gas	0.093	ppb	6.8	981.14	1000	
238	U	209	No Gas	0.033	ppb	29.3	266.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7299050.46	2.8	8075153.2	90.39	29.5	120.4	
Sc	45	No Gas	15914980.05	0.8	15284588.74	104.12	29.5	120.4	
Sc	45	H2	1780971.01	0.2	1817402.03	98	29.5	120.4	
Sc	45	He	438505.86	1.1	431380.74	101.65	29.5	120.4	
Ge	72	No Gas	2832632.98	1.7	2712289.77	104.44	29.5	120.4	
Ge	72	H2	496589.48	1.2	540643.15	91.85	29.5	120.4	
Ge	72	He	262182.97	0.7	259264.63	101.13	29.5	120.4	
Y	89	H2	9478361.46	0.8	9628329.76	98.44	29.5	120.4	
Y	89	He	2087819.92	0.8	2093497.43	99.73	29.5	120.4	
Tb	159	No Gas	22064197.45	0.5	21312636.35	103.53	29.5	120.4	
Tb	159	He	7932558.08	0.5	7937819.95	99.93	29.5	120.4	
Bi	209	No Gas	10034133.68	0.7	9931051.85	101.04	29.5	120.4	

Sample Report

Sample Name PBSNH04IMS1

File Name 023_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:52:27 PM

Sample Type PB

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	212.2	17.78	0.2	
11	B	6	No Gas	8.032	ppb	3.4	7247.63	4	
23	Na	45	He	42.727	ppb	14.8	44364.10	200	
24	Mg	45	He	22.959	ppb	10.6	1940.27	20	
27	Al	45	He	1.191	ppb	113.3	473.37	20	
28	Si	45	H2	25.151	ppb	4.1	1631.92	100	
39	K	45	He	40.550	ppb	22.6	24054.27	200	
40	Ca	45	H2	27.838	ppb	2.5	26306.41	20	
51	V	89	He	0.300	ppb	8.0	476.69	1	
52	Cr	89	He	0.937	ppb	2.1	1990.45	1	
55	Mn	89	He	0.508	ppb	6.8	773.88	0.4	
56	Fe	89	H2	17.537	ppb	2.7	34076.29	20	
59	Co	89	He	0.040	ppb	35.9	144.45	0.2	
60	Ni	89	He	0.256	ppb	30.3	445.58	0.4	
63	Cu	89	He	0.317	ppb	8.2	912.29	0.6	
66	Zn	89	He	1.349	ppb	63.0	1012.30	2	
75	As	89	He	0.075	ppb	69.1	20.33	1	
78	Se	89	H2	0.060	ppb	9.0	4.33	1	
88	Sr	89	He	0.165	ppb	28.1	141.12	1	
95	Mo	89	He	0.193	ppb	6.4	162.23	1	
107	Ag	89	He	0.014	ppb	18.3	60.00	0.2	
111	Cd	89	He	0.013	ppb	34.2	5.18	0.2	
118	Sn	159	He	47.261	ppb	2.7	28327.37	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
121	Sb	159	No Gas	0.044	ppb	33.4	353.73	0.2	
137	Ba	159	No Gas	0.431	ppb	9.6	724.17	0.4	
182	W	159	No Gas	0.092	ppb	17.0	357.07	1	
205	Tl	209	No Gas	-0.045	ppb	N/A	460.53	0.2	
208	Pb	209	No Gas	0.235	ppb	2.1	2669.79	0.2	
232	Th	209	No Gas	0.073	ppb	7.0	817.61	1	
238	U	209	No Gas	0.016	ppb	27.2	130.15	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7212521.74	1.5	8075153.2	89.32	29.5	120.4	
Sc	45	No Gas	15501535.47	0.7	15284588.74	101.42	29.5	120.4	
Sc	45	H2	1773115.18	1.0	1817402.03	97.56	29.5	120.4	
Sc	45	He	433886.58	0.6	431380.74	100.58	29.5	120.4	
Ge	72	No Gas	2754583.08	0.6	2712289.77	101.56	29.5	120.4	
Ge	72	H2	492391.42	1.1	540643.15	91.08	29.5	120.4	
Ge	72	He	259317.82	0.6	259264.63	100.02	29.5	120.4	
Y	89	H2	9362961.49	0.9	9628329.76	97.24	29.5	120.4	
Y	89	He	2074969.07	1.0	2093497.43	99.11	29.5	120.4	
Tb	159	No Gas	21768548.56	1.3	21312636.35	102.14	29.5	120.4	
Tb	159	He	7929298.49	1.0	7937819.95	99.89	29.5	120.4	
Bi	209	No Gas	9979502.90	1.3	9931051.85	100.49	29.5	120.4	

Sample Report

Sample Name LCSONH04IMS1

File Name 024LCSO.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:55:05 PM

Sample Type LCSO

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	64.072	ppb	1.4	79669.25	50	6020□ DoD
11	B	6	No Gas	642.998	ppb	3.2	538961.57	500	6020□ DoD
23	Na	45	He	9823.770	ppb	0.2	1500826.95	7500	6020□ DoD
24	Mg	45	He	6385.052	ppb	0.6	506945.19	5000	6020□ DoD
27	Al	45	He	2175.522	ppb	0.1	64336.84	2000	
28	Si	45	H2	1091.483	ppb	0.9	48449.61	1000	
39	K	45	He	12611.468	ppb	1.4	810837.96	10000	6020□ DoD
40	Ca	45	H2	3243.523	ppb	0.2	1335808.88	2500	6020□ DoD
51	V	89	He	611.038	ppb	0.6	605092.71	500	6020□ DoD
52	Cr	89	He	249.638	ppb	0.4	315754.09	200	6020□ DoD
55	Mn	89	He	610.134	ppb	0.4	333999.69	500	6020□ DoD
56	Fe	89	H2	1265.127	ppb	0.8	2014593.48	1000	6020□ DoD
59	Co	89	He	626.548	ppb	0.1	1307314.70	500	6020□ DoD
60	Ni	89	He	630.666	ppb	0.2	362786.10	500	6020□ DoD
63	Cu	89	He	310.578	ppb	0.5	489101.47	250	6020□ DoD
66	Zn	89	He	607.095	ppb	1.2	105505.80	500	6020□ DoD
75	As	89	He	124.960	ppb	1.0	15026.08	100	6020□ DoD
78	Se	89	H2	125.081	ppb	0.9	7283.58	100	6020□ DoD
88	Sr	89	He	596.231	ppb	0.9	370681.83	500	
95	Mo	89	He	128.557	ppb	0.5	96867.87	100	6020□ DoD
107	Ag	89	He	62.909	ppb	0.5	150663.42	50	6020□ DoD
111	Cd	89	He	314.230	ppb	0.5	89812.82	250	6020□ DoD
118	Sn	159	He	655.147	ppb	0.4	387803.85	500	6020□ DoD
121	Sb	159	No Gas	131.865	ppb	2.7	533469.29	100	6020□ DoD
137	Ba	159	No Gas	2452.391	ppb	2.9	3868557.38	2000	6020□ DoD
182	W	159	No Gas	127.320	ppb	2.6	417689.79	100	6020□ DoD
205	Tl	209	No Gas	135.152	ppb	2.2	821962.15	100	6020□ DoD
206	[Pb]	209	No Gas	130.462	ppb	3.0	284639.48	100	6020□ DoD
207	[Pb]	209	No Gas	130.379	ppb	3.6	248252.60	100	6020□ DoD
208	Pb	209	No Gas	132.626	ppb	3.0	1133656.27	100	6020□ DoD
232	Th	209	No Gas	133.185	ppb	4.0	1097634.58	100	6020□ DoD
238	U	209	No Gas	132.514	ppb	3.0	1056481.56	100	6020□ DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7560542.05	3.0	8075153.2	93.63	29.5	120.4	
Sc	45	No Gas	15952193.30	2.6	15284588.74	104.37	29.5	120.4	
Sc	45	H2	1763091.33	0.9	1817402.03	97.01	29.5	120.4	
Sc	45	He	435031.56	0.6	431380.74	100.85	29.5	120.4	
Ge	72	No Gas	2834967.68	3.1	2712289.77	104.52	29.5	120.4	
Ge	72	H2	487274.04	1.2	540643.15	90.13	29.5	120.4	
Ge	72	He	258805.53	0.7	259264.63	99.82	29.5	120.4	
Y	89	H2	9309671.11	1.6	9628329.76	96.69	29.5	120.4	
Y	89	He	2073454.59	0.7	2093497.43	99.04	29.5	120.4	
Tb	159	No Gas	22559643.83	2.3	21312636.35	105.85	29.5	120.4	
Tb	159	He	7928276.06	0.9	7937819.95	99.88	29.5	120.4	
Bi	209	No Gas	10274316.25	2.9	9931051.85	103.46	29.5	120.4	

Sample Report

Sample Name SN5717-004

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:57:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.179	ppb	6.2	7518.91	100	
11	B	6	No Gas	82.737	ppb	2.3	68535.36	1000	
23	Na	45	He	673.215	ppb	0.6	144193.25	200000	
24	Mg	45	He	37580.459	ppb	0.5	3109029.68	200000	
27	Al	45	He	110933.702	ppb	0.7	3396113.63	200000	
28	Si	45	H2	2755.087	ppb	1.1	128241.43	10000	
39	K	45	He	13735.856	ppb	0.8	918348.14	200000	
40	Ca	45	H2	30869.740	ppb	0.9	13282754.25	200000	
51	V	89	He	199.664	ppb	0.2	222624.19	1000	
52	Cr	89	He	142.555	ppb	0.1	203280.10	2000	
55	Mn	89	He	5392.554	ppb	0.7	3317330.67	2000	
56	Fe	89	H2	220979.378	ppb	1.0	398277643.61	100000	
59	Co	89	He	90.581	ppb	1.5	212743.58	1000	
60	Ni	89	He	215.172	ppb	0.4	139499.82	1000	
63	Cu	89	He	245.222	ppb	0.7	434620.70	2000	
66	Zn	89	He	865.771	ppb	0.7	168930.43	2000	
75	As	89	He	85.468	ppb	1.3	11569.09	1000	
78	Se	89	H2	2.780	ppb	4.8	184.66	1000	
88	Sr	89	He	84.469	ppb	1.1	59132.77	2000	
95	Mo	89	He	19.533	ppb	3.2	16573.91	1000	
107	Ag	89	He	0.401	ppb	3.8	1108.98	100	
111	Cd	89	He	2.669	ppb	2.7	860.04	1000	
118	Sn	159	He	47.684	ppb	1.4	28633.49	1000	
121	Sb	159	No Gas	2.120	ppb	7.5	8642.47	1000	
137	Ba	159	No Gas	553.380	ppb	3.4	861801.60	2000	
182	W	159	No Gas	0.487	ppb	10.9	1645.27	1000	
205	Tl	209	No Gas	3.894	ppb	2.6	23678.44	1000	
208	Pb	209	No Gas	357.604	ppb	3.4	2963931.71	2000	
232	Th	209	No Gas	43.793	ppb	4.7	350245.69	1000	
238	U	209	No Gas	7.889	ppb	5.8	60994.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7388214.36	2.0	8075153.2	91.49	29.5	120.4	
Sc	45	No Gas	16552464.59	1.3	15284588.74	108.3	29.5	120.4	
Sc	45	H2	1860723.81	1.7	1817402.03	102.38	29.5	120.4	
Sc	45	He	453379.69	0.8	431380.74	105.1	29.5	120.4	
Ge	72	No Gas	2843612.31	1.8	2712289.77	104.84	29.5	120.4	
Ge	72	H2	495082.00	0.4	540643.15	91.57	29.5	120.4	
Ge	72	He	263881.11	1.0	259264.63	101.78	29.5	120.4	
Y	89	H2	10568170.40	1.1	9628329.76	109.76	29.5	120.4	
Y	89	He	2333103.65	0.9	2093497.43	111.45	29.5	120.4	
Tb	159	No Gas	22269304.39	1.7	21312636.35	104.49	29.5	120.4	
Tb	159	He	7945305.50	0.4	7937819.95	100.09	29.5	120.4	
Bi	209	No Gas	9965922.45	2.3	9931051.85	100.35	29.5	120.4	

Sample Report

Sample Name SN5717-010

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:00:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.585	ppb	1.8	6553.92	100	
11	B	6	No Gas	93.552	ppb	3.7	74553.53	1000	
23	Na	45	He	1050.509	ppb	0.5	198537.72	200000	
24	Mg	45	He	103736.807	ppb	0.6	8404056.68	200000	
27	Al	45	He	95060.464	ppb	1.5	2849881.80	200000	
28	Si	45	H2	2410.741	ppb	4.8	108135.02	10000	
39	K	45	He	16210.311	ppb	0.5	1057333.90	200000	
40	Ca	45	H2	308560.578	ppb	0.7	127790390.32	200000	
51	V	89	He	181.809	ppb	0.7	193904.79	1000	
52	Cr	89	He	148.741	ppb	0.8	202828.90	2000	
55	Mn	89	He	3932.090	ppb	0.2	2313661.48	2000	
56	Fe	89	H2	219473.544	ppb	0.7	377885512.20	100000	
59	Co	89	He	94.014	ppb	0.2	211173.14	1000	
60	Ni	89	He	236.485	ppb	0.5	146607.34	1000	
63	Cu	89	He	224.327	ppb	0.4	380322.23	2000	
66	Zn	89	He	616.094	ppb	0.4	115217.07	2000	
75	As	89	He	79.050	ppb	1.0	10234.86	1000	
78	Se	89	H2	1.700	ppb	6.1	108.17	1000	
88	Sr	89	He	390.302	ppb	0.3	261168.10	2000	
95	Mo	89	He	16.026	ppb	0.4	13012.20	1000	
107	Ag	89	He	0.452	ppb	6.3	1194.54	100	
111	Cd	89	He	1.253	ppb	5.3	387.05	1000	
118	Sn	159	He	45.388	ppb	1.0	26658.22	1000	
121	Sb	159	No Gas	1.087	ppb	7.1	4489.10	1000	
137	Ba	159	No Gas	566.182	ppb	4.0	875238.93	2000	
182	W	159	No Gas	0.270	ppb	7.2	934.42	1000	
205	Tl	209	No Gas	3.380	ppb	3.3	20051.57	1000	
208	Pb	209	No Gas	178.974	ppb	3.6	1440809.83	2000	
232	Th	209	No Gas	46.688	ppb	3.7	362636.31	1000	
238	U	209	No Gas	7.299	ppb	4.0	54817.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7118491.32	1.4	8075153.2	88.15	29.5	120.4	
Sc	45	No Gas	16328643.69	2.4	15284588.74	106.83	29.5	120.4	
Sc	45	H2	1792593.82	1.1	1817402.03	98.63	29.5	120.4	
Sc	45	He	443984.88	0.3	431380.74	102.92	29.5	120.4	
Ge	72	No Gas	2799274.85	2.3	2712289.77	103.21	29.5	120.4	
Ge	72	H2	482170.41	1.5	540643.15	89.18	29.5	120.4	
Ge	72	He	258333.14	0.4	259264.63	99.64	29.5	120.4	
Y	89	H2	10095136.24	0.9	9628329.76	104.85	29.5	120.4	
Y	89	He	2231515.77	0.0	2093497.43	106.59	29.5	120.4	
Tb	159	No Gas	22110098.28	2.3	21312636.35	103.74	29.5	120.4	
Tb	159	He	7766577.80	0.4	7937819.95	97.84	29.5	120.4	
Bi	209	No Gas	9677082.99	2.1	9931051.85	97.44	29.5	120.4	

Sample Report

Sample Name SN5717-010L

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:03:18 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.936	ppb	2.2	1450.12	100	
11	B	6	No Gas	107.460	ppb	1.8	18327.75	1000	
23	Na	45	He	987.341	ppb	2.2	69216.83	200000	
24	Mg	45	He	115453.903	ppb	0.6	1879056.01	200000	
27	Al	45	He	103295.040	ppb	0.4	622464.04	200000	
28	Si	45	H2	2593.485	ppb	4.7	23926.12	10000	
39	K	45	He	18185.926	ppb	0.1	255457.38	200000	
40	Ca	45	H2	337532.459	ppb	0.7	28250864.58	200000	
51	V	89	He	210.225	ppb	1.0	43338.79	1000	
52	Cr	89	He	170.605	ppb	1.2	45465.21	2000	
55	Mn	89	He	4625.240	ppb	0.0	524697.79	2000	
56	Fe	89	H2	255146.352	ppb	0.3	84170578.45	100000	
59	Co	89	He	108.979	ppb	1.6	47208.81	1000	
60	Ni	89	He	276.968	ppb	0.8	33317.14	1000	
63	Cu	89	He	264.573	ppb	0.7	86739.12	2000	
66	Zn	89	He	714.193	ppb	0.5	26352.33	2000	
75	As	89	He	93.019	ppb	1.7	2329.12	1000	
78	Se	89	H2	2.300	ppb	11.2	28.67	1000	
88	Sr	89	He	450.360	ppb	0.4	58086.94	2000	
95	Mo	89	He	18.934	ppb	3.4	2974.88	1000	
107	Ag	89	He	0.565	ppb	4.8	307.79	100	
111	Cd	89	He	1.724	ppb	6.8	103.70	1000	
118	Sn	159	He	50.283	ppb	2.3	6307.28	1000	
121	Sb	159	No Gas	1.287	ppb	17.3	1188.05	1000	
137	Ba	159	No Gas	633.167	ppb	3.0	193531.33	2000	
182	W	159	No Gas	0.407	ppb	22.8	323.70	1000	
205	Tl	209	No Gas	3.417	ppb	5.8	4736.24	1000	
208	Pb	209	No Gas	194.588	ppb	2.0	321957.55	2000	
232	Th	209	No Gas	48.511	ppb	1.3	77495.42	1000	
238	U	209	No Gas	7.862	ppb	4.5	12119.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7344222.82	1.5	8075153.2	90.95	29.5	120.4	
Sc	45	No Gas	15939489.76	0.4	15284588.74	104.28	29.5	120.4	
Sc	45	H2	1810649.30	0.9	1817402.03	99.63	29.5	120.4	
Sc	45	He	445967.73	0.9	431380.74	103.38	29.5	120.4	
Ge	72	No Gas	2816481.90	1.4	2712289.77	103.84	29.5	120.4	
Ge	72	H2	503003.20	2.4	540643.15	93.04	29.5	120.4	
Ge	72	He	264463.25	0.7	259264.63	102.01	29.5	120.4	
Y	89	H2	9670493.69	1.4	9628329.76	100.44	29.5	120.4	
Y	89	He	2149527.70	0.6	2093497.43	102.68	29.5	120.4	
Tb	159	No Gas	21842932.18	1.2	21312636.35	102.49	29.5	120.4	
Tb	159	He	7911774.68	0.6	7937819.95	99.67	29.5	120.4	
Bi	209	No Gas	9922695.16	0.4	9931051.85	99.92	29.5	120.4	

Sample Report

Sample Name SN5717-010A

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:05:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	17.953	ppb	5.1	21196.25	100	
11	B	6	No Gas	321.786	ppb	3.9	256520.54	1000	
23	Na	45	He	12190.078	ppb	0.5	1860903.11	200000	
24	Mg	45	He	103055.906	ppb	0.3	8214810.57	200000	
27	Al	45	He	94548.051	ppb	0.7	2788994.23	200000	
28	Si	45	H2	7341.327	ppb	0.8	322900.28	10000	
39	K	45	He	26512.260	ppb	0.4	1687731.22	200000	
40	Ca	45	H2	308041.733	ppb	1.6	125482803.68	200000	
51	V	89	He	230.872	ppb	1.1	241522.31	1000	
52	Cr	89	He	199.319	ppb	0.8	266374.40	2000	
55	Mn	89	He	3885.181	ppb	0.7	2242835.34	2000	
56	Fe	89	H2	216040.033	ppb	0.4	367606233.29	100000	
59	Co	89	He	102.688	ppb	0.5	226295.92	1000	
60	Ni	89	He	254.559	ppb	0.1	154807.12	1000	
63	Cu	89	He	251.372	ppb	0.7	418063.15	2000	
66	Zn	89	He	705.914	ppb	0.5	129401.14	2000	
75	As	89	He	130.121	ppb	1.4	16520.60	1000	
78	Se	89	H2	52.977	ppb	1.5	3306.58	1000	
88	Sr	89	He	433.876	ppb	0.6	284838.85	2000	
95	Mo	89	He	68.801	ppb	0.8	54748.26	1000	
107	Ag	89	He	11.267	ppb	0.3	28513.99	100	
111	Cd	89	He	11.795	ppb	1.7	3561.25	1000	
118	Sn	159	He	96.921	ppb	1.6	55920.52	1000	
121	Sb	159	No Gas	13.421	ppb	5.5	52316.26	1000	
137	Ba	159	No Gas	576.174	ppb	5.4	873133.21	2000	
182	W	159	No Gas	57.226	ppb	5.4	180373.04	1000	
205	Tl	209	No Gas	15.742	ppb	6.1	90351.62	1000	
208	Pb	209	No Gas	185.553	ppb	4.9	1486822.92	2000	
232	Th	209	No Gas	57.870	ppb	5.2	447359.86	1000	
238	U	209	No Gas	19.724	ppb	7.9	147330.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7178625.66	2.4	8075153.2	88.9	29.5	120.4	
Sc	45	No Gas	16022427.17	2.4	15284588.74	104.83	29.5	120.4	
Sc	45	H2	1763180.23	0.6	1817402.03	97.02	29.5	120.4	
Sc	45	He	436852.47	0.3	431380.74	101.27	29.5	120.4	
Ge	72	No Gas	2761916.61	2.8	2712289.77	101.83	29.5	120.4	
Ge	72	H2	479385.09	0.5	540643.15	88.67	29.5	120.4	
Ge	72	He	253850.16	0.2	259264.63	97.91	29.5	120.4	
Y	89	H2	9977027.61	0.8	9628329.76	103.62	29.5	120.4	
Y	89	He	2189355.30	0.4	2093497.43	104.58	29.5	120.4	
Tb	159	No Gas	21684152.18	2.9	21312636.35	101.74	29.5	120.4	
Tb	159	He	7686019.54	0.8	7937819.95	96.83	29.5	120.4	
Bi	209	No Gas	9639206.68	3.7	9931051.85	97.06	29.5	120.4	

Sample Report

Sample Name CCV

File Name 029_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:08:41 PM

Sample Type CCV

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	26.696	ppb	3.6	165913.24	25	
11	B	6	No Gas	27.144	ppb	4.2	114454.20	25	
23	Na	45	He	5135.786	ppb	0.8	3878209.32	5000	
24	Mg	45	He	5035.269	ppb	0.8	2007159.28	5000	
27	Al	45	He	476.180	ppb	1.3	70670.84	500	
28	Si	45	H2	477.640	ppb	0.7	107475.96	500	
39	K	45	He	4962.714	ppb	0.1	1581226.38	5000	
40	Ca	45	H2	5053.257	ppb	0.1	10508429.15	5000	
51	V	89	He	25.333	ppb	0.6	126735.54	25	
52	Cr	89	He	25.349	ppb	0.8	162194.45	25	
55	Mn	89	He	25.245	ppb	1.5	70129.66	25	
56	Fe	89	H2	5114.939	ppb	0.6	41293053.27	5000	
59	Co	89	He	25.617	ppb	0.8	269761.98	25	
60	Ni	89	He	25.476	ppb	0.4	74192.79	25	
63	Cu	89	He	25.791	ppb	0.9	205191.53	25	
66	Zn	89	He	25.392	ppb	1.3	22889.42	25	
75	As	89	He	25.043	ppb	0.1	15196.27	25	
78	Se	89	H2	25.421	ppb	1.3	7525.86	25	
88	Sr	89	He	23.562	ppb	0.5	73952.71	25	
95	Mo	89	He	24.948	ppb	1.1	94860.56	25	
107	Ag	89	He	25.286	ppb	1.2	305559.98	25	
111	Cd	89	He	24.820	ppb	0.6	35800.17	25	
118	Sn	159	He	24.269	ppb	0.6	72065.68	25	
121	Sb	159	No Gas	26.526	ppb	3.1	519614.03	25	
137	Ba	159	No Gas	26.183	ppb	3.6	200054.46	25	
182	W	159	No Gas	25.255	ppb	3.1	401174.86	25	
205	Tl	209	No Gas	26.158	ppb	3.0	778794.87	25	
208	Pb	209	No Gas	26.150	ppb	3.4	1094327.17	25	
232	Th	209	No Gas	25.658	ppb	3.8	1035355.89	25	
238	U	209	No Gas	25.562	ppb	3.4	997702.97	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7560298.16	2.0	8075153.2	93.62	29.5	120.4	
Sc	45	No Gas	16019916.43	2.2	15284588.74	104.81	29.5	120.4	
Sc	45	H2	1797919.97	1.7	1817402.03	98.93	29.5	120.4	
Sc	45	He	436920.42	0.9	431380.74	101.28	29.5	120.4	
Ge	72	No Gas	2831241.66	2.2	2712289.77	104.39	29.5	120.4	
Ge	72	H2	509780.17	1.2	540643.15	94.29	29.5	120.4	
Ge	72	He	262702.14	0.6	259264.63	101.33	29.5	120.4	
Y	89	H2	9465800.26	1.1	9628329.76	98.31	29.5	120.4	
Y	89	He	2092641.90	0.8	2093497.43	99.96	29.5	120.4	
Tb	159	No Gas	21845596.90	1.6	21312636.35	102.5	29.5	120.4	
Tb	159	He	7921309.67	0.9	7937819.95	99.79	29.5	120.4	
Bi	209	No Gas	10058371.56	1.8	9931051.85	101.28	29.5	120.4	

Sample Report

Sample Name CCB

File Name 030_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:11:18 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.026	ppb	58.9	181.12	0.2	
11	B	6	No Gas	0.684	ppb	1.8	3803.97	4	
23	Na	45	He	-8.492	ppb	N/A	31726.96	200	
24	Mg	45	He	2.764	ppb	45.1	1220.30	20	
27	Al	45	He	-0.735	ppb	N/A	332.25	20	
28	Si	45	H2	0.099	ppb	171.7	537.28	100	
39	K	45	He	2.526	ppb	105.6	22317.50	200	
40	Ca	45	H2	-2.316	ppb	N/A	10059.46	20	
51	V	89	He	0.002	ppb	556.2	187.79	1	
52	Cr	89	He	0.004	ppb	126.0	834.54	1	
55	Mn	89	He	-0.052	ppb	N/A	355.29	0.4	
56	Fe	89	H2	2.768	ppb	7.4	28243.60	20	
59	Co	89	He	0.001	ppb	135.0	73.34	0.2	
60	Ni	89	He	-0.079	ppb	N/A	71.11	0.4	
63	Cu	89	He	-0.011	ppb	N/A	330.02	0.6	
66	Zn	89	He	-0.544	ppb	N/A	311.12	2	
75	As	89	He	0.006	ppb	103.4	14.67	1	
78	Se	89	H2	0.022	ppb	28.6	7.33	1	
88	Sr	89	He	0.008	ppb	72.4	63.34	1	
95	Mo	89	He	0.054	ppb	6.4	220.01	1	
107	Ag	89	He	0.008	ppb	39.4	123.34	0.2	
111	Cd	89	He	0.005	ppb	61.4	8.89	0.2	
118	Sn	159	He	0.108	ppb	21.8	691.15	1	
121	Sb	159	No Gas	0.033	ppb	26.9	827.63	0.2	
137	Ba	159	No Gas	0.017	ppb	72.3	200.22	0.4	
182	W	159	No Gas	0.096	ppb	6.4	1588.56	1	
205	Tl	209	No Gas	0.011	ppb	106.6	1061.25	0.2	
208	Pb	209	No Gas	0.013	ppb	51.7	1271.46	0.2	
232	Th	209	No Gas	0.110	ppb	27.0	4676.19	1	
238	U	209	No Gas	0.033	ppb	41.3	1281.52	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7697073.94	1.9	8075153.2	95.32	29.5	120.4	
Sc	45	No Gas	15796403.66	1.6	15284588.74	103.35	29.5	120.4	
Sc	45	H2	1754910.68	1.2	1817402.03	96.56	29.5	120.4	
Sc	45	He	434061.48	1.0	431380.74	100.62	29.5	120.4	
Ge	72	No Gas	2789518.48	1.8	2712289.77	102.85	29.5	120.4	
Ge	72	H2	501686.95	1.3	540643.15	92.79	29.5	120.4	
Ge	72	He	259616.71	0.8	259264.63	100.14	29.5	120.4	
Y	89	H2	9392224.40	1.7	9628329.76	97.55	29.5	120.4	
Y	89	He	2079719.08	1.4	2093497.43	99.34	29.5	120.4	
Tb	159	No Gas	21754250.79	1.1	21312636.35	102.07	29.5	120.4	
Tb	159	He	7895177.31	1.0	7937819.95	99.46	29.5	120.4	
Bi	209	No Gas	10007608.19	2.4	9931051.85	100.77	29.5	120.4	

Sample Report

Sample Name SN5717-010S

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:14:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	63.823	ppb	3.9	78676.93	100	
11	B	6	No Gas	637.757	ppb	5.3	530034.33	1000	
23	Na	45	He	9325.125	ppb	1.0	1434048.11	200000	
24	Mg	45	He	109848.146	ppb	0.7	8765583.62	200000	
27	Al	45	He	117439.454	ppb	1.2	3467664.04	200000	
28	Si	45	H2	3721.230	ppb	4.1	163885.27	10000	
39	K	45	He	31279.626	ppb	0.8	1989390.85	200000	
40	Ca	45	H2	292412.656	ppb	0.2	119050201.56	200000	
51	V	89	He	726.475	ppb	0.7	766704.99	1000	
52	Cr	89	He	375.228	ppb	0.5	505393.96	2000	
55	Mn	89	He	4609.177	ppb	0.6	2685616.97	2000	
56	Fe	89	H2	235011.881	ppb	0.7	400680459.68	100000	
59	Co	89	He	607.146	ppb	0.3	1350165.17	1000	
60	Ni	89	He	759.679	ppb	0.5	465679.72	1000	
63	Cu	89	He	483.872	ppb	0.2	811876.56	2000	
66	Zn	89	He	1124.195	ppb	0.8	207509.76	2000	
75	As	89	He	183.365	ppb	0.3	23494.30	1000	
78	Se	89	H2	97.316	ppb	1.3	6084.89	1000	
88	Sr	89	He	858.916	ppb	0.4	569104.06	2000	
95	Mo	89	He	114.565	ppb	0.2	92006.57	1000	
107	Ag	89	He	50.546	ppb	0.9	129022.14	100	
111	Cd	89	He	240.471	ppb	0.6	73253.52	1000	
118	Sn	159	He	544.918	ppb	1.2	315460.89	1000	
121	Sb	159	No Gas	28.778	ppb	3.5	111897.12	1000	
137	Ba	159	No Gas	2814.357	ppb	3.7	4261625.90	2000	
182	W	159	No Gas	59.889	ppb	3.1	188639.23	1000	
205	Tl	209	No Gas	119.208	ppb	3.9	681318.94	1000	
208	Pb	209	No Gas	311.702	ppb	4.0	2503068.09	2000	
232	Th	209	No Gas	166.635	ppb	4.5	1290635.00	1000	
238	U	209	No Gas	124.869	ppb	4.0	935591.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7498835.50	2.8	8075153.2	92.86	29.5	120.4	
Sc	45	No Gas	15924752.94	1.7	15284588.74	104.19	29.5	120.4	
Sc	45	H2	1762326.13	1.7	1817402.03	96.97	29.5	120.4	
Sc	45	He	437326.88	1.0	431380.74	101.38	29.5	120.4	
Ge	72	No Gas	2719210.18	2.2	2712289.77	100.26	29.5	120.4	
Ge	72	H2	475722.53	0.9	540643.15	87.99	29.5	120.4	
Ge	72	He	252227.67	0.5	259264.63	97.29	29.5	120.4	
Y	89	H2	9996281.14	0.9	9628329.76	103.82	29.5	120.4	
Y	89	He	2209837.33	0.1	2093497.43	105.56	29.5	120.4	
Tb	159	No Gas	21652895.79	1.3	21312636.35	101.6	29.5	120.4	
Tb	159	He	7752739.19	0.6	7937819.95	97.67	29.5	120.4	
Bi	209	No Gas	9657669.73	3.0	9931051.85	97.25	29.5	120.4	

Sample Report

Sample Name SN5717-010P

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:16:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	60.229	ppb	5.2	73211.96	100	
11	B	6	No Gas	597.937	ppb	3.8	490237.71	1000	
23	Na	45	He	8912.282	ppb	0.3	1358544.66	200000	
24	Mg	45	He	104469.466	ppb	0.3	8252779.18	200000	
27	Al	45	He	106821.329	ppb	1.3	3122793.01	200000	
28	Si	45	H2	3219.249	ppb	2.8	141385.50	10000	
39	K	45	He	27085.658	ppb	0.7	1708322.71	200000	
40	Ca	45	H2	276542.048	ppb	0.8	112247742.77	200000	
51	V	89	He	665.958	ppb	0.4	696935.27	1000	
52	Cr	89	He	346.926	ppb	0.2	463408.64	2000	
55	Mn	89	He	4455.214	ppb	0.2	2574110.11	2000	
56	Fe	89	H2	221143.460	ppb	0.8	375109135.92	100000	
59	Co	89	He	567.015	ppb	0.6	1250301.84	1000	
60	Ni	89	He	709.426	ppb	0.3	431242.17	1000	
63	Cu	89	He	461.153	ppb	0.4	767264.08	2000	
66	Zn	89	He	1069.386	ppb	0.7	195772.74	2000	
75	As	89	He	174.336	ppb	0.3	22149.96	1000	
78	Se	89	H2	93.796	ppb	1.5	5835.63	1000	
88	Sr	89	He	807.039	ppb	0.5	530243.82	2000	
95	Mo	89	He	109.038	ppb	0.9	86831.95	1000	
107	Ag	89	He	47.405	ppb	0.6	119991.16	100	
111	Cd	89	He	232.299	ppb	0.2	70169.94	1000	
118	Sn	159	He	526.206	ppb	0.9	303276.35	1000	
121	Sb	159	No Gas	28.025	ppb	4.5	109088.58	1000	
137	Ba	159	No Gas	2641.160	ppb	4.9	4003444.69	2000	
182	W	159	No Gas	59.047	ppb	5.1	186156.83	1000	
205	Tl	209	No Gas	117.755	ppb	4.1	667480.95	1000	
208	Pb	209	No Gas	283.160	ppb	4.1	2255084.78	2000	
232	Th	209	No Gas	160.064	ppb	5.4	1229451.07	1000	
238	U	209	No Gas	120.660	ppb	4.6	896529.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7394073.86	2.4	8075153.2	91.57	29.5	120.4	
Sc	45	No Gas	15759555.98	1.9	15284588.74	103.11	29.5	120.4	
Sc	45	H2	1756921.22	1.0	1817402.03	96.67	29.5	120.4	
Sc	45	He	432938.45	0.5	431380.74	100.36	29.5	120.4	
Ge	72	No Gas	2704226.24	1.5	2712289.77	99.7	29.5	120.4	
Ge	72	H2	475597.79	1.1	540643.15	87.97	29.5	120.4	
Ge	72	He	251915.22	0.4	259264.63	97.17	29.5	120.4	
Y	89	H2	9945421.01	0.3	9628329.76	103.29	29.5	120.4	
Y	89	He	2191250.68	0.5	2093497.43	104.67	29.5	120.4	
Tb	159	No Gas	21684280.79	2.3	21312636.35	101.74	29.5	120.4	
Tb	159	He	7717888.01	0.9	7937819.95	97.23	29.5	120.4	
Bi	209	No Gas	9575032.09	1.7	9931051.85	96.42	29.5	120.4	

Sample Report

Sample Name SN5717-013

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:19:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.950	ppb	7.3	5920.32	100	
11	B	6	No Gas	74.723	ppb	3.8	60889.66	1000	
23	Na	45	He	656.940	ppb	1.1	136925.19	200000	
24	Mg	45	He	47700.720	ppb	0.2	3814271.26	200000	
27	Al	45	He	84150.328	ppb	0.5	2490088.77	200000	
28	Si	45	H2	2894.803	ppb	2.9	129296.29	10000	
39	K	45	He	12444.647	ppb	0.4	806246.37	200000	
40	Ca	45	H2	76893.956	ppb	1.4	31738633.97	200000	
51	V	89	He	158.052	ppb	1.2	167414.28	1000	
52	Cr	89	He	118.237	ppb	0.5	160275.68	2000	
55	Mn	89	He	3914.245	ppb	0.4	2287021.00	2000	
56	Fe	89	H2	177063.624	ppb	0.4	303426232.21	100000	
59	Co	89	He	78.023	ppb	0.9	174035.06	1000	
60	Ni	89	He	196.257	ppb	0.9	120864.45	1000	
63	Cu	89	He	715.984	ppb	0.4	1204386.92	2000	
66	Zn	89	He	903.335	ppb	0.5	167367.74	2000	
75	As	89	He	73.813	ppb	0.3	9490.61	1000	
78	Se	89	H2	7.704	ppb	1.7	484.99	1000	
88	Sr	89	He	121.615	ppb	0.9	80836.80	2000	
95	Mo	89	He	13.997	ppb	3.0	11285.03	1000	
107	Ag	89	He	0.615	ppb	3.2	1602.38	100	
111	Cd	89	He	2.465	ppb	1.9	754.48	1000	
118	Sn	159	He	49.008	ppb	1.0	28842.78	1000	
121	Sb	159	No Gas	8.803	ppb	4.1	34696.87	1000	
137	Ba	159	No Gas	432.977	ppb	4.3	662271.19	2000	
182	W	159	No Gas	0.378	ppb	7.3	1268.15	1000	
205	Tl	209	No Gas	3.148	ppb	5.5	19038.94	1000	
208	Pb	209	No Gas	3242.498	ppb	3.4	26534657.11	2000	
232	Th	209	No Gas	35.063	ppb	5.0	277025.85	1000	
238	U	209	No Gas	6.287	ppb	3.6	48022.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7260743.56	2.6	8075153.2	89.91	29.5	120.4	
Sc	45	No Gas	15892582.86	1.8	15284588.74	103.98	29.5	120.4	
Sc	45	H2	1785959.24	0.6	1817402.03	98.27	29.5	120.4	
Sc	45	He	438226.16	1.1	431380.74	101.59	29.5	120.4	
Ge	72	No Gas	2755062.99	2.0	2712289.77	101.58	29.5	120.4	
Ge	72	H2	478017.12	0.4	540643.15	88.42	29.5	120.4	
Ge	72	He	256213.35	1.1	259264.63	98.82	29.5	120.4	
Y	89	H2	10047636.76	0.5	9628329.76	104.35	29.5	120.4	
Y	89	He	2215885.71	0.9	2093497.43	105.85	29.5	120.4	
Tb	159	No Gas	21874978.01	1.9	21312636.35	102.64	29.5	120.4	
Tb	159	He	7790083.70	0.2	7937819.95	98.14	29.5	120.4	
Bi	209	No Gas	9838521.30	0.8	9931051.85	99.07	29.5	120.4	

Sample Report

Sample Name SN5717-017

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:22:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.893	ppb	1.6	8340.49	100	
11	B	6	No Gas	60.025	ppb	1.8	49654.37	1000	
23	Na	45	He	344.507	ppb	1.9	90743.70	200000	
24	Mg	45	He	32643.009	ppb	1.3	2629794.79	200000	
27	Al	45	He	120492.706	ppb	1.0	3592115.88	200000	
28	Si	45	H2	2637.660	ppb	4.9	118490.46	10000	
39	K	45	He	12412.653	ppb	0.4	810276.30	200000	
40	Ca	45	H2	4803.215	ppb	0.6	2007392.59	200000	
51	V	89	He	197.035	ppb	0.6	211818.27	1000	
52	Cr	89	He	143.948	ppb	0.8	197900.57	2000	
55	Mn	89	He	3898.818	ppb	0.6	2312542.81	2000	
56	Fe	89	H2	222266.780	ppb	0.7	389326893.18	100000	
59	Co	89	He	94.196	ppb	0.3	213284.83	1000	
60	Ni	89	He	227.729	ppb	0.4	142326.93	1000	
63	Cu	89	He	256.388	ppb	0.3	438113.09	2000	
66	Zn	89	He	737.311	ppb	0.6	138828.74	2000	
75	As	89	He	86.872	ppb	1.1	11336.86	1000	
78	Se	89	H2	1.621	ppb	4.0	105.00	1000	
88	Sr	89	He	54.844	ppb	0.9	37029.76	2000	
95	Mo	89	He	15.776	ppb	2.3	12912.11	1000	
107	Ag	89	He	0.194	ppb	8.4	532.25	100	
111	Cd	89	He	1.738	ppb	3.2	540.39	1000	
118	Sn	159	He	49.304	ppb	0.9	28941.87	1000	
121	Sb	159	No Gas	0.962	ppb	6.4	4041.83	1000	
137	Ba	159	No Gas	494.164	ppb	2.4	772669.39	2000	
182	W	159	No Gas	0.324	ppb	25.8	1117.96	1000	
205	Tl	209	No Gas	3.767	ppb	7.8	22923.15	1000	
208	Pb	209	No Gas	152.798	ppb	2.5	1267386.31	2000	
232	Th	209	No Gas	51.299	ppb	5.0	410398.98	1000	
238	U	209	No Gas	6.019	ppb	3.8	46572.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7342050.75	1.1	8075153.2	90.92	29.5	120.4	
Sc	45	No Gas	16427505.68	1.9	15284588.74	107.48	29.5	120.4	
Sc	45	H2	1795605.86	1.8	1817402.03	98.8	29.5	120.4	
Sc	45	He	441531.06	0.8	431380.74	102.35	29.5	120.4	
Ge	72	No Gas	2806797.22	1.6	2712289.77	103.48	29.5	120.4	
Ge	72	H2	480063.54	1.6	540643.15	88.79	29.5	120.4	
Ge	72	He	256168.71	0.9	259264.63	98.81	29.5	120.4	
Y	89	H2	10269800.17	1.4	9628329.76	106.66	29.5	120.4	
Y	89	He	2249476.36	0.1	2093497.43	107.45	29.5	120.4	
Tb	159	No Gas	22356013.28	1.9	21312636.35	104.9	29.5	120.4	
Tb	159	He	7770436.62	0.4	7937819.95	97.89	29.5	120.4	
Bi	209	No Gas	9967760.74	1.6	9931051.85	100.37	29.5	120.4	

Sample Report

Sample Name PBWNG31IMW1

File Name 035_PBE.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:25:01 PM

Sample Type PB200.8

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	153.1	22.22	0.2	
11	B	6	No Gas	1.006	ppb	3.4	5055.50	4	
23	Na	45	He	-4.143	ppb	N/A	34957.73	200	
24	Mg	45	He	8.728	ppb	38.4	3574.54	20	
27	Al	45	He	7.983	ppb	88.8	1604.95	20	
28	Si	45	H2	10.057	ppb	3.1	2753.35	100	
39	K	45	He	-0.458	ppb	N/A	21388.05	200	
40	Ca	45	H2	-1.569	ppb	N/A	11750.88	20	
51	V	89	He	0.014	ppb	148.7	247.79	1	
52	Cr	89	He	0.022	ppb	68.0	946.53	1	
55	Mn	89	He	0.209	ppb	138.2	1068.70	0.4	200.8 PB Fails DoD
56	Fe	89	H2	12.761	ppb	0.8	108758.96	20	200.8 PB Fails DoD
59	Co	89	He	0.009	ppb	118.5	153.35	0.2	
60	Ni	89	He	-0.046	ppb	N/A	166.68	0.4	
63	Cu	89	He	0.030	ppb	104.6	648.95	0.6	
66	Zn	89	He	-0.319	ppb	N/A	505.59	2	
75	As	89	He	0.015	ppb	87.2	20.00	1	
78	Se	89	H2	0.006	ppb	134.8	2.67	1	
88	Sr	89	He	0.021	ppb	83.9	104.45	1	
95	Mo	89	He	0.011	ppb	46.5	56.67	1	
107	Ag	89	He	0.001	ppb	187.1	35.56	0.2	
111	Cd	89	He	0.005	ppb	114.7	8.52	0.2	
118	Sn	159	He	0.000	ppb	3869.6	370.02	1	
121	Sb	159	No Gas	-0.001	ppb	N/A	170.19	0.2	
137	Ba	159	No Gas	0.050	ppb	29.7	447.17	0.4	
182	W	159	No Gas	0.005	ppb	43.6	143.50	1	
205	Tl	209	No Gas	-0.017	ppb	N/A	236.93	0.2	
206	[Pb]	209	No Gas	0.058	ppb	6.9	814.28	0.2	
207	[Pb]	209	No Gas	0.068	ppb	10.8	767.55	0.2	
208	Pb	209	No Gas	0.062	ppb	1.9	3290.51	0.2	
232	Th	209	No Gas	0.015	ppb	24.2	834.30	1	
238	U	209	No Gas	0.002	ppb	71.4	80.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7519159.62	2.3	8075153.2	93.11	29.5	120.4	
Sc	45	No Gas	15826257.78	2.6	15284588.74	103.54	29.5	120.4	
Sc	45	H2	1780941.39	1.5	1817402.03	97.99	29.5	120.4	
Sc	45	He	434083.23	0.6	431380.74	100.63	29.5	120.4	
Ge	72	No Gas	2798182.54	2.4	2712289.77	103.17	29.5	120.4	
Ge	72	H2	510894.15	1.1	540643.15	94.5	29.5	120.4	
Ge	72	He	259460.88	0.4	259264.63	100.08	29.5	120.4	
Y	89	H2	9431960.90	1.5	9628329.76	97.96	29.5	120.4	
Y	89	He	2079148.30	0.5	2093497.43	99.31	29.5	120.4	
Tb	159	No Gas	21774569.96	2.2	21312636.35	102.17	29.5	120.4	
Tb	159	He	7855504.47	0.7	7937819.95	98.96	29.5	120.4	
Bi	209	No Gas	9998075.74	1.8	9931051.85	100.67	29.5	120.4	

Sample Report

Sample Name LCSWNG31IMW1

File Name 036_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:27:39 PM

Sample Type LCS

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.409	ppb	3.0	337153.83	50	
11	B	6	No Gas	466.978	ppb	3.0	2190967.62	500	
23	Na	45	He	7762.509	ppb	0.4	5803528.64	7500	
24	Mg	45	He	5090.262	ppb	0.3	2015659.94	5000	
27	Al	45	He	1830.406	ppb	1.0	268607.62	2000	
28	Si	45	H2	974.019	ppb	0.5	217882.45	1000	
39	K	45	He	10090.120	ppb	0.9	3171251.07	10000	
40	Ca	45	H2	2552.692	ppb	0.1	5298329.50	2500	
51	V	89	He	512.193	ppb	0.7	2551109.42	500	
52	Cr	89	He	201.489	ppb	0.7	1279627.91	200	
55	Mn	89	He	494.710	ppb	0.9	1360820.30	500	
56	Fe	89	H2	1023.534	ppb	0.3	8313116.88	1000	
59	Co	89	He	509.924	ppb	0.3	5352505.55	500	
60	Ni	89	He	508.264	ppb	0.7	1469937.34	500	
63	Cu	89	He	248.916	ppb	0.7	1970755.07	250	
66	Zn	89	He	505.245	ppb	0.8	439229.66	500	
75	As	89	He	104.302	ppb	0.6	63060.76	100	
78	Se	89	H2	103.200	ppb	0.6	30716.19	100	
88	Sr	89	He	493.728	ppb	0.4	1544129.70	500	
95	Mo	89	He	103.086	ppb	0.7	390715.25	100	
107	Ag	89	He	50.887	ppb	0.9	613000.67	50	
111	Cd	89	He	255.551	ppb	0.4	367455.59	250	
118	Sn	159	He	501.583	ppb	0.6	1487011.68	500	
121	Sb	159	No Gas	107.744	ppb	3.0	2095012.44	100	
137	Ba	159	No Gas	2073.279	ppb	3.3	15723855.07	2000	
182	W	159	No Gas	102.912	ppb	2.3	1622973.25	100	
205	Tl	209	No Gas	110.496	ppb	2.6	3190344.19	100	
208	Pb	209	No Gas	107.666	ppb	2.3	4370782.28	100	
232	Th	209	No Gas	109.523	ppb	3.4	4288392.62	100	
238	U	209	No Gas	108.864	ppb	3.2	4123618.53	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8469869.57	1.0	8075153.2	104.89	29.5	120.4	
Sc	45	No Gas	15782980.03	1.0	15284588.74	103.26	29.5	120.4	
Sc	45	H2	1791956.97	1.1	1817402.03	98.6	29.5	120.4	
Sc	45	He	434012.63	0.3	431380.74	100.61	29.5	120.4	
Ge	72	No Gas	2773395.80	1.5	2712289.77	102.25	29.5	120.4	
Ge	72	H2	509567.00	1.2	540643.15	94.25	29.5	120.4	
Ge	72	He	259422.99	1.1	259264.63	100.06	29.5	120.4	
Y	89	H2	9517299.57	0.8	9628329.76	98.85	29.5	120.4	
Y	89	He	2086278.89	1.2	2093497.43	99.66	29.5	120.4	
Tb	159	No Gas	21686209.12	0.9	21312636.35	101.75	29.5	120.4	
Tb	159	He	7947426.34	0.5	7937819.95	100.12	29.5	120.4	
Bi	209	No Gas	9760701.40	1.6	9931051.85	98.28	29.5	120.4	

Sample Report

Sample Name SN6310-003

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:30:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.127	ppb	15.6	154.45	100	
11	B	6	No Gas	2729.031	ppb	3.3	2017482.64	1000	
23	Na	45	He	6086521.132	ppb	0.5	918636490.80	200000	>LDR
24	Mg	45	He	707459.513	ppb	0.3	56922182.49	200000	
27	Al	45	He	36.458	ppb	0.2	1531.30	200000	
28	Si	45	H2	1261.023	ppb	2.7	55469.62	10000	
39	K	45	He	221692.642	ppb	0.6	14083689.50	200000	
40	Ca	45	H2	242622.565	ppb	1.3	98077238.54	200000	
51	V	89	He	1.443	ppb	5.0	1579.04	1000	
52	Cr	89	He	0.397	ppb	6.7	1282.50	2000	
55	Mn	89	He	21.860	ppb	1.2	12216.42	2000	
56	Fe	89	H2	193.914	ppb	7.8	288456.76	100000	
59	Co	89	He	0.320	ppb	11.2	713.41	1000	
60	Ni	89	He	0.133	ppb	38.1	367.79	1000	
63	Cu	89	He	1.220	ppb	7.6	2288.05	2000	
66	Zn	89	He	0.199	ppb	368.4	797.83	2000	
75	As	89	He	1.522	ppb	15.1	190.36	1000	
78	Se	89	H2	0.581	ppb	8.6	31.83	1000	
88	Sr	89	He	4246.125	ppb	0.8	2591557.79	2000	
95	Mo	89	He	6.452	ppb	3.4	4788.80	1000	
107	Ag	89	He	0.041	ppb	31.7	121.11	100	
111	Cd	89	He	0.177	ppb	19.7	51.11	1000	
118	Sn	159	He	4.433	ppb	5.6	2651.47	1000	
121	Sb	159	No Gas	0.410	ppb	16.4	1525.12	1000	
137	Ba	159	No Gas	11.912	ppb	6.0	15603.29	2000	
182	W	159	No Gas	0.781	ppb	12.8	2172.62	1000	
205	Tl	209	No Gas	0.183	ppb	18.6	1398.34	1000	
208	Pb	209	No Gas	0.546	ppb	1.3	4054.78	2000	
232	Th	209	No Gas	0.859	ppb	5.4	5497.37	1000	
238	U	209	No Gas	2.409	ppb	3.5	14407.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6674198.86	1.9	8075153.2	82.65	29.5	120.4	
Sc	45	No Gas	14336221.97	3.0	15284588.74	93.8	29.5	120.4	
Sc	45	H2	1749610.40	0.8	1817402.03	96.27	29.5	120.4	
Sc	45	He	440985.40	2.8	431380.74	102.23	29.5	120.4	
Ge	72	No Gas	2385557.17	2.8	2712289.77	87.95	29.5	120.4	
Ge	72	H2	464976.24	1.5	540643.15	86	29.5	120.4	
Ge	72	He	248756.67	2.2	259264.63	95.95	29.5	120.4	
Y	89	H2	8551163.88	0.9	9628329.76	88.81	29.5	120.4	
Y	89	He	2035505.49	1.8	2093497.43	97.23	29.5	120.4	
Tb	159	No Gas	18676686.11	3.2	21312636.35	87.63	29.5	120.4	
Tb	159	He	7018683.79	0.9	7937819.95	88.42	29.5	120.4	
Bi	209	No Gas	7706415.46	2.6	9931051.85	77.6	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:33:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	41.4	34.45	100	
11	B	6	No Gas	4.996	ppb	6.1	25008.06	1000	
23	Na	45	He	315.100	ppb	9.7	282144.64	200000	
24	Mg	45	He	21.868	ppb	11.7	9108.02	200000	
27	Al	45	He	-2.037	ppb	N/A	145.56	200000	
28	Si	45	H2	-0.124	ppb	N/A	540.61	10000	
39	K	45	He	18.223	ppb	16.6	28220.11	200000	
40	Ca	45	H2	4.909	ppb	12.4	27284.85	200000	
51	V	89	He	0.016	ppb	55.7	272.23	1000	
52	Cr	89	He	-0.007	ppb	N/A	802.55	2000	
55	Mn	89	He	-0.114	ppb	N/A	193.30	2000	
56	Fe	89	H2	0.783	ppb	11.5	13258.16	100000	
59	Co	89	He	0.014	ppb	34.5	213.35	1000	
60	Ni	89	He	-0.074	ppb	N/A	90.00	1000	
63	Cu	89	He	-0.003	ppb	N/A	405.57	2000	
66	Zn	89	He	-0.538	ppb	N/A	331.13	2000	
75	As	89	He	-0.001	ppb	N/A	11.00	1000	
78	Se	89	H2	0.023	ppb	25.7	8.00	1000	
88	Sr	89	He	0.144	ppb	6.5	508.92	2000	
95	Mo	89	He	0.034	ppb	8.4	153.34	1000	
107	Ag	89	He	0.006	ppb	8.2	106.67	100	
111	Cd	89	He	0.009	ppb	12.8	14.81	1000	
118	Sn	159	He	0.154	ppb	17.8	857.84	1000	
121	Sb	159	No Gas	0.010	ppb	52.8	363.75	1000	
137	Ba	159	No Gas	0.085	ppb	13.0	710.82	2000	
182	W	159	No Gas	0.023	ppb	20.0	430.49	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	363.75	1000	
208	Pb	209	No Gas	0.009	ppb	6.2	1061.21	2000	
232	Th	209	No Gas	0.013	ppb	8.3	734.18	1000	
238	U	209	No Gas	0.006	ppb	33.3	220.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8668566.08	2.5	8075153.2	107.35	29.5	120.4	
Sc	45	No Gas	17168917.27	2.3	15284588.74	112.33	29.5	120.4	
Sc	45	H2	1939387.54	1.6	1817402.03	106.71	29.5	120.4	
Sc	45	He	449936.38	0.8	431380.74	104.3	29.5	120.4	
Ge	72	No Gas	2954699.44	2.5	2712289.77	108.94	29.5	120.4	
Ge	72	H2	559118.56	1.5	540643.15	103.42	29.5	120.4	
Ge	72	He	268029.23	0.3	259264.63	103.38	29.5	120.4	
Y	89	H2	10072542.08	1.4	9628329.76	104.61	29.5	120.4	
Y	89	He	2176299.88	0.3	2093497.43	103.96	29.5	120.4	
Tb	159	No Gas	21657653.84	2.0	21312636.35	101.62	29.5	120.4	
Tb	159	He	8216248.84	0.7	7937819.95	103.51	29.5	120.4	
Bi	209	No Gas	9825892.21	2.4	9931051.85	98.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:35:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	185.6	23.33	100	
11	B	6	No Gas	1.671	ppb	3.4	8543.92	1000	
23	Na	45	He	101.293	ppb	2.7	111483.84	200000	
24	Mg	45	He	6.140	ppb	4.0	2513.74	200000	
27	Al	45	He	-2.086	ppb	N/A	131.12	200000	
28	Si	45	H2	0.290	ppb	63.9	587.54	10000	
39	K	45	He	3.307	ppb	71.0	22208.84	200000	
40	Ca	45	H2	-3.357	ppb	N/A	8060.35	200000	
51	V	89	He	0.003	ppb	170.5	196.68	1000	
52	Cr	89	He	-0.012	ppb	N/A	737.89	2000	
55	Mn	89	He	-0.129	ppb	N/A	143.98	2000	
56	Fe	89	H2	0.286	ppb	5.0	8488.69	100000	
59	Co	89	He	0.001	ppb	175.6	73.34	1000	
60	Ni	89	He	-0.080	ppb	N/A	68.89	1000	
63	Cu	89	He	-0.010	ppb	N/A	336.68	2000	
66	Zn	89	He	-0.574	ppb	N/A	286.68	2000	
75	As	89	He	-0.002	ppb	N/A	10.33	1000	
78	Se	89	H2	0.013	ppb	19.7	4.83	1000	
88	Sr	89	He	0.031	ppb	14.8	136.67	2000	
95	Mo	89	He	0.015	ppb	46.8	72.22	1000	
107	Ag	89	He	0.003	ppb	26.2	68.89	100	
111	Cd	89	He	0.004	ppb	64.3	7.78	1000	
118	Sn	159	He	0.082	ppb	15.5	633.37	1000	
121	Sb	159	No Gas	0.004	ppb	89.7	256.95	1000	
137	Ba	159	No Gas	0.039	ppb	40.8	377.09	2000	
182	W	159	No Gas	0.012	ppb	32.9	253.62	1000	
205	Tl	209	No Gas	-0.015	ppb	N/A	290.33	1000	
208	Pb	209	No Gas	0.003	ppb	112.7	864.32	2000	
232	Th	209	No Gas	0.008	ppb	6.6	580.66	1000	
238	U	209	No Gas	0.002	ppb	47.5	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8212275.94	2.6	8075153.2	101.7	29.5	120.4	
Sc	45	No Gas	15598752.48	1.7	15284588.74	102.06	29.5	120.4	
Sc	45	H2	1779936.54	0.8	1817402.03	97.94	29.5	120.4	
Sc	45	He	427239.88	0.8	431380.74	99.04	29.5	120.4	
Ge	72	No Gas	2765332.68	1.8	2712289.77	101.96	29.5	120.4	
Ge	72	H2	524771.54	1.2	540643.15	97.06	29.5	120.4	
Ge	72	He	256479.48	0.6	259264.63	98.93	29.5	120.4	
Y	89	H2	9510675.03	0.8	9628329.76	98.78	29.5	120.4	
Y	89	He	2092603.47	1.1	2093497.43	99.96	29.5	120.4	
Tb	159	No Gas	22197285.78	1.8	21312636.35	104.15	29.5	120.4	
Tb	159	He	8143614.88	0.9	7937819.95	102.59	29.5	120.4	
Bi	209	No Gas	10231618.65	0.7	9931051.85	103.03	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:38:24 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	212.4	21.11	100	
11	B	6	No Gas	1.157	ppb	6.2	6113.73	1000	
23	Na	45	He	54.282	ppb	1.1	76033.86	200000	
24	Mg	45	He	1.685	ppb	3.2	766.75	200000	
27	Al	45	He	-2.331	ppb	N/A	94.45	200000	
28	Si	45	H2	0.010	ppb	1189.6	517.25	10000	
39	K	45	He	2.126	ppb	84.8	21538.26	200000	
40	Ca	45	H2	-4.683	ppb	N/A	5256.71	200000	
51	V	89	He	0.000	ppb	N/A	178.89	1000	
52	Cr	89	He	-0.013	ppb	N/A	728.55	2000	
55	Mn	89	He	-0.145	ppb	N/A	99.98	2000	
56	Fe	89	H2	-0.125	ppb	N/A	5140.34	100000	
59	Co	89	He	-0.001	ppb	N/A	53.34	1000	
60	Ni	89	He	-0.088	ppb	N/A	45.56	1000	
63	Cu	89	He	-0.018	ppb	N/A	271.12	2000	
66	Zn	89	He	-0.574	ppb	N/A	285.57	2000	
75	As	89	He	-0.003	ppb	N/A	9.33	1000	
78	Se	89	H2	0.008	ppb	39.6	3.33	1000	
88	Sr	89	He	0.003	ppb	157.0	48.89	2000	
95	Mo	89	He	0.010	ppb	77.2	53.34	1000	
107	Ag	89	He	0.002	ppb	71.5	45.56	100	
111	Cd	89	He	0.002	ppb	39.4	4.82	1000	
118	Sn	159	He	0.051	ppb	20.9	534.48	1000	
121	Sb	159	No Gas	0.000	ppb	1899.1	186.88	1000	
137	Ba	159	No Gas	0.009	ppb	56.9	140.16	2000	
182	W	159	No Gas	0.005	ppb	12.6	150.17	1000	
205	Tl	209	No Gas	-0.018	ppb	N/A	203.56	1000	
208	Pb	209	No Gas	-0.003	ppb	N/A	614.03	2000	
232	Th	209	No Gas	0.004	ppb	71.7	390.44	1000	
238	U	209	No Gas	0.001	ppb	59.2	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8090306.38	2.8	8075153.2	100.19	29.5	120.4	
Sc	45	No Gas	15407330.64	2.1	15284588.74	100.8	29.5	120.4	
Sc	45	H2	1753078.85	1.0	1817402.03	96.46	29.5	120.4	
Sc	45	He	421201.93	0.6	431380.74	97.64	29.5	120.4	
Ge	72	No Gas	2746265.86	2.6	2712289.77	101.25	29.5	120.4	
Ge	72	H2	517853.18	1.1	540643.15	95.78	29.5	120.4	
Ge	72	He	254454.78	0.7	259264.63	98.14	29.5	120.4	
Y	89	H2	9487300.19	1.3	9628329.76	98.54	29.5	120.4	
Y	89	He	2081281.83	1.0	2093497.43	99.42	29.5	120.4	
Tb	159	No Gas	22142719.67	2.2	21312636.35	103.89	29.5	120.4	
Tb	159	He	8107092.59	1.2	7937819.95	102.13	29.5	120.4	
Bi	209	No Gas	10309317.91	2.7	9931051.85	103.81	29.5	120.4	

Sample Report

Sample Name CCV

File Name 041_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:41:08 PM

Sample Type CCV

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.519	ppb	5.4	167047.80	25	
11	B	6	No Gas	26.114	ppb	5.1	116022.88	25	
23	Na	45	He	5094.290	ppb	0.7	3754927.04	5000	
24	Mg	45	He	5031.826	ppb	1.2	1957660.09	5000	
27	Al	45	He	484.062	ppb	0.3	70112.69	500	
28	Si	45	H2	493.351	ppb	1.4	109119.35	500	
39	K	45	He	4970.061	ppb	0.9	1545545.69	5000	
40	Ca	45	H2	5058.800	ppb	1.9	10343557.07	5000	
51	V	89	He	25.069	ppb	0.8	124656.21	25	
52	Cr	89	He	25.129	ppb	1.0	159825.77	25	
55	Mn	89	He	24.872	ppb	1.6	68680.21	25	
56	Fe	89	H2	5060.840	ppb	1.1	40787632.45	5000	
59	Co	89	He	25.555	ppb	1.7	267470.82	25	
60	Ni	89	He	25.564	ppb	2.5	73989.45	25	
63	Cu	89	He	25.542	ppb	1.0	201988.07	25	
66	Zn	89	He	25.192	ppb	1.1	22577.86	25	
75	As	89	He	25.039	ppb	1.7	15100.82	25	
78	Se	89	H2	25.505	ppb	1.2	7538.20	25	
88	Sr	89	He	24.118	ppb	1.8	75231.99	25	
95	Mo	89	He	25.075	ppb	0.7	94768.85	25	
107	Ag	89	He	25.752	ppb	1.1	309308.82	25	
111	Cd	89	He	25.515	ppb	1.5	36577.04	25	
118	Sn	159	He	24.252	ppb	1.6	73393.62	25	
121	Sb	159	No Gas	25.890	ppb	3.5	510624.12	25	
137	Ba	159	No Gas	25.736	ppb	3.7	197990.21	25	
182	W	159	No Gas	24.847	ppb	4.1	397364.81	25	
205	Tl	209	No Gas	26.180	ppb	5.2	788344.65	25	
208	Pb	209	No Gas	25.886	ppb	4.2	1095836.28	25	
232	Th	209	No Gas	25.616	ppb	5.4	1045539.14	25	
238	U	209	No Gas	25.871	ppb	4.0	1021494.72	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7964887.89	2.2	8075153.2	98.63	29.5	120.4	
Sc	45	No Gas	15389381.97	1.4	15284588.74	100.69	29.5	120.4	
Sc	45	H2	1767526.10	1.4	1817402.03	97.26	29.5	120.4	
Sc	45	He	426439.23	0.8	431380.74	98.85	29.5	120.4	
Ge	72	No Gas	2758854.83	1.8	2712289.77	101.72	29.5	120.4	
Ge	72	H2	519952.34	1.3	540643.15	96.17	29.5	120.4	
Ge	72	He	257601.33	0.4	259264.63	99.36	29.5	120.4	
Y	89	H2	9449259.76	0.9	9628329.76	98.14	29.5	120.4	
Y	89	He	2080020.46	1.0	2093497.43	99.36	29.5	120.4	
Tb	159	No Gas	21994863.28	1.5	21312636.35	103.2	29.5	120.4	
Tb	159	He	8073167.31	0.6	7937819.95	101.71	29.5	120.4	
Bi	209	No Gas	10176147.14	1.8	9931051.85	102.47	29.5	120.4	

Sample Report

Sample Name CCB

File Name 042_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:43:47 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	46.9	113.34	0.2	
11	B	6	No Gas	1.204	ppb	0.9	6241.58	4	
23	Na	45	He	32.863	ppb	3.6	61141.22	200	
24	Mg	45	He	1.220	ppb	28.2	593.39	20	
27	Al	45	He	-2.306	ppb	N/A	98.89	20	
28	Si	45	H2	2.136	ppb	175.8	986.84	100	
39	K	45	He	2.598	ppb	66.1	21878.57	200	
40	Ca	45	H2	-4.253	ppb	N/A	6159.34	20	
51	V	89	He	0.005	ppb	73.1	202.23	1	
52	Cr	89	He	-0.007	ppb	N/A	762.55	1	
55	Mn	89	He	-0.137	ppb	N/A	119.98	0.4	
56	Fe	89	H2	1.173	ppb	7.3	15569.34	20	
59	Co	89	He	0.000	ppb	280.7	64.45	0.2	
60	Ni	89	He	-0.084	ppb	N/A	55.56	0.4	
63	Cu	89	He	-0.016	ppb	N/A	282.23	0.6	
66	Zn	89	He	-0.567	ppb	N/A	290.01	2	
75	As	89	He	0.006	ppb	138.8	15.00	1	
78	Se	89	H2	0.041	ppb	10.8	13.00	1	
88	Sr	89	He	-0.001	ppb	N/A	35.56	1	
95	Mo	89	He	0.056	ppb	12.3	227.79	1	
107	Ag	89	He	0.007	ppb	17.8	108.89	0.2	
111	Cd	89	He	0.006	ppb	51.9	9.63	0.2	
118	Sn	159	He	0.129	ppb	4.9	766.72	1	
121	Sb	159	No Gas	0.021	ppb	29.1	594.01	0.2	
137	Ba	159	No Gas	0.013	ppb	48.8	173.53	0.4	
182	W	159	No Gas	0.082	ppb	6.1	1384.97	1	
205	Tl	209	No Gas	0.000	ppb	1253.2	764.22	0.2	
208	Pb	209	No Gas	0.009	ppb	45.6	1111.27	0.2	
232	Th	209	No Gas	0.081	ppb	18.7	3567.83	1	
238	U	209	No Gas	0.019	ppb	34.8	760.89	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7978746.64	2.0	8075153.2	98.81	29.5	120.4	
Sc	45	No Gas	15471809.18	2.1	15284588.74	101.22	29.5	120.4	
Sc	45	H2	1762402.76	0.2	1817402.03	96.97	29.5	120.4	
Sc	45	He	425016.09	0.4	431380.74	98.52	29.5	120.4	
Ge	72	No Gas	2766395.62	2.2	2712289.77	101.99	29.5	120.4	
Ge	72	H2	520033.60	0.9	540643.15	96.19	29.5	120.4	
Ge	72	He	256097.67	0.4	259264.63	98.78	29.5	120.4	
Y	89	H2	9438927.24	0.2	9628329.76	98.03	29.5	120.4	
Y	89	He	2067472.00	0.5	2093497.43	98.76	29.5	120.4	
Tb	159	No Gas	22108959.11	2.6	21312636.35	103.74	29.5	120.4	
Tb	159	He	8044000.43	0.3	7937819.95	101.34	29.5	120.4	
Bi	209	No Gas	10261060.59	2.3	9931051.85	103.32	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP/KC **ANALYSIS DATE**: 8/07/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH06A

REVIEWED
MC 8/10/20
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19535	08/05/20	10/15/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (15:36) fails low for B (0.537 ug/L)

Closing PQL (18:33) fails high for W (1.221 ug/L) and failed low for B (1.060 ug/L)

ICSA (15:39) fails high for Mn (0.555 ug/L). LRS1(15:45) fails high for B and W. LRS2 (15:47) fails high for Ca.

CCB (15:58) fails for Sb (0.105 ug/L) Tl (0.105 ug/L) Pb (0.165 ug/L) U (0.105 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH06A	08/06/2020	15:24	KC
CalStd	1	LNH06A	08/06/2020	15:28	KC
ICV	1	LNH06A	08/06/2020	15:31	KC
ICB	1	LNH06A	08/06/2020	15:34	KC
PQL	1	LNH06A	08/06/2020	15:36	KC
ICSA	1	LNH06A	08/06/2020	15:39	KC
ICSAB	1	LNH06A	08/06/2020	15:42	KC
LRS1	1	LNH06A	08/06/2020	15:45	KC
LRS2	1	LNH06A	08/06/2020	15:47	KC
RINSE	1	LNH06A	08/06/2020	15:50	KC
RINSE	1	LNH06A	08/06/2020	15:53	KC
CCV	1	LNH06A	08/06/2020	15:56	KC
CCB	1	LNH06A	08/06/2020	15:58	KC
PBSNG29IMS2	5	LNH06A	08/06/2020	16:01	KC
LCSONG29IMS2	5	LNH06A	08/06/2020	16:04	KC
SN5107-028R	5	LNH06A	08/06/2020	16:06	KC
SN5107-029R	5	LNH06A	08/06/2020	16:09	KC
PBSNG07IMS1	5	LNH06A	08/06/2020	16:12	KC
LCSONG07IMS1	5	LNH06A	08/06/2020	16:14	KC
SN5107-028	5	LNH06A	08/06/2020	16:17	KC
SN5107-029	5	LNH06A	08/06/2020	16:20	KC
PBWNG16IMW2	5	LNH06A	08/06/2020	16:22	KC
LCSWNG16IMW2	5	LNH06A	08/06/2020	16:25	KC
CCV	1	LNH06A	08/06/2020	16:28	KC
CCB	1	LNH06A	08/06/2020	16:30	KC
SN5734-002	5	LNH06A	08/06/2020	16:33	KC
PBWNG14IMW2	5	LNH06A	08/06/2020	16:35	KC
LCSWNG14IMW2	5	LNH06A	08/06/2020	16:38	KC
SN5646-004R	5	LNH06A	08/06/2020	16:41	KC
SN5646-005R	5	LNH06A	08/06/2020	16:43	KC
SN5646-005RA	5	LNH06A	08/06/2020	16:46	KC
SN5646-005RL	25	LNH06A	08/06/2020	16:49	KC
SN5646-005RP	5	LNH06A	08/06/2020	16:51	KC
SN5646-005RS	5	LNH06A	08/06/2020	16:54	KC
PBWNG13IMW2	5	LNH06A	08/06/2020	16:57	KC
CCV	1	LNH06A	08/06/2020	16:59	KC
CCB	1	LNH06A	08/06/2020	17:02	KC
LCSWNG13IMW2	5	LNH06A	08/06/2020	17:05	KC
SN5646-004	5	LNH06A	08/06/2020	17:07	KC
SN5646-005	5	LNH06A	08/06/2020	17:10	KC
SN5646-005A	5	LNH06A	08/06/2020	17:13	KC
SN5646-005L	25	LNH06A	08/06/2020	17:15	KC
SN5646-005P	5	LNH06A	08/06/2020	17:18	KC
SN5646-005S	5	LNH06A	08/06/2020	17:21	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBSNH04IMS1	5	LNH06A	08/06/2020	17:23	KC
LCSONH04IMS1	5	LNH06A	08/06/2020	17:26	KC
SN5717-004	5	LNH06A	08/06/2020	17:29	KC
CCV	1	LNH06A	08/06/2020	17:31	KC
CCB	1	LNH06A	08/06/2020	17:34	KC
SN5717-010	5	LNH06A	08/06/2020	17:37	KC
SN5717-010A	5	LNH06A	08/06/2020	17:39	KC
SN5717-010L	25	LNH06A	08/06/2020	17:42	KC
SN5717-010P	5	LNH06A	08/06/2020	17:45	KC
SN5717-010S	5	LNH06A	08/06/2020	17:48	KC
SN5717-013	5	LNH06A	08/06/2020	17:50	KC
SN5717-017	5	LNH06A	08/06/2020	17:53	KC
PBWNG31IMW1	1	LNH06A	08/06/2020	17:56	KC
LCSWNG31IMW1	1	LNH06A	08/06/2020	17:59	KC
SN6347-001	1	LNH06A	08/06/2020	18:01	KC
CCV	1	LNH06A	08/06/2020	18:04	KC
CCB	1	LNH06A	08/06/2020	18:07	KC
PBWNH05IMW1	1	LNH06A	08/06/2020	18:09	KC
LCSWNH05IMW1	1	LNH06A	08/06/2020	18:12	KC
SN6445-001	1	LNH06A	08/06/2020	18:14	KC
PBWNH06IMW2	5	LNH06A	08/06/2020	18:17	KC
LCSWNH06IMW2	5	LNH06A	08/06/2020	18:20	KC
SN5589-006R	5	LNH06A	08/06/2020	18:22	KC
SN6300-001	1	LNH06A	08/06/2020	18:25	KC
CCV	1	LNH06A	08/06/2020	18:27	KC
CCB	1	LNH06A	08/06/2020	18:30	KC
PQL	1	LNH06A	08/06/2020	18:33	KC
RINSE	1	LNH06A	08/06/2020	18:36	KC
RINSE	1	LNH06A	08/06/2020	18:38	KC

US EPA Tune Check Report

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq. Date-Time 8/6/2020 12:19:30 PM

Report Comment ---

Instrument Name G8421A SG18503526

[No Gas]

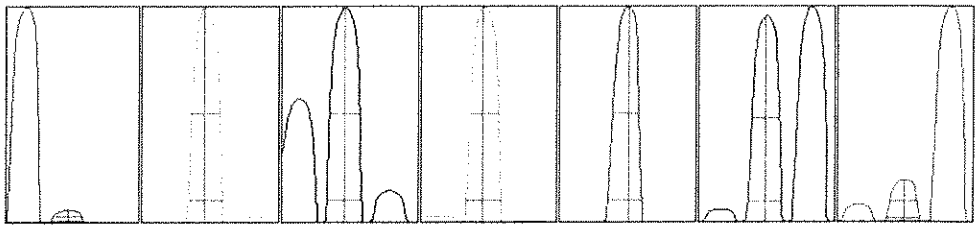
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	17271	172710.45	0.298	5.000	
9	6791	67911.65	0.302	5.000	
24	261423	2614230.14	0.077	5.000	
59	43844	438443.18	0.305	5.000	
115	456382	4563819.20	0.231	5.000	
205	23156	231561.07	0.418	5.000	
208	50795	507947.01	0.458	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	17314	17260	17332	17240	17208
9	6801	6762	6815	6798	6780
24	261321	261549	261193	261348	261704
59	43654	43889	43934	43763	43981
115	454999	455531	457131	456852	457397
205	23027	23152	23141	23161	23300
208	50809	50478	50663	50969	51055

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	28198.17	6.95	6.90 - 7.10	
9	11252.92	8.90	8.90 - 9.10	
24	415110.34	23.90	23.90 - 24.10	
59	71734.73	58.90	58.90 - 59.10	
115	808573.67	115.05	114.90 - 115.10	
205	39209.87	205.00	204.90 - 205.10	
208	86007.42	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.757	0.900	
24	0.66	0.771	0.900	
59	0.64	0.768	0.900	
115	0.58	0.743	0.900	
205	0.61	0.737	0.900	
208	0.61	0.735	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2954	29535.68	1.353	5.000	
89	315255	3152548.86	1.820	5.000	
205	26391	263913.50	1.102	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2902	2928	2968	2964	3006
89	306298	313885	317147	317187	321757
205	25983	26229	26429	26631	26685

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	9434	94338.15	1.347	5.000	
89	65014	650140.55	1.683	5.000	
205	11263	112630.60	1.066	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9242	9377	9467	9555	9528
89	63243	64670	65561	65844	65752
205	11072	11223	11371	11315	11335

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

RUN ID: LNH06A

RUN NOTES: Concentrations in ppb noted by bracketing ( ) . Concentrations in ppm noted by bracketing [ ]

Circled analytes: Fail DoD limits. Analytes with no circle: Fail all limits

ANALYST: AP/KC

Circled analytes (LCS ONLY) : Fail EPA limits. Analytes with no circle: Fail all limits

Type	Sample	Time	D.F.	Vial	Comments	No Gas				Helium				Hydrogen		
						Li	Sc	Tb	Bi	Sc	Ge	Y	Tb	Sc	Ge	Y
CalBlk	CalBlank	8/6/2020 3:24:44 PM	1	1203												
CalStd	CalStd	8/6/2020 3:28:18 PM	1	1101												
ICV	ICV	8/6/2020 3:31:34 PM	1	1202												
ICB	ICB	8/6/2020 3:34:14 PM	1	1203												
LLICV	PQL	8/6/2020 3:36:53 PM	1	1302	B↑ (0.537)											
ICSA	ICSA	8/6/2020 3:39:37 PM	1	1104	Mn↑ (0.555)											
ICSB	ICSAB	8/6/2020 3:42:26 PM	1	1105												
LRS	LRS1	8/6/2020 3:45:16 PM	1	4511	B↑ Wf											
Sample	LRS2	8/6/2020 3:47:51 PM	1	4512	Ca↑											
Sample	RINSE	8/6/2020 3:50:47 PM	1	1303												
Sample	RINSE	8/6/2020 3:53:25 PM	1	1303												
CCV	CCV	8/6/2020 3:56:08 PM	1	1206												
CCB	CCB	8/6/2020 3:58:47 PM	1	1207	Sb↑ (.105) Tl↑ (.105) Pb↑ (.105) U↑ (.105)											
PB	PBSNG29IMS2	8/6/2020 4:01:31 PM	5	2101	Mg↑ Sn↑											
LCSO	LCSONG29IMS2	8/6/2020 4:04:10 PM	5	2102												
Sample	SN5107-028R	8/6/2020 4:06:53 PM	5	2103												
Sample	SN5107-029R	8/6/2020 4:09:28 PM	5	2104												
PB	PBSNG07IMS1	8/6/2020 4:12:12 PM	5	2105	Mn↑ Zn↑ Sn↑ Pb↑											
LCSO	LCSONG07IMS1	8/6/2020 4:14:49 PM	5	2106												
Sample	SN5107-028	8/6/2020 4:17:31 PM	5	2107												
Sample	SN5107-029	8/6/2020 4:20:06 PM	5	2108												
PB	PBWNG16IMW2	8/6/2020 4:22:47 PM	5	2109	Cu↑ Zn↑ (71.199)											
LCSW	LCSWNG16IMW2	8/6/2020 4:25:23 PM	5	2110												
CCV	CCV	8/6/2020 4:28:04 PM	1	1206												
CCB	CCB	8/6/2020 4:30:41 PM	1	1207												
Sample	SN5734-002	8/6/2020 4:33:24 PM	5	2111												
PB	PBWNG14IMW2	8/6/2020 4:35:59 PM	5	2112	Cu↑ Zn↑											
LCSW	LCSWNG14IMW2	8/6/2020 4:38:40 PM	5	2201	Cr↑ Mn↑ Co↑ Zn↑ Mo↑ Ag↑											
Sample	SN5646-004R	8/6/2020 4:41:14 PM	5	2202												
Sample	SN5646-005R	8/6/2020 4:43:52 PM	5	2203												
Sample	SN5646-005RA	8/6/2020 4:46:33 PM	5	2204												
Sample	SN5646-005RL	8/6/2020 4:49:16 PM	25	2205												
Sample	SN5646-005RP	8/6/2020 4:51:51 PM	5	2206												
Sample	SN5646-005RS	8/6/2020 4:54:36 PM	5	2207												
PB	PBWNG13IMW2	8/6/2020 4:57:13 PM	5	2208	Cu↑ Zn↑ Be↑											
CCV	CCV	8/6/2020 4:59:56 PM	1	1206												
CCB	CCB	8/6/2020 5:02:33 PM	1	1207												
LCSW	LCSWNG13IMW2	8/6/2020 5:05:16 PM	5	2209	Tl↑											
Sample	SN5646-004	8/6/2020 5:07:52 PM	5	2210												
Sample	SN5646-005	8/6/2020 5:10:32 PM	5	2211												
Sample	SN5646-005A	8/6/2020 5:13:07 PM	5	2212												
Sample	SN5646-005L	8/6/2020 5:15:47 PM	25	2301												
Sample	SN5646-005P	8/6/2020 5:18:24 PM	5	2302												
Sample	SN5646-005S	8/6/2020 5:21:08 PM	5	2303												
PB	PBSNH04IMS1	8/6/2020 5:23:43 PM	5	2304	B↑ Co↑ Mn↑ Cu↑ Zn↑ Sn↑ Ba↑											
LCSO	LCSONH04IMS1	8/6/2020 5:26:29 PM	5	2305	Zn↑											
Sample	SN5717-004	8/6/2020 5:29:03 PM	5	2306												
CCV	CCV	8/6/2020 5:31:50 PM	1	1206												
CCB	CCB	8/6/2020 5:34:25 PM	1	1207												
Sample	SN5717-010	8/6/2020 5:37:07 PM	5	2307												
Sample	SN5717-010A	8/6/2020 5:39:54 PM	5	2308												
Sample	SN5717-010L	8/6/2020 5:42:43 PM	25	2309												
Sample	SN5717-010P	8/6/2020 5:45:21 PM	5	2310												
Sample	SN5717-010S	8/6/2020 5:48:10 PM	5	2311												
Sample	SN5717-013	8/6/2020 5:50:56 PM	5	2312												
Sample	SN5717-017	8/6/2020 5:53:43 PM	5	2401												

Katahdin Analytical Services A0000688

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:24:44 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	3.33	100.1
11	B	6	No Gas	897.84	6.7
23	Na	45	He	38306.62	0.7
24	Mg	45	He	75.56	53.9
27	Al	45	He	106.67	32.9
28	Si	45	H2	533.94	21.1
39	K	45	He	21921.91	1.5
40	Ca	45	H2	4929.92	3.9
51	V	89	He	200.01	20.9
52	Cr	89	He	670.56	4.8
55	Mn	89	He	181.97	8.6
56	Fe	89	H2	4332.22	1.3
59	Co	89	He	35.56	84.5
60	Ni	89	He	122.23	10.3
63	Cu	89	He	505.58	8.4
66	Zn	89	He	315.57	7.0
75	As	89	He	12.67	4.6
78	Se	89	H2	1.50	0.0
88	Sr	89	He	22.22	60.6
95	Mo	89	He	7.78	65.5
107	Ag	89	He	35.56	21.6
111	Cd	89	He	0.74	86.6
118	Sn	159	He	354.46	6.3
121	Sb	159	No Gas	133.49	4.3
137	Ba	159	No Gas	70.08	24.7
182	W	159	No Gas	26.69	57.3
205	Tl	209	No Gas	183.54	30.0
208	Pb	209	No Gas	337.05	18.1
232	Th	209	No Gas	220.25	37.2
238	U	209	No Gas	6.67	86.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	9181465.10	1.3
Sc	45	No Gas	16426983.07	0.6
Sc	45	H2	1932518.05	1.3
Sc	45	He	478214.17	0.6
Ge	72	No Gas	2769440.33	0.2
Ge	72	H2	546905.92	0.5
Ge	72	He	272551.69	0.5
Y	89	H2	9834260.27	0.6
Y	89	He	2139239.05	0.7
Tb	159	No Gas	19495400.26	0.5
Tb	159	He	7485871.83	0.3
Bi	209	No Gas	8594079.30	1.5

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:28:18 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	402304.39	2.1
11	B	6	No Gas	269163.42	1.3
23	Na	45	He	8798999.21	0.7
24	Mg	45	He	4548830.42	1.0
27	Al	45	He	165303.11	0.9
28	Si	45	H2	255142.16	2.1
39	K	45	He	3600031.05	0.5
40	Ca	45	H2	24051182.98	1.6
51	V	89	He	276353.67	0.5
52	Cr	89	He	350594.34	0.3
55	Mn	89	He	150295.42	1.1
56	Fe	89	H2	88695455.66	0.1
59	Co	89	He	571800.01	0.6
60	Ni	89	He	156115.53	0.1
63	Cu	89	He	424216.46	0.8
66	Zn	89	He	47433.76	0.4
75	As	89	He	31989.11	0.6
78	Se	89	H2	16155.12	1.8
88	Sr	89	He	162557.49	1.0
95	Mo	89	He	193512.94	0.2
107	Ag	89	He	599372.86	0.6
111	Cd	89	He	71477.06	0.9
118	Sn	159	He	148461.65	0.8
121	Sb	159	No Gas	964276.06	0.3
137	Ba	159	No Gas	373247.65	0.6
182	W	159	No Gas	727073.90	1.1
205	Tl	209	No Gas	1319508.88	2.0
208	Pb	209	No Gas	1883688.02	0.9
232	Th	209	No Gas	1802585.82	2.0
238	U	209	No Gas	1738183.49	1.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9158925.06	0.5	9181465.1	99.75	29.5	120.4	
Sc	45	No Gas	16555301.80	0.5	16426983.07	100.78	29.5	120.4	
Sc	45	H2	1975140.89	1.3	1932518.05	102.21	29.5	120.4	
Sc	45	He	481831.37	0.8	478214.17	100.76	29.5	120.4	
Ge	72	No Gas	2790644.14	0.2	2769440.33	100.77	29.5	120.4	
Ge	72	H2	552805.34	1.0	546905.92	101.08	29.5	120.4	
Ge	72	He	274963.78	0.8	272551.69	100.89	29.5	120.4	
Y	89	H2	9900606.72	1.2	9834260.27	100.67	29.5	120.4	
Y	89	He	2161898.23	1.2	2139239.05	101.06	29.5	120.4	
Tb	159	No Gas	19523319.15	0.4	19495400.26	100.14	29.5	120.4	
Tb	159	He	7476374.06	0.7	7485871.83	99.87	29.5	120.4	
Bi	209	No Gas	8499431.63	0.2	8594079.3	98.9	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:31:34 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	19.951	ppb	2.4	163902.99	20	99.76	89.6	110.4	
11	B	6	No Gas	20.192	ppb	3.4	111514.51	20	100.96	89.6	110.4	
23	Na	45	He	3968.719	ppb	0.3	3479773.16	4000	99.22	89.6	110.4	
24	Mg	45	He	3982.004	ppb	0.1	1793004.21	4000	99.55	89.6	110.4	
27	Al	45	He	376.887	ppb	0.4	61735.25	400	94.22	89.6	110.4	
28	Si	45	H2	408.858	ppb	1.7	102866.92	400	102.21	89.6	110.4	
39	K	45	He	3973.610	ppb	0.8	1429193.03	4000	99.34	89.6	110.4	
40	Ca	45	H2	3937.522	ppb	1.1	9313382.64	4000	98.44	89.6	110.4	
51	V	89	He	20.026	ppb	0.7	109755.06	20	100.13	89.6	110.4	
52	Cr	89	He	20.257	ppb	0.2	141101.75	20	101.28	89.6	110.4	
55	Mn	89	He	20.361	ppb	0.2	60730.26	20	101.8	89.6	110.4	
56	Fe	89	H2	3895.497	ppb	0.8	34493390.51	4000	97.39	89.6	110.4	
59	Co	89	He	20.472	ppb	0.8	231915.50	20	102.36	89.6	110.4	
60	Ni	89	He	20.512	ppb	0.7	63512.60	20	102.56	89.6	110.4	
63	Cu	89	He	20.441	ppb	1.0	172093.48	20	102.2	89.6	110.4	
66	Zn	89	He	19.817	ppb	0.3	18813.27	20	99.08	89.6	110.4	
75	As	89	He	19.970	ppb	0.5	12663.48	20	99.85	89.6	110.4	
78	Se	89	H2	19.783	ppb	0.6	6381.68	20	98.92	89.6	110.4	
88	Sr	89	He	19.554	ppb	0.8	62983.10	20	97.77	89.6	110.4	
95	Mo	89	He	40.363	ppb	0.8	154741.40	40	100.91	89.6	110.4	
107	Ag	89	He	20.253	ppb	1.1	240502.79	20	101.26	89.6	110.4	
111	Cd	89	He	20.224	ppb	1.1	28639.21	20	101.12	89.6	110.4	
118	Sn	159	He	19.527	ppb	0.2	58254.53	20	97.64	89.6	110.4	
121	Sb	159	No Gas	20.205	ppb	3.1	396578.12	20	101.02	89.6	110.4	
137	Ba	159	No Gas	20.045	ppb	3.2	152295.93	20	100.22	89.6	110.4	
182	W	159	No Gas	20.096	ppb	3.7	297337.64	20	100.48	89.6	110.4	
205	Tl	209	No Gas	21.388	ppb	3.6	576631.36	20	106.94	89.6	110.4	
208	Pb	209	No Gas	20.067	ppb	3.5	772380.94	20	100.34	89.6	110.4	
232	Th	209	No Gas	20.726	ppb	3.4	763330.89	20	103.63	89.6	110.4	
238	U	209	No Gas	20.372	ppb	3.5	723381.62	20	101.86	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9353797.64	1.6	9181465.1	101.88	29.5	120.4	
Sc	45	No Gas	16909392.34	1.9	16426983.07	102.94	29.5	120.4	
Sc	45	H2	1941709.11	0.9	1932518.05	100.48	29.5	120.4	
Sc	45	He	476945.51	0.4	478214.17	99.73	29.5	120.4	
Ge	72	No Gas	2844106.14	2.4	2769440.33	102.7	29.5	120.4	
Ge	72	H2	543408.03	2.1	546905.92	99.36	29.5	120.4	
Ge	72	He	272731.07	0.2	272551.69	100.07	29.5	120.4	
Y	89	H2	9882665.23	1.6	9834260.27	100.49	29.5	120.4	
Y	89	He	2141346.30	0.6	2139239.05	100.1	29.5	120.4	
Tb	159	No Gas	19873841.09	2.1	19495400.26	101.94	29.5	120.4	
Tb	159	He	7483736.76	0.4	7485871.83	99.97	29.5	120.4	
Bi	209	No Gas	8685541.49	2.2	8594079.3	101.06	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:34:14 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.011	ppb	7.7	97.78	0.2	
11	B	6	No Gas	0.369	ppb	6.0	2937.07	4	
23	Na	45	He	3.657	ppb	95.5	41835.65	200	
24	Mg	45	He	2.632	ppb	90.9	1271.59	20	
27	Al	45	He	0.519	ppb	28.5	193.36	20	
28	Si	45	H2	0.110	ppb	218.2	563.97	100	
39	K	45	He	3.356	ppb	81.0	23308.58	200	
40	Ca	45	H2	0.947	ppb	2.0	7189.85	20	
51	V	89	He	0.001	ppb	1783.4	205.57	1	
52	Cr	89	He	0.013	ppb	62.5	766.55	1	
55	Mn	89	He	0.013	ppb	85.9	221.97	0.4	
56	Fe	89	H2	1.160	ppb	7.9	14710.72	20	
59	Co	89	He	0.014	ppb	115.3	193.36	0.2	
60	Ni	89	He	0.009	ppb	186.9	151.12	0.4	
63	Cu	89	He	0.027	ppb	62.1	741.16	0.6	
66	Zn	89	He	-0.009	ppb	N/A	311.12	2	
75	As	89	He	0.009	ppb	213.2	18.67	1	
78	Se	89	H2	0.017	ppb	9.6	7.00	1	
88	Sr	89	He	0.014	ppb	117.5	66.67	1	
95	Mo	89	He	0.079	ppb	15.5	313.35	1	
107	Ag	89	He	0.017	ppb	81.6	238.91	0.2	
111	Cd	89	He	0.011	ppb	109.4	16.30	0.2	
118	Sn	159	He	0.058	ppb	27.2	527.81	1	
121	Sb	159	No Gas	0.015	ppb	18.4	420.48	0.2	
137	Ba	159	No Gas	0.008	ppb	29.1	130.15	0.4	
182	W	159	No Gas	0.054	ppb	8.9	814.27	1	
205	Tl	209	No Gas	0.018	ppb	17.5	664.09	0.2	
208	Pb	209	No Gas	0.013	ppb	15.5	830.94	0.2	
232	Th	209	No Gas	0.026	ppb	5.4	1184.72	1	
238	U	209	No Gas	0.013	ppb	13.3	467.20	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9355723.94	2.9	9181465.1	101.9	29.5	120.4	
Sc	45	No Gas	16769680.76	1.6	16426983.07	102.09	29.5	120.4	
Sc	45	H2	1941452.06	0.9	1932518.05	100.46	29.5	120.4	
Sc	45	He	482336.27	0.6	478214.17	100.86	29.5	120.4	
Ge	72	No Gas	2836413.84	1.6	2769440.33	102.42	29.5	120.4	
Ge	72	H2	542007.94	0.8	546905.92	99.1	29.5	120.4	
Ge	72	He	274053.80	0.5	272551.69	100.55	29.5	120.4	
Y	89	H2	9938110.99	0.4	9834260.27	101.06	29.5	120.4	
Y	89	He	2163201.22	0.3	2139239.05	101.12	29.5	120.4	
Tb	159	No Gas	19526371.38	2.3	19495400.26	100.16	29.5	120.4	
Tb	159	He	7494834.75	0.8	7485871.83	100.12	29.5	120.4	
Bi	209	No Gas	8683781.70	2.7	8594079.3	101.04	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:36:53 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.216	ppb	7.2	1784.62	0.2	108	79.5	120.4
11	B	6	No Gas	0.537	ppb	3.1	3862.88	4	13.42	79.5	120.4
23	Na	45	He	209.926	ppb	0.6	222679.28	200	104.96	79.5	120.4
24	Mg	45	He	23.532	ppb	8.4	10787.40	20	117.66	79.5	120.4
27	Al	45	He	20.018	ppb	2.5	3417.20	20	100.09	79.5	120.4
28	Si	45	H2	96.523	ppb	1.7	24515.07	100	96.52	79.5	120.4
39	K	45	He	208.784	ppb	0.9	96866.69	200	104.39	79.5	120.4
40	Ca	45	H2	21.073	ppb	0.6	54370.84	20	105.36	79.5	120.4
51	V	89	He	1.004	ppb	3.3	5789.19	1	100.4	79.5	120.4
52	Cr	89	He	1.068	ppb	1.1	8207.58	1	106.8	79.5	120.4
55	Mn	89	He	0.424	ppb	0.4	1466.48	0.4	106	79.5	120.4
56	Fe	89	H2	21.682	ppb	1.7	195537.76	20	108.41	79.5	120.4
59	Co	89	He	0.222	ppb	3.2	2587.09	0.2	111	79.5	120.4
60	Ni	89	He	0.429	ppb	2.5	1473.47	0.4	107.25	79.5	120.4
63	Cu	89	He	0.676	ppb	1.3	6281.65	0.6	112.67	79.5	120.4
66	Zn	89	He	2.035	ppb	7.0	2251.38	2	101.75	79.5	120.4
75	As	89	He	1.022	ppb	0.6	670.76	1	102.2	79.5	120.4
78	Se	89	H2	1.023	ppb	4.7	330.32	1	102.3	79.5	120.4
88	Sr	89	He	1.009	ppb	2.3	3324.97	1	100.9	79.5	120.4
95	Mo	89	He	1.034	ppb	0.8	4036.30	1	103.4	79.5	120.4
107	Ag	89	He	0.224	ppb	6.9	2737.05	0.2	112	79.5	120.4
111	Cd	89	He	0.216	ppb	9.9	311.12	0.2	108	79.5	120.4
118	Sn	159	He	1.024	ppb	2.6	3415.00	1	102.4	79.5	120.4
121	Sb	159	No Gas	0.226	ppb	7.5	4515.80	0.2	113	79.5	120.4
137	Ba	159	No Gas	0.418	ppb	1.7	3210.67	0.4	104.5	79.5	120.4
182	W	159	No Gas	1.179	ppb	0.7	17274.18	1	117.9	79.5	120.4
205	Tl	209	No Gas	0.234	ppb	2.9	6472.23	0.2	117	79.5	120.4
208	Pb	209	No Gas	0.219	ppb	4.4	8734.33	0.2	109.5	79.5	120.4
232	Th	209	No Gas	0.227	ppb	4.4	8542.57	0.2	113.5	79.5	120.4
238	U	209	No Gas	0.219	ppb	4.9	7741.05	0.2	109.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9372468.39	1.3	9181465.1	102.08	29.5	120.4	
Sc	45	No Gas	16665259.25	0.5	16426983.07	101.45	29.5	120.4	
Sc	45	H2	1927606.56	0.4	1932518.05	99.75	29.5	120.4	
Sc	45	He	482209.73	0.3	478214.17	100.84	29.5	120.4	
Ge	72	No Gas	2827143.19	0.9	2769440.33	102.08	29.5	120.4	
Ge	72	H2	542060.47	1.4	546905.92	99.11	29.5	120.4	
Ge	72	He	274270.64	0.7	272551.69	100.63	29.5	120.4	
Y	89	H2	9844074.35	1.1	9834260.27	100.1	29.5	120.4	
Y	89	He	2176773.30	0.6	2139239.05	101.75	29.5	120.4	
Tb	159	No Gas	19631719.29	1.0	19495400.26	100.7	29.5	120.4	
Tb	159	He	7538940.72	0.1	7485871.83	100.71	29.5	120.4	
Bi	209	No Gas	8651635.60	1.4	8594079.3	100.67	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:39:37 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.001	ppb	69.2	14.44	0.2	-50	50	
B	11	6	No Gas	1.748	ppb	3.4	9835.91	4	-50	100	
Na	23	45	He	99696.996	ppb	3.0	86268983.44	100000	80	120	
Mg	24	45	He	98153.883	ppb	3.0	44080929.34	100000	80	120	
Al	27	45	He	92824.047	ppb	2.3	15141631.30	100000	80	120	
Si	28	45	H2	11.317	ppb	7.6	3400.91	100	-50	50	
K	39	45	He	99332.192	ppb	2.2	35117868.28	100000	80	120	
Ca	40	45	H2	98143.414	ppb	1.0	234251398.73	100000	80	120	
V	51	89	He	0.012	ppb	36.2	256.68	1	-50	100	
Cr	52	89	He	0.291	ppb	3.9	2617.77	0.78	-100	100	
Mn	55	89	He	0.555	ppb	2.8	1781.80	0.0826	100	100	DoD
Fe	56	89	H2	93801.675	ppb	1.0	823768412.73	100000	80	120	
Co	59	89	He	0.293	ppb	2.5	3267.28	0.2	-50	100	
Ni	60	89	He	0.319	ppb	8.0	1075.64	0.114	100	100	
Cu	63	89	He	0.280	ppb	2.7	2782.60	-0.043	100	100	
Zn	66	89	He	0.602	ppb	10.2	853.39	-0.7632	100	100	
As	75	89	He	0.042	ppb	24.8	38.34	1	-50	100	
Se	78	89	H2	0.065	ppb	6.8	22.17	1	-50	100	
Sr	88	89	He	0.795	ppb	1.4	2510.33	0.0578	100	100	
Mo	95	89	He	2025.438	ppb	2.5	7551778.29	2000	80	120	
Ag	107	89	He	0.018	ppb	14.2	240.01	0.2	-50	50	
Cd	111	89	He	0.386	ppb	7.5	532.98	0.268	100	100	
Sn	118	159	He	0.252	ppb	8.0	1004.52	-0.24	100	100	
Sb	121	159	No Gas	0.153	ppb	4.9	2880.21	0.089	100	100	
Ba	137	159	No Gas	0.184	ppb	12.8	1341.58	-0.0794	100	100	
W	182	159	No Gas	0.188	ppb	5.2	2569.81	0.32	-100	100	
Tl	205	209	No Gas	0.006	ppb	66.2	297.01	0.2	-50	50	
Pb	208	209	No Gas	0.088	ppb	3.9	3120.30	0.03	100	100	
Th	232	209	No Gas	0.016	ppb	4.7	687.46	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	58.4	40.04	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8769271.05	1.1	9181465.1	95.51	29.5	120.4	
Sc	45	No Gas	16543780.49	0.9	16426983.07	100.71	29.5	120.4	
Sc	45	H2	1960376.69	0.8	1932518.05	101.44	29.5	120.4	
Sc	45	He	476000.19	3.0	478214.17	99.54	29.5	120.4	
Ge	72	No Gas	2704105.39	1.4	2769440.33	97.64	29.5	120.4	
Ge	72	H2	510049.48	1.9	546905.92	93.26	29.5	120.4	
Ge	72	He	262280.81	1.8	272551.69	96.23	29.5	120.4	
Y	89	H2	9803413.17	2.0	9834260.27	99.69	29.5	120.4	
Y	89	He	2083569.47	2.8	2139239.05	97.4	29.5	120.4	
Tb	159	No Gas	18192999.03	0.7	19495400.26	93.32	29.5	120.4	
Tb	159	He	6829110.80	2.7	7485871.83	91.23	29.5	120.4	
Bi	209	No Gas	7285093.64	1.2	8594079.3	84.77	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:42:26 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.457	ppb	4.9	157627.02	20	79.5	120.4	
11	B	6	No Gas	21.112	ppb	4.8	109335.66	20	79.5	120.4	
23	Na	45	He	102720.050	ppb	3.4	87224458.88	100000	79.5	120.4	
24	Mg	45	He	99944.418	ppb	4.2	44040521.57	100000	79.5	120.4	
27	Al	45	He	93532.228	ppb	4.4	14967307.28	100000	79.5	120.4	
28	Si	45	H2	491.610	ppb	1.1	121226.14	500	79.5	120.4	
39	K	45	He	101945.595	ppb	3.3	35362570.11	100000	79.5	120.4	
40	Ca	45	H2	102082.508	ppb	0.4	236756316.47	100000	79.5	120.4	
51	V	89	He	21.068	ppb	4.1	110925.66	20	79.5	120.4	
52	Cr	89	He	20.950	ppb	4.2	140165.68	20	79.5	120.4	
55	Mn	89	He	21.206	ppb	5.0	60746.70	20	79.5	120.4	
56	Fe	89	H2	98446.727	ppb	0.6	833942359.65	100000	79.5	120.4	
59	Co	89	He	20.647	ppb	3.9	224715.99	20	79.5	120.4	
60	Ni	89	He	19.823	ppb	3.3	58986.81	20	79.5	120.4	
63	Cu	89	He	19.442	ppb	3.7	157289.68	20	79.5	120.4	
66	Zn	89	He	19.496	ppb	2.7	17790.86	20	79.5	120.4	
75	As	89	He	21.056	ppb	4.8	12824.66	20	79.5	120.4	
78	Se	89	H2	20.512	ppb	1.0	6330.65	20	79.5	120.4	
88	Sr	89	He	20.798	ppb	3.7	64363.01	20	79.5	120.4	
95	Mo	89	He	2052.304	ppb	4.2	7558405.16	2000	79.5	120.4	
107	Ag	89	He	18.704	ppb	3.7	213396.85	20	79.5	120.4	
111	Cd	89	He	18.957	ppb	4.7	25787.31	20	79.5	120.4	
118	Sn	159	He	20.808	ppb	5.6	55325.15	20	79.5	120.4	
121	Sb	159	No Gas	20.750	ppb	4.3	367487.16	20	79.5	120.4	
137	Ba	159	No Gas	20.359	ppb	3.6	139583.38	20	79.5	120.4	
182	W	159	No Gas	19.990	ppb	4.7	266899.18	20	79.5	120.4	
205	Tl	209	No Gas	21.991	ppb	3.0	480577.31	20	79.5	120.4	
208	Pb	209	No Gas	21.238	ppb	2.7	662647.67	20	79.5	120.4	
232	Th	209	No Gas	21.971	ppb	4.2	655866.62	20	79.5	120.4	
238	U	209	No Gas	21.827	ppb	3.1	628248.75	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8777882.26	2.4	9181465.1	95.6	29.5	120.4	
Sc	45	No Gas	16640448.61	1.5	16426983.07	101.3	29.5	120.4	
Sc	45	H2	1905073.61	1.8	1932518.05	98.58	29.5	120.4	
Sc	45	He	467163.76	3.3	478214.17	97.69	29.5	120.4	
Ge	72	No Gas	2689654.85	2.1	2769440.33	97.12	29.5	120.4	
Ge	72	H2	486743.56	1.6	546905.92	89	29.5	120.4	
Ge	72	He	258915.00	1.4	272551.69	95	29.5	120.4	
Y	89	H2	9456026.53	1.8	9834260.27	96.15	29.5	120.4	
Y	89	He	2058755.64	2.9	2139239.05	96.24	29.5	120.4	
Tb	159	No Gas	17933413.90	1.8	19495400.26	91.99	29.5	120.4	
Tb	159	He	6681026.85	3.5	7485871.83	89.25	29.5	120.4	
Bi	209	No Gas	7038568.69	1.2	8594079.3	81.9	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:45:16 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	97.483	ppb	11.1	801293.64	100	97.48	89.5	110.4	
11	B	6	No Gas	442.165	ppb	11.6	2424100.90	500	88.43	89.5	110.4	> +/- 10%
51	V	89	He	1032.664	ppb	1.4	5462282.14	1000	103.27	89.5	110.4	
52	Cr	89	He	2040.402	ppb	1.1	13676419.93	2000	102.02	89.5	110.4	
55	Mn	89	He	2020.636	ppb	0.8	5809802.18	2000	101.03	89.5	110.4	
59	Co	89	He	1046.304	ppb	1.3	11458430.80	1000	104.63	89.5	110.4	
60	Ni	89	He	1051.936	ppb	1.6	3143196.48	1000	105.19	89.5	110.4	
63	Cu	89	He	2016.400	ppb	0.9	16366038.92	2000	100.82	89.5	110.4	
66	Zn	89	He	1979.746	ppb	0.9	1786957.98	2000	98.99	89.5	110.4	
75	As	89	He	1016.710	ppb	1.1	622723.47	1000	101.67	89.5	110.4	
78	Se	89	H2	987.247	ppb	0.9	303924.37	1000	98.72	89.5	110.4	
88	Sr	89	He	1928.652	ppb	1.2	6004029.57	2000	96.43	89.5	110.4	
95	Mo	89	He	1024.229	ppb	1.0	3796328.31	1000	102.42	89.5	110.4	
107	Ag	89	He	109.198	ppb	1.5	1253586.83	100	109.2	89.5	110.4	
111	Cd	89	He	1001.694	ppb	1.5	1371401.89	1000	100.17	89.5	110.4	
118	Sn	159	He	988.433	ppb	0.7	2773370.10	1000	98.84	89.5	110.4	
121	Sb	159	No Gas	947.890	ppb	13.2	18347783.18	1000	94.79	89.5	110.4	
137	Ba	159	No Gas	1827.485	ppb	13.0	13693419.71	2000	91.37	89.5	110.4	
182	W	159	No Gas	886.928	ppb	13.8	12942028.14	1000	88.69	89.5	110.4	> +/- 10%
205	Tl	209	No Gas	967.256	ppb	12.2	25335776.34	1000	96.73	89.5	110.4	
208	Pb	209	No Gas	1840.186	ppb	11.7	68824641.18	2000	92.01	89.5	110.4	
232	Th	209	No Gas	919.156	ppb	11.2	32907672.97	1000	91.92	89.5	110.4	
238	U	209	No Gas	895.892	ppb	11.3	30930641.43	1000	89.59	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9402622.39	6.6	9181465.1	102.41	29.5	120.4	
Sc	45	No Gas	17442290.22	7.9	16426983.07	106.18	29.5	120.4	
Ge	72	No Gas	2873012.60	7.0	2769440.33	103.74	29.5	120.4	
Tb	159	No Gas	19751359.15	8.9	19495400.26	101.31	29.5	120.4	
Bi	209	No Gas	8487174.48	7.3	8594079.3	98.76	29.5	120.4	
Sc	45	H2	1855270.61	1.2	1932518.05	96	29.5	120.4	
Ge	72	H2	494049.35	1.3	546905.92	90.34	29.5	120.4	
Y	89	H2	9435035.02	1.6	9834260.27	95.94	29.5	120.4	
Sc	45	He	469683.09	0.9	478214.17	98.22	29.5	120.4	
Ge	72	He	267476.21	1.1	272551.69	98.14	29.5	120.4	
Y	89	He	2070482.78	1.0	2139239.05	96.79	29.5	120.4	
Tb	159	He	7081358.02	1.3	7485871.83	94.6	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 3:47:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.271	ppb	33.4	2006.94	100	
11	B	6	No Gas	8.224	ppb	8.9	41146.23	1000	
23	Na	45	He	196200.325	ppb	0.6	176532214.33	200000	
24	Mg	45	He	191009.434	ppb	1.0	89212377.56	200000	
27	Al	45	He	184957.778	ppb	0.6	31373724.81	200000	
28	Si	45	H2	8930.241	ppb	1.1	2199320.54	10000	
39	K	45	He	198965.172	ppb	0.8	73129173.32	200000	
40	Ca	45	H2	201603.389	ppb	1.1	468843828.57	200000	>LDR
51	V	89	He	0.179	ppb	33.7	1172.33	1000	
52	Cr	89	He	1.470	ppb	8.5	10817.56	2000	
55	Mn	89	He	7.694	ppb	2.7	22987.23	2000	
56	Fe	89	H2	95803.486	ppb	0.2	805535627.25	100000	
59	Co	89	He	0.612	ppb	13.2	6935.61	1000	
60	Ni	89	He	1.982	ppb	4.1	6226.06	1000	
63	Cu	89	He	1.115	ppb	9.2	9822.67	2000	
66	Zn	89	He	1.739	ppb	9.5	1931.32	2000	
75	As	89	He	0.292	ppb	19.2	196.69	1000	
78	Se	89	H2	0.436	ppb	5.7	134.82	1000	
88	Sr	89	He	1.173	ppb	11.7	3782.88	2000	
95	Mo	89	He	1.178	ppb	16.0	4500.94	1000	
107	Ag	89	He	0.111	ppb	16.0	1343.46	100	
111	Cd	89	He	0.129	ppb	44.2	182.23	1000	
118	Sn	159	He	1.228	ppb	2.5	3557.29	1000	
121	Sb	159	No Gas	2.204	ppb	23.7	37731.52	1000	
137	Ba	159	No Gas	3.972	ppb	21.9	26279.74	2000	
182	W	159	No Gas	3.259	ppb	19.2	42133.70	1000	
205	Tl	209	No Gas	1.942	ppb	18.8	40500.69	1000	
208	Pb	209	No Gas	3.622	ppb	20.2	107869.77	2000	
232	Th	209	No Gas	4.384	ppb	39.2	127287.83	1000	
238	U	209	No Gas	3.251	ppb	36.7	90580.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8376274.47	5.1	9181465.1	91.23	29.5	120.4	
Sc	45	No Gas	15851674.76	8.5	16426983.07	96.5	29.5	120.4	
Sc	45	H2	1910515.12	2.9	1932518.05	98.86	29.5	120.4	
Sc	45	He	494797.36	2.0	478214.17	103.47	29.5	120.4	
Ge	72	No Gas	2504828.15	5.3	2769440.33	90.45	29.5	120.4	
Ge	72	H2	479788.73	1.8	546905.92	87.73	29.5	120.4	
Ge	72	He	265555.33	1.5	272551.69	97.43	29.5	120.4	
Y	89	H2	9384961.61	2.4	9834260.27	95.43	29.5	120.4	
Y	89	He	2134610.44	1.7	2139239.05	99.78	29.5	120.4	
Tb	159	No Gas	17361785.02	9.0	19495400.26	89.06	29.5	120.4	
Tb	159	He	6664527.89	0.6	7485871.83	89.03	29.5	120.4	
Bi	209	No Gas	6740331.65	7.9	8594079.3	78.43	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 3:50:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	12.2	82.22	100	
11	B	6	No Gas	0.964	ppb	1.7	6431.65	1000	
23	Na	45	He	69.489	ppb	11.1	104123.24	200000	
24	Mg	45	He	32.895	ppb	12.6	15738.75	200000	
27	Al	45	He	28.990	ppb	12.3	5124.45	200000	
28	Si	45	H2	1.827	ppb	10.3	1021.17	10000	
39	K	45	He	62.521	ppb	13.7	46534.76	200000	
40	Ca	45	H2	39.447	ppb	5.2	100986.02	200000	
51	V	89	He	0.030	ppb	7.8	370.02	1000	
52	Cr	89	He	0.073	ppb	11.5	1199.17	2000	
55	Mn	89	He	0.117	ppb	7.5	539.25	2000	
56	Fe	89	H2	23.397	ppb	3.9	214450.92	100000	
59	Co	89	He	0.035	ppb	5.6	435.59	1000	
60	Ni	89	He	0.013	ppb	73.3	165.56	1000	
63	Cu	89	He	0.169	ppb	5.9	1962.43	2000	
66	Zn	89	He	0.073	ppb	42.8	392.24	2000	
75	As	89	He	0.049	ppb	21.8	44.34	1000	
78	Se	89	H2	0.086	ppb	17.3	29.50	1000	
88	Sr	89	He	0.064	ppb	27.6	233.34	2000	
95	Mo	89	He	0.296	ppb	7.9	1166.76	1000	
107	Ag	89	He	0.007	ppb	22.4	116.67	100	
111	Cd	89	He	0.040	ppb	16.5	58.52	1000	
118	Sn	159	He	0.318	ppb	14.2	1240.10	1000	
121	Sb	159	No Gas	0.070	ppb	5.4	1431.67	1000	
137	Ba	159	No Gas	0.088	ppb	9.5	700.80	2000	
182	W	159	No Gas	0.180	ppb	9.9	2549.77	1000	
205	Tl	209	No Gas	0.066	ppb	13.0	1795.47	1000	
208	Pb	209	No Gas	0.111	ppb	7.9	4238.38	2000	
232	Th	209	No Gas	0.068	ppb	10.2	2503.07	1000	
238	U	209	No Gas	0.052	ppb	5.7	1715.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9710305.07	2.5	9181465.1	105.76	29.5	120.4	
Sc	45	No Gas	17789772.69	1.6	16426983.07	108.3	29.5	120.4	
Sc	45	H2	1996515.18	1.5	1932518.05	103.31	29.5	120.4	
Sc	45	He	504571.55	1.0	478214.17	105.51	29.5	120.4	
Ge	72	No Gas	2926374.01	2.8	2769440.33	105.67	29.5	120.4	
Ge	72	H2	532661.74	0.2	546905.92	97.4	29.5	120.4	
Ge	72	He	283586.29	0.3	272551.69	104.05	29.5	120.4	
Y	89	H2	10021077.18	0.3	9834260.27	101.9	29.5	120.4	
Y	89	He	2184463.89	0.4	2139239.05	102.11	29.5	120.4	
Tb	159	No Gas	18875651.94	2.0	19495400.26	96.82	29.5	120.4	
Tb	159	He	7157781.01	0.6	7485871.83	95.62	29.5	120.4	
Bi	209	No Gas	7991813.98	2.8	8594079.3	92.99	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:53:25 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.006	ppb	13.9	53.34	100	
11	B	6	No Gas	0.528	ppb	3.4	3998.47	1000	
23	Na	45	He	40.932	ppb	71.8	78576.10	200000	
24	Mg	45	He	27.084	ppb	113.1	13070.23	200000	
27	Al	45	He	23.574	ppb	113.5	4219.61	200000	
28	Si	45	H2	0.411	ppb	19.5	660.75	10000	
39	K	45	He	35.900	ppb	84.7	36862.45	200000	
40	Ca	45	H2	18.388	ppb	25.5	49986.17	200000	
51	V	89	He	0.066	ppb	135.3	578.99	1000	
52	Cr	89	He	0.124	ppb	136.8	1572.23	2000	
55	Mn	89	He	0.165	ppb	111.5	691.31	2000	
56	Fe	89	H2	11.084	ppb	26.3	103805.43	100000	
59	Co	89	He	0.068	ppb	129.0	829.30	1000	
60	Ni	89	He	0.046	ppb	208.1	272.27	1000	
63	Cu	89	He	0.194	ppb	95.2	2197.60	2000	
66	Zn	89	He	0.129	ppb	130.2	448.92	2000	
75	As	89	He	0.075	ppb	130.9	61.67	1000	
78	Se	89	H2	0.055	ppb	11.3	19.50	1000	
88	Sr	89	He	0.129	ppb	130.3	450.12	2000	
95	Mo	89	He	0.310	ppb	81.9	1230.44	1000	
107	Ag	89	He	0.008	ppb	112.3	133.34	100	
111	Cd	89	He	0.064	ppb	140.9	94.08	1000	
118	Sn	159	He	0.206	ppb	32.9	935.67	1000	
121	Sb	159	No Gas	0.034	ppb	1.1	794.24	1000	
137	Ba	159	No Gas	0.036	ppb	14.3	337.05	2000	
182	W	159	No Gas	0.084	ppb	15.3	1244.79	1000	
205	Tl	209	No Gas	0.027	ppb	5.3	857.67	1000	
208	Pb	209	No Gas	0.048	ppb	4.4	2092.42	2000	
232	Th	209	No Gas	0.029	ppb	11.6	1221.44	1000	
238	U	209	No Gas	0.020	ppb	25.6	680.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9831009.72	2.4	9181465.1	107.07	29.5	120.4	
Sc	45	No Gas	17931291.29	3.4	16426983.07	109.16	29.5	120.4	
Sc	45	H2	2007300.77	0.9	1932518.05	103.87	29.5	120.4	
Sc	45	He	508719.98	1.1	478214.17	106.38	29.5	120.4	
Ge	72	No Gas	2950262.45	4.1	2769440.33	106.53	29.5	120.4	
Ge	72	H2	537723.49	1.6	546905.92	98.32	29.5	120.4	
Ge	72	He	284994.54	0.9	272551.69	104.57	29.5	120.4	
Y	89	H2	10033344.55	1.4	9834260.27	102.02	29.5	120.4	
Y	89	He	2204337.81	0.8	2139239.05	103.04	29.5	120.4	
Tb	159	No Gas	19416895.27	3.0	19495400.26	99.6	29.5	120.4	
Tb	159	He	7242136.91	1.1	7485871.83	96.74	29.5	120.4	
Bi	209	No Gas	8243367.30	3.6	8594079.3	95.92	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:56:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.639	ppb	5.4	208045.46	25	98.56	89.8	110.2	
11	B	6	No Gas	24.956	ppb	6.1	141441.41	25	99.82	89.8	110.2	
23	Na	45	He	5144.622	ppb	1.1	4741875.46	5000	102.89	89.8	110.2	
24	Mg	45	He	5074.426	ppb	1.0	2408021.79	5000	101.49	89.8	110.2	
27	Al	45	He	499.942	ppb	1.4	86265.08	500	99.99	89.8	110.2	
28	Si	45	H2	483.128	ppb	1.2	123423.56	500	96.63	89.8	110.2	
39	K	45	He	5051.177	ppb	1.1	1908412.78	5000	101.02	89.8	110.2	
40	Ca	45	H2	5008.508	ppb	0.4	12038017.18	5000	100.17	89.8	110.2	
51	V	89	He	25.644	ppb	0.5	143753.94	25	102.58	89.8	110.2	
52	Cr	89	He	25.869	ppb	0.4	184178.68	25	103.48	89.8	110.2	
55	Mn	89	He	25.713	ppb	1.0	78420.84	25	102.85	89.8	110.2	
56	Fe	89	H2	5023.164	ppb	1.7	44610619.05	5000	100.46	89.8	110.2	
59	Co	89	He	25.679	ppb	0.9	297648.57	25	102.72	89.8	110.2	
60	Ni	89	He	25.915	ppb	1.3	82071.37	25	103.66	89.8	110.2	
63	Cu	89	He	25.946	ppb	0.7	223369.75	25	103.78	89.8	110.2	
66	Zn	89	He	25.391	ppb	1.6	24573.42	25	101.56	89.8	110.2	
75	As	89	He	25.619	ppb	1.6	16618.06	25	102.48	89.8	110.2	
78	Se	89	H2	25.134	ppb	1.6	8131.17	25	100.54	89.8	110.2	
88	Sr	89	He	24.354	ppb	1.5	80259.42	25	97.42	89.8	110.2	
95	Mo	89	He	25.175	ppb	1.1	98757.50	25	100.7	89.8	110.2	
107	Ag	89	He	25.211	ppb	0.6	306322.49	25	100.84	89.8	110.2	
111	Cd	89	He	24.832	ppb	1.7	35979.59	25	99.33	89.8	110.2	
118	Sn	159	He	25.379	ppb	2.0	73431.38	25	101.52	89.8	110.2	
121	Sb	159	No Gas	25.834	ppb	6.2	486202.21	25	103.34	89.8	110.2	
137	Ba	159	No Gas	25.291	ppb	6.0	184249.24	25	101.16	89.8	110.2	
182	W	159	No Gas	23.623	ppb	4.9	335287.78	25	94.49	89.8	110.2	
205	Tl	209	No Gas	25.860	ppb	4.5	650738.17	25	103.44	89.8	110.2	
208	Pb	209	No Gas	25.178	ppb	4.4	904556.17	25	100.71	89.8	110.2	
232	Th	209	No Gas	24.999	ppb	4.9	859294.92	25	100	89.8	110.2	
238	U	209	No Gas	24.825	ppb	4.8	822758.22	25	99.3	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9620628.21	2.6	9181465.1	104.78	29.5	120.4	
Sc	45	No Gas	17595530.95	2.9	16426983.07	107.11	29.5	120.4	
Sc	45	H2	1973441.84	1.2	1932518.05	102.12	29.5	120.4	
Sc	45	He	502669.53	0.8	478214.17	105.11	29.5	120.4	
Ge	72	No Gas	2907072.75	2.7	2769440.33	104.97	29.5	120.4	
Ge	72	H2	531235.63	0.5	546905.92	97.13	29.5	120.4	
Ge	72	He	282963.92	0.4	272551.69	103.82	29.5	120.4	
Y	89	H2	9912556.06	0.7	9834260.27	100.8	29.5	120.4	
Y	89	He	2191040.70	0.5	2139239.05	102.42	29.5	120.4	
Tb	159	No Gas	19073274.30	3.1	19495400.26	97.83	29.5	120.4	
Tb	159	He	7269509.62	0.9	7485871.83	97.11	29.5	120.4	
Bi	209	No Gas	8108997.78	2.5	8594079.3	94.36	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:58:47 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.041	ppb	36.2	347.79	0.2	
11	B	6	No Gas	0.601	ppb	8.4	4323.01	4	
23	Na	45	He	12.196	ppb	18.5	51177.50	200	
24	Mg	45	He	2.834	ppb	11.7	1417.96	20	
27	Al	45	He	1.985	ppb	20.6	452.24	20	
28	Si	45	H2	0.136	ppb	461.1	584.00	100	
39	K	45	He	9.083	ppb	27.6	26312.40	200	
40	Ca	45	H2	2.871	ppb	9.7	12053.30	20	
51	V	89	He	0.003	ppb	55.8	222.23	1	
52	Cr	89	He	0.023	ppb	10.7	848.54	1	
55	Mn	89	He	0.037	ppb	47.3	297.28	0.4	
56	Fe	89	H2	2.853	ppb	7.7	29845.15	20	
59	Co	89	He	0.008	ppb	11.7	124.45	0.2	
60	Ni	89	He	-0.011	ppb	N/A	91.12	0.4	
63	Cu	89	He	0.055	ppb	14.1	984.52	0.6	
66	Zn	89	He	-0.041	ppb	N/A	283.35	2	
75	As	89	He	0.013	ppb	69.9	21.33	1	
78	Se	89	H2	0.036	ppb	2.2	13.17	1	
88	Sr	89	He	0.008	ppb	51.5	48.89	1	
95	Mo	89	He	0.129	ppb	3.3	512.25	1	
107	Ag	89	He	0.006	ppb	55.6	114.45	0.2	
111	Cd	89	He	0.007	ppb	42.2	10.74	0.2	
118	Sn	159	He	0.141	ppb	16.2	747.83	1	
121	Sb	159	No Gas	0.105	ppb	29.6	2092.51	0.2	Failed DoD
137	Ba	159	No Gas	0.154	ppb	32.4	1181.38	0.4	
182	W	159	No Gas	0.168	ppb	22.2	2392.93	1	
205	Tl	209	No Gas	0.105	ppb	30.6	2840.20	0.2	Failed DoD
208	Pb	209	No Gas	0.165	ppb	31.9	6327.76	0.2	Failed DoD
232	Th	209	No Gas	0.146	ppb	31.8	5273.76	1	
238	U	209	No Gas	0.105	ppb	31.1	3544.56	0.2	Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9617411.55	1.0	9181465.1	104.75	29.5	120.4	
Sc	45	No Gas	17110671.95	2.0	16426983.07	104.16	29.5	120.4	
Sc	45	H2	1994251.08	1.5	1932518.05	103.19	29.5	120.4	
Sc	45	He	500412.44	0.6	478214.17	104.64	29.5	120.4	
Ge	72	No Gas	2844715.97	0.6	2769440.33	102.72	29.5	120.4	
Ge	72	H2	529099.49	0.8	546905.92	96.74	29.5	120.4	
Ge	72	He	282253.65	0.6	272551.69	103.56	29.5	120.4	
Y	89	H2	9961109.51	0.3	9834260.27	101.29	29.5	120.4	
Y	89	He	2182837.12	0.1	2139239.05	102.04	29.5	120.4	
Tb	159	No Gas	18986558.47	1.6	19495400.26	97.39	29.5	120.4	
Tb	159	He	7240455.24	0.8	7485871.83	96.72	29.5	120.4	
Bi	209	No Gas	8200367.89	1.1	8594079.3	95.42	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG29IMS2
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:01:31 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.028	ppb	48.3	50.00	0.5	
B	11	6	No Gas	3.652	ppb	5.0	5026.60	10	
Na	23	45	He	114.838	ppb	53.5	60146.95	500	
Mg	24	45	He	52.106	ppb	117.2	4930.03	50	PB 6020 Fails DoD
Al	27	45	He	44.514	ppb	110.2	1615.58	50	
Si	28	45	H2	12.798	ppb	7.0	1174.69	250	
K	39	45	He	103.084	ppb	66.4	30182.94	500	
Ca	40	45	H2	33.561	ppb	1.8	20780.28	50	
V	51	89	He	0.264	ppb	27.0	488.92	2.5	
Cr	52	89	He	0.845	ppb	10.0	1844.47	2.5	
Mn	55	89	He	0.651	ppb	23.9	569.91	1	
Fe	56	89	H2	16.633	ppb	3.7	33286.81	50	
Co	59	89	He	0.054	ppb	125.3	157.80	0.5	
Ni	60	89	He	0.431	ppb	16.5	388.91	1	
Cu	63	89	He	0.945	ppb	14.1	2094.70	1.5	
Zn	66	89	He	1.845	ppb	13.8	661.15	5	
As	75	89	He	0.121	ppb	88.3	28.00	2.5	
Se	78	89	H2	0.131	ppb	34.9	9.83	2.5	
Sr	88	89	He	0.123	ppb	112.7	101.12	2.5	
Mo	95	89	He	0.490	ppb	29.0	383.36	2.5	
Ag	107	89	He	0.039	ppb	72.9	128.90	0.5	
Cd	111	89	He	0.043	ppb	139.4	12.96	0.5	
Sn	118	159	He	41.698	ppb	1.4	24150.11	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.082	ppb	10.6	443.84	0.5	
Ba	137	159	No Gas	0.154	ppb	21.2	297.00	1	
W	182	159	No Gas	0.255	ppb	16.0	757.54	2.5	
Tl	205	209	No Gas	0.057	ppb	45.1	473.87	0.5	
Pb	208	209	No Gas	0.153	ppb	5.8	1448.32	0.5	
Th	232	209	No Gas	0.214	ppb	9.0	1718.73	2.5	
U	238	209	No Gas	0.027	ppb	40.9	190.22	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9567896.31	2.0	9181465.1	104.21	29.5	120.4	
Sc	45	No Gas	17274069.92	1.4	16426983.07	105.16	29.5	120.4	
Sc	45	H2	1937981.27	0.5	1932518.05	100.28	29.5	120.4	
Sc	45	He	493648.46	0.7	478214.17	103.23	29.5	120.4	
Ge	72	No Gas	2832868.18	1.3	2769440.33	102.29	29.5	120.4	
Ge	72	H2	513053.61	0.9	546905.92	93.81	29.5	120.4	
Ge	72	He	276499.30	0.4	272551.69	101.45	29.5	120.4	
Y	89	H2	9732464.52	1.0	9834260.27	98.96	29.5	120.4	
Y	89	He	2143933.61	0.4	2139239.05	100.22	29.5	120.4	
Tb	159	No Gas	19301290.27	2.3	19495400.26	99	29.5	120.4	
Tb	159	He	7205492.95	0.4	7485871.83	96.25	29.5	120.4	
Bi	209	No Gas	8299367.20	2.1	8594079.3	96.57	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG29IMS2
File Name	020LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:04:10 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.433	ppb	2.4	87219.67	50	20.57	79.5	120.4	
B	11	6	No Gas	503.423	ppb	3.1	570161.01	500	20.14	79.5	120.4	
Na	23	45	He	8130.470	ppb	0.5	1503505.22	7500	21.68	79.5	120.4	
Mg	24	45	He	5370.564	ppb	0.7	502134.65	5000	21.48	79.5	120.4	
Al	27	45	He	1917.147	ppb	2.8	65193.86	2000	19.17	79.5	120.4	
Si	28	45	H2	962.791	ppb	0.5	48947.77	1000	19.26	79.5	120.4	
K	39	45	He	10782.457	ppb	0.5	815600.35	10000	21.56	79.5	120.4	
Ca	40	45	H2	2576.547	ppb	0.5	1228603.71	2500	20.61	79.5	120.4	
V	51	89	He	528.785	ppb	0.8	584740.41	500	21.15	79.5	120.4	
Cr	52	89	He	215.107	ppb	1.7	301962.33	200	21.51	79.5	120.4	
Mn	55	89	He	531.973	ppb	0.8	319834.44	500	21.28	79.5	120.4	
Fe	56	89	H2	1049.983	ppb	0.4	1846396.71	1000	21	79.5	120.4	
Co	59	89	He	538.009	ppb	0.8	1231397.33	500	21.52	79.5	120.4	
Ni	60	89	He	537.615	ppb	1.1	335831.71	500	21.5	79.5	120.4	
Cu	63	89	He	266.446	ppb	1.6	452420.66	250	21.32	79.5	120.4	
Zn	66	89	He	509.164	ppb	1.6	96344.66	500	20.37	79.5	120.4	
As	75	89	He	106.566	ppb	1.3	13653.52	100	21.31	79.5	120.4	
Se	78	89	H2	100.664	ppb	0.5	6433.69	100	20.13	79.5	120.4	
Sr	88	89	He	505.868	ppb	0.2	329162.17	500	20.23	79.5	120.4	
Mo	95	89	He	106.548	ppb	0.6	82543.38	100	21.31	79.5	120.4	
Ag	107	89	He	53.058	ppb	1.6	127322.45	50	21.22	79.5	120.4	
Cd	111	89	He	259.400	ppb	0.6	74224.47	250	20.75	79.5	120.4	
Sn	118	159	He	558.110	ppb	0.1	322963.57	500	22.32	79.5	120.4	
Sb	121	159	No Gas	108.602	ppb	2.0	416119.77	100	21.72	79.5	120.4	
Ba	137	159	No Gas	2088.637	ppb	2.4	3096630.64	2000	20.89	79.5	120.4	
W	182	159	No Gas	103.242	ppb	2.7	298228.43	100	20.65	79.5	120.4	
Tl	205	209	No Gas	112.581	ppb	3.6	576244.17	100	22.52	79.5	120.4	
[Pb]	206	209	No Gas	109.817	ppb	2.8	202398.70	100	21.96	79.5	120.4	
[Pb]	207	209	No Gas	110.004	ppb	3.4	174886.17	100	22	79.5	120.4	
Pb	208	209	No Gas	108.848	ppb	3.3	795465.52	100	21.77	79.5	120.4	
Th	232	209	No Gas	109.166	ppb	2.3	763464.96	100	21.83	79.5	120.4	
U	238	209	No Gas	109.616	ppb	2.1	739149.55	100	21.92	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9654257.98	1.7	9181465.1	105.15	29.5	120.4	
Sc	45	No Gas	17249278.88	1.8	16426983.07	105.01	29.5	120.4	
Sc	45	H2	1950434.57	0.3	1932518.05	100.93	29.5	120.4	
Sc	45	He	495142.09	1.1	478214.17	103.54	29.5	120.4	
Ge	72	No Gas	2846271.72	2.3	2769440.33	102.77	29.5	120.4	
Ge	72	H2	510966.08	0.8	546905.92	93.43	29.5	120.4	
Ge	72	He	277505.85	1.1	272551.69	101.82	29.5	120.4	
Y	89	H2	9791087.62	0.7	9834260.27	99.56	29.5	120.4	
Y	89	He	2163554.00	1.5	2139239.05	101.14	29.5	120.4	
Tb	159	No Gas	19394163.32	1.5	19495400.26	99.48	29.5	120.4	
Tb	159	He	7294945.10	0.4	7485871.83	97.45	29.5	120.4	
Bi	209	No Gas	8245195.42	2.2	8594079.3	95.94	29.5	120.4	

Sample Report

Sample Name SN5107-028R

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:06:53 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.084	ppb	20.5	141.12	100	
11	B	6	No Gas	13.797	ppb	3.3	15948.22	1000	
23	Na	45	He	95.868	ppb	7.7	56185.35	200000	
24	Mg	45	He	83.589	ppb	1.9	7789.31	200000	
27	Al	45	He	896.527	ppb	1.0	30153.72	200000	
28	Si	45	H2	748.456	ppb	2.5	37779.36	10000	
39	K	45	He	102.059	ppb	9.6	29809.33	200000	
40	Ca	45	H2	300.361	ppb	0.7	146101.46	200000	
51	V	89	He	1.497	ppb	1.0	1842.41	1000	
52	Cr	89	He	3.047	ppb	3.9	4909.32	2000	
55	Mn	89	He	3.928	ppb	2.8	2524.44	2000	
56	Fe	89	H2	330.413	ppb	1.7	577155.05	100000	
59	Co	89	He	0.228	ppb	50.4	553.41	1000	
60	Ni	89	He	0.860	ppb	16.9	655.60	1000	
63	Cu	89	He	1.275	ppb	4.1	2653.68	2000	
66	Zn	89	He	2.440	ppb	3.8	773.38	2000	
75	As	89	He	0.310	ppb	24.7	52.01	1000	
78	Se	89	H2	0.185	ppb	12.3	13.17	1000	
88	Sr	89	He	31.076	ppb	2.0	20086.36	2000	
95	Mo	89	He	0.649	ppb	16.2	506.70	1000	
107	Ag	89	He	0.033	ppb	17.5	114.45	100	
111	Cd	89	He	0.102	ppb	34.4	29.63	1000	
118	Sn	159	He	52.293	ppb	1.1	30312.75	1000	
121	Sb	159	No Gas	0.153	ppb	9.2	700.81	1000	
137	Ba	159	No Gas	11.836	ppb	3.0	17183.73	2000	
182	W	159	No Gas	0.266	ppb	8.3	774.23	1000	
205	Tl	209	No Gas	0.082	ppb	24.1	584.00	1000	
208	Pb	209	No Gas	5.402	ppb	2.7	39100.98	2000	
232	Th	209	No Gas	1.035	ppb	4.4	7320.35	1000	
238	U	209	No Gas	0.332	ppb	9.6	2202.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9305851.25	1.3	9181465.1	101.35	29.5	120.4	
Sc	45	No Gas	16801888.59	2.0	16426983.07	102.28	29.5	120.4	
Sc	45	H2	1930371.80	0.5	1932518.05	99.89	29.5	120.4	
Sc	45	He	488706.43	0.9	478214.17	102.19	29.5	120.4	
Ge	72	No Gas	2781383.32	1.8	2769440.33	100.43	29.5	120.4	
Ge	72	H2	510420.87	1.2	546905.92	93.33	29.5	120.4	
Ge	72	He	275364.76	0.7	272551.69	101.03	29.5	120.4	
Y	89	H2	9678234.56	1.5	9834260.27	98.41	29.5	120.4	
Y	89	He	2146853.77	0.3	2139239.05	100.36	29.5	120.4	
Tb	159	No Gas	18915102.91	1.3	19495400.26	97.02	29.5	120.4	
Tb	159	He	7232918.58	0.4	7485871.83	96.62	29.5	120.4	
Bi	209	No Gas	8099179.52	0.6	8594079.3	94.24	29.5	120.4	

Sample Report

Sample Name SN5107-029R

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:09:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.049	ppb	10.4	85.56	100	
11	B	6	No Gas	6.508	ppb	2.6	8251.51	1000	
23	Na	45	He	77.006	ppb	5.1	52838.59	200000	
24	Mg	45	He	81.799	ppb	1.1	7627.01	200000	
27	Al	45	He	940.776	ppb	1.1	31638.16	200000	
28	Si	45	H2	739.148	ppb	1.2	37223.50	10000	
39	K	45	He	80.973	ppb	6.7	28281.77	200000	
40	Ca	45	H2	209.501	ppb	0.3	103138.94	200000	
51	V	89	He	1.245	ppb	3.7	1564.59	1000	
52	Cr	89	He	2.482	ppb	2.3	4118.54	2000	
55	Mn	89	He	2.868	ppb	1.8	1890.45	2000	
56	Fe	89	H2	317.987	ppb	1.3	561060.32	100000	
59	Co	89	He	0.104	ppb	24.1	271.13	1000	
60	Ni	89	He	0.750	ppb	7.3	586.70	1000	
63	Cu	89	He	1.032	ppb	6.1	2241.37	2000	
66	Zn	89	He	2.634	ppb	3.1	808.94	2000	
75	As	89	He	0.246	ppb	23.1	44.00	1000	
78	Se	89	H2	0.141	ppb	28.5	10.50	1000	
88	Sr	89	He	24.335	ppb	1.6	15717.23	2000	
95	Mo	89	He	0.418	ppb	7.2	328.90	1000	
107	Ag	89	He	0.011	ppb	31.2	61.11	100	
111	Cd	89	He	0.027	ppb	65.5	8.52	1000	
118	Sn	159	He	41.902	ppb	1.0	24352.83	1000	
121	Sb	159	No Gas	0.059	ppb	17.7	363.75	1000	
137	Ba	159	No Gas	9.123	ppb	3.5	13775.89	2000	
182	W	159	No Gas	0.128	ppb	19.6	400.45	1000	
205	Tl	209	No Gas	0.023	ppb	68.2	300.34	1000	
208	Pb	209	No Gas	4.451	ppb	6.2	33645.26	2000	
232	Th	209	No Gas	0.704	ppb	5.6	5260.42	1000	
238	U	209	No Gas	0.222	ppb	8.4	1538.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9594716.25	3.1	9181465.1	104.5	29.5	120.4	
Sc	45	No Gas	17275743.05	3.5	16426983.07	105.17	29.5	120.4	
Sc	45	H2	1925627.89	0.7	1932518.05	99.64	29.5	120.4	
Sc	45	He	488794.28	1.0	478214.17	102.21	29.5	120.4	
Ge	72	No Gas	2880219.86	4.0	2769440.33	104	29.5	120.4	
Ge	72	H2	514497.70	0.8	546905.92	94.07	29.5	120.4	
Ge	72	He	275769.61	0.9	272551.69	101.18	29.5	120.4	
Y	89	H2	9772380.06	1.0	9834260.27	99.37	29.5	120.4	
Y	89	He	2144457.10	0.9	2139239.05	100.24	29.5	120.4	
Tb	159	No Gas	19661908.18	3.2	19495400.26	100.85	29.5	120.4	
Tb	159	He	7231081.49	0.4	7485871.83	96.6	29.5	120.4	
Bi	209	No Gas	8455573.82	3.5	8594079.3	98.39	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	023_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:12:12 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	33.3	28.89	0.5	
B	11	6	No Gas	5.957	ppb	4.4	7496.65	10	
Na	23	45	He	73.711	ppb	7.6	51539.76	500	
Mg	24	45	He	17.268	ppb	10.1	1649.10	50	
Al	27	45	He	9.037	ppb	11.9	406.69	50	
Si	28	45	H2	21.960	ppb	8.0	1595.20	250	
K	39	45	He	74.008	ppb	18.9	27392.12	500	
Ca	40	45	H2	40.282	ppb	3.8	23415.62	50	
V	51	89	He	0.271	ppb	2.0	492.25	2.5	
Cr	52	89	He	0.807	ppb	10.6	1773.13	2.5	
Mn	55	89	He	1.703	ppb	3.5	1183.17	1	PB 6020 Fails DoD
Fe	56	89	H2	15.288	ppb	3.0	30794.65	50	
Co	59	89	He	0.052	ppb	47.7	153.35	0.5	
Ni	60	89	He	0.998	ppb	11.7	732.27	1	
Cu	63	89	He	1.072	ppb	9.0	2283.60	1.5	
Zn	66	89	He	8.310	ppb	5.3	1849.08	5	PB 6020 Fails DoD
As	75	89	He	0.065	ppb	57.1	20.67	2.5	
Se	78	89	H2	0.077	ppb	33.2	6.33	2.5	
Sr	88	89	He	0.206	ppb	6.2	153.34	2.5	
Mo	95	89	He	0.189	ppb	25.3	151.12	2.5	
Ag	107	89	He	0.026	ppb	11.6	96.67	0.5	
Cd	111	89	He	0.028	ppb	81.6	8.52	0.5	
Sn	118	159	He	47.463	ppb	1.6	27569.07	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.045	ppb	34.0	307.01	0.5	
Ba	137	159	No Gas	0.230	ppb	29.1	410.47	1	
W	182	159	No Gas	0.086	ppb	3.8	276.98	2.5	
Tl	205	209	No Gas	0.009	ppb	80.0	230.26	0.5	
Pb	208	209	No Gas	0.582	ppb	10.4	4712.35	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.036	ppb	31.1	477.21	2.5	
U	238	209	No Gas	0.005	ppb	84.3	43.38	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9428463.55	2.8	9181465.1	102.69	29.5	120.4	
Sc	45	No Gas	17084970.62	2.1	16426983.07	104.01	29.5	120.4	
Sc	45	H2	1895112.27	1.6	1932518.05	98.06	29.5	120.4	
Sc	45	He	482146.66	1.3	478214.17	100.82	29.5	120.4	
Ge	72	No Gas	2837044.94	2.4	2769440.33	102.44	29.5	120.4	
Ge	72	H2	510189.07	1.5	546905.92	93.29	29.5	120.4	
Ge	72	He	272687.09	0.4	272551.69	100.05	29.5	120.4	
Y	89	H2	9685136.36	1.5	9834260.27	98.48	29.5	120.4	
Y	89	He	2120624.98	0.5	2139239.05	99.13	29.5	120.4	
Tb	159	No Gas	19448764.99	1.4	19495400.26	99.76	29.5	120.4	
Tb	159	He	7238989.41	0.1	7485871.83	96.7	29.5	120.4	
Bi	209	No Gas	8497408.05	2.4	8594079.3	98.88	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG07IMS1
File Name	024LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:14:49 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.997	ppb	7.1	87064.57	50	20.4	79.5	120.4	
B	11	6	No Gas	494.220	ppb	6.4	563710.92	500	19.77	79.5	120.4	
Na	23	45	He	7793.495	ppb	2.5	1417180.33	7500	20.78	79.5	120.4	
Mg	24	45	He	5534.496	ppb	2.8	508249.71	5000	22.14	79.5	120.4	
Al	27	45	He	2023.311	ppb	2.6	67578.41	2000	20.23	79.5	120.4	
Si	28	45	H2	956.517	ppb	1.4	47397.77	1000	19.13	79.5	120.4	
K	39	45	He	10854.427	ppb	1.9	806310.63	10000	21.71	79.5	120.4	
Ca	40	45	H2	2636.142	ppb	0.6	1225030.85	2500	21.09	79.5	120.4	
V	51	89	He	547.118	ppb	1.8	596189.58	500	21.88	79.5	120.4	
Cr	52	89	He	222.429	ppb	2.2	307689.41	200	22.24	79.5	120.4	
Mn	55	89	He	550.325	ppb	2.1	326029.14	500	22.01	79.5	120.4	
Fe	56	89	H2	1076.386	ppb	0.7	1872706.61	1000	21.53	79.5	120.4	
Co	59	89	He	553.656	ppb	2.0	1248747.98	500	22.15	79.5	120.4	
Ni	60	89	He	556.091	ppb	2.2	342312.11	500	22.24	79.5	120.4	
Cu	63	89	He	276.701	ppb	2.0	463002.93	250	22.14	79.5	120.4	
Zn	66	89	He	536.786	ppb	2.1	100079.30	500	21.47	79.5	120.4	
As	75	89	He	109.315	ppb	2.5	13800.67	100	21.86	79.5	120.4	
Se	78	89	H2	103.419	ppb	1.7	6539.74	100	20.68	79.5	120.4	
Sr	88	89	He	522.035	ppb	2.5	334698.30	500	20.88	79.5	120.4	
Mo	95	89	He	109.022	ppb	1.0	83232.28	100	21.8	79.5	120.4	
Ag	107	89	He	55.772	ppb	1.0	131899.10	50	22.31	79.5	120.4	
Cd	111	89	He	266.649	ppb	2.4	75183.31	250	21.33	79.5	120.4	
Sn	118	159	He	567.258	ppb	3.4	327769.66	500	22.69	79.5	120.4	
Sb	121	159	No Gas	107.857	ppb	4.4	418708.22	100	21.57	79.5	120.4	
Ba	137	159	No Gas	2072.377	ppb	4.6	3112825.79	2000	20.72	79.5	120.4	
W	182	159	No Gas	103.946	ppb	6.0	304141.88	100	20.79	79.5	120.4	
Tl	205	209	No Gas	110.897	ppb	4.4	582943.72	100	22.18	79.5	120.4	
[Pb]	206	209	No Gas	106.639	ppb	4.3	201813.88	100	21.33	79.5	120.4	
[Pb]	207	209	No Gas	107.573	ppb	4.9	175617.65	100	21.52	79.5	120.4	
Pb	208	209	No Gas	107.321	ppb	5.0	805291.83	100	21.46	79.5	120.4	
Th	232	209	No Gas	105.620	ppb	7.0	758121.34	100	21.12	79.5	120.4	
U	238	209	No Gas	105.926	ppb	5.8	733165.98	100	21.18	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9734352.34	3.8	9181465.1	106.02	29.5	120.4	
Sc	45	No Gas	17208203.22	3.4	16426983.07	104.76	29.5	120.4	
Sc	45	H2	1901019.36	0.5	1932518.05	98.37	29.5	120.4	
Sc	45	He	486415.03	1.2	478214.17	101.71	29.5	120.4	
Ge	72	No Gas	2867292.53	3.4	2769440.33	103.53	29.5	120.4	
Ge	72	H2	503657.67	0.5	546905.92	92.09	29.5	120.4	
Ge	72	He	273411.00	0.4	272551.69	100.32	29.5	120.4	
Y	89	H2	9687860.33	0.6	9834260.27	98.51	29.5	120.4	
Y	89	He	2132128.34	1.0	2139239.05	99.67	29.5	120.4	
Tb	159	No Gas	19660197.21	2.6	19495400.26	100.85	29.5	120.4	
Tb	159	He	7287502.74	2.0	7485871.83	97.35	29.5	120.4	
Bi	209	No Gas	8469574.59	2.6	8594079.3	98.55	29.5	120.4	

Sample Report

Sample Name SN5107-028

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:17:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.121	ppb	43.5	204.46	100	
11	B	6	No Gas	15.022	ppb	3.1	17621.31	1000	
23	Na	45	He	79.256	ppb	12.9	51814.05	200000	
24	Mg	45	He	93.289	ppb	3.2	8454.22	200000	
27	Al	45	He	1029.086	ppb	2.5	33676.19	200000	
28	Si	45	H2	711.491	ppb	1.1	35979.03	10000	
39	K	45	He	96.551	ppb	20.0	28624.09	200000	
40	Ca	45	H2	244.253	ppb	1.4	119840.40	200000	
51	V	89	He	2.496	ppb	4.5	2880.40	1000	
52	Cr	89	He	5.867	ppb	4.5	8654.41	2000	
55	Mn	89	He	9.066	ppb	3.5	5480.77	2000	
56	Fe	89	H2	549.884	ppb	0.6	971285.67	100000	
59	Co	89	He	0.218	ppb	20.3	520.05	1000	
60	Ni	89	He	0.890	ppb	2.4	661.15	1000	
63	Cu	89	He	1.669	ppb	5.1	3250.50	2000	
66	Zn	89	He	10.738	ppb	3.6	2281.38	2000	
75	As	89	He	0.567	ppb	14.7	83.01	1000	
78	Se	89	H2	0.239	ppb	16.5	16.83	1000	
88	Sr	89	He	29.345	ppb	2.5	18596.49	2000	
95	Mo	89	He	0.830	ppb	4.5	633.38	1000	
107	Ag	89	He	0.027	ppb	27.3	98.89	100	
111	Cd	89	He	0.061	ppb	21.5	17.78	1000	
118	Sn	159	He	43.127	ppb	2.3	24882.66	1000	
121	Sb	159	No Gas	0.227	ppb	39.3	1004.51	1000	
137	Ba	159	No Gas	15.555	ppb	12.9	23220.54	2000	
182	W	159	No Gas	0.302	ppb	32.9	901.06	1000	
205	Tl	209	No Gas	0.148	ppb	52.2	954.45	1000	
208	Pb	209	No Gas	11.129	ppb	2.5	83364.78	2000	
232	Th	209	No Gas	5.505	ppb	2.1	39526.47	1000	
238	U	209	No Gas	1.197	ppb	7.3	8245.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9484294.17	1.5	9181465.1	103.3	29.5	120.4	
Sc	45	No Gas	16884875.32	0.4	16426983.07	102.79	29.5	120.4	
Sc	45	H2	1932405.62	1.3	1932518.05	99.99	29.5	120.4	
Sc	45	He	475899.24	2.1	478214.17	99.52	29.5	120.4	
Ge	72	No Gas	2823933.50	1.0	2769440.33	101.97	29.5	120.4	
Ge	72	H2	510184.25	0.4	546905.92	93.29	29.5	120.4	
Ge	72	He	269899.23	1.9	272551.69	99.03	29.5	120.4	
Y	89	H2	9813832.45	0.6	9834260.27	99.79	29.5	120.4	
Y	89	He	2105496.03	2.0	2139239.05	98.42	29.5	120.4	
Tb	159	No Gas	19474851.65	0.6	19495400.26	99.89	29.5	120.4	
Tb	159	He	7183478.71	1.7	7485871.83	95.96	29.5	120.4	
Bi	209	No Gas	8418413.64	0.6	8594079.3	97.96	29.5	120.4	

Sample Report

Sample Name SN5107-029

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:20:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	30.0	102.23	100	
11	B	6	No Gas	10.791	ppb	3.5	12968.47	1000	
23	Na	45	He	134.285	ppb	3.4	63057.75	200000	
24	Mg	45	He	95.272	ppb	1.5	8874.58	200000	
27	Al	45	He	962.757	ppb	1.6	32394.34	200000	
28	Si	45	H2	774.647	ppb	1.3	38565.28	10000	
39	K	45	He	79.370	ppb	14.0	28180.02	200000	
40	Ca	45	H2	272.982	ppb	0.5	131488.76	200000	
51	V	89	He	2.016	ppb	4.1	2419.19	1000	
52	Cr	89	He	3.969	ppb	1.5	6209.59	2000	
55	Mn	89	He	8.571	ppb	1.0	5310.05	2000	
56	Fe	89	H2	431.284	ppb	1.0	752355.47	100000	
59	Co	89	He	0.206	ppb	10.6	504.49	1000	
60	Ni	89	He	1.027	ppb	14.2	761.16	1000	
63	Cu	89	He	3.644	ppb	0.8	6661.84	2000	
66	Zn	89	He	7.984	ppb	2.3	1816.85	2000	
75	As	89	He	0.253	ppb	10.0	45.01	1000	
78	Se	89	H2	0.143	ppb	11.4	10.50	1000	
88	Sr	89	He	23.739	ppb	0.9	15395.77	2000	
95	Mo	89	He	0.703	ppb	2.9	550.03	1000	
107	Ag	89	He	0.017	ppb	37.1	75.56	100	
111	Cd	89	He	0.043	ppb	5.3	12.96	1000	
118	Sn	159	He	43.395	ppb	1.4	25727.48	1000	
121	Sb	159	No Gas	0.077	ppb	35.0	433.82	1000	
137	Ba	159	No Gas	11.916	ppb	6.1	17995.58	2000	
182	W	159	No Gas	0.122	ppb	8.6	383.77	1000	
205	Tl	209	No Gas	0.023	ppb	46.6	303.68	1000	
208	Pb	209	No Gas	9.435	ppb	5.5	71442.52	2000	
232	Th	209	No Gas	1.485	ppb	7.7	10927.02	1000	
238	U	209	No Gas	0.338	ppb	10.5	2356.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9528809.73	3.6	9181465.1	103.78	29.5	120.4	
Sc	45	No Gas	17027267.71	1.9	16426983.07	103.65	29.5	120.4	
Sc	45	H2	1905081.98	1.3	1932518.05	98.58	29.5	120.4	
Sc	45	He	489104.95	1.2	478214.17	102.28	29.5	120.4	
Ge	72	No Gas	2832393.57	2.0	2769440.33	102.27	29.5	120.4	
Ge	72	H2	508942.04	2.8	546905.92	93.06	29.5	120.4	
Ge	72	He	274611.32	0.9	272551.69	100.76	29.5	120.4	
Y	89	H2	9681017.24	1.6	9834260.27	98.44	29.5	120.4	
Y	89	He	2153545.50	0.9	2139239.05	100.67	29.5	120.4	
Tb	159	No Gas	19692810.82	2.9	19495400.26	101.01	29.5	120.4	
Tb	159	He	7380731.07	1.1	7485871.83	98.6	29.5	120.4	
Bi	209	No Gas	8512774.45	3.2	8594079.3	99.05	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW2
File Name	027_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:22:47 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	38.6	27.78	0.5	
B	11	6	No Gas	4.129	ppb	0.5	5368.97	10	
Na	23	45	He	45.759	ppb	64.4	46497.53	500	
Mg	24	45	He	34.292	ppb	91.6	3198.57	50	
Al	27	45	He	27.128	ppb	94.2	1004.54	50	
Si	28	45	H2	23.707	ppb	9.0	1668.63	250	
K	39	45	He	45.542	ppb	56.1	25277.62	500	
Ca	40	45	H2	15.629	ppb	1.4	11954.40	50	
V	51	89	He	0.287	ppb	30.9	507.81	2.5	
Cr	52	89	He	0.318	ppb	53.4	1099.18	2.5	
Mn	55	89	He	0.577	ppb	27.6	518.58	1	
Fe	56	89	H2	5.138	ppb	2.6	13053.95	50	
Co	59	89	He	0.137	ppb	88.4	342.26	0.5	
Ni	60	89	He	0.187	ppb	71.6	235.57	1	
Cu	63	89	He	8.006	ppb	4.0	13760.59	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	71.199	ppb	0.6	13426.90	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.078	ppb	93.7	22.33	2.5	
Se	78	89	H2	0.056	ppb	64.5	5.00	2.5	
Sr	88	89	He	0.202	ppb	117.3	151.12	2.5	
Mo	95	89	He	0.267	ppb	80.7	210.01	2.5	
Ag	107	89	He	0.034	ppb	27.5	114.45	0.5	
Cd	111	89	He	0.090	ppb	115.0	25.92	0.5	
Sn	118	159	He	0.826	ppb	24.8	818.94	2.5	
Sb	121	159	No Gas	0.036	ppb	10.6	263.63	0.5	
Ba	137	159	No Gas	0.089	ppb	32.6	196.89	1	
W	182	159	No Gas	0.046	ppb	37.5	156.84	2.5	
Tl	205	209	No Gas	0.000	ppb	N/A	173.53	0.5	
Pb	208	209	No Gas	0.031	ppb	37.3	547.28	0.5	
Th	232	209	No Gas	0.069	ppb	3.7	694.13	2.5	
U	238	209	No Gas	0.005	ppb	40.4	43.38	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9233881.89	1.1	9181465.1	100.57	29.5	120.4	
Sc	45	No Gas	16433559.02	1.9	16426983.07	100.04	29.5	120.4	
Sc	45	H2	1880815.80	0.5	1932518.05	97.32	29.5	120.4	
Sc	45	He	480380.52	0.7	478214.17	100.45	29.5	120.4	
Ge	72	No Gas	2733857.49	1.7	2769440.33	98.72	29.5	120.4	
Ge	72	H2	507511.63	0.3	546905.92	92.8	29.5	120.4	
Ge	72	He	270562.65	0.9	272551.69	99.27	29.5	120.4	
Y	89	H2	9589959.52	0.3	9834260.27	97.52	29.5	120.4	
Y	89	He	2112838.88	1.2	2139239.05	98.77	29.5	120.4	
Tb	159	No Gas	18946015.13	1.7	19495400.26	97.18	29.5	120.4	
Tb	159	He	7251387.67	1.3	7485871.83	96.87	29.5	120.4	
Bi	209	No Gas	8226780.45	1.7	8594079.3	95.73	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:25:23 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.072	ppb	4.9	87762.85	50	20.43	79.5	120.4	
B	11	6	No Gas	500.778	ppb	5.0	574767.36	500	20.03	79.5	120.4	
Na	23	45	He	7893.989	ppb	0.2	1424597.99	7500	21.05	79.5	120.4	
Mg	24	45	He	5635.200	ppb	0.2	513778.41	5000	22.54	79.5	120.4	
Al	27	45	He	1987.414	ppb	0.9	65903.75	2000	19.87	79.5	120.4	
Si	28	45	H2	1034.333	ppb	2.0	51924.93	1000	20.69	0	200	
K	39	45	He	10882.784	ppb	0.7	802494.82	10000	21.77	79.5	120.4	
Ca	40	45	H2	2736.450	ppb	0.2	1289192.87	2500	21.89	79.5	120.4	
V	51	89	He	546.853	ppb	0.5	592558.59	500	21.87	79.5	120.4	
Cr	52	89	He	222.042	ppb	0.7	305432.12	200	22.2	79.5	120.4	
Mn	55	89	He	551.897	ppb	1.0	325134.54	500	22.08	79.5	120.4	
Fe	56	89	H2	1071.717	ppb	0.5	1870486.58	1000	21.43	79.5	120.4	
Co	59	89	He	558.948	ppb	0.6	1253600.96	500	22.36	79.5	120.4	
Ni	60	89	He	558.856	ppb	0.7	342106.34	500	22.35	79.5	120.4	
Cu	63	89	He	293.858	ppb	0.9	488917.59	250	23.51	79.5	120.4	
Zn	66	89	He	582.943	ppb	0.7	108048.09	500	23.32	79.5	120.4	
As	75	89	He	111.685	ppb	1.3	14020.59	100	22.34	79.5	120.4	
Se	78	89	H2	105.641	ppb	0.4	6701.47	100	21.13	79.5	120.4	
Sr	88	89	He	523.622	ppb	0.8	333838.97	500	20.94	79.5	120.4	
Mo	95	89	He	109.173	ppb	0.4	82875.52	100	21.84	79.5	120.4	
Ag	107	89	He	55.375	ppb	0.6	130217.94	50	22.15	79.5	120.4	
Cd	111	89	He	271.903	ppb	1.2	76235.22	250	21.75	79.5	120.4	
Sn	118	159	He	524.526	ppb	1.4	303106.04	500	20.98	79.5	120.4	
Sb	121	159	No Gas	109.654	ppb	4.9	428976.08	100	21.93	79.5	120.4	
Ba	137	159	No Gas	2069.318	ppb	4.9	3132395.51	2000	20.69	79.5	120.4	
W	182	159	No Gas	104.072	ppb	5.4	306921.76	100	20.81	79.5	120.4	
Tl	205	209	No Gas	114.309	ppb	6.2	604154.62	100	22.86	79.5	120.4	
[Pb]	206	209	No Gas	109.742	ppb	5.2	208867.08	100	21.95	79.5	120.4	
[Pb]	207	209	No Gas	110.348	ppb	5.6	181172.67	100	22.07	79.5	120.4	
Pb	208	209	No Gas	109.630	ppb	5.3	827387.88	100	21.93	79.5	120.4	
Th	232	209	No Gas	108.898	ppb	5.8	786345.78	100	21.78	79.5	120.4	
U	238	209	No Gas	107.618	ppb	5.9	749225.70	100	21.52	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9788235.49	2.5	9181465.1	106.61	29.5	120.4	
Sc	45	No Gas	17139176.07	2.1	16426983.07	104.34	29.5	120.4	
Sc	45	H2	1927459.85	1.5	1932518.05	99.74	29.5	120.4	
Sc	45	He	482814.36	0.4	478214.17	100.96	29.5	120.4	
Ge	72	No Gas	2859964.34	2.4	2769440.33	103.27	29.5	120.4	
Ge	72	H2	515481.62	0.8	546905.92	94.25	29.5	120.4	
Ge	72	He	272702.28	0.2	272551.69	100.06	29.5	120.4	
Y	89	H2	9718319.33	0.8	9834260.27	98.82	29.5	120.4	
Y	89	He	2119956.20	0.9	2139239.05	99.1	29.5	120.4	
Tb	159	No Gas	19814148.32	2.6	19495400.26	101.63	29.5	120.4	
Tb	159	He	7284672.39	0.8	7485871.83	97.31	29.5	120.4	
Bi	209	No Gas	8521091.00	3.3	8594079.3	99.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:28:04 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.499	ppb	4.4	203829.68	25	98	89.8	110.2	
11	B	6	No Gas	24.725	ppb	3.4	138125.02	25	98.9	89.8	110.2	
23	Na	45	He	4985.762	ppb	0.7	4437691.96	5000	99.72	89.8	110.2	
24	Mg	45	He	4943.123	ppb	0.6	2264545.38	5000	98.86	89.8	110.2	
27	Al	45	He	490.858	ppb	1.1	81775.19	500	98.17	89.8	110.2	
28	Si	45	H2	475.774	ppb	1.1	119086.33	500	95.15	89.8	110.2	
39	K	45	He	4922.091	ppb	0.2	1795952.20	5000	98.44	89.8	110.2	
40	Ca	45	H2	4821.787	ppb	0.5	11354050.80	5000	96.44	89.8	110.2	
51	V	89	He	24.969	ppb	0.8	137006.86	25	99.88	89.8	110.2	
52	Cr	89	He	25.020	ppb	0.9	174382.12	25	100.08	89.8	110.2	
55	Mn	89	He	24.951	ppb	0.4	74492.96	25	99.8	89.8	110.2	
56	Fe	89	H2	4831.505	ppb	0.7	42288549.98	5000	96.63	89.8	110.2	
59	Co	89	He	25.110	ppb	0.7	284891.18	25	100.44	89.8	110.2	
60	Ni	89	He	25.062	ppb	0.4	77696.08	25	100.25	89.8	110.2	
63	Cu	89	He	25.149	ppb	0.3	211943.86	25	100.6	89.8	110.2	
66	Zn	89	He	25.158	ppb	1.4	23833.32	25	100.63	89.8	110.2	
75	As	89	He	24.757	ppb	0.6	15720.24	25	99.03	89.8	110.2	
78	Se	89	H2	24.102	ppb	0.7	7684.44	25	96.41	89.8	110.2	
88	Sr	89	He	24.203	ppb	0.8	78069.96	25	96.81	89.8	110.2	
95	Mo	89	He	24.804	ppb	0.6	95245.68	25	99.22	89.8	110.2	
107	Ag	89	He	25.117	ppb	0.7	298718.06	25	100.47	89.8	110.2	
111	Cd	89	He	24.434	ppb	0.7	34654.29	25	97.74	89.8	110.2	
118	Sn	159	He	24.650	ppb	0.7	71970.81	25	98.6	89.8	110.2	
121	Sb	159	No Gas	25.043	ppb	3.2	487369.88	25	100.17	89.8	110.2	
137	Ba	159	No Gas	24.806	ppb	3.7	186873.22	25	99.22	89.8	110.2	
182	W	159	No Gas	24.221	ppb	3.3	355405.37	25	96.88	89.8	110.2	
205	Tl	209	No Gas	25.485	ppb	3.7	675178.30	25	101.94	89.8	110.2	
208	Pb	209	No Gas	24.838	ppb	3.6	939401.11	25	99.35	89.8	110.2	
232	Th	209	No Gas	24.924	ppb	4.3	901948.22	25	99.7	89.8	110.2	
238	U	209	No Gas	24.859	ppb	3.4	867473.13	25	99.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9478621.31	2.8	9181465.1	103.24	29.5	120.4	
Sc	45	No Gas	16951898.80	2.2	16426983.07	103.2	29.5	120.4	
Sc	45	H2	1933264.94	1.1	1932518.05	100.04	29.5	120.4	
Sc	45	He	485268.65	0.6	478214.17	101.48	29.5	120.4	
Ge	72	No Gas	2824875.97	2.6	2769440.33	102	29.5	120.4	
Ge	72	H2	521110.84	0.5	546905.92	95.28	29.5	120.4	
Ge	72	He	275487.16	0.6	272551.69	101.08	29.5	120.4	
Y	89	H2	9768541.22	0.4	9834260.27	99.33	29.5	120.4	
Y	89	He	2144671.27	0.9	2139239.05	100.25	29.5	120.4	
Tb	159	No Gas	19707372.76	2.1	19495400.26	101.09	29.5	120.4	
Tb	159	He	7333476.21	0.3	7485871.83	97.96	29.5	120.4	
Bi	209	No Gas	8535744.61	2.2	8594079.3	99.32	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:30:41 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.013	ppb	44.3	114.45	0.2	
11	B	6	No Gas	0.561	ppb	5.8	4072.95	4	
23	Na	45	He	0.971	ppb	191.7	39404.56	200	
24	Mg	45	He	1.505	ppb	26.0	760.09	20	
27	Al	45	He	0.460	ppb	31.2	183.34	20	
28	Si	45	H2	0.016	ppb	711.4	537.27	100	
39	K	45	He	6.070	ppb	27.6	24234.61	200	
40	Ca	45	H2	0.902	ppb	1.2	7044.23	20	
51	V	89	He	0.004	ppb	91.1	220.01	1	
52	Cr	89	He	0.014	ppb	23.0	767.22	1	
55	Mn	89	He	0.016	ppb	42.3	228.63	0.4	
56	Fe	89	H2	1.203	ppb	4.0	14824.28	20	
59	Co	89	He	0.013	ppb	72.9	186.68	0.2	
60	Ni	89	He	-0.012	ppb	N/A	86.67	0.4	
63	Cu	89	He	0.016	ppb	59.0	642.26	0.6	
66	Zn	89	He	0.019	ppb	360.1	334.46	2	
75	As	89	He	0.007	ppb	121.3	17.33	1	
78	Se	89	H2	0.023	ppb	22.2	8.67	1	
88	Sr	89	He	0.009	ppb	60.9	52.22	1	
95	Mo	89	He	0.052	ppb	11.9	208.90	1	
107	Ag	89	He	0.009	ppb	42.8	147.78	0.2	
111	Cd	89	He	0.007	ppb	34.1	10.74	0.2	
118	Sn	159	He	0.082	ppb	7.5	590.04	1	
121	Sb	159	No Gas	0.019	ppb	20.8	503.91	0.2	
137	Ba	159	No Gas	0.024	ppb	14.7	253.62	0.4	
182	W	159	No Gas	0.059	ppb	14.5	894.37	1	
205	Tl	209	No Gas	0.021	ppb	20.3	747.53	0.2	
208	Pb	209	No Gas	0.014	ppb	37.9	884.34	0.2	
232	Th	209	No Gas	0.061	ppb	16.1	2476.41	1	
238	U	209	No Gas	0.021	ppb	45.3	744.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9545316.64	2.7	9181465.1	103.96	29.5	120.4	
Sc	45	No Gas	16885821.27	2.5	16426983.07	102.79	29.5	120.4	
Sc	45	H2	1930369.29	0.6	1932518.05	99.89	29.5	120.4	
Sc	45	He	481407.82	0.9	478214.17	100.67	29.5	120.4	
Ge	72	No Gas	2853641.80	2.5	2769440.33	103.04	29.5	120.4	
Ge	72	H2	527148.81	1.4	546905.92	96.39	29.5	120.4	
Ge	72	He	274684.12	0.6	272551.69	100.78	29.5	120.4	
Y	89	H2	9760769.80	1.1	9834260.27	99.25	29.5	120.4	
Y	89	He	2142828.42	1.4	2139239.05	100.17	29.5	120.4	
Tb	159	No Gas	19713176.23	2.6	19495400.26	101.12	29.5	120.4	
Tb	159	He	7375909.96	0.5	7485871.83	98.53	29.5	120.4	
Bi	209	No Gas	8664097.02	3.0	8594079.3	100.81	29.5	120.4	

Sample Report

Sample Name SN5734-002

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:33:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	34.3	35.55	100	
11	B	6	No Gas	20.038	ppb	3.9	23081.36	1000	
23	Na	45	He	21378.925	ppb	1.0	3752514.23	200000	
24	Mg	45	He	8870.616	ppb	1.0	800269.99	200000	
27	Al	45	He	71.052	ppb	1.3	2434.74	200000	
28	Si	45	H2	4233.215	ppb	0.9	210836.82	10000	
39	K	45	He	843.708	ppb	1.0	81770.31	200000	
40	Ca	45	H2	13082.305	ppb	0.8	6143820.60	200000	
51	V	89	He	0.220	ppb	2.8	434.47	1000	
52	Cr	89	He	0.390	ppb	6.3	1195.84	2000	
55	Mn	89	He	1212.417	ppb	0.6	711361.87	2000	
56	Fe	89	H2	520.361	ppb	0.9	907389.88	100000	
59	Co	89	He	13.955	ppb	2.7	31217.13	1000	
60	Ni	89	He	37.816	ppb	0.4	23174.29	1000	
63	Cu	89	He	5.398	ppb	1.7	9436.87	2000	
66	Zn	89	He	88.368	ppb	0.9	16581.46	2000	
75	As	89	He	0.156	ppb	18.1	32.00	1000	
78	Se	89	H2	0.169	ppb	22.5	12.17	1000	
88	Sr	89	He	117.385	ppb	0.1	74577.08	2000	
95	Mo	89	He	0.168	ppb	5.4	134.45	1000	
107	Ag	89	He	0.039	ppb	17.0	126.67	100	
111	Cd	89	He	0.680	ppb	4.8	190.74	1000	
118	Sn	159	He	0.674	ppb	13.5	734.49	1000	
121	Sb	159	No Gas	0.067	ppb	18.3	390.44	1000	
137	Ba	159	No Gas	9.461	ppb	3.2	14160.14	2000	
182	W	159	No Gas	0.097	ppb	20.8	307.02	1000	
205	Tl	209	No Gas	0.011	ppb	71.3	236.94	1000	
208	Pb	209	No Gas	0.058	ppb	33.7	760.87	2000	
232	Th	209	No Gas	0.207	ppb	10.6	1688.68	1000	
238	U	209	No Gas	0.016	ppb	37.0	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9440628.42	1.1	9181465.1	102.82	29.5	120.4	
Sc	45	No Gas	16869292.24	0.8	16426983.07	102.69	29.5	120.4	
Sc	45	H2	1927196.94	0.5	1932518.05	99.72	29.5	120.4	
Sc	45	He	477802.72	1.0	478214.17	99.91	29.5	120.4	
Ge	72	No Gas	2824109.66	0.8	2769440.33	101.97	29.5	120.4	
Ge	72	H2	518732.48	1.2	546905.92	94.85	29.5	120.4	
Ge	72	He	272348.24	0.6	272551.69	99.93	29.5	120.4	
Y	89	H2	9686178.23	0.4	9834260.27	98.49	29.5	120.4	
Y	89	He	2111950.42	0.4	2139239.05	98.72	29.5	120.4	
Tb	159	No Gas	19482801.93	2.0	19495400.26	99.94	29.5	120.4	
Tb	159	He	7290539.27	0.8	7485871.83	97.39	29.5	120.4	
Bi	209	No Gas	8414829.32	1.5	8594079.3	97.91	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG14IMW2
File Name	032_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:35:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	19.0	27.78	0.5	
B	11	6	No Gas	3.816	ppb	4.7	5142.19	10	
Na	23	45	He	81.790	ppb	7.0	52671.54	500	
Mg	24	45	He	9.961	ppb	5.9	977.88	50	
Al	27	45	He	44.534	ppb	5.2	1571.26	50	
Si	28	45	H2	18.108	ppb	7.3	1424.98	250	
K	39	45	He	31.455	ppb	26.0	24219.56	500	
Ca	40	45	H2	19.340	ppb	0.8	13923.96	50	
V	51	89	He	0.179	ppb	27.7	391.13	2.5	
Cr	52	89	He	0.420	ppb	7.1	1239.17	2.5	
Mn	55	89	He	0.604	ppb	12.8	535.25	1	
Fe	56	89	H2	11.516	ppb	1.7	24445.29	50	
Co	59	89	He	0.080	ppb	24.9	215.57	0.5	
Ni	60	89	He	0.080	ppb	45.8	170.01	1	
Cu	63	89	He	4.688	ppb	1.2	8283.90	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	148.735	ppb	0.5	27771.73	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.025	ppb	186.7	15.67	2.5	
Se	78	89	H2	0.047	ppb	58.9	4.50	2.5	
Sr	88	89	He	0.028	ppb	56.9	40.00	2.5	
Mo	95	89	He	0.086	ppb	30.2	73.34	2.5	
Ag	107	89	He	0.013	ppb	39.5	65.56	0.5	
Cd	111	89	He	0.005	ppb	129.5	2.22	0.5	
Sn	118	159	He	0.629	ppb	4.5	711.16	2.5	
Sb	121	159	No Gas	0.032	ppb	47.7	253.62	0.5	
Ba	137	159	No Gas	0.048	ppb	76.7	140.16	1	
W	182	159	No Gas	0.053	ppb	29.1	180.20	2.5	
Tl	205	209	No Gas	0.002	ppb	676.5	193.55	0.5	
Pb	208	209	No Gas	0.018	ppb	102.0	470.54	0.5	
Th	232	209	No Gas	0.078	ppb	14.6	787.58	2.5	
U	238	209	No Gas	0.001	ppb	113.5	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9440782.33	2.1	9181465.1	102.82	29.5	120.4	
Sc	45	No Gas	16752560.93	1.3	16426983.07	101.98	29.5	120.4	
Sc	45	H2	1918059.83	0.9	1932518.05	99.25	29.5	120.4	
Sc	45	He	479529.40	0.7	478214.17	100.28	29.5	120.4	
Ge	72	No Gas	2802107.58	2.1	2769440.33	101.18	29.5	120.4	
Ge	72	H2	512372.55	1.0	546905.92	93.69	29.5	120.4	
Ge	72	He	270890.84	0.5	272551.69	99.39	29.5	120.4	
Y	89	H2	9761691.35	0.9	9834260.27	99.26	29.5	120.4	
Y	89	He	2117760.73	1.3	2139239.05	99	29.5	120.4	
Tb	159	No Gas	19392096.66	1.3	19495400.26	99.47	29.5	120.4	
Tb	159	He	7318808.50	0.3	7485871.83	97.77	29.5	120.4	
Bi	209	No Gas	8543478.91	1.3	8594079.3	99.41	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG14IMW2
File Name	033LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:38:40 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.838	ppb	8.6	88789.36	50	20.74	79.5	120.4	
B	11	6	No Gas	507.181	ppb	9.6	580104.24	500	20.29	79.5	120.4	
Na	23	45	He	8174.429	ppb	0.5	1463111.47	7500	21.8	79.5	120.4	
Mg	24	45	He	5823.357	ppb	0.9	527059.68	5000	23.29	79.5	120.4	
Al	27	45	He	2082.375	ppb	0.4	68546.07	2000	20.82	79.5	120.4	
Si	28	45	H2	1117.297	ppb	0.7	55345.40	1000	22.35	0	200	
K	39	45	He	11159.437	ppb	0.7	816343.35	10000	22.32	79.5	120.4	
Ca	40	45	H2	2791.848	ppb	1.0	1298625.80	2500	22.33	79.5	120.4	
V	51	89	He	573.061	ppb	0.8	622182.67	500	22.92	79.5	120.4	
Cr	52	89	He	232.618	ppb	0.6	320603.73	200	23.26	79.5	120.4	DoD
Mn	55	89	He	576.182	ppb	0.6	340107.22	500	23.05	79.5	120.4	DoD
Fe	56	89	H2	1128.724	ppb	0.3	1956975.59	1000	22.57	79.5	120.4	
Co	59	89	He	583.312	ppb	0.6	1310869.50	500	23.33	79.5	120.4	DoD
Ni	60	89	He	581.187	ppb	0.6	356473.98	500	23.25	79.5	120.4	
Cu	63	89	He	293.646	ppb	0.5	489545.77	250	23.49	79.5	120.4	
Zn	66	89	He	705.331	ppb	0.9	130925.50	500	28.21	79.5	120.4	6020□ DoD
As	75	89	He	115.078	ppb	0.9	14475.43	100	23.02	79.5	120.4	
Se	78	89	H2	110.090	ppb	1.0	6939.08	100	22.02	79.5	120.4	
Sr	88	89	He	549.071	ppb	0.7	350770.83	500	21.96	79.5	120.4	
Mo	95	89	He	115.725	ppb	0.2	88025.78	100	23.14	79.5	120.4	DoD
Ag	107	89	He	58.669	ppb	0.5	138239.75	50	23.47	79.5	120.4	DoD
Cd	111	89	He	281.096	ppb	0.6	78972.03	250	22.49	79.5	120.4	
Sn	118	159	He	550.087	ppb	0.8	320612.68	500	22	79.5	120.4	
Sb	121	159	No Gas	107.564	ppb	8.3	422782.47	100	21.51	79.5	120.4	
Ba	137	159	No Gas	2064.690	ppb	8.8	3139881.93	2000	20.65	79.5	120.4	
W	182	159	No Gas	103.832	ppb	9.3	307623.65	100	20.77	79.5	120.4	
Tl	205	209	No Gas	112.329	ppb	9.6	602593.55	100	22.47	79.5	120.4	
[Pb]	206	209	No Gas	107.181	ppb	9.2	207023.71	100	21.44	79.5	120.4	
[Pb]	207	209	No Gas	107.906	ppb	9.0	179823.88	100	21.58	79.5	120.4	
Pb	208	209	No Gas	106.930	ppb	8.8	819114.73	100	21.39	79.5	120.4	
Th	232	209	No Gas	106.557	ppb	9.8	780878.86	100	21.31	79.5	120.4	
U	238	209	No Gas	106.175	ppb	10.0	750126.89	100	21.24	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9764470.07	2.9	9181465.1	106.35	29.5	120.4	
Sc	45	No Gas	17067695.01	3.1	16426983.07	103.9	29.5	120.4	
Sc	45	H2	1903351.61	1.1	1932518.05	98.49	29.5	120.4	
Sc	45	He	479302.94	0.6	478214.17	100.23	29.5	120.4	
Ge	72	No Gas	2850875.23	3.2	2769440.33	102.94	29.5	120.4	
Ge	72	H2	506730.34	1.0	546905.92	92.65	29.5	120.4	
Ge	72	He	272191.18	1.1	272551.69	99.87	29.5	120.4	
Y	89	H2	9655529.36	1.3	9834260.27	98.18	29.5	120.4	
Y	89	He	2124199.42	0.7	2139239.05	99.3	29.5	120.4	
Tb	159	No Gas	19929571.79	3.6	19495400.26	102.23	29.5	120.4	
Tb	159	He	7347706.00	0.9	7485871.83	98.15	29.5	120.4	
Bi	209	No Gas	8658533.02	3.9	8594079.3	100.75	29.5	120.4	

Sample Report

Sample Name SN5646-004R

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:41:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.075	ppb	51.0	127.78	100	
11	B	6	No Gas	33.636	ppb	1.3	37973.14	1000	
23	Na	45	He	71000.748	ppb	7.5	12624372.99	200000	
24	Mg	45	He	22519.467	ppb	7.1	2072973.13	200000	
27	Al	45	He	9.970	ppb	10.0	442.25	200000	
28	Si	45	H2	2477.453	ppb	5.1	121354.28	10000	
39	K	45	He	2068.353	ppb	7.2	172154.32	200000	
40	Ca	45	H2	35380.680	ppb	5.8	16300086.70	200000	
51	V	89	He	0.248	ppb	6.4	474.47	1000	
52	Cr	89	He	0.444	ppb	18.6	1292.49	2000	
55	Mn	89	He	0.863	ppb	12.5	697.89	2000	
56	Fe	89	H2	12.069	ppb	6.2	24879.96	100000	
59	Co	89	He	0.321	ppb	10.4	766.74	1000	
60	Ni	89	He	6.247	ppb	11.3	3998.51	1000	
63	Cu	89	He	5.587	ppb	7.1	9932.76	2000	
66	Zn	89	He	114.227	ppb	7.2	21739.85	2000	
75	As	89	He	1.357	ppb	4.5	185.69	1000	
78	Se	89	H2	0.708	ppb	7.6	45.67	1000	
88	Sr	89	He	170.973	ppb	7.0	110651.26	2000	
95	Mo	89	He	0.201	ppb	1.8	163.34	1000	
107	Ag	89	He	0.022	ppb	34.2	90.00	100	
111	Cd	89	He	0.074	ppb	17.7	21.85	1000	
118	Sn	159	He	0.798	ppb	18.9	823.39	1000	
121	Sb	159	No Gas	0.210	ppb	33.9	941.09	1000	
137	Ba	159	No Gas	5.285	ppb	13.6	7934.66	2000	
182	W	159	No Gas	4.809	ppb	0.5	13983.35	1000	
205	Tl	209	No Gas	0.179	ppb	67.7	1097.96	1000	
208	Pb	209	No Gas	0.123	ppb	49.3	1234.74	2000	
232	Th	209	No Gas	1.023	ppb	32.3	7427.40	1000	
238	U	209	No Gas	0.192	ppb	63.7	1311.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9402400.51	0.5	9181465.1	102.41	29.5	120.4	
Sc	45	No Gas	16727467.29	1.0	16426983.07	101.83	29.5	120.4	
Sc	45	H2	1894071.13	3.5	1932518.05	98.01	29.5	120.4	
Sc	45	He	488720.83	5.3	478214.17	102.2	29.5	120.4	
Ge	72	No Gas	2799434.23	0.7	2769440.33	101.08	29.5	120.4	
Ge	72	H2	508087.76	3.0	546905.92	92.9	29.5	120.4	
Ge	72	He	274550.52	3.8	272551.69	100.73	29.5	120.4	
Y	89	H2	9571110.35	4.2	9834260.27	97.32	29.5	120.4	
Y	89	He	2156411.70	5.1	2139239.05	100.8	29.5	120.4	
Tb	159	No Gas	19480520.13	1.2	19495400.26	99.92	29.5	120.4	
Tb	159	He	7467899.12	4.8	7485871.83	99.76	29.5	120.4	
Bi	209	No Gas	8319991.78	0.6	8594079.3	96.81	29.5	120.4	

Sample Report

Sample Name SN5646-005R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:43:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.024	ppb	33.3	44.45	100	
11	B	6	No Gas	20.197	ppb	7.6	23593.42	1000	
23	Na	45	He	9845.495	ppb	0.7	1743419.20	200000	
24	Mg	45	He	2549.276	ppb	0.7	229335.81	200000	
27	Al	45	He	28.558	ppb	5.2	1038.97	200000	
28	Si	45	H2	3220.786	ppb	0.7	157139.03	10000	
39	K	45	He	315.709	ppb	2.6	44164.71	200000	
40	Ca	45	H2	4531.297	ppb	0.4	2086072.84	200000	
51	V	89	He	0.225	ppb	19.8	437.80	1000	
52	Cr	89	He	0.449	ppb	5.5	1268.50	2000	
55	Mn	89	He	6.099	ppb	3.5	3734.49	2000	
56	Fe	89	H2	16.607	ppb	1.2	32500.76	100000	
59	Co	89	He	0.337	ppb	6.5	782.30	1000	
60	Ni	89	He	2.586	ppb	1.8	1686.83	1000	
63	Cu	89	He	9.774	ppb	2.5	16579.24	2000	
66	Zn	89	He	110.548	ppb	1.2	20539.12	2000	
75	As	89	He	1.033	ppb	9.2	140.69	1000	
78	Se	89	H2	0.106	ppb	21.3	8.00	1000	
88	Sr	89	He	31.932	ppb	1.0	20178.70	2000	
95	Mo	89	He	0.116	ppb	10.1	94.45	1000	
107	Ag	89	He	0.017	ppb	21.5	75.56	100	
111	Cd	89	He	0.042	ppb	52.1	12.22	1000	
118	Sn	159	He	0.604	ppb	13.6	694.49	1000	
121	Sb	159	No Gas	0.053	ppb	8.0	340.38	1000	
137	Ba	159	No Gas	5.866	ppb	3.6	8896.28	2000	
182	W	159	No Gas	0.062	ppb	43.5	206.90	1000	
205	Tl	209	No Gas	0.003	ppb	388.9	203.56	1000	
208	Pb	209	No Gas	0.063	ppb	29.1	817.59	2000	
232	Th	209	No Gas	0.086	ppb	17.1	847.65	1000	
238	U	209	No Gas	0.017	ppb	30.6	126.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9583509.42	1.8	9181465.1	104.38	29.5	120.4	
Sc	45	No Gas	16874199.86	1.9	16426983.07	102.72	29.5	120.4	
Sc	45	H2	1886406.50	0.8	1932518.05	97.61	29.5	120.4	
Sc	45	He	476313.34	0.8	478214.17	99.6	29.5	120.4	
Ge	72	No Gas	2839069.41	2.4	2769440.33	102.51	29.5	120.4	
Ge	72	H2	507191.78	1.1	546905.92	92.74	29.5	120.4	
Ge	72	He	271334.39	1.0	272551.69	99.55	29.5	120.4	
Y	89	H2	9514508.34	1.2	9834260.27	96.75	29.5	120.4	
Y	89	He	2099040.80	1.0	2139239.05	98.12	29.5	120.4	
Tb	159	No Gas	19682113.60	1.2	19495400.26	100.96	29.5	120.4	
Tb	159	He	7295247.05	0.4	7485871.83	97.45	29.5	120.4	
Bi	209	No Gas	8635338.37	1.7	8594079.3	100.48	29.5	120.4	

Sample Report

Sample Name SN5646-005RA

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:46:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.063	ppb	3.7	16858.13	100	
11	B	6	No Gas	209.486	ppb	4.7	234858.82	1000	
23	Na	45	He	19940.326	ppb	0.9	3485790.09	200000	
24	Mg	45	He	3591.204	ppb	0.3	322490.66	200000	
27	Al	45	He	970.731	ppb	0.6	31757.16	200000	
28	Si	45	H2	7702.058	ppb	0.7	375453.63	10000	
39	K	45	He	10426.309	ppb	0.7	758100.40	200000	
40	Ca	45	H2	5412.553	ppb	0.6	2493453.68	200000	
51	V	89	He	50.411	ppb	1.2	54351.25	1000	
52	Cr	89	He	51.682	ppb	0.5	71014.08	2000	
55	Mn	89	He	27.269	ppb	0.6	16102.25	2000	
56	Fe	89	H2	1001.977	ppb	0.5	1724846.01	100000	
59	Co	89	He	10.911	ppb	0.8	24305.01	1000	
60	Ni	89	He	24.510	ppb	0.9	14995.21	1000	
63	Cu	89	He	38.056	ppb	0.8	63231.68	2000	
66	Zn	89	He	179.801	ppb	0.9	33267.16	2000	
75	As	89	He	51.322	ppb	0.7	6396.84	1000	
78	Se	89	H2	48.715	ppb	1.4	3048.53	1000	
88	Sr	89	He	79.915	ppb	1.3	50553.80	2000	
95	Mo	89	He	50.544	ppb	0.5	38057.30	1000	
107	Ag	89	He	10.623	ppb	1.1	24804.55	100	
111	Cd	89	He	10.375	ppb	1.3	2885.90	1000	
118	Sn	159	He	49.654	ppb	1.3	28880.59	1000	
121	Sb	159	No Gas	10.648	ppb	4.1	41510.47	1000	
137	Ba	159	No Gas	25.806	ppb	4.4	38880.49	2000	
182	W	159	No Gas	48.484	ppb	4.9	142078.88	1000	
205	Tl	209	No Gas	10.765	ppb	5.5	57869.72	1000	
208	Pb	209	No Gas	10.464	ppb	7.0	80367.07	2000	
232	Th	209	No Gas	10.408	ppb	4.7	76428.24	1000	
238	U	209	No Gas	10.321	ppb	5.7	72877.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9539551.09	2.8	9181465.1	103.9	29.5	120.4	
Sc	45	No Gas	16913470.58	2.7	16426983.07	102.96	29.5	120.4	
Sc	45	H2	1888240.95	1.6	1932518.05	97.71	29.5	120.4	
Sc	45	He	475512.05	1.1	478214.17	99.43	29.5	120.4	
Ge	72	No Gas	2831175.82	3.1	2769440.33	102.23	29.5	120.4	
Ge	72	H2	508445.08	1.8	546905.92	92.97	29.5	120.4	
Ge	72	He	267590.16	1.0	272551.69	98.18	29.5	120.4	
Y	89	H2	9583792.93	0.8	9834260.27	97.45	29.5	120.4	
Y	89	He	2102490.44	0.6	2139239.05	98.28	29.5	120.4	
Tb	159	No Gas	19683568.46	2.5	19495400.26	100.97	29.5	120.4	
Tb	159	He	7252887.88	0.7	7485871.83	96.89	29.5	120.4	
Bi	209	No Gas	8639950.27	3.2	8594079.3	100.53	29.5	120.4	

Sample Report

Sample Name SN5646-005RL

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:49:16 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.184	ppb	35.3	65.56	100	
11	B	6	No Gas	31.320	ppb	2.9	7985.82	1000	
23	Na	45	He	9652.474	ppb	0.8	372746.30	200000	
24	Mg	45	He	2495.569	ppb	0.7	44988.86	200000	
27	Al	45	He	38.445	ppb	17.6	357.80	200000	
28	Si	45	H2	3167.237	ppb	1.7	31419.71	10000	
39	K	45	He	417.701	ppb	11.1	27759.23	200000	
40	Ca	45	H2	4514.420	ppb	0.0	420808.11	200000	
51	V	89	He	0.297	ppb	60.4	261.12	1000	
52	Cr	89	He	0.888	ppb	17.6	903.87	2000	
55	Mn	89	He	6.440	ppb	8.0	933.87	2000	
56	Fe	89	H2	16.437	ppb	3.3	9881.09	100000	
59	Co	89	He	0.683	ppb	4.0	340.03	1000	
60	Ni	89	He	2.396	ppb	9.5	412.24	1000	
63	Cu	89	He	47.259	ppb	1.9	16128.70	2000	
66	Zn	89	He	699.700	ppb	1.7	26043.85	2000	
75	As	89	He	0.862	ppb	37.2	34.00	1000	
78	Se	89	H2	0.282	ppb	55.9	5.00	1000	
88	Sr	89	He	31.216	ppb	1.6	3981.84	2000	
95	Mo	89	He	0.515	ppb	17.7	85.56	1000	
107	Ag	89	He	0.022	ppb	174.4	45.56	100	
111	Cd	89	He	0.033	ppb	91.4	2.59	1000	
118	Sn	159	He	0.203	ppb	91.9	372.24	1000	
121	Sb	159	No Gas	0.235	ppb	10.0	323.70	1000	
137	Ba	159	No Gas	8.428	ppb	25.3	2653.27	2000	
182	W	159	No Gas	0.652	ppb	27.0	417.14	1000	
205	Tl	209	No Gas	0.121	ppb	84.8	317.03	1000	
208	Pb	209	No Gas	2.990	ppb	10.4	4972.63	2000	
232	Th	209	No Gas	0.343	ppb	20.7	730.84	1000	
238	U	209	No Gas	0.220	ppb	40.7	320.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9602549.50	0.5	9181465.1	104.59	29.5	120.4	
Sc	45	No Gas	17023824.27	2.2	16426983.07	103.63	29.5	120.4	
Sc	45	H2	1892188.21	0.5	1932518.05	97.91	29.5	120.4	
Sc	45	He	476606.51	0.5	478214.17	99.66	29.5	120.4	
Ge	72	No Gas	2861348.36	1.4	2769440.33	103.32	29.5	120.4	
Ge	72	H2	516707.17	1.2	546905.92	94.48	29.5	120.4	
Ge	72	He	272124.64	0.4	272551.69	99.84	29.5	120.4	
Y	89	H2	9597200.20	0.5	9834260.27	97.59	29.5	120.4	
Y	89	He	2109175.23	0.3	2139239.05	98.59	29.5	120.4	
Tb	159	No Gas	20064089.14	1.8	19495400.26	102.92	29.5	120.4	
Tb	159	He	7358689.96	0.9	7485871.83	98.3	29.5	120.4	
Bi	209	No Gas	8742605.74	1.6	8594079.3	101.73	29.5	120.4	

Sample Report

Sample Name	SN5646-005RP
File Name	038SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:51:51 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.540	ppb	6.0	85989.69	100	
11	B	6	No Gas	500.065	ppb	4.1	568413.42	1000	
23	Na	45	He	17177.663	ppb	0.4	2995738.89	200000	
24	Mg	45	He	7902.145	ppb	0.9	706564.36	200000	
27	Al	45	He	2035.679	ppb	1.0	66201.95	200000	
28	Si	45	H2	4201.048	ppb	1.7	206706.71	10000	
39	K	45	He	10761.261	ppb	0.3	778503.97	200000	
40	Ca	45	H2	6886.644	ppb	1.1	3197270.96	200000	
51	V	89	He	524.272	ppb	0.3	560952.67	1000	
52	Cr	89	He	212.667	ppb	1.1	288884.19	2000	
55	Mn	89	He	534.934	ppb	0.5	311178.52	2000	
56	Fe	89	H2	1039.988	ppb	0.2	1792630.94	100000	
59	Co	89	He	533.026	ppb	1.3	1180414.73	1000	
60	Ni	89	He	537.926	ppb	0.5	325141.10	1000	
63	Cu	89	He	264.812	ppb	0.3	435107.47	2000	
66	Zn	89	He	519.430	ppb	0.3	95100.36	2000	
75	As	89	He	105.784	ppb	1.1	13113.60	1000	
78	Se	89	H2	101.532	ppb	1.2	6360.50	1000	
88	Sr	89	He	534.597	ppb	0.2	336555.87	2000	
95	Mo	89	He	105.302	ppb	0.7	78930.63	1000	
107	Ag	89	He	53.892	ppb	0.9	125136.72	100	
111	Cd	89	He	259.503	ppb	0.2	71846.24	1000	
118	Sn	159	He	503.098	ppb	1.3	289646.36	1000	
121	Sb	159	No Gas	104.937	ppb	4.3	408085.86	1000	
137	Ba	159	No Gas	2015.954	ppb	4.6	3033613.97	2000	
182	W	159	No Gas	101.283	ppb	4.0	296962.77	1000	
205	Tl	209	No Gas	108.020	ppb	3.3	575343.96	1000	
208	Pb	209	No Gas	103.878	ppb	3.8	789901.34	2000	
232	Th	209	No Gas	104.114	ppb	4.8	757474.37	1000	
238	U	209	No Gas	103.031	ppb	5.3	722627.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9690249.80	1.7	9181465.1	105.54	29.5	120.4	
Sc	45	No Gas	16678549.84	1.4	16426983.07	101.53	29.5	120.4	
Sc	45	H2	1903917.14	1.2	1932518.05	98.52	29.5	120.4	
Sc	45	He	473521.91	0.2	478214.17	99.02	29.5	120.4	
Ge	72	No Gas	2808055.64	1.5	2769440.33	101.39	29.5	120.4	
Ge	72	H2	509158.42	1.4	546905.92	93.1	29.5	120.4	
Ge	72	He	266818.53	0.6	272551.69	97.9	29.5	120.4	
Y	89	H2	9597245.66	0.6	9834260.27	97.59	29.5	120.4	
Y	89	He	2093263.23	0.4	2139239.05	97.85	29.5	120.4	
Tb	159	No Gas	19690134.70	1.9	19495400.26	101	29.5	120.4	
Tb	159	He	7257150.45	0.4	7485871.83	96.94	29.5	120.4	
Bi	209	No Gas	8578589.33	1.7	8594079.3	99.82	29.5	120.4	

Sample Report

Sample Name SN5646-005RS

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:54:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.485	ppb	3.9	88792.61	100	
11	B	6	No Gas	529.588	ppb	4.5	598319.27	1000	
23	Na	45	He	17851.745	ppb	0.4	3133208.28	200000	
24	Mg	45	He	8202.103	ppb	0.5	738430.16	200000	
27	Al	45	He	2000.448	ppb	0.5	65506.18	200000	
28	Si	45	H2	4413.555	ppb	1.4	215591.86	10000	
39	K	45	He	11080.854	ppb	1.2	806494.42	200000	
40	Ca	45	H2	7235.572	ppb	0.3	3334588.84	200000	
51	V	89	He	543.904	ppb	1.2	585772.44	1000	
52	Cr	89	He	220.371	ppb	0.7	301303.39	2000	
55	Mn	89	He	551.911	ppb	0.9	323164.09	2000	
56	Fe	89	H2	1076.066	ppb	0.7	1850731.66	100000	
59	Co	89	He	550.536	ppb	0.5	1227248.77	1000	
60	Ni	89	He	555.387	ppb	0.4	337906.88	1000	
63	Cu	89	He	273.925	ppb	0.8	453024.88	2000	
66	Zn	89	He	533.989	ppb	1.0	98398.54	2000	
75	As	89	He	111.204	ppb	0.7	13876.09	1000	
78	Se	89	H2	105.955	ppb	0.5	6623.94	1000	
88	Sr	89	He	552.915	ppb	1.4	350370.31	2000	
95	Mo	89	He	108.848	ppb	1.2	82125.76	1000	
107	Ag	89	He	56.177	ppb	0.7	131305.81	100	
111	Cd	89	He	270.177	ppb	0.5	75293.53	1000	
118	Sn	159	He	522.788	ppb	0.2	302501.50	1000	
121	Sb	159	No Gas	110.206	ppb	3.5	426989.13	1000	
137	Ba	159	No Gas	2112.519	ppb	3.8	3167093.75	2000	
182	W	159	No Gas	105.625	ppb	2.6	308564.39	1000	
205	Tl	209	No Gas	115.626	ppb	2.4	606518.97	1000	
208	Pb	209	No Gas	110.877	ppb	3.5	830247.18	2000	
232	Th	209	No Gas	111.848	ppb	4.4	801358.17	1000	
238	U	209	No Gas	109.979	ppb	3.5	759751.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9634572.15	2.3	9181465.1	104.94	29.5	120.4	
Sc	45	No Gas	16654470.76	1.1	16426983.07	101.38	29.5	120.4	
Sc	45	H2	1890047.38	1.5	1932518.05	97.8	29.5	120.4	
Sc	45	He	476779.73	0.1	478214.17	99.7	29.5	120.4	
Ge	72	No Gas	2782693.32	1.6	2769440.33	100.48	29.5	120.4	
Ge	72	H2	506204.94	0.6	546905.92	92.56	29.5	120.4	
Ge	72	He	269734.59	0.5	272551.69	98.97	29.5	120.4	
Y	89	H2	9577160.88	1.4	9834260.27	97.39	29.5	120.4	
Y	89	He	2107062.14	0.4	2139239.05	98.5	29.5	120.4	
Tb	159	No Gas	19613163.60	1.2	19495400.26	100.6	29.5	120.4	
Tb	159	He	7293883.85	0.2	7485871.83	97.44	29.5	120.4	
Bi	209	No Gas	8447088.46	1.2	8594079.3	98.29	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW2
File Name	040_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:57:13 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.054	ppb	16.0	94.45	0.5	
B	11	6	No Gas	9.579	ppb	7.7	11728.51	10	
Na	23	45	He	18.188	ppb	14.8	40983.41	500	
Mg	24	45	He	9.248	ppb	6.7	900.10	50	
Al	27	45	He	4.259	ppb	25.5	243.34	50	
Si	28	45	H2	25.062	ppb	31.7	1739.77	250	
K	39	45	He	27.396	ppb	42.3	23582.18	500	
Ca	40	45	H2	12.879	ppb	2.2	10719.98	50	
V	51	89	He	0.265	ppb	4.6	478.91	2.5	
Cr	52	89	He	0.265	ppb	3.1	1015.19	2.5	
Mn	55	89	He	0.453	ppb	14.6	441.26	1	
Fe	56	89	H2	3.269	ppb	3.8	9841.15	50	
Co	59	89	He	0.153	ppb	39.0	373.37	0.5	
Ni	60	89	He	0.156	ppb	63.2	213.34	1	
Cu	63	89	He	5.944	ppb	1.7	10245.21	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	107.223	ppb	1.5	19867.01	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.059	ppb	55.8	19.67	2.5	
Se	78	89	H2	0.120	ppb	28.4	9.00	2.5	
Sr	88	89	He	0.089	ppb	12.4	77.78	2.5	
Mo	95	89	He	0.143	ppb	10.5	114.45	2.5	
Ag	107	89	He	0.019	ppb	23.9	77.78	0.5	
Cd	111	89	He	0.050	ppb	30.1	14.45	0.5	
Sn	118	159	He	0.938	ppb	6.2	884.51	2.5	
Sb	121	159	No Gas	0.139	ppb	11.4	677.43	0.5	
Ba	137	159	No Gas	1.299	ppb	26.2	2035.80	1	PB 6020 Fails DoD
W	182	159	No Gas	0.246	ppb	11.7	750.87	2.5	
Tl	205	209	No Gas	0.116	ppb	30.4	807.60	0.5	
Pb	208	209	No Gas	0.082	ppb	34.8	967.77	0.5	
Th	232	209	No Gas	0.570	ppb	18.5	4399.06	2.5	
U	238	209	No Gas	0.107	ppb	46.4	770.89	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9601600.64	2.9	9181465.1	104.58	29.5	120.4	
Sc	45	No Gas	16728903.32	2.7	16426983.07	101.84	29.5	120.4	
Sc	45	H2	1885124.57	0.6	1932518.05	97.55	29.5	120.4	
Sc	45	He	472609.38	1.1	478214.17	98.83	29.5	120.4	
Ge	72	No Gas	2812543.15	3.1	2769440.33	101.56	29.5	120.4	
Ge	72	H2	502778.35	1.1	546905.92	91.93	29.5	120.4	
Ge	72	He	267232.61	0.9	272551.69	98.05	29.5	120.4	
Y	89	H2	9589265.18	0.7	9834260.27	97.51	29.5	120.4	
Y	89	He	2092419.88	1.1	2139239.05	97.81	29.5	120.4	
Tb	159	No Gas	19687469.15	3.0	19495400.26	100.99	29.5	120.4	
Tb	159	He	7268259.61	0.7	7485871.83	97.09	29.5	120.4	
Bi	209	No Gas	8616984.39	2.8	8594079.3	100.27	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:59:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.178	ppb	4.3	202009.94	25	96.71	89.8	110.2	
11	B	6	No Gas	23.906	ppb	4.3	134121.41	25	95.62	89.8	110.2	
23	Na	45	He	5092.699	ppb	1.5	4397564.65	5000	101.85	89.8	110.2	
24	Mg	45	He	5048.583	ppb	1.7	2244190.00	5000	100.97	89.8	110.2	
27	Al	45	He	497.316	ppb	0.8	80392.07	500	99.46	89.8	110.2	
28	Si	45	H2	478.625	ppb	0.9	118309.51	500	95.72	89.8	110.2	
39	K	45	He	5011.597	ppb	1.7	1773904.44	5000	100.23	89.8	110.2	
40	Ca	45	H2	4872.623	ppb	0.6	11330438.16	5000	97.45	89.8	110.2	
51	V	89	He	25.241	ppb	1.6	135898.70	25	100.96	89.8	110.2	
52	Cr	89	He	25.308	ppb	2.0	173064.61	25	101.23	89.8	110.2	
55	Mn	89	He	25.540	ppb	1.9	74815.37	25	102.16	89.8	110.2	
56	Fe	89	H2	4849.278	ppb	0.5	41897330.44	5000	96.99	89.8	110.2	
59	Co	89	He	25.268	ppb	2.2	281283.43	25	101.07	89.8	110.2	
60	Ni	89	He	25.107	ppb	0.8	76381.16	25	100.43	89.8	110.2	
63	Cu	89	He	25.538	ppb	1.7	211173.96	25	102.15	89.8	110.2	
66	Zn	89	He	25.356	ppb	1.1	23570.61	25	101.42	89.8	110.2	
75	As	89	He	24.987	ppb	2.7	15566.72	25	99.95	89.8	110.2	
78	Se	89	H2	24.267	ppb	1.3	7636.91	25	97.07	89.8	110.2	
88	Sr	89	He	24.591	ppb	1.8	77833.01	25	98.36	89.8	110.2	
95	Mo	89	He	25.108	ppb	1.9	94595.48	25	100.43	89.8	110.2	
107	Ag	89	He	25.706	ppb	2.3	299965.45	25	102.82	89.8	110.2	
111	Cd	89	He	25.037	ppb	1.8	34841.44	25	100.15	89.8	110.2	
118	Sn	159	He	24.741	ppb	1.3	71628.68	25	98.96	89.8	110.2	
121	Sb	159	No Gas	24.922	ppb	5.2	482308.57	25	99.69	89.8	110.2	
137	Ba	159	No Gas	24.883	ppb	3.4	186462.82	25	99.53	89.8	110.2	
182	W	159	No Gas	24.447	ppb	3.8	356794.81	25	97.79	89.8	110.2	
205	Tl	209	No Gas	25.395	ppb	3.6	674070.85	25	101.58	89.8	110.2	
208	Pb	209	No Gas	24.574	ppb	3.6	931278.98	25	98.3	89.8	110.2	
232	Th	209	No Gas	24.554	ppb	4.2	890286.53	25	98.22	89.8	110.2	
238	U	209	No Gas	24.921	ppb	3.5	871305.19	25	99.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9517573.38	2.4	9181465.1	103.66	29.5	120.4	
Sc	45	No Gas	16839912.23	1.8	16426983.07	102.51	29.5	120.4	
Sc	45	H2	1909229.46	0.5	1932518.05	98.79	29.5	120.4	
Sc	45	He	470888.68	0.8	478214.17	98.47	29.5	120.4	
Ge	72	No Gas	2829150.35	1.9	2769440.33	102.16	29.5	120.4	
Ge	72	H2	522654.02	1.2	546905.92	95.57	29.5	120.4	
Ge	72	He	268675.41	1.6	272551.69	98.58	29.5	120.4	
Y	89	H2	9643193.48	1.2	9834260.27	98.06	29.5	120.4	
Y	89	He	2104760.80	1.9	2139239.05	98.39	29.5	120.4	
Tb	159	No Gas	19604089.15	2.3	19495400.26	100.56	29.5	120.4	
Tb	159	He	7272664.27	1.1	7485871.83	97.15	29.5	120.4	
Bi	209	No Gas	8551741.55	2.0	8594079.3	99.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:02:33 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.019	ppb	44.3	161.12	0.2	
11	B	6	No Gas	0.523	ppb	1.8	3835.09	4	
23	Na	45	He	-1.561	ppb	N/A	36944.83	200	
24	Mg	45	He	0.837	ppb	11.9	453.37	20	
27	Al	45	He	0.589	ppb	35.9	203.34	20	
28	Si	45	H2	0.196	ppb	169.5	573.99	100	
39	K	45	He	5.754	ppb	49.9	23957.63	200	
40	Ca	45	H2	1.994	ppb	77.4	9501.94	20	
51	V	89	He	0.001	ppb	1114.9	203.34	1	
52	Cr	89	He	0.007	ppb	41.0	712.56	1	
55	Mn	89	He	0.006	ppb	170.0	197.96	0.4	
56	Fe	89	H2	2.335	ppb	58.7	24737.09	20	
59	Co	89	He	0.004	ppb	79.4	80.01	0.2	
60	Ni	89	He	-0.015	ppb	N/A	75.56	0.4	
63	Cu	89	He	0.005	ppb	90.5	541.14	0.6	
66	Zn	89	He	0.019	ppb	283.4	331.13	2	
75	As	89	He	0.006	ppb	58.7	16.33	1	
78	Se	89	H2	0.026	ppb	20.0	9.83	1	
88	Sr	89	He	0.005	ppb	126.4	37.78	1	
95	Mo	89	He	0.041	ppb	12.2	163.34	1	
107	Ag	89	He	0.005	ppb	23.8	95.56	0.2	
111	Cd	89	He	0.004	ppb	11.4	6.30	0.2	
118	Sn	159	He	0.071	ppb	4.3	552.26	1	
121	Sb	159	No Gas	0.030	ppb	14.7	720.83	0.2	
137	Ba	159	No Gas	0.026	ppb	13.1	266.97	0.4	
182	W	159	No Gas	0.076	ppb	4.9	1134.65	1	
205	Tl	209	No Gas	0.020	ppb	18.0	724.17	0.2	
208	Pb	209	No Gas	0.019	ppb	12.1	1077.89	0.2	
232	Th	209	No Gas	0.082	ppb	7.4	3237.40	1	
238	U	209	No Gas	0.020	ppb	12.5	710.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9494616.89	2.5	9181465.1	103.41	29.5	120.4	
Sc	45	No Gas	16713553.17	2.6	16426983.07	101.74	29.5	120.4	
Sc	45	H2	1903351.61	1.2	1932518.05	98.49	29.5	120.4	
Sc	45	He	478119.29	0.3	478214.17	99.98	29.5	120.4	
Ge	72	No Gas	2811566.18	2.9	2769440.33	101.52	29.5	120.4	
Ge	72	H2	530373.95	1.3	546905.92	96.98	29.5	120.4	
Ge	72	He	270892.11	1.0	272551.69	99.39	29.5	120.4	
Y	89	H2	9724658.59	1.4	9834260.27	98.89	29.5	120.4	
Y	89	He	2122167.73	0.6	2139239.05	99.2	29.5	120.4	
Tb	159	No Gas	19622097.62	2.0	19495400.26	100.65	29.5	120.4	
Tb	159	He	7309609.47	0.3	7485871.83	97.65	29.5	120.4	
Bi	209	No Gas	8661231.55	2.3	8594079.3	100.78	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW2
File Name	043LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:05:16 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	53.426	ppb	3.0	90702.15	50	21.37	79.5	120.4	
B	11	6	No Gas	526.224	ppb	2.5	596679.62	500	21.05	79.5	120.4	
Na	23	45	He	8059.199	ppb	0.5	1432282.48	7500	21.49	79.5	120.4	
Mg	24	45	He	5766.252	ppb	0.5	518016.60	5000	23.06	79.5	120.4	
Al	27	45	He	2109.390	ppb	0.5	68915.63	2000	21.09	79.5	120.4	
Si	28	45	H2	1076.460	ppb	2.5	53938.50	1000	21.53	0	200	
K	39	45	He	11221.094	ppb	1.7	814616.17	10000	22.44	79.5	120.4	
Ca	40	45	H2	2702.794	ppb	1.8	1271577.24	2500	21.62	79.5	120.4	
V	51	89	He	558.648	ppb	0.6	604170.87	500	22.35	79.5	120.4	
Cr	52	89	He	226.508	ppb	0.5	310970.42	200	22.65	79.5	120.4	
Mn	55	89	He	565.170	ppb	0.2	332313.60	500	22.61	79.5	120.4	
Fe	56	89	H2	1092.012	ppb	3.1	1907407.32	1000	21.84	79.5	120.4	
Co	59	89	He	565.950	ppb	0.4	1266892.00	500	22.64	79.5	120.4	
Ni	60	89	He	571.319	ppb	0.2	349050.94	500	22.85	79.5	120.4	
Cu	63	89	He	283.860	ppb	0.7	471395.68	250	22.71	79.5	120.4	
Zn	66	89	He	567.090	ppb	0.5	104917.18	500	22.68	79.5	120.4	
As	75	89	He	114.225	ppb	0.9	14311.92	100	22.84	79.5	120.4	
Se	78	89	H2	108.558	ppb	2.3	6893.06	100	21.71	79.5	120.4	
Sr	88	89	He	540.159	ppb	0.3	343728.19	500	21.61	79.5	120.4	
Mo	95	89	He	113.617	ppb	1.5	86081.80	100	22.72	79.5	120.4	
Ag	107	89	He	57.248	ppb	0.7	134362.75	50	22.9	79.5	120.4	
Cd	111	89	He	279.984	ppb	0.7	78351.94	250	22.4	79.5	120.4	
Sn	118	159	He	539.835	ppb	0.1	315355.31	500	21.59	79.5	120.4	
Sb	121	159	No Gas	114.685	ppb	1.2	440083.67	100	22.94	79.5	120.4	
Ba	137	159	No Gas	2188.792	ppb	1.9	3250206.03	2000	21.89	79.5	120.4	
W	182	159	No Gas	110.185	ppb	1.4	318795.12	100	22.04	79.5	120.4	
Tl	205	209	No Gas	118.568	ppb	3.2	626543.22	100	23.71	79.5	120.4	DoD
[Pb]	206	209	No Gas	113.746	ppb	3.9	216393.31	100	22.75	79.5	120.4	
[Pb]	207	209	No Gas	113.277	ppb	2.7	185930.36	100	22.66	79.5	120.4	
Pb	208	209	No Gas	113.286	ppb	3.1	854676.60	100	22.66	79.5	120.4	
Th	232	209	No Gas	114.711	ppb	2.4	828114.34	100	22.94	79.5	120.4	
U	238	209	No Gas	113.003	ppb	1.8	786532.91	100	22.6	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9663832.14	0.8	9181465.1	105.25	29.5	120.4	
Sc	45	No Gas	16554539.37	0.4	16426983.07	100.78	29.5	120.4	
Sc	45	H2	1924942.02	1.1	1932518.05	99.61	29.5	120.4	
Sc	45	He	475733.87	0.4	478214.17	99.48	29.5	120.4	
Ge	72	No Gas	2781495.33	0.9	2769440.33	100.44	29.5	120.4	
Ge	72	H2	517428.75	1.2	546905.92	94.61	29.5	120.4	
Ge	72	He	269855.41	0.1	272551.69	99.01	29.5	120.4	
Y	89	H2	9729754.62	1.7	9834260.27	98.94	29.5	120.4	
Y	89	He	2115873.65	0.5	2139239.05	98.91	29.5	120.4	
Tb	159	No Gas	19420341.66	0.8	19495400.26	99.61	29.5	120.4	
Tb	159	He	7363978.71	0.4	7485871.83	98.37	29.5	120.4	
Bi	209	No Gas	8509007.25	0.6	8594079.3	99.01	29.5	120.4	

Sample Report

Sample Name SN5646-004

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:07:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	65.5	155.56	100	
11	B	6	No Gas	33.471	ppb	1.4	38039.86	1000	
23	Na	45	He	70024.985	ppb	0.5	12169762.77	200000	
24	Mg	45	He	22230.612	ppb	1.1	1999771.60	200000	
27	Al	45	He	11.880	ppb	3.6	494.47	200000	
28	Si	45	H2	2361.161	ppb	1.3	117132.53	10000	
39	K	45	He	2044.866	ppb	1.0	166528.46	200000	
40	Ca	45	H2	33599.613	ppb	0.4	15679558.66	200000	
51	V	89	He	0.257	ppb	11.1	473.36	1000	
52	Cr	89	He	0.574	ppb	6.1	1443.15	2000	
55	Mn	89	He	0.876	ppb	7.4	691.23	2000	
56	Fe	89	H2	14.838	ppb	3.7	30052.55	100000	
59	Co	89	He	0.396	ppb	7.9	917.88	1000	
60	Ni	89	He	6.237	ppb	2.4	3910.70	1000	
63	Cu	89	He	6.377	ppb	1.0	11024.71	2000	
66	Zn	89	He	132.747	ppb	1.7	24675.84	2000	
75	As	89	He	1.340	ppb	1.2	179.35	1000	
78	Se	89	H2	0.650	ppb	8.7	42.67	1000	
88	Sr	89	He	169.381	ppb	1.0	107267.69	2000	
95	Mo	89	He	0.277	ppb	13.0	216.68	1000	
107	Ag	89	He	0.043	ppb	25.1	134.45	100	
111	Cd	89	He	0.110	ppb	8.9	31.48	1000	
118	Sn	159	He	0.962	ppb	4.1	901.18	1000	
121	Sb	159	No Gas	0.218	ppb	37.3	981.16	1000	
137	Ba	159	No Gas	5.815	ppb	28.9	8827.06	2000	
182	W	159	No Gas	4.714	ppb	9.1	13856.30	1000	
205	Tl	209	No Gas	0.164	ppb	62.1	1037.90	1000	
208	Pb	209	No Gas	1.438	ppb	12.2	11031.01	2000	
232	Th	209	No Gas	0.696	ppb	23.9	5203.67	1000	
238	U	209	No Gas	0.186	ppb	39.2	1291.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9465585.77	1.7	9181465.1	103.09	29.5	120.4	
Sc	45	No Gas	16773551.71	2.2	16426983.07	102.11	29.5	120.4	
Sc	45	H2	1916120.41	2.8	1932518.05	99.15	29.5	120.4	
Sc	45	He	476440.33	0.6	478214.17	99.63	29.5	120.4	
Ge	72	No Gas	2808866.76	3.3	2769440.33	101.42	29.5	120.4	
Ge	72	H2	516638.59	1.9	546905.92	94.47	29.5	120.4	
Ge	72	He	270798.86	0.5	272551.69	99.36	29.5	120.4	
Y	89	H2	9697979.20	1.6	9834260.27	98.61	29.5	120.4	
Y	89	He	2105450.80	0.3	2139239.05	98.42	29.5	120.4	
Tb	159	No Gas	19720885.82	3.3	19495400.26	101.16	29.5	120.4	
Tb	159	He	7293382.60	0.8	7485871.83	97.43	29.5	120.4	
Bi	209	No Gas	8416419.25	3.8	8594079.3	97.93	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:10:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.030	ppb	8.9	53.34	100	
11	B	6	No Gas	22.204	ppb	4.2	25587.93	1000	
23	Na	45	He	10066.204	ppb	0.4	1777512.44	200000	
24	Mg	45	He	2682.618	ppb	1.0	240755.33	200000	
27	Al	45	He	64.567	ppb	10.0	2209.15	200000	
28	Si	45	H2	3339.975	ppb	1.5	164761.64	10000	
39	K	45	He	320.014	ppb	4.4	44362.07	200000	
40	Ca	45	H2	4600.845	ppb	1.0	2141676.48	200000	
51	V	89	He	0.273	ppb	17.7	491.14	1000	
52	Cr	89	He	0.313	ppb	0.7	1088.52	2000	
55	Mn	89	He	6.173	ppb	3.3	3794.50	2000	
56	Fe	89	H2	11.303	ppb	2.7	23856.93	100000	
59	Co	89	He	0.375	ppb	8.0	871.20	1000	
60	Ni	89	He	2.831	ppb	9.7	1843.53	1000	
63	Cu	89	He	4.084	ppb	0.8	7251.01	2000	
66	Zn	89	He	158.857	ppb	1.7	29520.96	2000	
75	As	89	He	1.070	ppb	8.3	146.02	1000	
78	Se	89	H2	0.096	ppb	26.1	7.50	1000	
88	Sr	89	He	32.744	ppb	1.9	20789.71	2000	
95	Mo	89	He	0.087	ppb	21.2	73.34	1000	
107	Ag	89	He	0.023	ppb	38.2	87.78	100	
111	Cd	89	He	0.046	ppb	17.0	13.70	1000	
118	Sn	159	He	0.902	ppb	12.6	873.42	1000	
121	Sb	159	No Gas	0.060	ppb	21.6	367.08	1000	
137	Ba	159	No Gas	6.417	ppb	10.2	9741.23	2000	
182	W	159	No Gas	0.043	ppb	32.8	153.50	1000	
205	Tl	209	No Gas	0.006	ppb	237.8	213.57	1000	
208	Pb	209	No Gas	0.042	ppb	39.8	650.74	2000	
232	Th	209	No Gas	0.085	ppb	16.0	834.31	1000	
238	U	209	No Gas	0.021	ppb	31.7	153.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9487188.00	2.8	9181465.1	103.33	29.5	120.4	
Sc	45	No Gas	16761723.42	3.2	16426983.07	102.04	29.5	120.4	
Sc	45	H2	1907425.95	0.7	1932518.05	98.7	29.5	120.4	
Sc	45	He	475212.73	1.1	478214.17	99.37	29.5	120.4	
Ge	72	No Gas	2836682.75	2.4	2769440.33	102.43	29.5	120.4	
Ge	72	H2	515824.38	0.8	546905.92	94.32	29.5	120.4	
Ge	72	He	271483.99	0.5	272551.69	99.61	29.5	120.4	
Y	89	H2	9674523.04	1.0	9834260.27	98.38	29.5	120.4	
Y	89	He	2109064.02	0.9	2139239.05	98.59	29.5	120.4	
Tb	159	No Gas	19748955.12	3.1	19495400.26	101.3	29.5	120.4	
Tb	159	He	7350416.07	0.4	7485871.83	98.19	29.5	120.4	
Bi	209	No Gas	8579371.15	2.7	8594079.3	99.83	29.5	120.4	

Sample Report

Sample Name SN5646-005A

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:13:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.249	ppb	5.2	16803.57	100	
11	B	6	No Gas	214.030	ppb	5.1	234890.00	1000	
23	Na	45	He	19886.244	ppb	0.8	3471761.53	200000	
24	Mg	45	He	3628.859	ppb	1.1	325410.98	200000	
27	Al	45	He	969.585	ppb	1.2	31674.76	200000	
28	Si	45	H2	7830.674	ppb	0.2	379860.84	10000	
39	K	45	He	10562.664	ppb	0.9	766660.34	200000	
40	Ca	45	H2	5462.669	ppb	0.3	2504236.40	200000	
51	V	89	He	51.617	ppb	1.2	55607.42	1000	
52	Cr	89	He	51.877	ppb	0.6	71228.42	2000	
55	Mn	89	He	27.595	ppb	0.4	16281.11	2000	
56	Fe	89	H2	1013.655	ppb	1.4	1741256.21	100000	
59	Co	89	He	11.120	ppb	1.1	24752.30	1000	
60	Ni	89	He	24.300	ppb	2.2	14857.29	1000	
63	Cu	89	He	35.620	ppb	0.8	59171.65	2000	
66	Zn	89	He	312.535	ppb	0.6	57555.11	2000	
75	As	89	He	51.503	ppb	1.1	6414.51	1000	
78	Se	89	H2	48.687	ppb	0.6	3040.36	1000	
88	Sr	89	He	81.305	ppb	1.9	51393.50	2000	
95	Mo	89	He	50.730	ppb	0.7	38169.80	1000	
107	Ag	89	He	10.775	ppb	1.6	25141.72	100	
111	Cd	89	He	10.626	ppb	1.0	2953.32	1000	
118	Sn	159	He	50.597	ppb	1.1	29546.51	1000	
121	Sb	159	No Gas	10.757	ppb	2.7	41660.68	1000	
137	Ba	159	No Gas	26.543	ppb	2.4	39733.75	2000	
182	W	159	No Gas	49.484	ppb	4.6	144050.13	1000	
205	Tl	209	No Gas	10.827	ppb	5.1	57679.51	1000	
208	Pb	209	No Gas	10.471	ppb	3.9	79711.03	2000	
232	Th	209	No Gas	10.636	ppb	5.2	77364.51	1000	
238	U	209	No Gas	10.516	ppb	6.7	73545.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9338646.24	2.5	9181465.1	101.71	29.5	120.4	
Sc	45	No Gas	16583849.52	1.2	16426983.07	100.95	29.5	120.4	
Sc	45	H2	1879207.06	1.6	1932518.05	97.24	29.5	120.4	
Sc	45	He	474868.94	1.2	478214.17	99.3	29.5	120.4	
Ge	72	No Gas	2802299.93	1.1	2769440.33	101.19	29.5	120.4	
Ge	72	H2	506374.12	1.0	546905.92	92.59	29.5	120.4	
Ge	72	He	269601.03	0.5	272551.69	98.92	29.5	120.4	
Y	89	H2	9564072.28	0.6	9834260.27	97.25	29.5	120.4	
Y	89	He	2100972.16	0.4	2139239.05	98.21	29.5	120.4	
Tb	159	No Gas	19547835.68	1.7	19495400.26	100.27	29.5	120.4	
Tb	159	He	7283308.02	0.2	7485871.83	97.29	29.5	120.4	
Bi	209	No Gas	8558096.13	2.6	8594079.3	99.58	29.5	120.4	

Sample Report

Sample Name SN5646-005L

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:15:47 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.100	ppb	40.9	36.67	100	
11	B	6	No Gas	34.397	ppb	4.2	8508.33	1000	
23	Na	45	He	9876.091	ppb	4.1	377473.89	200000	
24	Mg	45	He	2619.287	ppb	4.2	46835.10	200000	
27	Al	45	He	64.549	ppb	16.0	523.36	200000	
28	Si	45	H2	3365.245	ppb	2.5	33687.53	10000	
39	K	45	He	431.288	ppb	15.3	27732.71	200000	
40	Ca	45	H2	4548.180	ppb	0.7	428136.41	200000	
51	V	89	He	-0.013	ppb	N/A	193.34	1000	
52	Cr	89	He	0.437	ppb	68.3	777.88	2000	
55	Mn	89	He	6.901	ppb	4.2	983.86	2000	
56	Fe	89	H2	17.940	ppb	3.7	10569.13	100000	
59	Co	89	He	0.596	ppb	21.0	300.03	1000	
60	Ni	89	He	2.876	ppb	3.2	468.92	1000	
63	Cu	89	He	34.559	ppb	3.8	11878.85	2000	
66	Zn	89	He	682.007	ppb	4.3	25285.91	2000	
75	As	89	He	1.068	ppb	9.5	39.00	1000	
78	Se	89	H2	0.354	ppb	21.1	6.00	1000	
88	Sr	89	He	32.500	ppb	4.2	4127.44	2000	
95	Mo	89	He	0.429	ppb	18.4	72.23	1000	
107	Ag	89	He	0.049	ppb	73.1	57.78	100	
111	Cd	89	He	0.053	ppb	20.1	3.70	1000	
118	Sn	159	He	0.942	ppb	44.1	452.25	1000	
121	Sb	159	No Gas	0.180	ppb	68.8	276.98	1000	
137	Ba	159	No Gas	7.307	ppb	4.3	2292.74	2000	
182	W	159	No Gas	0.563	ppb	28.0	360.41	1000	
205	Tl	209	No Gas	0.085	ppb	44.5	276.98	1000	
208	Pb	209	No Gas	0.113	ppb	25.3	513.91	2000	
232	Th	209	No Gas	0.207	ppb	34.8	527.27	1000	
238	U	209	No Gas	0.117	ppb	23.2	173.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9418329.77	2.9	9181465.1	102.58	29.5	120.4	
Sc	45	No Gas	16775883.42	1.9	16426983.07	102.12	29.5	120.4	
Sc	45	H2	1910945.63	1.2	1932518.05	98.88	29.5	120.4	
Sc	45	He	473112.93	2.8	478214.17	98.93	29.5	120.4	
Ge	72	No Gas	2830651.80	2.7	2769440.33	102.21	29.5	120.4	
Ge	72	H2	526164.16	1.2	546905.92	96.21	29.5	120.4	
Ge	72	He	268906.39	2.0	272551.69	98.66	29.5	120.4	
Y	89	H2	9755595.25	0.9	9834260.27	99.2	29.5	120.4	
Y	89	He	2101701.39	2.5	2139239.05	98.25	29.5	120.4	
Tb	159	No Gas	19886580.82	1.6	19495400.26	102.01	29.5	120.4	
Tb	159	He	7275145.72	2.9	7485871.83	97.19	29.5	120.4	
Bi	209	No Gas	8660131.39	1.7	8594079.3	100.77	29.5	120.4	

Sample Report

Sample Name SN5646-005P

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:18:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.318	ppb	8.3	84525.46	100	
11	B	6	No Gas	509.934	ppb	7.1	572264.94	1000	
23	Na	45	He	17663.460	ppb	1.1	3096925.93	200000	
24	Mg	45	He	8219.540	ppb	0.9	739143.37	200000	
27	Al	45	He	2040.055	ppb	0.1	66727.60	200000	
28	Si	45	H2	4430.702	ppb	1.1	214856.51	10000	
39	K	45	He	11186.909	ppb	1.1	813047.59	200000	
40	Ca	45	H2	7292.882	ppb	0.1	3336981.31	200000	
51	V	89	He	544.221	ppb	0.9	584422.05	1000	
52	Cr	89	He	221.203	ppb	0.6	301564.50	2000	
55	Mn	89	He	560.406	ppb	0.2	327197.92	2000	
56	Fe	89	H2	1107.937	ppb	1.2	1907011.73	100000	
59	Co	89	He	554.760	ppb	0.3	1233123.97	1000	
60	Ni	89	He	558.667	ppb	0.4	338927.98	1000	
63	Cu	89	He	282.653	ppb	0.7	466091.18	2000	
66	Zn	89	He	663.769	ppb	1.5	121878.66	2000	
75	As	89	He	111.292	ppb	1.0	13846.73	1000	
78	Se	89	H2	105.586	ppb	1.4	6606.10	1000	
88	Sr	89	He	563.905	ppb	0.2	356323.08	2000	
95	Mo	89	He	110.453	ppb	0.6	83099.23	1000	
107	Ag	89	He	55.902	ppb	0.4	130289.75	100	
111	Cd	89	He	272.536	ppb	0.5	75734.91	1000	
118	Sn	159	He	526.362	ppb	0.5	305571.12	1000	
121	Sb	159	No Gas	105.616	ppb	7.7	408590.69	1000	
137	Ba	159	No Gas	2014.935	ppb	7.8	3016265.40	2000	
182	W	159	No Gas	101.265	ppb	8.5	295318.44	1000	
205	Tl	209	No Gas	110.390	ppb	8.4	584189.19	1000	
208	Pb	209	No Gas	105.727	ppb	7.6	798951.88	2000	
232	Th	209	No Gas	103.810	ppb	9.6	750345.66	1000	
238	U	209	No Gas	103.625	ppb	10.0	721969.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9575871.99	2.9	9181465.1	104.3	29.5	120.4	
Sc	45	No Gas	16719199.23	2.5	16426983.07	101.78	29.5	120.4	
Sc	45	H2	1876517.87	0.5	1932518.05	97.1	29.5	120.4	
Sc	45	He	476257.19	1.1	478214.17	99.59	29.5	120.4	
Ge	72	No Gas	2797037.25	3.0	2769440.33	101	29.5	120.4	
Ge	72	H2	510594.64	0.8	546905.92	93.36	29.5	120.4	
Ge	72	He	269323.71	0.9	272551.69	98.82	29.5	120.4	
Y	89	H2	9585604.43	1.0	9834260.27	97.47	29.5	120.4	
Y	89	He	2101032.62	1.0	2139239.05	98.21	29.5	120.4	
Tb	159	No Gas	19607334.01	2.9	19495400.26	100.57	29.5	120.4	
Tb	159	He	7317962.11	0.6	7485871.83	97.76	29.5	120.4	
Bi	209	No Gas	8537679.77	3.7	8594079.3	99.34	29.5	120.4	

Sample Report

Sample Name SN5646-005S

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:21:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	56.162	ppb	4.8	94037.63	100	
11	B	6	No Gas	570.939	ppb	4.6	638392.51	1000	
23	Na	45	He	19041.720	ppb	1.3	3303395.08	200000	
24	Mg	45	He	8662.727	ppb	0.7	771495.10	200000	
27	Al	45	He	2141.359	ppb	0.7	69360.24	200000	
28	Si	45	H2	4702.241	ppb	2.0	227881.46	10000	
39	K	45	He	11728.554	ppb	0.8	843238.41	200000	
40	Ca	45	H2	7853.606	ppb	1.4	3591644.08	200000	
51	V	89	He	581.398	ppb	0.6	621398.14	1000	
52	Cr	89	He	236.602	ppb	0.2	320999.31	2000	
55	Mn	89	He	595.039	ppb	0.3	345773.32	2000	
56	Fe	89	H2	1156.494	ppb	1.1	1985611.18	100000	
59	Co	89	He	591.767	ppb	0.6	1309143.18	1000	
60	Ni	89	He	596.333	ppb	0.9	360041.33	1000	
63	Cu	89	He	303.401	ppb	0.8	497900.26	2000	
66	Zn	89	He	708.864	ppb	1.2	129526.03	2000	
75	As	89	He	118.316	ppb	0.3	14651.31	1000	
78	Se	89	H2	112.234	ppb	1.6	7004.11	1000	
88	Sr	89	He	598.279	ppb	0.2	376255.20	2000	
95	Mo	89	He	118.356	ppb	1.5	88615.64	1000	
107	Ag	89	He	59.996	ppb	0.7	139161.56	100	
111	Cd	89	He	291.378	ppb	0.6	80585.03	1000	
118	Sn	159	He	561.979	ppb	0.6	324201.70	1000	
121	Sb	159	No Gas	117.770	ppb	3.9	454452.19	1000	
137	Ba	159	No Gas	2245.620	ppb	4.7	3352773.64	2000	
182	W	159	No Gas	114.201	ppb	4.8	332225.81	1000	
205	Tl	209	No Gas	122.917	ppb	5.2	646951.72	1000	
208	Pb	209	No Gas	118.086	ppb	4.9	887352.58	2000	
232	Th	209	No Gas	119.280	ppb	5.0	857729.38	1000	
238	U	209	No Gas	117.919	ppb	6.2	817332.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9535073.59	2.1	9181465.1	103.85	29.5	120.4	
Sc	45	No Gas	16644618.41	1.9	16426983.07	101.32	29.5	120.4	
Sc	45	H2	1875872.52	1.4	1932518.05	97.07	29.5	120.4	
Sc	45	He	471666.38	1.1	478214.17	98.63	29.5	120.4	
Ge	72	No Gas	2779469.40	2.0	2769440.33	100.36	29.5	120.4	
Ge	72	H2	510795.07	1.3	546905.92	93.4	29.5	120.4	
Ge	72	He	268305.82	0.8	272551.69	98.44	29.5	120.4	
Y	89	H2	9561717.00	1.3	9834260.27	97.23	29.5	120.4	
Y	89	He	2091129.71	1.2	2139239.05	97.75	29.5	120.4	
Tb	159	No Gas	19537729.71	1.9	19495400.26	100.22	29.5	120.4	
Tb	159	He	7272517.60	0.9	7485871.83	97.15	29.5	120.4	
Bi	209	No Gas	8482410.13	2.8	8594079.3	98.7	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNH04IMS1
File Name	050_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:23:43 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.029	ppb	42.2	52.23	0.5	
B	11	6	No Gas	13.054	ppb	4.5	15348.76	10	PB 6020 Fails DoD
Na	23	45	He	49.387	ppb	11.0	46058.39	500	
Mg	24	45	He	19.068	ppb	8.2	1764.68	50	
Al	27	45	He	37.211	ppb	7.9	1303.44	50	
Si	28	45	H2	27.342	ppb	9.6	1835.50	250	
K	39	45	He	68.102	ppb	17.7	26277.33	500	
Ca	40	45	H2	51.682	ppb	0.5	28320.11	50	PB 6020 Fails DoD
V	51	89	He	0.343	ppb	16.7	558.92	2.5	
Cr	52	89	He	0.787	ppb	10.6	1713.80	2.5	
Mn	55	89	He	1.305	ppb	3.3	931.20	1	PB 6020 Fails DoD
Fe	56	89	H2	15.326	ppb	1.9	30350.11	50	
Co	59	89	He	0.179	ppb	24.0	428.93	0.5	
Ni	60	89	He	0.607	ppb	9.4	483.36	1	
Cu	63	89	He	6.903	ppb	1.0	11757.54	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	132.617	ppb	1.0	24371.99	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.073	ppb	44.9	21.33	2.5	
Se	78	89	H2	0.156	ppb	26.4	11.17	2.5	
Sr	88	89	He	0.214	ppb	22.9	155.56	2.5	
Mo	95	89	He	0.173	ppb	11.5	136.67	2.5	
Ag	107	89	He	0.029	ppb	33.8	102.22	0.5	
Cd	111	89	He	0.050	ppb	14.2	14.45	0.5	
Sn	118	159	He	44.565	ppb	0.4	25787.57	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.154	ppb	17.3	734.17	0.5	
Ba	137	159	No Gas	1.221	ppb	16.4	1908.96	1	PB 6020 Fails DoD
W	182	159	No Gas	0.204	ppb	10.9	624.05	2.5	
Tl	205	209	No Gas	0.083	ppb	46.2	634.06	0.5	
Pb	208	209	No Gas	0.149	ppb	13.8	1478.36	0.5	
Th	232	209	No Gas	0.544	ppb	15.3	4212.16	2.5	
U	238	209	No Gas	0.073	ppb	39.5	523.94	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9426617.12	2.4	9181465.1	102.67	29.5	120.4	
Sc	45	No Gas	16667048.75	1.4	16426983.07	101.46	29.5	120.4	
Sc	45	H2	1871221.40	0.2	1932518.05	96.83	29.5	120.4	
Sc	45	He	469653.20	0.4	478214.17	98.21	29.5	120.4	
Ge	72	No Gas	2771731.19	1.5	2769440.33	100.08	29.5	120.4	
Ge	72	H2	505788.31	0.6	546905.92	92.48	29.5	120.4	
Ge	72	He	266524.95	0.2	272551.69	97.79	29.5	120.4	
Y	89	H2	9523602.64	0.5	9834260.27	96.84	29.5	120.4	
Y	89	He	2081436.29	0.2	2139239.05	97.3	29.5	120.4	
Tb	159	No Gas	19660810.54	1.6	19495400.26	100.85	29.5	120.4	
Tb	159	He	7205903.57	0.4	7485871.83	96.26	29.5	120.4	
Bi	209	No Gas	8628667.74	1.9	8594079.3	100.4	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH04IMS1
File Name	051LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:26:29 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.473	ppb	4.3	79648.67	50	18.99	79.5	120.4	
B	11	6	No Gas	479.954	ppb	3.6	537945.22	500	19.2	79.5	120.4	
Na	23	45	He	7940.917	ppb	0.5	1396326.11	7500	21.18	79.5	120.4	
Mg	24	45	He	5318.584	ppb	0.6	472564.86	5000	21.27	79.5	120.4	
Al	27	45	He	1849.579	ppb	0.2	59778.02	2000	18.5	79.5	120.4	
Si	28	45	H2	936.840	ppb	3.6	45553.56	1000	18.74	79.5	120.4	
K	39	45	He	10558.539	ppb	0.5	759389.66	10000	21.12	79.5	120.4	
Ca	40	45	H2	2587.062	ppb	0.2	1179632.58	2500	20.7	79.5	120.4	
V	51	89	He	497.766	ppb	0.4	532449.89	500	19.91	79.5	120.4	
Cr	52	89	He	202.776	ppb	0.5	275399.72	200	20.28	79.5	120.4	
Mn	55	89	He	503.604	ppb	0.6	292886.71	500	20.14	79.5	120.4	
Fe	56	89	H2	986.459	ppb	0.4	1690564.17	1000	19.73	79.5	120.4	
Co	59	89	He	506.072	ppb	0.9	1120390.36	500	20.24	79.5	120.4	
Ni	60	89	He	509.366	ppb	0.7	307792.69	500	20.37	79.5	120.4	
Cu	63	89	He	257.927	ppb	0.4	423685.09	250	20.63	79.5	120.4	
Zn	66	89	He	643.300	ppb	0.1	117670.20	500	25.73	79.5	120.4	6020□ DoD
As	75	89	He	104.182	ppb	0.7	12912.05	100	20.84	79.5	120.4	
Se	78	89	H2	100.944	ppb	1.3	6286.97	100	20.19	79.5	120.4	
Sr	88	89	He	499.501	ppb	0.5	314374.77	500	19.98	79.5	120.4	
Mo	95	89	He	104.812	ppb	0.5	78540.50	100	20.96	79.5	120.4	
Ag	107	89	He	51.271	ppb	0.2	119019.85	50	20.51	79.5	120.4	
Cd	111	89	He	258.952	ppb	0.4	71671.20	250	20.72	79.5	120.4	
Sn	118	159	He	539.021	ppb	0.5	311671.69	500	21.56	79.5	120.4	
Sb	121	159	No Gas	103.560	ppb	4.9	399802.14	100	20.71	79.5	120.4	
Ba	137	159	No Gas	1920.693	ppb	5.3	2869058.70	2000	19.21	79.5	120.4	
W	182	159	No Gas	99.602	ppb	4.0	289953.81	100	19.92	79.5	120.4	
Tl	205	209	No Gas	107.916	ppb	2.9	568867.38	100	21.58	79.5	120.4	
[Pb]	206	209	No Gas	104.241	ppb	3.5	197811.32	100	20.85	79.5	120.4	
[Pb]	207	209	No Gas	105.094	ppb	3.2	172058.84	100	21.02	79.5	120.4	
Pb	208	209	No Gas	104.306	ppb	3.1	784937.60	100	20.86	79.5	120.4	
Th	232	209	No Gas	102.415	ppb	3.9	737419.29	100	20.48	79.5	120.4	
U	238	209	No Gas	103.376	ppb	3.6	717647.21	100	20.68	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9554144.85	1.8	9181465.1	104.06	29.5	120.4	
Sc	45	No Gas	16493859.94	1.9	16426983.07	100.41	29.5	120.4	
Sc	45	H2	1865134.59	0.6	1932518.05	96.51	29.5	120.4	
Sc	45	He	470517.51	0.7	478214.17	98.39	29.5	120.4	
Ge	72	No Gas	2760468.60	2.5	2769440.33	99.68	29.5	120.4	
Ge	72	H2	507183.68	1.0	546905.92	92.74	29.5	120.4	
Ge	72	He	267246.39	1.0	272551.69	98.05	29.5	120.4	
Y	89	H2	9540907.76	0.7	9834260.27	97.02	29.5	120.4	
Y	89	He	2092638.75	0.6	2139239.05	97.82	29.5	120.4	
Tb	159	No Gas	19549217.90	2.1	19495400.26	100.28	29.5	120.4	
Tb	159	He	7288839.54	0.7	7485871.83	97.37	29.5	120.4	
Bi	209	No Gas	8489028.21	1.6	8594079.3	98.78	29.5	120.4	

Sample Report

Sample Name SN5717-004

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:29:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.444	ppb	2.3	8732.94	100	
11	B	6	No Gas	73.752	ppb	1.2	79747.31	1000	
23	Na	45	He	635.927	ppb	0.8	152444.41	200000	
24	Mg	45	He	35076.562	ppb	0.5	3242748.46	200000	
27	Al	45	He	105686.285	ppb	0.2	3548334.53	200000	
28	Si	45	H2	2698.293	ppb	4.3	136326.36	10000	
39	K	45	He	13013.473	ppb	0.1	968763.55	200000	
40	Ca	45	H2	28575.375	ppb	0.9	13588485.49	200000	
51	V	89	He	186.474	ppb	0.5	222383.31	1000	
52	Cr	89	He	132.800	ppb	0.6	201209.32	2000	
55	Mn	89	He	5059.806	ppb	0.0	3276841.94	2000	
56	Fe	89	H2	200012.105	ppb	0.7	383890940.75	100000	
59	Co	89	He	83.548	ppb	1.4	206108.48	1000	
60	Ni	89	He	201.729	ppb	0.7	135893.19	1000	
63	Cu	89	He	231.070	ppb	0.6	422945.56	2000	
66	Zn	89	He	802.030	ppb	0.7	163366.14	2000	
75	As	89	He	81.155	ppb	1.1	11208.74	1000	
78	Se	89	H2	2.487	ppb	6.7	175.49	1000	
88	Sr	89	He	83.353	ppb	1.0	58470.92	2000	
95	Mo	89	He	18.377	ppb	2.0	15347.98	1000	
107	Ag	89	He	0.376	ppb	5.3	1010.08	100	
111	Cd	89	He	2.421	ppb	5.6	747.07	1000	
118	Sn	159	He	45.387	ppb	0.6	26472.32	1000	
121	Sb	159	No Gas	1.936	ppb	2.7	7360.29	1000	
137	Ba	159	No Gas	512.504	ppb	1.1	741164.14	2000	
182	W	159	No Gas	0.500	ppb	16.4	1435.02	1000	
205	Tl	209	No Gas	3.674	ppb	0.4	18684.59	1000	
208	Pb	209	No Gas	327.121	ppb	1.4	2352695.68	2000	
232	Th	209	No Gas	39.728	ppb	0.3	273656.83	1000	
238	U	209	No Gas	7.210	ppb	1.0	47858.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9126767.49	1.2	9181465.1	99.4	29.5	120.4	
Sc	45	No Gas	16573861.19	2.5	16426983.07	100.89	29.5	120.4	
Sc	45	H2	1952289.47	0.8	1932518.05	101.02	29.5	120.4	
Sc	45	He	489627.07	0.8	478214.17	102.39	29.5	120.4	
Ge	72	No Gas	2699464.81	2.0	2769440.33	97.47	29.5	120.4	
Ge	72	H2	514537.18	1.3	546905.92	94.08	29.5	120.4	
Ge	72	He	272457.54	0.4	272551.69	99.97	29.5	120.4	
Y	89	H2	10711982.54	0.8	9834260.27	108.93	29.5	120.4	
Y	89	He	2331586.51	1.0	2139239.05	108.99	29.5	120.4	
Tb	159	No Gas	18915119.16	2.2	19495400.26	97.02	29.5	120.4	
Tb	159	He	7264933.09	0.3	7485871.83	97.05	29.5	120.4	
Bi	209	No Gas	8114475.18	1.8	8594079.3	94.42	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:31:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.845	ppb	5.7	200910.10	25	99.38	89.8	110.2	
11	B	6	No Gas	24.758	ppb	4.5	134428.46	25	99.03	89.8	110.2	
23	Na	45	He	4950.983	ppb	0.3	4382239.59	5000	99.02	89.8	110.2	
24	Mg	45	He	4939.761	ppb	0.8	2250238.60	5000	98.8	89.8	110.2	
27	Al	45	He	495.127	ppb	0.7	82017.28	500	99.03	89.8	110.2	
28	Si	45	H2	477.951	ppb	0.8	119372.41	500	95.59	89.8	110.2	
39	K	45	He	4917.600	ppb	0.3	1784193.28	5000	98.35	89.8	110.2	
40	Ca	45	H2	4853.520	ppb	0.4	11404149.13	5000	97.07	89.8	110.2	
51	V	89	He	24.992	ppb	0.5	136975.62	25	99.97	89.8	110.2	
52	Cr	89	He	24.915	ppb	0.2	173453.66	25	99.66	89.8	110.2	
55	Mn	89	He	25.125	ppb	0.4	74924.49	25	100.5	89.8	110.2	
56	Fe	89	H2	4851.613	ppb	0.6	42685257.09	5000	97.03	89.8	110.2	
59	Co	89	He	24.968	ppb	1.1	282947.92	25	99.87	89.8	110.2	
60	Ni	89	He	24.969	ppb	0.4	77316.54	25	99.88	89.8	110.2	
63	Cu	89	He	25.181	ppb	0.7	211969.83	25	100.72	89.8	110.2	
66	Zn	89	He	25.131	ppb	0.4	23782.04	25	100.52	89.8	110.2	
75	As	89	He	24.782	ppb	0.7	15717.56	25	99.13	89.8	110.2	
78	Se	89	H2	24.391	ppb	1.4	7817.00	25	97.56	89.8	110.2	
88	Sr	89	He	24.468	ppb	0.8	78833.00	25	97.87	89.8	110.2	
95	Mo	89	He	24.782	ppb	0.6	95046.41	25	99.13	89.8	110.2	
107	Ag	89	He	25.051	ppb	0.8	297591.14	25	100.2	89.8	110.2	
111	Cd	89	He	24.619	ppb	0.6	34875.59	25	98.48	89.8	110.2	
118	Sn	159	He	24.786	ppb	1.4	72877.32	25	99.14	89.8	110.2	
121	Sb	159	No Gas	25.986	ppb	4.4	486400.58	25	103.94	89.8	110.2	
137	Ba	159	No Gas	25.783	ppb	3.1	186846.12	25	103.13	89.8	110.2	
182	W	159	No Gas	24.921	ppb	5.3	351658.61	25	99.68	89.8	110.2	
205	Tl	209	No Gas	26.604	ppb	5.3	675330.42	25	106.42	89.8	110.2	
208	Pb	209	No Gas	25.594	ppb	2.9	927834.70	25	102.38	89.8	110.2	
232	Th	209	No Gas	25.760	ppb	5.9	893273.36	25	103.04	89.8	110.2	
238	U	209	No Gas	25.976	ppb	4.6	868585.59	25	103.9	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9213700.36	2.5	9181465.1	100.35	29.5	120.4	
Sc	45	No Gas	16408316.49	1.9	16426983.07	99.89	29.5	120.4	
Sc	45	H2	1929135.46	0.7	1932518.05	99.82	29.5	120.4	
Sc	45	He	482531.16	0.5	478214.17	100.9	29.5	120.4	
Ge	72	No Gas	2760739.96	1.1	2769440.33	99.69	29.5	120.4	
Ge	72	H2	533420.54	1.5	546905.92	97.53	29.5	120.4	
Ge	72	He	273446.54	0.4	272551.69	100.33	29.5	120.4	
Y	89	H2	9819386.44	0.5	9834260.27	99.85	29.5	120.4	
Y	89	He	2142115.44	0.2	2139239.05	100.13	29.5	120.4	
Tb	159	No Gas	18957371.94	2.1	19495400.26	97.24	29.5	120.4	
Tb	159	He	7385570.44	0.2	7485871.83	98.66	29.5	120.4	
Bi	209	No Gas	8179930.79	2.1	8594079.3	95.18	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:34:25 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.023	ppb	37.9	193.34	0.2	
11	B	6	No Gas	0.545	ppb	4.8	3930.66	4	
23	Na	45	He	-3.327	ppb	N/A	35302.75	200	
24	Mg	45	He	1.092	ppb	19.4	566.72	20	
27	Al	45	He	1.171	ppb	8.5	297.79	20	
28	Si	45	H2	0.301	ppb	114.0	600.68	100	
39	K	45	He	7.224	ppb	28.9	24409.93	200	
40	Ca	45	H2	1.067	ppb	13.7	7346.61	20	
51	V	89	He	-0.003	ppb	N/A	182.23	1	
52	Cr	89	He	0.007	ppb	37.8	717.22	1	
55	Mn	89	He	0.054	ppb	11.6	339.28	0.4	
56	Fe	89	H2	2.809	ppb	3.6	28745.04	20	
59	Co	89	He	0.005	ppb	26.2	86.67	0.2	
60	Ni	89	He	-0.014	ppb	N/A	80.00	0.4	
63	Cu	89	He	0.002	ppb	33.7	523.36	0.6	
66	Zn	89	He	0.009	ppb	212.1	322.24	2	
75	As	89	He	0.002	ppb	312.1	14.00	1	
78	Se	89	H2	0.030	ppb	14.4	11.00	1	
88	Sr	89	He	0.006	ppb	56.0	40.00	1	
95	Mo	89	He	0.042	ppb	31.0	167.79	1	
107	Ag	89	He	0.006	ppb	9.5	106.67	0.2	
111	Cd	89	He	0.005	ppb	22.7	8.15	0.2	
118	Sn	159	He	0.065	ppb	32.5	540.03	1	
121	Sb	159	No Gas	0.028	ppb	7.4	680.78	0.2	
137	Ba	159	No Gas	0.055	ppb	32.4	483.88	0.4	
182	W	159	No Gas	0.070	ppb	3.4	1037.87	1	
205	Tl	209	No Gas	0.023	ppb	30.8	797.59	0.2	
208	Pb	209	No Gas	0.027	ppb	37.4	1351.54	0.2	
232	Th	209	No Gas	0.066	ppb	13.8	2589.87	1	
238	U	209	No Gas	0.026	ppb	35.8	907.73	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9418354.07	2.8	9181465.1	102.58	29.5	120.4	
Sc	45	No Gas	16734702.24	2.2	16426983.07	101.87	29.5	120.4	
Sc	45	H2	1908782.66	0.8	1932518.05	98.77	29.5	120.4	
Sc	45	He	476693.41	0.2	478214.17	99.68	29.5	120.4	
Ge	72	No Gas	2806491.52	3.4	2769440.33	101.34	29.5	120.4	
Ge	72	H2	530458.32	1.3	546905.92	96.99	29.5	120.4	
Ge	72	He	271824.34	0.5	272551.69	99.73	29.5	120.4	
Y	89	H2	9721375.41	0.5	9834260.27	98.85	29.5	120.4	
Y	89	He	2127533.02	0.2	2139239.05	99.45	29.5	120.4	
Tb	159	No Gas	19473428.74	2.5	19495400.26	99.89	29.5	120.4	
Tb	159	He	7372767.95	0.5	7485871.83	98.49	29.5	120.4	
Bi	209	No Gas	8515268.72	2.9	8594079.3	99.08	29.5	120.4	

Sample Report

Sample Name SN5717-010

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:37:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.810	ppb	10.8	7934.68	100	
11	B	6	No Gas	77.293	ppb	7.2	85956.39	1000	
23	Na	45	He	1015.783	ppb	1.3	215963.41	200000	
24	Mg	45	He	99682.428	ppb	0.6	9043313.13	200000	
27	Al	45	He	93987.884	ppb	0.1	3096822.00	200000	
28	Si	45	H2	2398.085	ppb	1.2	118482.11	10000	
39	K	45	He	15804.122	ppb	0.1	1149863.02	200000	
40	Ca	45	H2	293410.003	ppb	1.7	136327855.75	200000	
51	V	89	He	173.249	ppb	1.2	200763.82	1000	
52	Cr	89	He	140.491	ppb	1.0	206793.86	2000	
55	Mn	89	He	3769.968	ppb	0.4	2372488.92	2000	
56	Fe	89	H2	202113.906	ppb	0.7	376831531.59	100000	
59	Co	89	He	87.804	ppb	0.6	210499.53	1000	
60	Ni	89	He	223.310	ppb	1.3	146158.76	1000	
63	Cu	89	He	213.079	ppb	0.4	379050.35	2000	
66	Zn	89	He	578.358	ppb	1.0	114563.78	2000	
75	As	89	He	76.298	ppb	0.8	10241.89	1000	
78	Se	89	H2	1.596	ppb	15.8	110.00	1000	
88	Sr	89	He	387.275	ppb	0.8	263891.92	2000	
95	Mo	89	He	15.394	ppb	3.3	12493.88	1000	
107	Ag	89	He	0.440	ppb	8.1	1143.42	100	
111	Cd	89	He	1.306	ppb	0.9	392.23	1000	
118	Sn	159	He	44.150	ppb	0.4	25588.39	1000	
121	Sb	159	No Gas	0.990	ppb	3.8	3955.00	1000	
137	Ba	159	No Gas	504.665	ppb	6.6	753305.60	2000	
182	W	159	No Gas	0.272	ppb	12.5	817.60	1000	
205	Tl	209	No Gas	3.092	ppb	12.6	16075.03	1000	
208	Pb	209	No Gas	156.468	ppb	7.4	1149875.71	2000	
232	Th	209	No Gas	39.960	ppb	9.1	281077.17	1000	
238	U	209	No Gas	6.316	ppb	7.2	42835.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9399453.29	2.0	9181465.1	102.37	29.5	120.4	
Sc	45	No Gas	17064007.99	2.0	16426983.07	103.88	29.5	120.4	
Sc	45	H2	1908179.98	0.8	1932518.05	98.74	29.5	120.4	
Sc	45	He	480504.86	1.0	478214.17	100.48	29.5	120.4	
Ge	72	No Gas	2770585.02	2.0	2769440.33	100.04	29.5	120.4	
Ge	72	H2	501163.71	1.2	546905.92	91.64	29.5	120.4	
Ge	72	He	266029.73	0.8	272551.69	97.61	29.5	120.4	
Y	89	H2	10405415.36	1.2	9834260.27	105.81	29.5	120.4	
Y	89	He	2265705.17	1.3	2139239.05	105.91	29.5	120.4	
Tb	159	No Gas	19536582.35	2.0	19495400.26	100.21	29.5	120.4	
Tb	159	He	7216577.18	0.4	7485871.83	96.4	29.5	120.4	
Bi	209	No Gas	8300267.37	2.8	8594079.3	96.58	29.5	120.4	

Sample Report

Sample Name SN5717-010A

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:39:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	14.193	ppb	6.8	23615.51	100	
11	B	6	No Gas	257.048	ppb	5.2	286194.41	1000	
23	Na	45	He	11041.118	ppb	0.3	1956668.53	200000	
24	Mg	45	He	95023.148	ppb	0.3	8572674.66	200000	
27	Al	45	He	89815.711	ppb	0.4	2942794.23	200000	
28	Si	45	H2	6715.707	ppb	0.8	328173.55	10000	
39	K	45	He	24779.665	ppb	0.6	1780390.08	200000	
40	Ca	45	H2	278706.628	ppb	0.2	128440660.31	200000	
51	V	89	He	211.028	ppb	0.3	241928.38	1000	
52	Cr	89	He	180.621	ppb	0.5	262859.35	2000	
55	Mn	89	He	3574.007	ppb	0.1	2225435.42	2000	
56	Fe	89	H2	192463.515	ppb	0.8	355107925.42	100000	
59	Co	89	He	92.831	ppb	0.8	220195.32	1000	
60	Ni	89	He	232.597	ppb	1.0	150628.79	1000	
63	Cu	89	He	227.231	ppb	0.5	399900.19	2000	
66	Zn	89	He	633.452	ppb	0.6	124126.22	2000	
75	As	89	He	119.669	ppb	1.3	15884.78	1000	
78	Se	89	H2	46.181	ppb	1.1	3105.04	1000	
88	Sr	89	He	408.098	ppb	0.2	275145.47	2000	
95	Mo	89	He	60.805	ppb	0.7	48815.81	1000	
107	Ag	89	He	10.067	ppb	1.7	25063.83	100	
111	Cd	89	He	10.822	ppb	2.9	3209.30	1000	
118	Sn	159	He	89.818	ppb	1.5	51227.18	1000	
121	Sb	159	No Gas	10.923	ppb	5.8	43425.62	1000	
137	Ba	159	No Gas	483.741	ppb	7.1	741553.30	2000	
182	W	159	No Gas	46.271	ppb	6.4	138225.56	1000	
205	Tl	209	No Gas	13.199	ppb	6.4	69611.07	1000	
208	Pb	209	No Gas	155.006	ppb	6.4	1164192.90	2000	
232	Th	209	No Gas	47.774	ppb	7.0	343521.60	1000	
238	U	209	No Gas	15.980	ppb	6.9	110727.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9483878.23	3.7	9181465.1	103.29	29.5	120.4	
Sc	45	No Gas	17605452.33	5.3	16426983.07	107.17	29.5	120.4	
Sc	45	H2	1892629.55	1.2	1932518.05	97.94	29.5	120.4	
Sc	45	He	477813.31	0.4	478214.17	99.92	29.5	120.4	
Ge	72	No Gas	2861857.57	4.3	2769440.33	103.34	29.5	120.4	
Ge	72	H2	498615.40	1.6	546905.92	91.17	29.5	120.4	
Ge	72	He	266308.25	0.5	272551.69	97.71	29.5	120.4	
Y	89	H2	10296718.86	0.9	9834260.27	104.7	29.5	120.4	
Y	89	He	2241705.56	0.7	2139239.05	104.79	29.5	120.4	
Tb	159	No Gas	20096045.26	5.5	19495400.26	103.08	29.5	120.4	
Tb	159	He	7150490.38	0.6	7485871.83	95.52	29.5	120.4	
Bi	209	No Gas	8490027.65	5.4	8594079.3	98.79	29.5	120.4	

Sample Report

Sample Name SN5717-010L

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:42:43 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.147	ppb	4.1	1707.94	100	
11	B	6	No Gas	95.010	ppb	3.3	21897.21	1000	
23	Na	45	He	933.597	ppb	2.4	70802.07	200000	
24	Mg	45	He	103850.928	ppb	0.3	1876120.02	200000	
27	Al	45	He	97198.243	ppb	0.6	637789.91	200000	
28	Si	45	H2	2466.202	ppb	7.7	24936.16	10000	
39	K	45	He	16878.947	ppb	0.8	261780.25	200000	
40	Ca	45	H2	300576.504	ppb	0.5	28104220.69	200000	
51	V	89	He	186.388	ppb	0.7	41357.15	1000	
52	Cr	89	He	154.327	ppb	1.5	43856.99	2000	
55	Mn	89	He	4190.783	ppb	0.6	503157.05	2000	
56	Fe	89	H2	222984.292	ppb	0.1	78351241.82	100000	
59	Co	89	He	97.330	ppb	2.2	44530.97	1000	
60	Ni	89	He	249.992	ppb	0.5	31305.92	1000	
63	Cu	89	He	268.114	ppb	1.0	91351.61	2000	
66	Zn	89	He	1492.168	ppb	1.4	56530.91	2000	
75	As	89	He	81.703	ppb	1.2	2101.73	1000	
78	Se	89	H2	1.862	ppb	13.3	25.33	1000	
88	Sr	89	He	418.964	ppb	1.5	54468.93	2000	
95	Mo	89	He	16.727	ppb	2.4	2595.89	1000	
107	Ag	89	He	0.505	ppb	13.8	277.79	100	
111	Cd	89	He	1.412	ppb	5.7	81.48	1000	
118	Sn	159	He	44.767	ppb	5.1	5556.89	1000	
121	Sb	159	No Gas	1.128	ppb	11.3	1004.50	1000	
137	Ba	159	No Gas	543.130	ppb	5.7	162264.43	2000	
182	W	159	No Gas	0.854	ppb	7.5	523.93	1000	
205	Tl	209	No Gas	3.130	ppb	2.3	3480.99	1000	
208	Pb	209	No Gas	165.174	ppb	5.3	248788.24	2000	
232	Th	209	No Gas	40.705	ppb	4.8	58816.92	1000	
238	U	209	No Gas	6.366	ppb	10.2	8839.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9425822.89	1.8	9181465.1	102.66	29.5	120.4	
Sc	45	No Gas	16857233.31	2.0	16426983.07	102.62	29.5	120.4	
Sc	45	H2	1919746.73	1.0	1932518.05	99.34	29.5	120.4	
Sc	45	He	478389.93	0.4	478214.17	100.04	29.5	120.4	
Ge	72	No Gas	2808898.83	2.0	2769440.33	101.42	29.5	120.4	
Ge	72	H2	520648.85	0.8	546905.92	95.2	29.5	120.4	
Ge	72	He	271999.84	0.6	272551.69	99.8	29.5	120.4	
Y	89	H2	9804545.03	0.8	9834260.27	99.7	29.5	120.4	
Y	89	He	2160631.90	0.5	2139239.05	101	29.5	120.4	
Tb	159	No Gas	19541942.63	1.8	19495400.26	100.24	29.5	120.4	
Tb	159	He	7341864.96	0.3	7485871.83	98.08	29.5	120.4	
Bi	209	No Gas	8491589.62	2.1	8594079.3	98.81	29.5	120.4	

Sample Report

Sample Name SN5717-010P

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:45:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	58.232	ppb	6.6	96286.15	100	
11	B	6	No Gas	575.609	ppb	5.1	635785.43	1000	
23	Na	45	He	9453.760	ppb	0.5	1683422.91	200000	
24	Mg	45	He	112144.136	ppb	0.8	10132395.96	200000	
27	Al	45	He	116430.735	ppb	0.4	3820544.07	200000	
28	Si	45	H2	3576.691	ppb	3.9	175047.27	10000	
39	K	45	He	29289.734	ppb	0.6	2103630.56	200000	
40	Ca	45	H2	292925.181	ppb	0.5	135084656.87	200000	
51	V	89	He	711.502	ppb	0.2	819735.16	1000	
52	Cr	89	He	367.892	ppb	0.2	537662.20	2000	
55	Mn	89	He	4784.202	ppb	0.4	2995515.70	2000	
56	Fe	89	H2	226625.897	ppb	0.4	419640368.92	100000	
59	Co	89	He	603.172	ppb	0.3	1438506.05	1000	
60	Ni	89	He	745.012	ppb	0.2	484885.95	1000	
63	Cu	89	He	490.059	ppb	0.3	866648.67	2000	
66	Zn	89	He	1252.894	ppb	0.6	246555.55	2000	
75	As	89	He	188.414	ppb	1.2	25143.36	1000	
78	Se	89	H2	97.261	ppb	0.6	6561.25	1000	
88	Sr	89	He	880.887	ppb	0.9	597185.60	2000	
95	Mo	89	He	115.663	ppb	1.0	93366.15	1000	
107	Ag	89	He	50.210	ppb	0.1	125556.70	100	
111	Cd	89	He	246.830	ppb	0.4	73591.08	1000	
118	Sn	159	He	569.352	ppb	0.9	321916.30	1000	
121	Sb	159	No Gas	28.835	ppb	4.5	108231.10	1000	
137	Ba	159	No Gas	2678.621	ppb	4.4	3887090.89	2000	
182	W	159	No Gas	60.035	ppb	5.9	169708.87	1000	
205	Tl	209	No Gas	119.537	ppb	4.2	595079.05	1000	
208	Pb	209	No Gas	283.315	ppb	4.6	2012910.22	2000	
232	Th	209	No Gas	158.485	ppb	5.8	1077395.23	1000	
238	U	209	No Gas	120.691	ppb	6.0	791078.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9424461.53	3.2	9181465.1	102.65	29.5	120.4	
Sc	45	No Gas	16744568.14	2.5	16426983.07	101.93	29.5	120.4	
Sc	45	H2	1893827.03	2.3	1932518.05	98	29.5	120.4	
Sc	45	He	478539.82	0.5	478214.17	100.07	29.5	120.4	
Ge	72	No Gas	2736886.56	2.7	2769440.33	98.82	29.5	120.4	
Ge	72	H2	492389.04	2.3	546905.92	90.03	29.5	120.4	
Ge	72	He	263987.87	0.8	272551.69	96.86	29.5	120.4	
Y	89	H2	10334260.04	2.0	9834260.27	105.08	29.5	120.4	
Y	89	He	2254198.21	0.6	2139239.05	105.37	29.5	120.4	
Tb	159	No Gas	18994938.47	2.9	19495400.26	97.43	29.5	120.4	
Tb	159	He	7127879.76	0.3	7485871.83	95.22	29.5	120.4	
Bi	209	No Gas	8021701.99	2.9	8594079.3	93.34	29.5	120.4	

Sample Report

Sample Name SN5717-010S

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:48:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	60.516	ppb	5.8	100110.04	100	
11	B	6	No Gas	594.084	ppb	4.1	656466.62	1000	
23	Na	45	He	9430.139	ppb	0.5	1701094.24	200000	
24	Mg	45	He	111343.816	ppb	0.4	10190924.29	200000	
27	Al	45	He	120887.562	ppb	0.6	4018273.62	200000	
28	Si	45	H2	3769.068	ppb	1.4	185339.72	10000	
39	K	45	He	32177.502	ppb	0.3	2338830.86	200000	
40	Ca	45	H2	291450.781	ppb	1.2	134965851.32	200000	
51	V	89	He	741.197	ppb	1.3	854257.43	1000	
52	Cr	89	He	382.122	ppb	0.9	558649.05	2000	
55	Mn	89	He	4725.465	ppb	0.3	2960036.16	2000	
56	Fe	89	H2	229125.020	ppb	0.8	425798463.46	100000	
59	Co	89	He	613.163	ppb	0.9	1462897.11	1000	
60	Ni	89	He	761.220	ppb	0.9	495634.51	1000	
63	Cu	89	He	495.233	ppb	0.5	876171.00	2000	
66	Zn	89	He	1257.080	ppb	0.3	247485.90	2000	
75	As	89	He	189.551	ppb	0.5	25306.02	1000	
78	Se	89	H2	97.310	ppb	1.2	6588.10	1000	
88	Sr	89	He	899.823	ppb	0.2	610308.18	2000	
95	Mo	89	He	116.999	ppb	0.4	94482.40	1000	
107	Ag	89	He	51.361	ppb	1.1	128488.81	100	
111	Cd	89	He	245.348	ppb	0.5	73181.01	1000	
118	Sn	159	He	569.912	ppb	0.3	319701.20	1000	
121	Sb	159	No Gas	28.606	ppb	2.7	108197.32	1000	
137	Ba	159	No Gas	2751.622	ppb	4.3	4022854.12	2000	
182	W	159	No Gas	58.460	ppb	4.6	166534.41	1000	
205	Tl	209	No Gas	119.833	ppb	4.4	594892.07	1000	
208	Pb	209	No Gas	304.195	ppb	4.7	2155323.48	2000	
232	Th	209	No Gas	160.052	ppb	6.3	1085045.59	1000	
238	U	209	No Gas	121.167	ppb	6.0	792052.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9425692.86	2.8	9181465.1	102.66	29.5	120.4	
Sc	45	No Gas	16844679.50	2.3	16426983.07	102.54	29.5	120.4	
Sc	45	H2	1901913.40	1.5	1932518.05	98.42	29.5	120.4	
Sc	45	He	484758.87	0.9	478214.17	101.37	29.5	120.4	
Ge	72	No Gas	2736152.33	2.6	2769440.33	98.8	29.5	120.4	
Ge	72	H2	493781.25	1.7	546905.92	90.29	29.5	120.4	
Ge	72	He	266196.12	1.0	272551.69	97.67	29.5	120.4	
Y	89	H2	10371287.38	0.4	9834260.27	105.46	29.5	120.4	
Y	89	He	2255223.49	1.1	2139239.05	105.42	29.5	120.4	
Tb	159	No Gas	19129139.85	1.5	19495400.26	98.12	29.5	120.4	
Tb	159	He	7072002.33	1.1	7485871.83	94.47	29.5	120.4	
Bi	209	No Gas	7999242.81	2.7	8594079.3	93.08	29.5	120.4	

Sample Report

Sample Name SN5717-013

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:50:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.333	ppb	1.5	7031.95	100	
11	B	6	No Gas	66.633	ppb	3.2	72969.39	1000	
23	Na	45	He	610.434	ppb	6.5	150949.48	200000	
24	Mg	45	He	43781.059	ppb	5.1	4130339.35	200000	
27	Al	45	He	78653.533	ppb	6.0	2694360.52	200000	
28	Si	45	H2	2795.566	ppb	2.6	142348.70	10000	
39	K	45	He	11545.581	ppb	5.1	879697.68	200000	
40	Ca	45	H2	71739.764	ppb	0.5	34375345.60	200000	
51	V	89	He	144.810	ppb	4.5	172417.90	1000	
52	Cr	89	He	108.859	ppb	5.3	164735.52	2000	
55	Mn	89	He	3640.334	ppb	5.4	2352757.29	2000	
56	Fe	89	H2	162725.978	ppb	0.3	304229088.37	100000	
59	Co	89	He	71.734	ppb	4.8	176643.11	1000	
60	Ni	89	He	179.766	ppb	5.0	120878.94	1000	
63	Cu	89	He	655.515	ppb	5.3	1196442.31	2000	
66	Zn	89	He	960.586	ppb	4.6	195231.48	2000	
75	As	89	He	69.059	ppb	5.7	9520.64	1000	
78	Se	89	H2	7.187	ppb	2.6	490.99	1000	
88	Sr	89	He	115.542	ppb	5.6	80871.81	2000	
95	Mo	89	He	13.042	ppb	6.6	10872.49	1000	
107	Ag	89	He	0.517	ppb	6.2	1372.35	100	
111	Cd	89	He	2.353	ppb	1.1	725.58	1000	
118	Sn	159	He	46.394	ppb	9.2	27404.46	1000	
121	Sb	159	No Gas	8.276	ppb	0.9	31321.52	1000	
137	Ba	159	No Gas	406.565	ppb	2.2	593094.65	2000	
182	W	159	No Gas	0.353	ppb	11.2	1027.86	1000	
205	Tl	209	No Gas	2.963	ppb	1.4	15079.03	1000	
208	Pb	209	No Gas	2967.807	ppb	1.9	21313835.16	2000	
232	Th	209	No Gas	32.014	ppb	3.2	220216.32	1000	
238	U	209	No Gas	5.777	ppb	4.8	38291.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9234721.16	1.8	9181465.1	100.58	29.5	120.4	
Sc	45	No Gas	16954804.21	0.9	16426983.07	103.21	29.5	120.4	
Sc	45	H2	1967580.33	0.9	1932518.05	101.81	29.5	120.4	
Sc	45	He	500196.01	3.2	478214.17	104.6	29.5	120.4	
Ge	72	No Gas	2760312.22	1.4	2769440.33	99.67	29.5	120.4	
Ge	72	H2	505501.96	1.0	546905.92	92.43	29.5	120.4	
Ge	72	He	275479.34	1.6	272551.69	101.07	29.5	120.4	
Y	89	H2	10434026.37	0.6	9834260.27	106.1	29.5	120.4	
Y	89	He	2329252.14	2.9	2139239.05	108.88	29.5	120.4	
Tb	159	No Gas	19078949.30	0.9	19495400.26	97.86	29.5	120.4	
Tb	159	He	7373808.64	3.3	7485871.83	98.5	29.5	120.4	
Bi	209	No Gas	8103387.17	1.0	8594079.3	94.29	29.5	120.4	

Sample Report

Sample Name SN5717-017

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:53:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.850	ppb	7.1	9536.82	100	
11	B	6	No Gas	50.160	ppb	4.5	55442.97	1000	
23	Na	45	He	350.913	ppb	0.6	102599.03	200000	
24	Mg	45	He	30038.808	ppb	1.1	2801388.68	200000	
27	Al	45	He	112569.165	ppb	0.9	3812599.56	200000	
28	Si	45	H2	2348.378	ppb	1.7	120228.51	10000	
39	K	45	He	11537.639	ppb	0.6	869030.42	200000	
40	Ca	45	H2	4354.645	ppb	0.7	2101261.13	200000	
51	V	89	He	180.290	ppb	0.7	213989.40	1000	
52	Cr	89	He	133.068	ppb	0.6	200661.89	2000	
55	Mn	89	He	3609.978	ppb	0.6	2326851.41	2000	
56	Fe	89	H2	199469.445	ppb	0.6	382167327.20	100000	
59	Co	89	He	86.859	ppb	0.7	213277.93	1000	
60	Ni	89	He	207.158	ppb	0.3	138892.88	1000	
63	Cu	89	He	239.631	ppb	0.4	436536.05	2000	
66	Zn	89	He	825.009	ppb	0.5	167247.41	2000	
75	As	89	He	82.464	ppb	1.3	11335.52	1000	
78	Se	89	H2	1.462	ppb	4.6	103.67	1000	
88	Sr	89	He	52.375	ppb	0.9	36575.29	2000	
95	Mo	89	He	14.406	ppb	0.9	11979.01	1000	
107	Ag	89	He	0.172	ppb	9.6	480.03	100	
111	Cd	89	He	1.583	ppb	2.9	486.68	1000	
118	Sn	159	He	46.355	ppb	1.2	26846.33	1000	
121	Sb	159	No Gas	0.860	ppb	6.9	3377.54	1000	
137	Ba	159	No Gas	450.270	ppb	4.6	657988.45	2000	
182	W	159	No Gas	0.243	ppb	9.2	717.50	1000	
205	Tl	209	No Gas	3.373	ppb	4.2	17164.08	1000	
208	Pb	209	No Gas	134.919	ppb	4.0	970634.40	2000	
232	Th	209	No Gas	45.023	ppb	5.0	310026.11	1000	
238	U	209	No Gas	5.251	ppb	5.4	34854.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9288878.13	3.3	9181465.1	101.17	29.5	120.4	
Sc	45	No Gas	17236960.52	2.6	16426983.07	104.93	29.5	120.4	
Sc	45	H2	1977005.86	0.1	1932518.05	102.3	29.5	120.4	
Sc	45	He	493956.17	1.1	478214.17	103.29	29.5	120.4	
Ge	72	No Gas	2805177.53	1.9	2769440.33	101.29	29.5	120.4	
Ge	72	H2	510304.23	0.5	546905.92	93.31	29.5	120.4	
Ge	72	He	272281.61	0.7	272551.69	99.9	29.5	120.4	
Y	89	H2	10692995.54	1.1	9834260.27	108.73	29.5	120.4	
Y	89	He	2320592.03	0.8	2139239.05	108.48	29.5	120.4	
Tb	159	No Gas	19124557.49	2.4	19495400.26	98.1	29.5	120.4	
Tb	159	He	7215396.98	0.6	7485871.83	96.39	29.5	120.4	
Bi	209	No Gas	8119573.87	2.6	8594079.3	94.48	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG31IMW1
File Name	062_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:56:28 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.003	ppb	6.7	31.11	0.1	
B	11	6	No Gas	0.899	ppb	4.6	5736.88	2	
Na	23	45	He	1.450	ppb	34.5	40010.30	100	
Mg	24	45	He	7.911	ppb	3.7	3687.41	10	
Al	27	45	He	6.824	ppb	10.4	1238.99	10	
Si	28	45	H2	10.085	ppb	7.9	3020.72	50	
K	39	45	He	4.913	ppb	23.6	23927.49	100	
Ca	40	45	H2	8.989	ppb	15.0	25866.72	10	
V	51	89	He	0.007	ppb	75.0	236.68	0.5	
Cr	52	89	He	0.023	ppb	36.4	830.54	0.5	
Mn	55	89	He	0.253	ppb	7.5	935.86	0.2	200.8 PB Fails DoD
Fe	56	89	H2	23.560	ppb	22.0	212008.98	10	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Co	59	89	He	0.008	ppb	31.3	124.45	0.1	
Ni	60	89	He	0.033	ppb	39.4	223.34	0.2	
Cu	63	89	He	0.041	ppb	13.0	850.06	0.3	
Zn	66	89	He	0.671	ppb	11.7	944.51	1	
As	75	89	He	0.002	ppb	523.2	14.00	0.5	
Se	78	89	H2	0.004	ppb	162.6	2.67	0.5	
Sr	88	89	He	0.029	ppb	12.9	115.56	0.5	
Mo	95	89	He	0.004	ppb	80.1	24.45	0.5	
Ag	107	89	He	0.001	ppb	153.6	53.33	0.1	
Cd	111	89	He	0.003	ppb	89.2	4.44	0.1	
Sn	118	159	He	0.005	ppb	303.0	360.02	0.5	
Sb	121	159	No Gas	-0.002	ppb	N/A	96.77	0.1	
Ba	137	159	No Gas	0.073	ppb	22.1	604.03	0.2	
W	182	159	No Gas	0.006	ppb	32.6	110.12	0.5	
Tl	205	209	No Gas	-0.001	ppb	N/A	150.17	0.1	
[Pb]	206	209	No Gas	0.069	ppb	9.9	747.52	0.1	
[Pb]	207	209	No Gas	0.082	ppb	12.1	714.15	0.1	
Pb	208	209	No Gas	0.074	ppb	5.9	3060.24	0.1	
Th	232	209	No Gas	0.020	ppb	26.6	924.40	0.5	
U	238	209	No Gas	0.002	ppb	61.0	73.41	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9186976.86	1.6	9181465.1	100.06	29.5	120.4	
Sc	45	No Gas	16763344.00	1.0	16426983.07	102.05	29.5	120.4	
Sc	45	H2	1916605.30	0.6	1932518.05	99.18	29.5	120.4	
Sc	45	He	483519.73	1.4	478214.17	101.11	29.5	120.4	
Ge	72	No Gas	2799572.89	1.7	2769440.33	101.09	29.5	120.4	
Ge	72	H2	533860.40	0.1	546905.92	97.61	29.5	120.4	
Ge	72	He	273624.66	0.7	272551.69	100.39	29.5	120.4	
Y	89	H2	9836474.46	0.6	9834260.27	100.02	29.5	120.4	
Y	89	He	2145021.81	1.6	2139239.05	100.27	29.5	120.4	
Tb	159	No Gas	19144474.99	1.3	19495400.26	98.2	29.5	120.4	
Tb	159	He	7307090.59	0.5	7485871.83	97.61	29.5	120.4	
Bi	209	No Gas	8363205.20	1.2	8594079.3	97.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG31IMW1
File Name	063_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:59:11 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	44.330	ppb	5.0	398073.21	50	88.66	79.5	120.4	
B	11	6	No Gas	422.276	ppb	4.9	2529663.97	500	84.46	79.5	120.4	> +/- 15% (EPA)
Na	23	45	He	7564.201	ppb	0.5	6546452.78	7500	100.86	79.5	120.4	
Mg	24	45	He	5002.378	ppb	0.5	2234985.33	5000	100.05	79.5	120.4	
Al	27	45	He	1836.673	ppb	0.6	298105.99	2000	91.83	79.5	120.4	
Si	28	45	H2	967.564	ppb	0.7	237937.18	1000	96.76	79.5	120.4	
K	39	45	He	10008.089	ppb	0.6	3538791.54	10000	100.08	79.5	120.4	
Ca	40	45	H2	2467.788	ppb	0.7	5724387.00	2500	98.71	79.5	120.4	
V	51	89	He	494.821	ppb	0.2	2678534.73	500	98.96	79.5	120.4	
Cr	52	89	He	195.831	ppb	0.3	1343803.72	200	97.92	79.5	120.4	
Mn	55	89	He	489.179	ppb	0.4	1439421.14	500	97.84	79.5	120.4	
Fe	56	89	H2	996.660	ppb	2.3	8615750.76	1000	99.67	79.5	120.4	
Co	59	89	He	500.642	ppb	0.0	5610633.81	500	100.13	79.5	120.4	
Ni	60	89	He	495.388	ppb	0.7	1514829.55	500	99.08	79.5	120.4	
Cu	63	89	He	240.944	ppb	0.6	2001610.77	250	96.38	79.5	120.4	
Zn	66	89	He	487.015	ppb	0.4	450071.79	500	97.4	79.5	120.4	
As	75	89	He	103.497	ppb	0.5	64880.54	100	103.5	79.5	120.4	
Se	78	89	H2	100.206	ppb	0.3	31538.62	100	100.21	79.5	120.4	
Sr	88	89	He	494.592	ppb	0.4	1575633.94	500	98.92	79.5	120.4	
Mo	95	89	He	101.796	ppb	0.6	386109.41	100	101.8	79.5	120.4	
Ag	107	89	He	50.102	ppb	1.0	588602.36	50	100.2	79.5	120.4	
Cd	111	89	He	252.334	ppb	0.4	353530.14	250	100.93	79.5	120.4	
Sn	118	159	He	497.639	ppb	0.4	1437533.09	500	99.53	79.5	120.4	
Sb	121	159	No Gas	102.230	ppb	2.6	1914647.44	100	102.23	79.5	120.4	
Ba	137	159	No Gas	1967.124	ppb	3.0	14259202.34	2000	98.36	79.5	120.4	
W	182	159	No Gas	95.448	ppb	3.4	1347973.36	100	95.45	79.5	120.4	
Tl	205	209	No Gas	104.262	ppb	2.8	2648531.20	100	104.26	79.5	120.4	
Pb	208	209	No Gas	100.461	ppb	3.5	3642834.41	100	100.46	79.5	120.4	
Th	232	209	No Gas	100.743	ppb	5.1	3495493.47	100	100.74	79.5	120.4	
U	238	209	No Gas	99.362	ppb	4.5	3324729.17	100	99.36	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	10229764.51	2.2	9181465.1	111.42	29.5	120.4	
Sc	45	No Gas	16682208.29	1.8	16426983.07	101.55	29.5	120.4	
Sc	45	H2	1903724.02	0.7	1932518.05	98.51	29.5	120.4	
Sc	45	He	473263.61	1.1	478214.17	98.96	29.5	120.4	
Ge	72	No Gas	2783540.01	2.2	2769440.33	100.51	29.5	120.4	
Ge	72	H2	520297.96	0.4	546905.92	95.13	29.5	120.4	
Ge	72	He	269873.64	0.7	272551.69	99.02	29.5	120.4	
Y	89	H2	9644983.71	0.6	9834260.27	98.08	29.5	120.4	
Y	89	He	2118600.39	0.4	2139239.05	99.04	29.5	120.4	
Tb	159	No Gas	18962329.99	0.4	19495400.26	97.27	29.5	120.4	
Tb	159	He	7289241.76	0.4	7485871.83	97.37	29.5	120.4	
Bi	209	No Gas	8183479.65	1.1	8594079.3	95.22	29.5	120.4	

Sample Report

Sample Name SN6347-001

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 6:01:49 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	16.0	402.24	100	
11	B	6	No Gas	8.372	ppb	7.2	44745.73	1000	
23	Na	45	He	1431.510	ppb	0.5	1285130.07	200000	
24	Mg	45	He	2206.889	ppb	0.6	998051.20	200000	
27	Al	45	He	17.849	ppb	43.5	3030.48	200000	
28	Si	45	H2	6422.215	ppb	0.7	1578187.08	10000	
39	K	45	He	886.626	ppb	0.5	337343.66	200000	
40	Ca	45	H2	9946.378	ppb	1.0	23084324.93	200000	
51	V	89	He	0.181	ppb	31.2	1184.54	1000	
52	Cr	89	He	0.156	ppb	20.1	1749.80	2000	
55	Mn	89	He	144.172	ppb	0.4	427995.57	2000	
56	Fe	89	H2	2856.919	ppb	1.1	24976640.55	100000	
59	Co	89	He	6.518	ppb	1.4	73706.83	1000	
60	Ni	89	He	5.911	ppb	2.5	18348.16	1000	
63	Cu	89	He	0.536	ppb	12.1	4988.87	2000	
66	Zn	89	He	2.346	ppb	5.6	2501.42	2000	
75	As	89	He	0.234	ppb	7.1	160.69	1000	
78	Se	89	H2	0.118	ppb	17.9	39.17	1000	
88	Sr	89	He	18.206	ppb	0.3	58519.75	2000	
95	Mo	89	He	0.274	ppb	3.4	1057.86	1000	
107	Ag	89	He	0.012	ppb	50.5	182.23	100	
111	Cd	89	He	0.279	ppb	16.0	394.46	1000	
118	Sn	159	He	0.755	ppb	12.1	2525.89	1000	
121	Sb	159	No Gas	0.117	ppb	5.9	2282.75	1000	
137	Ba	159	No Gas	4.277	ppb	5.3	30669.52	2000	
182	W	159	No Gas	0.388	ppb	4.2	5440.56	1000	
205	Tl	209	No Gas	0.093	ppb	14.0	2563.12	1000	
208	Pb	209	No Gas	0.264	ppb	4.1	9982.72	2000	
232	Th	209	No Gas	0.185	ppb	20.1	6682.75	1000	
238	U	209	No Gas	0.085	ppb	24.6	2863.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8946320.38	0.3	9181465.1	97.44	29.5	120.4	
Sc	45	No Gas	15953216.51	2.2	16426983.07	97.12	29.5	120.4	
Sc	45	H2	1905805.52	1.5	1932518.05	98.62	29.5	120.4	
Sc	45	He	479035.24	1.1	478214.17	100.17	29.5	120.4	
Ge	72	No Gas	2702243.19	1.8	2769440.33	97.57	29.5	120.4	
Ge	72	H2	528014.54	1.3	546905.92	96.55	29.5	120.4	
Ge	72	He	273426.91	0.4	272551.69	100.32	29.5	120.4	
Y	89	H2	9756724.19	0.7	9834260.27	99.21	29.5	120.4	
Y	89	He	2136846.77	1.0	2139239.05	99.89	29.5	120.4	
Tb	159	No Gas	18730675.00	2.0	19495400.26	96.08	29.5	120.4	
Tb	159	He	7287564.96	0.2	7485871.83	97.35	29.5	120.4	
Bi	209	No Gas	8246029.28	1.9	8594079.3	95.95	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 6:04:29 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.296	ppb	5.9	195463.81	25	97.18	89.8	110.2	
11	B	6	No Gas	25.010	ppb	4.6	135109.01	25	100.04	89.8	110.2	
23	Na	45	He	4926.220	ppb	0.7	4330437.79	5000	98.52	89.8	110.2	
24	Mg	45	He	4915.944	ppb	0.5	2224005.64	5000	98.32	89.8	110.2	
27	Al	45	He	485.945	ppb	0.8	79948.65	500	97.19	89.8	110.2	
28	Si	45	H2	484.966	ppb	1.4	120008.17	500	96.99	89.8	110.2	
39	K	45	He	4924.852	ppb	0.1	1774513.93	5000	98.5	89.8	110.2	
40	Ca	45	H2	4899.445	ppb	0.9	11406858.44	5000	97.99	89.8	110.2	
51	V	89	He	24.772	ppb	0.9	135282.10	25	99.09	89.8	110.2	
52	Cr	89	He	24.921	ppb	0.6	172867.84	25	99.68	89.8	110.2	
55	Mn	89	He	25.256	ppb	1.1	75039.02	25	101.02	89.8	110.2	
56	Fe	89	H2	4831.744	ppb	0.9	42153500.35	5000	96.63	89.8	110.2	
59	Co	89	He	24.922	ppb	0.9	281404.40	25	99.69	89.8	110.2	
60	Ni	89	He	24.897	ppb	1.3	76812.35	25	99.59	89.8	110.2	
63	Cu	89	He	25.258	ppb	0.8	211833.22	25	101.03	89.8	110.2	
66	Zn	89	He	25.191	ppb	1.4	23750.87	25	100.76	89.8	110.2	
75	As	89	He	24.999	ppb	1.4	15796.69	25	100	89.8	110.2	
78	Se	89	H2	24.522	ppb	0.9	7792.99	25	98.09	89.8	110.2	
88	Sr	89	He	24.731	ppb	0.4	79396.23	25	98.92	89.8	110.2	
95	Mo	89	He	24.800	ppb	1.1	94768.91	25	99.2	89.8	110.2	
107	Ag	89	He	24.951	ppb	0.9	295325.43	25	99.8	89.8	110.2	
111	Cd	89	He	24.513	ppb	0.8	34599.70	25	98.05	89.8	110.2	
118	Sn	159	He	25.182	ppb	0.9	73200.53	25	100.73	89.8	110.2	
121	Sb	159	No Gas	24.850	ppb	3.8	473918.89	25	99.4	89.8	110.2	
137	Ba	159	No Gas	24.742	ppb	4.8	182634.86	25	98.97	89.8	110.2	
182	W	159	No Gas	23.949	ppb	3.9	344358.78	25	95.8	89.8	110.2	
205	Tl	209	No Gas	25.135	ppb	5.6	652218.19	25	100.54	89.8	110.2	
208	Pb	209	No Gas	24.484	ppb	4.3	907260.30	25	97.94	89.8	110.2	
232	Th	209	No Gas	24.570	ppb	4.9	871120.67	25	98.28	89.8	110.2	
238	U	209	No Gas	24.644	ppb	5.8	842233.68	25	98.58	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9169188.24	3.0	9181465.1	99.87	29.5	120.4	
Sc	45	No Gas	16678693.94	2.0	16426983.07	101.53	29.5	120.4	
Sc	45	H2	1911500.71	0.7	1932518.05	98.91	29.5	120.4	
Sc	45	He	479213.23	0.6	478214.17	100.21	29.5	120.4	
Ge	72	No Gas	2787104.40	2.0	2769440.33	100.64	29.5	120.4	
Ge	72	H2	530448.78	0.8	546905.92	96.99	29.5	120.4	
Ge	72	He	272908.82	0.9	272551.69	100.13	29.5	120.4	
Y	89	H2	9737132.83	0.2	9834260.27	99.01	29.5	120.4	
Y	89	He	2134412.64	0.9	2139239.05	99.77	29.5	120.4	
Tb	159	No Gas	19313345.96	2.0	19495400.26	99.07	29.5	120.4	
Tb	159	He	7302180.38	0.3	7485871.83	97.55	29.5	120.4	
Bi	209	No Gas	8364909.93	2.9	8594079.3	97.33	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 6:07:06 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.036	ppb	46.7	295.57	0.2	
11	B	6	No Gas	0.978	ppb	1.7	6200.44	4	
23	Na	45	He	-6.481	ppb	N/A	32944.27	200	
24	Mg	45	He	1.014	ppb	10.6	537.83	20	
27	Al	45	He	0.982	ppb	83.6	270.09	20	
28	Si	45	H2	1.629	ppb	34.8	934.40	100	
39	K	45	He	4.404	ppb	28.5	23680.54	200	
40	Ca	45	H2	5.020	ppb	21.1	16649.69	20	
51	V	89	He	0.008	ppb	20.2	246.68	1	
52	Cr	89	He	0.009	ppb	97.7	735.89	1	
55	Mn	89	He	0.025	ppb	29.9	257.95	0.4	
56	Fe	89	H2	4.085	ppb	18.5	40148.66	20	
59	Co	89	He	0.011	ppb	46.5	160.02	0.2	
60	Ni	89	He	-0.004	ppb	N/A	108.89	0.4	
63	Cu	89	He	0.009	ppb	11.8	583.37	0.6	
66	Zn	89	He	0.023	ppb	180.9	338.91	2	
75	As	89	He	0.009	ppb	70.0	18.67	1	
78	Se	89	H2	0.041	ppb	28.2	14.50	1	
88	Sr	89	He	0.008	ppb	50.8	46.67	1	
95	Mo	89	He	0.044	ppb	23.7	175.57	1	
107	Ag	89	He	0.005	ppb	10.6	96.67	0.2	
111	Cd	89	He	0.007	ppb	11.6	11.11	0.2	
118	Sn	159	He	0.129	ppb	21.1	722.28	1	
121	Sb	159	No Gas	0.039	ppb	47.6	874.34	0.2	
137	Ba	159	No Gas	0.056	ppb	56.8	487.22	0.4	
182	W	159	No Gas	0.077	ppb	9.8	1131.32	1	
205	Tl	209	No Gas	0.036	ppb	39.7	1134.65	0.2	
208	Pb	209	No Gas	0.040	ppb	24.9	1812.09	0.2	
232	Th	209	No Gas	0.103	ppb	24.2	3911.74	1	
238	U	209	No Gas	0.042	ppb	51.3	1468.43	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9243073.16	3.2	9181465.1	100.67	29.5	120.4	
Sc	45	No Gas	16734967.50	1.9	16426983.07	101.87	29.5	120.4	
Sc	45	H2	1924472.65	1.5	1932518.05	99.58	29.5	120.4	
Sc	45	He	482200.84	0.4	478214.17	100.83	29.5	120.4	
Ge	72	No Gas	2812061.10	2.8	2769440.33	101.54	29.5	120.4	
Ge	72	H2	534957.06	0.6	546905.92	97.82	29.5	120.4	
Ge	72	He	274342.33	0.7	272551.69	100.66	29.5	120.4	
Y	89	H2	9795982.30	0.9	9834260.27	99.61	29.5	120.4	
Y	89	He	2149454.86	0.9	2139239.05	100.48	29.5	120.4	
Tb	159	No Gas	19266206.94	1.9	19495400.26	98.82	29.5	120.4	
Tb	159	He	7344077.94	0.6	7485871.83	98.11	29.5	120.4	
Bi	209	No Gas	8411702.76	3.6	8594079.3	97.88	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: KC **ANALYSIS DATE**: 8/13/2020

REVIEWED
MC 8/19/20
KATAHDIN ANALYTICAL
METALS SECTION

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH12B

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19544	08/11/20	10/08/20	Varies by Element
ICV	MW19535	08/05/20	10/15/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19538	08/06/20	10/01/20	Varies by Element
LRS2	MW19548	08/11/20	09/21/20	Varies by Element
ICSA	MW19552	08/11/20	08/18/20	Varies by Element
ICSAB	MW19546	08/11/20	08/18/20	Varies by Element
CCV	MW19539	08/06/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19531	08/04/20	11/04/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (15:21) fails low for B and high for Ni (0.728 ug/L). Closing PQL (21:57) fails high for B and Na (249.363 ug/L) and low for Mn (0.242 ug/L) Ni (-4.568 ug/L) Cu (-0.124 ug/L)

ICSA (15:24) fails high for Mn (0.704 ug/L) and low for Ni (-2.718 ug/L). ICSAB (15:27) fails low for Ni (15.875 ug/L).

LRS1 (15:30) fails low for Ag. LRS2 (15:32) fails high for Ca.

CCV (17:18, 17:49, 18:20, 18:52, 19:23, 19:55, 20:26, 20:57, 21:29, 21:52) fails low for Ni (22.311 ug/L, 21.782 ug/L, 21.733 ug/L, 20.606 ug/L, 20.869 ug/L, 19.901 ug/L, 19.415 ug/L, 19.571 ug/L, 19.936ug/L, 20.478 ug/L). CCV (19:23 & 19:55) fails high for B.

CCB (all) fail low for Ni (lowest value -5.118 ug/L and the highest -1.964 ug/L). CCB (17:20, 18:23, 18:55, 19:26, 19:58, 20:29, 21:00, 21:31, 21:55) fails low for Cu (-0.408 ug/L, -0.574 ug/L, -0.596 ug/L, -0.638 ug/L, -0.650 ug/L, -0.683 ug/L, -0.711 ug/L, -0.722 ug/L, -0.727 ug/L). CCB (18:55, 19:26, 19:58, 20:29) fails high for B. CCB (21:31) fails high for Na (108.04 ug/L).

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH12B	08/12/2020	15:10	KC
CalStd	1	LNH12B	08/12/2020	15:13	KC
ICV	1	LNH12B	08/12/2020	15:16	KC
ICB	1	LNH12B	08/12/2020	15:19	KC
PQL	1	LNH12B	08/12/2020	15:21	KC
ICSA	1	LNH12B	08/12/2020	15:24	KC
ICSAB	1	LNH12B	08/12/2020	15:27	KC
LRS1	1	LNH12B	08/12/2020	15:30	KC
LRS2	1	LNH12B	08/12/2020	15:32	KC
RINSE	1	LNH12B	08/12/2020	15:35	KC
RINSE	1	LNH12B	08/12/2020	15:37	KC
CCV	1	LNH12B	08/12/2020	15:40	KC
CCB	1	LNH12B	08/12/2020	15:43	KC
PBSNH05IMS1	5	LNH12B	08/12/2020	15:46	KC
LCSONH05IMS1	5	LNH12B	08/12/2020	15:48	KC
SN6100-001	5	LNH12B	08/12/2020	15:51	KC
SN6100-002	10	LNH12B	08/12/2020	15:54	KC
RINSE	1	LNH12B	08/12/2020	15:56	KC
SN6100-003	10	LNH12B	08/12/2020	15:59	KC
RINSE	1	LNH12B	08/12/2020	16:01	KC
SN6100-004	5	LNH12B	08/12/2020	16:04	KC
SN6100-004A	5	LNH12B	08/12/2020	16:06	KC
SN6100-004L	25	LNH12B	08/12/2020	16:09	KC
CCV	1	LNH12B	08/12/2020	16:12	KC
CCB	1	LNH12B	08/12/2020	16:14	KC
SN6100-004P	5	LNH12B	08/12/2020	16:17	KC
SN6100-004S	5	LNH12B	08/12/2020	16:19	KC
SN6100-005	5	LNH12B	08/12/2020	16:22	KC
SN6100-006	5	LNH12B	08/12/2020	16:25	KC
SN6100-007	5	LNH12B	08/12/2020	16:27	KC
SN6100-008	5	LNH12B	08/12/2020	16:34	KC
RINSE	1	LNH12B	08/12/2020	16:36	KC
RINSE	1	LNH12B	08/12/2020	16:39	KC
RINSE	1	LNH12B	08/12/2020	16:41	KC
RINSE	1	LNH12B	08/12/2020	16:44	KC
CCV	1	LNH12B	08/12/2020	16:47	KC
CCB	1	LNH12B	08/12/2020	16:49	KC
SN6100-009	5	LNH12B	08/12/2020	16:52	KC
PBWNH04IMW1	5	LNH12B	08/12/2020	16:54	KC
LCSWNH04IMW1	5	LNH12B	08/12/2020	16:57	KC
SN6316-008	10	LNH12B	08/12/2020	17:00	KC
SN6316-009	10	LNH12B	08/12/2020	17:02	KC
SN6316-008	20	LNH12B	08/12/2020	17:05	KC
SN6316-009	20	LNH12B	08/12/2020	17:07	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNH06IMW2	5	LNH12B	08/12/2020	17:10	KC
LCSWNH06IMW2	5	LNH12B	08/12/2020	17:13	KC
SN5589-006R	5	LNH12B	08/12/2020	17:15	KC
CCV	1	LNH12B	08/12/2020	17:18	KC
CCB	1	LNH12B	08/12/2020	17:20	KC
PBWNG14IMW2	5	LNH12B	08/12/2020	17:23	KC
LCSWNG14IMW2	5	LNH12B	08/12/2020	17:26	KC
SN5646-004R	5	LNH12B	08/12/2020	17:28	KC
SN5646-005R	5	LNH12B	08/12/2020	17:31	KC
SN5646-005RA	5	LNH12B	08/12/2020	17:33	KC
SN5646-005RL	25	LNH12B	08/12/2020	17:36	KC
SN5646-005RP	5	LNH12B	08/12/2020	17:38	KC
SN5646-005RS	5	LNH12B	08/12/2020	17:41	KC
PBSNH04IMS1	5	LNH12B	08/12/2020	17:44	KC
LCSONH04IMS1	5	LNH12B	08/12/2020	17:46	KC
CCV	1	LNH12B	08/12/2020	17:49	KC
CCB	1	LNH12B	08/12/2020	17:51	KC
SN5717-004	5	LNH12B	08/12/2020	17:54	KC
SN5717-010	5	LNH12B	08/12/2020	17:57	KC
SN5717-010A	5	LNH12B	08/12/2020	17:59	KC
SN5717-010L	25	LNH12B	08/12/2020	18:02	KC
SN5717-010P	5	LNH12B	08/12/2020	18:04	KC
SN5717-010S	5	LNH12B	08/12/2020	18:07	KC
SN5717-013	5	LNH12B	08/12/2020	18:10	KC
SN5717-017	5	LNH12B	08/12/2020	18:12	KC
PBWNG30IMW2	5	LNH12B	08/12/2020	18:15	KC
LCSWNG30IMW2	5	LNH12B	08/12/2020	18:18	KC
CCV	1	LNH12B	08/12/2020	18:20	KC
CCB	1	LNH12B	08/12/2020	18:23	KC
SN6224-001	10	LNH12B	08/12/2020	18:25	KC
SN6224-002	10	LNH12B	08/12/2020	18:28	KC
RINSE	1	LNH12B	08/12/2020	18:31	KC
SN6224-003	10	LNH12B	08/12/2020	18:33	KC
SN6224-004	10	LNH12B	08/12/2020	18:36	KC
SN6224-004A	10	LNH12B	08/12/2020	18:39	KC
SN6224-004L	50	LNH12B	08/12/2020	18:41	KC
SN6224-004P	10	LNH12B	08/12/2020	18:44	KC
SN6224-004S	10	LNH12B	08/12/2020	18:47	KC
SN6224-005	10	LNH12B	08/12/2020	18:49	KC
CCV	1	LNH12B	08/12/2020	18:52	KC
CCB	1	LNH12B	08/12/2020	18:55	KC
SN6224-006	10	LNH12B	08/12/2020	18:57	KC
RINSE	1	LNH12B	08/12/2020	19:00	KC
SN6224-001	20	LNH12B	08/12/2020	19:02	KC
SN6224-002	20	LNH12B	08/12/2020	19:05	KC
RINSE	1	LNH12B	08/12/2020	19:08	KC
SN6224-003	20	LNH12B	08/12/2020	19:10	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6224-004	20	LNH12B	08/12/2020	19:13	KC
SN6224-004P	20	LNH12B	08/12/2020	19:16	KC
SN6224-004S	20	LNH12B	08/12/2020	19:18	KC
SN6224-005	20	LNH12B	08/12/2020	19:21	KC
CCV	1	LNH12B	08/12/2020	19:23	KC
CCB	1	LNH12B	08/12/2020	19:26	KC
SN6224-006	20	LNH12B	08/12/2020	19:29	KC
RINSE	1	LNH12B	08/12/2020	19:31	KC
SN6224-001	25	LNH12B	08/12/2020	19:34	KC
SN6224-002	25	LNH12B	08/12/2020	19:37	KC
RINSE	1	LNH12B	08/12/2020	19:39	KC
SN6224-003	25	LNH12B	08/12/2020	19:42	KC
SN6224-004	25	LNH12B	08/12/2020	19:44	KC
SN6224-004A	25	LNH12B	08/12/2020	19:47	KC
SN6224-004L	125	LNH12B	08/12/2020	19:50	KC
SN6224-004P	25	LNH12B	08/12/2020	19:52	KC
CCV	1	LNH12B	08/12/2020	19:55	KC
CCB	1	LNH12B	08/12/2020	19:58	KC
SN6224-004S	25	LNH12B	08/12/2020	20:00	KC
SN6224-005	25	LNH12B	08/12/2020	20:03	KC
SN6224-006	25	LNH12B	08/12/2020	20:05	KC
RINSE	1	LNH12B	08/12/2020	20:08	KC
SN6224-002	50	LNH12B	08/12/2020	20:11	KC
RINSE	1	LNH12B	08/12/2020	20:13	KC
PBWNG31IMW2	5	LNH12B	08/12/2020	20:16	KC
LCSWNG31IMW2	5	LNH12B	08/12/2020	20:18	KC
SN6316-001	20	LNH12B	08/12/2020	20:21	KC
RINSE	1	LNH12B	08/12/2020	20:24	KC
CCV	1	LNH12B	08/12/2020	20:26	KC
CCB	1	LNH12B	08/12/2020	20:29	KC
SN6316-002	20	LNH12B	08/12/2020	20:31	KC
SN6316-003	20	LNH12B	08/12/2020	20:34	KC
SN6316-004	20	LNH12B	08/12/2020	20:37	KC
SN6316-005	20	LNH12B	08/12/2020	20:39	KC
SN6316-006	20	LNH12B	08/12/2020	20:42	KC
SN6316-007	20	LNH12B	08/12/2020	20:44	KC
SN6316-001	25	LNH12B	08/12/2020	20:47	KC
SN6100-004P	5	LNH12B	08/12/2020	20:50	KC
SN6100-004S	5	LNH12B	08/12/2020	20:52	KC
SN6100-005	5	LNH12B	08/12/2020	20:55	KC
CCV	1	LNH12B	08/12/2020	20:57	KC
CCB	1	LNH12B	08/12/2020	21:00	KC
SN6100-006	5	LNH12B	08/12/2020	21:03	KC
SN6100-007	5	LNH12B	08/12/2020	21:05	KC
SN6100-008	5	LNH12B	08/12/2020	21:08	KC
PBWNH06IMW1	5	LNH12B	08/12/2020	21:10	KC
LCSWNH06IMW1	5	LNH12B	08/12/2020	21:13	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-002X	10	LNH12B	08/12/2020	21:16	KC
RINSE	1	LNH12B	08/12/2020	21:18	KC
SN6492-001	20	LNH12B	08/12/2020	21:21	KC
RINSE	1	LNH12B	08/12/2020	21:24	KC
SN6517-001	1	LNH12B	08/12/2020	21:26	KC
CCV	1	LNH12B	08/12/2020	21:29	KC
CCB	1	LNH12B	08/12/2020	21:31	KC
SN6517-003	1	LNH12B	08/12/2020	21:34	KC
SN6528-001	125	LNH12B	08/12/2020	21:37	KC
RINSE	1	LNH12B	08/12/2020	21:39	KC
SN6528-001	150	LNH12B	08/12/2020	21:42	KC
RINSE	1	LNH12B	08/12/2020	21:44	KC
RINSE	1	LNH12B	08/12/2020	21:47	KC
RINSE	1	LNH12B	08/12/2020	21:49	KC
CCV	1	LNH12B	08/12/2020	21:52	KC
CCB	1	LNH12B	08/12/2020	21:55	KC
PQL	1	LNH12B	08/12/2020	21:57	KC
RINSE	1	LNH12B	08/12/2020	22:00	KC
RINSE	1	LNH12B	08/12/2020	22:02	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12A.b
Acq. Date-Time	8/12/2020 11:37:12 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

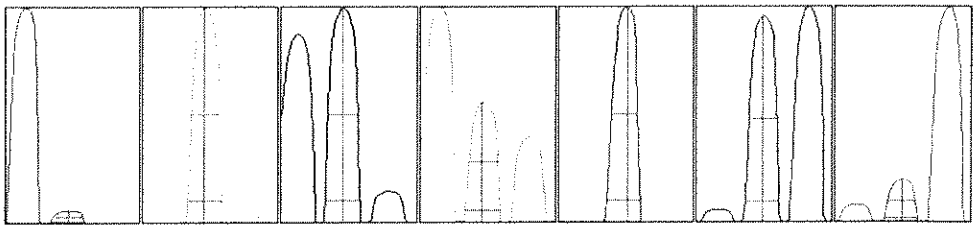
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	14959	149593.44	0.353	5.000	
9	5856	58558.19	0.484	5.000	
24	245528	2455279.02	0.347	5.000	
59	42386	423857.63	0.313	5.000	
115	464675	4646745.74	0.511	5.000	
205	24553	245533.79	0.237	5.000	
208	53704	537040.47	0.453	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	14944	15038	14978	14896	14941
9	5807	5876	5876	5864	5856
24	244556	244726	246178	246454	245725
59	42222	42293	42457	42559	42398
115	461804	462563	465510	466208	467287
205	24493	24519	24631	24597	24527
208	53344	53635	53969	53689	53883

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	24409.80	6.95	6.90 - 7.10	
9	9687.37	8.90	8.90 - 9.10	
24	388709.68	23.90	23.90 - 24.10	
59	69092.94	58.90	58.90 - 59.10	
115	821776.64	115.05	114.90 - 115.10	
205	41247.53	205.00	204.90 - 205.10	
208	90542.01	208.00	207.90 - 208.10	

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US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.731	0.900	
9	0.64	0.758	0.900	
24	0.66	0.772	0.900	
59	0.64	0.768	0.900	
115	0.58	0.744	0.900	
205	0.62	0.738	0.900	
208	0.61	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	12.4 V
Extract 2	-170.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2786	27863.98	0.883	5.000	
89	300361	3003613.77	1.518	5.000	
205	25914	259141.39	0.737	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2752	2783	2785	2791	2821
89	292915	299796	301760	302337	304999
205	25678	25770	25987	26159	25977

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	1.6 V
Extract 2	-170.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	8843	88431.54	1.108	5.000	
89	61573	615729.11	1.308	5.000	
205	11470	114704.02	0.805	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8689	8825	8847	8920	8935
89	60208	61539	61823	62087	62207
205	11319	11463	11518	11562	11490

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	1.2 V
Extract 2	-170.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:10:20 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	20.00	72.7
11	B	6	No Gas	1343.44	4.3
23	Na	45	He	39862.65	1.4
24	Mg	45	He	388.93	11.4
27	Al	45	He	104.45	22.6
28	Si	45	H2	350.39	11.4
39	K	45	He	16003.49	0.3
40	Ca	45	H2	3038.21	2.4
51	V	89	He	92.23	16.3
52	Cr	89	He	265.96	2.0
55	Mn	89	He	565.91	5.9
56	Fe	89	H2	10632.55	3.4
59	Co	89	He	66.67	26.5
60	Ni	89	He	18136.76	1.2
63	Cu	89	He	5901.47	0.8
66	Zn	89	He	251.12	8.5
75	As	89	He	15.67	45.3
78	Se	89	H2	1.33	78.1
88	Sr	89	He	11.11	75.5
95	Mo	89	He	257.79	10.5
107	Ag	89	He	26.67	25.0
111	Cd	89	He	1.48	43.3
118	Sn	159	He	260.01	14.3
121	Sb	159	No Gas	360.41	5.6
137	Ba	159	No Gas	86.76	17.6
182	W	159	No Gas	146.83	30.7
205	Tl	209	No Gas	327.04	16.9
208	Pb	209	No Gas	240.27	0.0
232	Th	209	No Gas	256.95	19.2
238	U	209	No Gas	26.70	21.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	4785442.25	1.4
Sc	45	No Gas	11869896.98	0.7
Sc	45	H2	1440463.34	0.2
Sc	45	He	342270.52	0.7
Ge	72	No Gas	2254278.57	1.0
Ge	72	H2	432978.24	0.1
Ge	72	He	219029.81	0.5
Y	89	H2	7788630.76	0.3
Y	89	He	1720337.72	0.9
Tb	159	No Gas	19085444.99	0.7
Tb	159	He	6890196.91	1.0
Bi	209	No Gas	8525371.63	1.3

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:13:42 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	214172.68	3.4
11	B	6	No Gas	143958.57	3.9
23	Na	45	He	5949366.08	0.8
24	Mg	45	He	3120482.11	1.4
27	Al	45	He	112001.84	1.7
28	Si	45	H2	165526.38	0.3
39	K	45	He	2424902.88	0.4
40	Ca	45	H2	16803220.72	1.1
51	V	89	He	206309.86	0.3
52	Cr	89	He	264961.89	0.5
55	Mn	89	He	115766.87	1.3
56	Fe	89	H2	67141632.60	0.8
59	Co	89	He	443880.48	0.5
60	Ni	89	He	136685.47	1.0
63	Cu	89	He	336481.77	1.2
66	Zn	89	He	38217.93	0.8
75	As	89	He	25611.30	0.2
78	Se	89	H2	12612.30	0.9
88	Sr	89	He	129912.15	0.6
95	Mo	89	He	164834.96	1.3
107	Ag	89	He	538000.50	0.3
111	Cd	89	He	62963.98	1.1
118	Sn	159	He	129631.00	1.1
121	Sb	159	No Gas	923734.63	3.4
137	Ba	159	No Gas	350630.41	4.0
182	W	159	No Gas	710351.49	3.9
205	Tl	209	No Gas	1329451.30	4.3
208	Pb	209	No Gas	1892128.55	3.0
232	Th	209	No Gas	1789860.75	4.1
238	U	209	No Gas	1727990.98	4.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4774038.24	0.8	4785442.25	99.76	29.5	120.4	
Sc	45	No Gas	11901286.07	0.3	11869896.98	100.26	29.5	120.4	
Sc	45	H2	1436643.88	1.5	1440463.34	99.73	29.5	120.4	
Sc	45	He	336425.72	2.9	342270.52	98.29	29.5	120.4	
Ge	72	No Gas	2239941.53	1.2	2254278.57	99.36	29.5	120.4	
Ge	72	H2	426029.13	1.3	432978.24	98.4	29.5	120.4	
Ge	72	He	217465.17	2.6	219029.81	99.29	29.5	120.4	
Y	89	H2	7754307.68	1.1	7788630.76	99.56	29.5	120.4	
Y	89	He	1706504.40	3.4	1720337.72	99.2	29.5	120.4	
Tb	159	No Gas	19243640.41	0.6	19085444.99	100.83	29.5	120.4	
Tb	159	He	6775352.05	3.7	6890196.91	98.33	29.5	120.4	
Bi	209	No Gas	8427850.99	0.6	8525371.63	98.86	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:16:45 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	18.954	ppb	10.3	83295.45	20	94.77	89.6	110.4	
11	B	6	No Gas	20.214	ppb	8.0	60553.00	20	101.07	89.6	110.4	
23	Na	45	He	3945.317	ppb	0.5	2430933.22	4000	98.63	89.6	110.4	
24	Mg	45	He	3982.143	ppb	0.2	1274340.68	4000	99.55	89.6	110.4	
27	Al	45	He	378.320	ppb	1.8	43507.42	400	94.58	89.6	110.4	
28	Si	45	H2	423.984	ppb	0.4	70858.14	400	106	89.6	110.4	
39	K	45	He	3913.959	ppb	1.1	982849.54	4000	97.85	89.6	110.4	
40	Ca	45	H2	4019.704	ppb	0.6	6800768.37	4000	100.49	89.6	110.4	
51	V	89	He	19.486	ppb	0.5	82292.44	20	97.43	89.6	110.4	
52	Cr	89	He	19.571	ppb	0.4	106239.23	20	97.86	89.6	110.4	
55	Mn	89	He	19.578	ppb	1.0	46714.66	20	97.89	89.6	110.4	
56	Fe	89	H2	3976.057	ppb	0.7	26880152.95	4000	99.4	89.6	110.4	
59	Co	89	He	19.521	ppb	0.9	177293.87	20	97.6	89.6	110.4	
60	Ni	89	He	20.034	ppb	0.9	67043.45	20	100.17	89.6	110.4	
63	Cu	89	He	19.854	ppb	0.3	140281.93	20	99.27	89.6	110.4	
66	Zn	89	He	19.534	ppb	0.6	15423.48	20	97.67	89.6	110.4	
75	As	89	He	19.471	ppb	1.6	10210.19	20	97.36	89.6	110.4	
78	Se	89	H2	19.806	ppb	0.8	5030.02	20	99.03	89.6	110.4	
88	Sr	89	He	19.136	ppb	1.1	50861.78	20	95.68	89.6	110.4	
95	Mo	89	He	39.413	ppb	0.4	132953.58	40	98.53	89.6	110.4	
107	Ag	89	He	19.659	ppb	0.8	216376.33	20	98.3	89.6	110.4	
111	Cd	89	He	19.996	ppb	0.7	25751.59	20	99.98	89.6	110.4	
118	Sn	159	He	19.191	ppb	0.8	51162.42	20	95.95	89.6	110.4	
121	Sb	159	No Gas	19.077	ppb	9.0	359302.44	20	95.38	89.6	110.4	
137	Ba	159	No Gas	19.364	ppb	9.2	138402.94	20	96.82	89.6	110.4	
182	W	159	No Gas	19.874	ppb	8.5	287807.26	20	99.37	89.6	110.4	
205	Tl	209	No Gas	20.211	ppb	9.5	555949.63	20	101.05	89.6	110.4	
208	Pb	209	No Gas	19.315	ppb	9.3	756000.93	20	96.58	89.6	110.4	
232	Th	209	No Gas	19.591	ppb	9.1	725485.05	20	97.96	89.6	110.4	
238	U	209	No Gas	19.306	ppb	10.3	689899.22	20	96.53	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4908265.60	3.6	4785442.25	102.57	29.5	120.4	
Sc	45	No Gas	12221928.48	4.3	11869896.98	102.97	29.5	120.4	
Sc	45	H2	1446113.00	1.0	1440463.34	100.39	29.5	120.4	
Sc	45	He	344713.78	0.7	342270.52	100.71	29.5	120.4	
Ge	72	No Gas	2312325.35	3.4	2254278.57	102.57	29.5	120.4	
Ge	72	H2	429802.83	0.2	432978.24	99.27	29.5	120.4	
Ge	72	He	221367.26	0.6	219029.81	101.07	29.5	120.4	
Y	89	H2	7805882.90	0.5	7788630.76	100.22	29.5	120.4	
Y	89	He	1743974.52	0.3	1720337.72	101.37	29.5	120.4	
Tb	159	No Gas	19635629.29	2.6	19085444.99	102.88	29.5	120.4	
Tb	159	He	6936931.84	0.4	6890196.91	100.68	29.5	120.4	
Bi	209	No Gas	8733246.79	3.6	8525371.63	102.44	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:19:23 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.017	ppb	47.5	93.34	0.2	
11	B	6	No Gas	0.543	ppb	4.7	2960.41	4	
23	Na	45	He	1.096	ppb	85.0	40354.94	200	
24	Mg	45	He	0.307	ppb	28.4	484.49	20	
27	Al	45	He	-0.193	ppb	N/A	82.23	20	
28	Si	45	H2	0.380	ppb	18.9	410.46	100	
39	K	45	He	2.333	ppb	55.6	16508.78	200	
40	Ca	45	H2	0.990	ppb	4.3	4674.27	20	
51	V	89	He	-0.001	ppb	N/A	87.78	1	
52	Cr	89	He	0.006	ppb	39.9	298.62	1	
55	Mn	89	He	-0.037	ppb	N/A	482.59	0.4	
56	Fe	89	H2	1.208	ppb	2.3	18666.78	20	
59	Co	89	He	0.005	ppb	66.2	108.90	0.2	
60	Ni	89	He	0.160	ppb	92.5	18664.11	0.4	
63	Cu	89	He	-0.052	ppb	N/A	5595.77	0.6	
66	Zn	89	He	0.061	ppb	62.0	300.01	2	
75	As	89	He	0.025	ppb	4.9	28.67	1	
78	Se	89	H2	0.042	ppb	13.1	12.00	1	
88	Sr	89	He	0.005	ppb	38.4	24.44	1	
95	Mo	89	He	0.100	ppb	36.9	593.37	1	
107	Ag	89	He	0.009	ppb	19.1	130.01	0.2	
111	Cd	89	He	0.003	ppb	38.8	5.93	0.2	
118	Sn	159	He	0.053	ppb	9.9	401.13	1	
121	Sb	159	No Gas	0.012	ppb	20.7	590.68	0.2	
137	Ba	159	No Gas	0.014	ppb	14.6	186.87	0.4	
182	W	159	No Gas	0.072	ppb	11.0	1171.36	1	
205	Tl	209	No Gas	0.036	ppb	23.8	1334.90	0.2	
208	Pb	209	No Gas	0.016	ppb	30.6	881.01	0.2	
232	Th	209	No Gas	0.053	ppb	9.2	2226.04	1	
238	U	209	No Gas	0.015	ppb	45.7	573.99	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4892504.41	2.8	4785442.25	102.24	29.5	120.4	
Sc	45	No Gas	12076377.31	2.5	11869896.98	101.74	29.5	120.4	
Sc	45	H2	1430476.32	0.6	1440463.34	99.31	29.5	120.4	
Sc	45	He	340865.57	0.3	342270.52	99.59	29.5	120.4	
Ge	72	No Gas	2295643.64	2.1	2254278.57	101.83	29.5	120.4	
Ge	72	H2	424658.75	1.5	432978.24	98.08	29.5	120.4	
Ge	72	He	220548.06	0.1	219029.81	100.69	29.5	120.4	
Y	89	H2	7741545.80	0.6	7788630.76	99.4	29.5	120.4	
Y	89	He	1733625.48	0.3	1720337.72	100.77	29.5	120.4	
Tb	159	No Gas	19404067.49	3.4	19085444.99	101.67	29.5	120.4	
Tb	159	He	6902193.37	0.1	6890196.91	100.17	29.5	120.4	
Bi	209	No Gas	8687038.81	3.2	8525371.63	101.9	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:21:54 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.211	ppb	13.7	963.40	0.2	105.5	79.5	120.4
11	B	6	No Gas	0.255	ppb	5.8	2159.13	4	6.38	79.5	120.4
23	Na	45	He	214.532	ppb	3.5	163133.17	200	107.27	79.5	120.4
24	Mg	45	He	21.658	ppb	4.0	7017.77	20	108.29	79.5	120.4
27	Al	45	He	20.029	ppb	1.3	2304.71	20	100.14	79.5	120.4
28	Si	45	H2	100.377	ppb	6.3	17045.88	100	100.38	79.5	120.4
39	K	45	He	210.436	ppb	1.6	65302.28	200	105.22	79.5	120.4
40	Ca	45	H2	20.253	ppb	1.6	37302.31	20	101.26	79.5	120.4
51	V	89	He	1.014	ppb	2.6	4228.58	1	101.4	79.5	120.4
52	Cr	89	He	1.014	ppb	4.5	5572.12	1	101.4	79.5	120.4
55	Mn	89	He	0.390	ppb	9.5	1442.49	0.4	97.5	79.5	120.4
56	Fe	89	H2	21.012	ppb	2.5	154093.17	20	105.06	79.5	120.4
59	Co	89	He	0.214	ppb	6.6	1946.94	0.2	107	79.5	120.4
60	Ni	89	He	0.728	ppb	30.5	19500.80	0.4	182	79.5	120.4
63	Cu	89	He	0.614	ppb	7.9	9807.12	0.6	102.33	79.5	120.4
66	Zn	89	He	2.057	ppb	3.5	1793.51	2	102.85	79.5	120.4
75	As	89	He	1.053	ppb	11.0	547.74	1	105.3	79.5	120.4
78	Se	89	H2	0.974	ppb	3.3	250.99	1	97.4	79.5	120.4
88	Sr	89	He	0.982	ppb	4.7	2534.76	1	98.2	79.5	120.4
95	Mo	89	He	0.986	ppb	4.9	3462.80	1	98.6	79.5	120.4
107	Ag	89	He	0.213	ppb	4.4	2289.17	0.2	106.5	79.5	120.4
111	Cd	89	He	0.216	ppb	8.4	270.38	0.2	108	79.5	120.4
118	Sn	159	He	0.976	ppb	6.7	2780.39	1	97.6	79.5	120.4
121	Sb	159	No Gas	0.207	ppb	10.2	4225.40	0.2	103.5	79.5	120.4
137	Ba	159	No Gas	0.377	ppb	10.7	2750.02	0.4	94.25	79.5	120.4
182	W	159	No Gas	0.984	ppb	5.2	14247.22	1	98.4	79.5	120.4
205	Tl	209	No Gas	0.224	ppb	3.9	6509.03	0.2	112	79.5	120.4
208	Pb	209	No Gas	0.202	ppb	7.4	8160.20	0.2	101	79.5	120.4
232	Th	209	No Gas	0.185	ppb	5.8	7133.37	0.2	92.5	79.5	120.4
238	U	209	No Gas	0.205	ppb	4.6	7360.40	0.2	102.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4983599.41	2.4	4785442.25	104.14	29.5	120.4	
Sc	45	No Gas	12209873.71	3.0	11869896.98	102.86	29.5	120.4	
Sc	45	H2	1446243.22	0.7	1440463.34	100.4	29.5	120.4	
Sc	45	He	330617.79	2.0	342270.52	96.6	29.5	120.4	
Ge	72	No Gas	2297787.73	2.9	2254278.57	101.93	29.5	120.4	
Ge	72	H2	427228.89	0.7	432978.24	98.67	29.5	120.4	
Ge	72	He	216336.37	2.0	219029.81	98.77	29.5	120.4	
Y	89	H2	7879581.13	1.0	7788630.76	101.17	29.5	120.4	
Y	89	He	1687939.63	2.8	1720337.72	98.12	29.5	120.4	
Tb	159	No Gas	19410514.57	1.9	19085444.99	101.7	29.5	120.4	
Tb	159	He	6767792.88	2.3	6890196.91	98.22	29.5	120.4	
Bi	209	No Gas	8731445.51	2.5	8525371.63	102.42	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:24:34 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.002	ppb	142.0	26.67	0.2	-50	50	
B	11	6	No Gas	0.452	ppb	10.7	2360.28	4	-50	100	
Na	23	45	He	95659.337	ppb	2.0	52768560.03	100000	80	120	
Mg	24	45	He	94369.892	ppb	2.2	27463671.81	100000	80	120	
Al	27	45	He	88724.733	ppb	2.6	9259502.64	100000	80	120	
Si	28	45	H2	5.845	ppb	27.1	1218.26	100	-50	50	
K	39	45	He	95168.603	ppb	1.6	21398927.47	100000	80	120	
Ca	40	45	H2	100447.458	ppb	1.1	156382401.00	100000	80	120	
V	51	89	He	0.020	ppb	30.4	164.45	1	-50	100	
Cr	52	89	He	0.303	ppb	1.2	1764.46	0.78	-100	100	
Mn	55	89	He	0.704	ppb	8.3	2063.79	0.0826	100	100	DoD□ 6020/EPA
Fe	56	89	H2	94601.182	ppb	0.7	600688447.29	100000	80	120	
Co	59	89	He	0.268	ppb	2.1	2311.47	0.2	-50	100	
Ni	60	89	He	-2.718	ppb	N/A	10892.36	0.114	100	100	DoD□ 6020/EPA
Cu	63	89	He	0.116	ppb	24.4	6257.20	-0.043	100	100	
Zn	66	89	He	0.496	ppb	4.7	591.14	-0.7632	100	100	
As	75	89	He	0.047	ppb	15.7	37.67	1	-50	100	
Se	78	89	H2	0.087	ppb	17.0	22.00	1	-50	100	
Sr	88	89	He	0.796	ppb	1.4	1966.88	0.0578	100	100	
Mo	95	89	He	1935.580	ppb	2.4	6022291.09	2000	80	120	
Ag	107	89	He	0.020	ppb	5.3	223.34	0.2	-50	50	
Cd	111	89	He	0.385	ppb	12.5	459.28	0.268	100	100	
Sn	118	159	He	0.313	ppb	16.6	981.19	-0.24	100	100	
Sb	121	159	No Gas	0.184	ppb	13.7	3577.81	0.089	100	100	
Ba	137	159	No Gas	0.182	ppb	6.1	1304.85	-0.0794	100	100	
W	182	159	No Gas	0.203	ppb	10.6	2886.90	0.32	-100	100	
Tl	205	209	No Gas	0.003	ppb	50.4	367.08	0.2	-50	50	
Pb	208	209	No Gas	0.080	ppb	14.2	2923.43	0.03	100	100	
Th	232	209	No Gas	0.025	ppb	13.9	1014.52	0.2	-50	50	
U	238	209	No Gas	0.000	ppb	N/A	10.01	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4293405.65	5.0	4785442.25	89.72	29.5	120.4	
Sc	45	No Gas	11375067.38	4.6	11869896.98	95.83	29.5	120.4	
Sc	45	H2	1331263.56	0.4	1440463.34	92.42	29.5	120.4	
Sc	45	He	313625.94	1.3	342270.52	91.63	29.5	120.4	
Ge	72	No Gas	2115580.97	3.9	2254278.57	93.85	29.5	120.4	
Ge	72	H2	378228.19	0.5	432978.24	87.36	29.5	120.4	
Ge	72	He	199072.73	0.7	219029.81	90.89	29.5	120.4	
Y	89	H2	7334064.69	0.3	7788630.76	94.16	29.5	120.4	
Y	89	He	1612017.89	1.4	1720337.72	93.7	29.5	120.4	
Tb	159	No Gas	18396606.95	4.1	19085444.99	96.39	29.5	120.4	
Tb	159	He	6234285.25	1.2	6890196.91	90.48	29.5	120.4	
Bi	209	No Gas	7524754.65	4.6	8525371.63	88.26	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:27:16 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.122	ppb	7.4	71871.88	20	79.5	120.4	
11	B	6	No Gas	20.044	ppb	7.2	48792.89	20	79.5	120.4	
23	Na	45	He	98685.688	ppb	1.1	53728337.28	100000	79.5	120.4	
24	Mg	45	He	97346.017	ppb	0.8	27961617.36	100000	79.5	120.4	
27	Al	45	He	90270.565	ppb	0.6	9298976.18	100000	79.5	120.4	
28	Si	45	H2	488.848	ppb	1.7	73220.04	500	79.5	120.4	
39	K	45	He	97703.109	ppb	0.6	21682481.33	100000	79.5	120.4	
40	Ca	45	H2	103683.017	ppb	0.5	157292425.43	100000	79.5	120.4	
51	V	89	He	20.012	ppb	0.5	76920.60	20	79.5	120.4	
52	Cr	89	He	19.702	ppb	1.1	97339.53	20	79.5	120.4	
55	Mn	89	He	20.101	ppb	1.1	43639.32	20	79.5	120.4	
56	Fe	89	H2	97822.287	ppb	1.3	606275300.61	100000	79.5	120.4	
59	Co	89	He	19.769	ppb	1.8	163409.15	20	79.5	120.4	
60	Ni	89	He	15.875	ppb	1.9	51824.68	20	79.5	120.4	> +/- 10%
63	Cu	89	He	18.772	ppb	0.4	121020.81	20	79.5	120.4	
66	Zn	89	He	19.014	ppb	3.2	13669.38	20	79.5	120.4	
75	As	89	He	20.397	ppb	1.0	9734.14	20	79.5	120.4	
78	Se	89	H2	20.419	ppb	1.7	4755.93	20	79.5	120.4	
88	Sr	89	He	20.260	ppb	0.4	49012.87	20	79.5	120.4	
95	Mo	89	He	2032.206	ppb	1.1	6227362.96	2000	79.5	120.4	
107	Ag	89	He	18.505	ppb	0.7	185381.90	20	79.5	120.4	
111	Cd	89	He	19.569	ppb	1.0	22938.04	20	79.5	120.4	
118	Sn	159	He	20.513	ppb	0.3	48143.67	20	79.5	120.4	
121	Sb	159	No Gas	19.679	ppb	7.3	333218.72	20	79.5	120.4	
137	Ba	159	No Gas	19.790	ppb	8.9	127140.04	20	79.5	120.4	
182	W	159	No Gas	19.797	ppb	7.1	257721.70	20	79.5	120.4	
205	Tl	209	No Gas	20.356	ppb	7.9	462553.09	20	79.5	120.4	
208	Pb	209	No Gas	20.250	ppb	8.2	654690.79	20	79.5	120.4	
232	Th	209	No Gas	21.251	ppb	7.7	650049.94	20	79.5	120.4	
238	U	209	No Gas	20.854	ppb	7.3	615755.88	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	3985373.15	2.9	4785442.25	83.28	29.5	120.4	
Sc	45	No Gas	10882566.14	2.0	11869896.98	91.68	29.5	120.4	
Sc	45	H2	1297104.70	2.3	1440463.34	90.05	29.5	120.4	
Sc	45	He	309507.86	0.7	342270.52	90.43	29.5	120.4	
Ge	72	No Gas	2041866.98	2.9	2254278.57	90.58	29.5	120.4	
Ge	72	H2	372086.01	1.1	432978.24	85.94	29.5	120.4	
Ge	72	He	196805.60	0.7	219029.81	89.85	29.5	120.4	
Y	89	H2	7158400.96	0.5	7788630.76	91.91	29.5	120.4	
Y	89	He	1587343.17	0.7	1720337.72	92.27	29.5	120.4	
Tb	159	No Gas	17645900.85	2.4	19085444.99	92.46	29.5	120.4	
Tb	159	He	6109068.10	0.6	6890196.91	88.66	29.5	120.4	
Bi	209	No Gas	7208645.47	3.0	8525371.63	84.56	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:30:02 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	99.664	ppb	7.4	401228.04	100	99.66	89.5	110.4	
11	B	6	No Gas	520.347	ppb	7.1	1396341.93	500	104.07	89.5	110.4	
51	V	89	He	974.408	ppb	0.6	3980271.96	1000	97.44	89.5	110.4	
52	Cr	89	He	1932.019	ppb	0.8	10129884.61	2000	96.6	89.5	110.4	
55	Mn	89	He	1903.711	ppb	0.3	4345185.69	2000	95.19	89.5	110.4	
59	Co	89	He	979.503	ppb	1.0	8610903.48	1000	97.95	89.5	110.4	
60	Ni	89	He	999.641	ppb	0.9	2368607.07	1000	99.96	89.5	110.4	
63	Cu	89	He	1953.303	ppb	0.7	12799900.37	2000	97.67	89.5	110.4	
66	Zn	89	He	1922.757	ppb	0.7	1446079.89	2000	96.14	89.5	110.4	
75	As	89	He	988.791	ppb	0.6	501329.48	1000	98.88	89.5	110.4	
78	Se	89	H2	995.200	ppb	1.8	245216.39	1000	99.52	89.5	110.4	
88	Sr	89	He	1913.339	ppb	0.4	4923438.02	2000	95.67	89.5	110.4	
95	Mo	89	He	999.896	ppb	0.8	3259871.23	1000	99.99	89.5	110.4	
107	Ag	89	He	89.493	ppb	0.7	953695.78	100	89.49	89.5	110.4	> +/- 10%
111	Cd	89	He	997.084	ppb	1.0	1243315.89	1000	99.71	89.5	110.4	
118	Sn	159	He	986.055	ppb	0.9	2510667.77	1000	98.61	89.5	110.4	
121	Sb	159	No Gas	967.046	ppb	8.0	17705718.85	1000	96.7	89.5	110.4	
137	Ba	159	No Gas	1945.957	ppb	7.5	13527051.05	2000	97.3	89.5	110.4	
182	W	159	No Gas	935.205	ppb	8.1	13170403.38	1000	93.52	89.5	110.4	
205	Tl	209	No Gas	1010.674	ppb	6.2	27033809.52	1000	101.07	89.5	110.4	
208	Pb	209	No Gas	1880.853	ppb	6.9	71599334.94	2000	94.04	89.5	110.4	
232	Th	209	No Gas	952.048	ppb	7.5	34281460.25	1000	95.2	89.5	110.4	
238	U	209	No Gas	942.739	ppb	7.6	32776625.68	1000	94.27	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4491429.24	2.2	4785442.25	93.86	29.5	120.4	
Sc	45	No Gas	11572082.51	2.9	11869896.98	97.49	29.5	120.4	
Ge	72	No Gas	2235097.99	2.7	2254278.57	99.15	29.5	120.4	
Tb	159	No Gas	19105199.86	2.7	19085444.99	100.1	29.5	120.4	
Bi	209	No Gas	8486593.06	2.3	8525371.63	99.55	29.5	120.4	
Sc	45	H2	1361660.91	2.0	1440463.34	94.53	29.5	120.4	
Ge	72	H2	407861.19	0.4	432978.24	94.2	29.5	120.4	
Y	89	H2	7577242.03	2.4	7788630.76	97.29	29.5	120.4	
Sc	45	He	328491.47	1.1	342270.52	95.97	29.5	120.4	
Ge	72	He	213262.59	1.3	219029.81	97.37	29.5	120.4	
Y	89	He	1688820.08	1.4	1720337.72	98.17	29.5	120.4	
Tb	159	He	6658567.82	0.3	6890196.91	96.64	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:32:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.240	ppb	69.2	871.18	100	
11	B	6	No Gas	11.664	ppb	14.8	28626.27	1000	
23	Na	45	He	190355.253	ppb	1.5	107974883.58	200000	
24	Mg	45	He	186678.251	ppb	0.3	55887711.39	200000	
27	Al	45	He	182544.766	ppb	0.4	19598928.04	200000	
28	Si	45	H2	9340.262	ppb	2.2	1433917.61	10000	
39	K	45	He	192063.570	ppb	2.0	44409009.02	200000	
40	Ca	45	H2	203880.174	ppb	0.9	318268324.15	200000	>LDR
51	V	89	He	0.199	ppb	5.3	865.62	1000	
52	Cr	89	He	0.624	ppb	1.2	3389.14	2000	
55	Mn	89	He	7.331	ppb	0.6	16588.12	2000	
56	Fe	89	H2	95492.435	ppb	0.3	593336835.94	100000	
59	Co	89	He	0.564	ppb	5.5	4823.41	1000	
60	Ni	89	He	-3.300	ppb	N/A	9638.07	1000	
63	Cu	89	He	0.410	ppb	4.0	8138.21	2000	
66	Zn	89	He	1.793	ppb	2.7	1530.14	2000	
75	As	89	He	0.381	ppb	6.6	200.36	1000	
78	Se	89	H2	0.756	ppb	1.0	177.66	1000	
88	Sr	89	He	1.164	ppb	6.2	2883.75	2000	
95	Mo	89	He	1.999	ppb	3.2	6498.44	1000	
107	Ag	89	He	0.114	ppb	1.1	1195.65	100	
111	Cd	89	He	0.117	ppb	8.8	141.11	1000	
118	Sn	159	He	1.644	ppb	8.3	4026.30	1000	
121	Sb	159	No Gas	1.966	ppb	54.5	33041.25	1000	
137	Ba	159	No Gas	3.739	ppb	56.2	23699.98	2000	
182	W	159	No Gas	3.910	ppb	32.8	50038.58	1000	
205	Tl	209	No Gas	0.978	ppb	44.2	21421.93	1000	
208	Pb	209	No Gas	3.102	ppb	61.6	95957.32	2000	
232	Th	209	No Gas	5.212	ppb	55.5	152239.88	1000	
238	U	209	No Gas	2.988	ppb	65.0	84312.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	3943080.23	1.6	4785442.25	82.4	29.5	120.4	
Sc	45	No Gas	10911059.22	1.6	11869896.98	91.92	29.5	120.4	
Sc	45	H2	1335008.58	1.9	1440463.34	92.68	29.5	120.4	
Sc	45	He	322589.02	1.1	342270.52	94.25	29.5	120.4	
Ge	72	No Gas	2000672.37	1.4	2254278.57	88.75	29.5	120.4	
Ge	72	H2	368985.09	1.3	432978.24	85.22	29.5	120.4	
Ge	72	He	198832.64	1.3	219029.81	90.78	29.5	120.4	
Y	89	H2	7176679.91	1.1	7788630.76	92.14	29.5	120.4	
Y	89	He	1620493.85	0.7	1720337.72	94.2	29.5	120.4	
Tb	159	No Gas	17220419.05	1.9	19085444.99	90.23	29.5	120.4	
Tb	159	He	6040896.09	0.5	6890196.91	87.67	29.5	120.4	
Bi	209	No Gas	6813639.91	2.4	8525371.63	79.92	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:35:24 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	37.4	38.89	100	
11	B	6	No Gas	2.059	ppb	6.1	7077.54	1000	
23	Na	45	He	65.061	ppb	14.6	78512.58	200000	
24	Mg	45	He	21.990	ppb	11.1	7326.85	200000	
27	Al	45	He	18.600	ppb	19.7	2209.14	200000	
28	Si	45	H2	2.003	ppb	21.6	680.78	10000	
39	K	45	He	40.750	ppb	11.2	25835.18	200000	
40	Ca	45	H2	33.947	ppb	4.5	60106.98	200000	
51	V	89	He	0.017	ppb	7.6	165.56	1000	
52	Cr	89	He	0.036	ppb	5.0	461.26	2000	
55	Mn	89	He	0.296	ppb	7.4	1260.50	2000	
56	Fe	89	H2	18.808	ppb	4.4	137880.97	100000	
59	Co	89	He	0.035	ppb	21.4	377.81	1000	
60	Ni	89	He	-3.807	ppb	N/A	9063.25	1000	
63	Cu	89	He	-0.084	ppb	N/A	5365.66	2000	
66	Zn	89	He	0.086	ppb	94.5	317.80	2000	
75	As	89	He	0.061	ppb	22.7	47.34	1000	
78	Se	89	H2	0.128	ppb	6.8	33.83	1000	
88	Sr	89	He	0.038	ppb	16.0	112.23	2000	
95	Mo	89	He	0.439	ppb	15.5	1723.51	1000	
107	Ag	89	He	0.008	ppb	28.0	118.89	100	
111	Cd	89	He	0.017	ppb	24.4	23.70	1000	
118	Sn	159	He	0.328	ppb	17.6	1095.64	1000	
121	Sb	159	No Gas	0.048	ppb	3.4	1231.43	1000	
137	Ba	159	No Gas	0.040	ppb	27.0	363.75	2000	
182	W	159	No Gas	0.213	ppb	9.1	3123.89	1000	
205	Tl	209	No Gas	0.035	ppb	17.9	1234.79	1000	
208	Pb	209	No Gas	0.075	ppb	12.2	3026.86	2000	
232	Th	209	No Gas	0.025	ppb	5.3	1131.33	1000	
238	U	209	No Gas	0.023	ppb	15.4	810.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4686482.57	2.4	4785442.25	97.93	29.5	120.4	
Sc	45	No Gas	12151847.98	2.8	11869896.98	102.38	29.5	120.4	
Sc	45	H2	1437595.61	0.3	1440463.34	99.8	29.5	120.4	
Sc	45	He	340165.97	0.6	342270.52	99.39	29.5	120.4	
Ge	72	No Gas	2311404.29	3.6	2254278.57	102.53	29.5	120.4	
Ge	72	H2	422678.52	0.8	432978.24	97.62	29.5	120.4	
Ge	72	He	219896.93	0.3	219029.81	100.4	29.5	120.4	
Y	89	H2	7813933.13	0.8	7788630.76	100.32	29.5	120.4	
Y	89	He	1728989.63	0.9	1720337.72	100.5	29.5	120.4	
Tb	159	No Gas	18994050.27	3.1	19085444.99	99.52	29.5	120.4	
Tb	159	He	6716272.75	0.6	6890196.91	97.48	29.5	120.4	
Bi	209	No Gas	8298481.94	2.8	8525371.63	97.34	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:37:55 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.006	ppb	53.5	47.78	100	
11	B	6	No Gas	1.223	ppb	4.8	4808.76	1000	
23	Na	45	He	24.603	ppb	17.0	54360.22	200000	
24	Mg	45	He	6.579	ppb	28.0	2462.63	200000	
27	Al	45	He	5.306	ppb	23.2	704.49	200000	
28	Si	45	H2	-0.121	ppb	N/A	330.37	10000	
39	K	45	He	14.992	ppb	16.8	19572.96	200000	
40	Ca	45	H2	5.360	ppb	1.9	12061.10	200000	
51	V	89	He	0.005	ppb	28.6	114.45	1000	
52	Cr	89	He	0.023	ppb	17.6	393.27	2000	
55	Mn	89	He	0.242	ppb	6.5	1135.84	2000	
56	Fe	89	H2	3.185	ppb	1.5	32259.55	100000	
59	Co	89	He	0.021	ppb	16.4	257.80	1000	
60	Ni	89	He	-3.330	ppb	N/A	10230.74	1000	
63	Cu	89	He	-0.147	ppb	N/A	4955.52	2000	
66	Zn	89	He	0.041	ppb	122.3	284.46	2000	
75	As	89	He	0.023	ppb	23.4	28.00	1000	
78	Se	89	H2	0.059	ppb	20.8	16.33	1000	
88	Sr	89	He	0.015	ppb	18.2	50.00	2000	
95	Mo	89	He	0.229	ppb	18.3	1026.75	1000	
107	Ag	89	He	0.004	ppb	50.9	66.67	100	
111	Cd	89	He	0.008	ppb	10.6	11.11	1000	
118	Sn	159	He	0.164	ppb	8.1	684.49	1000	
121	Sb	159	No Gas	0.027	ppb	17.8	860.99	1000	
137	Ba	159	No Gas	0.027	ppb	55.5	276.98	2000	
182	W	159	No Gas	0.116	ppb	12.0	1792.13	1000	
205	Tl	209	No Gas	0.020	ppb	24.4	854.32	1000	
208	Pb	209	No Gas	0.041	ppb	28.4	1822.09	2000	
232	Th	209	No Gas	0.025	ppb	6.3	1158.02	1000	
238	U	209	No Gas	0.020	ppb	27.6	720.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4754723.72	3.3	4785442.25	99.36	29.5	120.4	
Sc	45	No Gas	12200206.65	3.6	11869896.98	102.78	29.5	120.4	
Sc	45	H2	1439808.43	0.6	1440463.34	99.95	29.5	120.4	
Sc	45	He	340452.67	1.1	342270.52	99.47	29.5	120.4	
Ge	72	No Gas	2301874.27	3.0	2254278.57	102.11	29.5	120.4	
Ge	72	H2	426652.28	0.6	432978.24	98.54	29.5	120.4	
Ge	72	He	220362.09	0.8	219029.81	100.61	29.5	120.4	
Y	89	H2	7825520.19	0.5	7788630.76	100.47	29.5	120.4	
Y	89	He	1732304.37	0.8	1720337.72	100.7	29.5	120.4	
Tb	159	No Gas	19234964.85	3.5	19085444.99	100.78	29.5	120.4	
Tb	159	He	6805520.32	0.6	6890196.91	98.77	29.5	120.4	
Bi	209	No Gas	8471196.52	3.5	8525371.63	99.36	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:40:34 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.562	ppb	8.6	100758.32	25	94.25	89.8	110.2	
11	B	6	No Gas	24.305	ppb	10.0	70525.46	25	97.22	89.8	110.2	
23	Na	45	He	5042.477	ppb	3.4	3013736.96	5000	100.85	89.8	110.2	
24	Mg	45	He	5050.674	ppb	3.8	1573240.67	5000	101.01	89.8	110.2	
27	Al	45	He	501.522	ppb	3.5	56116.31	500	100.3	89.8	110.2	
28	Si	45	H2	492.346	ppb	0.6	82625.91	500	98.47	89.8	110.2	
39	K	45	He	5047.460	ppb	3.5	1229364.77	5000	100.95	89.8	110.2	
40	Ca	45	H2	4904.971	ppb	0.6	8338254.25	5000	98.1	89.8	110.2	
51	V	89	He	25.212	ppb	4.4	103252.61	25	100.85	89.8	110.2	
52	Cr	89	He	25.176	ppb	3.8	132502.83	25	100.7	89.8	110.2	
55	Mn	89	He	25.427	ppb	4.4	58682.06	25	101.71	89.8	110.2	
56	Fe	89	H2	4875.326	ppb	0.3	33432685.68	5000	97.51	89.8	110.2	
59	Co	89	He	25.159	ppb	5.3	221577.03	25	100.64	89.8	110.2	
60	Ni	89	He	22.607	ppb	6.5	71084.74	25	90.43	89.8	110.2	
63	Cu	89	He	25.678	ppb	4.3	174295.69	25	102.71	89.8	110.2	
66	Zn	89	He	25.278	ppb	3.0	19293.98	25	101.11	89.8	110.2	
75	As	89	He	24.943	ppb	4.7	12682.16	25	99.77	89.8	110.2	
78	Se	89	H2	24.348	ppb	1.0	6272.13	25	97.39	89.8	110.2	
88	Sr	89	He	25.023	ppb	5.0	64497.07	25	100.09	89.8	110.2	
95	Mo	89	He	25.489	ppb	3.9	83498.75	25	101.96	89.8	110.2	
107	Ag	89	He	25.283	ppb	4.5	269910.36	25	101.13	89.8	110.2	
111	Cd	89	He	25.218	ppb	4.7	31499.33	25	100.87	89.8	110.2	
118	Sn	159	He	25.460	ppb	4.5	65352.03	25	101.84	89.8	110.2	
121	Sb	159	No Gas	23.891	ppb	8.8	442187.63	25	95.56	89.8	110.2	
137	Ba	159	No Gas	24.058	ppb	7.4	169036.10	25	96.23	89.8	110.2	
182	W	159	No Gas	23.706	ppb	8.6	337357.40	25	94.82	89.8	110.2	
205	Tl	209	No Gas	23.628	ppb	8.6	632979.86	25	94.51	89.8	110.2	
208	Pb	209	No Gas	23.388	ppb	7.1	891731.10	25	93.55	89.8	110.2	
232	Th	209	No Gas	23.299	ppb	8.7	840212.59	25	93.2	89.8	110.2	
238	U	209	No Gas	23.543	ppb	8.4	819599.99	25	94.17	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4774693.27	3.5	4785442.25	99.78	29.5	120.4	
Sc	45	No Gas	12229545.16	3.1	11869896.98	103.03	29.5	120.4	
Sc	45	H2	1453135.02	0.8	1440463.34	100.88	29.5	120.4	
Sc	45	He	335762.93	2.5	342270.52	98.1	29.5	120.4	
Ge	72	No Gas	2301961.73	2.1	2254278.57	102.12	29.5	120.4	
Ge	72	H2	423930.44	1.3	432978.24	97.91	29.5	120.4	
Ge	72	He	215718.85	2.1	219029.81	98.49	29.5	120.4	
Y	89	H2	7918308.55	0.7	7788630.76	101.66	29.5	120.4	
Y	89	He	1693433.93	3.7	1720337.72	98.44	29.5	120.4	
Tb	159	No Gas	19300176.24	2.8	19085444.99	101.13	29.5	120.4	
Tb	159	He	6694160.73	3.3	6890196.91	97.15	29.5	120.4	
Bi	209	No Gas	8497515.65	2.1	8525371.63	99.67	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:43:09 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.024	ppb	25.9	125.56	0.2	
11	B	6	No Gas	1.038	ppb	6.7	4410.83	4	
23	Na	45	He	11.588	ppb	15.3	47202.88	200	
24	Mg	45	He	4.630	ppb	13.0	1873.60	20	
27	Al	45	He	4.214	ppb	13.0	588.92	20	
28	Si	45	H2	0.170	ppb	207.2	387.10	100	
39	K	45	He	10.439	ppb	33.1	18710.53	200	
40	Ca	45	H2	6.086	ppb	2.0	13591.45	20	
51	V	89	He	0.014	ppb	49.8	153.34	1	
52	Cr	89	He	0.029	ppb	14.4	429.93	1	
55	Mn	89	He	0.195	ppb	14.5	1043.18	0.4	
56	Fe	89	H2	4.291	ppb	5.3	40794.46	20	
59	Co	89	He	0.028	ppb	2.6	324.47	0.2	
60	Ni	89	He	-2.880	ppb	N/A	11490.67	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.188	ppb	N/A	4754.32	0.6	
66	Zn	89	He	0.061	ppb	49.1	304.46	2	
75	As	89	He	0.023	ppb	28.8	28.33	1	
78	Se	89	H2	0.067	ppb	35.3	18.83	1	
88	Sr	89	He	0.022	ppb	42.5	70.00	1	
95	Mo	89	He	0.164	ppb	6.5	821.17	1	
107	Ag	89	He	0.008	ppb	34.2	111.12	0.2	
111	Cd	89	He	0.016	ppb	5.8	22.22	0.2	
118	Sn	159	He	0.133	ppb	5.0	612.26	1	
121	Sb	159	No Gas	0.039	ppb	6.9	1114.63	0.2	
137	Ba	159	No Gas	0.046	ppb	11.1	420.47	0.4	
182	W	159	No Gas	0.132	ppb	6.4	2089.17	1	
205	Tl	209	No Gas	0.051	ppb	30.8	1755.44	0.2	
208	Pb	209	No Gas	0.051	ppb	15.3	2242.59	0.2	
232	Th	209	No Gas	0.109	ppb	16.3	4348.96	1	
238	U	209	No Gas	0.037	ppb	34.6	1358.26	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4895306.96	2.7	4785442.25	102.3	29.5	120.4	
Sc	45	No Gas	12594112.94	3.4	11869896.98	106.1	29.5	120.4	
Sc	45	H2	1473303.98	1.0	1440463.34	102.28	29.5	120.4	
Sc	45	He	344993.66	0.6	342270.52	100.8	29.5	120.4	
Ge	72	No Gas	2380354.33	3.2	2254278.57	105.59	29.5	120.4	
Ge	72	H2	439112.84	0.5	432978.24	101.42	29.5	120.4	
Ge	72	He	222810.29	0.6	219029.81	101.73	29.5	120.4	
Y	89	H2	8033340.14	1.4	7788630.76	103.14	29.5	120.4	
Y	89	He	1758971.95	0.4	1720337.72	102.25	29.5	120.4	
Tb	159	No Gas	19832884.56	3.5	19085444.99	103.92	29.5	120.4	
Tb	159	He	6909135.17	0.6	6890196.91	100.27	29.5	120.4	
Bi	209	No Gas	8757330.46	4.0	8525371.63	102.72	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNH05IMS1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:46:21 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.011	ppb	95.3	30.00	0.5	
B	11	6	No Gas	4.893	ppb	9.0	4216.32	10	
Na	23	45	He	63.836	ppb	6.1	48284.70	500	
Mg	24	45	He	21.780	ppb	5.7	1800.24	50	
Al	27	45	He	14.524	ppb	5.2	442.25	50	
Si	28	45	H2	19.004	ppb	9.7	1001.15	250	
K	39	45	He	59.355	ppb	7.2	19210.90	500	
Ca	40	45	H2	60.823	ppb	5.6	24058.01	50	PB 6020 Fails DoD
V	51	89	He	0.252	ppb	26.9	308.90	2.5	
Cr	52	89	He	0.775	ppb	4.0	1117.85	2.5	
Mn	55	89	He	1.614	ppb	8.0	1345.16	1	PB 6020 Fails DoD
Fe	56	89	H2	23.924	ppb	8.3	43847.56	50	
Co	59	89	He	0.095	ppb	6.0	242.24	0.5	
Ni	60	89	He	-11.714	ppb	N/A	12801.84	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	2.861	ppb	5.3	9933.87	1.5	PB 6020 Fails DoD
Zn	66	89	He	5.792	ppb	4.8	1163.43	5	PB 6020 Fails DoD
As	75	89	He	0.236	ppb	14.2	41.00	2.5	
Se	78	89	H2	0.318	ppb	7.2	17.83	2.5	
Sr	88	89	He	0.132	ppb	22.3	82.22	2.5	
Mo	95	89	He	0.532	ppb	4.2	624.48	2.5	
Ag	107	89	He	0.027	ppb	22.1	87.78	0.5	
Cd	111	89	He	0.023	ppb	43.8	7.41	0.5	
Sn	118	159	He	42.187	ppb	1.9	22798.87	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.214	ppb	19.3	1184.71	0.5	
Ba	137	159	No Gas	0.255	ppb	31.9	457.18	1	
W	182	159	No Gas	0.336	ppb	20.3	1131.32	2.5	
Tl	205	209	No Gas	0.103	ppb	12.1	924.40	0.5	
Pb	208	209	No Gas	0.318	ppb	13.0	2799.92	0.5	
Th	232	209	No Gas	0.321	ppb	3.7	2710.01	2.5	
U	238	209	No Gas	0.060	ppb	9.8	470.53	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4874527.17	3.0	4785442.25	101.86	29.5	120.4	
Sc	45	No Gas	12555845.50	3.5	11869896.98	105.78	29.5	120.4	
Sc	45	H2	1472269.84	1.4	1440463.34	102.21	29.5	120.4	
Sc	45	He	347607.86	0.3	342270.52	101.56	29.5	120.4	
Ge	72	No Gas	2360158.77	3.3	2254278.57	104.7	29.5	120.4	
Ge	72	H2	424292.75	1.1	432978.24	97.99	29.5	120.4	
Ge	72	He	220089.29	0.2	219029.81	100.48	29.5	120.4	
Y	89	H2	7958474.49	0.8	7788630.76	102.18	29.5	120.4	
Y	89	He	1758241.67	0.2	1720337.72	102.2	29.5	120.4	
Tb	159	No Gas	19811280.82	3.1	19085444.99	103.8	29.5	120.4	
Tb	159	He	6985991.01	0.7	6890196.91	101.39	29.5	120.4	
Bi	209	No Gas	8948981.69	3.5	8525371.63	104.97	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH05IMS1
File Name	020LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:48:54 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.739	ppb	9.9	43182.62	50	19.1	79.5	120.4	
B	11	6	No Gas	501.592	ppb	9.0	303489.74	500	20.06	79.5	120.4	
Na	23	45	He	7741.313	ppb	0.5	995836.85	7500	20.64	79.5	120.4	
Mg	24	45	He	5162.759	ppb	1.1	336655.87	5000	20.65	79.5	120.4	
Al	27	45	He	1874.764	ppb	1.3	43896.49	2000	18.75	79.5	120.4	
Si	28	45	H2	1040.744	ppb	1.6	35370.00	1000	20.81	79.5	120.4	
K	39	45	He	10434.217	ppb	0.5	541068.59	10000	20.87	79.5	120.4	
Ca	40	45	H2	2602.544	ppb	0.5	893575.70	2500	20.82	79.5	120.4	
V	51	89	He	496.941	ppb	0.4	426311.32	500	19.88	79.5	120.4	
Cr	52	89	He	202.266	ppb	0.4	222949.58	200	20.23	79.5	120.4	
Mn	55	89	He	503.589	ppb	0.6	241891.34	500	20.14	79.5	120.4	
Fe	56	89	H2	1042.258	ppb	0.8	1454129.57	1000	20.85	79.5	120.4	
Co	59	89	He	501.460	ppb	0.6	925739.72	500	20.06	79.5	120.4	
Ni	60	89	He	514.257	ppb	0.7	272631.21	500	20.57	79.5	120.4	
Cu	63	89	He	257.174	ppb	0.2	359781.55	250	20.57	79.5	120.4	
Zn	66	89	He	493.207	ppb	1.1	78133.87	500	19.73	79.5	120.4	
As	75	89	He	102.789	ppb	1.1	10958.53	100	20.56	79.5	120.4	
Se	78	89	H2	102.729	ppb	0.9	5345.79	100	20.55	79.5	120.4	
Sr	88	89	He	497.161	ppb	0.6	268623.66	500	19.89	79.5	120.4	
Mo	95	89	He	103.330	ppb	0.8	70997.24	100	20.67	79.5	120.4	
Ag	107	89	He	51.292	ppb	0.5	114793.91	50	20.52	79.5	120.4	
Cd	111	89	He	256.881	ppb	0.7	67261.91	250	20.55	79.5	120.4	
Sn	118	159	He	543.078	ppb	1.0	291980.96	500	21.72	79.5	120.4	
Sb	121	159	No Gas	100.431	ppb	9.5	387250.04	100	20.09	79.5	120.4	
Ba	137	159	No Gas	1939.765	ppb	8.5	2837293.76	2000	19.4	79.5	120.4	
W	182	159	No Gas	99.219	ppb	8.8	294167.22	100	19.84	79.5	120.4	
Tl	205	209	No Gas	103.314	ppb	10.4	577030.78	100	20.66	79.5	120.4	
[Pb]	206	209	No Gas	100.731	ppb	9.2	203132.21	100	20.15	79.5	120.4	
[Pb]	207	209	No Gas	99.779	ppb	8.9	176504.01	100	19.96	79.5	120.4	
Pb	208	209	No Gas	101.452	ppb	9.0	806528.39	100	20.29	79.5	120.4	
Th	232	209	No Gas	99.511	ppb	9.7	748320.74	100	19.9	79.5	120.4	
U	238	209	No Gas	100.087	ppb	9.6	726481.46	100	20.02	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5047414.32	2.7	4785442.25	105.47	29.5	120.4	
Sc	45	No Gas	12651145.91	2.7	11869896.98	106.58	29.5	120.4	
Sc	45	H2	1462955.88	1.4	1440463.34	101.56	29.5	120.4	
Sc	45	He	350875.11	0.9	342270.52	102.51	29.5	120.4	
Ge	72	No Gas	2368485.51	2.2	2254278.57	105.07	29.5	120.4	
Ge	72	H2	426972.78	1.4	432978.24	98.61	29.5	120.4	
Ge	72	He	222959.93	1.0	219029.81	101.79	29.5	120.4	
Y	89	H2	7997060.42	0.1	7788630.76	102.68	29.5	120.4	
Y	89	He	1772922.87	0.4	1720337.72	103.06	29.5	120.4	
Tb	159	No Gas	20106421.92	2.9	19085444.99	105.35	29.5	120.4	
Tb	159	He	7024466.91	0.5	6890196.91	101.95	29.5	120.4	
Bi	209	No Gas	8866635.60	3.2	8525371.63	104	29.5	120.4	

Sample Report

Sample Name SN6100-001

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:51:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.122	ppb	6.9	1884.64	100	
11	B	6	No Gas	28.143	ppb	1.6	17850.57	1000	
23	Na	45	He	335.901	ppb	1.8	82135.01	200000	
24	Mg	45	He	5179.580	ppb	0.4	337045.11	200000	
27	Al	45	He	19914.632	ppb	0.6	464293.51	200000	
28	Si	45	H2	2206.598	ppb	2.9	76562.30	10000	
39	K	45	He	1369.413	ppb	0.5	85092.53	200000	
40	Ca	45	H2	23642.297	ppb	1.1	8305917.37	200000	
51	V	89	He	66.876	ppb	0.2	58623.54	1000	
52	Cr	89	He	24.670	ppb	1.3	27991.31	2000	
55	Mn	89	He	2589.474	ppb	0.4	1266673.12	2000	
56	Fe	89	H2	20513.385	ppb	0.7	29508678.27	100000	
59	Co	89	He	17.106	ppb	0.2	32290.51	1000	
60	Ni	89	He	12.688	ppb	2.8	25466.10	1000	
63	Cu	89	He	35.748	ppb	1.8	56372.67	2000	
66	Zn	89	He	82.934	ppb	0.8	13624.91	2000	
75	As	89	He	18.267	ppb	2.6	2000.70	1000	
78	Se	89	H2	4.669	ppb	2.8	253.66	1000	
88	Sr	89	He	124.618	ppb	0.9	68712.65	2000	
95	Mo	89	He	5.461	ppb	2.4	4085.22	1000	
107	Ag	89	He	0.423	ppb	3.1	993.41	100	
111	Cd	89	He	1.425	ppb	3.1	382.24	1000	
118	Sn	159	He	42.489	ppb	1.3	23149.48	1000	
121	Sb	159	No Gas	0.963	ppb	6.2	4085.21	1000	
137	Ba	159	No Gas	132.543	ppb	7.5	193700.02	2000	
182	W	159	No Gas	1.244	ppb	8.7	3834.87	1000	
205	Tl	209	No Gas	0.654	ppb	7.7	4061.83	1000	
208	Pb	209	No Gas	280.378	ppb	7.8	2263307.34	2000	
232	Th	209	No Gas	6.429	ppb	4.3	49396.21	1000	
238	U	209	No Gas	23.518	ppb	7.9	173416.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4899127.96	1.9	4785442.25	102.38	29.5	120.4	
Sc	45	No Gas	12693448.73	2.6	11869896.98	106.94	29.5	120.4	
Sc	45	H2	1501528.66	0.6	1440463.34	104.24	29.5	120.4	
Sc	45	He	350162.00	0.2	342270.52	102.31	29.5	120.4	
Ge	72	No Gas	2389378.33	2.8	2254278.57	105.99	29.5	120.4	
Ge	72	H2	438820.63	0.8	432978.24	101.35	29.5	120.4	
Ge	72	He	223964.76	0.3	219029.81	102.25	29.5	120.4	
Y	89	H2	8304723.60	0.6	7788630.76	106.63	29.5	120.4	
Y	89	He	1809029.28	0.4	1720337.72	105.16	29.5	120.4	
Tb	159	No Gas	20071874.56	2.5	19085444.99	105.17	29.5	120.4	
Tb	159	He	7043225.86	0.4	6890196.91	102.22	29.5	120.4	
Bi	209	No Gas	8999620.03	2.5	8525371.63	105.56	29.5	120.4	

Sample Report

Sample Name	SN6100-002
File Name	022SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:54:05 PM
Sample Type	Sample
Total Dilution	10.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.846	ppb	11.9	833.39	100	
11	B	6	No Gas	24.118	ppb	6.7	8462.75	1000	
23	Na	45	He	257.564	ppb	4.3	56430.69	200000	
24	Mg	45	He	4312.986	ppb	0.5	140054.25	200000	
27	Al	45	He	17105.334	ppb	1.7	198736.72	200000	
28	Si	45	H2	2091.622	ppb	1.0	35821.92	10000	
39	K	45	He	1193.852	ppb	1.6	46162.28	200000	
40	Ca	45	H2	20205.136	ppb	0.6	3486966.79	200000	
51	V	89	He	55.567	ppb	0.8	24222.76	1000	
52	Cr	89	He	21.376	ppb	0.4	12191.07	2000	
55	Mn	89	He	2534.410	ppb	0.9	615364.72	2000	
56	Fe	89	H2	18156.247	ppb	0.7	12755790.97	100000	
59	Co	89	He	16.015	ppb	0.3	15035.75	1000	
60	Ni	89	He	-2.952	ppb	N/A	18187.89	1000	
63	Cu	89	He	31.046	ppb	1.6	27773.95	2000	
66	Zn	89	He	76.432	ppb	1.6	6371.70	2000	
75	As	89	He	16.407	ppb	3.5	900.46	1000	
78	Se	89	H2	4.539	ppb	13.0	121.16	1000	
88	Sr	89	He	107.314	ppb	0.9	29364.47	2000	
95	Mo	89	He	4.516	ppb	8.0	1834.63	1000	
107	Ag	89	He	0.434	ppb	5.3	518.92	100	
111	Cd	89	He	1.343	ppb	8.0	179.63	1000	
118	Sn	159	He	43.033	ppb	1.3	11870.09	1000	
121	Sb	159	No Gas	0.810	ppb	13.7	1952.32	1000	
137	Ba	159	No Gas	115.887	ppb	8.9	85402.69	2000	
182	W	159	No Gas	0.982	ppb	15.2	1618.59	1000	
205	Tl	209	No Gas	0.384	ppb	5.4	1455.05	1000	
208	Pb	209	No Gas	237.411	ppb	9.5	969364.65	2000	
232	Th	209	No Gas	5.106	ppb	5.1	20011.81	1000	
238	U	209	No Gas	20.253	ppb	10.4	75526.99	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4921923.00	4.0	4785442.25	102.85	29.5	120.4	
Sc	45	No Gas	12759216.58	3.9	11869896.98	107.49	29.5	120.4	
Sc	45	H2	1474420.11	0.3	1440463.34	102.36	29.5	120.4	
Sc	45	He	348904.23	0.4	342270.52	101.94	29.5	120.4	
Ge	72	No Gas	2397113.62	3.9	2254278.57	106.34	29.5	120.4	
Ge	72	H2	433145.68	0.5	432978.24	100.04	29.5	120.4	
Ge	72	He	222802.25	0.1	219029.81	101.72	29.5	120.4	
Y	89	H2	8108167.26	0.7	7788630.76	104.1	29.5	120.4	
Y	89	He	1795119.54	1.0	1720337.72	104.35	29.5	120.4	
Tb	159	No Gas	20247311.50	3.6	19085444.99	106.09	29.5	120.4	
Tb	159	He	7052801.08	0.2	6890196.91	102.36	29.5	120.4	
Bi	209	No Gas	9110713.31	3.5	8525371.63	106.87	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:56:40 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.003	ppb	91.1	34.45	100	
11	B	6	No Gas	0.421	ppb	10.1	2593.66	1000	
23	Na	45	He	-6.136	ppb	N/A	36728.12	200000	
24	Mg	45	He	0.271	ppb	10.7	482.27	200000	
27	Al	45	He	0.235	ppb	32.2	133.34	200000	
28	Si	45	H2	-0.048	ppb	N/A	350.39	10000	
39	K	45	He	0.335	ppb	318.5	16333.63	200000	
40	Ca	45	H2	-0.065	ppb	N/A	2995.99	200000	
51	V	89	He	-0.002	ppb	N/A	84.45	1000	
52	Cr	89	He	0.006	ppb	56.8	309.28	2000	
55	Mn	89	He	0.136	ppb	12.3	907.87	2000	
56	Fe	89	H2	0.062	ppb	223.3	11420.86	100000	
59	Co	89	He	0.017	ppb	20.7	224.46	1000	
60	Ni	89	He	-2.448	ppb	N/A	12633.87	1000	
63	Cu	89	He	-0.274	ppb	N/A	4191.90	2000	
66	Zn	89	He	0.035	ppb	100.8	285.57	2000	
75	As	89	He	0.004	ppb	161.3	18.33	1000	
78	Se	89	H2	0.012	ppb	55.4	4.50	1000	
88	Sr	89	He	0.004	ppb	77.3	22.22	2000	
95	Mo	89	He	-0.013	ppb	N/A	221.12	1000	
107	Ag	89	He	0.001	ppb	184.5	35.56	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	0.021	ppb	28.4	320.02	1000	
121	Sb	159	No Gas	-0.004	ppb	N/A	290.33	1000	
137	Ba	159	No Gas	0.011	ppb	64.5	170.19	2000	
182	W	159	No Gas	0.010	ppb	15.2	300.34	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	270.31	1000	
208	Pb	209	No Gas	0.025	ppb	22.6	1231.40	2000	
232	Th	209	No Gas	0.005	ppb	55.7	457.19	1000	
238	U	209	No Gas	0.003	ppb	101.3	126.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4875879.04	3.0	4785442.25	101.89	29.5	120.4	
Sc	45	No Gas	12534988.61	2.1	11869896.98	105.6	29.5	120.4	
Sc	45	H2	1473161.05	0.7	1440463.34	102.27	29.5	120.4	
Sc	45	He	347558.35	1.0	342270.52	101.54	29.5	120.4	
Ge	72	No Gas	2375138.13	2.7	2254278.57	105.36	29.5	120.4	
Ge	72	H2	439708.25	0.3	432978.24	101.55	29.5	120.4	
Ge	72	He	224263.80	0.2	219029.81	102.39	29.5	120.4	
Y	89	H2	8048831.99	0.5	7788630.76	103.34	29.5	120.4	
Y	89	He	1770861.38	0.5	1720337.72	102.94	29.5	120.4	
Tb	159	No Gas	19769703.18	2.1	19085444.99	103.59	29.5	120.4	
Tb	159	He	7012619.27	0.2	6890196.91	101.78	29.5	120.4	
Bi	209	No Gas	8788027.61	2.1	8525371.63	103.08	29.5	120.4	

Sample Report

Sample Name SN6100-003

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:59:12 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.102	ppb	22.6	962.29	100	
11	B	6	No Gas	25.902	ppb	7.6	9153.23	1000	
23	Na	45	He	308.830	ppb	5.8	60324.01	200000	
24	Mg	45	He	5398.055	ppb	0.3	177404.08	200000	
27	Al	45	He	19318.847	ppb	1.0	227273.72	200000	
28	Si	45	H2	2438.861	ppb	2.2	41371.30	10000	
39	K	45	He	1642.744	ppb	1.3	58113.08	200000	
40	Ca	45	H2	26848.831	ppb	1.1	4594989.76	200000	
51	V	89	He	72.748	ppb	1.8	31743.50	1000	
52	Cr	89	He	23.040	ppb	1.3	13142.43	2000	
55	Mn	89	He	4040.623	ppb	0.8	982607.50	2000	
56	Fe	89	H2	25704.277	ppb	0.8	18011290.66	100000	
59	Co	89	He	27.557	ppb	1.1	25870.13	1000	
60	Ni	89	He	2.792	ppb	64.8	19662.19	1000	
63	Cu	89	He	39.849	ppb	0.2	33966.69	2000	
66	Zn	89	He	94.805	ppb	1.5	7854.74	2000	
75	As	89	He	20.904	ppb	3.4	1145.17	1000	
78	Se	89	H2	4.577	ppb	6.6	121.83	1000	
88	Sr	89	He	143.285	ppb	0.6	39275.99	2000	
95	Mo	89	He	5.981	ppb	4.1	2345.84	1000	
107	Ag	89	He	0.442	ppb	3.9	528.92	100	
111	Cd	89	He	1.536	ppb	4.6	205.56	1000	
118	Sn	159	He	44.601	ppb	2.7	12421.70	1000	
121	Sb	159	No Gas	0.977	ppb	16.4	2262.74	1000	
137	Ba	159	No Gas	141.209	ppb	9.9	103463.93	2000	
182	W	159	No Gas	1.198	ppb	19.0	1928.99	1000	
205	Tl	209	No Gas	0.494	ppb	10.4	1775.45	1000	
208	Pb	209	No Gas	310.051	ppb	9.5	1271328.38	2000	
232	Th	209	No Gas	5.256	ppb	12.5	20643.76	1000	
238	U	209	No Gas	21.082	ppb	9.2	78975.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5011567.28	3.5	4785442.25	104.73	29.5	120.4	
Sc	45	No Gas	12703040.41	3.5	11869896.98	107.02	29.5	120.4	
Sc	45	H2	1462353.42	1.2	1440463.34	101.52	29.5	120.4	
Sc	45	He	353321.09	1.4	342270.52	103.23	29.5	120.4	
Ge	72	No Gas	2407635.88	3.1	2254278.57	106.8	29.5	120.4	
Ge	72	H2	437936.70	0.8	432978.24	101.15	29.5	120.4	
Ge	72	He	224770.74	1.4	219029.81	102.62	29.5	120.4	
Y	89	H2	8088485.39	1.0	7788630.76	103.85	29.5	120.4	
Y	89	He	1798420.80	0.4	1720337.72	104.54	29.5	120.4	
Tb	159	No Gas	20134596.51	3.2	19085444.99	105.5	29.5	120.4	
Tb	159	He	7127764.55	1.1	6890196.91	103.45	29.5	120.4	
Bi	209	No Gas	9152475.80	3.9	8525371.63	107.36	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:01:47 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	17.78	100	
11	B	6	No Gas	0.276	ppb	23.9	2181.36	1000	
23	Na	45	He	-6.447	ppb	N/A	36359.71	200000	
24	Mg	45	He	0.839	ppb	13.1	662.29	200000	
27	Al	45	He	0.694	ppb	12.2	185.56	200000	
28	Si	45	H2	0.041	ppb	941.5	377.09	10000	
39	K	45	He	2.870	ppb	51.1	16884.07	200000	
40	Ca	45	H2	0.124	ppb	65.8	3416.10	200000	
51	V	89	He	0.001	ppb	202.5	98.89	1000	
52	Cr	89	He	0.007	ppb	92.7	313.28	2000	
55	Mn	89	He	0.129	ppb	4.1	886.54	2000	
56	Fe	89	H2	0.126	ppb	17.3	12195.56	100000	
59	Co	89	He	0.015	ppb	18.8	202.24	1000	
60	Ni	89	He	-2.076	ppb	N/A	13490.29	1000	
63	Cu	89	He	-0.255	ppb	N/A	4304.16	2000	
66	Zn	89	He	0.023	ppb	328.1	275.57	2000	
75	As	89	He	0.005	ppb	121.2	19.00	1000	
78	Se	89	H2	0.013	ppb	45.3	4.83	1000	
88	Sr	89	He	0.007	ppb	17.5	30.00	2000	
95	Mo	89	He	-0.022	ppb	N/A	190.01	1000	
107	Ag	89	He	0.002	ppb	50.4	47.78	100	
111	Cd	89	He	0.002	ppb	24.4	4.07	1000	
118	Sn	159	He	0.009	ppb	100.3	287.79	1000	
121	Sb	159	No Gas	-0.006	ppb	N/A	253.62	1000	
137	Ba	159	No Gas	0.009	ppb	79.7	153.51	2000	
182	W	159	No Gas	0.004	ppb	58.2	210.24	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	303.68	1000	
208	Pb	209	No Gas	0.027	ppb	29.0	1308.16	2000	
232	Th	209	No Gas	0.003	ppb	40.4	383.78	1000	
238	U	209	No Gas	0.002	ppb	132.5	100.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4892690.85	0.4	4785442.25	102.24	29.5	120.4	
Sc	45	No Gas	12409984.86	0.7	11869896.98	104.55	29.5	120.4	
Sc	45	H2	1516299.03	2.6	1440463.34	105.26	29.5	120.4	
Sc	45	He	345866.92	0.3	342270.52	101.05	29.5	120.4	
Ge	72	No Gas	2352074.10	2.0	2254278.57	104.34	29.5	120.4	
Ge	72	H2	444257.83	1.3	432978.24	102.61	29.5	120.4	
Ge	72	He	224158.72	0.5	219029.81	102.34	29.5	120.4	
Y	89	H2	8272685.10	2.1	7788630.76	106.21	29.5	120.4	
Y	89	He	1762796.12	0.6	1720337.72	102.47	29.5	120.4	
Tb	159	No Gas	19627290.54	0.8	19085444.99	102.84	29.5	120.4	
Tb	159	He	6991255.31	0.7	6890196.91	101.47	29.5	120.4	
Bi	209	No Gas	8752482.91	0.4	8525371.63	102.66	29.5	120.4	

Sample Report

Sample Name SN6100-004

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:04:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.312	ppb	18.6	301.12	100	
11	B	6	No Gas	14.927	ppb	8.6	10364.10	1000	
23	Na	45	He	226.334	ppb	3.2	68182.47	200000	
24	Mg	45	He	2601.142	ppb	0.6	168314.69	200000	
27	Al	45	He	2545.783	ppb	1.0	59045.62	200000	
28	Si	45	H2	1019.072	ppb	7.4	35051.30	10000	
39	K	45	He	500.567	ppb	3.3	41209.48	200000	
40	Ca	45	H2	24651.893	ppb	1.4	8529765.15	200000	
51	V	89	He	47.595	ppb	0.7	40872.57	1000	
52	Cr	89	He	5.768	ppb	1.3	6617.02	2000	
55	Mn	89	He	34.278	ppb	0.3	16989.85	2000	
56	Fe	89	H2	4773.976	ppb	0.6	6672464.94	100000	
59	Co	89	He	3.307	ppb	1.6	6166.28	1000	
60	Ni	89	He	15.021	ppb	9.4	26079.46	1000	
63	Cu	89	He	78.327	ppb	1.0	113682.76	2000	
66	Zn	89	He	69.118	ppb	2.1	11159.29	2000	
75	As	89	He	2.516	ppb	1.9	283.70	1000	
78	Se	89	H2	2.568	ppb	2.0	135.99	1000	
88	Sr	89	He	168.437	ppb	0.5	90917.82	2000	
95	Mo	89	He	3.319	ppb	2.0	2534.78	1000	
107	Ag	89	He	0.188	ppb	8.6	447.80	100	
111	Cd	89	He	1.439	ppb	8.9	377.79	1000	
118	Sn	159	He	42.935	ppb	0.8	23621.45	1000	
121	Sb	159	No Gas	1.782	ppb	9.2	7300.18	1000	
137	Ba	159	No Gas	85.736	ppb	10.5	126399.13	2000	
182	W	159	No Gas	0.646	ppb	7.6	2085.83	1000	
205	Tl	209	No Gas	0.128	ppb	13.6	1091.28	1000	
208	Pb	209	No Gas	207.921	ppb	9.7	1707942.85	2000	
232	Th	209	No Gas	0.633	ppb	11.0	5193.58	1000	
238	U	209	No Gas	1.532	ppb	9.2	11524.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5027666.45	3.2	4785442.25	105.06	29.5	120.4	
Sc	45	No Gas	12640010.29	4.3	11869896.98	106.49	29.5	120.4	
Sc	45	H2	1479077.93	1.9	1440463.34	102.68	29.5	120.4	
Sc	45	He	347789.84	0.6	342270.52	101.61	29.5	120.4	
Ge	72	No Gas	2367635.13	3.3	2254278.57	105.03	29.5	120.4	
Ge	72	H2	429736.54	0.4	432978.24	99.25	29.5	120.4	
Ge	72	He	222434.00	0.2	219029.81	101.55	29.5	120.4	
Y	89	H2	8059090.47	1.3	7788630.76	103.47	29.5	120.4	
Y	89	He	1771014.42	0.7	1720337.72	102.95	29.5	120.4	
Tb	159	No Gas	20264428.17	3.3	19085444.99	106.18	29.5	120.4	
Tb	159	He	7112959.76	0.6	6890196.91	103.23	29.5	120.4	
Bi	209	No Gas	9167924.58	3.8	8525371.63	107.54	29.5	120.4	

Sample Report

Sample Name SN6100-004A

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:06:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.240	ppb	11.5	9194.34	100	
11	B	6	No Gas	213.227	ppb	10.4	128683.42	1000	
23	Na	45	He	10316.625	ppb	0.7	1306705.16	200000	
24	Mg	45	He	3570.032	ppb	1.3	231690.20	200000	
27	Al	45	He	3436.611	ppb	0.6	79954.98	200000	
28	Si	45	H2	6001.065	ppb	1.3	202147.23	10000	
39	K	45	He	10764.616	ppb	0.8	554783.27	200000	
40	Ca	45	H2	25788.059	ppb	1.7	8821897.71	200000	
51	V	89	He	97.054	ppb	1.4	83441.79	1000	
52	Cr	89	He	55.535	ppb	0.9	61491.16	2000	
55	Mn	89	He	54.157	ppb	1.4	26567.50	2000	
56	Fe	89	H2	5771.795	ppb	1.2	8037390.44	100000	
59	Co	89	He	13.810	ppb	1.0	25593.92	1000	
60	Ni	89	He	34.904	ppb	2.8	35973.73	1000	
63	Cu	89	He	107.169	ppb	0.6	153669.06	2000	
66	Zn	89	He	167.590	ppb	1.8	26753.19	2000	
75	As	89	He	51.485	ppb	2.2	5503.69	1000	
78	Se	89	H2	51.610	ppb	1.5	2697.81	1000	
88	Sr	89	He	215.547	ppb	0.7	116618.01	2000	
95	Mo	89	He	53.807	ppb	1.6	37145.78	1000	
107	Ag	89	He	10.694	ppb	1.4	23985.30	100	
111	Cd	89	He	11.926	ppb	0.7	3128.18	1000	
118	Sn	159	He	91.347	ppb	1.3	50130.65	1000	
121	Sb	159	No Gas	11.548	ppb	10.9	45578.26	1000	
137	Ba	159	No Gas	104.334	ppb	10.9	155096.59	2000	
182	W	159	No Gas	48.903	ppb	8.8	147419.54	1000	
205	Tl	209	No Gas	10.359	ppb	11.2	59818.02	1000	
208	Pb	209	No Gas	217.729	ppb	9.6	1779919.61	2000	
232	Th	209	No Gas	10.536	ppb	10.9	81714.80	1000	
238	U	209	No Gas	11.412	ppb	10.8	85206.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5010675.50	4.8	4785442.25	104.71	29.5	120.4	
Sc	45	No Gas	12657745.01	3.0	11869896.98	106.64	29.5	120.4	
Sc	45	H2	1462061.28	0.5	1440463.34	101.5	29.5	120.4	
Sc	45	He	349048.17	0.3	342270.52	101.98	29.5	120.4	
Ge	72	No Gas	2365249.38	3.7	2254278.57	104.92	29.5	120.4	
Ge	72	H2	429045.67	1.0	432978.24	99.09	29.5	120.4	
Ge	72	He	221221.91	0.1	219029.81	101	29.5	120.4	
Y	89	H2	8031288.71	0.1	7788630.76	103.12	29.5	120.4	
Y	89	He	1775198.41	0.4	1720337.72	103.19	29.5	120.4	
Tb	159	No Gas	20432656.78	3.1	19085444.99	107.06	29.5	120.4	
Tb	159	He	7138194.34	0.3	6890196.91	103.6	29.5	120.4	
Bi	209	No Gas	9125065.68	4.0	8525371.63	107.03	29.5	120.4	

Sample Report

Sample Name	SN6100-004L
File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:09:32 PM
Sample Type	Sample
Total Dilution	25.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.484	ppb	15.2	105.56	100	
11	B	6	No Gas	30.841	ppb	2.6	4977.69	1000	
23	Na	45	He	143.433	ppb	63.4	42967.99	200000	
24	Mg	45	He	2701.087	ppb	3.8	34441.59	200000	
27	Al	45	He	2659.669	ppb	4.9	12126.75	200000	
28	Si	45	H2	1074.688	ppb	10.7	7663.32	10000	
39	K	45	He	566.599	ppb	10.5	21404.70	200000	
40	Ca	45	H2	25049.289	ppb	1.3	1734083.85	200000	
51	V	89	He	49.816	ppb	2.7	8383.91	1000	
52	Cr	89	He	6.146	ppb	9.5	1576.48	2000	
55	Mn	89	He	36.458	ppb	4.5	3954.51	2000	
56	Fe	89	H2	4866.998	ppb	0.2	1365779.26	100000	
59	Co	89	He	3.799	ppb	5.6	1426.85	1000	
60	Ni	89	He	-22.178	ppb	N/A	16010.78	1000	
63	Cu	89	He	76.104	ppb	6.6	26188.73	2000	
66	Zn	89	He	74.467	ppb	3.8	2531.43	2000	
75	As	89	He	2.627	ppb	1.0	70.01	1000	
78	Se	89	H2	2.753	ppb	8.4	30.17	1000	
88	Sr	89	He	174.507	ppb	5.0	18291.66	2000	
95	Mo	89	He	2.931	ppb	13.7	647.81	1000	
107	Ag	89	He	0.207	ppb	12.3	116.67	100	
111	Cd	89	He	1.644	ppb	20.0	84.82	1000	
118	Sn	159	He	44.587	ppb	5.2	4948.88	1000	
121	Sb	159	No Gas	1.731	ppb	20.6	1675.29	1000	
137	Ba	159	No Gas	89.208	ppb	6.4	25653.52	2000	
182	W	159	No Gas	0.806	ppb	30.8	617.38	1000	
205	Tl	209	No Gas	0.085	ppb	68.0	440.50	1000	
208	Pb	209	No Gas	220.071	ppb	7.9	354210.71	2000	
232	Th	209	No Gas	0.805	ppb	12.4	1495.09	1000	
238	U	209	No Gas	1.654	ppb	7.9	2459.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4891426.88	2.6	4785442.25	102.21	29.5	120.4	
Sc	45	No Gas	12331183.67	2.3	11869896.98	103.89	29.5	120.4	
Sc	45	H2	1477352.95	1.2	1440463.34	102.56	29.5	120.4	
Sc	45	He	339965.74	3.9	342270.52	99.33	29.5	120.4	
Ge	72	No Gas	2346080.19	2.9	2254278.57	104.07	29.5	120.4	
Ge	72	H2	436613.20	0.9	432978.24	100.84	29.5	120.4	
Ge	72	He	217141.65	4.6	219029.81	99.14	29.5	120.4	
Y	89	H2	8038201.35	0.3	7788630.76	103.2	29.5	120.4	
Y	89	He	1721086.73	4.3	1720337.72	100.04	29.5	120.4	
Tb	159	No Gas	19682708.60	2.3	19085444.99	103.13	29.5	120.4	
Tb	159	He	6885696.84	4.1	6890196.91	99.93	29.5	120.4	
Bi	209	No Gas	8966399.63	2.7	8525371.63	105.17	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:12:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.440	ppb	11.3	104194.49	25	93.76	89.8	110.2	
11	B	6	No Gas	24.074	ppb	10.4	72658.09	25	96.3	89.8	110.2	
23	Na	45	He	4859.339	ppb	0.8	3018295.14	5000	97.19	89.8	110.2	
24	Mg	45	He	4891.434	ppb	1.1	1582768.87	5000	97.83	89.8	110.2	
27	Al	45	He	486.743	ppb	2.9	56571.42	500	97.35	89.8	110.2	
28	Si	45	H2	505.487	ppb	0.6	86014.10	500	101.1	89.8	110.2	
39	K	45	He	4871.851	ppb	0.7	1233130.05	5000	97.44	89.8	110.2	
40	Ca	45	H2	4976.115	ppb	0.9	8577799.60	5000	99.52	89.8	110.2	
51	V	89	He	24.152	ppb	0.6	103014.35	25	96.61	89.8	110.2	
52	Cr	89	He	24.200	ppb	0.6	132641.36	25	96.8	89.8	110.2	
55	Mn	89	He	24.254	ppb	0.7	58320.79	25	97.02	89.8	110.2	
56	Fe	89	H2	4892.265	ppb	1.5	34137934.65	5000	97.85	89.8	110.2	
59	Co	89	He	24.418	ppb	0.2	224019.00	25	97.67	89.8	110.2	
60	Ni	89	He	22.464	ppb	0.8	73690.25	25	89.86	89.8	110.2	
63	Cu	89	He	24.380	ppb	0.2	172640.32	25	97.52	89.8	110.2	
66	Zn	89	He	24.051	ppb	1.5	19125.96	25	96.2	89.8	110.2	
75	As	89	He	23.979	ppb	0.9	12698.19	25	95.92	89.8	110.2	
78	Se	89	H2	24.449	ppb	0.8	6408.69	25	97.8	89.8	110.2	
88	Sr	89	He	24.230	ppb	1.5	65057.07	25	96.92	89.8	110.2	
95	Mo	89	He	24.230	ppb	0.9	82666.00	25	96.92	89.8	110.2	
107	Ag	89	He	24.720	ppb	0.1	274843.63	25	98.88	89.8	110.2	
111	Cd	89	He	24.471	ppb	0.4	31835.58	25	97.88	89.8	110.2	
118	Sn	159	He	24.010	ppb	1.3	65110.27	25	96.04	89.8	110.2	
121	Sb	159	No Gas	23.596	ppb	10.5	452009.80	25	94.38	89.8	110.2	
137	Ba	159	No Gas	23.814	ppb	11.0	173105.84	25	95.26	89.8	110.2	
182	W	159	No Gas	23.544	ppb	10.4	346766.53	25	94.18	89.8	110.2	
205	Tl	209	No Gas	23.685	ppb	10.9	662969.22	25	94.74	89.8	110.2	
208	Pb	209	No Gas	23.408	ppb	9.6	932618.46	25	93.63	89.8	110.2	
232	Th	209	No Gas	23.124	ppb	11.1	871304.40	25	92.5	89.8	110.2	
238	U	209	No Gas	23.664	ppb	10.3	860859.44	25	94.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4965803.86	3.6	4785442.25	103.77	29.5	120.4	
Sc	45	No Gas	12593693.15	3.3	11869896.98	106.1	29.5	120.4	
Sc	45	H2	1473589.34	1.3	1440463.34	102.3	29.5	120.4	
Sc	45	He	348581.36	1.0	342270.52	101.84	29.5	120.4	
Ge	72	No Gas	2388131.12	3.7	2254278.57	105.94	29.5	120.4	
Ge	72	H2	440525.16	0.8	432978.24	101.74	29.5	120.4	
Ge	72	He	223568.93	1.0	219029.81	102.07	29.5	120.4	
Y	89	H2	8057248.42	0.8	7788630.76	103.45	29.5	120.4	
Y	89	He	1761729.90	0.7	1720337.72	102.41	29.5	120.4	
Tb	159	No Gas	19991869.98	3.4	19085444.99	104.75	29.5	120.4	
Tb	159	He	7064285.45	1.2	6890196.91	102.53	29.5	120.4	
Bi	209	No Gas	8889748.39	3.4	8525371.63	104.27	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:14:45 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.015	ppb	32.5	88.89	0.2	
11	B	6	No Gas	0.533	ppb	4.9	2932.63	4	
23	Na	45	He	-4.714	ppb	N/A	37246.40	200	
24	Mg	45	He	1.553	ppb	100.8	888.99	20	
27	Al	45	He	1.193	ppb	125.2	242.23	20	
28	Si	45	H2	0.162	ppb	281.9	383.76	100	
39	K	45	He	3.175	ppb	75.8	16882.40	200	
40	Ca	45	H2	0.578	ppb	34.6	4028.49	20	
51	V	89	He	0.010	ppb	86.8	137.79	1	
52	Cr	89	He	0.010	ppb	77.8	323.95	1	
55	Mn	89	He	0.013	ppb	192.0	606.57	0.4	
56	Fe	89	H2	0.794	ppb	9.8	16170.68	20	
59	Co	89	He	0.017	ppb	26.5	220.02	0.2	
60	Ni	89	He	-1.964	ppb	N/A	13655.97	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.253	ppb	N/A	4284.14	0.6	
66	Zn	89	He	0.050	ppb	85.6	294.46	2	
75	As	89	He	0.018	ppb	65.3	25.67	1	
78	Se	89	H2	0.042	ppb	30.4	12.33	1	
88	Sr	89	He	0.014	ppb	102.2	48.89	1	
95	Mo	89	He	0.067	ppb	53.6	488.92	1	
107	Ag	89	He	0.004	ppb	1.2	73.34	0.2	
111	Cd	89	He	0.005	ppb	110.0	7.78	0.2	
118	Sn	159	He	0.073	ppb	30.6	457.80	1	
121	Sb	159	No Gas	0.015	ppb	26.5	664.10	0.2	
137	Ba	159	No Gas	0.012	ppb	76.1	180.20	0.4	
182	W	159	No Gas	0.088	ppb	3.6	1438.35	1	
205	Tl	209	No Gas	0.029	ppb	40.5	1154.69	0.2	
208	Pb	209	No Gas	0.016	ppb	40.2	901.03	0.2	
232	Th	209	No Gas	0.097	ppb	1.4	3878.28	1	
238	U	209	No Gas	0.017	ppb	41.7	647.41	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4896591.52	3.4	4785442.25	102.32	29.5	120.4	
Sc	45	No Gas	12308566.47	3.6	11869896.98	103.7	29.5	120.4	
Sc	45	H2	1451823.97	7.2	1440463.34	100.79	29.5	120.4	
Sc	45	He	344320.77	0.7	342270.52	100.6	29.5	120.4	
Ge	72	No Gas	2325720.04	3.7	2254278.57	103.17	29.5	120.4	
Ge	72	H2	429456.23	4.6	432978.24	99.19	29.5	120.4	
Ge	72	He	221770.84	0.5	219029.81	101.25	29.5	120.4	
Y	89	H2	7885873.83	6.9	7788630.76	101.25	29.5	120.4	
Y	89	He	1748909.16	0.7	1720337.72	101.66	29.5	120.4	
Tb	159	No Gas	19713488.04	4.3	19085444.99	103.29	29.5	120.4	
Tb	159	He	6976448.23	0.3	6890196.91	101.25	29.5	120.4	
Bi	209	No Gas	8765619.06	4.7	8525371.63	102.82	29.5	120.4	

Sample Report

Sample Name SN6100-004P

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:17:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	25.55	100	
11	B	6	No Gas	0.503	ppb	190.1	3685.06	1000	
23	Na	45	He	-136.958	ppb	N/A	34168.42	200000	
24	Mg	45	He	0.290	ppb	1115.3	580.05	200000	
27	Al	45	He	-0.670	ppb	N/A	135.56	200000	
28	Si	45	H2	5.241	ppb	53.0	523.94	10000	
39	K	45	He	-198.921	ppb	N/A	9170.76	200000	
40	Ca	45	H2	-1.887	ppb	N/A	2409.22	200000	
51	V	89	He	-0.082	ppb	N/A	33.33	1000	
52	Cr	89	He	-0.110	ppb	N/A	220.63	2000	
55	Mn	89	He	-0.797	ppb	N/A	293.95	2000	
56	Fe	89	H2	-1.173	ppb	N/A	9267.27	100000	
59	Co	89	He	0.000	ppb	N/A	91.12	1000	
60	Ni	89	He	-25.309	ppb	N/A	9265.74	1000	
63	Cu	89	He	-2.824	ppb	N/A	3279.42	2000	
66	Zn	89	He	-0.413	ppb	N/A	308.91	2000	
75	As	89	He	-0.062	ppb	N/A	14.00	1000	
78	Se	89	H2	0.072	ppb	42.8	5.50	1000	
88	Sr	89	He	0.011	ppb	386.0	22.22	2000	
95	Mo	89	He	-0.166	ppb	N/A	194.45	1000	
107	Ag	89	He	0.002	ppb	416.3	46.67	100	
111	Cd	89	He	0.003	ppb	164.5	3.33	1000	
118	Sn	159	He	-0.198	ppb	N/A	231.12	1000	
121	Sb	159	No Gas	-0.035	ppb	N/A	553.96	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	170.19	2000	
182	W	159	No Gas	0.025	ppb	248.1	407.13	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	560.64	1000	
208	Pb	209	No Gas	0.012	ppb	120.7	747.51	2000	
232	Th	209	No Gas	0.095	ppb	36.4	2232.74	1000	
238	U	209	No Gas	0.001	ppb	189.9	76.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	12239770.95	54.8	4785442.25	255.77	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	30213634.24	52.0	11869896.98	254.54	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	1474304.69	35.2	1440463.34	102.35	29.5	120.4	
Sc	45	He	530962.66	29.1	342270.52	155.13	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	5784501.87	54.3	2254278.57	256.6	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	418887.92	35.7	432978.24	96.75	29.5	120.4	
Ge	72	He	357321.46	30.0	219029.81	163.14	29.5	120.4	6020/DoD□ EPA
Y	89	H2	8083235.76	34.8	7788630.76	103.78	29.5	120.4	
Y	89	He	2804642.58	30.7	1720337.72	163.03	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	48490385.95	51.6	19085444.99	254.07	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11267418.86	29.3	6890196.91	163.53	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	21724178.62	53.1	8525371.63	254.82	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-004S

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:19:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.007	ppb	N/A	23.33	100	
11	B	6	No Gas	0.511	ppb	159.9	2912.62	1000	
23	Na	45	He	-30.452	ppb	N/A	35118.79	200000	
24	Mg	45	He	1.681	ppb	295.8	468.93	200000	
27	Al	45	He	-1.059	ppb	N/A	100.01	200000	
28	Si	45	H2	16.630	ppb	57.2	427.15	10000	
39	K	45	He	-148.867	ppb	N/A	8857.41	200000	
40	Ca	45	H2	13.545	ppb	136.7	2268.09	200000	
51	V	89	He	-0.068	ppb	N/A	37.78	1000	
52	Cr	89	He	-0.012	ppb	N/A	257.29	2000	
55	Mn	89	He	-0.713	ppb	N/A	255.96	2000	
56	Fe	89	H2	12.086	ppb	149.8	7407.40	100000	
59	Co	89	He	0.022	ppb	115.9	115.57	1000	
60	Ni	89	He	-19.509	ppb	N/A	9045.54	1000	
63	Cu	89	He	-1.961	ppb	N/A	3478.37	2000	
66	Zn	89	He	-0.380	ppb	N/A	245.57	2000	
75	As	89	He	-0.025	ppb	N/A	14.33	1000	
78	Se	89	H2	0.297	ppb	143.0	2.67	1000	
88	Sr	89	He	0.019	ppb	71.2	24.44	2000	
95	Mo	89	He	-0.136	ppb	N/A	168.90	1000	
107	Ag	89	He	0.004	ppb	320.7	33.33	100	
111	Cd	89	He	0.010	ppb	176.8	4.44	1000	
118	Sn	159	He	-0.109	ppb	N/A	232.24	1000	
121	Sb	159	No Gas	-0.034	ppb	N/A	400.46	1000	
137	Ba	159	No Gas	-0.018	ppb	N/A	123.47	2000	
182	W	159	No Gas	0.044	ppb	112.9	450.51	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	567.32	1000	
208	Pb	209	No Gas	0.023	ppb	74.7	727.50	2000	
232	Th	209	No Gas	0.029	ppb	12.5	897.72	1000	
238	U	209	No Gas	0.005	ppb	16.5	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9218274.05	41.6	4785442.25	192.63	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	22378587.69	39.0	11869896.98	188.53	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	861065.78	116.9	1440463.34	59.78	29.5	120.4	
Sc	45	He	437986.83	63.0	342270.52	127.97	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	4302602.48	42.2	2254278.57	190.86	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	247094.46	117.3	432978.24	57.07	29.5	120.4	EPA
Ge	72	He	292468.77	65.7	219029.81	133.53	29.5	120.4	6020/DoD□ EPA
Y	89	H2	4626207.66	116.4	7788630.76	59.4	29.5	120.4	EPA
Y	89	He	2300326.17	66.3	1720337.72	133.71	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	36442368.35	39.5	19085444.99	190.94	29.5	120.4	6020/DoD□ EPA
Tb	159	He	9245690.56	66.1	6890196.91	134.19	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	16342168.36	40.6	8525371.63	191.69	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-005

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:22:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	17.78	100	
11	B	6	No Gas	0.746	ppb	86.4	2611.44	1000	
23	Na	45	He	-149.318	ppb	N/A	33001.21	200000	
24	Mg	45	He	-0.468	ppb	N/A	535.61	200000	
27	Al	45	He	-0.478	ppb	N/A	141.12	200000	
28	Si	45	H2	9.950	ppb	67.4	310.35	10000	
39	K	45	He	-208.856	ppb	N/A	8702.40	200000	
40	Ca	45	H2	1.890	ppb	192.2	1586.83	200000	
51	V	89	He	-0.086	ppb	N/A	34.44	1000	
52	Cr	89	He	-0.103	ppb	N/A	253.29	2000	
55	Mn	89	He	-0.831	ppb	N/A	288.62	2000	
56	Fe	89	H2	2.900	ppb	148.1	6001.32	100000	
59	Co	89	He	-0.009	ppb	N/A	82.23	1000	
60	Ni	89	He	-25.948	ppb	N/A	9183.43	1000	
63	Cu	89	He	-2.905	ppb	N/A	3282.75	2000	
66	Zn	89	He	-0.534	ppb	N/A	274.46	2000	
75	As	89	He	-0.091	ppb	N/A	10.00	1000	
78	Se	89	H2	0.069	ppb	132.2	2.50	1000	
88	Sr	89	He	0.009	ppb	41.3	25.55	2000	
95	Mo	89	He	-0.292	ppb	N/A	106.67	1000	
107	Ag	89	He	-0.001	ppb	N/A	41.11	100	
111	Cd	89	He	0.000	ppb	N/A	2.22	1000	
118	Sn	159	He	-0.280	ppb	N/A	183.34	1000	
121	Sb	159	No Gas	-0.028	ppb	N/A	397.12	1000	
137	Ba	159	No Gas	0.006	ppb	543.3	133.48	2000	
182	W	159	No Gas	0.003	ppb	580.7	230.26	1000	
205	Tl	209	No Gas	0.003	ppb	365.2	517.26	1000	
208	Pb	209	No Gas	0.016	ppb	65.4	550.62	2000	
232	Th	209	No Gas	0.017	ppb	7.2	604.03	1000	
238	U	209	No Gas	0.001	ppb	179.4	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7434305.50	36.4	4785442.25	155.35	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	18436152.17	33.5	11869896.98	155.32	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	713808.75	59.7	1440463.34	49.55	29.5	120.4	EPA
Sc	45	He	524668.07	15.3	342270.52	153.29	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	3512978.82	36.1	2254278.57	155.84	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	198947.25	59.4	432978.24	45.95	29.5	120.4	EPA
Ge	72	He	354654.13	12.9	219029.81	161.92	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3852722.61	62.7	7788630.76	49.47	29.5	120.4	EPA
Y	89	He	2796197.23	12.9	1720337.72	162.54	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	29933084.28	34.0	19085444.99	156.84	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11301444.14	12.8	6890196.91	164.02	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	13367103.19	34.7	8525371.63	156.79	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-006

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:25:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	22.22	100	
11	B	6	No Gas	0.783	ppb	185.1	2791.49	1000	
23	Na	45	He	-153.474	ppb	N/A	33907.60	200000	
24	Mg	45	He	-1.974	ppb	N/A	424.48	200000	
27	Al	45	He	-2.246	ppb	N/A	84.45	200000	
28	Si	45	H2	9.695	ppb	60.1	1004.61	10000	
39	K	45	He	-203.923	ppb	N/A	9676.02	200000	
40	Ca	45	H2	-4.126	ppb	N/A	2442.54	200000	
51	V	89	He	-0.090	ppb	N/A	30.00	1000	
52	Cr	89	He	-0.072	ppb	N/A	315.28	2000	
55	Mn	89	He	-0.848	ppb	N/A	289.29	2000	
56	Fe	89	H2	-3.335	ppb	N/A	9213.67	100000	
59	Co	89	He	-0.001	ppb	N/A	106.68	1000	
60	Ni	89	He	-25.274	ppb	N/A	10002.93	1000	
63	Cu	89	He	-2.783	ppb	N/A	3618.40	2000	
66	Zn	89	He	-0.119	ppb	N/A	391.14	2000	
75	As	89	He	-0.073	ppb	N/A	13.67	1000	
78	Se	89	H2	0.015	ppb	93.8	3.17	1000	
88	Sr	89	He	0.009	ppb	81.1	26.67	2000	
95	Mo	89	He	-0.250	ppb	N/A	155.56	1000	
107	Ag	89	He	0.000	ppb	1854.8	45.56	100	
111	Cd	89	He	-0.002	ppb	N/A	1.85	1000	
118	Sn	159	He	-0.258	ppb	N/A	213.35	1000	
121	Sb	159	No Gas	-0.031	ppb	N/A	457.19	1000	
137	Ba	159	No Gas	-0.004	ppb	N/A	140.16	2000	
182	W	159	No Gas	0.083	ppb	93.7	600.69	1000	
205	Tl	209	No Gas	0.001	ppb	2177.5	530.60	1000	
208	Pb	209	No Gas	0.013	ppb	76.0	570.65	2000	
232	Th	209	No Gas	0.038	ppb	48.3	947.78	1000	
238	U	209	No Gas	0.003	ppb	139.2	73.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8846830.11	51.0	4785442.25	184.87	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	21256733.59	49.9	11869896.98	179.08	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2131848.41	7.0	1440463.34	148	29.5	120.4	6020/DoD□ EPA
Sc	45	He	552081.45	13.9	342270.52	161.3	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	4061887.86	47.3	2254278.57	180.19	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	614959.28	10.2	432978.24	142.03	29.5	120.4	6020/DoD□ EPA
Ge	72	He	364758.44	12.2	219029.81	166.53	29.5	120.4	6020/DoD□ EPA
Y	89	H2	11686822.87	6.2	7788630.76	150.05	29.5	120.4	6020/DoD□ EPA
Y	89	He	2876669.89	12.7	1720337.72	167.22	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	34773982.40	51.1	19085444.99	182.2	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11616286.08	13.0	6890196.91	168.59	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	15552249.20	49.8	8525371.63	182.42	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-007

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:27:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	24.45	100	
11	B	6	No Gas	0.513	ppb	109.6	2240.26	1000	
23	Na	45	He	-58.577	ppb	N/A	34285.81	200000	
24	Mg	45	He	-0.355	ppb	N/A	375.59	200000	
27	Al	45	He	-0.951	ppb	N/A	91.11	200000	
28	Si	45	H2	49.202	ppb	100.0	190.22	10000	
39	K	45	He	-169.515	ppb	N/A	8393.96	200000	
40	Ca	45	H2	18.475	ppb	152.4	667.82	200000	
51	V	89	He	-0.093	ppb	N/A	23.33	1000	
52	Cr	89	He	-0.050	ppb	N/A	250.63	2000	
55	Mn	89	He	-0.773	ppb	N/A	241.96	2000	
56	Fe	89	H2	25.394	ppb	118.7	3103.83	100000	
59	Co	89	He	-0.004	ppb	N/A	73.34	1000	
60	Ni	89	He	-21.510	ppb	N/A	8886.60	1000	
63	Cu	89	He	-2.442	ppb	N/A	3110.50	2000	
66	Zn	89	He	-0.105	ppb	N/A	283.35	2000	
75	As	89	He	-0.077	ppb	N/A	9.33	1000	
78	Se	89	H2	0.303	ppb	83.8	1.50	1000	
88	Sr	89	He	0.006	ppb	221.2	17.78	2000	
95	Mo	89	He	-0.305	ppb	N/A	76.67	1000	
107	Ag	89	He	-0.002	ppb	N/A	25.56	100	
111	Cd	89	He	-0.001	ppb	N/A	1.85	1000	
118	Sn	159	He	-0.228	ppb	N/A	174.45	1000	
121	Sb	159	No Gas	-0.040	ppb	N/A	293.66	1000	
137	Ba	159	No Gas	-0.018	ppb	N/A	86.76	2000	
182	W	159	No Gas	0.003	ppb	515.9	210.24	1000	
205	Tl	209	No Gas	0.001	ppb	1074.9	460.52	1000	
208	Pb	209	No Gas	0.007	ppb	100.8	420.47	2000	
232	Th	209	No Gas	0.002	ppb	191.6	397.11	1000	
238	U	209	No Gas	-0.002	ppb	N/A	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6819596.08	30.5	4785442.25	142.51	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	16823642.43	28.1	11869896.98	141.73	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	327156.63	135.5	1440463.34	22.71	29.5	120.4	6020/DoD□ EPA
Sc	45	He	412823.86	49.9	342270.52	120.61	29.5	120.4	6020/DoD
Ge	72	No Gas	3182059.68	30.5	2254278.57	141.16	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	91992.31	134.7	432978.24	21.25	29.5	120.4	6020/DoD□ EPA
Ge	72	He	277054.62	50.2	219029.81	126.49	29.5	120.4	6020/DoD□ EPA
Y	89	H2	1773410.50	136.5	7788630.76	22.77	29.5	120.4	6020/DoD□ EPA
Y	89	He	2170723.94	50.0	1720337.72	126.18	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	27282653.48	29.2	19085444.99	142.95	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8810549.11	49.3	6890196.91	127.87	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	12226402.95	29.0	8525371.63	143.41	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name	SN6100-008
File Name	036SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:34:05 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	56.5	47.78	100	
11	B	6	No Gas	-0.139	ppb	N/A	1577.92	1000	
23	Na	45	He	-12.084	ppb	N/A	37173.54	200000	
24	Mg	45	He	0.048	ppb	9379.6	377.81	200000	
27	Al	45	He	-0.953	ppb	N/A	98.90	200000	
28	Si	45	H2	30.445	ppb	91.4	163.52	10000	
39	K	45	He	-161.080	ppb	N/A	8450.70	200000	
40	Ca	45	H2	49.371	ppb	120.8	1405.71	200000	
51	V	89	He	-0.094	ppb	N/A	16.67	1000	
52	Cr	89	He	-0.097	ppb	N/A	180.64	2000	
55	Mn	89	He	-0.854	ppb	N/A	196.63	2000	
56	Fe	89	H2	44.090	ppb	120.8	5293.86	100000	
59	Co	89	He	-0.002	ppb	N/A	71.12	1000	
60	Ni	89	He	-21.384	ppb	N/A	8246.16	1000	
63	Cu	89	He	-2.618	ppb	N/A	2573.71	2000	
66	Zn	89	He	-0.302	ppb	N/A	267.80	2000	
75	As	89	He	-0.086	ppb	N/A	9.67	1000	
78	Se	89	H2	0.330	ppb	104.8	1.33	1000	
88	Sr	89	He	-0.010	ppb	N/A	10.00	2000	
95	Mo	89	He	-0.369	ppb	N/A	12.22	1000	
107	Ag	89	He	-0.003	ppb	N/A	25.55	100	
111	Cd	89	He	0.000	ppb	989.9	1.85	1000	
118	Sn	159	He	-0.313	ppb	N/A	113.34	1000	
121	Sb	159	No Gas	0.100	ppb	37.7	891.03	1000	
137	Ba	159	No Gas	0.378	ppb	19.2	750.86	2000	
182	W	159	No Gas	0.124	ppb	29.7	607.36	1000	
205	Tl	209	No Gas	0.144	ppb	40.0	1351.59	1000	
208	Pb	209	No Gas	0.319	ppb	32.5	3273.85	2000	
232	Th	209	No Gas	0.141	ppb	41.5	1551.84	1000	
238	U	209	No Gas	0.147	ppb	41.3	1278.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6083536.71	16.6	4785442.25	127.13	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	14711632.36	12.9	11869896.98	123.94	29.5	120.4	6020/DoD
Sc	45	H2	287024.52	121.4	1440463.34	19.93	29.5	120.4	6020/DoD□ EPA
Sc	45	He	437004.81	50.8	342270.52	127.68	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	2824715.42	14.9	2254278.57	125.3	29.5	120.4	6020/DoD
Ge	72	H2	85128.78	122.7	432978.24	19.66	29.5	120.4	6020/DoD□ EPA
Ge	72	He	284539.92	50.4	219029.81	129.91	29.5	120.4	6020/DoD□ EPA
Y	89	H2	1579306.34	122.2	7788630.76	20.28	29.5	120.4	6020/DoD□ EPA
Y	89	He	2303403.77	51.9	1720337.72	133.89	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	23751037.14	13.3	19085444.99	124.45	29.5	120.4	6020/DoD
Tb	159	He	9269787.05	51.4	6890196.91	134.54	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	10685935.87	13.8	8525371.63	125.34	29.5	120.4	6020/DoD

Sample Report

Sample Name RINSE

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:36:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	16.67	100	
11	B	6	No Gas	0.080	ppb	15.0	1657.93	1000	
23	Na	45	He	-7.495	ppb	N/A	35546.85	200000	
24	Mg	45	He	-0.160	ppb	N/A	340.03	200000	
27	Al	45	He	-0.112	ppb	N/A	92.23	200000	
28	Si	45	H2	-0.096	ppb	N/A	343.72	10000	
39	K	45	He	0.273	ppb	787.8	16158.56	200000	
40	Ca	45	H2	-0.495	ppb	N/A	2262.49	200000	
51	V	89	He	-0.002	ppb	N/A	85.56	1000	
52	Cr	89	He	-0.002	ppb	N/A	256.63	2000	
55	Mn	89	He	-0.043	ppb	N/A	471.25	2000	
56	Fe	89	H2	-0.395	ppb	N/A	8198.25	100000	
59	Co	89	He	0.005	ppb	74.9	111.12	1000	
60	Ni	89	He	-1.826	ppb	N/A	13952.92	1000	
63	Cu	89	He	-0.260	ppb	N/A	4221.92	2000	
66	Zn	89	He	-0.011	ppb	N/A	245.57	2000	
75	As	89	He	0.007	ppb	121.9	19.33	1000	
78	Se	89	H2	0.013	ppb	69.7	4.67	1000	
88	Sr	89	He	0.001	ppb	267.2	14.44	2000	
95	Mo	89	He	-0.028	ppb	N/A	165.57	1000	
107	Ag	89	He	0.002	ppb	46.9	44.45	100	
111	Cd	89	He	0.001	ppb	154.2	2.22	1000	
118	Sn	159	He	0.010	ppb	195.7	290.01	1000	
121	Sb	159	No Gas	-0.004	ppb	N/A	310.35	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	56.73	2000	
182	W	159	No Gas	0.007	ppb	82.2	256.96	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	243.61	1000	
208	Pb	209	No Gas	0.000	ppb	117.9	273.64	2000	
232	Th	209	No Gas	0.001	ppb	165.8	297.00	1000	
238	U	209	No Gas	0.000	ppb	N/A	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5048215.27	3.6	4785442.25	105.49	29.5	120.4	
Sc	45	No Gas	12603416.72	2.9	11869896.98	106.18	29.5	120.4	
Sc	45	H2	1479086.79	1.8	1440463.34	102.68	29.5	120.4	
Sc	45	He	344157.36	0.3	342270.52	100.55	29.5	120.4	
Ge	72	No Gas	2375554.22	3.5	2254278.57	105.38	29.5	120.4	
Ge	72	H2	435330.65	2.8	432978.24	100.54	29.5	120.4	
Ge	72	He	222442.68	0.7	219029.81	101.56	29.5	120.4	
Y	89	H2	8019923.86	1.9	7788630.76	102.97	29.5	120.4	
Y	89	He	1744044.96	0.6	1720337.72	101.38	29.5	120.4	
Tb	159	No Gas	20187085.95	3.3	19085444.99	105.77	29.5	120.4	
Tb	159	He	7012122.19	1.1	6890196.91	101.77	29.5	120.4	
Bi	209	No Gas	9035936.03	3.7	8525371.63	105.99	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:39:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	13.33	100	
11	B	6	No Gas	-0.003	ppb	N/A	1411.23	1000	
23	Na	45	He	-9.424	ppb	N/A	34526.58	200000	
24	Mg	45	He	-0.344	ppb	N/A	282.25	200000	
27	Al	45	He	0.048	ppb	657.3	111.13	200000	
28	Si	45	H2	0.023	ppb	2024.8	360.40	10000	
39	K	45	He	-0.096	ppb	N/A	16136.84	200000	
40	Ca	45	H2	-0.478	ppb	N/A	2270.27	200000	
51	V	89	He	-0.002	ppb	N/A	87.78	1000	
52	Cr	89	He	-0.002	ppb	N/A	261.96	2000	
55	Mn	89	He	-0.069	ppb	N/A	415.27	2000	
56	Fe	89	H2	-0.420	ppb	N/A	7994.51	100000	
59	Co	89	He	0.006	ppb	63.5	126.68	1000	
60	Ni	89	He	-1.827	ppb	N/A	14074.20	1000	
63	Cu	89	He	-0.278	ppb	N/A	4140.76	2000	
66	Zn	89	He	0.021	ppb	343.0	273.35	2000	
75	As	89	He	0.009	ppb	46.9	20.67	1000	
78	Se	89	H2	0.008	ppb	64.7	3.33	1000	
88	Sr	89	He	0.000	ppb	N/A	11.11	2000	
95	Mo	89	He	-0.048	ppb	N/A	101.11	1000	
107	Ag	89	He	0.002	ppb	79.4	44.45	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	-0.009	ppb	N/A	241.12	1000	
121	Sb	159	No Gas	-0.008	ppb	N/A	216.91	1000	
137	Ba	159	No Gas	-0.003	ppb	N/A	70.08	2000	
182	W	159	No Gas	0.000	ppb	578.5	156.85	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	0.001	ppb	139.2	276.98	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	233.59	1000	
238	U	209	No Gas	0.000	ppb	N/A	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5062749.39	2.9	4785442.25	105.79	29.5	120.4	
Sc	45	No Gas	12522356.71	3.9	11869896.98	105.5	29.5	120.4	
Sc	45	H2	1464426.76	1.4	1440463.34	101.66	29.5	120.4	
Sc	45	He	345621.49	0.5	342270.52	100.98	29.5	120.4	
Ge	72	No Gas	2382135.70	3.5	2254278.57	105.67	29.5	120.4	
Ge	72	H2	439028.37	0.5	432978.24	101.4	29.5	120.4	
Ge	72	He	221096.02	0.6	219029.81	100.94	29.5	120.4	
Y	89	H2	7982624.27	0.6	7788630.76	102.49	29.5	120.4	
Y	89	He	1759424.45	0.4	1720337.72	102.27	29.5	120.4	
Tb	159	No Gas	19915788.87	3.0	19085444.99	104.35	29.5	120.4	
Tb	159	He	7049256.56	0.8	6890196.91	102.31	29.5	120.4	
Bi	209	No Gas	9023529.78	3.7	8525371.63	105.84	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:41:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	12.22	100	
11	B	6	No Gas	-0.024	ppb	N/A	1325.66	1000	
23	Na	45	He	-7.747	ppb	N/A	35296.05	200000	
24	Mg	45	He	1.774	ppb	41.9	955.66	200000	
27	Al	45	He	2.194	ppb	29.6	355.57	200000	
28	Si	45	H2	-0.534	ppb	N/A	266.97	10000	
39	K	45	He	2.175	ppb	92.3	16583.84	200000	
40	Ca	45	H2	0.121	ppb	49.0	3298.28	200000	
51	V	89	He	0.005	ppb	105.5	113.34	1000	
52	Cr	89	He	0.015	ppb	26.8	349.28	2000	
55	Mn	89	He	-0.017	ppb	N/A	529.92	2000	
56	Fe	89	H2	-0.373	ppb	N/A	8221.52	100000	
59	Co	89	He	0.008	ppb	34.2	142.24	1000	
60	Ni	89	He	-1.813	ppb	N/A	13892.88	1000	
63	Cu	89	He	-0.255	ppb	N/A	4231.91	2000	
66	Zn	89	He	0.038	ppb	49.8	282.24	2000	
75	As	89	He	0.001	ppb	129.7	16.33	1000	
78	Se	89	H2	0.004	ppb	105.7	2.33	1000	
88	Sr	89	He	0.017	ppb	26.5	56.67	2000	
95	Mo	89	He	-0.036	ppb	N/A	137.78	1000	
107	Ag	89	He	0.002	ppb	40.2	52.23	100	
111	Cd	89	He	0.008	ppb	38.9	11.11	1000	
118	Sn	159	He	0.033	ppb	168.2	349.08	1000	
121	Sb	159	No Gas	-0.010	ppb	N/A	186.88	1000	
137	Ba	159	No Gas	0.002	ppb	186.9	106.79	2000	
182	W	159	No Gas	-0.003	ppb	N/A	113.46	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	166.85	1000	
208	Pb	209	No Gas	0.002	ppb	33.5	337.05	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	223.59	1000	
238	U	209	No Gas	0.000	ppb	N/A	26.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4982719.16	2.8	4785442.25	104.12	29.5	120.4	
Sc	45	No Gas	12359184.38	2.1	11869896.98	104.12	29.5	120.4	
Sc	45	H2	1465351.38	0.9	1440463.34	101.73	29.5	120.4	
Sc	45	He	343181.69	0.7	342270.52	100.27	29.5	120.4	
Ge	72	No Gas	2359875.62	2.9	2254278.57	104.68	29.5	120.4	
Ge	72	H2	433677.31	0.3	432978.24	100.16	29.5	120.4	
Ge	72	He	220652.40	0.2	219029.81	100.74	29.5	120.4	
Y	89	H2	7888788.93	0.3	7788630.76	101.29	29.5	120.4	
Y	89	He	1732405.55	0.9	1720337.72	100.7	29.5	120.4	
Tb	159	No Gas	19779330.82	2.2	19085444.99	103.64	29.5	120.4	
Tb	159	He	6953688.37	0.4	6890196.91	100.92	29.5	120.4	
Bi	209	No Gas	8891134.05	2.3	8525371.63	104.29	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:44:31 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	12.22	100	
11	B	6	No Gas	-0.040	ppb	N/A	1266.77	1000	
23	Na	45	He	-9.366	ppb	N/A	34292.14	200000	
24	Mg	45	He	-0.457	ppb	N/A	244.47	200000	
27	Al	45	He	-0.207	ppb	N/A	81.11	200000	
28	Si	45	H2	-0.273	ppb	N/A	310.37	10000	
39	K	45	He	1.156	ppb	50.6	16318.77	200000	
40	Ca	45	H2	-0.297	ppb	N/A	2575.89	200000	
51	V	89	He	-0.002	ppb	N/A	83.34	1000	
52	Cr	89	He	0.000	ppb	N/A	269.29	2000	
55	Mn	89	He	-0.061	ppb	N/A	430.60	2000	
56	Fe	89	H2	-0.464	ppb	N/A	7647.20	100000	
59	Co	89	He	0.006	ppb	111.1	117.79	1000	
60	Ni	89	He	-1.821	ppb	N/A	13960.76	1000	
63	Cu	89	He	-0.275	ppb	N/A	4122.98	2000	
66	Zn	89	He	-0.044	ppb	N/A	220.01	2000	
75	As	89	He	-0.007	ppb	N/A	12.00	1000	
78	Se	89	H2	0.004	ppb	75.8	2.50	1000	
88	Sr	89	He	0.004	ppb	50.1	21.11	2000	
95	Mo	89	He	-0.059	ppb	N/A	62.23	1000	
107	Ag	89	He	0.000	ppb	N/A	24.45	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	0.006	ppb	232.6	280.01	1000	
121	Sb	159	No Gas	-0.010	ppb	N/A	186.88	1000	
137	Ba	159	No Gas	-0.001	ppb	N/A	80.09	2000	
182	W	159	No Gas	-0.003	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	186.88	1000	
208	Pb	209	No Gas	0.001	ppb	186.1	273.64	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	246.95	1000	
238	U	209	No Gas	0.000	ppb	N/A	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4932485.59	1.0	4785442.25	103.07	29.5	120.4	
Sc	45	No Gas	12336550.91	1.8	11869896.98	103.93	29.5	120.4	
Sc	45	H2	1462414.75	1.2	1440463.34	101.52	29.5	120.4	
Sc	45	He	342923.35	0.5	342270.52	100.19	29.5	120.4	
Ge	72	No Gas	2339204.69	2.4	2254278.57	103.77	29.5	120.4	
Ge	72	H2	430218.74	0.5	432978.24	99.36	29.5	120.4	
Ge	72	He	220633.22	1.0	219029.81	100.73	29.5	120.4	
Y	89	H2	7935646.20	0.2	7788630.76	101.89	29.5	120.4	
Y	89	He	1743242.73	0.9	1720337.72	101.33	29.5	120.4	
Tb	159	No Gas	19706085.40	2.5	19085444.99	103.25	29.5	120.4	
Tb	159	He	7003786.84	0.3	6890196.91	101.65	29.5	120.4	
Bi	209	No Gas	8846224.46	2.8	8525371.63	103.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:47:06 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.177	ppb	8.8	104451.82	25	92.71	89.8	110.2	
11	B	6	No Gas	23.399	ppb	9.0	71625.97	25	93.6	89.8	110.2	
23	Na	45	He	5047.963	ppb	5.2	3017338.22	5000	100.96	89.8	110.2	
24	Mg	45	He	5101.020	ppb	6.1	1588657.67	5000	102.02	89.8	110.2	
27	Al	45	He	504.792	ppb	8.2	56430.45	500	100.96	89.8	110.2	
28	Si	45	H2	505.014	ppb	2.2	85279.32	500	101	89.8	110.2	
39	K	45	He	5013.158	ppb	5.9	1220982.13	5000	100.26	89.8	110.2	
40	Ca	45	H2	4973.871	ppb	1.1	8508828.14	5000	99.48	89.8	110.2	
51	V	89	He	25.187	ppb	6.7	103173.17	25	100.75	89.8	110.2	
52	Cr	89	He	25.040	ppb	6.9	131803.38	25	100.16	89.8	110.2	
55	Mn	89	He	24.920	ppb	6.2	57549.17	25	99.68	89.8	110.2	
56	Fe	89	H2	4920.011	ppb	0.3	33727150.13	5000	98.4	89.8	110.2	
59	Co	89	He	25.256	ppb	7.4	222489.96	25	101.02	89.8	110.2	
60	Ni	89	He	24.079	ppb	8.6	74580.47	25	96.32	89.8	110.2	
63	Cu	89	He	25.358	ppb	7.0	172225.66	25	101.43	89.8	110.2	
66	Zn	89	He	24.800	ppb	6.4	18937.91	25	99.2	89.8	110.2	
75	As	89	He	24.824	ppb	6.0	12629.44	25	99.3	89.8	110.2	
78	Se	89	H2	24.521	ppb	0.8	6314.48	25	98.08	89.8	110.2	
88	Sr	89	He	24.913	ppb	6.2	64255.79	25	99.65	89.8	110.2	
95	Mo	89	He	24.903	ppb	7.2	81587.27	25	99.61	89.8	110.2	
107	Ag	89	He	25.157	ppb	6.4	268669.63	25	100.63	89.8	110.2	
111	Cd	89	He	25.188	ppb	5.7	31485.55	25	100.75	89.8	110.2	
118	Sn	159	He	24.878	ppb	6.9	65188.08	25	99.51	89.8	110.2	
121	Sb	159	No Gas	23.322	ppb	7.8	446111.52	25	93.29	89.8	110.2	
137	Ba	159	No Gas	23.578	ppb	7.3	171175.81	25	94.31	89.8	110.2	
182	W	159	No Gas	23.694	ppb	8.0	348465.06	25	94.78	89.8	110.2	
205	Tl	209	No Gas	23.496	ppb	8.5	660509.39	25	93.98	89.8	110.2	
208	Pb	209	No Gas	23.389	ppb	7.9	935683.00	25	93.56	89.8	110.2	
232	Th	209	No Gas	22.892	ppb	8.3	866327.17	25	91.57	89.8	110.2	
238	U	209	No Gas	23.290	ppb	8.8	850725.89	25	93.16	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5030537.23	2.9	4785442.25	105.12	29.5	120.4	
Sc	45	No Gas	12487819.46	2.2	11869896.98	105.21	29.5	120.4	
Sc	45	H2	1462351.31	0.6	1440463.34	101.52	29.5	120.4	
Sc	45	He	336229.12	5.4	342270.52	98.23	29.5	120.4	
Ge	72	No Gas	2359854.35	2.1	2254278.57	104.68	29.5	120.4	
Ge	72	H2	431839.61	0.9	432978.24	99.74	29.5	120.4	
Ge	72	He	216079.20	4.0	219029.81	98.65	29.5	120.4	
Y	89	H2	7915608.56	0.9	7788630.76	101.63	29.5	120.4	
Y	89	He	1695995.30	5.2	1720337.72	98.59	29.5	120.4	
Tb	159	No Gas	19932432.06	1.8	19085444.99	104.44	29.5	120.4	
Tb	159	He	6842988.65	5.4	6890196.91	99.31	29.5	120.4	
Bi	209	No Gas	8917449.43	2.3	8525371.63	104.6	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:49:42 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.028	ppb	59.6	147.78	0.2	
11	B	6	No Gas	0.320	ppb	3.4	2354.72	4	
23	Na	45	He	-9.867	ppb	N/A	33796.90	200	
24	Mg	45	He	-0.010	ppb	N/A	384.48	20	
27	Al	45	He	-0.369	ppb	N/A	62.22	20	
28	Si	45	H2	0.218	ppb	86.2	390.45	100	
39	K	45	He	0.815	ppb	76.4	16141.91	200	
40	Ca	45	H2	0.733	ppb	31.2	4316.38	20	
51	V	89	He	-0.002	ppb	N/A	84.45	1	
52	Cr	89	He	0.002	ppb	233.2	277.29	1	
55	Mn	89	He	-0.058	ppb	N/A	431.93	0.4	
56	Fe	89	H2	1.155	ppb	14.6	18699.85	20	
59	Co	89	He	0.005	ppb	19.5	108.90	0.2	
60	Ni	89	He	-2.001	ppb	N/A	13382.37	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.272	ppb	N/A	4100.76	0.6	
66	Zn	89	He	0.047	ppb	84.5	287.79	2	
75	As	89	He	0.006	ppb	173.3	18.67	1	
78	Se	89	H2	0.037	ppb	7.6	10.83	1	
88	Sr	89	He	0.005	ppb	95.2	23.33	1	
95	Mo	89	He	0.037	ppb	30.8	382.24	1	
107	Ag	89	He	0.003	ppb	31.1	58.89	0.2	
111	Cd	89	He	0.005	ppb	68.1	8.15	0.2	
118	Sn	159	He	0.060	ppb	34.1	422.24	1	
121	Sb	159	No Gas	0.027	ppb	49.6	894.37	0.2	
137	Ba	159	No Gas	0.018	ppb	81.3	220.25	0.4	
182	W	159	No Gas	0.088	ppb	7.2	1448.38	1	
205	Tl	209	No Gas	0.041	ppb	40.0	1505.13	0.2	
208	Pb	209	No Gas	0.023	ppb	61.5	1198.04	0.2	
232	Th	209	No Gas	0.110	ppb	9.5	4449.15	1	
238	U	209	No Gas	0.030	ppb	60.8	1131.34	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4991450.91	4.2	4785442.25	104.3	29.5	120.4	
Sc	45	No Gas	12415631.55	3.2	11869896.98	104.6	29.5	120.4	
Sc	45	H2	1455831.12	1.3	1440463.34	101.07	29.5	120.4	
Sc	45	He	340974.32	0.9	342270.52	99.62	29.5	120.4	
Ge	72	No Gas	2336003.14	3.0	2254278.57	103.63	29.5	120.4	
Ge	72	H2	434025.79	0.6	432978.24	100.24	29.5	120.4	
Ge	72	He	218546.30	0.5	219029.81	99.78	29.5	120.4	
Y	89	H2	7907804.87	0.6	7788630.76	101.53	29.5	120.4	
Y	89	He	1724930.08	0.7	1720337.72	100.27	29.5	120.4	
Tb	159	No Gas	19889423.45	2.7	19085444.99	104.21	29.5	120.4	
Tb	159	He	6951794.89	0.9	6890196.91	100.89	29.5	120.4	
Bi	209	No Gas	8931483.46	3.1	8525371.63	104.76	29.5	120.4	

Sample Report

Sample Name	SN6100-009
File Name	043SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:52:16 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.815	ppb	5.6	1641.26	100	
11	B	6	No Gas	9.540	ppb	5.8	7069.77	1000	
23	Na	45	He	441.255	ppb	3.7	93242.29	200000	
24	Mg	45	He	2011.601	ppb	0.5	128574.11	200000	
27	Al	45	He	8975.248	ppb	0.5	205215.41	200000	
28	Si	45	H2	1919.651	ppb	0.4	64651.90	10000	
39	K	45	He	988.194	ppb	1.6	64670.14	200000	
40	Ca	45	H2	13805.919	ppb	0.9	4705591.04	200000	
51	V	89	He	56.016	ppb	0.7	48305.14	1000	
52	Cr	89	He	12.362	ppb	2.1	13931.71	2000	
55	Mn	89	He	623.293	ppb	1.0	300262.10	2000	
56	Fe	89	H2	22067.427	ppb	0.6	30740167.42	100000	
59	Co	89	He	22.103	ppb	0.6	41009.21	1000	
60	Ni	89	He	41.813	ppb	1.4	39474.41	1000	
63	Cu	89	He	1091.557	ppb	0.7	1512469.02	2000	
66	Zn	89	He	303.413	ppb	0.8	48329.18	2000	
75	As	89	He	31.705	ppb	1.0	3402.79	1000	
78	Se	89	H2	2.572	ppb	12.4	135.83	1000	
88	Sr	89	He	80.854	ppb	1.1	43848.75	2000	
95	Mo	89	He	2.735	ppb	2.9	2144.69	1000	
107	Ag	89	He	0.890	ppb	1.8	2024.67	100	
111	Cd	89	He	3.550	ppb	5.9	934.12	1000	
118	Sn	159	He	43.570	ppb	2.9	23876.35	1000	
121	Sb	159	No Gas	26.098	ppb	6.6	100288.90	1000	
137	Ba	159	No Gas	126.596	ppb	5.7	184085.28	2000	
182	W	159	No Gas	0.618	ppb	7.4	1972.37	1000	
205	Tl	209	No Gas	0.396	ppb	9.1	2649.92	1000	
208	Pb	209	No Gas	3962.229	ppb	6.4	32673442.50	2000	
232	Th	209	No Gas	2.212	ppb	3.1	17531.91	1000	
238	U	209	No Gas	4.011	ppb	5.5	30240.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4976130.07	0.6	4785442.25	103.98	29.5	120.4	
Sc	45	No Gas	12277233.05	0.4	11869896.98	103.43	29.5	120.4	
Sc	45	H2	1456352.84	0.5	1440463.34	101.1	29.5	120.4	
Sc	45	He	343308.50	0.3	342270.52	100.3	29.5	120.4	
Ge	72	No Gas	2295138.10	0.4	2254278.57	101.81	29.5	120.4	
Ge	72	H2	420728.62	0.6	432978.24	97.17	29.5	120.4	
Ge	72	He	219836.92	1.1	219029.81	100.37	29.5	120.4	
Y	89	H2	8042154.52	0.9	7788630.76	103.26	29.5	120.4	
Y	89	He	1779021.26	0.8	1720337.72	103.41	29.5	120.4	
Tb	159	No Gas	19943806.37	0.6	19085444.99	104.5	29.5	120.4	
Tb	159	He	7086848.50	0.7	6890196.91	102.85	29.5	120.4	
Bi	209	No Gas	9184676.96	0.6	8525371.63	107.73	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNH04IMW1
File Name	044_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:54:54 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.007	ppb	N/A	14.44	0.5	
B	11	6	No Gas	1.279	ppb	11.6	2158.02	10	
Na	23	45	He	-13.236	ppb	N/A	36921.43	500	
Mg	24	45	He	3.509	ppb	15.5	591.17	50	
Al	27	45	He	5.702	ppb	41.6	225.57	50	
Si	28	45	H2	11.383	ppb	26.8	724.17	250	
K	39	45	He	12.709	ppb	146.0	16053.49	500	
Ca	40	45	H2	14.635	ppb	6.1	7923.63	50	
V	51	89	He	0.150	ppb	8.7	213.34	2.5	
Cr	52	89	He	0.172	ppb	17.2	440.60	2.5	
Mn	55	89	He	0.079	ppb	93.0	590.58	1	
Fe	56	89	H2	3.476	ppb	8.9	15449.00	50	
Co	59	89	He	0.043	ppb	75.3	142.23	0.5	
Ni	60	89	He	-8.621	ppb	N/A	13741.66	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.490	ppb	67.4	6423.94	1.5	
Zn	66	89	He	1.504	ppb	18.3	473.36	5	
As	75	89	He	0.054	ppb	132.8	21.00	2.5	
Se	78	89	H2	0.059	ppb	35.3	4.33	2.5	
Sr	88	89	He	0.024	ppb	53.6	23.33	2.5	
Mo	95	89	He	-0.254	ppb	N/A	86.67	2.5	
Ag	107	89	He	0.009	ppb	116.6	44.44	0.5	
Cd	111	89	He	0.000	ppb	2092.6	1.48	0.5	
Sn	118	159	He	0.586	ppb	11.6	564.48	2.5	
Sb	121	159	No Gas	0.018	ppb	89.5	447.17	0.5	
Ba	137	159	No Gas	0.078	ppb	65.8	206.90	1	
W	182	159	No Gas	0.033	ppb	86.6	250.28	2.5	
Tl	205	209	No Gas	-0.032	ppb	N/A	166.85	0.5	
Pb	208	209	No Gas	2.319	ppb	34.6	19107.54	0.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.045	ppb	39.2	610.70	2.5	
U	238	209	No Gas	0.003	ppb	85.4	53.39	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4973150.06	2.5	4785442.25	103.92	29.5	120.4	
Sc	45	No Gas	12480449.28	2.1	11869896.98	105.14	29.5	120.4	
Sc	45	H2	1432944.12	1.9	1440463.34	99.48	29.5	120.4	
Sc	45	He	330974.17	4.6	342270.52	96.7	29.5	120.4	
Ge	72	No Gas	2329369.32	2.8	2254278.57	103.33	29.5	120.4	
Ge	72	H2	425691.68	0.3	432978.24	98.32	29.5	120.4	
Ge	72	He	213152.91	2.8	219029.81	97.32	29.5	120.4	
Y	89	H2	7854446.41	0.4	7788630.76	100.85	29.5	120.4	
Y	89	He	1689618.41	5.0	1720337.72	98.21	29.5	120.4	
Tb	159	No Gas	20081201.92	2.6	19085444.99	105.22	29.5	120.4	
Tb	159	He	6830831.70	4.0	6890196.91	99.14	29.5	120.4	
Bi	209	No Gas	8987097.72	3.2	8525371.63	105.42	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNH04IMW1
File Name	045LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:57:28 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.359	ppb	7.0	45281.25	50	20.14	79.5	120.4	
B	11	6	No Gas	517.542	ppb	8.1	311173.54	500	20.7	79.5	120.4	
Na	23	45	He	8080.176	ppb	1.2	1010722.37	7500	21.55	79.5	120.4	
Mg	24	45	He	5433.776	ppb	1.4	345094.38	5000	21.74	79.5	120.4	
Al	27	45	He	1977.907	ppb	2.2	45100.25	2000	19.78	79.5	120.4	
Si	28	45	H2	1076.881	ppb	1.3	36186.36	1000	21.54	0	200	
K	39	45	He	10921.832	ppb	0.7	550923.84	10000	21.84	79.5	120.4	
Ca	40	45	H2	2716.636	ppb	1.4	922359.29	2500	21.73	79.5	120.4	
V	51	89	He	518.852	ppb	0.6	436708.42	500	20.75	79.5	120.4	
Cr	52	89	He	210.759	ppb	1.5	227901.05	200	21.08	79.5	120.4	
Mn	55	89	He	523.521	ppb	0.4	246707.95	500	20.94	79.5	120.4	
Fe	56	89	H2	1070.225	ppb	0.2	1472513.63	1000	21.4	79.5	120.4	
Co	59	89	He	522.360	ppb	1.1	946070.55	500	20.89	79.5	120.4	
Ni	60	89	He	533.780	ppb	1.6	276931.02	500	21.35	79.5	120.4	
Cu	63	89	He	265.572	ppb	1.6	364299.14	250	21.25	79.5	120.4	
Zn	66	89	He	517.103	ppb	1.0	80359.20	500	20.68	79.5	120.4	
As	75	89	He	106.776	ppb	1.0	11167.71	100	21.36	79.5	120.4	
Se	78	89	H2	106.671	ppb	0.8	5475.16	100	21.33	79.5	120.4	
Sr	88	89	He	518.241	ppb	0.3	274737.79	500	20.73	79.5	120.4	
Mo	95	89	He	106.350	ppb	1.4	71679.60	100	21.27	79.5	120.4	
Ag	107	89	He	53.975	ppb	0.8	118517.53	50	21.59	79.5	120.4	
Cd	111	89	He	269.391	ppb	1.0	69205.64	250	21.55	79.5	120.4	
Sn	118	159	He	515.592	ppb	0.8	278353.33	500	20.62	79.5	120.4	
Sb	121	159	No Gas	105.250	ppb	8.3	400490.75	100	21.05	79.5	120.4	
Ba	137	159	No Gas	2021.563	ppb	7.4	2917966.46	2000	20.22	79.5	120.4	
W	182	159	No Gas	103.265	ppb	8.1	302119.91	100	20.65	79.5	120.4	
Tl	205	209	No Gas	106.112	ppb	8.4	600209.46	100	21.22	79.5	120.4	
[Pb]	206	209	No Gas	103.262	ppb	8.4	210840.18	100	20.65	79.5	120.4	
[Pb]	207	209	No Gas	102.019	ppb	7.8	182715.17	100	20.4	79.5	120.4	
Pb	208	209	No Gas	104.079	ppb	8.0	837734.35	100	20.82	79.5	120.4	
Th	232	209	No Gas	103.008	ppb	8.4	784319.77	100	20.6	79.5	120.4	
U	238	209	No Gas	103.885	ppb	8.1	763560.27	100	20.78	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5010710.27	1.6	4785442.25	104.71	29.5	120.4	
Sc	45	No Gas	12285005.41	1.9	11869896.98	103.5	29.5	120.4	
Sc	45	H2	1446795.82	0.4	1440463.34	100.44	29.5	120.4	
Sc	45	He	341781.22	1.1	342270.52	99.86	29.5	120.4	
Ge	72	No Gas	2337655.57	2.3	2254278.57	103.7	29.5	120.4	
Ge	72	H2	425421.85	0.8	432978.24	98.25	29.5	120.4	
Ge	72	He	218586.24	1.1	219029.81	99.8	29.5	120.4	
Y	89	H2	7888019.20	0.5	7788630.76	101.28	29.5	120.4	
Y	89	He	1739559.75	1.4	1720337.72	101.12	29.5	120.4	
Tb	159	No Gas	19821749.29	1.7	19085444.99	103.86	29.5	120.4	
Tb	159	He	7053031.08	0.5	6890196.91	102.36	29.5	120.4	
Bi	209	No Gas	8967728.04	1.6	8525371.63	105.19	29.5	120.4	

Sample Report

Sample Name SN6316-008

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:00:06 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.250	ppb	17.7	124.45	100	
11	B	6	No Gas	2657.500	ppb	7.5	743282.93	1000	
23	Na	45	He	799953.920	ppb	2.1	47023259.94	200000	
24	Mg	45	He	60300.526	ppb	1.3	1870365.49	200000	
27	Al	45	He	154.183	ppb	5.7	1816.85	200000	
28	Si	45	H2	12929.054	ppb	1.0	214860.38	10000	
39	K	45	He	204643.351	ppb	2.4	4914712.48	200000	
40	Ca	45	H2	202543.293	ppb	0.6	34177280.05	200000	
51	V	89	He	23.483	ppb	4.3	9630.31	1000	
52	Cr	89	He	69.075	ppb	2.7	36283.81	2000	
55	Mn	89	He	54.134	ppb	3.7	12838.89	2000	
56	Fe	89	H2	4658.935	ppb	0.8	3135502.11	100000	
59	Co	89	He	16.252	ppb	4.3	14272.73	1000	
60	Ni	89	He	22.020	ppb	9.9	22863.71	1000	
63	Cu	89	He	-0.189	ppb	N/A	5636.89	2000	
66	Zn	89	He	17.980	ppb	2.5	1591.27	2000	
75	As	89	He	178.604	ppb	3.1	9021.57	1000	
78	Se	89	H2	1.363	ppb	12.8	35.67	1000	
88	Sr	89	He	2823.533	ppb	3.5	722596.05	2000	
95	Mo	89	He	6.946	ppb	4.5	2503.65	1000	
107	Ag	89	He	0.028	ppb	20.5	55.56	100	
111	Cd	89	He	0.057	ppb	77.5	8.52	1000	
118	Sn	159	He	15.101	ppb	1.8	4174.16	1000	
121	Sb	159	No Gas	16.697	ppb	4.8	30963.60	1000	
137	Ba	159	No Gas	160.993	ppb	4.4	112103.09	2000	
182	W	159	No Gas	1.428	ppb	8.6	2159.28	1000	
205	Tl	209	No Gas	0.267	ppb	39.2	1007.84	1000	
208	Pb	209	No Gas	1.173	ppb	5.2	4568.81	2000	
232	Th	209	No Gas	1.986	ppb	14.4	7190.11	1000	
238	U	209	No Gas	1.604	ppb	5.4	5440.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4674959.43	1.3	4785442.25	97.69	29.5	120.4	
Sc	45	No Gas	11879887.70	1.4	11869896.98	100.08	29.5	120.4	
Sc	45	H2	1442723.95	0.8	1440463.34	100.16	29.5	120.4	
Sc	45	He	334204.93	2.1	342270.52	97.64	29.5	120.4	
Ge	72	No Gas	2246612.45	0.5	2254278.57	99.66	29.5	120.4	
Ge	72	H2	420989.97	1.7	432978.24	97.23	29.5	120.4	
Ge	72	He	213810.86	1.4	219029.81	97.62	29.5	120.4	
Y	89	H2	7747407.87	0.4	7788630.76	99.47	29.5	120.4	
Y	89	He	1680539.30	2.7	1720337.72	97.69	29.5	120.4	
Tb	159	No Gas	19092737.35	0.9	19085444.99	100.04	29.5	120.4	
Tb	159	He	6787924.14	2.5	6890196.91	98.52	29.5	120.4	
Bi	209	No Gas	8235536.81	0.8	8525371.63	96.6	29.5	120.4	

Sample Report

Sample Name SN6316-009

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:02:39 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.087	ppb	48.2	58.89	100	
11	B	6	No Gas	1916.636	ppb	6.1	565482.59	1000	
23	Na	45	He	639214.387	ppb	5.1	38111959.37	200000	
24	Mg	45	He	48947.939	ppb	4.9	1539598.53	200000	
27	Al	45	He	244.007	ppb	5.8	2854.83	200000	
28	Si	45	H2	11451.382	ppb	16.2	201955.11	10000	
39	K	45	He	161150.527	ppb	5.9	3927302.62	200000	
40	Ca	45	H2	153677.458	ppb	16.1	27515714.87	200000	
51	V	89	He	18.221	ppb	4.7	7631.23	1000	
52	Cr	89	He	49.127	ppb	5.2	26353.02	2000	
55	Mn	89	He	60.796	ppb	3.9	14620.31	2000	
56	Fe	89	H2	3846.168	ppb	15.9	2773661.14	100000	
59	Co	89	He	12.340	ppb	3.7	11058.53	1000	
60	Ni	89	He	16.047	ppb	22.2	21863.25	1000	
63	Cu	89	He	7.535	ppb	13.0	10864.61	2000	
66	Zn	89	He	50.493	ppb	6.8	4094.08	2000	
75	As	89	He	133.628	ppb	5.1	6877.79	1000	
78	Se	89	H2	0.954	ppb	36.2	27.00	1000	
88	Sr	89	He	2309.162	ppb	5.5	601798.47	2000	
95	Mo	89	He	8.096	ppb	2.5	2931.53	1000	
107	Ag	89	He	0.074	ppb	58.4	107.78	100	
111	Cd	89	He	0.211	ppb	22.6	28.15	1000	
118	Sn	159	He	12.056	ppb	2.3	3423.89	1000	
121	Sb	159	No Gas	12.234	ppb	3.7	23319.61	1000	
137	Ba	159	No Gas	129.816	ppb	7.5	92543.85	2000	
182	W	159	No Gas	0.789	ppb	5.5	1288.18	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	18.096	ppb	8.1	69043.92	2000	
232	Th	209	No Gas	0.182	ppb	15.9	911.06	1000	
238	U	209	No Gas	1.153	ppb	3.8	4031.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4926012.56	0.3	4785442.25	102.94	29.5	120.4	
Sc	45	No Gas	12318521.21	0.7	11869896.98	103.78	29.5	120.4	
Sc	45	H2	1552390.90	12.9	1440463.34	107.77	29.5	120.4	
Sc	45	He	339268.00	4.0	342270.52	99.12	29.5	120.4	
Ge	72	No Gas	2305789.38	2.0	2254278.57	102.29	29.5	120.4	
Ge	72	H2	446802.08	9.1	432978.24	103.19	29.5	120.4	
Ge	72	He	217294.19	3.4	219029.81	99.21	29.5	120.4	
Y	89	H2	8399979.69	11.8	7788630.76	107.85	29.5	120.4	
Y	89	He	1712481.27	3.5	1720337.72	99.54	29.5	120.4	
Tb	159	No Gas	19548226.24	0.4	19085444.99	102.42	29.5	120.4	
Tb	159	He	6866710.52	4.5	6890196.91	99.66	29.5	120.4	
Bi	209	No Gas	8473179.34	1.3	8525371.63	99.39	29.5	120.4	

Sample Report

Sample Name SN6316-008

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:05:14 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.104	ppb	37.6	44.45	100	
11	B	6	No Gas	2553.635	ppb	10.3	382977.85	1000	
23	Na	45	He	829099.503	ppb	2.8	24200818.51	200000	
24	Mg	45	He	62765.893	ppb	2.3	966098.11	200000	
27	Al	45	He	163.873	ppb	8.1	1006.74	200000	
28	Si	45	H2	12538.495	ppb	8.2	110850.93	10000	
39	K	45	He	214114.225	ppb	3.1	2558904.38	200000	
40	Ca	45	H2	195553.440	ppb	10.3	17507150.99	200000	
51	V	89	He	23.910	ppb	2.9	4959.95	1000	
52	Cr	89	He	72.597	ppb	4.5	19232.29	2000	
55	Mn	89	He	54.516	ppb	4.6	6755.09	2000	
56	Fe	89	H2	4591.801	ppb	10.6	1647199.01	100000	
59	Co	89	He	17.326	ppb	7.3	7653.82	1000	
60	Ni	89	He	9.529	ppb	48.3	18873.30	1000	
63	Cu	89	He	-3.951	ppb	N/A	4487.56	2000	
66	Zn	89	He	17.451	ppb	8.4	901.18	2000	
75	As	89	He	186.532	ppb	3.1	4730.32	1000	
78	Se	89	H2	1.020	ppb	13.5	15.17	1000	
88	Sr	89	He	2926.621	ppb	2.9	375470.93	2000	
95	Mo	89	He	6.387	ppb	10.0	1290.11	1000	
107	Ag	89	He	0.039	ppb	37.4	46.67	100	
111	Cd	89	He	0.036	ppb	55.7	3.70	1000	
118	Sn	159	He	15.229	ppb	2.0	2230.27	1000	
121	Sb	159	No Gas	16.212	ppb	11.8	16014.08	1000	
137	Ba	159	No Gas	159.838	ppb	12.3	58597.97	2000	
182	W	159	No Gas	1.126	ppb	22.1	987.81	1000	
205	Tl	209	No Gas	-0.111	ppb	N/A	183.54	1000	
208	Pb	209	No Gas	1.106	ppb	3.3	2436.16	2000	
232	Th	209	No Gas	0.094	ppb	17.2	440.50	1000	
238	U	209	No Gas	1.319	ppb	19.8	2399.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5015173.90	4.1	4785442.25	104.8	29.5	120.4	
Sc	45	No Gas	12608113.40	3.8	11869896.98	106.22	29.5	120.4	
Sc	45	H2	1538837.25	7.6	1440463.34	106.83	29.5	120.4	
Sc	45	He	331676.28	2.0	342270.52	96.9	29.5	120.4	
Ge	72	No Gas	2367998.82	4.0	2254278.57	105.04	29.5	120.4	
Ge	72	H2	457338.31	4.2	432978.24	105.63	29.5	120.4	
Ge	72	He	215847.96	2.3	219029.81	98.55	29.5	120.4	
Y	89	H2	8277151.39	8.0	7788630.76	106.27	29.5	120.4	
Y	89	He	1684848.84	2.8	1720337.72	97.94	29.5	120.4	
Tb	159	No Gas	20164732.06	4.4	19085444.99	105.66	29.5	120.4	
Tb	159	He	6782990.94	3.1	6890196.91	98.44	29.5	120.4	
Bi	209	No Gas	8814176.47	4.7	8525371.63	103.39	29.5	120.4	

Sample Report

Sample Name SN6316-009

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:07:49 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	95.0	47.78	100	
11	B	6	No Gas	1927.455	ppb	9.7	287076.99	1000	
23	Na	45	He	638970.662	ppb	7.1	19202252.20	200000	
24	Mg	45	He	48871.130	ppb	7.0	774113.31	200000	
27	Al	45	He	234.199	ppb	11.0	1432.34	200000	
28	Si	45	H2	12657.875	ppb	0.6	107282.44	10000	
39	K	45	He	162584.222	ppb	7.2	2003204.60	200000	
40	Ca	45	H2	169517.992	ppb	0.4	14566248.53	200000	
51	V	89	He	18.807	ppb	13.4	3999.62	1000	
52	Cr	89	He	49.491	ppb	8.3	13488.00	2000	
55	Mn	89	He	60.728	ppb	9.9	7625.38	2000	
56	Fe	89	H2	4280.755	ppb	0.4	1483766.15	100000	
59	Co	89	He	12.833	ppb	11.0	5810.54	1000	
60	Ni	89	He	-4.272	ppb	N/A	17641.62	1000	
63	Cu	89	He	4.473	ppb	27.9	7403.33	2000	
66	Zn	89	He	52.229	ppb	6.5	2254.71	2000	
75	As	89	He	134.925	ppb	8.5	3500.83	1000	
78	Se	89	H2	1.325	ppb	14.0	18.50	1000	
88	Sr	89	He	2332.624	ppb	7.6	305918.26	2000	
95	Mo	89	He	7.636	ppb	10.7	1525.69	1000	
107	Ag	89	He	0.065	ppb	15.9	62.23	100	
111	Cd	89	He	0.164	ppb	64.9	11.85	1000	
118	Sn	159	He	12.073	ppb	11.9	1850.20	1000	
121	Sb	159	No Gas	12.006	ppb	9.8	11851.81	1000	
137	Ba	159	No Gas	130.335	ppb	11.2	47364.10	2000	
182	W	159	No Gas	0.723	ppb	15.8	684.13	1000	
205	Tl	209	No Gas	-0.067	ppb	N/A	243.61	1000	
208	Pb	209	No Gas	18.287	ppb	11.6	36144.00	2000	
232	Th	209	No Gas	0.118	ppb	25.8	483.89	1000	
238	U	209	No Gas	1.069	ppb	20.4	1938.99	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4971695.32	3.5	4785442.25	103.89	29.5	120.4	
Sc	45	No Gas	12654612.81	3.8	11869896.98	106.61	29.5	120.4	
Sc	45	H2	1469207.59	1.1	1440463.34	102	29.5	120.4	
Sc	45	He	341979.31	5.1	342270.52	99.91	29.5	120.4	
Ge	72	No Gas	2385680.13	3.6	2254278.57	105.83	29.5	120.4	
Ge	72	H2	440027.10	1.4	432978.24	101.63	29.5	120.4	
Ge	72	He	220013.97	5.9	219029.81	100.45	29.5	120.4	
Y	89	H2	7948778.29	1.1	7788630.76	102.06	29.5	120.4	
Y	89	He	1725906.02	5.3	1720337.72	100.32	29.5	120.4	
Tb	159	No Gas	19969538.45	4.0	19085444.99	104.63	29.5	120.4	
Tb	159	He	6915393.37	5.5	6890196.91	100.37	29.5	120.4	
Bi	209	No Gas	8771095.58	4.1	8525371.63	102.88	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNH06IMW2
File Name	050_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:10:29 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.010	ppb	N/A	12.22	0.5	
B	11	6	No Gas	14.915	ppb	3.5	10396.33	10	PB 6020 Fails DoD
Na	23	45	He	80.391	ppb	21.9	48525.44	500	
Mg	24	45	He	6.305	ppb	12.1	773.41	50	
Al	27	45	He	3.418	ppb	17.5	178.90	50	
Si	28	45	H2	29.519	ppb	11.7	1341.58	250	
K	39	45	He	29.909	ppb	31.6	17120.94	500	
Ca	40	45	H2	19.712	ppb	4.9	9777.05	50	
V	51	89	He	0.195	ppb	26.3	254.46	2.5	
Cr	52	89	He	0.251	ppb	22.9	533.25	2.5	
Mn	55	89	He	0.122	ppb	13.8	621.90	1	
Fe	56	89	H2	-0.566	ppb	N/A	10084.81	50	
Co	59	89	He	0.051	ppb	77.3	157.79	0.5	
Ni	60	89	He	-8.244	ppb	N/A	14172.05	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	-0.086	ppb	N/A	5780.31	1.5	
Zn	66	89	He	5.691	ppb	5.6	1122.31	5	PB 6020 Fails DoD
As	75	89	He	0.113	ppb	11.7	27.33	2.5	
Se	78	89	H2	0.061	ppb	55.5	4.50	2.5	
Sr	88	89	He	0.104	ppb	9.3	65.56	2.5	
Mo	95	89	He	-0.299	ppb	N/A	58.89	2.5	
Ag	107	89	He	0.007	ppb	47.6	41.11	0.5	
Cd	111	89	He	0.003	ppb	267.1	2.22	0.5	
Sn	118	159	He	0.518	ppb	14.0	533.36	2.5	
Sb	121	159	No Gas	0.024	ppb	104.6	470.53	0.5	
Ba	137	159	No Gas	0.083	ppb	31.7	213.57	1	
W	182	159	No Gas	0.001	ppb	1112.1	156.84	2.5	
Tl	205	209	No Gas	-0.028	ppb	N/A	190.21	0.5	
Pb	208	209	No Gas	0.064	ppb	32.4	774.22	0.5	
Th	232	209	No Gas	0.023	ppb	15.2	450.52	2.5	
U	238	209	No Gas	-0.001	ppb	N/A	23.36	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5035856.77	3.3	4785442.25	105.23	29.5	120.4	
Sc	45	No Gas	12494953.47	4.0	11869896.98	105.27	29.5	120.4	
Sc	45	H2	1455442.16	1.5	1440463.34	101.04	29.5	120.4	
Sc	45	He	335606.43	3.4	342270.52	98.05	29.5	120.4	
Ge	72	No Gas	2368536.42	3.7	2254278.57	105.07	29.5	120.4	
Ge	72	H2	431316.91	1.5	432978.24	99.62	29.5	120.4	
Ge	72	He	216838.18	2.5	219029.81	99	29.5	120.4	
Y	89	H2	7959303.50	1.1	7788630.76	102.19	29.5	120.4	
Y	89	He	1719086.57	2.9	1720337.72	99.93	29.5	120.4	
Tb	159	No Gas	20087276.37	3.3	19085444.99	105.25	29.5	120.4	
Tb	159	He	6903871.01	3.1	6890196.91	100.2	29.5	120.4	
Bi	209	No Gas	9042784.24	3.7	8525371.63	106.07	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNH06IMW2
File Name	051LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:13:00 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.597	ppb	8.5	43759.73	50	19.44	79.5	120.4	
B	11	6	No Gas	506.731	ppb	7.7	305169.73	500	20.27	79.5	120.4	
Na	23	45	He	7816.681	ppb	1.1	988417.95	7500	20.84	79.5	120.4	
Mg	24	45	He	5236.904	ppb	1.0	335764.08	5000	20.95	79.5	120.4	
Al	27	45	He	1924.077	ppb	1.1	44296.69	2000	19.24	79.5	120.4	
Si	28	45	H2	1071.315	ppb	1.1	36312.99	1000	21.43	0	200	
K	39	45	He	10566.152	ppb	0.7	538594.52	10000	21.13	79.5	120.4	
Ca	40	45	H2	2625.755	ppb	0.8	899316.99	2500	21.01	79.5	120.4	
V	51	89	He	502.538	ppb	0.5	429105.34	500	20.1	79.5	120.4	
Cr	52	89	He	203.866	ppb	0.7	223666.44	200	20.39	79.5	120.4	
Mn	55	89	He	509.901	ppb	1.0	243768.42	500	20.4	79.5	120.4	
Fe	56	89	H2	1035.853	ppb	0.4	1450911.67	1000	20.72	79.5	120.4	
Co	59	89	He	506.428	ppb	1.4	930513.55	500	20.26	79.5	120.4	
Ni	60	89	He	516.127	ppb	0.4	272279.59	500	20.64	79.5	120.4	
Cu	63	89	He	256.784	ppb	0.9	357565.97	250	20.54	79.5	120.4	
Zn	66	89	He	501.627	ppb	0.3	79092.56	500	20.06	79.5	120.4	
As	75	89	He	102.741	ppb	1.7	10901.79	100	20.55	79.5	120.4	
Se	78	89	H2	103.452	ppb	0.3	5404.47	100	20.69	79.5	120.4	
Sr	88	89	He	505.639	ppb	0.4	271931.48	500	20.23	79.5	120.4	
Mo	95	89	He	103.269	ppb	0.4	70624.58	100	20.65	79.5	120.4	
Ag	107	89	He	51.653	ppb	0.8	115065.10	50	20.66	79.5	120.4	
Cd	111	89	He	259.634	ppb	0.4	67666.40	250	20.77	79.5	120.4	
Sn	118	159	He	499.614	ppb	0.5	270647.89	500	19.98	79.5	120.4	
Sb	121	159	No Gas	99.873	ppb	8.0	385412.50	100	19.98	79.5	120.4	
Ba	137	159	No Gas	1948.966	ppb	8.3	2852512.62	2000	19.49	79.5	120.4	
W	182	159	No Gas	98.340	ppb	8.0	291765.68	100	19.67	79.5	120.4	
Tl	205	209	No Gas	103.672	ppb	7.1	587047.18	100	20.73	79.5	120.4	
[Pb]	206	209	No Gas	98.816	ppb	7.5	201967.62	100	19.76	79.5	120.4	
[Pb]	207	209	No Gas	97.224	ppb	8.9	174266.14	100	19.44	79.5	120.4	
Pb	208	209	No Gas	99.549	ppb	8.5	801973.02	100	19.91	79.5	120.4	
Th	232	209	No Gas	99.155	ppb	7.8	755741.04	100	19.83	79.5	120.4	
U	238	209	No Gas	99.749	ppb	8.4	733819.46	100	19.95	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5018601.65	1.1	4785442.25	104.87	29.5	120.4	
Sc	45	No Gas	12387958.56	0.8	11869896.98	104.36	29.5	120.4	
Sc	45	H2	1459390.98	1.0	1440463.34	101.31	29.5	120.4	
Sc	45	He	345040.20	1.0	342270.52	100.81	29.5	120.4	
Ge	72	No Gas	2358679.77	1.8	2254278.57	104.63	29.5	120.4	
Ge	72	H2	431291.57	0.6	432978.24	99.61	29.5	120.4	
Ge	72	He	222989.34	0.3	219029.81	101.81	29.5	120.4	
Y	89	H2	8028293.32	0.3	7788630.76	103.08	29.5	120.4	
Y	89	He	1764708.46	0.6	1720337.72	102.58	29.5	120.4	
Tb	159	No Gas	20099009.70	1.3	19085444.99	105.31	29.5	120.4	
Tb	159	He	7077082.88	0.2	6890196.91	102.71	29.5	120.4	
Bi	209	No Gas	8976045.84	1.6	8525371.63	105.29	29.5	120.4	

Sample Report

Sample Name SN5589-006R

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:15:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	146.8	30.00	100	
11	B	6	No Gas	40.111	ppb	7.5	24614.12	1000	
23	Na	45	He	93162.969	ppb	0.7	11235893.83	200000	
24	Mg	45	He	4941.842	ppb	1.3	313915.06	200000	
27	Al	45	He	9.425	ppb	4.2	318.91	200000	
28	Si	45	H2	3051.497	ppb	2.3	102592.46	10000	
39	K	45	He	1817.070	ppb	0.3	104996.26	200000	
40	Ca	45	H2	15989.949	ppb	0.6	5450617.00	200000	
51	V	89	He	0.301	ppb	14.5	346.69	1000	
52	Cr	89	He	0.387	ppb	7.3	687.89	2000	
55	Mn	89	He	1.015	ppb	2.2	1051.19	2000	
56	Fe	89	H2	4.346	ppb	5.1	16848.96	100000	
59	Co	89	He	0.368	ppb	2.8	735.63	1000	
60	Ni	89	He	-8.347	ppb	N/A	14321.13	1000	
63	Cu	89	He	-0.077	ppb	N/A	5873.64	2000	
66	Zn	89	He	7.414	ppb	6.4	1404.57	2000	
75	As	89	He	1.107	ppb	7.2	131.68	1000	
78	Se	89	H2	0.354	ppb	20.9	19.67	1000	
88	Sr	89	He	71.601	ppb	1.4	38031.41	2000	
95	Mo	89	He	-0.073	ppb	N/A	212.23	1000	
107	Ag	89	He	0.027	ppb	21.5	86.67	100	
111	Cd	89	He	0.058	ppb	4.8	16.30	1000	
118	Sn	159	He	0.866	ppb	6.8	727.82	1000	
121	Sb	159	No Gas	0.147	ppb	12.0	944.43	1000	
137	Ba	159	No Gas	6.977	ppb	9.2	10275.58	2000	
182	W	159	No Gas	0.170	ppb	15.4	657.41	1000	
205	Tl	209	No Gas	0.079	ppb	49.2	787.58	1000	
208	Pb	209	No Gas	0.121	ppb	16.1	1218.06	2000	
232	Th	209	No Gas	0.830	ppb	13.5	6555.78	1000	
238	U	209	No Gas	0.069	ppb	6.2	533.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4861145.66	4.9	4785442.25	101.58	29.5	120.4	
Sc	45	No Gas	12493487.63	3.8	11869896.98	105.25	29.5	120.4	
Sc	45	H2	1456599.74	1.3	1440463.34	101.12	29.5	120.4	
Sc	45	He	341827.34	0.8	342270.52	99.87	29.5	120.4	
Ge	72	No Gas	2381441.93	3.4	2254278.57	105.64	29.5	120.4	
Ge	72	H2	435537.73	1.2	432978.24	100.59	29.5	120.4	
Ge	72	He	221375.00	0.7	219029.81	101.07	29.5	120.4	
Y	89	H2	7957512.70	1.5	7788630.76	102.17	29.5	120.4	
Y	89	He	1742460.20	0.7	1720337.72	101.29	29.5	120.4	
Tb	159	No Gas	20074195.39	3.5	19085444.99	105.18	29.5	120.4	
Tb	159	He	7004105.45	0.5	6890196.91	101.65	29.5	120.4	
Bi	209	No Gas	8903018.23	3.3	8525371.63	104.43	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:18:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.206	ppb	10.8	100596.51	25	92.82	89.8	110.2	
11	B	6	No Gas	24.685	ppb	10.5	72617.69	25	98.74	89.8	110.2	
23	Na	45	He	4889.675	ppb	1.0	2987792.74	5000	97.79	89.8	110.2	
24	Mg	45	He	4941.319	ppb	0.6	1573073.97	5000	98.83	89.8	110.2	
27	Al	45	He	492.844	ppb	0.2	56358.02	500	98.57	89.8	110.2	
28	Si	45	H2	504.550	ppb	1.3	84882.60	500	100.91	89.8	110.2	
39	K	45	He	4886.244	ppb	1.3	1216733.43	5000	97.72	89.8	110.2	
40	Ca	45	H2	4985.052	ppb	0.4	8496828.41	5000	99.7	89.8	110.2	
51	V	89	He	24.239	ppb	0.5	102354.70	25	96.96	89.8	110.2	
52	Cr	89	He	24.165	ppb	0.4	131128.71	25	96.66	89.8	110.2	
55	Mn	89	He	24.151	ppb	0.6	57496.86	25	96.6	89.8	110.2	
56	Fe	89	H2	4935.367	ppb	0.8	33985701.59	5000	98.71	89.8	110.2	
59	Co	89	He	24.357	ppb	1.1	221221.10	25	97.43	89.8	110.2	
60	Ni	89	He	22.311	ppb	1.2	72579.04	25	89.24	89.8	110.2	> +/- 10%
63	Cu	89	He	24.351	ppb	0.9	170721.00	25	97.4	89.8	110.2	
66	Zn	89	He	24.476	ppb	2.4	19262.82	25	97.9	89.8	110.2	
75	As	89	He	24.143	ppb	1.4	12658.14	25	96.57	89.8	110.2	
78	Se	89	H2	24.670	ppb	1.7	6382.00	25	98.68	89.8	110.2	
88	Sr	89	He	24.180	ppb	0.2	64273.29	25	96.72	89.8	110.2	
95	Mo	89	He	24.207	ppb	0.3	81766.09	25	96.83	89.8	110.2	
107	Ag	89	He	24.480	ppb	0.5	269456.69	25	97.92	89.8	110.2	
111	Cd	89	He	24.365	ppb	0.3	31381.57	25	97.46	89.8	110.2	
118	Sn	159	He	24.296	ppb	0.4	64910.38	25	97.18	89.8	110.2	
121	Sb	159	No Gas	23.241	ppb	9.9	446503.85	25	92.96	89.8	110.2	
137	Ba	159	No Gas	23.485	ppb	10.7	171200.90	25	93.94	89.8	110.2	
182	W	159	No Gas	23.566	ppb	10.0	348110.99	25	94.26	89.8	110.2	
205	Tl	209	No Gas	23.696	ppb	10.4	663528.66	25	94.78	89.8	110.2	
208	Pb	209	No Gas	23.271	ppb	10.5	927237.53	25	93.08	89.8	110.2	
232	Th	209	No Gas	23.102	ppb	11.5	870588.42	25	92.41	89.8	110.2	
238	U	209	No Gas	23.497	ppb	11.3	854810.82	25	93.99	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4843337.75	3.7	4785442.25	101.21	29.5	120.4	
Sc	45	No Gas	12532309.79	4.3	11869896.98	105.58	29.5	120.4	
Sc	45	H2	1456993.36	1.4	1440463.34	101.15	29.5	120.4	
Sc	45	He	342936.13	0.3	342270.52	100.19	29.5	120.4	
Ge	72	No Gas	2370365.72	4.0	2254278.57	105.15	29.5	120.4	
Ge	72	H2	436209.46	0.6	432978.24	100.75	29.5	120.4	
Ge	72	He	221248.58	0.3	219029.81	101.01	29.5	120.4	
Y	89	H2	7951209.32	0.5	7788630.76	102.09	29.5	120.4	
Y	89	He	1744158.84	0.4	1720337.72	101.38	29.5	120.4	
Tb	159	No Gas	20047053.73	3.5	19085444.99	105.04	29.5	120.4	
Tb	159	He	6959182.81	0.6	6890196.91	101	29.5	120.4	
Bi	209	No Gas	8895814.77	3.9	8525371.63	104.35	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:20:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.017	ppb	40.3	94.45	0.2	
11	B	6	No Gas	0.899	ppb	2.1	4022.94	4	
23	Na	45	He	-3.098	ppb	N/A	38085.98	200	
24	Mg	45	He	-0.352	ppb	N/A	277.80	20	
27	Al	45	He	-0.392	ppb	N/A	60.00	20	
28	Si	45	H2	1.045	ppb	24.5	527.27	100	
39	K	45	He	1.374	ppb	69.0	16378.74	200	
40	Ca	45	H2	0.610	ppb	22.6	4095.18	20	
51	V	89	He	0.006	ppb	88.6	120.01	1	
52	Cr	89	He	0.001	ppb	590.5	271.95	1	
55	Mn	89	He	-0.084	ppb	N/A	373.94	0.4	
56	Fe	89	H2	0.744	ppb	14.2	15990.25	20	
59	Co	89	He	0.010	ppb	28.9	153.35	0.2	
60	Ni	89	He	-2.390	ppb	N/A	12514.92	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.408	ppb	N/A	3204.93	0.6	Failed DoD
66	Zn	89	He	-0.010	ppb	N/A	245.56	2	
75	As	89	He	0.015	ppb	65.4	23.67	1	
78	Se	89	H2	0.039	ppb	9.6	11.50	1	
88	Sr	89	He	0.001	ppb	156.3	13.33	1	
95	Mo	89	He	0.023	ppb	85.2	335.57	1	
107	Ag	89	He	0.003	ppb	50.8	60.00	0.2	
111	Cd	89	He	0.004	ppb	35.4	6.30	0.2	
118	Sn	159	He	0.074	ppb	11.7	460.03	1	
121	Sb	159	No Gas	0.013	ppb	27.9	627.39	0.2	
137	Ba	159	No Gas	0.015	ppb	76.1	200.23	0.4	
182	W	159	No Gas	0.076	ppb	13.2	1251.47	1	
205	Tl	209	No Gas	0.019	ppb	39.7	897.71	0.2	
208	Pb	209	No Gas	0.017	ppb	32.0	934.39	0.2	
232	Th	209	No Gas	0.098	ppb	16.1	3988.50	1	
238	U	209	No Gas	0.016	ppb	36.1	637.40	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4920772.74	3.9	4785442.25	102.83	29.5	120.4	
Sc	45	No Gas	12474621.27	3.4	11869896.98	105.09	29.5	120.4	
Sc	45	H2	1450903.56	0.6	1440463.34	100.72	29.5	120.4	
Sc	45	He	343064.56	0.5	342270.52	100.23	29.5	120.4	
Ge	72	No Gas	2364626.26	3.7	2254278.57	104.9	29.5	120.4	
Ge	72	H2	438526.38	1.4	432978.24	101.28	29.5	120.4	
Ge	72	He	221103.65	0.4	219029.81	100.95	29.5	120.4	
Y	89	H2	7961208.53	1.1	7788630.76	102.22	29.5	120.4	
Y	89	He	1734735.90	0.8	1720337.72	100.84	29.5	120.4	
Tb	159	No Gas	19758475.82	3.9	19085444.99	103.53	29.5	120.4	
Tb	159	He	6957339.55	0.6	6890196.91	100.97	29.5	120.4	
Bi	209	No Gas	8936444.46	3.7	8525371.63	104.82	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG14IMW2
File Name	055_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:23:25 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ppb	126.1	28.89	0.5	
B	11	6	No Gas	6.534	ppb	6.4	5180.00	10	
Na	23	45	He	0.879	ppb	606.1	40007.04	500	
Mg	24	45	He	3.826	ppb	40.5	633.40	50	
Al	27	45	He	3.939	ppb	14.3	194.45	50	
Si	28	45	H2	26.501	ppb	27.9	1238.10	250	
K	39	45	He	5.159	ppb	62.4	16273.65	500	
Ca	40	45	H2	15.277	ppb	2.2	8278.26	50	
V	51	89	He	0.174	ppb	32.5	241.12	2.5	
Cr	52	89	He	0.385	ppb	6.6	687.90	2.5	
Mn	55	89	He	0.028	ppb	300.6	587.91	1	
Fe	56	89	H2	7.644	ppb	2.7	21366.72	50	
Co	59	89	He	0.043	ppb	68.6	146.68	0.5	
Ni	60	89	He	-10.643	ppb	N/A	13243.39	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	-0.317	ppb	N/A	5564.64	1.5	
Zn	66	89	He	1.396	ppb	18.2	472.25	5	
As	75	89	He	0.115	ppb	35.8	28.00	2.5	
Se	78	89	H2	0.077	ppb	17.1	5.33	2.5	
Sr	88	89	He	0.025	ppb	39.1	24.44	2.5	
Mo	95	89	He	-0.146	ppb	N/A	163.34	2.5	
Ag	107	89	He	0.012	ppb	40.9	54.45	0.5	
Cd	111	89	He	0.003	ppb	155.9	2.22	0.5	
Sn	118	159	He	0.624	ppb	22.9	602.26	2.5	
Sb	121	159	No Gas	0.030	ppb	56.2	487.22	0.5	
Ba	137	159	No Gas	0.068	ppb	23.5	186.88	1	
W	182	159	No Gas	0.065	ppb	42.9	340.38	2.5	
Tl	205	209	No Gas	-0.020	ppb	N/A	230.26	0.5	
Pb	208	209	No Gas	0.066	ppb	14.7	777.55	0.5	
Th	232	209	No Gas	0.320	ppb	3.6	2679.95	2.5	
U	238	209	No Gas	0.014	ppb	8.9	126.81	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4883825.89	3.3	4785442.25	102.06	29.5	120.4	
Sc	45	No Gas	12246720.66	1.3	11869896.98	103.17	29.5	120.4	
Sc	45	H2	1456595.92	2.5	1440463.34	101.12	29.5	120.4	
Sc	45	He	342638.76	1.0	342270.52	100.11	29.5	120.4	
Ge	72	No Gas	2316176.20	2.0	2254278.57	102.75	29.5	120.4	
Ge	72	H2	432732.17	1.9	432978.24	99.94	29.5	120.4	
Ge	72	He	220501.59	0.4	219029.81	100.67	29.5	120.4	
Y	89	H2	7945877.84	1.7	7788630.76	102.02	29.5	120.4	
Y	89	He	1747256.88	0.9	1720337.72	101.56	29.5	120.4	
Tb	159	No Gas	19727237.34	1.3	19085444.99	103.36	29.5	120.4	
Tb	159	He	7047732.39	0.8	6890196.91	102.29	29.5	120.4	
Bi	209	No Gas	8862550.47	2.3	8525371.63	103.96	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG14IMW2
File Name	056LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:26:03 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.729	ppb	9.0	44174.37	50	19.89	79.5	120.4	
B	11	6	No Gas	515.120	ppb	8.0	306054.44	500	20.6	79.5	120.4	
Na	23	45	He	7402.554	ppb	1.1	928204.71	7500	19.74	79.5	120.4	
Mg	24	45	He	5367.986	ppb	0.9	340513.69	5000	21.47	79.5	120.4	
Al	27	45	He	1965.576	ppb	0.6	44769.15	2000	19.66	79.5	120.4	
Si	28	45	H2	1092.594	ppb	2.2	36869.01	1000	21.85	0	200	
K	39	45	He	10586.977	ppb	0.5	533893.93	10000	21.17	79.5	120.4	
Ca	40	45	H2	2651.555	ppb	1.5	904341.75	2500	21.21	79.5	120.4	
V	51	89	He	521.628	ppb	1.5	440996.24	500	20.87	79.5	120.4	
Cr	52	89	He	208.311	ppb	0.7	226281.76	200	20.83	79.5	120.4	
Mn	55	89	He	521.736	ppb	0.4	246969.27	500	20.87	79.5	120.4	
Fe	56	89	H2	1068.753	ppb	0.7	1476364.37	1000	21.38	79.5	120.4	
Co	59	89	He	518.398	ppb	0.1	943174.47	500	20.74	79.5	120.4	
Ni	60	89	He	526.403	ppb	0.1	274602.61	500	21.06	79.5	120.4	
Cu	63	89	He	262.809	ppb	0.7	362215.29	250	21.02	79.5	120.4	
Zn	66	89	He	514.268	ppb	0.5	80282.46	500	20.57	79.5	120.4	
As	75	89	He	105.755	ppb	0.2	11111.32	100	21.15	79.5	120.4	
Se	78	89	H2	106.063	ppb	0.9	5465.66	100	21.21	79.5	120.4	
Sr	88	89	He	516.958	ppb	0.3	275286.74	500	20.68	79.5	120.4	
Mo	95	89	He	105.783	ppb	0.1	71626.27	100	21.16	79.5	120.4	
Ag	107	89	He	53.332	ppb	0.6	117633.40	50	21.33	79.5	120.4	
Cd	111	89	He	263.191	ppb	0.3	67918.84	250	21.06	79.5	120.4	
Sn	118	159	He	509.872	ppb	0.3	275358.03	500	20.39	79.5	120.4	
Sb	121	159	No Gas	102.729	ppb	9.2	395123.82	100	20.55	79.5	120.4	
Ba	137	159	No Gas	1998.278	ppb	9.3	2915074.66	2000	19.98	79.5	120.4	
W	182	159	No Gas	102.754	ppb	7.6	303952.83	100	20.55	79.5	120.4	
Tl	205	209	No Gas	105.715	ppb	9.0	598498.47	100	21.14	79.5	120.4	
[Pb]	206	209	No Gas	101.737	ppb	9.4	207897.04	100	20.35	79.5	120.4	
[Pb]	207	209	No Gas	100.668	ppb	8.5	180468.78	100	20.13	79.5	120.4	
Pb	208	209	No Gas	102.764	ppb	9.3	827817.40	100	20.55	79.5	120.4	
Th	232	209	No Gas	102.942	ppb	9.3	784485.55	100	20.59	79.5	120.4	
U	238	209	No Gas	102.126	ppb	9.9	751157.64	100	20.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4956708.46	3.0	4785442.25	103.58	29.5	120.4	
Sc	45	No Gas	12412098.85	3.5	11869896.98	104.57	29.5	120.4	
Sc	45	H2	1453284.69	1.0	1440463.34	100.89	29.5	120.4	
Sc	45	He	341376.86	0.7	342270.52	99.74	29.5	120.4	
Ge	72	No Gas	2350266.49	3.3	2254278.57	104.26	29.5	120.4	
Ge	72	H2	435161.35	1.7	432978.24	100.5	29.5	120.4	
Ge	72	He	222065.78	0.5	219029.81	101.39	29.5	120.4	
Y	89	H2	7919268.00	0.7	7788630.76	101.68	29.5	120.4	
Y	89	He	1747320.01	0.6	1720337.72	101.57	29.5	120.4	
Tb	159	No Gas	20058593.45	3.2	19085444.99	105.1	29.5	120.4	
Tb	159	He	7055483.78	0.2	6890196.91	102.4	29.5	120.4	
Bi	209	No Gas	8985589.86	3.3	8525371.63	105.4	29.5	120.4	

Sample Report

Sample Name SN5646-004R

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:28:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	86.1	60.00	100	
11	B	6	No Gas	37.050	ppb	5.2	22700.78	1000	
23	Na	45	He	67698.599	ppb	0.8	8229864.58	200000	
24	Mg	45	He	21735.297	ppb	0.7	1388531.80	200000	
27	Al	45	He	7.295	ppb	25.5	272.24	200000	
28	Si	45	H2	2469.713	ppb	0.7	83014.28	10000	
39	K	45	He	1987.894	ppb	0.7	114112.96	200000	
40	Ca	45	H2	34294.068	ppb	0.4	11676042.61	200000	
51	V	89	He	0.288	ppb	26.6	335.57	1000	
52	Cr	89	He	0.429	ppb	13.7	733.22	2000	
55	Mn	89	He	0.319	ppb	24.1	723.22	2000	
56	Fe	89	H2	9.675	ppb	4.6	24107.47	100000	
59	Co	89	He	0.345	ppb	4.1	693.40	1000	
60	Ni	89	He	-6.016	ppb	N/A	15446.76	1000	
63	Cu	89	He	0.524	ppb	12.8	6682.96	2000	
66	Zn	89	He	5.512	ppb	7.8	1108.98	2000	
75	As	89	He	1.436	ppb	10.5	166.02	1000	
78	Se	89	H2	0.756	ppb	9.0	40.33	1000	
88	Sr	89	He	167.097	ppb	0.3	88704.50	2000	
95	Mo	89	He	-0.038	ppb	N/A	235.57	1000	
107	Ag	89	He	0.028	ppb	34.5	88.89	100	
111	Cd	89	He	0.076	ppb	11.2	21.11	1000	
118	Sn	159	He	1.006	ppb	11.0	800.06	1000	
121	Sb	159	No Gas	0.163	ppb	31.7	1017.84	1000	
137	Ba	159	No Gas	4.684	ppb	2.8	6996.27	2000	
182	W	159	No Gas	4.786	ppb	9.1	14414.27	1000	
205	Tl	209	No Gas	0.171	ppb	33.1	1301.54	1000	
208	Pb	209	No Gas	0.153	ppb	19.9	1471.69	2000	
232	Th	209	No Gas	1.071	ppb	18.7	8342.27	1000	
238	U	209	No Gas	0.118	ppb	28.5	887.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4825997.23	3.1	4785442.25	100.85	29.5	120.4	
Sc	45	No Gas	12434220.97	3.4	11869896.98	104.75	29.5	120.4	
Sc	45	H2	1455329.67	1.1	1440463.34	101.03	29.5	120.4	
Sc	45	He	344089.53	0.7	342270.52	100.53	29.5	120.4	
Ge	72	No Gas	2344542.90	3.0	2254278.57	104	29.5	120.4	
Ge	72	H2	431538.45	0.3	432978.24	99.67	29.5	120.4	
Ge	72	He	221134.85	1.0	219029.81	100.96	29.5	120.4	
Y	89	H2	7928857.17	0.1	7788630.76	101.8	29.5	120.4	
Y	89	He	1741755.15	0.6	1720337.72	101.24	29.5	120.4	
Tb	159	No Gas	20220144.70	3.4	19085444.99	105.95	29.5	120.4	
Tb	159	He	6979835.03	0.3	6890196.91	101.3	29.5	120.4	
Bi	209	No Gas	8840918.42	4.2	8525371.63	103.7	29.5	120.4	

Sample Report

Sample Name SN5646-005R

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:31:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.037	ppb	89.7	53.33	100	
11	B	6	No Gas	23.468	ppb	9.8	14820.37	1000	
23	Na	45	He	9261.952	ppb	0.8	1158083.73	200000	
24	Mg	45	He	2467.714	ppb	1.2	157659.22	200000	
27	Al	45	He	21.520	ppb	3.3	596.70	200000	
28	Si	45	H2	3366.844	ppb	0.3	113133.69	10000	
39	K	45	He	278.544	ppb	0.4	29760.99	200000	
40	Ca	45	H2	4464.700	ppb	0.5	1523964.68	200000	
51	V	89	He	0.236	ppb	12.5	292.24	1000	
52	Cr	89	He	0.408	ppb	12.3	710.56	2000	
55	Mn	89	He	5.237	ppb	0.6	3037.12	2000	
56	Fe	89	H2	10.902	ppb	3.2	25989.70	100000	
59	Co	89	He	0.277	ppb	6.1	568.94	1000	
60	Ni	89	He	-9.864	ppb	N/A	13573.70	1000	
63	Cu	89	He	76.375	ppb	0.4	109133.56	2000	
66	Zn	89	He	28.234	ppb	3.5	4632.04	2000	
75	As	89	He	0.980	ppb	10.3	118.35	1000	
78	Se	89	H2	0.108	ppb	14.9	7.00	1000	
88	Sr	89	He	31.395	ppb	0.7	16669.56	2000	
95	Mo	89	He	-0.247	ppb	N/A	94.45	1000	
107	Ag	89	He	0.011	ppb	85.8	52.23	100	
111	Cd	89	He	0.049	ppb	19.2	14.07	1000	
118	Sn	159	He	0.815	ppb	5.2	701.16	1000	
121	Sb	159	No Gas	0.019	ppb	164.5	457.18	1000	
137	Ba	159	No Gas	5.915	ppb	8.1	8786.03	2000	
182	W	159	No Gas	0.017	ppb	281.9	203.56	1000	
205	Tl	209	No Gas	-0.020	ppb	N/A	233.60	1000	
208	Pb	209	No Gas	2.160	ppb	8.1	17617.84	2000	
232	Th	209	No Gas	0.101	ppb	8.1	1041.22	1000	
238	U	209	No Gas	0.017	ppb	27.9	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4816831.35	4.7	4785442.25	100.66	29.5	120.4	
Sc	45	No Gas	12419458.50	3.6	11869896.98	104.63	29.5	120.4	
Sc	45	H2	1456472.92	1.6	1440463.34	101.11	29.5	120.4	
Sc	45	He	343355.99	0.3	342270.52	100.32	29.5	120.4	
Ge	72	No Gas	2379771.69	3.4	2254278.57	105.57	29.5	120.4	
Ge	72	H2	439172.78	0.7	432978.24	101.43	29.5	120.4	
Ge	72	He	221600.79	0.1	219029.81	101.17	29.5	120.4	
Y	89	H2	7989691.70	0.5	7788630.76	102.58	29.5	120.4	
Y	89	He	1741160.25	0.7	1720337.72	101.21	29.5	120.4	
Tb	159	No Gas	20206336.09	3.6	19085444.99	105.87	29.5	120.4	
Tb	159	He	7011410.73	0.4	6890196.91	101.76	29.5	120.4	
Bi	209	No Gas	8969879.77	3.9	8525371.63	105.21	29.5	120.4	

Sample Report

Sample Name SN5646-005RA

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:33:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.934	ppb	8.7	8433.83	100	
11	B	6	No Gas	224.250	ppb	9.7	127784.60	1000	
23	Na	45	He	18732.633	ppb	0.7	2287718.24	200000	
24	Mg	45	He	3384.704	ppb	0.3	214817.93	200000	
27	Al	45	He	931.682	ppb	0.3	21272.09	200000	
28	Si	45	H2	8156.785	ppb	0.3	271723.35	10000	
39	K	45	He	10336.471	ppb	1.0	521578.50	200000	
40	Ca	45	H2	5397.909	ppb	1.0	1829348.86	200000	
51	V	89	He	50.073	ppb	1.3	42183.16	1000	
52	Cr	89	He	49.898	ppb	0.3	54106.57	2000	
55	Mn	89	He	25.679	ppb	1.2	12630.71	2000	
56	Fe	89	H2	1020.318	ppb	0.7	1406643.27	100000	
59	Co	89	He	10.720	ppb	2.5	19459.52	1000	
60	Ni	89	He	11.075	ppb	7.7	23677.34	1000	
63	Cu	89	He	30.266	ppb	1.0	46759.34	2000	
66	Zn	89	He	104.608	ppb	1.1	16440.26	2000	
75	As	89	He	49.465	ppb	0.5	5176.86	1000	
78	Se	89	H2	49.508	ppb	1.7	2546.12	1000	
88	Sr	89	He	79.179	ppb	0.9	41937.23	2000	
95	Mo	89	He	49.488	ppb	1.1	33458.48	1000	
107	Ag	89	He	10.585	ppb	1.1	23237.27	100	
111	Cd	89	He	10.535	ppb	2.7	2705.12	1000	
118	Sn	159	He	48.791	ppb	1.7	26581.41	1000	
121	Sb	159	No Gas	10.202	ppb	8.9	39408.79	1000	
137	Ba	159	No Gas	24.990	ppb	8.8	36390.54	2000	
182	W	159	No Gas	48.792	ppb	7.1	143775.41	1000	
205	Tl	209	No Gas	10.347	ppb	8.9	58442.15	1000	
208	Pb	209	No Gas	10.158	ppb	7.5	81453.28	2000	
232	Th	209	No Gas	10.294	ppb	9.0	78091.14	1000	
238	U	209	No Gas	10.228	ppb	7.9	74710.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4732037.97	4.5	4785442.25	98.88	29.5	120.4	
Sc	45	No Gas	12183862.81	3.1	11869896.98	102.65	29.5	120.4	
Sc	45	H2	1446557.74	0.6	1440463.34	100.42	29.5	120.4	
Sc	45	He	341317.80	0.7	342270.52	99.72	29.5	120.4	
Ge	72	No Gas	2326650.53	3.2	2254278.57	103.21	29.5	120.4	
Ge	72	H2	432338.30	0.7	432978.24	99.85	29.5	120.4	
Ge	72	He	221249.90	1.1	219029.81	101.01	29.5	120.4	
Y	89	H2	7901045.19	0.2	7788630.76	101.44	29.5	120.4	
Y	89	He	1737631.14	1.3	1720337.72	101.01	29.5	120.4	
Tb	159	No Gas	19960028.59	2.4	19085444.99	104.58	29.5	120.4	
Tb	159	He	7053599.90	0.8	6890196.91	102.37	29.5	120.4	
Bi	209	No Gas	8911990.43	2.3	8525371.63	104.53	29.5	120.4	

Sample Report

Sample Name SN5646-005RL

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:36:22 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.383	ppb	23.1	113.34	100	
11	B	6	No Gas	33.844	ppb	9.9	7056.51	1000	
23	Na	45	He	1260.016	ppb	305.5	35683.95	200000	
24	Mg	45	He	0.065	ppb	58656.3	217.80	200000	
27	Al	45	He	-8.848	ppb	N/A	94.45	200000	
28	Si	45	H2	70.182	ppb	38.3	493.90	10000	
39	K	45	He	-196.697	ppb	N/A	8889.04	200000	
40	Ca	45	H2	5.731	ppb	354.2	1926.88	200000	
51	V	89	He	-0.276	ppb	N/A	43.34	1000	
52	Cr	89	He	0.192	ppb	826.3	217.96	2000	
55	Mn	89	He	-3.226	ppb	N/A	209.97	2000	
56	Fe	89	H2	-11.906	ppb	N/A	4278.88	100000	
59	Co	89	He	0.100	ppb	334.0	68.90	1000	
60	Ni	89	He	-70.516	ppb	N/A	7456.79	1000	
63	Cu	89	He	-12.114	ppb	N/A	2109.15	2000	
66	Zn	89	He	-1.706	ppb	N/A	313.35	2000	
75	As	89	He	-0.189	ppb	N/A	11.33	1000	
78	Se	89	H2	0.261	ppb	107.0	2.00	1000	
88	Sr	89	He	0.065	ppb	166.2	20.00	2000	
95	Mo	89	He	-1.022	ppb	N/A	112.23	1000	
107	Ag	89	He	0.059	ppb	176.6	46.67	100	
111	Cd	89	He	-0.023	ppb	N/A	0.74	1000	
118	Sn	159	He	-0.790	ppb	N/A	212.23	1000	
121	Sb	159	No Gas	0.205	ppb	43.7	727.51	1000	
137	Ba	159	No Gas	1.336	ppb	38.3	644.07	2000	
182	W	159	No Gas	2.601	ppb	20.3	2282.79	1000	
205	Tl	209	No Gas	0.979	ppb	29.5	1955.69	1000	
208	Pb	209	No Gas	0.538	ppb	14.7	1491.71	2000	
232	Th	209	No Gas	0.389	ppb	29.1	1191.41	1000	
238	U	209	No Gas	0.540	ppb	16.2	1121.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6538614.63	27.2	4785442.25	136.64	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	16174151.19	24.8	11869896.98	136.26	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	960395.73	63.0	1440463.34	66.67	29.5	120.4	
Sc	45	He	501229.89	74.2	342270.52	146.44	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	3157830.45	26.8	2254278.57	140.08	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	275679.03	61.1	432978.24	63.67	29.5	120.4	
Ge	72	He	344087.07	73.6	219029.81	157.1	29.5	120.4	6020/DoD□ EPA
Y	89	H2	5269733.06	64.5	7788630.76	67.66	29.5	120.4	
Y	89	He	2684590.32	74.2	1720337.72	156.05	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	26661070.43	26.7	19085444.99	139.69	29.5	120.4	6020/DoD□ EPA
Tb	159	He	10871580.39	73.3	6890196.91	157.78	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	12027053.82	26.8	8525371.63	141.07	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5646-005RP

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:38:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.869	ppb	8.3	43202.48	100	
11	B	6	No Gas	520.779	ppb	8.8	307832.50	1000	
23	Na	45	He	16574.701	ppb	0.3	2036428.83	200000	
24	Mg	45	He	7737.573	ppb	0.6	492424.83	200000	
27	Al	45	He	1940.276	ppb	1.6	44351.21	200000	
28	Si	45	H2	4452.276	ppb	0.9	149314.97	10000	
39	K	45	He	10624.690	ppb	0.6	537675.80	200000	
40	Ca	45	H2	7091.125	ppb	0.5	2415795.52	200000	
51	V	89	He	512.630	ppb	0.4	430803.29	1000	
52	Cr	89	He	206.281	ppb	0.7	222733.41	2000	
55	Mn	89	He	520.083	ppb	0.3	244700.30	2000	
56	Fe	89	H2	1050.818	ppb	0.8	1458441.27	100000	
59	Co	89	He	511.910	ppb	0.4	925750.98	1000	
60	Ni	89	He	519.822	ppb	0.7	269759.73	1000	
63	Cu	89	He	259.654	ppb	0.2	355787.57	2000	
66	Zn	89	He	514.914	ppb	0.6	79897.07	2000	
75	As	89	He	104.651	ppb	1.5	10929.49	1000	
78	Se	89	H2	102.187	ppb	0.4	5290.10	1000	
88	Sr	89	He	535.899	ppb	1.0	283645.84	2000	
95	Mo	89	He	102.534	ppb	0.9	69016.16	1000	
107	Ag	89	He	52.554	ppb	1.6	115220.03	100	
111	Cd	89	He	261.369	ppb	0.8	67042.26	1000	
118	Sn	159	He	498.567	ppb	1.0	267339.03	1000	
121	Sb	159	No Gas	100.633	ppb	9.9	384357.78	1000	
137	Ba	159	No Gas	1954.704	ppb	9.7	2831898.88	2000	
182	W	159	No Gas	100.162	ppb	8.3	294219.40	1000	
205	Tl	209	No Gas	102.709	ppb	8.9	579939.83	1000	
208	Pb	209	No Gas	99.711	ppb	9.3	801112.92	2000	
232	Th	209	No Gas	99.576	ppb	9.4	756825.87	1000	
238	U	209	No Gas	98.604	ppb	8.4	723511.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4929576.49	2.1	4785442.25	103.01	29.5	120.4	
Sc	45	No Gas	12331928.99	2.7	11869896.98	103.89	29.5	120.4	
Sc	45	H2	1454706.10	0.4	1440463.34	100.99	29.5	120.4	
Sc	45	He	342606.19	0.8	342270.52	100.1	29.5	120.4	
Ge	72	No Gas	2346723.54	2.0	2254278.57	104.1	29.5	120.4	
Ge	72	H2	428572.93	0.8	432978.24	98.98	29.5	120.4	
Ge	72	He	220971.45	0.5	219029.81	100.89	29.5	120.4	
Y	89	H2	7955802.34	1.2	7788630.76	102.15	29.5	120.4	
Y	89	He	1736774.78	0.3	1720337.72	100.96	29.5	120.4	
Tb	159	No Gas	19911207.07	2.6	19085444.99	104.33	29.5	120.4	
Tb	159	He	7005222.53	0.5	6890196.91	101.67	29.5	120.4	
Bi	209	No Gas	8957551.71	2.6	8525371.63	105.07	29.5	120.4	

Sample Report

Sample Name SN5646-005RS

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:41:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.008	ppb	35.5	1522.36	100	
11	B	6	No Gas	21.698	ppb	27.3	24639.51	1000	
23	Na	45	He	46809.453	ppb	173.7	52361.46	200000	
24	Mg	45	He	158.471	ppb	175.5	317.81	200000	
27	Al	45	He	-2.258	ppb	N/A	95.56	200000	
28	Si	45	H2	10.232	ppb	42.3	944.44	10000	
39	K	45	He	12345.752	ppb	176.0	9996.13	200000	
40	Ca	45	H2	6.912	ppb	161.6	6796.14	200000	
51	V	89	He	1.471	ppb	167.7	151.12	1000	
52	Cr	89	He	7.243	ppb	174.5	277.96	2000	
55	Mn	89	He	12.549	ppb	184.1	262.62	2000	
56	Fe	89	H2	-1.753	ppb	N/A	11148.09	100000	
59	Co	89	He	2.585	ppb	165.1	328.92	1000	
60	Ni	89	He	653.794	ppb	180.6	7057.75	1000	
63	Cu	89	He	27.890	ppb	194.3	1768.00	2000	
66	Zn	89	He	0.606	ppb	252.1	275.57	2000	
75	As	89	He	1.113	ppb	179.3	14.00	1000	
78	Se	89	H2	0.201	ppb	55.7	19.00	1000	
88	Sr	89	He	0.093	ppb	151.9	91.11	2000	
95	Mo	89	He	0.115	ppb	377.8	176.68	1000	
107	Ag	89	He	0.473	ppb	170.1	50.00	100	
111	Cd	89	He	0.830	ppb	164.9	12.96	1000	
118	Sn	159	He	27.794	ppb	171.4	512.26	1000	
121	Sb	159	No Gas	2.034	ppb	32.2	14581.18	1000	
137	Ba	159	No Gas	41.425	ppb	30.3	108252.20	2000	
182	W	159	No Gas	2.137	ppb	31.0	11508.16	1000	
205	Tl	209	No Gas	3.674	ppb	35.9	36515.57	1000	
208	Pb	209	No Gas	2.117	ppb	33.7	30348.98	2000	
232	Th	209	No Gas	1.853	ppb	19.7	26918.57	1000	
238	U	209	No Gas	2.034	ppb	27.9	26506.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9317273.09	52.4	4785442.25	194.7	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	23625302.70	48.2	11869896.98	199.04	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2139194.67	62.7	1440463.34	148.51	29.5	120.4	6020/DoD□ EPA
Sc	45	He	428481.42	102.9	342270.52	125.19	29.5	120.4	6020/DoD
Ge	72	No Gas	4562443.25	52.1	2254278.57	202.39	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	624958.51	60.5	432978.24	144.34	29.5	120.4	6020/DoD□ EPA
Ge	72	He	278017.02	101.6	219029.81	126.93	29.5	120.4	6020/DoD□ EPA
Y	89	H2	11863067.07	61.7	7788630.76	152.31	29.5	120.4	6020/DoD□ EPA
Y	89	He	2250732.61	103.2	1720337.72	130.83	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	39094821.36	48.4	19085444.99	204.84	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8976124.07	102.7	6890196.91	130.27	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	17335412.41	49.3	8525371.63	203.34	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBSNH04IMS1
File Name	063_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:44:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.017	ppb	N/A	13.33	0.5	
B	11	6	No Gas	2.061	ppb	39.9	7535.79	10	
Na	23	45	He	-45.779	ppb	N/A	36828.00	500	
Mg	24	45	He	-0.422	ppb	N/A	433.37	50	
Al	27	45	He	-0.064	ppb	N/A	124.45	50	
Si	28	45	H2	2.685	ppb	104.3	640.73	250	
K	39	45	He	-143.536	ppb	N/A	9992.61	500	
Ca	40	45	H2	-1.960	ppb	N/A	3291.62	50	
V	51	89	He	-0.036	ppb	N/A	76.67	2.5	
Cr	52	89	He	0.499	ppb	47.4	996.54	2.5	
Mn	55	89	He	0.872	ppb	100.2	1266.53	1	
Fe	56	89	H2	-3.464	ppb	N/A	8318.57	50	
Co	59	89	He	0.050	ppb	28.3	188.91	0.5	
Ni	60	89	He	-22.235	ppb	N/A	8604.19	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	-2.212	ppb	N/A	3536.17	1.5	PB 6020 Fails DoD
Zn	66	89	He	0.409	ppb	128.9	402.25	5	
As	75	89	He	-0.043	ppb	N/A	14.33	2.5	
Se	78	89	H2	0.126	ppb	15.6	10.83	2.5	
Sr	88	89	He	0.061	ppb	7.3	54.45	2.5	
Mo	95	89	He	-0.255	ppb	N/A	114.45	2.5	
Ag	107	89	He	0.008	ppb	83.2	50.00	0.5	
Cd	111	89	He	0.007	ppb	95.1	4.45	0.5	
Sn	118	159	He	5.959	ppb	51.6	4483.58	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	-0.042	ppb	N/A	497.23	0.5	
Ba	137	159	No Gas	0.047	ppb	155.5	400.45	1	
W	182	159	No Gas	-0.029	ppb	N/A	170.19	2.5	
Tl	205	209	No Gas	-0.028	ppb	N/A	510.58	0.5	
Pb	208	209	No Gas	0.006	ppb	195.5	817.60	0.5	
Th	232	209	No Gas	0.039	ppb	67.7	1621.97	2.5	
U	238	209	No Gas	0.000	ppb	753.1	76.75	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	14935662.79	44.1	4785442.25	312.11	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	36470811.61	48.7	11869896.98	307.25	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2034358.94	29.9	1440463.34	141.23	29.5	120.4	6020/DoD□ EPA
Sc	45	He	407626.76	40.5	342270.52	119.09	29.5	120.4	
Ge	72	No Gas	6955076.94	48.4	2254278.57	308.53	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	630435.85	31.2	432978.24	145.6	29.5	120.4	6020/DoD□ EPA
Ge	72	He	271088.29	42.6	219029.81	123.77	29.5	120.4	6020/DoD
Y	89	H2	11203450.97	30.2	7788630.76	143.84	29.5	120.4	6020/DoD□ EPA
Y	89	He	2133632.19	42.5	1720337.72	124.02	29.5	120.4	6020/DoD
Tb	159	No Gas	60616736.32	47.2	19085444.99	317.61	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8556534.87	41.4	6890196.91	124.18	29.5	120.4	6020/DoD
Bi	209	No Gas	26982942.41	47.1	8525371.63	316.5	29.5	120.4	6020/DoD□ EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH04IMS1
File Name	064LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:46:40 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.340	ppb	11.4	40338.76	50	18.14	79.5	120.4	
B	11	6	No Gas	484.941	ppb	10.8	288624.43	500	19.4	79.5	120.4	
Na	23	45	He	7621.963	ppb	1.5	948622.84	7500	20.33	79.5	120.4	
Mg	24	45	He	5150.773	ppb	0.9	324733.04	5000	20.6	79.5	120.4	
Al	27	45	He	1831.727	ppb	1.2	41469.40	2000	18.32	79.5	120.4	
Si	28	45	H2	1013.994	ppb	3.4	33918.08	1000	20.28	79.5	120.4	
K	39	45	He	10590.165	ppb	0.6	530749.51	10000	21.18	79.5	120.4	
Ca	40	45	H2	2612.827	ppb	0.5	882769.84	2500	20.9	79.5	120.4	
V	51	89	He	481.921	ppb	0.6	405052.87	500	19.28	79.5	120.4	
Cr	52	89	He	195.698	ppb	0.2	211343.87	200	19.57	79.5	120.4	
Mn	55	89	He	486.617	ppb	0.3	229018.67	500	19.46	79.5	120.4	
Fe	56	89	H2	1003.071	ppb	0.4	1387908.03	1000	20.06	79.5	120.4	
Co	59	89	He	490.743	ppb	0.6	887574.29	500	19.63	79.5	120.4	
Ni	60	89	He	492.068	ppb	0.5	256364.96	500	19.68	79.5	120.4	
Cu	63	89	He	247.339	ppb	0.2	339235.98	250	19.79	79.5	120.4	
Zn	66	89	He	477.442	ppb	0.5	74108.77	500	19.1	79.5	120.4	
As	75	89	He	101.465	ppb	0.6	10598.19	100	20.29	79.5	120.4	
Se	78	89	H2	102.042	ppb	1.3	5264.43	100	20.41	79.5	120.4	
Sr	88	89	He	499.800	ppb	0.3	264572.44	500	19.99	79.5	120.4	
Mo	95	89	He	102.965	ppb	0.3	69311.79	100	20.59	79.5	120.4	
Ag	107	89	He	49.919	ppb	0.4	109458.50	50	19.97	79.5	120.4	
Cd	111	89	He	257.944	ppb	0.3	66170.56	250	20.64	79.5	120.4	
Sn	118	159	He	538.765	ppb	0.2	289176.90	500	21.55	79.5	120.4	
Sb	121	159	No Gas	97.162	ppb	11.2	374916.88	100	19.43	79.5	120.4	
Ba	137	159	No Gas	1832.462	ppb	10.6	2682107.28	2000	18.32	79.5	120.4	
W	182	159	No Gas	97.083	ppb	11.7	287994.47	100	19.42	79.5	120.4	
Tl	205	209	No Gas	100.847	ppb	10.9	574380.94	100	20.17	79.5	120.4	
[Pb]	206	209	No Gas	96.950	ppb	10.5	199341.10	100	19.39	79.5	120.4	
[Pb]	207	209	No Gas	95.725	ppb	12.1	172572.35	100	19.14	79.5	120.4	
Pb	208	209	No Gas	97.332	ppb	11.1	788801.47	100	19.47	79.5	120.4	
Th	232	209	No Gas	96.201	ppb	12.4	737331.08	100	19.24	79.5	120.4	
U	238	209	No Gas	98.189	ppb	11.8	726534.27	100	19.64	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4967589.13	3.2	4785442.25	103.81	29.5	120.4	
Sc	45	No Gas	12462165.69	3.4	11869896.98	104.99	29.5	120.4	
Sc	45	H2	1439556.04	0.7	1440463.34	99.94	29.5	120.4	
Sc	45	He	339264.99	0.6	342270.52	99.12	29.5	120.4	
Ge	72	No Gas	2364680.14	3.9	2254278.57	104.9	29.5	120.4	
Ge	72	H2	430508.45	1.2	432978.24	99.43	29.5	120.4	
Ge	72	He	220208.82	0.6	219029.81	100.54	29.5	120.4	
Y	89	H2	7928559.69	0.7	7788630.76	101.8	29.5	120.4	
Y	89	He	1736991.60	0.4	1720337.72	100.97	29.5	120.4	
Tb	159	No Gas	20135757.34	3.6	19085444.99	105.5	29.5	120.4	
Tb	159	He	7012572.95	0.2	6890196.91	101.78	29.5	120.4	
Bi	209	No Gas	9044243.41	3.5	8525371.63	106.09	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:49:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.215	ppb	10.3	100491.94	25	92.86	89.8	110.2	
11	B	6	No Gas	24.937	ppb	8.4	73250.79	25	99.75	89.8	110.2	
23	Na	45	He	4805.447	ppb	0.4	2964444.86	5000	96.11	89.8	110.2	
24	Mg	45	He	4892.225	ppb	0.5	1571997.29	5000	97.84	89.8	110.2	
27	Al	45	He	487.200	ppb	0.8	56234.27	500	97.44	89.8	110.2	
28	Si	45	H2	498.566	ppb	1.5	83769.46	500	99.71	89.8	110.2	
39	K	45	He	4834.104	ppb	1.8	1215143.74	5000	96.68	89.8	110.2	
40	Ca	45	H2	4947.110	ppb	0.6	8420499.39	5000	98.94	89.8	110.2	
51	V	89	He	24.074	ppb	0.6	102277.54	25	96.3	89.8	110.2	
52	Cr	89	He	24.192	ppb	0.3	132075.65	25	96.77	89.8	110.2	
55	Mn	89	He	23.981	ppb	0.5	57446.53	25	95.92	89.8	110.2	
56	Fe	89	H2	4917.657	ppb	0.7	33764694.34	5000	98.35	89.8	110.2	
59	Co	89	He	24.124	ppb	1.0	220453.52	25	96.5	89.8	110.2	
60	Ni	89	He	21.782	ppb	0.8	71732.21	25	87.13	89.8	110.2	> +/- 10%
63	Cu	89	He	24.135	ppb	0.5	170295.63	25	96.54	89.8	110.2	
66	Zn	89	He	24.156	ppb	1.7	19131.49	25	96.62	89.8	110.2	
75	As	89	He	24.096	ppb	1.3	12710.51	25	96.38	89.8	110.2	
78	Se	89	H2	24.779	ppb	1.6	6391.34	25	99.12	89.8	110.2	
88	Sr	89	He	23.920	ppb	1.9	63969.80	25	95.68	89.8	110.2	
95	Mo	89	He	24.055	ppb	0.4	81751.37	25	96.22	89.8	110.2	
107	Ag	89	He	24.351	ppb	0.5	269681.56	25	97.4	89.8	110.2	
111	Cd	89	He	24.359	ppb	0.3	31566.07	25	97.44	89.8	110.2	
118	Sn	159	He	24.176	ppb	1.0	65282.40	25	96.7	89.8	110.2	
121	Sb	159	No Gas	23.470	ppb	10.4	448055.10	25	93.88	89.8	110.2	
137	Ba	159	No Gas	23.676	ppb	9.1	171578.44	25	94.7	89.8	110.2	
182	W	159	No Gas	23.544	ppb	9.6	345611.10	25	94.18	89.8	110.2	
205	Tl	209	No Gas	23.781	ppb	10.0	663509.95	25	95.12	89.8	110.2	
208	Pb	209	No Gas	23.637	ppb	9.7	938482.77	25	94.55	89.8	110.2	
232	Th	209	No Gas	23.466	ppb	9.8	881344.78	25	93.86	89.8	110.2	
238	U	209	No Gas	23.614	ppb	9.3	856264.29	25	94.46	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4830658.09	2.3	4785442.25	100.94	29.5	120.4	
Sc	45	No Gas	12203815.05	2.6	11869896.98	102.81	29.5	120.4	
Sc	45	H2	1454958.93	0.8	1440463.34	101.01	29.5	120.4	
Sc	45	He	346147.92	0.5	342270.52	101.13	29.5	120.4	
Ge	72	No Gas	2328612.26	2.9	2254278.57	103.3	29.5	120.4	
Ge	72	H2	437794.33	0.6	432978.24	101.11	29.5	120.4	
Ge	72	He	222938.98	0.1	219029.81	101.78	29.5	120.4	
Y	89	H2	7927863.31	0.7	7788630.76	101.79	29.5	120.4	
Y	89	He	1754824.07	0.1	1720337.72	102	29.5	120.4	
Tb	159	No Gas	19919347.20	3.4	19085444.99	104.37	29.5	120.4	
Tb	159	He	7034016.21	0.4	6890196.91	102.09	29.5	120.4	
Bi	209	No Gas	8856318.40	2.9	8525371.63	103.88	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:51:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.020	ppb	30.2	108.89	0.2	
11	B	6	No Gas	0.946	ppb	2.5	4080.73	4	
23	Na	45	He	-6.020	ppb	N/A	35530.31	200	
24	Mg	45	He	0.072	ppb	58.2	404.48	20	
27	Al	45	He	-0.329	ppb	N/A	65.56	20	
28	Si	45	H2	0.217	ppb	271.7	403.79	100	
39	K	45	He	1.575	ppb	132.8	16073.56	200	
40	Ca	45	H2	0.628	ppb	24.0	4299.69	20	
51	V	89	He	0.007	ppb	24.2	118.89	1	
52	Cr	89	He	0.005	ppb	62.3	292.62	1	
55	Mn	89	He	-0.082	ppb	N/A	373.27	0.4	
56	Fe	89	H2	0.579	ppb	25.8	15435.93	20	
59	Co	89	He	0.017	ppb	30.3	213.35	0.2	
60	Ni	89	He	-2.798	ppb	N/A	11367.20	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.482	ppb	N/A	2672.57	0.6	Failed DoD
66	Zn	89	He	0.030	ppb	191.8	272.23	2	
75	As	89	He	0.012	ppb	35.6	21.67	1	
78	Se	89	H2	0.034	ppb	14.9	10.67	1	
88	Sr	89	He	0.013	ppb	49.0	44.45	1	
95	Mo	89	He	0.014	ppb	98.0	303.35	1	
107	Ag	89	He	0.006	ppb	65.2	86.67	0.2	
111	Cd	89	He	0.009	ppb	36.9	13.33	0.2	
118	Sn	159	He	0.091	ppb	17.6	493.36	1	
121	Sb	159	No Gas	0.016	ppb	64.4	670.77	0.2	
137	Ba	159	No Gas	0.051	ppb	20.3	453.85	0.4	
182	W	159	No Gas	0.093	ppb	2.5	1495.11	1	
205	Tl	209	No Gas	0.029	ppb	60.7	1151.36	0.2	
208	Pb	209	No Gas	0.020	ppb	21.2	1031.17	0.2	
232	Th	209	No Gas	0.089	ppb	17.5	3607.91	1	
238	U	209	No Gas	0.021	ppb	29.5	780.90	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4823280.19	3.0	4785442.25	100.79	29.5	120.4	
Sc	45	No Gas	12193478.99	2.1	11869896.98	102.73	29.5	120.4	
Sc	45	H2	1516099.05	6.4	1440463.34	105.25	29.5	120.4	
Sc	45	He	335853.50	3.8	342270.52	98.13	29.5	120.4	
Ge	72	No Gas	2320038.40	2.1	2254278.57	102.92	29.5	120.4	
Ge	72	H2	458333.11	6.2	432978.24	105.86	29.5	120.4	
Ge	72	He	217199.39	4.4	219029.81	99.16	29.5	120.4	
Y	89	H2	8291941.29	5.9	7788630.76	106.46	29.5	120.4	
Y	89	He	1710974.96	3.6	1720337.72	99.46	29.5	120.4	
Tb	159	No Gas	19618482.21	2.3	19085444.99	102.79	29.5	120.4	
Tb	159	He	6808258.93	3.6	6890196.91	98.81	29.5	120.4	
Bi	209	No Gas	8845477.56	3.0	8525371.63	103.75	29.5	120.4	

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282007	SW3540C	16-JUL-20	15-JUL-20	100 %	1 %	N/A
MBLANK	WG282324	SW3540C	21-JUL-20	20-JUL-20	100 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282324-2	LCS	WG282324	21-JUL-20	20-JUL-20	%	90	90.	100	90-110	
WG282007-2	LCS	WG282007	16-JUL-20	15-JUL-20	%	90	90.	100	90-110	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282324-3	SN5717-2	WG282324	21-JUL-20	%	90.	90.	0	20
WG282007-5	SN5717-7	WG282007	16-JUL-20	%	94.	94.	1	20
WG282007-3	SN5717-5	WG282007	16-JUL-20	%	90.	91.	0	20
WG282007-4	SN5717-18	WG282007	16-JUL-20	%	87.	88.	1	20

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-1
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DA01A	SL	08-JUL-20 17:30:00	28-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000850

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-4
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DB02A	SL	08-JUL-20 17:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services A0000851

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-5
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DA02A	SL	08-JUL-20 17:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	90. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000852

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-6
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01X39E	SL	08-JUL-20 18:00:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes

Katahdin Analytical Services A0000853

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-7
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA01A	SL	10-JUL-20 16:25:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000854

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-8
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA02B	SL	10-JUL-20 16:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-9
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA02A	SL	10-JUL-20 16:45:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	90. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000856

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-10
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DB02A	SL	10-JUL-20 16:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services A0000857

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-11
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02X01TCLP	SL	10-JUL-20 16:30:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes

Katahdin Analytical Services A0000858

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-12
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA01A	SL	09-JUL-20 17:08:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	86. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000859

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-13
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DB01A	SL	09-JUL-20 17:15:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	81. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services A0000860

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-14
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA02A	SL	10-JUL-20 15:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	88. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000861

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-15
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA02B	SL	10-JUL-20 15:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	87. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000862

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-17
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DB03A	SL	09-JUL-20 15:49:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	89. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services A0000863

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-18
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA03A	SL	09-JUL-20 15:43:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	87. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services A0000864

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-19
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03X01TCLP	SL	09-JUL-20 17:10:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes

Katahdin Analytical Services A0000865

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SN5717 **SOW No.** SW846

Client Field ID	Lab Sample ID
COR01DA01A	SN5717-001
COR01DA02A	SN5717-005
COR01DA02AP	SN5717-005P
COR01DA02AS	SN5717-005S
COR01DB02A	SN5717-004
COR02DA01A	SN5717-007
COR02DA01AP	SN5717-007P
COR02DA01AS	SN5717-007S
COR02DA02A	SN5717-009
COR02DA02B	SN5717-008
COR02DB02A	SN5717-010
COR02DB02AP	SN5717-010P
COR02DB02AS	SN5717-010S
COR03DA01A	SN5717-012
COR03DA02A	SN5717-014
COR03DA02B	SN5717-015
COR03DA03A	SN5717-018
COR03DA03AP	SN5717-018P
COR03DA03AS	SN5717-018S
COR03DB01A	SN5717-013
COR03DB03A	SN5717-017
COR03EQB	SN5717-020

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Kayla Crot Name: Kayla Croteau

Date: 8/21/2020 Title: Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.0 **Lab Sample ID:** SN5717-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.11			MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	20.8			MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	16.5			MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	74.8			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.9 **Lab Sample ID:** SN5717-004

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.20			MS	5	0.10	0.020	0.050
7440-50-8	COPPER, TOTAL	24.7			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	36.1			MS	5	0.10	0.0071	0.050
7440-66-6	ZINC, TOTAL	87.4			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	1.14		N	MS	5	0.082	0.016	0.041
7440-50-8	COPPER, TOTAL	23.3		NE	MS	5	0.24	0.057	0.16
7439-92-1	LEAD, TOTAL	502		NA	MS	5	0.082	0.0057	0.041
7440-66-6	ZINC, TOTAL	75.2		EA	MS	5	0.82	0.11	0.65

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.15		N	MS	5	0.078	0.016	0.039
7440-50-8	COPPER, TOTAL	24.4		NEA	MS	5	0.24	0.055	0.16
7439-92-1	LEAD, TOTAL	38.0		NA	MS	5	0.078	0.0055	0.039
7440-66-6	ZINC, TOTAL	71.8		NEA	MS	5	0.78	0.10	0.63

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA02B

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.6 **Lab Sample ID:** SN5717-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.276			MS	5	0.096	0.019	0.048
7440-50-8	COPPER, TOTAL	24.1			MS	5	0.29	0.067	0.19
7439-92-1	LEAD, TOTAL	57.8			MS	5	0.096	0.0067	0.048
7440-66-6	ZINC, TOTAL	57.3			MS	5	0.96	0.12	0.77

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.6 **Lab Sample ID:** SN5717-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.341			MS	5	0.10	0.020	0.050
7440-50-8	COPPER, TOTAL	28.2			MS	5	0.30	0.070	0.20
7439-92-1	LEAD, TOTAL	82.6			MS	5	0.10	0.0070	0.050
7440-66-6	ZINC, TOTAL	65.0			MS	5	1.0	0.13	0.80

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.11	J	N	MS	5	0.11	0.022	0.054
7440-50-8	COPPER, TOTAL	24.2		E	MS	5	0.32	0.075	0.22
7439-92-1	LEAD, TOTAL	19.3		NA	MS	5	0.11	0.0075	0.054
7440-66-6	ZINC, TOTAL	66.4		E	MS	5	1.1	0.14	0.86

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 85.8 **Lab Sample ID:** SN5717-012

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.447			MS	5	0.11	0.021	0.053
7440-50-8	COPPER, TOTAL	29.4			MS	5	0.32	0.075	0.21
7439-92-1	LEAD, TOTAL	34.2			MS	5	0.11	0.0075	0.053
7440-66-6	ZINC, TOTAL	78.4			MS	5	1.1	0.14	0.86

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DB01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 80.9 **Lab Sample ID:** SN5717-013

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	1.00			MS	5	0.12	0.024	0.061
7440-50-8	COPPER, TOTAL	86.8			MS	5	0.36	0.085	0.24
7439-92-1	LEAD, TOTAL	393			MS	5	0.12	0.0085	0.061
7440-66-6	ZINC, TOTAL	110			MS	5	1.2	0.16	0.97

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 88.1 **Lab Sample ID:** SN5717-014

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.11	0.023	0.057
7440-50-8	COPPER, TOTAL	15.8			MS	5	0.34	0.079	0.23
7439-92-1	LEAD, TOTAL	22.1		B	MS	5	0.11	0.0079	0.057
7440-66-6	ZINC, TOTAL	55.8			MS	5	1.1	0.15	0.91

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA02B

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.1 **Lab Sample ID:** SN5717-015

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.11			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	19.6			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	24.6		B	MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	58.1			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DB03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 89.1 **Lab Sample ID:** SN5717-017

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.096	J		MS	5	0.11	0.022	0.056
7440-50-8	COPPER, TOTAL	28.8			MS	5	0.34	0.079	0.22
7439-92-1	LEAD, TOTAL	17.1			MS	5	0.11	0.0079	0.056
7440-66-6	ZINC, TOTAL	82.8			MS	5	1.1	0.15	0.90

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.236		N*	MS	5	0.097	0.019	0.048
7440-50-8	COPPER, TOTAL	15.2			MS	5	0.29	0.068	0.19
7439-92-1	LEAD, TOTAL	90.7		NA	MS	5	0.097	0.0068	0.048
7440-66-6	ZINC, TOTAL	62.6		N	MS	5	0.97	0.13	0.78

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03EQB

Matrix: WATER **SDG Name:** SN5717

Percent Solids: 0.00 **Lab Sample ID:** SN5717-020

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.11	J		MS	5	1.0	0.055	0.50
7440-50-8	COPPER, TOTAL	2.36	J	B	MS	5	3.0	0.19	2.0
7439-92-1	LEAD, TOTAL	3.86			MS	5	1.0	0.075	0.50
7440-66-6	ZINC, TOTAL	6.7	J		MS	5	10	3.9	8.0

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG20A Jul 20, 2020 15:26

Analyte	True	Found	%R (1)
ALUMINUM	400.0	376.75	94.2
ANTIMONY	20.0	19.98	99.9
CALCIUM	4000.0	4101.19	102.5
COPPER	20.0	20.39	102.0
IRON	4000.0	4114.77	102.9
LEAD	20.0	19.81	99.0
MAGNESIUM	4000.0	3995.85	99.9
MOLYBDENUM	40.0	40.22	100.6
POTASSIUM	4000.0	3958.32	99.0
SODIUM	4000.0	4049.95	101.2
ZINC	20.0	20.83	104.1

SAMPLE: CCV

File: LNG20A Jul 20, 2020 15:53

Analyte	True	Found	%R (1)
ALUMINUM	500.0	503.09	100.6
ANTIMONY	25.0	24.36	97.4
CALCIUM	5000.0	5025.17	100.5
COPPER	25.0	25.64	102.6
IRON	5000.0	5028.96	100.6
LEAD	25.0	23.88	95.5
MAGNESIUM	5000.0	4937.73	98.8
MOLYBDENUM	25.0	26.26	105.0
POTASSIUM	5000.0	4973.94	99.5
SODIUM	5000.0	5143.05	102.9
ZINC	25.0	25.31	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 16:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.78	97.6
ANTIMONY	25.0	25.17	100.7
CALCIUM	5000.0	5051.81	101.0
COPPER	25.0	24.92	99.7
IRON	5000.0	5055.77	101.1
LEAD	25.0	24.94	99.8
MAGNESIUM	5000.0	4918.41	98.4
MOLYBDENUM	25.0	24.24	97.0
POTASSIUM	5000.0	4912.23	98.2
SODIUM	5000.0	5058.62	101.2
ZINC	25.0	24.97	99.9

SAMPLE: CCV

File: LNG20A Jul 20, 2020 16:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.93	96.8
ANTIMONY	25.0	24.41	97.6
CALCIUM	5000.0	5057.67	101.2
COPPER	25.0	24.99	100.0
IRON	5000.0	5049.95	101.0
LEAD	25.0	24.43	97.7
MAGNESIUM	5000.0	5015.84	100.3
MOLYBDENUM	25.0	24.60	98.4
POTASSIUM	5000.0	4936.32	98.7
SODIUM	5000.0	5271.38	105.4
ZINC	25.0	24.98	99.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 17:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.74	97.5
ANTIMONY	25.0	24.42	97.7
CALCIUM	5000.0	5280.37	105.6
COPPER	25.0	24.90	99.6
IRON	5000.0	5248.99	105.0
LEAD	25.0	24.03	96.1
MAGNESIUM	5000.0	4989.23	99.8
MOLYBDENUM	25.0	23.89	95.6
POTASSIUM	5000.0	4925.88	98.5
SODIUM	5000.0	5223.89	104.5
ZINC	25.0	24.97	99.9

SAMPLE: CCV

File: LNG20A Jul 20, 2020 17:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	491.06	98.2
ANTIMONY	25.0	24.09	96.4
CALCIUM	5000.0	5062.62	101.3
COPPER	25.0	25.16	100.6
IRON	5000.0	5085.34	101.7
LEAD	25.0	24.19	96.8
MAGNESIUM	5000.0	5013.75	100.3
MOLYBDENUM	25.0	24.54	98.2
POTASSIUM	5000.0	4947.36	98.9
SODIUM	5000.0	5202.91	104.1
ZINC	25.0	24.75	99.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 18:20

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.76	94.2
ANTIMONY	25.0	24.30	97.2
CALCIUM	5000.0	4997.76	100.0
COPPER	25.0	24.87	99.5
IRON	5000.0	4878.52	97.6
LEAD	25.0	24.68	98.7
MAGNESIUM	5000.0	4977.03	99.5
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4952.96	99.1
SODIUM	5000.0	5079.57	101.6
ZINC	25.0	24.52	98.1

SAMPLE: CCV

File: LNG20A Jul 20, 2020 18:52

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.02	95.2
ANTIMONY	25.0	24.21	96.8
CALCIUM	5000.0	5078.85	101.6
COPPER	25.0	25.12	100.5
IRON	5000.0	5069.08	101.4
LEAD	25.0	25.56	102.2
MAGNESIUM	5000.0	4845.59	96.9
MOLYBDENUM	25.0	24.27	97.1
POTASSIUM	5000.0	4864.56	97.3
SODIUM	5000.0	4987.38	99.7
ZINC	25.0	25.24	101.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 19:24

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.53	94.3
ANTIMONY	25.0	23.54	94.2
CALCIUM	5000.0	4946.52	98.9
COPPER	25.0	24.39	97.6
IRON	5000.0	4875.73	97.5
LEAD	25.0	23.89	95.6
MAGNESIUM	5000.0	4851.30	97.0
MOLYBDENUM	25.0	24.43	97.7
POTASSIUM	5000.0	4884.14	97.7
SODIUM	5000.0	4975.93	99.5
ZINC	25.0	23.76	95.0

SAMPLE: CCV

File: LNG20A Jul 20, 2020 19:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	460.31	92.1
ANTIMONY	25.0	23.55	94.2
CALCIUM	5000.0	5050.18	101.0
COPPER	25.0	24.26	97.0
IRON	5000.0	4875.39	97.5
LEAD	25.0	23.78	95.1
MAGNESIUM	5000.0	4832.22	96.6
MOLYBDENUM	25.0	24.96	99.8
POTASSIUM	5000.0	4862.93	97.3
SODIUM	5000.0	4992.71	99.9
ZINC	25.0	24.69	98.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 20:29

Analyte	True	Found	%R (1)
ALUMINUM	500.0	469.00	93.8
ANTIMONY	25.0	22.93	91.7
CALCIUM	5000.0	4963.54	99.3
COPPER	25.0	24.62	98.5
IRON	5000.0	4867.97	97.4
LEAD	25.0	23.51	94.0
MAGNESIUM	5000.0	4852.84	97.1
MOLYBDENUM	25.0	24.36	97.4
POTASSIUM	5000.0	4886.34	97.7
SODIUM	5000.0	4981.52	99.6
ZINC	25.0	24.32	97.3

SAMPLE: CCV

File: LNG20A Jul 20, 2020 21:01

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.81	96.6
ANTIMONY	25.0	24.61	98.4
CALCIUM	5000.0	4932.76	98.7
COPPER	25.0	25.18	100.7
IRON	5000.0	4962.96	99.3
LEAD	25.0	24.66	98.6
MAGNESIUM	5000.0	4848.26	97.0
MOLYBDENUM	25.0	24.92	99.7
POTASSIUM	5000.0	4940.49	98.8
SODIUM	5000.0	4937.95	98.8
ZINC	25.0	24.22	96.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 21:33

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.75	95.2
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4953.04	99.1
COPPER	25.0	24.65	98.6
IRON	5000.0	4852.87	97.1
LEAD	25.0	24.02	96.1
MAGNESIUM	5000.0	4847.74	97.0
MOLYBDENUM	25.0	25.05	100.2
POTASSIUM	5000.0	4924.20	98.5
SODIUM	5000.0	5004.11	100.1
ZINC	25.0	24.95	99.8

SAMPLE: CCV

File: LNG20A Jul 20, 2020 22:05

Analyte	True	Found	%R (1)
ALUMINUM	500.0	456.86	91.4
ANTIMONY	25.0	24.10	96.4
CALCIUM	5000.0	4915.75	98.3
COPPER	25.0	24.20	96.8
IRON	5000.0	4844.15	96.9
LEAD	25.0	24.51	98.0
MAGNESIUM	5000.0	4751.98	95.0
MOLYBDENUM	25.0	24.18	96.7
POTASSIUM	5000.0	4788.79	95.8
SODIUM	5000.0	4867.82	97.4
ZINC	25.0	23.20	92.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 22:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	462.70	92.5
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4935.06	98.7
COPPER	25.0	25.06	100.2
IRON	5000.0	4860.18	97.2
LEAD	25.0	23.95	95.8
MAGNESIUM	5000.0	4871.27	97.4
MOLYBDENUM	25.0	24.95	99.8
POTASSIUM	5000.0	4913.58	98.3
SODIUM	5000.0	4990.53	99.8
ZINC	25.0	23.76	95.0

SAMPLE: CCV

File: LNG20A Jul 20, 2020 23:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.77	93.4
ANTIMONY	25.0	22.80	91.2
CALCIUM	5000.0	4851.47	97.0
COPPER	25.0	24.42	97.7
IRON	5000.0	4754.04	95.1
LEAD	25.0	22.80	91.2
MAGNESIUM	5000.0	4805.39	96.1
MOLYBDENUM	25.0	25.67	102.7
POTASSIUM	5000.0	4909.55	98.2
SODIUM	5000.0	4956.70	99.1
ZINC	25.0	23.98	95.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 20, 2020 23:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	474.61	94.9
ANTIMONY	25.0	23.37	93.5
CALCIUM	5000.0	4935.96	98.7
COPPER	25.0	24.52	98.1
IRON	5000.0	4862.67	97.3
LEAD	25.0	23.33	93.3
MAGNESIUM	5000.0	4854.70	97.1
MOLYBDENUM	25.0	24.31	97.2
POTASSIUM	5000.0	4926.40	98.5
SODIUM	5000.0	4986.80	99.7
ZINC	25.0	24.35	97.4

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:09

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.22	94.6
ANTIMONY	25.0	23.08	92.3
CALCIUM	5000.0	4968.01	99.4
COPPER	25.0	23.93	95.7
IRON	5000.0	4811.39	96.2
LEAD	25.0	23.74	95.0
MAGNESIUM	5000.0	4720.65	94.4
MOLYBDENUM	25.0	23.90	95.6
POTASSIUM	5000.0	4788.58	95.8
SODIUM	5000.0	4804.54	96.1
ZINC	25.0	23.77	95.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	465.80	93.2
ANTIMONY	25.0	23.14	92.6
CALCIUM	5000.0	4952.65	99.1
COPPER	25.0	24.39	97.6
IRON	5000.0	4819.88	96.4
LEAD	25.0	23.43	93.7
MAGNESIUM	5000.0	4735.11	94.7
MOLYBDENUM	25.0	24.45	97.8
POTASSIUM	5000.0	4897.91	98.0
SODIUM	5000.0	4862.90	97.3
ZINC	25.0	23.97	95.9

SAMPLE: CCV

File: LNG20A Jul 21, 2020 00:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	455.79	91.2
ANTIMONY	25.0	25.09	100.4
CALCIUM	5000.0	4953.93	99.1
COPPER	25.0	24.40	97.6
IRON	5000.0	4931.79	98.6
LEAD	25.0	24.37	97.5
MAGNESIUM	5000.0	4648.76	93.0
MOLYBDENUM	25.0	23.93	95.7
POTASSIUM	5000.0	4854.55	97.1
SODIUM	5000.0	4745.34	94.9
ZINC	25.0	24.26	97.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG22A Jul 22, 2020 13:37

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.88	95.5
ANTIMONY	20.0	20.02	100.1
CALCIUM	4000.0	4031.49	100.8
COPPER	20.0	20.39	102.0
IRON	4000.0	4037.34	100.9
LEAD	20.0	20.21	101.1
MAGNESIUM	4000.0	4044.93	101.1
MOLYBDENUM	40.0	39.62	99.0
POTASSIUM	4000.0	4032.27	100.8
SODIUM	4000.0	4144.42	103.6
ZINC	20.0	20.60	103.0

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.16	96.2
ANTIMONY	25.0	23.72	94.9
CALCIUM	5000.0	4738.81	94.8
COPPER	25.0	24.99	100.0
IRON	5000.0	4785.07	95.7
LEAD	25.0	23.76	95.0
MAGNESIUM	5000.0	4948.42	99.0
MOLYBDENUM	25.0	24.84	99.4
POTASSIUM	5000.0	4933.72	98.7
SODIUM	5000.0	5108.90	102.2
ZINC	25.0	24.97	99.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:15

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.50	95.7
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4834.58	96.7
COPPER	25.0	25.09	100.4
IRON	5000.0	4841.43	96.8
LEAD	25.0	23.32	93.3
MAGNESIUM	5000.0	4948.20	99.0
MOLYBDENUM	25.0	24.52	98.1
POTASSIUM	5000.0	4955.62	99.1
SODIUM	5000.0	5085.75	101.7
ZINC	25.0	25.21	100.8

SAMPLE: CCV

File: LNG22A Jul 22, 2020 14:33

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.94	96.2
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4930.09	98.6
COPPER	25.0	25.15	100.6
IRON	5000.0	4983.58	99.7
LEAD	25.0	23.44	93.8
MAGNESIUM	5000.0	4906.32	98.1
MOLYBDENUM	25.0	24.28	97.1
POTASSIUM	5000.0	4945.87	98.9
SODIUM	5000.0	5046.64	100.9
ZINC	25.0	25.13	100.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG24A Jul 24, 2020 17:19

Analyte	True	Found	%R (1)
ALUMINUM	400.0	391.94	98.0
ANTIMONY	20.0	19.69	98.5
CALCIUM	4000.0	3973.95	99.3
IRON	4000.0	3948.94	98.7
LEAD	20.0	19.83	99.1
MAGNESIUM	4000.0	4025.92	100.6
MOLYBDENUM	40.0	40.06	100.2
POTASSIUM	4000.0	4014.47	100.4
SODIUM	4000.0	4100.39	102.5

SAMPLE: CCV

File: LNG24A Jul 24, 2020 17:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.29	97.1
ANTIMONY	25.0	24.33	97.3
CALCIUM	5000.0	4787.56	95.8
IRON	5000.0	4840.93	96.8
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4793.15	95.9
MOLYBDENUM	25.0	24.88	99.5
POTASSIUM	5000.0	4782.74	95.7
SODIUM	5000.0	4958.05	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.70	95.9
ANTIMONY	25.0	23.34	93.4
CALCIUM	5000.0	4880.97	97.6
IRON	5000.0	4863.52	97.3
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4976.93	99.5
MOLYBDENUM	25.0	25.20	100.8
POTASSIUM	5000.0	4813.51	96.3
SODIUM	5000.0	5152.45	103.0

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.85	96.6
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4826.83	96.5
IRON	5000.0	4765.73	95.3
LEAD	25.0	23.77	95.1
MAGNESIUM	5000.0	4900.34	98.0
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4796.74	95.9
SODIUM	5000.0	5095.64	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.79	94.2
ANTIMONY	25.0	23.20	92.8
CALCIUM	5000.0	4835.68	96.7
IRON	5000.0	4804.85	96.1
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4970.75	99.4
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4840.66	96.8
SODIUM	5000.0	5169.95	103.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.02	94.6
ANTIMONY	25.0	23.73	94.9
CALCIUM	5000.0	4870.24	97.4
IRON	5000.0	4816.00	96.3
LEAD	25.0	24.93	99.7
MAGNESIUM	5000.0	5018.00	100.4
MOLYBDENUM	25.0	25.48	101.9
POTASSIUM	5000.0	4786.29	95.7
SODIUM	5000.0	5237.15	104.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNG27A Jul 27, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.37	92.8
CALCIUM	4000.0	4024.59	100.6
COPPER	20.0	20.22	101.1
IRON	4000.0	4035.38	100.9
MAGNESIUM	4000.0	3955.83	98.9
MOLYBDENUM	40.0	39.82	99.6
POTASSIUM	4000.0	3935.04	98.4
SODIUM	4000.0	4031.58	100.8

SAMPLE: CCV

File: LNG27A Jul 27, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.45	95.7
CALCIUM	5000.0	4897.84	98.0
COPPER	25.0	25.06	100.2
IRON	5000.0	4949.13	99.0
MAGNESIUM	5000.0	4844.99	96.9
MOLYBDENUM	25.0	25.00	100.0
POTASSIUM	5000.0	4849.53	97.0
SODIUM	5000.0	5007.64	100.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.68	93.7
CALCIUM	5000.0	4911.47	98.2
COPPER	25.0	24.77	99.1
IRON	5000.0	4893.39	97.9
MAGNESIUM	5000.0	4923.79	98.5
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	4803.62	96.1
SODIUM	5000.0	5086.07	101.7

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.15	93.2
CALCIUM	5000.0	4947.54	99.0
COPPER	25.0	24.86	99.4
IRON	5000.0	4931.12	98.6
MAGNESIUM	5000.0	4938.59	98.8
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4770.07	95.4
SODIUM	5000.0	5097.36	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.32	93.3
CALCIUM	5000.0	4903.88	98.1
COPPER	25.0	24.84	99.4
IRON	5000.0	4828.46	96.6
MAGNESIUM	5000.0	5000.00	100.0
MOLYBDENUM	25.0	24.94	99.8
POTASSIUM	5000.0	4801.27	96.0
SODIUM	5000.0	5288.90	105.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH04A Aug 04, 2020 14:43

Analyte	True	Found	%R (1)
ALUMINUM	400.0	373.02	93.3
CALCIUM	4000.0	3927.75	98.2
IRON	4000.0	3950.74	98.8
MAGNESIUM	4000.0	3933.84	98.3
MOLYBDENUM	40.0	40.32	100.8
POTASSIUM	4000.0	3913.14	97.8
SODIUM	4000.0	3928.25	98.2
ZINC	20.0	20.52	102.6

SAMPLE: CCV

File: LNH04A Aug 04, 2020 15:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.80	94.2
CALCIUM	5000.0	4727.91	94.6
IRON	5000.0	4823.39	96.5
MAGNESIUM	5000.0	4962.06	99.2
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4903.58	98.1
SODIUM	5000.0	5065.87	101.3
ZINC	25.0	25.20	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH04A Aug 04, 2020 17:38

Analyte	True	Found	%R (1)
ALUMINUM	500.0	472.80	94.6
CALCIUM	5000.0	4777.77	95.6
IRON	5000.0	4810.93	96.2
MAGNESIUM	5000.0	4919.33	98.4
MOLYBDENUM	25.0	24.93	99.7
POTASSIUM	5000.0	4781.17	95.6
SODIUM	5000.0	4936.34	98.7
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNH04A Aug 04, 2020 18:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.84	96.2
CALCIUM	5000.0	4831.78	96.6
IRON	5000.0	4866.36	97.3
MAGNESIUM	5000.0	5027.15	100.5
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4857.49	97.1
SODIUM	5000.0	5122.39	102.4
ZINC	25.0	25.15	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH05A Aug 05, 2020 16:06

Analyte	True	Found	%R (1)
ALUMINUM	400.0	368.02	92.0
CALCIUM	4000.0	4087.97	102.2
COPPER	20.0	20.37	101.8
IRON	4000.0	4111.52	102.8
LEAD	20.0	20.24	101.2
MAGNESIUM	4000.0	3965.12	99.1
MOLYBDENUM	40.0	40.44	101.1
POTASSIUM	4000.0	3933.99	98.3
SODIUM	4000.0	3977.04	99.4
ZINC	20.0	19.86	99.3

SAMPLE: CCV

File: LNH05A Aug 05, 2020 16:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.76	96.2
CALCIUM	5000.0	5049.24	101.0
COPPER	25.0	26.22	104.9
IRON	5000.0	5122.91	102.5
LEAD	25.0	25.34	101.4
MAGNESIUM	5000.0	5073.26	101.5
MOLYBDENUM	25.0	25.32	101.3
POTASSIUM	5000.0	5044.24	100.9
SODIUM	5000.0	5165.67	103.3
ZINC	25.0	25.91	103.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH05A Aug 05, 2020 17:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.18	95.2
CALCIUM	5000.0	5053.26	101.1
COPPER	25.0	25.79	103.2
IRON	5000.0	5114.94	102.3
LEAD	25.0	26.15	104.6
MAGNESIUM	5000.0	5035.27	100.7
MOLYBDENUM	25.0	24.95	99.8
POTASSIUM	5000.0	4962.71	99.3
SODIUM	5000.0	5135.79	102.7
ZINC	25.0	25.39	101.6

SAMPLE: CCV

File: LNH05A Aug 05, 2020 17:41

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.06	96.8
CALCIUM	5000.0	5058.80	101.2
COPPER	25.0	25.54	102.2
IRON	5000.0	5060.84	101.2
LEAD	25.0	25.89	103.6
MAGNESIUM	5000.0	5031.83	100.6
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4970.06	99.4
SODIUM	5000.0	5094.29	101.9
ZINC	25.0	25.19	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH06A Aug 06, 2020 15:31

Analyte	True	Found	%R (1)
ALUMINUM	400.0	376.89	94.2
ANTIMONY	20.0	20.21	101.1
CALCIUM	4000.0	3937.52	98.4
COPPER	20.0	20.44	102.2
IRON	4000.0	3895.50	97.4
LEAD	20.0	20.07	100.4
MAGNESIUM	4000.0	3982.00	99.6
MOLYBDENUM	40.0	40.36	100.9
POTASSIUM	4000.0	3973.61	99.3
SODIUM	4000.0	3968.72	99.2

SAMPLE: CCV

File: LNH06A Aug 06, 2020 15:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	499.94	100.0
ANTIMONY	25.0	25.83	103.3
CALCIUM	5000.0	5008.51	100.2
COPPER	25.0	25.95	103.8
IRON	5000.0	5023.16	100.5
LEAD	25.0	25.18	100.7
MAGNESIUM	5000.0	5074.43	101.5
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	5051.18	101.0
SODIUM	5000.0	5144.62	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH06A Aug 06, 2020 16:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.86	98.2
ANTIMONY	25.0	25.04	100.2
CALCIUM	5000.0	4821.79	96.4
COPPER	25.0	25.15	100.6
IRON	5000.0	4831.51	96.6
LEAD	25.0	24.84	99.4
MAGNESIUM	5000.0	4943.12	98.9
MOLYBDENUM	25.0	24.80	99.2
POTASSIUM	5000.0	4922.09	98.4
SODIUM	5000.0	4985.76	99.7

SAMPLE: CCV

File: LNH06A Aug 06, 2020 16:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	497.32	99.5
ANTIMONY	25.0	24.92	99.7
CALCIUM	5000.0	4872.62	97.5
COPPER	25.0	25.54	102.2
IRON	5000.0	4849.28	97.0
LEAD	25.0	24.57	98.3
MAGNESIUM	5000.0	5048.58	101.0
MOLYBDENUM	25.0	25.11	100.4
POTASSIUM	5000.0	5011.60	100.2
SODIUM	5000.0	5092.70	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH06A Aug 06, 2020 17:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	495.13	99.0
ANTIMONY	25.0	25.99	104.0
CALCIUM	5000.0	4853.52	97.1
COPPER	25.0	25.18	100.7
IRON	5000.0	4851.61	97.0
LEAD	25.0	25.59	102.4
MAGNESIUM	5000.0	4939.76	98.8
MOLYBDENUM	25.0	24.78	99.1
POTASSIUM	5000.0	4917.60	98.4
SODIUM	5000.0	4950.98	99.0

SAMPLE: CCV

File: LNH06A Aug 06, 2020 18:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.94	97.2
ANTIMONY	25.0	24.85	99.4
CALCIUM	5000.0	4899.44	98.0
COPPER	25.0	25.26	101.0
IRON	5000.0	4831.74	96.6
LEAD	25.0	24.48	97.9
MAGNESIUM	5000.0	4915.94	98.3
MOLYBDENUM	25.0	24.80	99.2
POTASSIUM	5000.0	4924.85	98.5
SODIUM	5000.0	4926.22	98.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICV

File: LNH12B Aug 12, 2020 15:16

Analyte	True	Found	%R (1)
ALUMINUM	400.0	378.32	94.6
CALCIUM	4000.0	4019.70	100.5
IRON	4000.0	3976.06	99.4
MAGNESIUM	4000.0	3982.14	99.6
MOLYBDENUM	40.0	39.41	98.5
POTASSIUM	4000.0	3913.96	97.8
SODIUM	4000.0	3945.32	98.6
ZINC	20.0	19.53	97.7

SAMPLE: CCV

File: LNH12B Aug 12, 2020 15:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	501.52	100.3
CALCIUM	5000.0	4904.97	98.1
IRON	5000.0	4875.33	97.5
MAGNESIUM	5000.0	5050.67	101.0
MOLYBDENUM	25.0	25.49	102.0
POTASSIUM	5000.0	5047.46	100.9
SODIUM	5000.0	5042.48	100.8
ZINC	25.0	25.28	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH12B Aug 12, 2020 16:12

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.74	97.3
CALCIUM	5000.0	4976.11	99.5
IRON	5000.0	4892.27	97.8
MAGNESIUM	5000.0	4891.43	97.8
MOLYBDENUM	25.0	24.23	96.9
POTASSIUM	5000.0	4871.85	97.4
SODIUM	5000.0	4859.34	97.2
ZINC	25.0	24.05	96.2

SAMPLE: CCV

File: LNH12B Aug 12, 2020 16:47

Analyte	True	Found	%R (1)
ALUMINUM	500.0	504.79	101.0
CALCIUM	5000.0	4973.87	99.5
IRON	5000.0	4920.01	98.4
MAGNESIUM	5000.0	5101.02	102.0
MOLYBDENUM	25.0	24.90	99.6
POTASSIUM	5000.0	5013.16	100.3
SODIUM	5000.0	5047.96	101.0
ZINC	25.0	24.80	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCV

File: LNH12B Aug 12, 2020 17:18

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.84	98.6
CALCIUM	5000.0	4985.05	99.7
IRON	5000.0	4935.37	98.7
MAGNESIUM	5000.0	4941.32	98.8
MOLYBDENUM	25.0	24.21	96.8
POTASSIUM	5000.0	4886.24	97.7
SODIUM	5000.0	4889.68	97.8
ZINC	25.0	24.48	97.9

SAMPLE: CCV

File: LNH12B Aug 12, 2020 17:49

Analyte	True	Found	%R (1)
ALUMINUM	500.0	487.20	97.4
CALCIUM	5000.0	4947.11	98.9
IRON	5000.0	4917.66	98.4
MAGNESIUM	5000.0	4892.22	97.8
MOLYBDENUM	25.0	24.06	96.2
POTASSIUM	5000.0	4834.10	96.7
SODIUM	5000.0	4805.45	96.1
ZINC	25.0	24.16	96.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG20A Jul 20, 2020 15:31

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	17.39	87.0
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	20.28	101.4
COPPER	0.6	0.58	96.7
IRON	20.0	21.27	106.3
LEAD	0.2	0.21	105.0
MAGNESIUM	20.0	20.61	103.1
MOLYBDENUM	1.0	1.00	100.0
POTASSIUM	200.0	204.44	102.2
SODIUM	200.0	205.47	102.7
ZINC	2.0	2.14	107.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG22A Jul 22, 2020 13:42

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.99	94.9
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	22.59	112.9
COPPER	0.6	0.64	106.7
IRON	20.0	21.76	108.8
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	19.97	99.8
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	213.75	106.9
SODIUM	200.0	218.75	109.4
ZINC	2.0	2.10	105.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG24A Jul 24, 2020 17:24

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.94	109.7
IRON	20.0	23.11	115.6
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	19.22	96.1
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.16	104.6
SODIUM	200.0	228.92	114.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNG27A Jul 27, 2020 16:32

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.77	93.8
CALCIUM	20.0	22.19	111.0
COPPER	0.6	0.71	118.3
IRON	20.0	21.68	108.4
MAGNESIUM	20.0	20.50	102.5
MOLYBDENUM	1.0	1.06	106.0
POTASSIUM	200.0	201.86	100.9
SODIUM	200.0	218.83	109.4

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH04A Aug 04, 2020 14:49

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.59	93.0
CALCIUM	20.0	19.77	98.8
IRON	20.0	21.55	107.8
MAGNESIUM	20.0	21.01	105.1
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	204.83	102.4
SODIUM	200.0	208.69	104.3
ZINC	2.0	1.97	98.5

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH05A Aug 05, 2020 16:12

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	17.33	86.6
CALCIUM	20.0	16.65	83.2
COPPER	0.6	0.60	100.0
IRON	20.0	22.17	110.9
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	22.84	114.2
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	205.40	102.7
SODIUM	200.0	208.91	104.5
ZINC	2.0	1.62	81.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH06A Aug 06, 2020 15:36

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.02	100.1
ANTIMONY	0.2	0.23	115.0
CALCIUM	20.0	21.07	105.4
COPPER	0.6	0.68	113.3
IRON	20.0	21.68	108.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	23.53	117.7
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.78	104.4
SODIUM	200.0	209.93	105.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: PQL

File: LNH12B Aug 12, 2020 15:21

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
CALCIUM	20.0	20.25	101.3
IRON	20.0	21.01	105.1
MAGNESIUM	20.0	21.66	108.3
MOLYBDENUM	1.0	0.99	99.0
POTASSIUM	200.0	210.44	105.2
SODIUM	200.0	214.53	107.3
ZINC	2.0	2.06	103.0

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG20A Jul 20, 2020 15:28

Analyte	Result	C
ALUMINUM	-1.074	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.118	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 20, 2020 15:56

Analyte	Result	C
ALUMINUM	9.152	J
ANTIMONY	0.061	U
CALCIUM	9.254	J
COPPER	0.425	B
IRON	12.456	B
LEAD	0.034	J
MAGNESIUM	11.730	B
MOLYBDENUM	0.456	J
POTASSIUM	25.258	J
SODIUM	71.078	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 20, 2020 16:12

Analyte	Result	C
ALUMINUM	-0.750	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	1.723	J
MOLYBDENUM	0.125	J
POTASSIUM	15.269	J
SODIUM	23.891	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 16:46

Analyte	Result	C
ALUMINUM	-1.409	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	10.239	B
MOLYBDENUM	0.020	U
POTASSIUM	18.973	J
SODIUM	129.162	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 17:18

Analyte	Result	C
ALUMINUM	-1.228	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.129	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	6.836	J
MOLYBDENUM	0.020	U
POTASSIUM	19.023	J
SODIUM	135.466	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 17:51

Analyte	Result	C
ALUMINUM	1.715	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.125	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	-1.443	U
MOLYBDENUM	-0.022	U
POTASSIUM	16.318	J
SODIUM	47.861	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 18:23

Analyte	Result	C
ALUMINUM	1.836	J
ANTIMONY	0.061	U
CALCIUM	10.653	B
COPPER	0.087	U
IRON	13.534	B
LEAD	0.050	J
MAGNESIUM	-4.459	U
MOLYBDENUM	0.023	J
POTASSIUM	16.119	J
SODIUM	51.551	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 18:55

Analyte	Result	C
ALUMINUM	-0.782	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	1.559	B
MAGNESIUM	-1.755	U
MOLYBDENUM	0.020	U
POTASSIUM	17.187	J
SODIUM	45.654	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 19:27

Analyte	Result	C
ALUMINUM	-1.251	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.351	B
MAGNESIUM	-2.479	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	34.825	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 19:59

Analyte	Result	C
ALUMINUM	-1.241	U
ANTIMONY	0.061	U
CALCIUM	6.858	J
COPPER	0.087	U
IRON	6.400	U
LEAD	0.170	B
MAGNESIUM	-2.127	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	41.748	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 20:31

Analyte	Result	C
ALUMINUM	-1.613	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.142	B
MAGNESIUM	-1.870	U
MOLYBDENUM	-0.023	U
POTASSIUM	17.718	J
SODIUM	21.541	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 21:04

Analyte	Result	C
ALUMINUM	1.619	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.092	U
IRON	20.505	B
LEAD	0.122	B
MAGNESIUM	-6.185	U
MOLYBDENUM	0.020	U
POTASSIUM	14.455	J
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 21:35

Analyte	Result	C
ALUMINUM	-1.333	U
ANTIMONY	0.061	U
CALCIUM	7.240	J
COPPER	-0.107	U
IRON	6.400	U
LEAD	0.075	J
MAGNESIUM	-1.810	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	7.979	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 22:07

Analyte	Result	C
ALUMINUM	-0.936	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.102	U
IRON	6.400	U
LEAD	0.064	J
MAGNESIUM	-1.731	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	14.402	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 22:40

Analyte	Result	C
ALUMINUM	-0.896	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.108	U
IRON	6.400	U
LEAD	0.050	J
MAGNESIUM	-1.348	U
MOLYBDENUM	-0.055	U
POTASSIUM	12.000	U
SODIUM	21.741	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG20A Jul 20, 2020 23:11

Analyte	Result	C
ALUMINUM	-1.466	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.065	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.405	J
POTASSIUM	28.138	J
SODIUM	63.793	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 20, 2020 23:40

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.104	U
IRON	6.400	U
LEAD	0.081	J
MAGNESIUM	-1.160	U
MOLYBDENUM	0.020	U
POTASSIUM	26.254	J
SODIUM	43.230	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG20A Jul 21, 2020 00:11

Analyte	Result	C
ALUMINUM	3.449	J
ANTIMONY	0.061	U
CALCIUM	11.540	B
COPPER	0.087	U
IRON	12.450	B
LEAD	0.172	B
MAGNESIUM	0.796	J
MOLYBDENUM	-0.038	U
POTASSIUM	22.952	J
SODIUM	13.235	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG20A Jul 21, 2020 00:16

Analyte	Result	C
ALUMINUM	2.343	J
ANTIMONY	0.061	U
CALCIUM	7.049	J
COPPER	-0.094	U
IRON	6.400	U
LEAD	0.106	B
MAGNESIUM	1.699	J
MOLYBDENUM	0.020	U
POTASSIUM	19.842	J
SODIUM	13.687	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG20A Jul 21, 2020 00:48

Analyte	Result	C
ALUMINUM	0.437	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.109	U
IRON	6.400	U
LEAD	0.120	B
MAGNESIUM	-1.020	U
MOLYBDENUM	0.020	U
POTASSIUM	24.357	J
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG22A Jul 22, 2020 13:40

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.039	J
MAGNESIUM	-1.628	U
MOLYBDENUM	0.153	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:13

Analyte	Result	C
ALUMINUM	17.806	B
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.185	J
IRON	6.788	J
LEAD	0.034	J
MAGNESIUM	21.388	B
MOLYBDENUM	0.524	B
POTASSIUM	29.833	J
SODIUM	69.891	J
ZINC	0.243	J

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:18

Analyte	Result	C
ALUMINUM	9.005	J
ANTIMONY	0.070	J
CALCIUM	14.926	B
COPPER	0.108	J
IRON	15.712	B
LEAD	0.083	J
MAGNESIUM	15.430	B
MOLYBDENUM	0.267	J
POTASSIUM	18.915	J
SODIUM	48.372	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG22A Jul 22, 2020 14:36

Analyte	Result	C
ALUMINUM	0.601	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	14.616	B
LEAD	0.024	J
MAGNESIUM	4.380	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	14.813	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG24A Jul 24, 2020 17:21

Analyte	Result	C
ALUMINUM	0.479	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.210	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 17:45

Analyte	Result	C
ALUMINUM	3.295	J
ANTIMONY	0.070	J
CALCIUM	6.800	U
IRON	6.436	J
LEAD	0.113	B
MAGNESIUM	1.431	J
MOLYBDENUM	0.158	J
POTASSIUM	12.000	U
SODIUM	24.662	J

SAMPLE: CCB

File: LNG24A Jul 24, 2020 18:16

Analyte	Result	C
ALUMINUM	0.368	J
ANTIMONY	0.061	U
CALCIUM	8.450	J
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-1.125	U
MOLYBDENUM	0.088	J
POTASSIUM	12.000	U
SODIUM	39.932	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 18:47

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-2.104	U
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:19

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	-2.495	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-10.409	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:51

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-0.804	U
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	51.319	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNG27A Jul 27, 2020 16:30

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.196	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 16:54

Analyte	Result	C
ALUMINUM	1.453	J
CALCIUM	6.800	U
COPPER	0.158	J
IRON	6.400	U
MAGNESIUM	0.595	J
MOLYBDENUM	0.147	J
POTASSIUM	12.000	U
SODIUM	18.722	J

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:26

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	2.573	J
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:57

Analyte	Result	C
ALUMINUM	-0.586	U
CALCIUM	7.385	J
COPPER	0.088	J
IRON	6.400	U
MAGNESIUM	1.243	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	27.633	J

SAMPLE: CCB

File: LNG27A Jul 27, 2020 18:29

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
MAGNESIUM	3.305	J
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	97.453	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH04A Aug 04, 2020 14:46

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.904	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 15:10

Analyte	Result	C
ALUMINUM	1.292	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.691	J
MOLYBDENUM	0.116	J
POTASSIUM	12.000	U
SODIUM	7.248	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 17:40

Analyte	Result	C
ALUMINUM	0.897	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.807	J
MOLYBDENUM	0.050	J
POTASSIUM	12.000	U
SODIUM	-11.487	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNH04A Aug 04, 2020 18:13

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.883	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	11.016	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH05A Aug 05, 2020 16:09

Analyte	Result	C
ALUMINUM	-1.378	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.828	J
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	J

SAMPLE: CCB

File: LNH05A Aug 05, 2020 16:33

Analyte	Result	C
ALUMINUM	-0.417	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.033	J
MAGNESIUM	3.089	J
MOLYBDENUM	0.127	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	-0.547	U

SAMPLE: CCB

File: LNH05A Aug 05, 2020 17:11

Analyte	Result	C
ALUMINUM	-0.735	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	2.764	J
MOLYBDENUM	0.054	J
POTASSIUM	12.000	U
SODIUM	-8.492	U
ZINC	-0.544	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB

File: LNH05A Aug 05, 2020 17:43

Analyte	Result	C
ALUMINUM	-2.306	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	1.220	J
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	32.863	J
ZINC	-0.567	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH06A Aug 06, 2020 15:34

Analyte	Result	C
ALUMINUM	0.519	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	2.632	J
MOLYBDENUM	0.079	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNH06A Aug 06, 2020 15:58

Analyte	Result	C
ALUMINUM	1.985	J
ANTIMONY	0.105	B
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.165	B
MAGNESIUM	2.834	J
MOLYBDENUM	0.129	J
POTASSIUM	12.000	U
SODIUM	12.196	J

SAMPLE: CCB

File: LNH06A Aug 06, 2020 16:30

Analyte	Result	C
ALUMINUM	0.460	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.505	J
MOLYBDENUM	0.052	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNH06A Aug 06, 2020 17:02

Analyte	Result	C
ALUMINUM	0.589	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	0.837	J
MOLYBDENUM	0.041	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNH06A Aug 06, 2020 17:34

Analyte	Result	C
ALUMINUM	1.171	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.027	J
MAGNESIUM	1.092	J
MOLYBDENUM	0.042	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNH06A Aug 06, 2020 18:07

Analyte	Result	C
ALUMINUM	0.982	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.040	J
MAGNESIUM	1.014	J
MOLYBDENUM	0.044	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICB

File: LNH12B Aug 12, 2020 15:19

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.100	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH12B Aug 12, 2020 15:43

Analyte	Result	C
ALUMINUM	4.214	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	4.630	J
MOLYBDENUM	0.164	J
POTASSIUM	12.000	U
SODIUM	11.588	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH12B Aug 12, 2020 16:14

Analyte	Result	C
ALUMINUM	1.193	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	1.553	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: CCB
File: LNH12B Aug 12, 2020 16:49

Analyte	Result	C
ALUMINUM	-0.369	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.037	J
POTASSIUM	12.000	U
SODIUM	-9.867	U
ZINC	0.220	U

SAMPLE: CCB
File: LNH12B Aug 12, 2020 17:20

Analyte	Result	C
ALUMINUM	-0.392	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	-0.352	U
MOLYBDENUM	0.023	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNH12B Aug 12, 2020 17:51

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.350	U
MOLYBDENUM	0.020	U
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG16IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG16IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.082	J
LEAD	0.036	J
ZINC	0.40	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG20IMS2

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG20IMS2

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.14	J
LEAD	0.140	B
ZINC	0.44	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNH04IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NH04IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.024	J
ZINC	0.13	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG21IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG21IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ANTIMONY	0.50	U
COPPER	1.7	B
LEAD	0.50	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG29IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ZINC	8.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSAB

File: LNG20A Jul 20, 2020 15:50

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89659.54	89.7
ANTIMONY	20.00	19.38	95.0
CALCIUM	100000.00	98697.43	98.7
COPPER	20.47	19.49	95.0
IRON	100000.00	96847.53	96.8
LEAD	20.13	19.65	100.0
MAGNESIUM	100000.00	93920.45	93.9
MOLYBDENUM	2000.00	1967.70	98.4
POTASSIUM	100000.00	92256.75	92.3
SODIUM	100000.00	93903.37	93.9
ZINC	20.40	18.83	95.0

SAMPLE: ICSA

File: LNG20A Jul 20, 2020 16:01

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91637.36	91.6
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	100004.80	100.0
COPPER	0.26	0.78	•
IRON	100000.00	97507.25	97.5
LEAD	0.13	0.10	
MAGNESIUM	100000.00	96140.78	96.1
MOLYBDENUM	2000.00	1980.68	99.1
POTASSIUM	100000.00	94013.93	94.0
SODIUM	100000.00	95865.06	95.9
ZINC	0.24	0.55	

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG22A Jul 22, 2020 13:45

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92025.10	92.0
ANTIMONY	0.19	0.15	
CALCIUM	100000.00	99865.83	99.9
COPPER	0.26	0.45	
IRON	100000.00	96989.03	97.0
LEAD	0.13	0.09	
MAGNESIUM	100000.00	97235.85	97.2
MOLYBDENUM	2000.00	1979.51	99.0
POTASSIUM	100000.00	95710.14	95.7
SODIUM	100000.00	96772.05	96.8
ZINC	0.24	0.57	

SAMPLE: ICSAB

File: LNG22A Jul 22, 2020 13:48

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89743.61	89.7
ANTIMONY	20.00	18.62	95.0
CALCIUM	100000.00	98416.17	98.4
COPPER	20.47	19.22	95.0
IRON	100000.00	96374.97	96.4
LEAD	20.13	19.82	100.0
MAGNESIUM	100000.00	95357.19	95.4
MOLYBDENUM	2000.00	1991.24	99.6
POTASSIUM	100000.00	93594.03	93.6
SODIUM	100000.00	95153.15	95.2
ZINC	20.40	18.70	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSAB

File: LNG22A Jul 22, 2020 14:04

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90025.53	90.0
ANTIMONY	20.00	18.24	90.0
CALCIUM	100000.00	101379.26	101.4
COPPER	20.47	19.32	95.0
IRON	100000.00	99086.59	99.1
LEAD	20.13	19.07	95.0
MAGNESIUM	100000.00	95589.71	95.6
MOLYBDENUM	2000.00	1996.17	99.8
POTASSIUM	100000.00	93692.87	93.7
SODIUM	100000.00	95287.94	95.3
ZINC	20.40	18.72	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG24A Jul 24, 2020 17:26

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	97196.56	97.2
ANTIMONY	0.19	0.17	
CALCIUM	100000.00	97945.29	97.9
IRON	100000.00	96464.18	96.5
LEAD	0.13	0.09	
MAGNESIUM	100000.00	101202.85	101.2
MOLYBDENUM	2000.00	2114.34	105.7
POTASSIUM	100000.00	97416.54	97.4
SODIUM	100000.00	101176.76	101.2

SAMPLE: ICSAB

File: LNG24A Jul 24, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92943.98	92.9
ANTIMONY	20.00	19.66	100.0
CALCIUM	100000.00	97685.99	97.7
IRON	100000.00	95228.33	95.2
LEAD	20.13	20.51	105.0
MAGNESIUM	100000.00	96860.91	96.9
MOLYBDENUM	2000.00	2054.76	102.8
POTASSIUM	100000.00	93389.44	93.4
SODIUM	100000.00	97298.41	97.3

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG27A Jul 27, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93327.61	93.3
CALCIUM	100000.00	101196.79	101.2
COPPER	0.26	0.55	
IRON	100000.00	98471.88	98.5
MAGNESIUM	100000.00	101869.86	101.9
MOLYBDENUM	2000.00	2077.93	103.9
POTASSIUM	100000.00	96134.05	96.1
SODIUM	100000.00	98444.57	98.4

SAMPLE: ICSAB

File: LNG27A Jul 27, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90492.65	90.5
CALCIUM	100000.00	96094.68	96.1
COPPER	20.47	19.03	95.0
IRON	100000.00	93815.11	93.8
MAGNESIUM	100000.00	99295.07	99.3
MOLYBDENUM	2000.00	2048.57	102.5
POTASSIUM	100000.00	93391.14	93.4
SODIUM	100000.00	96442.34	96.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH04A Aug 04, 2020 14:51

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90063.20	90.1
CALCIUM	100000.00	99196.61	99.2
IRON	100000.00	96110.21	96.1
MAGNESIUM	100000.00	95522.87	95.5
MOLYBDENUM	2000.00	1994.74	99.8
POTASSIUM	100000.00	96822.08	96.8
SODIUM	100000.00	97712.43	97.7
ZINC	0.24	0.53	

SAMPLE: ICSAB

File: LNH04A Aug 04, 2020 14:54

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91061.63	91.1
CALCIUM	100000.00	102667.63	102.7
IRON	100000.00	100851.08	100.9
MAGNESIUM	100000.00	98059.54	98.1
MOLYBDENUM	2000.00	2072.74	103.6
POTASSIUM	100000.00	98832.43	98.8
SODIUM	100000.00	100883.69	100.9
ZINC	20.40	19.65	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH05A Aug 05, 2020 16:14

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90636.38	90.6
CALCIUM	100000.00	102559.25	102.6
COPPER	0.26	0.27	
IRON	100000.00	99704.63	99.7
LEAD	0.13	0.10	
MAGNESIUM	100000.00	96178.73	96.2
MOLYBDENUM	2000.00	2009.47	100.4
POTASSIUM	100000.00	97696.07	97.7
SODIUM	100000.00	98931.48	98.9
ZINC	0.24	-0.10	

SAMPLE: ICSAB

File: LNH05A Aug 05, 2020 16:17

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90998.96	91.0
CALCIUM	100000.00	104747.88	104.7
COPPER	20.47	19.80	100.0
IRON	100000.00	101823.47	101.8
LEAD	20.13	21.50	110.0
MAGNESIUM	100000.00	98641.71	98.6
MOLYBDENUM	2000.00	2102.53	105.2
POTASSIUM	100000.00	99259.27	99.3
SODIUM	100000.00	101614.74	101.6
ZINC	20.40	19.32	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH06A Aug 06, 2020 15:39

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92824.05	92.8
ANTIMONY	0.19	0.15	
CALCIUM	100000.00	98143.41	98.1
COPPER	0.26	0.28	
IRON	100000.00	93801.68	93.8
LEAD	0.13	0.09	
MAGNESIUM	100000.00	98153.88	98.2
MOLYBDENUM	2000.00	2025.44	101.3
POTASSIUM	100000.00	99332.19	99.3
SODIUM	100000.00	99697.00	99.7

SAMPLE: ICSAB

File: LNH06A Aug 06, 2020 15:42

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93532.23	93.5
ANTIMONY	20.00	20.75	105.0
CALCIUM	100000.00	102082.51	102.1
COPPER	20.47	19.44	95.0
IRON	100000.00	98446.73	98.4
LEAD	20.13	21.24	105.0
MAGNESIUM	100000.00	99944.42	99.9
MOLYBDENUM	2000.00	2052.30	102.6
POTASSIUM	100000.00	101945.60	101.9
SODIUM	100000.00	102720.05	102.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH12B Aug 12, 2020 15:24

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	88724.73	88.7
CALCIUM	100000.00	100447.46	100.4
IRON	100000.00	94601.18	94.6
MAGNESIUM	100000.00	94369.89	94.4
MOLYBDENUM	2000.00	1935.58	96.8
POTASSIUM	100000.00	95168.60	95.2
SODIUM	100000.00	95659.34	95.7
ZINC	0.24	0.50	

SAMPLE: ICSAB

File: LNH12B Aug 12, 2020 15:27

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90270.57	90.3
CALCIUM	100000.00	103683.02	103.7
IRON	100000.00	97822.29	97.8
MAGNESIUM	100000.00	97346.02	97.3
MOLYBDENUM	2000.00	2032.21	101.6
POTASSIUM	100000.00	97703.11	97.7
SODIUM	100000.00	98685.69	98.7
ZINC	20.40	19.01	95.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.79		1.14		8.01	8.1	N	72	124	MS
COPPER, TOTAL	43.2		23.3		20.02	99.5		84	119	MS
LEAD, TOTAL	45.6		502		8.01	-5697.9	N	84	118	MS
ZINC, TOTAL	116		75.2		40.05	103.1		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.01		1.14		8.13	10.8	N	72	124	MS
COPPER, TOTAL	40.2		23.3		20.32	83.2	N	84	119	MS
LEAD, TOTAL	51.2		502		8.13	-5544.6	N	84	118	MS
ZINC, TOTAL	112		75.2		40.64	90.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.63		0.15		7.73	19.2	N	72	124	MS
COPPER, TOTAL	38.3		24.4		19.33	72.0	N	84	119	MS
LEAD, TOTAL	43.2		38.0		7.73	66.7	N	84	118	MS
ZINC, TOTAL	98.4		71.8		38.67	68.7	N	82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	1.92		0.15		7.85	22.5	N	72	124	MS
COPPER, TOTAL	43.2		24.4		19.62	96.0		84	119	MS
LEAD, TOTAL	48.6		38.0		7.85	135.7	N	84	118	MS
ZINC, TOTAL	116		71.8		39.23	114.2		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.08		0.11	J	10.68	27.8	N	72	124	MS
COPPER, TOTAL	49.2		24.2		26.7	93.8		84	119	MS
LEAD, TOTAL	30.2		19.3		10.68	102.4		84	118	MS
ZINC, TOTAL	114		66.4		53.4	89.5		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.06		0.11	J	10.68	27.6	N	72	124	MS
COPPER, TOTAL	51.7		24.2		26.7	102.9		84	119	MS
LEAD, TOTAL	33.3		19.3		10.68	131.0	N	84	118	MS
ZINC, TOTAL	120		66.4		53.4	100.5		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AP

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	5.18		0.236		9.97	49.6	N	72	124	MS
COPPER, TOTAL	40.6		15.2		24.92	101.9		84	119	MS
LEAD, TOTAL	89.4		90.7		9.97	-12.5	N	84	118	MS
ZINC, TOTAL	109		62.6		49.84	92.9		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AS

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.72		0.236		10.06	34.7	N	72	124	MS
COPPER, TOTAL	37.2		15.2		25.14	87.4		84	119	MS
LEAD, TOTAL	98.6		90.7		10.06	78.8	N	84	118	MS
ZINC, TOTAL	102		62.6		50.28	79.3	N	82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	4.65		2.78		2	93.6		80	120	MS
COPPER, TOTAL	62.4		56.9		6	91.3		80	120	MS
LEAD, TOTAL	1190		1230		2	-2017.8	A	80	120	MS
ZINC, TOTAL	196		184		20	59.4	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.26		0.38		2	94.1		80	120	MS
COPPER, TOTAL	65.4		62.1		6	55.5	A	80	120	MS
LEAD, TOTAL	93.5		96.9		2	-170.1	A	80	120	MS
ZINC, TOTAL	195		183		20	58.2	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.18		0.20	J	2	99.3		80	120	MS
COPPER, TOTAL	50.3		44.9		6	89.6		80	120	MS
LEAD, TOTAL	37.1		35.8		2	65.5	A	80	120	MS
ZINC, TOTAL	141		123		20	90.9		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AA

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.54		0.485		2	102.6		80	120	MS
COPPER, TOTAL	36.2		31.3		6	82.2		80	120	MS
LEAD, TOTAL	184		187		2	-145.6	A	80	120	MS
ZINC, TOTAL	148		129		20	94.9		80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 90.5 **Lab Sample ID:** SN5717-005

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.01		1.79		11.7		MS
COPPER, TOTAL		40.2		43.2		7.2		MS
LEAD, TOTAL		51.2		45.6		11.6		MS
ZINC, TOTAL		112		116		4.1		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 93.7 **Lab Sample ID:** SN5717-007

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		1.92		1.63		16.1		MS
COPPER, TOTAL		43.2		38.3		12.1		MS
LEAD, TOTAL		48.6		43.2		12.0		MS
ZINC, TOTAL		116		98.4		16.9		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 91.8 **Lab Sample ID:** SN5717-010

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.06		3.08		0.8		MS
COPPER, TOTAL		51.7		49.2		4.8		MS
LEAD, TOTAL		33.3		30.2		9.6		MS
ZINC, TOTAL		120		114		5.0		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03A

Matrix: SOIL **SDG Name:** SN5717

Percent Solids: 87.2 **Lab Sample ID:** SN5717-018

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.72		5.18		32.8	*	MS
COPPER, TOTAL		37.2		40.6		8.8		MS
LEAD, TOTAL		98.6		89.4		9.8		MS
ZINC, TOTAL		102		109		6.1		MS

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG16IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG16IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.53	95.3	72	124
COPPER	25.0	26.0	104.1	84	119
LEAD	10.0	9.62	96.2	84	118
ZINC	50.0	50.2	100.3	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG20IMS2

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NG20IMS2

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	8.57	85.7	72	124
COPPER	25.0	24.3	97.2	84	119
LEAD	10.0	8.77	87.7	84	118
ZINC	50.0	46.7	93.4	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONH04IMS1

Matrix: SOIL **SDG Name:** SN5717

QC Batch ID: NH04IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	10.4	103.6	72	124
COPPER	25.0	25.8	103.2	84	119
LEAD	10.0	10.4	104.3	84	118
ZINC	50.0	47.7	95.5	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG21IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG21IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	100	103	103.0	85	117
COPPER	250	279	111.5	85	118
LEAD	100	108	108.1	88	115

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG29IMW2

Matrix: WATER **SDG Name:** SN5717

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ZINC	500	526	105.1	83	119

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01DA02AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-005L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	2.78		2.74		1.4		MS
COPPER, TOTAL	56.9		63.9		12.3	E	MS
LEAD, TOTAL	1230		1230		0.0		MS
ZINC, TOTAL	184		204		10.9	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DA01AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-007L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.38		0.33	J	13.2		MS
COPPER, TOTAL	62.1		73.0		17.6	E	MS
LEAD, TOTAL	96.9		94.0		3.0		MS
ZINC, TOTAL	183		216		18.0	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02DB02AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-010L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.20	J	0.22	J	10.0		MS
COPPER, TOTAL	44.9		52.9		17.8	E	MS
LEAD, TOTAL	35.8		38.9		8.7		MS
ZINC, TOTAL	123		143		16.3	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03DA03AL

Matrix: SOIL **SDG Name:** SN5717

Lab Sample ID: SN5717-018L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.485		0.50	J	3.1		MS
COPPER, TOTAL	31.3		32.6		4.2		MS
LEAD, TOTAL	187		194		3.7		MS
ZINC, TOTAL	129		138		7.0		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.10	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.40	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	1.6	ug/L	MS	SW846 3010A / SW846 6020A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/25/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.011	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.037	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.015	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	0.78	ug/L	MS	SW846 3010A / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG16IMS1

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 07/16/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG16IMS1	LCSONG16IMS1	1	0.1	
PBSNG16IMS1	PBSNG16IMS1	1	0.1	
COR01DA01A	SN5717-001	1.17	0.1	A
COR01DA02A	SN5717-005	1.35	0.1	A
COR01DA02AP	SN5717-005P	1.38	0.1	A
COR01DA02AS	SN5717-005S	1.36	0.1	A
COR02DA01A	SN5717-007	1.36	0.1	A
COR02DA01AP	SN5717-007P	1.38	0.1	A
COR02DA01AS	SN5717-007S	1.36	0.1	A
COR02DA02B	SN5717-008	1.15	0.1	A
COR02DA02A	SN5717-009	1.1	0.1	A
COR03DA01A	SN5717-012	1.09	0.1	A
COR03DA03A	SN5717-018	1.18	0.1	A
COR03DA03AP	SN5717-018P	1.15	0.1	A
COR03DA03AS	SN5717-018S	1.14	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG20IMS2

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 07/20/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG20IMS2	LCSONG20IMS2	1	0.1	
PBSNG20IMS2	PBSNG20IMS2	1	0.1	
COR03DA02A	SN5717-014	1	0.1	A
COR03DA02B	SN5717-015	1.13	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG21IMW2

Matrix: WATER **SDG Name:** SN5717

Method: MS **Prep Date:** 07/21/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG21IMW2	LCSWNG21IMW2	0.05	0.05	
PBWNG21IMW2	PBWNG21IMW2	0.05	0.05	
COR03EQB	SN5717-020	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG29IMW2

Matrix: WATER **SDG Name:** SN5717

Method: MS **Prep Date:** 07/29/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG29IMW2	LCSWNG29IMW2	0.05	0.05	
PBWNG29IMW2	PBWNG29IMW2	0.05	0.05	
COR03EQB	SN5717-020R	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH04IMS1

Matrix: SOIL **SDG Name:** SN5717

Method: MS **Prep Date:** 08/04/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH04IMS1	LCSONH04IMS1	1	0.1	
PBSNH04IMS1	PBSNH04IMS1	1	0.1	
COR01DB02A	SN5717-004	1.09	0.1	A
COR02DB02A	SN5717-010	1.01	0.1	A
COR02DB02AP	SN5717-010P	1.02	0.1	A
COR02DB02AS	SN5717-010S	1.02	0.1	A
COR03DB01A	SN5717-013	1.02	0.1	A
COR03DB03A	SN5717-017	1	0.1	A

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	15:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	15:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	15:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	15:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	15:39											
ZZZZZZ		1	15:42											
ZZZZZZ		1	15:45											
ZZZZZZ		1	15:47											
ICSAB		1	15:50	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCV		1	15:53	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	15:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:01	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:04											
ZZZZZZ		5	16:06											
CCV		1	16:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:12	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:15											
ZZZZZZ		5	16:17											
ZZZZZZ		5	16:20											
ZZZZZZ		5	16:23											
ZZZZZZ		5	16:25											
ZZZZZZ		5	16:28											
ZZZZZZ		5	16:30											
ZZZZZZ		5	16:33											
ZZZZZZ		5	16:36											
ZZZZZZ		1	16:41											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCV		1	16:44	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:46	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:49											
ZZZZZZ		5	16:52											
ZZZZZZ		5	16:55											
ZZZZZZ		5	16:57											
ZZZZZZ		5	17:00											
ZZZZZZ		5	17:02											
ZZZZZZ		5	17:05											
ZZZZZZ		5	17:08											
ZZZZZZ		5	17:11											
ZZZZZZ		25	17:13											
CCV		1	17:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:18	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:21											
ZZZZZZ		5	17:24											
ZZZZZZ		5	17:27											
ZZZZZZ		1	17:29											
ZZZZZZ		5	17:32											
ZZZZZZ		1	17:34											
ZZZZZZ		1	17:37											
ZZZZZZ		5	17:40											
ZZZZZZ		5	17:43											
ZZZZZZ		5	17:45											
CCV		1	17:48	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:51	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:53											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	17:56									
ZZZZZZ		5	17:59									
ZZZZZZ		25	18:01									
ZZZZZZ		5	18:04									
ZZZZZZ		5	18:07									
ZZZZZZ		5	18:09									
ZZZZZZ		5	18:12									
ZZZZZZ		5	18:15									
ZZZZZZ		5	18:17									
CCV		1	18:20	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:25									
ZZZZZZ		5	18:28									
ZZZZZZ		5	18:31									
ZZZZZZ		5	18:33									
ZZZZZZ		5	18:36									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:42									
ZZZZZZ		5	18:44									
ZZZZZZ		5	18:47									
ZZZZZZ		5	18:50									
CCV		1	18:52	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:55	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:58									
ZZZZZZ		5	19:00									
ZZZZZZ		5	19:03									
ZZZZZZ		5	19:06									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
ZZZZZZ		5	19:14	
ZZZZZZ		5	19:16	
ZZZZZZ		5	19:19	
ZZZZZZ		5	19:22	
CCV		1	19:24	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:27	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:30	
ZZZZZZ		5	19:32	
ZZZZZZ		5	19:35	
ZZZZZZ		5	19:38	
ZZZZZZ		5	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:46	
ZZZZZZ		5	19:48	
ZZZZZZ		5	19:51	
ZZZZZZ		5	19:54	
CCV		1	19:56	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:59	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	20:02	
ZZZZZZ		5	20:04	
ZZZZZZ		5	20:07	
ZZZZZZ		5	20:10	
ZZZZZZ		5	20:12	
ZZZZZZ		5	20:15	
ZZZZZZ		5	20:18	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	20:21									
ZZZZZZ		5	20:23									
ZZZZZZ		5	20:26									
CCV		1	20:29	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	20:31	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:34									
ZZZZZZ		1	20:37									
ZZZZZZ		5	20:39									
ZZZZZZ		1	20:42									
ZZZZZZ		5	20:45									
ZZZZZZ		5	20:47									
ZZZZZZ		5	20:50									
ZZZZZZ		5	20:53									
ZZZZZZ		5	20:55									
ZZZZZZ		5	20:58									
CCV		1	21:01	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	21:04	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:06									
ZZZZZZ		5	21:09									
ZZZZZZ		5	21:12									
ZZZZZZ		5	21:14									
ZZZZZZ		5	21:17									
ZZZZZZ		5	21:19									
ZZZZZZ		5	21:22									
ZZZZZZ		5	21:25									
ZZZZZZ		5	21:27									
ZZZZZZ		5	21:30									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCV		1	21:33	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:35	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:38											
ZZZZZZ		5	21:41											
ZZZZZZ		5	21:43											
ZZZZZZ		5	21:46											
ZZZZZZ		25	21:49											
ZZZZZZ		5	21:51											
ZZZZZZ		5	21:54											
ZZZZZZ		5	21:57											
ZZZZZZ		5	21:59											
ZZZZZZ		5	22:02											
CCV		1	22:05	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:07	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:10											
ZZZZZZ		5	22:13											
ZZZZZZ		5	22:15											
ZZZZZZ		5	22:18											
ZZZZZZ		25	22:21											
ZZZZZZ		5	22:23											
ZZZZZZ		5	22:26											
ZZZZZZ		5	22:29											
ZZZZZZ		5	22:32											
ZZZZZZ		5	22:34											
CCV		1	22:37	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:40	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:42											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		5	22:45										
ZZZZZZ		5	22:48										
ZZZZZZ		1	22:50										
ZZZZZZ		5	22:53										
ZZZZZZ		1	22:56										
ZZZZZZ		1	22:58										
ZZZZZZ		1	23:01										
ZZZZZZ		1	23:04										
ZZZZZZ		1	23:06										
CCV		1	23:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	23:14										
ZZZZZZ		5	23:17										
ZZZZZZ		1	23:19										
ZZZZZZ		1	23:22										
PBSNG16IMS1		5	23:24		Sb		Cu		Pb					Zn
LCSONG16IMS1		5	23:27		Sb		Cu		Pb					Zn
ZZZZZZ		5	23:30										
ZZZZZZ		5	23:32										
SN5717-001	COR01DA01A	5	23:35		Sb		Cu		Pb					Zn
CCV		1	23:37	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:40	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-005	COR01DA02A	5	23:43		Sb		Cu		Pb					Zn
SN5717-005L	COR01DA02AL	25	23:45		Sb		Cu		Pb					Zn
SN5717-005A	COR01DA02AA	5	23:48		Sb		Cu		Pb					Zn
SN5717-005S	COR01DA02AS	5	23:50		Sb		Cu		Pb					Zn
SN5717-005P	COR01DA02AP	5	23:53		Sb		Cu		Pb					Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG20A

Date: 07/20/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements										
SN5717-007	COR02DA01A	5	23:56		Sb		Cu		Pb					Zn
SN5717-007L	COR02DA01AL	25	23:58		Sb		Cu		Pb					Zn
SN5717-007A	COR02DA01AA	5	00:01		Sb		Cu		Pb					Zn
SN5717-007S	COR02DA01AS	5	00:03		Sb		Cu		Pb					Zn
SN5717-007P	COR02DA01AP	5	00:06		Sb		Cu		Pb					Zn
CCV		1	00:09	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCV		1	00:14	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-008	COR02DA02B	5	00:19		Sb		Cu		Pb					Zn
SN5717-009	COR02DA02A	5	00:22		Sb		Cu		Pb					Zn
SN5717-012	COR03DA01A	5	00:24		Sb		Cu		Pb					Zn
SN5717-018	COR03DA03A	5	00:27		Sb		Cu		Pb					Zn
SN5717-018L	COR03DA03AL	25	00:29		Sb		Cu		Pb					Zn
SN5717-018A	COR03DA03AA	5	00:32		Sb		Cu		Pb					Zn
SN5717-018S	COR03DA03AS	5	00:35		Sb		Cu		Pb					Zn
SN5717-018P	COR03DA03AP	5	00:37		Sb		Cu		Pb					Zn
ZZZZZZ		1	00:40											
ZZZZZZ		5	00:43											
CCV		1	00:45	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:48	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22A

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	13:31	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CalStd		1	13:34	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICV		1	13:37	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICB		1	13:40	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
PQL		1	13:42	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSA		1	13:45	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSAB		1	13:48	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	13:50									
ZZZZZZ		1	13:53									
ZZZZZZ		1	13:55									
ZZZZZZ		1	13:58									
ICSAB		1	14:04	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:07									
CCV		1	14:10	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:13	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCV		1	14:15	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:18	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
PBSNG20IMS2		5	14:20	Sb		Cu	Pb					Zn
LCSONG20IMS2		5	14:23	Sb		Cu	Pb					Zn
SN5717-014	COR03DA02A	5	14:25	Sb		Cu	Pb					Zn
SN5717-015	COR03DA02B	5	14:28	Sb		Cu	Pb					Zn
ZZZZZZ		5	14:31									
CCV		1	14:33	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	14:36	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	17:13	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
CalStd		1	17:16	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ICV		1	17:19	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ICB		1	17:21	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
PQL		1	17:24	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ICSA		1	17:26	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ICSAB		1	17:29	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:32									
ZZZZZZ		1	17:34									
ZZZZZZ		1	17:37									
ZZZZZZ		1	17:40									
CCV		1	17:42	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
CCB		1	17:45	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:47									
ZZZZZZ		1	17:50									
ZZZZZZ		1	17:53									
ZZZZZZ		1	17:55									
ZZZZZZ		1	17:58									
ZZZZZZ		1	18:00									
ZZZZZZ		1	18:03									
ZZZZZZ		1	18:05									
ZZZZZZ		1	18:08									
ZZZZZZ		1	18:11									
CCV		1	18:13	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:16	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:18									
ZZZZZZ		5	18:21									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	18:24	
ZZZZZZ		1	18:26	
ZZZZZZ		1	18:29	
ZZZZZZ		1	18:31	
ZZZZZZ		5	18:34	
ZZZZZZ		5	18:37	
ZZZZZZ		5	18:39	
ZZZZZZ		5	18:42	
CCV		1	18:44	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	18:47	Al Sb Ca Fe Pb Mg Mo K Na
ZZZZZZ		5	18:50	
ZZZZZZ		5	18:53	
ZZZZZZ		5	18:55	
ZZZZZZ		5	18:58	
ZZZZZZ		10	19:00	
ZZZZZZ		20	19:03	
ZZZZZZ		5	19:06	
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
ZZZZZZ		5	19:13	
CCV		1	19:16	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	19:19	Al Sb Ca Fe Pb Mg Mo K Na
ZZZZZZ		5	19:21	
PBWNG21IMW2		5	19:24	Sb Pb
LCSWNG21IMW2		5	19:27	Sb Pb
SN5717-020	COR03EQB	5	19:29	Sb Pb
ZZZZZZ		5	19:32	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	19:35	
ZZZZZZ		5	19:37	
ZZZZZZ		5	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:45	
CCV		1	19:48	Al Sb Ca Fe Pb Mg Mo K Na
CCB		1	19:51	Al Sb Ca Fe Pb Mg Mo K Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	16:21	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CalStd		1	16:24	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICV		1	16:27	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICB		1	16:30	Al	Ca	Cu	Fe	Mg	Mo	K	Na
PQL		1	16:32	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICSA		1	16:35	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ICSAB		1	16:38	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		1	16:40								
ZZZZZZ		1	16:43								
ZZZZZZ		1	16:46								
ZZZZZZ		1	16:48								
CCV		1	16:51	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	16:54	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		5	16:57								
ZZZZZZ		5	16:59								
ZZZZZZ		5	17:02								
ZZZZZZ		5	17:04								
ZZZZZZ		5	17:07								
ZZZZZZ		25	17:10								
ZZZZZZ		5	17:12								
ZZZZZZ		5	17:15								
ZZZZZZ		25	17:18								
ZZZZZZ		5	17:20								
CCV		1	17:23	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	17:26	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		5	17:28								
ZZZZZZ		5	17:31								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	17:33							
ZZZZZZ		1	17:36							
ZZZZZZ		1	17:39							
ZZZZZZ		1	17:41							
ZZZZZZ		1	17:44							
ZZZZZZ		1	17:47							
ZZZZZZ		1	17:49							
ZZZZZZ		1	17:52							
CCV		1	17:55	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	17:57	Al	Ca	Cu	Fe	Mg	Mo	K	Na
ZZZZZZ		1	18:00							
ZZZZZZ		1	18:03							
ZZZZZZ		50	18:05							
PBWNG21IMW2		5	18:08			Cu				
LCSWNG21IMW2		5	18:11			Cu				
SN5717-020	COR03EQB	5	18:13			Cu				
ZZZZZZ		5	18:16							
ZZZZZZ		5	18:19							
ZZZZZZ		5	18:21							
ZZZZZZ		5	18:24							
CCV		1	18:27	Al	Ca	Cu	Fe	Mg	Mo	K	Na
CCB		1	18:29	Al	Ca	Cu	Fe	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	14:36	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	14:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	14:43	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	14:46	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	14:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	14:51	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	14:54	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:57								
ZZZZZZ		1	14:59								
ZZZZZZ		1	15:02								
ZZZZZZ		1	15:05								
CCV		1	15:08	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
ZZZZZZ		5	17:18								
ZZZZZZ		5	17:22								
ZZZZZZ		5	17:24								
ZZZZZZ		5	17:27								
ZZZZZZ		5	17:30								
ZZZZZZ		5	17:32								
LCSWNG29IMW2		5	17:35								Zn
CCV		1	17:38	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PBWNG29IMW2		5	17:43								Zn
SN5717-020R	COR03EQB	5	17:46								Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		5	17:48								
ZZZZZZ		5	17:51								
ZZZZZZ		5	17:54								
ZZZZZZ		5	17:57								
ZZZZZZ		5	17:59								
ZZZZZZ		5	18:02								
ZZZZZZ		5	18:05								
ZZZZZZ		5	18:07								
CCV		1	18:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:13	Al	Ca	Fe	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH05A

Date: 08/05/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:59	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	16:03	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	16:06	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	16:09	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	16:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	16:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:20										
ZZZZZZ		1	16:22										
ZZZZZZ		1	16:25										
ZZZZZZ		1	16:28										
CCV		1	16:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:42										
ZZZZZZ		5	16:44										
ZZZZZZ		5	16:47										
ZZZZZZ		5	16:49										
PBSNH04IMS1		5	16:52			Cu		Pb					Zn
ZZZZZZ		5	16:55										
SN5717-004	COR01DB02A	5	16:57			Cu		Pb					Zn
SN5717-010	COR02DB02A	5	17:00			Cu		Pb					Zn
SN5717-010L	COR02DB02AL	25	17:03			Cu		Pb					Zn
SN5717-010A	COR02DB02AA	5	17:05			Cu		Pb					Zn
CCV		1	17:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:11	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5717-010S	COR02DB02AS	5	17:14			Cu		Pb					Zn
SN5717-010P	COR02DB02AP	5	17:16			Cu		Pb					Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH05A

Date: 08/05/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
SN5717-013	COR03DB01A	5	17:19			Cu	Pb						Zn
SN5717-017	COR03DB03A	5	17:22			Cu	Pb						Zn
ZZZZZZ		1	17:25										
ZZZZZZ		1	17:27										
ZZZZZZ		5	17:30										
ZZZZZZ		1	17:33										
ZZZZZZ		1	17:35										
ZZZZZZ		1	17:38										
CCV		1	17:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	15:24	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CalStd		1	15:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICV		1	15:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICB		1	15:34	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
PQL		1	15:36	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSA		1	15:39	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSAB		1	15:42	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	15:45										
ZZZZZZ		1	15:47										
ZZZZZZ		1	15:50										
ZZZZZZ		1	15:53										
CCV		1	15:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	15:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:01										
ZZZZZZ		5	16:04										
ZZZZZZ		5	16:06										
ZZZZZZ		5	16:09										
ZZZZZZ		5	16:12										
ZZZZZZ		5	16:14										
ZZZZZZ		5	16:17										
ZZZZZZ		5	16:20										
ZZZZZZ		5	16:22										
ZZZZZZ		5	16:25										
CCV		1	16:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	16:30	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:33										
ZZZZZZ		5	16:35										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	16:38	
ZZZZZZ		5	16:41	
ZZZZZZ		5	16:43	
ZZZZZZ		5	16:46	
ZZZZZZ		25	16:49	
ZZZZZZ		5	16:51	
ZZZZZZ		5	16:54	
ZZZZZZ		5	16:57	
CCV		1	16:59	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	17:02	Al Sb Ca Cu Fe Pb Mg Mo K Na
ZZZZZZ		5	17:05	
ZZZZZZ		5	17:07	
ZZZZZZ		5	17:10	
ZZZZZZ		5	17:13	
ZZZZZZ		25	17:15	
ZZZZZZ		5	17:18	
ZZZZZZ		5	17:21	
PBSNH04IMS1		5	17:23	Sb
LCSONH04IMS1		5	17:26	Sb Cu Pb
SN5717-004	COR01DB02A	5	17:29	Sb
CCV		1	17:31	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	17:34	Al Sb Ca Cu Fe Pb Mg Mo K Na
SN5717-010	COR02DB02A	5	17:37	Sb
SN5717-010A	COR02DB02AA	5	17:39	Sb
SN5717-010L	COR02DB02AL	25	17:42	Sb
SN5717-010P	COR02DB02AP	5	17:45	Sb
SN5717-010S	COR02DB02AS	5	17:48	Sb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH06A

Date: 08/06/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
SN5717-013	COR03DB01A	5	17:50	Sb
SN5717-017	COR03DB03A	5	17:53	Sb
ZZZZZZ		1	17:56	
ZZZZZZ		1	17:59	
ZZZZZZ		1	18:01	
CCV		1	18:04	Al Sb Ca Cu Fe Pb Mg Mo K Na
CCB		1	18:07	Al Sb Ca Cu Fe Pb Mg Mo K Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	15:10	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	15:13	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	15:16	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	15:19	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	15:21	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	15:24	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	15:27	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	15:30								
ZZZZZZ		1	15:32								
ZZZZZZ		1	15:35								
ZZZZZZ		1	15:37								
CCV		1	15:40	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:43	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	15:46								
ZZZZZZ		5	15:48								
ZZZZZZ		5	15:51								
ZZZZZZ		10	15:54								
ZZZZZZ		1	15:56								
ZZZZZZ		10	15:59								
ZZZZZZ		1	16:01								
ZZZZZZ		5	16:04								
ZZZZZZ		5	16:06								
ZZZZZZ		25	16:09								
CCV		1	16:12	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	16:14	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:17								
ZZZZZZ		5	16:19								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		5	16:22								
ZZZZZZ		5	16:25								
ZZZZZZ		5	16:27								
ZZZZZZ		5	16:34								
ZZZZZZ		1	16:36								
ZZZZZZ		1	16:39								
ZZZZZZ		1	16:41								
ZZZZZZ		1	16:44								
CCV		1	16:47	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	16:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:52								
ZZZZZZ		5	16:54								
ZZZZZZ		5	16:57								
ZZZZZZ		10	17:00								
ZZZZZZ		10	17:02								
ZZZZZZ		20	17:05								
ZZZZZZ		20	17:07								
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
CCV		1	17:18	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:20	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:23								
ZZZZZZ		5	17:26								
ZZZZZZ		5	17:28								
ZZZZZZ		5	17:31								
ZZZZZZ		5	17:33								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5717

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH12B

Date: 08/12/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		25	17:36								
ZZZZZZ		5	17:38								
ZZZZZZ		5	17:41								
ZZZZZZ		5	17:44								
LCSONH04IMS1		5	17:46								Zn
CCV		1	17:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:51	Al	Ca	Fe	Mg	Mo	K	Na	Zn

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/20/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED 07/24/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG20A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19455	06/16/20	06/16/21	0 ug/L
Standard 1	MW19486	07/08/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19465	07/08/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19499	07/20/20	07/27/20	Varies by Element
ICSAB	MW19500	07/20/20	07/27/20	Varies by Element
CCV	MW19495	07/14/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

KT 7/21/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

125x serial diln.: 2.0 mL of 25x diln. of sample (pipet M25) + 8.0 mL of MW19455 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG20A	07/20/2020	15:19	AP
CalStd	1	LNG20A	07/20/2020	15:23	AP
ICV	1	LNG20A	07/20/2020	15:26	AP
ICB	1	LNG20A	07/20/2020	15:28	AP
PQL	1	LNG20A	07/20/2020	15:31	AP
LRS1	1	LNG20A	07/20/2020	15:39	AP
LRS2	1	LNG20A	07/20/2020	15:42	AP
RINSE	1	LNG20A	07/20/2020	15:45	AP
RINSE	1	LNG20A	07/20/2020	15:47	AP
ICSAB	1	LNG20A	07/20/2020	15:50	AP
CCV	1	LNG20A	07/20/2020	15:53	AP
CCB	1	LNG20A	07/20/2020	15:56	AP
ICSA	1	LNG20A	07/20/2020	16:01	AP
PBWNF30IMW1	5	LNG20A	07/20/2020	16:04	AP
LCSWNF30IMW1	5	LNG20A	07/20/2020	16:06	AP
CCV	1	LNG20A	07/20/2020	16:09	AP
CCB	1	LNG20A	07/20/2020	16:12	AP
SN5146-018	5	LNG20A	07/20/2020	16:15	AP
PBWNF30IMW2	5	LNG20A	07/20/2020	16:17	AP
LCSWNF30IMW2	5	LNG20A	07/20/2020	16:20	AP
SN5146-016	5	LNG20A	07/20/2020	16:23	AP
SN5151-001	5	LNG20A	07/20/2020	16:25	AP
SN5151-002	5	LNG20A	07/20/2020	16:28	AP
SN5151-004	5	LNG20A	07/20/2020	16:30	AP
SN5151-004	5	LNG20A	07/20/2020	16:33	AP
SN5151-004A	5	LNG20A	07/20/2020	16:36	AP
RINSE	1	LNG20A	07/20/2020	16:41	AP
CCV	1	LNG20A	07/20/2020	16:44	AP
CCB	1	LNG20A	07/20/2020	16:46	AP
RINSE	1	LNG20A	07/20/2020	16:49	AP
SN5151-004S	5	LNG20A	07/20/2020	16:52	AP
SN5151-004P	5	LNG20A	07/20/2020	16:55	AP
SN5151-005	5	LNG20A	07/20/2020	16:57	AP
SN5151-006	5	LNG20A	07/20/2020	17:00	AP
SN5173-001	5	LNG20A	07/20/2020	17:02	AP
SN5173-002	5	LNG20A	07/20/2020	17:05	AP
SN5173-003	5	LNG20A	07/20/2020	17:08	AP
SN5173-004	5	LNG20A	07/20/2020	17:11	AP
SN5151-004L	25	LNG20A	07/20/2020	17:13	AP
CCV	1	LNG20A	07/20/2020	17:16	AP
CCB	1	LNG20A	07/20/2020	17:18	AP
SN5173-005	5	LNG20A	07/20/2020	17:21	AP
SN5173-006	5	LNG20A	07/20/2020	17:24	AP
SN5173-008	5	LNG20A	07/20/2020	17:27	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNG01IMW1	1	LNG20A	07/20/2020	17:29	AP
LCSWNG01IMW1	5	LNG20A	07/20/2020	17:32	AP
SN5286-001	1	LNG20A	07/20/2020	17:34	AP
SN5286-002	1	LNG20A	07/20/2020	17:37	AP
PBSNG02IMS1	5	LNG20A	07/20/2020	17:40	AP
LCSONG02IMS1	5	LNG20A	07/20/2020	17:43	AP
SN5043-008	5	LNG20A	07/20/2020	17:45	AP
CCV	1	LNG20A	07/20/2020	17:48	AP
CCB	1	LNG20A	07/20/2020	17:51	AP
SN5043-010	5	LNG20A	07/20/2020	17:53	AP
SN5043-012	5	LNG20A	07/20/2020	17:56	AP
SN5043-014	5	LNG20A	07/20/2020	17:59	AP
SN5043-014L	25	LNG20A	07/20/2020	18:01	AP
SN5043-014A	5	LNG20A	07/20/2020	18:04	AP
SN5043-014S	5	LNG20A	07/20/2020	18:07	AP
SN5043-014P	5	LNG20A	07/20/2020	18:09	AP
SN5043-016	5	LNG20A	07/20/2020	18:12	AP
SN5043-021	5	LNG20A	07/20/2020	18:15	AP
PBSNG07IMS1	5	LNG20A	07/20/2020	18:17	AP
CCV	1	LNG20A	07/20/2020	18:20	AP
CCB	1	LNG20A	07/20/2020	18:23	AP
LCSONG07IMS1	5	LNG20A	07/20/2020	18:25	AP
SN5107-028	5	LNG20A	07/20/2020	18:28	AP
SN5107-029	5	LNG20A	07/20/2020	18:31	AP
SN5107-031	5	LNG20A	07/20/2020	18:33	AP
SN5107-032	5	LNG20A	07/20/2020	18:36	AP
SN5107-033	5	LNG20A	07/20/2020	18:39	AP
SN5107-035	5	LNG20A	07/20/2020	18:42	AP
PBWNG07IMW1	5	LNG20A	07/20/2020	18:44	AP
LCSWNG07IMW1	5	LNG20A	07/20/2020	18:47	AP
SN5146-010	5	LNG20A	07/20/2020	18:50	AP
CCV	1	LNG20A	07/20/2020	18:52	AP
CCB	1	LNG20A	07/20/2020	18:55	AP
SN5394-003	5	LNG20A	07/20/2020	18:58	AP
SN5394-004	5	LNG20A	07/20/2020	19:00	AP
PBSNG08IMS1	5	LNG20A	07/20/2020	19:03	AP
LCSONG08IMS1	5	LNG20A	07/20/2020	19:06	AP
SN5147-001	5	LNG20A	07/20/2020	19:08	AP
SN5147-003	5	LNG20A	07/20/2020	19:11	AP
SN5147-004	5	LNG20A	07/20/2020	19:14	AP
SN5338-001	5	LNG20A	07/20/2020	19:16	AP
PBWNG09IMS1	5	LNG20A	07/20/2020	19:19	AP
LCSONG09IMS1	5	LNG20A	07/20/2020	19:22	AP
CCV	1	LNG20A	07/20/2020	19:24	AP
CCB	1	LNG20A	07/20/2020	19:27	AP
SN5233-006	5	LNG20A	07/20/2020	19:30	AP
SN5233-007	5	LNG20A	07/20/2020	19:32	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5233-008	5	LNG20A	07/20/2020	19:35	AP
SN5233-009	5	LNG20A	07/20/2020	19:38	AP
SN5423-001	5	LNG20A	07/20/2020	19:40	AP
PBWNG09IMW1	5	LNG20A	07/20/2020	19:43	AP
LCSWNG09IMW1	5	LNG20A	07/20/2020	19:46	AP
SN5494-003	5	LNG20A	07/20/2020	19:48	AP
SN5494-004	5	LNG20A	07/20/2020	19:51	AP
SN5494-005	5	LNG20A	07/20/2020	19:54	AP
CCV	1	LNG20A	07/20/2020	19:56	AP
CCB	1	LNG20A	07/20/2020	19:59	AP
SN5494-007	5	LNG20A	07/20/2020	20:02	AP
SN5494-008	5	LNG20A	07/20/2020	20:04	AP
SN5497-005	5	LNG20A	07/20/2020	20:07	AP
SN5520-001	5	LNG20A	07/20/2020	20:10	AP
SN5520-002	5	LNG20A	07/20/2020	20:12	AP
SN5520-003	5	LNG20A	07/20/2020	20:15	AP
SN5520-004	5	LNG20A	07/20/2020	20:18	AP
SN5520-005	5	LNG20A	07/20/2020	20:21	AP
SN5520-006	5	LNG20A	07/20/2020	20:23	AP
SN5520-007	5	LNG20A	07/20/2020	20:26	AP
CCV	1	LNG20A	07/20/2020	20:29	AP
CCB	1	LNG20A	07/20/2020	20:31	AP
SN5520-008	5	LNG20A	07/20/2020	20:34	AP
PBWNG09IMW2	1	LNG20A	07/20/2020	20:37	AP
LCSWNG09IMW2	5	LNG20A	07/20/2020	20:39	AP
SN5513-001	1	LNG20A	07/20/2020	20:42	AP
PBSNG10IMS1	5	LNG20A	07/20/2020	20:45	AP
LCSONG10IMS1	5	LNG20A	07/20/2020	20:47	AP
SN5481-001	5	LNG20A	07/20/2020	20:50	AP
SN5497-001	5	LNG20A	07/20/2020	20:53	AP
SN5497-002	5	LNG20A	07/20/2020	20:55	AP
SN5497-003	5	LNG20A	07/20/2020	20:58	AP
CCV	1	LNG20A	07/20/2020	21:01	AP
CCB	1	LNG20A	07/20/2020	21:04	AP
SN5497-004	5	LNG20A	07/20/2020	21:06	AP
SN5497-006	5	LNG20A	07/20/2020	21:09	AP
SN5498-001	5	LNG20A	07/20/2020	21:12	AP
SN5498-002	5	LNG20A	07/20/2020	21:14	AP
PBWNG10IMW1	5	LNG20A	07/20/2020	21:17	AP
LCSWNG10IMW1	5	LNG20A	07/20/2020	21:19	AP
SN5497-007	5	LNG20A	07/20/2020	21:22	AP
SN5589-001	5	LNG20A	07/20/2020	21:25	AP
SN5589-002	5	LNG20A	07/20/2020	21:27	AP
SN5608-001	5	LNG20A	07/20/2020	21:30	AP
CCV	1	LNG20A	07/20/2020	21:33	AP
CCB	1	LNG20A	07/20/2020	21:35	AP
SN5608-002	5	LNG20A	07/20/2020	21:38	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5608-003	5	LNG20A	07/20/2020	21:41	AP
SN5608-004	5	LNG20A	07/20/2020	21:43	AP
SN5608-005	5	LNG20A	07/20/2020	21:46	AP
SN5608-005L	25	LNG20A	07/20/2020	21:49	AP
SN5608-005A	5	LNG20A	07/20/2020	21:51	AP
SN5608-005S	5	LNG20A	07/20/2020	21:54	AP
SN5608-005P	5	LNG20A	07/20/2020	21:57	AP
PBWNG13IMW2	5	LNG20A	07/20/2020	21:59	AP
LCSWNG13IMW2	5	LNG20A	07/20/2020	22:02	AP
CCV	1	LNG20A	07/20/2020	22:05	AP
CCB	1	LNG20A	07/20/2020	22:07	AP
SN5646-002	5	LNG20A	07/20/2020	22:10	AP
SN5646-003	5	LNG20A	07/20/2020	22:13	AP
SN5646-004	5	LNG20A	07/20/2020	22:15	AP
SN5646-005	5	LNG20A	07/20/2020	22:18	AP
SN5646-005L	25	LNG20A	07/20/2020	22:21	AP
SN5646-005A	5	LNG20A	07/20/2020	22:23	AP
SN5646-005S	5	LNG20A	07/20/2020	22:26	AP
SN5646-005P	5	LNG20A	07/20/2020	22:29	AP
SN5646-006	5	LNG20A	07/20/2020	22:32	AP
SN5646-007	5	LNG20A	07/20/2020	22:34	AP
CCV	1	LNG20A	07/20/2020	22:37	AP
CCB	1	LNG20A	07/20/2020	22:40	AP
SN4647-002	5	LNG20A	07/20/2020	22:42	AP
SN4647-003	5	LNG20A	07/20/2020	22:45	AP
SN4647-004	5	LNG20A	07/20/2020	22:48	AP
PBWNG13IMW3	1	LNG20A	07/20/2020	22:50	AP
LCSWNG13IMW3	5	LNG20A	07/20/2020	22:53	AP
SN5596-002	1	LNG20A	07/20/2020	22:56	AP
SN5621-001	1	LNG20A	07/20/2020	22:58	AP
SN5624-001	1	LNG20A	07/20/2020	23:01	AP
SN5625-001	1	LNG20A	07/20/2020	23:04	AP
SN5626-001	1	LNG20A	07/20/2020	23:06	AP
CCV	1	LNG20A	07/20/2020	23:09	AP
CCB	1	LNG20A	07/20/2020	23:11	AP
PBWNG15IMW1	1	LNG20A	07/20/2020	23:14	AP
LCSWNG15IMW1	5	LNG20A	07/20/2020	23:17	AP
SN5690-001	1	LNG20A	07/20/2020	23:19	AP
SN5691-001	1	LNG20A	07/20/2020	23:22	AP
PBSNG16IMS1	5	LNG20A	07/20/2020	23:24	AP
LCSONG16IMS1	5	LNG20A	07/20/2020	23:27	AP
SN5594-002	5	LNG20A	07/20/2020	23:30	AP
SN5594-003	5	LNG20A	07/20/2020	23:32	AP
SN5717-001	5	LNG20A	07/20/2020	23:35	AP
CCV	1	LNG20A	07/20/2020	23:37	AP
CCB	1	LNG20A	07/20/2020	23:40	AP
SN5717-005	5	LNG20A	07/20/2020	23:43	AP

AP 7/21/20

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5717-005L	25	LNG20A	07/20/2020	23:45	AP
SN5717-005A	5	LNG20A	07/20/2020	23:48	AP
SN5717-005S	5	LNG20A	07/20/2020	23:50	AP
SN5717-005P	5	LNG20A	07/20/2020	23:53	AP
SN5717-007	5	LNG20A	07/20/2020	23:56	AP
SN5717-007L	25	LNG20A	07/20/2020	23:58	AP
SN5717-007A	5	LNG20A	07/21/2020	00:01	AP
SN5717-007S	5	LNG20A	07/21/2020	00:03	AP
SN5717-007P	5	LNG20A	07/21/2020	00:06	AP
CCV	1	LNG20A	07/21/2020	00:09	AP
CCB	1	LNG20A	07/21/2020	00:11	AP
CCV	1	LNG20A	07/21/2020	00:14	AP
CCB	1	LNG20A	07/21/2020	00:16	AP
SN5717-008	5	LNG20A	07/21/2020	00:19	AP
SN5717-009	5	LNG20A	07/21/2020	00:22	AP
SN5717-012	5	LNG20A	07/21/2020	00:24	AP
SN5717-018	5	LNG20A	07/21/2020	00:27	AP
SN5717-018L	25	LNG20A	07/21/2020	00:29	AP
SN5717-018A	5	LNG20A	07/21/2020	00:32	AP
SN5717-018S	5	LNG20A	07/21/2020	00:35	AP
SN5717-018P	5	LNG20A	07/21/2020	00:37	AP
PBWNG16IMW1	1	LNG20A	07/21/2020	00:40	AP
LCSWNG16IMW1	5	LNG20A	07/21/2020	00:43	AP
CCV	1	LNG20A	07/21/2020	00:45	AP
CCB	1	LNG20A	07/21/2020	00:48	AP
CCV	1	LNG20A	07/21/2020	00:51	AP
CCB	1	LNG20A	07/21/2020	00:53	AP
SN5778-001	1	LNG20A	07/21/2020	00:56	AP
SN5779-001	1	LNG20A	07/21/2020	00:59	AP
SN5790-001	1	LNG20A	07/21/2020	01:01	AP
PBWNG20IMW2	1	LNG20A	07/21/2020	01:04	AP
LCSWNG20IMW2	1	LNG20A	07/21/2020	01:07	AP
SN5541-001X	1	LNG20A	07/21/2020	01:09	AP
SN5151-002	25	LNG20A	07/21/2020	01:12	AP
SN5151-004	25	LNG20A	07/21/2020	01:15	AP
SN5151-004L	125	LNG20A	07/21/2020	01:17	AP
SN5151-004A	25	LNG20A	07/21/2020	01:20	AP
CCV	1	LNG20A	07/21/2020	01:23	AP
CCB	1	LNG20A	07/21/2020	01:25	AP
CCV	1	LNG20A	07/21/2020	01:28	AP
CCB	1	LNG20A	07/21/2020	01:31	AP
SN5151-004S	25	LNG20A	07/21/2020	01:33	AP
SN5151-004P	25	LNG20A	07/21/2020	01:36	AP
SN5151-005	25	LNG20A	07/21/2020	01:39	AP
SN5151-006	25	LNG20A	07/21/2020	01:42	AP
RINSE	1	LNG20A	07/21/2020	01:44	AP
RINSE	1	LNG20A	07/21/2020	01:47	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
RINSE	1	LNG20A	07/21/2020	01:49	AP
CCV	1	LNG20A	07/21/2020	01:52	AP
CCB	1	LNG20A	07/21/2020	01:55	AP
CCV	1	LNG20A	07/21/2020	01:58	AP
CCB	1	LNG20A	07/21/2020	02:00	AP
PQL	1	LNG20A	07/21/2020	02:03	AP
RINSE	1	LNG20A	07/21/2020	02:06	AP
RINSE	1	LNG20A	07/21/2020	02:08	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A.b
Acq. Date-Time	7/20/2020 10:49:39 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

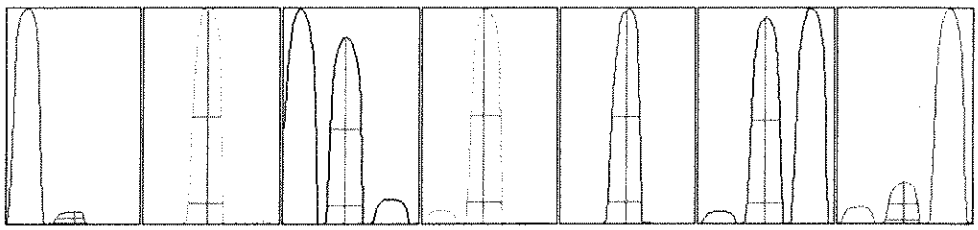
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2436	24357.22	0.499	5.000	
9	905	9054.64	0.835	5.000	
24	34975	349747.53	0.609	5.000	
59	6769	67688.74	0.492	5.000	
115	114361	1143610.82	0.531	5.000	
205	8156	81559.01	0.777	5.000	
208	18258	182575.14	0.481	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2449	2424	2427	2431	2448
9	897	903	917	903	908
24	34677	34848	35011	35152	35186
59	6766	6713	6777	6790	6798
115	113948	113564	114427	115012	114855
205	8050	8145	8192	8190	8202
208	18138	18233	18295	18244	18377

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	3984.71	7.05	6.90 - 7.10	
9	1449.57	8.95	8.90 - 9.10	
24	54228.01	23.90	23.90 - 24.10	
59	10674.50	58.90	58.90 - 59.10	
115	189649.26	115.00	114.90 - 115.10	
205	13396.97	205.00	204.90 - 205.10	
208	29524.90	208.00	207.90 - 208.10	

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US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.721	0.900	
9	0.64	0.752	0.900	
24	0.68	0.777	0.900	
59	0.66	0.766	0.900	
115	0.62	0.756	0.900	
205	0.63	0.775	0.900	
208	0.64	0.748	0.900	

Integration Time [sec] 0.1

Acquisition Time [sec] 247

Y Axis Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	12.4 V
Extract 2	-115.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-50 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	427	4274.83	1.651	5.000	
89	60762	607621.67	1.920	5.000	
205	6405	64048.26	0.991	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	417	428	435	426	432
89	58903	60510	61211	61180	62007
205	6327	6364	6417	6422	6494

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	1.6 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1280	12801.47	0.569	5.000	
89	13216	132160.86	1.000	5.000	
205	3644	36442.05	0.789	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1275	1281	1284	1272	1290
89	13089	13073	13231	13326	13361
205	3647	3596	3656	3648	3673

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.1 V	Deflect	1.2 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1177 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:19:57 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	18.89	71.3
11	B	6	No Gas	926.73	7.6
23	Na	45	He	6174.86	4.8
24	Mg	45	He	622.29	8.7
27	Al	45	He	50.01	11.5
28	Si	45	H2	260.29	13.9
39	K	45	He	11092.69	1.2
40	Ca	45	H2	1971.32	2.3
51	V	89	He	233.34	8.7
52	Cr	89	He	35.32	21.4
55	Mn	89	He	12.67	32.9
56	Fe	89	H2	8618.91	3.7
59	Co	89	He	8.89	43.3
60	Ni	89	He	42.22	16.4
63	Cu	89	He	425.58	12.3
66	Zn	89	He	65.56	5.9
75	As	89	He	4.67	12.4
78	Se	89	H2	0.50	100.0
88	Sr	89	He	6.67	100.0
95	Mo	89	He	126.67	24.1
107	Ag	89	He	11.11	45.8
111	Cd	89	He	1.11	100.0
118	Sn	159	He	71.11	2.7
121	Sb	159	No Gas	93.44	50.6
137	Ba	159	No Gas	16.68	91.7
182	W	159	No Gas	116.80	13.1
205	Tl	209	No Gas	26.69	43.3
208	Pb	209	No Gas	180.20	9.6
232	Th	209	No Gas	166.85	25.0
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1537409.87	0.6
Sc	45	No Gas	3373253.08	0.7
Sc	45	H2	415670.69	1.1
Sc	45	He	81171.76	0.7
Ge	72	No Gas	779333.11	0.3
Ge	72	H2	153246.58	1.6
Ge	72	He	63135.03	0.2
Y	89	H2	2642116.11	0.5
Y	89	He	544041.92	0.4
Tb	159	No Gas	8117023.84	0.9
Tb	159	He	2866479.19	0.2
Bi	209	No Gas	4424692.92	0.5

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:23:09 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	65205.12	1.9
11	B	6	No Gas	43743.62	1.5
23	Na	45	He	1118160.06	0.5
24	Mg	45	He	612459.95	0.4
27	Al	45	He	23744.90	1.4
28	Si	45	H2	44431.61	1.3
39	K	45	He	543723.55	0.2
40	Ca	45	H2	4223794.94	1.3
51	V	89	He	43503.52	0.7
52	Cr	89	He	53433.19	0.3
55	Mn	89	He	25461.69	0.3
56	Fe	89	H2	16794411.74	0.9
59	Co	89	He	90448.45	0.6
60	Ni	89	He	25665.34	2.2
63	Cu	89	He	69934.45	0.5
66	Zn	89	He	9586.95	2.1
75	As	89	He	7789.70	1.0
78	Se	89	H2	4181.77	1.9
88	Sr	89	He	38027.91	0.7
95	Mo	89	He	43786.44	0.6
107	Ag	89	He	148490.36	0.1
111	Cd	89	He	19784.54	0.2
118	Sn	159	He	42685.15	1.1
121	Sb	159	No Gas	368094.67	1.2
137	Ba	159	No Gas	144820.50	1.1
182	W	159	No Gas	292933.39	1.2
205	Tl	209	No Gas	646818.40	1.4
208	Pb	209	No Gas	894142.84	1.0
232	Th	209	No Gas	936110.95	1.7
238	U	209	No Gas	878578.95	1.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1504114.52	0.8	1537409.87	97.83	29.5	120.4	
Sc	45	No Gas	3354516.27	0.9	3373253.08	99.44	29.5	120.4	
Sc	45	H2	421300.84	2.0	415670.69	101.35	29.5	120.4	
Sc	45	He	80043.71	0.7	81171.76	98.61	29.5	120.4	
Ge	72	No Gas	772954.13	1.1	779333.11	99.18	29.5	120.4	
Ge	72	H2	156338.20	2.4	153246.58	102.02	29.5	120.4	
Ge	72	He	62495.21	0.6	63135.03	98.99	29.5	120.4	
Y	89	H2	2690794.76	1.5	2642116.11	101.84	29.5	120.4	
Y	89	He	539936.77	0.4	544041.92	99.25	29.5	120.4	
Tb	159	No Gas	8184203.77	0.7	8117023.84	100.83	29.5	120.4	
Tb	159	He	2848709.99	0.4	2866479.19	99.38	29.5	120.4	
Bi	209	No Gas	4396488.16	0.9	4424692.92	99.36	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:26:19 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	19.904	ppb	3.9	26539.46	20	99.52	89.6	110.4	
11	B	6	No Gas	20.089	ppb	4.0	18515.71	20	100.44	89.6	110.4	
23	Na	45	He	4049.945	ppb	1.3	467702.08	4000	101.25	89.6	110.4	
24	Mg	45	He	3995.852	ppb	1.1	251130.42	4000	99.9	89.6	110.4	
27	Al	45	He	376.751	ppb	3.8	9199.95	400	94.19	89.6	110.4	
28	Si	45	H2	441.941	ppb	1.2	19368.00	400	110.49	89.6	110.4	> +/- 10%
39	K	45	He	3958.321	ppb	1.7	227292.15	4000	98.96	89.6	110.4	
40	Ca	45	H2	4101.188	ppb	2.5	1696433.90	4000	102.53	89.6	110.4	
51	V	89	He	19.975	ppb	0.8	17662.79	20	99.88	89.6	110.4	
52	Cr	89	He	20.359	ppb	1.1	21956.36	20	101.8	89.6	110.4	
55	Mn	89	He	20.374	ppb	1.6	10468.00	20	101.87	89.6	110.4	
56	Fe	89	H2	4114.769	ppb	2.2	6777573.69	4000	102.87	89.6	110.4	
59	Co	89	He	20.325	ppb	1.0	37073.39	20	101.62	89.6	110.4	
60	Ni	89	He	19.475	ppb	1.2	10105.10	20	97.38	89.6	110.4	
63	Cu	89	He	20.392	ppb	0.1	29007.51	20	101.96	89.6	110.4	
66	Zn	89	He	20.826	ppb	0.9	4064.08	20	104.13	89.6	110.4	
75	As	89	He	20.582	ppb	0.7	3235.40	20	102.91	89.6	110.4	
78	Se	89	H2	20.793	ppb	3.3	1704.70	20	103.96	89.6	110.4	
88	Sr	89	He	20.000	ppb	1.0	15340.17	20	100	89.6	110.4	
95	Mo	89	He	40.223	ppb	0.9	35538.02	40	100.56	89.6	110.4	
107	Ag	89	He	20.936	ppb	0.7	62690.85	20	104.68	89.6	110.4	
111	Cd	89	He	20.240	ppb	1.6	8075.45	20	101.2	89.6	110.4	
118	Sn	159	He	19.840	ppb	1.9	17174.81	20	99.2	89.6	110.4	
121	Sb	159	No Gas	19.980	ppb	3.3	149358.82	20	99.9	89.6	110.4	
137	Ba	159	No Gas	19.776	ppb	2.8	58154.82	20	98.88	89.6	110.4	
182	W	159	No Gas	19.697	ppb	3.4	117201.53	20	98.48	89.6	110.4	
205	Tl	209	No Gas	20.425	ppb	2.7	270662.83	20	102.12	89.6	110.4	
208	Pb	209	No Gas	19.813	ppb	3.3	363009.10	20	99.06	89.6	110.4	
232	Th	209	No Gas	19.715	ppb	3.5	378149.13	20	98.58	89.6	110.4	
238	U	209	No Gas	19.580	ppb	2.9	352409.59	20	97.9	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1537619.38	1.6	1537409.87	100.01	29.5	120.4	
Sc	45	No Gas	3416777.73	1.5	3373253.08	101.29	29.5	120.4	
Sc	45	H2	412377.82	2.2	415670.69	99.21	29.5	120.4	
Sc	45	He	82017.82	0.9	81171.76	101.04	29.5	120.4	
Ge	72	No Gas	787353.59	1.4	779333.11	101.03	29.5	120.4	
Ge	72	H2	151866.51	2.0	153246.58	99.1	29.5	120.4	
Ge	72	He	63324.01	0.7	63135.03	100.3	29.5	120.4	
Y	89	H2	2637289.75	1.4	2642116.11	99.82	29.5	120.4	
Y	89	He	544361.46	0.5	544041.92	100.06	29.5	120.4	
Tb	159	No Gas	8308683.21	1.4	8117023.84	102.36	29.5	120.4	
Tb	159	He	2881162.70	0.4	2866479.19	100.51	29.5	120.4	
Bi	209	No Gas	4503837.74	1.4	4424692.92	101.79	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:28:58 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.065	ppb	22.6	107.78	0.2	
11	B	6	No Gas	0.477	ppb	21.2	1370.11	4	
23	Na	45	He	-2.437	ppb	N/A	5967.81	200	
24	Mg	45	He	-0.297	ppb	N/A	611.17	20	
27	Al	45	He	-1.074	ppb	N/A	24.45	20	
28	Si	45	H2	0.896	ppb	79.8	297.00	100	
39	K	45	He	-2.675	ppb	N/A	11077.78	200	
40	Ca	45	H2	0.002	ppb	13375.1	1956.88	20	
51	V	89	He	-0.049	ppb	N/A	192.23	1	
52	Cr	89	He	0.016	ppb	8.4	53.32	1	
55	Mn	89	He	0.013	ppb	93.6	19.33	0.4	
56	Fe	89	H2	0.457	ppb	20.8	9363.61	20	
59	Co	89	He	0.000	ppb	N/A	8.89	0.2	
60	Ni	89	He	0.001	ppb	1478.6	43.33	0.4	
63	Cu	89	He	-0.065	ppb	N/A	337.80	0.6	
66	Zn	89	He	-0.021	ppb	N/A	62.23	2	
75	As	89	He	0.019	ppb	69.9	7.67	1	
78	Se	89	H2	0.063	ppb	19.9	5.67	1	
88	Sr	89	He	-0.002	ppb	N/A	5.56	1	
95	Mo	89	He	0.118	ppb	32.7	233.34	1	
107	Ag	89	He	0.008	ppb	27.5	35.56	0.2	
111	Cd	89	He	0.003	ppb	1.5	2.22	0.2	
118	Sn	159	He	0.087	ppb	34.8	146.67	1	
121	Sb	159	No Gas	0.011	ppb	19.3	176.86	0.2	
137	Ba	159	No Gas	0.017	ppb	103.9	66.74	0.4	
182	W	159	No Gas	0.057	ppb	58.8	460.53	1	
205	Tl	209	No Gas	0.016	ppb	8.9	246.95	0.2	
208	Pb	209	No Gas	0.013	ppb	27.0	427.15	0.2	
232	Th	209	No Gas	0.040	ppb	30.8	961.11	1	
238	U	209	No Gas	0.015	ppb	23.4	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1566883.60	2.0	1537409.87	101.92	29.5	120.4	
Sc	45	No Gas	3449162.92	3.3	3373253.08	102.25	29.5	120.4	
Sc	45	H2	412556.02	1.3	415670.69	99.25	29.5	120.4	
Sc	45	He	82135.20	1.8	81171.76	101.19	29.5	120.4	
Ge	72	No Gas	791134.60	2.8	779333.11	101.51	29.5	120.4	
Ge	72	H2	152761.10	0.8	153246.58	99.68	29.5	120.4	
Ge	72	He	63407.78	0.7	63135.03	100.43	29.5	120.4	
Y	89	H2	2640173.47	1.0	2642116.11	99.93	29.5	120.4	
Y	89	He	549642.08	0.8	544041.92	101.03	29.5	120.4	
Tb	159	No Gas	8360132.86	3.4	8117023.84	103	29.5	120.4	
Tb	159	He	2882716.52	0.6	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4546637.67	3.7	4424692.92	102.76	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:31:38 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.253	ppb	4.7	362.24	0.2	126.5	79.5	120.4	Failed DoD
11	B	6	No Gas	3.904	ppb	3.6	4428.62	4	97.6	79.5	120.4	
23	Na	45	He	205.470	ppb	2.1	29593.74	200	102.74	79.5	120.4	
24	Mg	45	He	20.608	ppb	15.4	1918.06	20	103.04	79.5	120.4	
27	Al	45	He	17.391	ppb	17.0	471.13	20	86.96	79.5	120.4	
28	Si	45	H2	103.516	ppb	6.2	4746.09	100	103.52	79.5	120.4	
39	K	45	He	204.443	ppb	6.0	22323.91	200	102.22	79.5	120.4	
40	Ca	45	H2	20.275	ppb	5.1	10365.25	20	101.38	79.5	120.4	
51	V	89	He	1.023	ppb	4.6	1130.09	1	102.3	79.5	120.4	
52	Cr	89	He	1.070	ppb	2.3	1192.51	1	107	79.5	120.4	
55	Mn	89	He	0.413	ppb	11.8	225.96	0.4	103.25	79.5	120.4	
56	Fe	89	H2	21.269	ppb	2.4	43552.60	20	106.34	79.5	120.4	
59	Co	89	He	0.220	ppb	23.5	411.15	0.2	110	79.5	120.4	
60	Ni	89	He	0.419	ppb	7.8	260.01	0.4	104.75	79.5	120.4	
63	Cu	89	He	0.581	ppb	8.7	1244.54	0.6	96.83	79.5	120.4	
66	Zn	89	He	2.143	ppb	4.5	478.91	2	107.15	79.5	120.4	
75	As	89	He	0.947	ppb	7.4	154.02	1	94.7	79.5	120.4	
78	Se	89	H2	0.985	ppb	4.7	81.17	1	98.5	79.5	120.4	
88	Sr	89	He	1.013	ppb	5.3	786.72	1	101.3	79.5	120.4	
95	Mo	89	He	0.997	ppb	3.4	1008.96	1	99.7	79.5	120.4	
107	Ag	89	He	0.214	ppb	5.6	654.49	0.2	107	79.5	120.4	
111	Cd	89	He	0.211	ppb	6.4	85.56	0.2	105.5	79.5	120.4	
118	Sn	159	He	0.979	ppb	5.4	918.95	1	97.9	79.5	120.4	
121	Sb	159	No Gas	0.221	ppb	1.7	1735.39	0.2	110.5	79.5	120.4	
137	Ba	159	No Gas	0.407	ppb	3.0	1204.73	0.4	101.75	79.5	120.4	
182	W	159	No Gas	0.973	ppb	6.4	5857.90	1	97.3	79.5	120.4	
205	Tl	209	No Gas	0.220	ppb	2.8	2946.99	0.2	110	79.5	120.4	
208	Pb	209	No Gas	0.212	ppb	7.6	4078.15	0.2	106	79.5	120.4	
232	Th	209	No Gas	0.206	ppb	4.8	4128.68	0.2	103	79.5	120.4	
238	U	209	No Gas	0.203	ppb	7.4	3661.33	0.2	101.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1566886.11	1.0	1537409.87	101.92	29.5	120.4	
Sc	45	No Gas	3433874.61	1.2	3373253.08	101.8	29.5	120.4	
Sc	45	H2	413669.22	1.6	415670.69	99.52	29.5	120.4	
Sc	45	He	81867.72	1.6	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	787408.37	1.5	779333.11	101.04	29.5	120.4	
Ge	72	H2	153590.82	1.0	153246.58	100.22	29.5	120.4	
Ge	72	He	63556.06	0.6	63135.03	100.67	29.5	120.4	
Y	89	H2	2634383.85	1.7	2642116.11	99.71	29.5	120.4	
Y	89	He	546699.78	1.4	544041.92	100.49	29.5	120.4	
Tb	159	No Gas	8247861.41	1.1	8117023.84	101.61	29.5	120.4	
Tb	159	He	2891086.80	1.2	2866479.19	100.86	29.5	120.4	
Bi	209	No Gas	4513641.97	1.1	4424692.92	102.01	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:39:51 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	95.465	ppb	4.7	130673.84	100	95.46	89.5	110.4	
11	B	6	No Gas	456.586	ppb	5.1	411557.91	500	91.32	89.5	110.4	
51	V	89	He	992.271	ppb	0.5	851648.71	1000	99.23	89.5	110.4	
52	Cr	89	He	1986.381	ppb	0.5	2103305.50	2000	99.32	89.5	110.4	
55	Mn	89	He	1965.187	ppb	0.6	991716.49	2000	98.26	89.5	110.4	
59	Co	89	He	1013.720	ppb	0.8	1817967.28	1000	101.37	89.5	110.4	
60	Ni	89	He	988.659	ppb	0.7	502390.82	1000	98.87	89.5	110.4	
63	Cu	89	He	1951.408	ppb	0.6	2690136.80	2000	97.57	89.5	110.4	
66	Zn	89	He	2011.048	ppb	0.8	379749.08	2000	100.55	89.5	110.4	
75	As	89	He	999.503	ppb	0.6	154295.49	1000	99.95	89.5	110.4	
78	Se	89	H2	1011.271	ppb	1.7	83984.30	1000	101.13	89.5	110.4	
88	Sr	89	He	2000.200	ppb	0.2	1508061.58	2000	100.01	89.5	110.4	
95	Mo	89	He	1012.808	ppb	0.8	876974.67	1000	101.28	89.5	110.4	
107	Ag	89	He	110.494	ppb	0.7	325337.28	100	110.49	89.5	110.4	> +/- 10%
111	Cd	89	He	1016.181	ppb	0.4	398640.66	1000	101.62	89.5	110.4	
118	Sn	159	He	972.929	ppb	0.1	840750.21	1000	97.29	89.5	110.4	
121	Sb	159	No Gas	927.147	ppb	4.9	7288691.14	1000	92.71	89.5	110.4	
137	Ba	159	No Gas	1843.292	ppb	5.5	5701186.72	2000	92.16	89.5	110.4	
182	W	159	No Gas	970.221	ppb	4.8	6069201.70	1000	97.02	89.5	110.4	
205	Tl	209	No Gas	951.383	ppb	4.4	13431041.82	1000	95.14	89.5	110.4	
208	Pb	209	No Gas	1847.899	ppb	4.9	36052232.05	2000	92.39	89.5	110.4	
232	Th	209	No Gas	921.402	ppb	6.0	18816727.11	1000	92.14	89.5	110.4	
238	U	209	No Gas	917.906	ppb	6.3	17595228.15	1000	91.79	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1580009.48	2.6	1537409.87	102.77	29.5	120.4	
Sc	45	No Gas	3492771.24	3.5	3373253.08	103.54	29.5	120.4	
Ge	72	No Gas	810314.65	3.1	779333.11	103.98	29.5	120.4	
Tb	159	No Gas	8749214.11	3.0	8117023.84	107.79	29.5	120.4	
Bi	209	No Gas	4801978.27	3.3	4424692.92	108.53	29.5	120.4	
Sc	45	H2	410409.97	2.4	415670.69	98.73	29.5	120.4	
Ge	72	H2	152861.04	1.7	153246.58	99.75	29.5	120.4	
Y	89	H2	2671970.94	1.4	2642116.11	101.13	29.5	120.4	
Sc	45	He	79320.41	1.2	81171.76	97.72	29.5	120.4	
Ge	72	He	62310.90	0.8	63135.03	98.69	29.5	120.4	
Y	89	He	535329.94	0.6	544041.92	98.4	29.5	120.4	
Tb	159	He	2887955.10	0.4	2866479.19	100.75	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 3:42:27 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.193	ppb	26.1	243.34	100	
11	B	6	No Gas	9.541	ppb	8.0	8168.15	1000	
23	Na	45	He	192300.728	ppb	0.9	21357287.78	200000	
24	Mg	45	He	192432.014	ppb	0.6	11755796.77	200000	
27	Al	45	He	186745.578	ppb	0.9	4417996.84	200000	
28	Si	45	H2	10116.011	ppb	0.7	422868.29	10000	>LDR
39	K	45	He	189470.162	ppb	0.8	10090186.78	200000	
40	Ca	45	H2	201724.170	ppb	0.3	80557066.58	200000	>LDR
51	V	89	He	0.043	ppb	62.6	263.34	1000	
52	Cr	89	He	1.337	ppb	5.8	1431.82	2000	
55	Mn	89	He	7.398	ppb	2.1	3697.83	2000	
56	Fe	89	H2	98997.565	ppb	0.4	158084111.88	100000	
59	Co	89	He	0.588	ppb	1.1	1049.01	1000	
60	Ni	89	He	1.923	ppb	11.0	1005.63	1000	
63	Cu	89	He	1.218	ppb	12.7	2070.23	2000	
66	Zn	89	He	1.655	ppb	15.9	372.24	2000	
75	As	89	He	0.272	ppb	9.8	46.01	1000	
78	Se	89	H2	1.318	ppb	67.8	104.83	1000	
88	Sr	89	He	1.207	ppb	3.3	904.51	2000	
95	Mo	89	He	1.531	ppb	1.9	1431.25	1000	
107	Ag	89	He	0.122	ppb	7.8	365.58	100	
111	Cd	89	He	0.140	ppb	11.8	55.19	1000	
118	Sn	159	He	1.219	ppb	2.9	1082.31	1000	
121	Sb	159	No Gas	1.078	ppb	17.8	7887.91	1000	
137	Ba	159	No Gas	1.976	ppb	16.8	5640.83	2000	
182	W	159	No Gas	2.055	ppb	9.4	11935.60	1000	
205	Tl	209	No Gas	0.798	ppb	24.0	9537.77	1000	
208	Pb	209	No Gas	1.814	ppb	18.1	30051.36	2000	
232	Th	209	No Gas	2.917	ppb	45.6	50636.55	1000	
238	U	209	No Gas	1.180	ppb	39.0	19158.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1352429.20	1.6	1537409.87	87.97	29.5	120.4	
Sc	45	No Gas	3245797.59	1.9	3373253.08	96.22	29.5	120.4	
Sc	45	H2	398422.80	1.5	415670.69	95.85	29.5	120.4	
Sc	45	He	79919.27	1.6	81171.76	98.46	29.5	120.4	
Ge	72	No Gas	729654.67	2.2	779333.11	93.63	29.5	120.4	
Ge	72	H2	142568.89	0.1	153246.58	93.03	29.5	120.4	
Ge	72	He	60231.11	1.2	63135.03	95.4	29.5	120.4	
Y	89	H2	2559310.63	1.1	2642116.11	96.87	29.5	120.4	
Y	89	He	528466.13	0.8	544041.92	97.14	29.5	120.4	
Tb	159	No Gas	8027257.87	1.7	8117023.84	98.89	29.5	120.4	
Tb	159	He	2779344.09	0.6	2866479.19	96.96	29.5	120.4	
Bi	209	No Gas	4046313.46	1.7	4424692.92	91.45	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	015SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:45:15 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	13.0	108.89	100	
11	B	6	No Gas	1.927	ppb	5.3	2752.58	1000	
23	Na	45	He	243.362	ppb	16.2	34549.81	200000	
24	Mg	45	He	19.998	ppb	9.1	1918.05	200000	
27	Al	45	He	22.155	ppb	19.5	597.81	200000	
28	Si	45	H2	5.086	ppb	62.8	507.24	10000	
39	K	45	He	57.568	ppb	11.5	14634.32	200000	
40	Ca	45	H2	32.633	ppb	5.6	16371.15	200000	
51	V	89	He	0.175	ppb	16.6	392.24	1000	
52	Cr	89	He	0.103	ppb	5.4	147.97	2000	
55	Mn	89	He	0.147	ppb	16.9	89.32	2000	
56	Fe	89	H2	22.614	ppb	8.2	48162.88	100000	
59	Co	89	He	0.059	ppb	11.4	117.79	1000	
60	Ni	89	He	0.071	ppb	19.7	80.01	1000	
63	Cu	89	He	1.680	ppb	4.1	2817.06	2000	
66	Zn	89	He	0.821	ppb	11.9	226.68	2000	
75	As	89	He	0.052	ppb	48.0	13.00	1000	
78	Se	89	H2	0.234	ppb	36.2	20.67	1000	
88	Sr	89	He	0.048	ppb	52.6	44.45	2000	
95	Mo	89	He	0.363	ppb	23.9	453.36	1000	
107	Ag	89	He	0.008	ppb	102.9	35.56	100	
111	Cd	89	He	0.065	ppb	19.0	27.41	1000	
118	Sn	159	He	0.439	ppb	11.4	451.14	1000	
121	Sb	159	No Gas	0.070	ppb	17.2	634.06	1000	
137	Ba	159	No Gas	0.106	ppb	22.5	337.05	2000	
182	W	159	No Gas	0.163	ppb	21.2	1111.30	1000	
205	Tl	209	No Gas	0.043	ppb	8.2	600.69	1000	
208	Pb	209	No Gas	0.130	ppb	11.9	2599.69	2000	
232	Th	209	No Gas	0.043	ppb	15.4	1011.18	1000	
238	U	209	No Gas	0.029	ppb	12.4	537.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1618738.11	1.2	1537409.87	105.29	29.5	120.4	
Sc	45	No Gas	3554250.71	1.9	3373253.08	105.37	29.5	120.4	
Sc	45	H2	437176.66	1.4	415670.69	105.17	29.5	120.4	
Sc	45	He	83681.45	3.6	81171.76	103.09	29.5	120.4	
Ge	72	No Gas	806224.90	1.3	779333.11	103.45	29.5	120.4	
Ge	72	H2	160789.28	0.7	153246.58	104.92	29.5	120.4	
Ge	72	He	64584.73	2.4	63135.03	102.3	29.5	120.4	
Y	89	H2	2772707.56	1.0	2642116.11	104.94	29.5	120.4	
Y	89	He	551858.95	2.7	544041.92	101.44	29.5	120.4	
Tb	159	No Gas	8456423.21	2.0	8117023.84	104.18	29.5	120.4	
Tb	159	He	2886144.02	2.7	2866479.19	100.69	29.5	120.4	
Bi	209	No Gas	4559243.77	1.8	4424692.92	103.04	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 3:47:55 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.058	ppb	29.8	102.23	100	
11	B	6	No Gas	1.540	ppb	4.3	2422.52	1000	
23	Na	45	He	115.001	ppb	5.8	19799.01	200000	
24	Mg	45	He	12.152	ppb	22.4	1424.62	200000	
27	Al	45	He	15.177	ppb	4.0	428.91	200000	
28	Si	45	H2	4.216	ppb	58.4	453.85	10000	
39	K	45	He	35.341	ppb	13.9	13448.65	200000	
40	Ca	45	H2	16.340	ppb	4.9	8988.69	200000	
51	V	89	He	0.252	ppb	16.7	466.69	1000	
52	Cr	89	He	0.092	ppb	16.3	138.64	2000	
55	Mn	89	He	0.141	ppb	17.9	87.32	2000	
56	Fe	89	H2	12.953	ppb	4.9	30794.51	100000	
59	Co	89	He	0.058	ppb	23.2	117.79	1000	
60	Ni	89	He	0.079	ppb	47.7	85.56	1000	
63	Cu	89	He	1.070	ppb	4.9	1981.32	2000	
66	Zn	89	He	0.862	ppb	13.2	237.79	2000	
75	As	89	He	0.063	ppb	17.0	15.00	1000	
78	Se	89	H2	0.146	ppb	32.5	12.83	1000	
88	Sr	89	He	0.058	ppb	66.8	52.22	2000	
95	Mo	89	He	0.224	ppb	30.1	333.35	1000	
107	Ag	89	He	0.005	ppb	13.8	25.56	100	
111	Cd	89	He	0.037	ppb	34.6	16.29	1000	
118	Sn	159	He	0.255	ppb	6.5	295.57	1000	
121	Sb	159	No Gas	0.180	ppb	60.5	1469.04	1000	
137	Ba	159	No Gas	0.362	ppb	64.9	1101.64	2000	
182	W	159	No Gas	0.210	ppb	36.4	1391.99	1000	
205	Tl	209	No Gas	0.151	ppb	58.4	2063.78	1000	
208	Pb	209	No Gas	0.343	ppb	62.2	6576.14	2000	
232	Th	209	No Gas	0.154	ppb	65.3	3178.38	1000	
238	U	209	No Gas	0.149	ppb	67.9	2726.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1636914.77	1.2	1537409.87	106.47	29.5	120.4	
Sc	45	No Gas	3553320.56	1.4	3373253.08	105.34	29.5	120.4	
Sc	45	H2	425687.48	1.1	415670.69	102.41	29.5	120.4	
Sc	45	He	83966.13	0.8	81171.76	103.44	29.5	120.4	
Ge	72	No Gas	806045.48	1.1	779333.11	103.43	29.5	120.4	
Ge	72	H2	157779.25	1.5	153246.58	102.96	29.5	120.4	
Ge	72	He	65129.67	0.4	63135.03	103.16	29.5	120.4	
Y	89	H2	2715276.74	1.2	2642116.11	102.77	29.5	120.4	
Y	89	He	559994.87	0.1	544041.92	102.93	29.5	120.4	
Tb	159	No Gas	8445936.06	0.7	8117023.84	104.05	29.5	120.4	
Tb	159	He	2925917.73	0.7	2866479.19	102.07	29.5	120.4	
Bi	209	No Gas	4569007.96	0.9	4424692.92	103.26	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	017ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:50:38 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	19.180	ppb	4.8	24333.29	20	79.5	120.4	
11	B	6	No Gas	20.113	ppb	5.0	17636.83	20	79.5	120.4	
23	Na	45	He	93903.374	ppb	0.8	10349957.93	100000	79.5	120.4	
24	Mg	45	He	93920.450	ppb	0.7	5692743.95	100000	79.5	120.4	
27	Al	45	He	89659.537	ppb	0.9	2104435.18	100000	79.5	120.4	
28	Si	45	H2	507.549	ppb	2.6	21623.72	500	79.5	120.4	
39	K	45	He	92256.753	ppb	1.1	4879663.39	100000	79.5	120.4	
40	Ca	45	H2	98697.429	ppb	1.4	39723185.24	100000	79.5	120.4	
51	V	89	He	19.700	ppb	0.7	17013.00	20	79.5	120.4	
52	Cr	89	He	19.394	ppb	0.5	20427.00	20	79.5	120.4	
55	Mn	89	He	19.829	ppb	2.0	9949.72	20	79.5	120.4	
56	Fe	89	H2	96847.532	ppb	1.4	155924160.33	100000	79.5	120.4	
59	Co	89	He	19.792	ppb	0.8	35253.12	20	79.5	120.4	
60	Ni	89	He	19.176	ppb	1.9	9717.05	20	79.5	120.4	
63	Cu	89	He	19.490	ppb	0.6	27091.42	20	79.5	120.4	
66	Zn	89	He	18.826	ppb	5.9	3593.94	20	79.5	120.4	
75	As	89	He	19.853	ppb	1.5	3047.67	20	79.5	120.4	
78	Se	89	H2	20.242	ppb	2.0	1624.19	20	79.5	120.4	
88	Sr	89	He	20.328	ppb	2.0	15225.57	20	79.5	120.4	
95	Mo	89	He	1967.701	ppb	0.5	1691809.21	2000	79.5	120.4	
107	Ag	89	He	13.451	ppb	1.4	39336.65	20	79.5	120.4	> +/- 10%
111	Cd	89	He	19.248	ppb	1.1	7498.82	20	79.5	120.4	
118	Sn	159	He	19.596	ppb	1.5	16804.38	20	79.5	120.4	
121	Sb	159	No Gas	19.379	ppb	4.9	141782.13	20	79.5	120.4	
137	Ba	159	No Gas	19.284	ppb	4.7	55497.11	20	79.5	120.4	
182	W	159	No Gas	19.731	ppb	4.5	114910.99	20	79.5	120.4	
205	Tl	209	No Gas	19.529	ppb	4.0	241788.06	20	79.5	120.4	
208	Pb	209	No Gas	19.652	ppb	5.1	336353.01	20	79.5	120.4	
232	Th	209	No Gas	20.347	ppb	5.4	364563.76	20	79.5	120.4	
238	U	209	No Gas	20.183	ppb	4.8	339375.57	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1463739.06	2.9	1537409.87	95.21	29.5	120.4	
Sc	45	No Gas	3314206.15	3.0	3373253.08	98.25	29.5	120.4	
Sc	45	H2	401542.80	0.6	415670.69	96.6	29.5	120.4	
Sc	45	He	79286.62	0.5	81171.76	97.68	29.5	120.4	
Ge	72	No Gas	758456.70	3.2	779333.11	97.32	29.5	120.4	
Ge	72	H2	146979.43	1.6	153246.58	95.91	29.5	120.4	
Ge	72	He	60635.38	0.3	63135.03	96.04	29.5	120.4	
Y	89	H2	2580569.85	0.8	2642116.11	97.67	29.5	120.4	
Y	89	He	531577.42	0.6	544041.92	97.71	29.5	120.4	
Tb	159	No Gas	8135662.66	2.4	8117023.84	100.23	29.5	120.4	
Tb	159	He	2854076.21	0.4	2866479.19	99.57	29.5	120.4	
Bi	209	No Gas	4210067.63	2.8	4424692.92	95.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	018_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:53:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.341	ppb	4.5	31552.96	25	93.36	89.8	110.2	
11	B	6	No Gas	23.365	ppb	4.0	21684.65	25	93.46	89.8	110.2	
23	Na	45	He	5143.050	ppb	2.0	602114.08	5000	102.86	89.8	110.2	
24	Mg	45	He	4937.726	ppb	2.2	315334.95	5000	98.75	89.8	110.2	
27	Al	45	He	503.092	ppb	3.0	12470.28	500	100.62	89.8	110.2	
28	Si	45	H2	493.737	ppb	1.1	22308.85	500	98.75	89.8	110.2	
39	K	45	He	4973.938	ppb	2.6	287420.94	5000	99.48	89.8	110.2	
40	Ca	45	H2	5025.169	ppb	0.8	2146485.39	5000	100.5	89.8	110.2	
51	V	89	He	24.673	ppb	1.0	22181.45	25	98.69	89.8	110.2	
52	Cr	89	He	25.160	ppb	2.6	27647.24	25	100.64	89.8	110.2	
55	Mn	89	He	24.782	ppb	1.0	12975.63	25	99.13	89.8	110.2	
56	Fe	89	H2	5028.964	ppb	1.7	8574327.05	5000	100.58	89.8	110.2	
59	Co	89	He	25.105	ppb	1.4	46673.71	25	100.42	89.8	110.2	
60	Ni	89	He	25.458	ppb	2.0	13450.22	25	101.83	89.8	110.2	
63	Cu	89	He	25.640	ppb	1.9	37063.30	25	102.56	89.8	110.2	
66	Zn	89	He	25.311	ppb	3.0	5019.97	25	101.24	89.8	110.2	
75	As	89	He	24.747	ppb	0.9	3964.33	25	98.99	89.8	110.2	
78	Se	89	H2	24.915	ppb	1.6	2114.90	25	99.66	89.8	110.2	
88	Sr	89	He	24.318	ppb	0.9	19010.38	25	97.27	89.8	110.2	
95	Mo	89	He	26.260	ppb	2.3	23692.25	25	105.04	89.8	110.2	
107	Ag	89	He	18.448	ppb	1.1	56309.67	25	73.79	89.8	110.2	> +/- 10%
111	Cd	89	He	24.844	ppb	2.6	10102.39	25	99.38	89.8	110.2	
118	Sn	159	He	24.359	ppb	0.9	21337.49	25	97.44	89.8	110.2	
121	Sb	159	No Gas	24.362	ppb	5.2	187640.37	25	97.45	89.8	110.2	
137	Ba	159	No Gas	23.950	ppb	4.2	72574.42	25	95.8	89.8	110.2	
182	W	159	No Gas	23.448	ppb	4.1	143781.83	25	93.79	89.8	110.2	
205	Tl	209	No Gas	24.013	ppb	4.3	326692.30	25	96.05	89.8	110.2	
208	Pb	209	No Gas	23.883	ppb	4.0	449246.04	25	95.53	89.8	110.2	
232	Th	209	No Gas	23.635	ppb	5.1	465396.32	25	94.54	89.8	110.2	
238	U	209	No Gas	23.583	ppb	4.6	435776.68	25	94.33	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559386.22	2.1	1537409.87	101.43	29.5	120.4	
Sc	45	No Gas	3517378.84	1.8	3373253.08	104.27	29.5	120.4	
Sc	45	H2	425790.94	1.0	415670.69	102.43	29.5	120.4	
Sc	45	He	83400.57	2.1	81171.76	102.75	29.5	120.4	
Ge	72	No Gas	808165.98	2.4	779333.11	103.7	29.5	120.4	
Ge	72	H2	159333.21	0.3	153246.58	103.97	29.5	120.4	
Ge	72	He	64656.86	0.5	63135.03	102.41	29.5	120.4	
Y	89	H2	2730459.06	1.5	2642116.11	103.34	29.5	120.4	
Y	89	He	554877.55	0.7	544041.92	101.99	29.5	120.4	
Tb	159	No Gas	8565560.85	2.1	8117023.84	105.53	29.5	120.4	
Tb	159	He	2917711.73	0.8	2866479.19	101.79	29.5	120.4	
Bi	209	No Gas	4625644.49	2.1	4424692.92	104.54	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	019_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 3:56:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.074	ppb	13.2	118.89	0.2	
11	B	6	No Gas	0.771	ppb	8.7	1629.04	4	
23	Na	45	He	71.078	ppb	7.1	14540.18	200	
24	Mg	45	He	11.730	ppb	21.2	1386.83	20	Failed DoD
27	Al	45	He	9.152	ppb	53.8	278.90	20	
28	Si	45	H2	0.731	ppb	118.8	303.67	100	
39	K	45	He	25.258	ppb	7.5	12768.40	200	
40	Ca	45	H2	9.254	ppb	2.0	6049.31	20	
51	V	89	He	0.149	ppb	15.6	368.91	1	
52	Cr	89	He	0.063	ppb	24.1	104.65	1	
55	Mn	89	He	0.068	ppb	61.9	48.66	0.4	
56	Fe	89	H2	12.456	ppb	2.3	30533.81	20	Failed DoD
59	Co	89	He	0.037	ppb	38.9	77.78	0.2	
60	Ni	89	He	0.053	ppb	72.3	71.11	0.4	
63	Cu	89	He	0.425	ppb	7.6	1035.63	0.6	Failed DoD
66	Zn	89	He	0.012	ppb	287.6	68.89	2	
75	As	89	He	0.031	ppb	23.6	9.67	1	
78	Se	89	H2	0.065	ppb	68.1	6.17	1	
88	Sr	89	He	0.034	ppb	51.6	33.33	1	
95	Mo	89	He	0.456	ppb	23.5	537.81	1	
107	Ag	89	He	0.012	ppb	67.9	46.67	0.2	
111	Cd	89	He	0.032	ppb	67.2	14.07	0.2	
118	Sn	159	He	0.147	ppb	19.8	197.79	1	
121	Sb	159	No Gas	0.032	ppb	39.8	343.72	0.2	
137	Ba	159	No Gas	0.040	ppb	23.6	136.82	0.4	
182	W	159	No Gas	0.076	ppb	29.7	584.00	1	
205	Tl	209	No Gas	0.029	ppb	16.5	420.48	0.2	
208	Pb	209	No Gas	0.034	ppb	26.2	827.60	0.2	
232	Th	209	No Gas	0.051	ppb	8.1	1174.70	1	
238	U	209	No Gas	0.023	ppb	28.7	427.17	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1563579.21	2.5	1537409.87	101.7	29.5	120.4	
Sc	45	No Gas	3537558.66	2.3	3373253.08	104.87	29.5	120.4	
Sc	45	H2	431614.45	2.0	415670.69	103.84	29.5	120.4	
Sc	45	He	83200.71	2.9	81171.76	102.5	29.5	120.4	
Ge	72	No Gas	808388.19	1.9	779333.11	103.73	29.5	120.4	
Ge	72	H2	158734.84	2.7	153246.58	103.58	29.5	120.4	
Ge	72	He	64750.81	1.9	63135.03	102.56	29.5	120.4	
Y	89	H2	2767574.19	1.6	2642116.11	104.75	29.5	120.4	
Y	89	He	552533.56	2.8	544041.92	101.56	29.5	120.4	
Tb	159	No Gas	8481126.33	2.6	8117023.84	104.49	29.5	120.4	
Tb	159	He	2877328.08	3.0	2866479.19	100.38	29.5	120.4	
Bi	209	No Gas	4574833.32	2.3	4424692.92	103.39	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	021ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:01:26 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.032	ppb	27.7	56.67	0.2	-50	50	
B	11	6	No Gas	0.750	ppb	3.0	1471.24	4	-50	100	
Na	23	45	He	95865.056	ppb	1.7	10349496.84	100000	80	120	
Mg	24	45	He	96140.778	ppb	2.0	5707641.51	100000	80	120	
Al	27	45	He	91637.356	ppb	2.1	2106679.12	100000	80	120	
Si	28	45	H2	5.398	ppb	8.5	473.88	100	-50	50	
K	39	45	He	94013.934	ppb	1.8	4870418.69	100000	80	120	
Ca	40	45	H2	100004.803	ppb	2.2	39866582.18	100000	80	120	
V	51	89	He	0.142	ppb	30.0	342.24	1	-50	100	
Cr	52	89	He	0.307	ppb	3.0	351.28	0.78	-100	100	
Mn	55	89	He	0.395	ppb	4.3	206.63	0.0826	100	100	
Fe	56	89	H2	97507.252	ppb	1.4	156083903.40	100000	80	120	
Co	59	89	He	0.269	ppb	12.7	480.05	0.2	-50	100	
Ni	60	89	He	0.275	ppb	22.1	176.67	0.114	100	100	
Cu	63	89	He	0.780	ppb	4.1	1457.90	-0.043	100	100	DoD
Zn	66	89	He	0.545	ppb	7.2	163.34	-0.7632	100	100	
As	75	89	He	0.055	ppb	55.8	12.67	1	-50	100	
Se	78	89	H2	0.172	ppb	25.0	14.17	1	-50	100	
Sr	88	89	He	0.782	ppb	5.1	582.25	0.0578	100	100	
Mo	95	89	He	1980.677	ppb	1.8	1672688.74	2000	80	120	
Ag	107	89	He	0.019	ppb	23.5	65.56	0.2	-50	50	
Cd	111	89	He	0.364	ppb	5.1	140.37	0.268	100	100	
Sn	118	159	He	0.311	ppb	13.7	331.13	-0.24	100	100	
Sb	121	159	No Gas	0.159	ppb	4.0	1248.11	0.089	100	100	
Ba	137	159	No Gas	0.208	ppb	9.2	610.70	-0.0794	100	100	
W	182	159	No Gas	0.203	ppb	7.0	1294.85	0.32	-100	100	
Tl	205	209	No Gas	0.004	ppb	34.7	73.42	0.2	-50	50	
Pb	208	209	No Gas	0.096	ppb	10.5	1795.40	0.03	100	100	
Th	232	209	No Gas	0.036	ppb	38.3	807.60	0.2	-50	50	
U	238	209	No Gas	0.003	ppb	86.4	60.07	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1428320.58	2.1	1537409.87	92.9	29.5	120.4	
Sc	45	No Gas	3305719.59	2.3	3373253.08	98	29.5	120.4	
Sc	45	H2	397721.78	1.0	415670.69	95.68	29.5	120.4	
Sc	45	He	77678.45	2.1	81171.76	95.7	29.5	120.4	
Ge	72	No Gas	755442.14	2.3	779333.11	96.93	29.5	120.4	
Ge	72	H2	145259.47	1.0	153246.58	94.79	29.5	120.4	
Ge	72	He	59866.73	1.4	63135.03	94.82	29.5	120.4	
Y	89	H2	2565706.76	1.1	2642116.11	97.11	29.5	120.4	
Y	89	He	522235.95	1.7	544041.92	95.99	29.5	120.4	
Tb	159	No Gas	8096408.28	2.3	8117023.84	99.75	29.5	120.4	
Tb	159	He	2804481.56	1.6	2866479.19	97.84	29.5	120.4	
Bi	209	No Gas	4178657.26	2.1	4424692.92	94.44	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF30IMW1
File Name	022_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:04:08 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.132	ppb	22.2	55.56	0.5	
B	11	6	No Gas	2.186	ppb	21.1	1338.99	10	
Na	23	45	He	707.304	ppb	11.3	21560.27	500	PB 6020 Fails DoD
Mg	24	45	He	93.225	ppb	16.1	1733.56	50	PB 6020 Fails DoD
Al	27	45	He	113.685	ppb	6.5	581.15	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Si	28	45	H2	17.083	ppb	69.8	400.46	250	
K	39	45	He	220.366	ppb	10.9	13133.50	500	
Ca	40	45	H2	212.586	ppb	4.5	19229.19	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
V	51	89	He	3.231	ppb	1.3	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.315	ppb	41.5	101.32	2.5	
Mn	55	89	He	0.582	ppb	16.5	71.32	1	
Fe	56	89	H2	164.295	ppb	2.5	62997.83	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.044	ppb	88.2	24.44	0.5	
Ni	60	89	He	0.268	ppb	56.0	68.89	1	
Cu	63	89	He	5.098	ppb	5.9	1824.63	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	3.703	ppb	7.2	204.45	5	
As	75	89	He	0.304	ppb	37.5	14.00	2.5	
Se	78	89	H2	0.456	ppb	15.3	8.00	2.5	
Sr	88	89	He	0.081	ppb	109.2	18.89	2.5	
Mo	95	89	He	10.219	ppb	5.9	1895.76	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Ag	107	89	He	0.017	ppb	147.9	21.11	0.5	
Cd	111	89	He	0.057	ppb	88.9	5.55	0.5	
Sn	118	159	He	1.243	ppb	20.3	286.68	2.5	
Sb	121	159	No Gas	0.067	ppb	58.0	200.23	0.5	
Ba	137	159	No Gas	0.066	ppb	39.9	56.73	1	
W	182	159	No Gas	0.026	ppb	212.3	153.50	2.5	
Tl	205	209	No Gas	0.015	ppb	92.4	70.08	0.5	
Pb	208	209	No Gas	0.279	ppb	14.4	1238.08	0.5	
Th	232	209	No Gas	0.055	ppb	20.3	390.45	2.5	
U	238	209	No Gas	0.015	ppb	96.6	60.07	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573321.88	2.7	1537409.87	102.34	29.5	120.4	
Sc	45	No Gas	3385796.67	1.7	3373253.08	100.37	29.5	120.4	
Sc	45	H2	406215.16	1.9	415670.69	97.73	29.5	120.4	
Sc	45	He	79130.26	0.9	81171.76	97.48	29.5	120.4	
Ge	72	No Gas	794753.76	1.7	779333.11	101.98	29.5	120.4	
Ge	72	H2	149990.75	2.4	153246.58	97.88	29.5	120.4	
Ge	72	He	61847.78	1.4	63135.03	97.96	29.5	120.4	
Y	89	H2	2651511.34	2.0	2642116.11	100.36	29.5	120.4	
Y	89	He	535660.24	1.0	544041.92	98.46	29.5	120.4	
Tb	159	No Gas	8476086.40	1.4	8117023.84	104.42	29.5	120.4	
Tb	159	He	2891335.65	0.6	2866479.19	100.87	29.5	120.4	
Bi	209	No Gas	4631778.75	2.3	4424692.92	104.68	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF30IMW1
File Name	023LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:06:50 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	43.859	ppb	4.6	11457.14	50	17.54	79.5	120.4	
B	11	6	No Gas	476.817	ppb	5.8	82596.98	500	19.07	79.5	120.4	
Na	23	45	He	8113.410	ppb	1.6	184125.03	7500	21.64	79.5	120.4	
Mg	24	45	He	4989.972	ppb	1.6	60874.38	5000	19.96	79.5	120.4	
Al	27	45	He	1803.353	ppb	1.3	8483.91	2000	18.03	79.5	120.4	
Si	28	45	H2	1051.741	ppb	4.4	9052.90	1000	21.03	0	200	
K	39	45	He	10352.600	ppb	0.9	119686.59	10000	20.71	79.5	120.4	
Ca	40	45	H2	2666.378	ppb	0.8	215204.72	2500	21.33	79.5	120.4	
V	51	89	He	476.086	ppb	0.1	82032.07	500	19.04	79.5	120.4	
Cr	52	89	He	192.616	ppb	0.9	40874.56	200	19.26	79.5	120.4	
Mn	55	89	He	480.833	ppb	0.6	48601.58	500	19.23	79.5	120.4	
Fe	56	89	H2	1048.488	ppb	1.3	350550.55	1000	20.97	79.5	120.4	
Co	59	89	He	491.286	ppb	0.2	176440.85	500	19.65	79.5	120.4	
Ni	60	89	He	473.155	ppb	0.4	48184.76	500	18.93	79.5	120.4	
Cu	63	89	He	243.993	ppb	0.2	67764.85	250	19.52	79.5	120.4	
Zn	66	89	He	481.447	ppb	2.2	18268.12	500	19.26	79.5	120.4	
As	75	89	He	100.940	ppb	1.9	3125.03	100	20.19	79.5	120.4	
Se	78	89	H2	100.767	ppb	0.8	1638.19	100	20.15	79.5	120.4	
Sr	88	89	He	507.803	ppb	0.9	76672.75	500	20.31	79.5	120.4	
Mo	95	89	He	104.580	ppb	3.3	18254.96	100	20.92	79.5	120.4	
Ag	107	89	He	50.683	ppb	1.2	29892.54	50	20.27	79.5	120.4	
Cd	111	89	He	253.294	ppb	0.9	19898.05	250	20.26	79.5	120.4	
Sn	118	159	He	492.523	ppb	1.6	85304.07	500	19.7	79.5	120.4	
Sb	121	159	No Gas	97.421	ppb	5.7	150571.38	100	19.48	79.5	120.4	
Ba	137	159	No Gas	1799.008	ppb	5.7	1093409.47	2000	17.99	79.5	120.4	
W	182	159	No Gas	100.061	ppb	4.9	123122.20	100	20.01	79.5	120.4	
Tl	205	209	No Gas	98.871	ppb	5.9	271588.56	100	19.77	79.5	120.4	
[Pb]	206	209	No Gas	100.062	ppb	6.2	94611.29	100	20.01	79.5	120.4	
[Pb]	207	209	No Gas	98.645	ppb	5.8	81765.48	100	19.73	79.5	120.4	
Pb	208	209	No Gas	98.771	ppb	5.7	375161.79	100	19.75	79.5	120.4	
Th	232	209	No Gas	97.689	ppb	6.5	388382.93	100	19.54	79.5	120.4	
U	238	209	No Gas	98.228	ppb	6.5	366445.16	100	19.65	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1505650.32	3.4	1537409.87	97.93	29.5	120.4	
Sc	45	No Gas	3388736.58	3.4	3373253.08	100.46	29.5	120.4	
Sc	45	H2	399092.36	1.3	415670.69	96.01	29.5	120.4	
Sc	45	He	79008.58	0.7	81171.76	97.34	29.5	120.4	
Ge	72	No Gas	788889.98	3.3	779333.11	101.23	29.5	120.4	
Ge	72	H2	148034.71	1.0	153246.58	96.6	29.5	120.4	
Ge	72	He	62012.89	0.8	63135.03	98.22	29.5	120.4	
Y	89	H2	2614091.79	0.9	2642116.11	98.94	29.5	120.4	
Y	89	He	535985.25	0.5	544041.92	98.52	29.5	120.4	
Tb	159	No Gas	8598091.33	3.4	8117023.84	105.93	29.5	120.4	
Tb	159	He	2892063.74	0.4	2866479.19	100.89	29.5	120.4	
Bi	209	No Gas	4673848.63	3.8	4424692.92	105.63	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	024_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:09:40 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.015	ppb	3.6	30999.52	25	100.06	89.8	110.2	
11	B	6	No Gas	25.325	ppb	4.8	21473.27	25	101.3	89.8	110.2	
23	Na	45	He	5058.624	ppb	0.8	581592.97	5000	101.17	89.8	110.2	
24	Mg	45	He	4918.408	ppb	1.5	308392.51	5000	98.37	89.8	110.2	
27	Al	45	He	487.782	ppb	2.5	11873.10	500	97.56	89.8	110.2	
28	Si	45	H2	513.441	ppb	3.4	22379.01	500	102.69	89.8	110.2	
39	K	45	He	4912.231	ppb	2.1	278844.59	5000	98.24	89.8	110.2	
40	Ca	45	H2	5051.806	ppb	0.2	2082764.80	5000	101.04	89.8	110.2	
51	V	89	He	24.311	ppb	1.8	21668.40	25	97.24	89.8	110.2	
52	Cr	89	He	24.409	ppb	2.1	26590.07	25	97.64	89.8	110.2	
55	Mn	89	He	24.603	ppb	1.4	12770.78	25	98.41	89.8	110.2	
56	Fe	89	H2	5055.773	ppb	0.4	8315202.83	5000	101.12	89.8	110.2	
59	Co	89	He	24.737	ppb	3.1	45587.90	25	98.95	89.8	110.2	
60	Ni	89	He	24.984	ppb	2.0	13085.42	25	99.94	89.8	110.2	
63	Cu	89	He	24.916	ppb	0.4	35718.70	25	99.66	89.8	110.2	
66	Zn	89	He	24.972	ppb	0.2	4911.05	25	99.89	89.8	110.2	
75	As	89	He	24.299	ppb	0.9	3859.29	25	97.2	89.8	110.2	
78	Se	89	H2	25.641	ppb	1.3	2099.56	25	102.56	89.8	110.2	
88	Sr	89	He	24.427	ppb	1.5	18929.19	25	97.71	89.8	110.2	
95	Mo	89	He	24.245	ppb	3.1	21694.51	25	96.98	89.8	110.2	
107	Ag	89	He	17.899	ppb	1.3	54157.73	25	71.6	89.8	110.2	> +/- 10%
111	Cd	89	He	24.305	ppb	2.6	9798.08	25	97.22	89.8	110.2	
118	Sn	159	He	23.540	ppb	2.3	20487.33	25	94.16	89.8	110.2	
121	Sb	159	No Gas	25.171	ppb	7.6	184644.83	25	100.68	89.8	110.2	
137	Ba	159	No Gas	24.997	ppb	7.0	72156.18	25	99.99	89.8	110.2	
182	W	159	No Gas	24.616	ppb	7.3	143744.37	25	98.46	89.8	110.2	
205	Tl	209	No Gas	25.134	ppb	7.1	326617.58	25	100.54	89.8	110.2	
208	Pb	209	No Gas	24.945	ppb	6.2	448284.40	25	99.78	89.8	110.2	
232	Th	209	No Gas	24.743	ppb	7.0	465468.10	25	98.97	89.8	110.2	
238	U	209	No Gas	24.684	ppb	7.9	435608.98	25	98.74	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1428981.73	1.2	1537409.87	92.95	29.5	120.4	
Sc	45	No Gas	3315987.82	4.8	3373253.08	98.3	29.5	120.4	
Sc	45	H2	410950.81	0.9	415670.69	98.86	29.5	120.4	
Sc	45	He	81868.47	1.0	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	763223.76	2.0	779333.11	97.93	29.5	120.4	
Ge	72	H2	153370.25	1.4	153246.58	100.08	29.5	120.4	
Ge	72	He	63918.01	0.7	63135.03	101.24	29.5	120.4	
Y	89	H2	2633432.43	0.5	2642116.11	99.67	29.5	120.4	
Y	89	He	550074.01	1.0	544041.92	101.11	29.5	120.4	
Tb	159	No Gas	8173102.38	5.1	8117023.84	100.69	29.5	120.4	
Tb	159	He	2898949.47	1.4	2866479.19	101.13	29.5	120.4	
Bi	209	No Gas	4424628.12	4.4	4424692.92	100	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	025_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:12:22 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	6.4	103.33	0.2	
11	B	6	No Gas	0.883	ppb	4.1	1635.71	4	
23	Na	45	He	23.891	ppb	1.4	8949.36	200	
24	Mg	45	He	1.723	ppb	59.5	735.63	20	
27	Al	45	He	-0.750	ppb	N/A	32.22	20	
28	Si	45	H2	0.443	ppb	160.9	276.98	100	
39	K	45	He	15.269	ppb	39.3	12026.33	200	
40	Ca	45	H2	0.842	ppb	25.9	2303.61	20	
51	V	89	He	0.086	ppb	32.7	311.13	1	
52	Cr	89	He	0.038	ppb	15.5	76.66	1	
55	Mn	89	He	0.014	ppb	95.9	20.00	0.4	
56	Fe	89	H2	4.222	ppb	10.2	15442.42	20	
59	Co	89	He	0.010	ppb	135.7	26.67	0.2	
60	Ni	89	He	0.035	ppb	133.1	61.11	0.4	
63	Cu	89	He	0.084	ppb	23.4	547.81	0.6	
66	Zn	89	He	0.037	ppb	203.5	73.34	2	
75	As	89	He	-0.002	ppb	N/A	4.33	1	
78	Se	89	H2	0.057	ppb	14.0	5.17	1	
88	Sr	89	He	0.009	ppb	87.4	13.34	1	
95	Mo	89	He	0.125	ppb	54.1	238.90	1	
107	Ag	89	He	0.007	ppb	32.9	32.22	0.2	
111	Cd	89	He	0.000	ppb	N/A	1.11	0.2	
118	Sn	159	He	0.187	ppb	22.2	232.23	1	
121	Sb	159	No Gas	0.019	ppb	24.9	236.93	0.2	
137	Ba	159	No Gas	0.024	ppb	51.9	86.77	0.4	
182	W	159	No Gas	0.073	ppb	26.4	543.95	1	
205	Tl	209	No Gas	0.019	ppb	27.0	270.31	0.2	
208	Pb	209	No Gas	0.017	ppb	6.5	487.22	0.2	
232	Th	209	No Gas	0.120	ppb	10.0	2446.33	1	
238	U	209	No Gas	0.018	ppb	37.1	323.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1479010.69	0.6	1537409.87	96.2	29.5	120.4	
Sc	45	No Gas	3378358.16	1.8	3373253.08	100.15	29.5	120.4	
Sc	45	H2	412639.06	2.5	415670.69	99.27	29.5	120.4	
Sc	45	He	81914.72	0.6	81171.76	100.92	29.5	120.4	
Ge	72	No Gas	778504.07	1.2	779333.11	99.89	29.5	120.4	
Ge	72	H2	153856.59	2.1	153246.58	100.4	29.5	120.4	
Ge	72	He	63767.16	0.4	63135.03	101	29.5	120.4	
Y	89	H2	2620873.18	2.1	2642116.11	99.2	29.5	120.4	
Y	89	He	549136.97	0.1	544041.92	100.94	29.5	120.4	
Tb	159	No Gas	8179788.00	2.0	8117023.84	100.77	29.5	120.4	
Tb	159	He	2879091.83	0.1	2866479.19	100.44	29.5	120.4	
Bi	209	No Gas	4454340.64	1.7	4424692.92	100.67	29.5	120.4	

Sample Report

Sample Name SN5146-018

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:15:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.111	ppb	26.7	47.78	100	
11	B	6	No Gas	11.756	ppb	5.6	2952.62	1000	
23	Na	45	He	2934.229	ppb	1.1	69853.87	200000	
24	Mg	45	He	353.315	ppb	10.0	4836.77	200000	
27	Al	45	He	253.734	ppb	14.3	1226.77	200000	
28	Si	45	H2	1220.082	ppb	3.4	10642.48	10000	
39	K	45	He	138.571	ppb	6.7	12154.81	200000	
40	Ca	45	H2	2752.714	ppb	1.3	225909.90	200000	
51	V	89	He	3.807	ppb	10.8	867.84	1000	
52	Cr	89	He	0.723	ppb	2.9	184.64	2000	
55	Mn	89	He	15.935	ppb	3.6	1594.47	2000	
56	Fe	89	H2	694.712	ppb	1.0	236592.05	100000	
59	Co	89	He	0.258	ppb	43.9	100.01	1000	
60	Ni	89	He	1.513	ppb	10.0	192.23	1000	
63	Cu	89	He	2.138	ppb	5.7	991.18	2000	
66	Zn	89	He	10.853	ppb	9.2	466.69	2000	
75	As	89	He	0.324	ppb	17.1	14.33	1000	
78	Se	89	H2	0.326	ppb	22.9	5.83	1000	
88	Sr	89	He	7.928	ppb	1.9	1182.32	2000	
95	Mo	89	He	0.856	ppb	36.0	268.91	1000	
107	Ag	89	He	0.054	ppb	120.8	42.22	100	
111	Cd	89	He	0.101	ppb	60.1	8.89	1000	
118	Sn	159	He	1.517	ppb	13.3	327.79	1000	
121	Sb	159	No Gas	3.594	ppb	2.6	5524.07	1000	
137	Ba	159	No Gas	7.419	ppb	1.0	4425.66	2000	
182	W	159	No Gas	0.058	ppb	76.7	190.22	1000	
205	Tl	209	No Gas	0.023	ppb	15.3	90.10	1000	
208	Pb	209	No Gas	0.784	ppb	5.2	3100.30	2000	
232	Th	209	No Gas	0.421	ppb	9.8	1812.18	1000	
238	U	209	No Gas	0.033	ppb	21.6	123.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1521022.94	2.2	1537409.87	98.93	29.5	120.4	
Sc	45	No Gas	3396617.93	1.0	3373253.08	100.69	29.5	120.4	
Sc	45	H2	405930.25	0.8	415670.69	97.66	29.5	120.4	
Sc	45	He	78369.08	1.1	81171.76	96.55	29.5	120.4	
Ge	72	No Gas	795868.68	1.1	779333.11	102.12	29.5	120.4	
Ge	72	H2	150206.13	1.1	153246.58	98.02	29.5	120.4	
Ge	72	He	61358.49	1.1	63135.03	97.19	29.5	120.4	
Y	89	H2	2630481.22	0.8	2642116.11	99.56	29.5	120.4	
Y	89	He	526481.47	1.4	544041.92	96.77	29.5	120.4	
Tb	159	No Gas	8396010.15	0.8	8117023.84	103.44	29.5	120.4	
Tb	159	He	2838334.06	1.0	2866479.19	99.02	29.5	120.4	
Bi	209	No Gas	4568582.01	0.6	4424692.92	103.25	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF30IMW2
File Name	027_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:17:43 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.053	ppb	114.5	31.11	0.5	
B	11	6	No Gas	2.505	ppb	28.8	1283.44	10	
Na	23	45	He	167.545	ppb	5.1	9674.14	500	
Mg	24	45	He	31.572	ppb	82.8	986.79	50	
Al	27	45	He	12.855	ppb	135.3	108.90	50	
Si	28	45	H2	10.144	ppb	33.2	333.71	250	
K	39	45	He	82.023	ppb	9.6	11641.19	500	
Ca	40	45	H2	36.989	ppb	2.8	4839.90	50	
V	51	89	He	2.845	ppb	13.7	714.49	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.320	ppb	10.3	101.98	2.5	
Mn	55	89	He	0.991	ppb	23.5	111.98	1	
Fe	56	89	H2	24.064	ppb	6.8	16200.62	50	
Co	59	89	He	0.069	ppb	211.5	33.34	0.5	
Ni	60	89	He	0.382	ppb	31.7	80.00	1	
Cu	63	89	He	1.246	ppb	21.1	758.94	1.5	
Zn	66	89	He	2.637	ppb	9.0	163.34	5	
As	75	89	He	0.155	ppb	73.5	9.33	2.5	
Se	78	89	H2	0.229	ppb	15.5	4.17	2.5	
Sr	88	89	He	0.060	ppb	129.4	15.56	2.5	
Mo	95	89	He	0.272	ppb	207.7	171.12	2.5	
Ag	107	89	He	0.002	ppb	1181.9	12.22	0.5	
Cd	111	89	He	0.038	ppb	77.9	4.07	0.5	
Sn	118	159	He	1.297	ppb	11.7	295.57	2.5	
Sb	121	159	No Gas	0.060	ppb	56.5	186.88	0.5	
Ba	137	159	No Gas	0.156	ppb	2.3	110.12	1	
W	182	159	No Gas	0.041	ppb	73.2	170.19	2.5	
Tl	205	209	No Gas	-0.002	ppb	N/A	23.36	0.5	
Pb	208	209	No Gas	0.099	ppb	15.8	553.96	0.5	
Th	232	209	No Gas	0.048	ppb	18.6	360.41	2.5	
U	238	209	No Gas	0.006	ppb	107.7	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1445630.49	1.1	1537409.87	94.03	29.5	120.4	
Sc	45	No Gas	3339062.67	2.3	3373253.08	98.99	29.5	120.4	
Sc	45	H2	398172.64	1.2	415670.69	95.79	29.5	120.4	
Sc	45	He	78886.94	1.0	81171.76	97.19	29.5	120.4	
Ge	72	No Gas	777381.51	1.4	779333.11	99.75	29.5	120.4	
Ge	72	H2	147580.96	1.6	153246.58	96.3	29.5	120.4	
Ge	72	He	61435.99	0.6	63135.03	97.31	29.5	120.4	
Y	89	H2	2586708.83	1.2	2642116.11	97.9	29.5	120.4	
Y	89	He	532942.96	0.3	544041.92	97.96	29.5	120.4	
Tb	159	No Gas	8391592.03	2.0	8117023.84	103.38	29.5	120.4	
Tb	159	He	2885687.28	0.6	2866479.19	100.67	29.5	120.4	
Bi	209	No Gas	4565526.25	1.6	4424692.92	103.18	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF30IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:20:21 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.111	ppb	2.4	12328.94	50	19.24	79.5	120.4	
B	11	6	No Gas	496.620	ppb	4.0	84372.56	500	19.86	79.5	120.4	
Na	23	45	He	8229.634	ppb	1.6	187476.68	7500	21.95	79.5	120.4	
Mg	24	45	He	5227.804	ppb	2.3	64026.01	5000	20.91	79.5	120.4	
Al	27	45	He	1928.549	ppb	2.0	9108.79	2000	19.29	79.5	120.4	
Si	28	45	H2	1060.178	ppb	1.0	9019.66	1000	21.2	0	200	
K	39	45	He	10620.454	ppb	0.8	123032.05	10000	21.24	79.5	120.4	
Ca	40	45	H2	2795.064	ppb	1.1	222921.67	2500	22.36	79.5	120.4	
V	51	89	He	513.446	ppb	0.5	88115.45	500	20.54	79.5	120.4	
Cr	52	89	He	208.755	ppb	0.5	44129.74	200	20.88	79.5	120.4	
Mn	55	89	He	518.803	ppb	0.7	52239.27	500	20.75	79.5	120.4	
Fe	56	89	H2	1114.539	ppb	1.2	366111.81	1000	22.29	79.5	120.4	
Co	59	89	He	531.884	ppb	0.6	190292.59	500	21.28	79.5	120.4	
Ni	60	89	He	507.639	ppb	1.2	51494.42	500	20.31	79.5	120.4	
Cu	63	89	He	261.953	ppb	1.4	72442.51	250	20.96	79.5	120.4	
Zn	66	89	He	518.892	ppb	1.5	19606.59	500	20.76	79.5	120.4	
As	75	89	He	105.840	ppb	1.3	3263.74	100	21.17	79.5	120.4	
Se	78	89	H2	103.992	ppb	1.3	1663.53	100	20.8	79.5	120.4	
Sr	88	89	He	519.495	ppb	0.5	78140.97	500	20.78	79.5	120.4	
Mo	95	89	He	106.562	ppb	1.4	18527.60	100	21.31	79.5	120.4	
Ag	107	89	He	54.471	ppb	0.8	32005.16	50	21.79	79.5	120.4	
Cd	111	89	He	264.548	ppb	0.7	20703.67	250	21.16	79.5	120.4	
Sn	118	159	He	507.819	ppb	0.8	87856.90	500	20.31	79.5	120.4	
Sb	121	159	No Gas	101.856	ppb	4.9	156710.01	100	20.37	79.5	120.4	
Ba	137	159	No Gas	1933.990	ppb	4.7	1170132.75	2000	19.34	79.5	120.4	
W	182	159	No Gas	102.094	ppb	5.3	125029.56	100	20.42	79.5	120.4	
Tl	205	209	No Gas	103.481	ppb	3.7	281469.49	100	20.7	79.5	120.4	
[Pb]	206	209	No Gas	105.256	ppb	4.9	98531.41	100	21.05	79.5	120.4	
[Pb]	207	209	No Gas	103.689	ppb	3.8	85097.89	100	20.74	79.5	120.4	
Pb	208	209	No Gas	103.602	ppb	4.1	389599.17	100	20.72	79.5	120.4	
Th	232	209	No Gas	100.628	ppb	5.0	396138.84	100	20.13	79.5	120.4	
U	238	209	No Gas	101.317	ppb	4.4	374279.30	100	20.26	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1476171.20	1.8	1537409.87	96.02	29.5	120.4	
Sc	45	No Gas	3384734.56	2.6	3373253.08	100.34	29.5	120.4	
Sc	45	H2	394572.02	1.7	415670.69	94.92	29.5	120.4	
Sc	45	He	79352.73	1.1	81171.76	97.76	29.5	120.4	
Ge	72	No Gas	793053.31	2.5	779333.11	101.76	29.5	120.4	
Ge	72	H2	146673.54	0.7	153246.58	95.71	29.5	120.4	
Ge	72	He	61872.74	0.5	63135.03	98	29.5	120.4	
Y	89	H2	2572634.57	2.0	2642116.11	97.37	29.5	120.4	
Y	89	He	533962.54	0.9	544041.92	98.15	29.5	120.4	
Tb	159	No Gas	8554918.07	2.5	8117023.84	105.39	29.5	120.4	
Tb	159	He	2888867.11	0.6	2866479.19	100.78	29.5	120.4	
Bi	209	No Gas	4623460.69	2.1	4424692.92	104.49	29.5	120.4	

Sample Report

Sample Name SN5146-016

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:23:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.173	ppb	28.7	61.12	100	
11	B	6	No Gas	13.465	ppb	2.1	3084.88	1000	
23	Na	45	He	1011.354	ppb	2.2	28289.21	200000	
24	Mg	45	He	187.957	ppb	8.1	2884.95	200000	
27	Al	45	He	197.431	ppb	5.0	974.51	200000	
28	Si	45	H2	1144.192	ppb	5.0	9941.26	10000	
39	K	45	He	253.948	ppb	8.8	13503.73	200000	
40	Ca	45	H2	650.308	ppb	2.4	54564.71	200000	
51	V	89	He	3.362	ppb	1.2	806.72	1000	
52	Cr	89	He	0.801	ppb	25.4	204.63	2000	
55	Mn	89	He	8.432	ppb	1.7	863.87	2000	
56	Fe	89	H2	36.403	ppb	7.0	20337.24	100000	
59	Co	89	He	0.316	ppb	31.6	122.23	1000	
60	Ni	89	He	1.669	ppb	18.0	211.12	1000	
63	Cu	89	He	5.254	ppb	6.2	1867.98	2000	
66	Zn	89	He	17.287	ppb	8.5	717.82	2000	
75	As	89	He	0.391	ppb	5.7	16.67	1000	
78	Se	89	H2	2.643	ppb	4.6	43.33	1000	
88	Sr	89	He	1.827	ppb	9.6	282.24	2000	
95	Mo	89	He	0.223	ppb	43.9	163.34	1000	
107	Ag	89	He	0.021	ppb	25.8	23.33	100	
111	Cd	89	He	0.123	ppb	62.7	10.74	1000	
118	Sn	159	He	1.768	ppb	9.1	377.80	1000	
121	Sb	159	No Gas	0.291	ppb	28.7	543.96	1000	
137	Ba	159	No Gas	6.497	ppb	3.6	3951.67	2000	
182	W	159	No Gas	0.230	ppb	20.5	403.79	1000	
205	Tl	209	No Gas	0.106	ppb	22.0	317.03	1000	
208	Pb	209	No Gas	0.301	ppb	7.8	1324.85	2000	
232	Th	209	No Gas	1.407	ppb	24.3	5764.54	1000	
238	U	209	No Gas	0.136	ppb	23.1	507.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443799.57	2.4	1537409.87	93.91	29.5	120.4	
Sc	45	No Gas	3399025.23	2.6	3373253.08	100.76	29.5	120.4	
Sc	45	H2	404031.39	2.6	415670.69	97.2	29.5	120.4	
Sc	45	He	79233.58	1.7	81171.76	97.61	29.5	120.4	
Ge	72	No Gas	800502.62	2.2	779333.11	102.72	29.5	120.4	
Ge	72	H2	148963.17	2.8	153246.58	97.2	29.5	120.4	
Ge	72	He	62205.75	0.6	63135.03	98.53	29.5	120.4	
Y	89	H2	2606312.16	1.7	2642116.11	98.64	29.5	120.4	
Y	89	He	535498.38	0.9	544041.92	98.43	29.5	120.4	
Tb	159	No Gas	8560274.11	2.8	8117023.84	105.46	29.5	120.4	
Tb	159	He	2893217.14	0.7	2866479.19	100.93	29.5	120.4	
Bi	209	No Gas	4642488.73	3.2	4424692.92	104.92	29.5	120.4	

Sample Report

Sample Name SN5151-001

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:25:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	71.2	40.00	100	
11	B	6	No Gas	1135.735	ppb	1.8	183415.48	1000	
23	Na	45	He	782672.707	ppb	0.3	17130443.59	200000	
24	Mg	45	He	393520.997	ppb	0.7	4737660.45	200000	
27	Al	45	He	35.832	ppb	11.9	215.56	200000	
28	Si	45	H2	7526.838	ppb	5.3	60809.90	10000	
39	K	45	He	11074.813	ppb	1.0	126848.38	200000	
40	Ca	45	H2	520109.865	ppb	5.5	40003548.29	200000	
51	V	89	He	5.389	ppb	5.9	1136.75	1000	
52	Cr	89	He	1.380	ppb	3.5	321.95	2000	
55	Mn	89	He	38.042	ppb	2.0	3791.82	2000	
56	Fe	89	H2	4.522	ppb	56.3	9500.54	100000	
59	Co	89	He	0.171	ppb	28.1	68.89	1000	
60	Ni	89	He	2.354	ppb	17.9	276.68	1000	
63	Cu	89	He	4.168	ppb	6.4	1543.48	2000	
66	Zn	89	He	5.610	ppb	14.6	272.24	2000	
75	As	89	He	0.684	ppb	10.9	25.33	1000	
78	Se	89	H2	13.678	ppb	3.6	212.16	1000	
88	Sr	89	He	7623.118	ppb	0.9	1131591.21	2000	
95	Mo	89	He	0.180	ppb	57.0	153.34	1000	
107	Ag	89	He	0.010	ppb	260.7	16.67	100	
111	Cd	89	He	0.053	ppb	14.7	5.19	1000	
118	Sn	159	He	1.310	ppb	22.3	293.35	1000	
121	Sb	159	No Gas	0.224	ppb	21.4	430.49	1000	
137	Ba	159	No Gas	16.901	ppb	3.6	9948.20	2000	
182	W	159	No Gas	0.064	ppb	134.7	196.89	1000	
205	Tl	209	No Gas	0.094	ppb	54.6	270.31	1000	
208	Pb	209	No Gas	0.233	ppb	30.2	1007.82	2000	
232	Th	209	No Gas	0.153	ppb	24.9	734.18	1000	
238	U	209	No Gas	133.405	ppb	0.9	465153.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410918.61	1.6	1537409.87	91.77	29.5	120.4	
Sc	45	No Gas	3313970.42	2.5	3373253.08	98.24	29.5	120.4	
Sc	45	H2	384161.31	3.5	415670.69	92.42	29.5	120.4	
Sc	45	He	78740.47	0.4	81171.76	97	29.5	120.4	
Ge	72	No Gas	766740.45	1.6	779333.11	98.38	29.5	120.4	
Ge	72	H2	141936.10	2.3	153246.58	92.62	29.5	120.4	
Ge	72	He	60428.28	0.5	63135.03	95.71	29.5	120.4	
Y	89	H2	2488907.68	4.3	2642116.11	94.2	29.5	120.4	
Y	89	He	527016.21	1.0	544041.92	96.87	29.5	120.4	
Tb	159	No Gas	8298416.89	2.0	8117023.84	102.23	29.5	120.4	
Tb	159	He	2843156.80	0.6	2866479.19	99.19	29.5	120.4	
Bi	209	No Gas	4361632.62	1.9	4424692.92	98.57	29.5	120.4	

Sample Report

Sample Name SN5151-002

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:28:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	64.2	37.78	100	
11	B	6	No Gas	836.015	ppb	2.4	139587.31	1000	
23	Na	45	He	1451638.497	ppb	0.6	32218265.05	200000	>LDR
24	Mg	45	He	335490.356	ppb	0.7	4096511.60	200000	
27	Al	45	He	-1.220	ppb	N/A	43.34	200000	
28	Si	45	H2	5735.050	ppb	8.4	47384.52	10000	
39	K	45	He	10973.007	ppb	0.7	127570.42	200000	
40	Ca	45	H2	472121.117	ppb	8.5	37095298.06	200000	
51	V	89	He	5.911	ppb	5.3	1223.43	1000	
52	Cr	89	He	1.026	ppb	3.0	247.96	2000	
55	Mn	89	He	232.391	ppb	0.6	23081.98	2000	
56	Fe	89	H2	16.190	ppb	16.1	13408.07	100000	
59	Co	89	He	0.341	ppb	24.7	128.90	1000	
60	Ni	89	He	4.227	ppb	4.2	463.36	1000	
63	Cu	89	He	6.575	ppb	5.3	2194.70	2000	
66	Zn	89	He	15.491	ppb	10.6	638.93	2000	
75	As	89	He	0.477	ppb	18.6	19.00	1000	
78	Se	89	H2	5.985	ppb	11.2	94.83	1000	
88	Sr	89	He	5527.272	ppb	0.8	819804.46	2000	
95	Mo	89	He	2.047	ppb	5.7	471.14	1000	
107	Ag	89	He	0.012	ppb	109.7	17.78	100	
111	Cd	89	He	0.111	ppb	14.6	9.63	1000	
118	Sn	159	He	1.155	ppb	19.5	265.57	1000	
121	Sb	159	No Gas	0.173	ppb	13.7	350.40	1000	
137	Ba	159	No Gas	18.273	ppb	3.4	10619.31	2000	
182	W	159	No Gas	0.007	ppb	170.5	126.81	1000	
205	Tl	209	No Gas	0.045	ppb	17.3	136.82	1000	
208	Pb	209	No Gas	0.128	ppb	10.5	614.02	2000	
232	Th	209	No Gas	0.043	ppb	22.1	313.69	1000	
238	U	209	No Gas	95.313	ppb	2.9	322921.66	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1456404.66	0.8	1537409.87	94.73	29.5	120.4	
Sc	45	No Gas	3306141.49	0.7	3373253.08	98.01	29.5	120.4	
Sc	45	H2	393079.82	5.3	415670.69	94.57	29.5	120.4	
Sc	45	He	79862.47	1.3	81171.76	98.39	29.5	120.4	
Ge	72	No Gas	763314.46	1.0	779333.11	97.94	29.5	120.4	
Ge	72	H2	143832.16	4.2	153246.58	93.86	29.5	120.4	
Ge	72	He	60457.35	0.1	63135.03	95.76	29.5	120.4	
Y	89	H2	2543996.77	5.4	2642116.11	96.29	29.5	120.4	
Y	89	He	526541.46	0.4	544041.92	96.78	29.5	120.4	
Tb	159	No Gas	8197589.53	0.4	8117023.84	100.99	29.5	120.4	
Tb	159	He	2828038.88	0.6	2866479.19	98.66	29.5	120.4	
Bi	209	No Gas	4238552.88	1.2	4424692.92	95.79	29.5	120.4	

Sample Report

Sample Name SN5151-004

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:30:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.078	ppb	51.4	38.89	100	
11	B	6	No Gas	831.460	ppb	1.7	143908.20	1000	
23	Na	45	He	1301503.377	ppb	3.7	28486224.18	200000	>LDR
24	Mg	45	He	376713.437	ppb	3.8	4536011.56	200000	
27	Al	45	He	3.887	ppb	64.2	66.67	200000	
28	Si	45	H2	5767.797	ppb	2.7	48690.03	10000	
39	K	45	He	57759.367	ppb	4.2	616269.89	200000	
40	Ca	45	H2	386325.672	ppb	0.7	31014870.93	200000	
51	V	89	He	7.415	ppb	8.5	1483.47	1000	
52	Cr	89	He	0.690	ppb	15.6	178.64	2000	
55	Mn	89	He	8738.141	ppb	3.5	871371.49	2000	
56	Fe	89	H2	123.110	ppb	3.6	47804.58	100000	
59	Co	89	He	4.072	ppb	8.7	1451.31	1000	
60	Ni	89	He	10.407	ppb	6.9	1085.64	1000	
63	Cu	89	He	3.802	ppb	9.1	1449.02	2000	
66	Zn	89	He	16.623	ppb	13.3	683.37	2000	
75	As	89	He	2.628	ppb	7.2	84.68	1000	
78	Se	89	H2	0.691	ppb	28.6	11.50	1000	
88	Sr	89	He	5861.198	ppb	2.9	873288.07	2000	
95	Mo	89	He	2.324	ppb	5.1	521.14	1000	
107	Ag	89	He	0.010	ppb	148.9	16.67	100	
111	Cd	89	He	0.019	ppb	40.7	2.59	1000	
118	Sn	159	He	1.055	ppb	8.5	247.79	1000	
121	Sb	159	No Gas	0.397	ppb	23.4	680.79	1000	
137	Ba	159	No Gas	27.467	ppb	2.3	16004.18	2000	
182	W	159	No Gas	0.013	ppb	134.2	133.48	1000	
205	Tl	209	No Gas	0.039	ppb	50.6	123.47	1000	
208	Pb	209	No Gas	0.144	ppb	16.9	674.10	2000	
232	Th	209	No Gas	0.033	ppb	7.9	280.31	1000	
238	U	209	No Gas	37.548	ppb	2.3	127904.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509649.19	0.8	1537409.87	98.19	29.5	120.4	
Sc	45	No Gas	3325725.64	1.1	3373253.08	98.59	29.5	120.4	
Sc	45	H2	400472.72	0.4	415670.69	96.34	29.5	120.4	
Sc	45	He	78804.75	2.8	81171.76	97.08	29.5	120.4	
Ge	72	No Gas	763054.78	0.2	779333.11	97.91	29.5	120.4	
Ge	72	H2	145588.43	0.5	153246.58	95	29.5	120.4	
Ge	72	He	60646.41	1.8	63135.03	96.06	29.5	120.4	
Y	89	H2	2567103.08	0.4	2642116.11	97.16	29.5	120.4	
Y	89	He	529112.11	1.7	544041.92	97.26	29.5	120.4	
Tb	159	No Gas	8222310.92	1.2	8117023.84	101.3	29.5	120.4	
Tb	159	He	2819808.47	1.8	2866479.19	98.37	29.5	120.4	
Bi	209	No Gas	4261127.96	0.6	4424692.92	96.3	29.5	120.4	

Sample Report

Sample Name SN5151-004L

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:33:30 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.172	ppb	45.2	27.78	100	
11	B	6	No Gas	4039.976	ppb	3.9	141411.83	1000	
23	Na	45	He	6439028.942	ppb	1.6	28272397.86	200000	>LDR
24	Mg	45	He	1864016.032	ppb	1.7	4502607.71	200000	
27	Al	45	He	8.549	ppb	65.3	56.67	200000	
28	Si	45	H2	29012.632	ppb	0.9	48827.50	10000	
39	K	45	He	285720.718	ppb	1.4	611723.14	200000	
40	Ca	45	H2	1928797.188	ppb	0.9	30867435.93	200000	
51	V	89	He	39.240	ppb	3.6	1546.81	1000	
52	Cr	89	He	3.577	ppb	14.9	182.64	2000	
55	Mn	89	He	43609.942	ppb	1.9	863839.38	2000	
56	Fe	89	H2	607.558	ppb	2.0	47001.43	100000	
59	Co	89	He	18.990	ppb	11.1	1344.60	1000	
60	Ni	89	He	49.149	ppb	2.1	1021.19	1000	
63	Cu	89	He	17.068	ppb	3.3	1334.56	2000	
66	Zn	89	He	80.651	ppb	1.3	661.15	2000	
75	As	89	He	12.298	ppb	6.7	79.01	1000	
78	Se	89	H2	3.526	ppb	11.3	11.67	1000	
88	Sr	89	He	29156.239	ppb	1.9	862838.21	2000	
95	Mo	89	He	9.478	ppb	26.2	444.47	1000	
107	Ag	89	He	0.032	ppb	276.8	14.44	100	
111	Cd	89	He	0.123	ppb	69.9	2.96	1000	
118	Sn	159	He	5.298	ppb	17.9	248.90	1000	
121	Sb	159	No Gas	1.680	ppb	15.7	594.01	1000	
137	Ba	159	No Gas	131.464	ppb	2.6	15389.51	2000	
182	W	159	No Gas	-0.009	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.113	ppb	53.3	83.43	1000	
208	Pb	209	No Gas	0.432	ppb	13.2	477.21	2000	
232	Th	209	No Gas	0.048	ppb	109.8	196.89	1000	
238	U	209	No Gas	182.531	ppb	3.9	125440.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1526631.03	1.3	1537409.87	99.3	29.5	120.4	
Sc	45	No Gas	3349749.00	1.5	3373253.08	99.3	29.5	120.4	
Sc	45	H2	399171.84	1.2	415670.69	96.03	29.5	120.4	
Sc	45	He	78999.59	1.2	81171.76	97.32	29.5	120.4	
Ge	72	No Gas	768223.63	1.6	779333.11	98.57	29.5	120.4	
Ge	72	H2	144201.20	0.1	153246.58	94.1	29.5	120.4	
Ge	72	He	60621.77	1.6	63135.03	96.02	29.5	120.4	
Y	89	H2	2551092.98	0.1	2642116.11	96.55	29.5	120.4	
Y	89	He	525379.50	1.3	544041.92	96.57	29.5	120.4	
Tb	159	No Gas	8262208.21	1.2	8117023.84	101.79	29.5	120.4	
Tb	159	He	2821880.31	1.3	2866479.19	98.44	29.5	120.4	
Bi	209	No Gas	4300016.43	1.9	4424692.92	97.18	29.5	120.4	

Sample Report

Sample Name SN5151-004A

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:36:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.404	ppb	3.8	2529.20	100	
11	B	6	No Gas	983.546	ppb	5.5	173349.19	1000	
23	Na	45	He	1317839.232	ppb	1.7	28446530.32	200000	>LDR
24	Mg	45	He	378636.448	ppb	1.5	4496489.06	200000	
27	Al	45	He	943.573	ppb	3.4	4387.50	200000	
28	Si	45	H2	10874.508	ppb	2.9	91704.38	10000	
39	K	45	He	67825.811	ppb	1.7	711886.01	200000	
40	Ca	45	H2	384614.171	ppb	2.0	30923932.87	200000	
51	V	89	He	60.027	ppb	1.2	10021.71	1000	
52	Cr	89	He	51.867	ppb	2.5	10483.35	2000	
55	Mn	89	He	8959.807	ppb	2.1	860432.95	2000	
56	Fe	89	H2	1161.862	ppb	1.2	378319.34	100000	
59	Co	89	He	14.789	ppb	4.1	5054.63	1000	
60	Ni	89	He	29.938	ppb	4.1	2934.86	1000	
63	Cu	89	He	33.551	ppb	2.3	9198.89	2000	
66	Zn	89	He	119.737	ppb	3.5	4363.08	2000	
75	As	89	He	54.677	ppb	3.8	1611.61	1000	
78	Se	89	H2	52.466	ppb	0.5	832.99	1000	
88	Sr	89	He	6051.457	ppb	1.8	868267.79	2000	
95	Mo	89	He	54.033	ppb	3.2	9019.96	1000	
107	Ag	89	He	10.627	ppb	3.5	5963.73	100	
111	Cd	89	He	10.368	ppb	4.0	774.84	1000	
118	Sn	159	He	50.569	ppb	3.3	8386.26	1000	
121	Sb	159	No Gas	10.731	ppb	4.5	16101.00	1000	
137	Ba	159	No Gas	45.504	ppb	8.2	26703.31	2000	
182	W	159	No Gas	49.831	ppb	5.0	59255.15	1000	
205	Tl	209	No Gas	10.186	ppb	6.2	26008.83	1000	
208	Pb	209	No Gas	10.316	ppb	4.4	36558.58	2000	
232	Th	209	No Gas	10.598	ppb	5.6	39285.56	1000	
238	U	209	No Gas	46.851	ppb	6.3	162338.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1540554.51	3.4	1537409.87	100.2	29.5	120.4	
Sc	45	No Gas	3348477.24	3.4	3373253.08	99.27	29.5	120.4	
Sc	45	H2	401164.40	2.1	415670.69	96.51	29.5	120.4	
Sc	45	He	77678.66	1.5	81171.76	95.7	29.5	120.4	
Ge	72	No Gas	768596.75	3.1	779333.11	98.62	29.5	120.4	
Ge	72	H2	145409.72	1.1	153246.58	94.89	29.5	120.4	
Ge	72	He	58807.64	2.2	63135.03	93.15	29.5	120.4	
Y	89	H2	2552313.42	1.0	2642116.11	96.6	29.5	120.4	
Y	89	He	509497.18	2.1	544041.92	93.65	29.5	120.4	
Tb	159	No Gas	8299986.68	3.1	8117023.84	102.25	29.5	120.4	
Tb	159	He	2750106.24	2.4	2866479.19	95.94	29.5	120.4	
Bi	209	No Gas	4339925.66	3.4	4424692.92	98.08	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	035SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:41:39 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	20.00	100	
11	B	6	No Gas	2.178	ppb	4.9	3152.68	1000	
23	Na	45	He	360.606	ppb	18.1	46970.98	200000	
24	Mg	45	He	46.301	ppb	26.8	3505.78	200000	
27	Al	45	He	-1.664	ppb	N/A	10.00	200000	
28	Si	45	H2	5.369	ppb	28.5	487.21	10000	
39	K	45	He	28.907	ppb	2.3	12679.95	200000	
40	Ca	45	H2	16.387	ppb	4.2	8676.29	200000	
51	V	89	He	3.316	ppb	4.1	3089.35	1000	
52	Cr	89	He	0.170	ppb	7.2	215.30	2000	
55	Mn	89	He	0.943	ppb	44.7	490.61	2000	
56	Fe	89	H2	-1.559	ppb	N/A	6007.94	100000	
59	Co	89	He	-0.001	ppb	N/A	6.67	1000	
60	Ni	89	He	-0.038	ppb	N/A	22.22	1000	
63	Cu	89	He	0.315	ppb	10.8	856.72	2000	
66	Zn	89	He	0.174	ppb	107.9	97.78	2000	
75	As	89	He	0.119	ppb	14.4	23.00	1000	
78	Se	89	H2	0.082	ppb	8.6	7.17	1000	
88	Sr	89	He	0.545	ppb	39.3	418.93	2000	
95	Mo	89	He	-0.043	ppb	N/A	87.78	1000	
107	Ag	89	He	-0.002	ppb	N/A	5.55	100	
111	Cd	89	He	0.003	ppb	98.8	2.22	1000	
118	Sn	159	He	0.191	ppb	8.1	236.68	1000	
121	Sb	159	No Gas	0.010	ppb	35.9	176.86	1000	
137	Ba	159	No Gas	0.009	ppb	165.5	46.72	2000	
182	W	159	No Gas	0.039	ppb	18.2	367.09	1000	
205	Tl	209	No Gas	0.000	ppb	495.6	33.37	1000	
208	Pb	209	No Gas	0.007	ppb	13.7	327.03	2000	
232	Th	209	No Gas	0.032	ppb	28.5	810.93	1000	
238	U	209	No Gas	0.002	ppb	62.2	36.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710706.96	2.1	1537409.87	111.27	29.5	120.4	
Sc	45	No Gas	3594063.76	1.3	3373253.08	106.55	29.5	120.4	
Sc	45	H2	409919.14	0.2	415670.69	98.62	29.5	120.4	
Sc	45	He	81335.29	0.9	81171.76	100.2	29.5	120.4	
Ge	72	No Gas	843843.39	1.6	779333.11	108.28	29.5	120.4	
Ge	72	H2	149217.65	1.7	153246.58	97.37	29.5	120.4	
Ge	72	He	61941.96	0.9	63135.03	98.11	29.5	120.4	
Y	89	H2	2624294.46	0.1	2642116.11	99.33	29.5	120.4	
Y	89	He	537790.04	0.1	544041.92	98.85	29.5	120.4	
Tb	159	No Gas	8735769.10	1.2	8117023.84	107.62	29.5	120.4	
Tb	159	He	2884136.83	0.8	2866479.19	100.62	29.5	120.4	
Bi	209	No Gas	4708088.29	1.5	4424692.92	106.4	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	036_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:44:19 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.743	ppb	5.8	32134.15	25	98.97	89.8	110.2	
11	B	6	No Gas	24.456	ppb	5.8	21762.54	25	97.82	89.8	110.2	
23	Na	45	He	5271.379	ppb	2.0	574011.06	5000	105.43	89.8	110.2	
24	Mg	45	He	5015.844	ppb	2.4	297996.35	5000	100.32	89.8	110.2	
27	Al	45	He	483.925	ppb	4.1	11159.20	500	96.78	89.8	110.2	
28	Si	45	H2	507.517	ppb	2.1	21189.33	500	101.5	89.8	110.2	
39	K	45	He	4936.325	ppb	2.1	265477.39	5000	98.73	89.8	110.2	
40	Ca	45	H2	5057.669	ppb	1.3	1996810.01	5000	101.15	89.8	110.2	
51	V	89	He	24.699	ppb	2.6	20768.15	25	98.8	89.8	110.2	
52	Cr	89	He	24.646	ppb	2.4	25333.34	25	98.58	89.8	110.2	
55	Mn	89	He	24.884	ppb	0.8	12187.73	25	99.54	89.8	110.2	
56	Fe	89	H2	5049.947	ppb	1.5	7969913.90	5000	101	89.8	110.2	
59	Co	89	He	24.966	ppb	0.7	43425.46	25	99.86	89.8	110.2	
60	Ni	89	He	25.044	ppb	2.6	12378.09	25	100.18	89.8	110.2	
63	Cu	89	He	24.987	ppb	1.2	33802.85	25	99.95	89.8	110.2	
66	Zn	89	He	24.983	ppb	2.3	4636.48	25	99.93	89.8	110.2	
75	As	89	He	24.459	ppb	2.2	3664.89	25	97.84	89.8	110.2	
78	Se	89	H2	24.858	ppb	2.1	1953.05	25	99.43	89.8	110.2	
88	Sr	89	He	24.473	ppb	1.6	17897.76	25	97.89	89.8	110.2	
95	Mo	89	He	24.600	ppb	2.6	20768.65	25	98.4	89.8	110.2	
107	Ag	89	He	18.371	ppb	1.0	52453.04	25	73.48	89.8	110.2	> +/- 10%
111	Cd	89	He	24.665	ppb	2.5	9381.49	25	98.66	89.8	110.2	
118	Sn	159	He	23.617	ppb	2.5	19830.70	25	94.47	89.8	110.2	
121	Sb	159	No Gas	24.409	ppb	9.7	180931.91	25	97.64	89.8	110.2	
137	Ba	159	No Gas	24.554	ppb	8.1	71644.53	25	98.22	89.8	110.2	
182	W	159	No Gas	23.979	ppb	8.2	141573.23	25	95.92	89.8	110.2	
205	Tl	209	No Gas	24.569	ppb	7.1	323413.02	25	98.28	89.8	110.2	
208	Pb	209	No Gas	24.427	ppb	7.4	444507.86	25	97.71	89.8	110.2	
232	Th	209	No Gas	24.294	ppb	8.1	462718.85	25	97.18	89.8	110.2	
238	U	209	No Gas	24.551	ppb	7.9	438834.20	25	98.2	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1499634.28	4.2	1537409.87	97.54	29.5	120.4	
Sc	45	No Gas	3390921.38	6.5	3373253.08	100.52	29.5	120.4	
Sc	45	H2	393566.21	0.9	415670.69	94.68	29.5	120.4	
Sc	45	He	77586.72	1.7	81171.76	95.58	29.5	120.4	
Ge	72	No Gas	765765.31	4.9	779333.11	98.26	29.5	120.4	
Ge	72	H2	145690.40	2.0	153246.58	95.07	29.5	120.4	
Ge	72	He	60322.65	1.0	63135.03	95.55	29.5	120.4	
Y	89	H2	2527410.68	1.5	2642116.11	95.66	29.5	120.4	
Y	89	He	519075.93	1.2	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8272667.03	6.6	8117023.84	101.92	29.5	120.4	
Tb	159	He	2796890.38	0.8	2866479.19	97.57	29.5	120.4	
Bi	209	No Gas	4485332.62	5.8	4424692.92	101.37	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	037_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 4:46:57 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.058	ppb	5.8	93.34	0.2	
11	B	6	No Gas	0.953	ppb	19.4	1719.06	4	
23	Na	45	He	129.162	ppb	6.3	19929.41	200	Failed DoD
24	Mg	45	He	10.239	ppb	17.2	1209.03	20	Failed DoD
27	Al	45	He	-1.409	ppb	N/A	15.55	20	
28	Si	45	H2	-0.721	ppb	N/A	216.91	100	
39	K	45	He	18.973	ppb	57.3	11642.88	200	
40	Ca	45	H2	1.553	ppb	28.0	2484.76	20	
51	V	89	He	0.333	ppb	14.9	504.47	1	
52	Cr	89	He	0.020	ppb	23.8	55.32	1	
55	Mn	89	He	0.093	ppb	42.2	57.99	0.4	
56	Fe	89	H2	-0.498	ppb	N/A	7436.94	20	
59	Co	89	He	0.002	ppb	392.1	11.11	0.2	
60	Ni	89	He	-0.026	ppb	N/A	27.78	0.4	
63	Cu	89	He	-0.074	ppb	N/A	308.91	0.6	
66	Zn	89	He	-0.014	ppb	N/A	60.00	2	
75	As	89	He	0.025	ppb	10.1	8.33	1	
78	Se	89	H2	0.053	ppb	45.2	4.67	1	
88	Sr	89	He	0.033	ppb	86.2	31.11	1	
95	Mo	89	He	0.001	ppb	3843.5	122.23	1	
107	Ag	89	He	0.008	ppb	53.8	34.44	0.2	
111	Cd	89	He	0.006	ppb	85.7	3.33	0.2	
118	Sn	159	He	0.101	ppb	53.4	153.34	1	
121	Sb	159	No Gas	0.027	ppb	44.4	293.67	0.2	
137	Ba	159	No Gas	0.022	ppb	70.9	80.09	0.4	
182	W	159	No Gas	0.083	ppb	31.4	604.03	1	
205	Tl	209	No Gas	0.032	ppb	48.4	443.84	0.2	
208	Pb	209	No Gas	0.020	ppb	65.7	543.94	0.2	
232	Th	209	No Gas	0.095	ppb	20.2	1975.72	1	
238	U	209	No Gas	0.030	ppb	31.9	533.94	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1500864.95	3.4	1537409.87	97.62	29.5	120.4	
Sc	45	No Gas	3312073.83	3.7	3373253.08	98.19	29.5	120.4	
Sc	45	H2	394527.06	0.6	415670.69	94.91	29.5	120.4	
Sc	45	He	78078.63	3.5	81171.76	96.19	29.5	120.4	
Ge	72	No Gas	756089.77	2.7	779333.11	97.02	29.5	120.4	
Ge	72	H2	144870.51	1.9	153246.58	94.53	29.5	120.4	
Ge	72	He	61259.46	2.0	63135.03	97.03	29.5	120.4	
Y	89	H2	2519667.03	0.5	2642116.11	95.37	29.5	120.4	
Y	89	He	524708.32	3.7	544041.92	96.45	29.5	120.4	
Tb	159	No Gas	8220906.54	3.9	8117023.84	101.28	29.5	120.4	
Tb	159	He	2808683.53	4.0	2866479.19	97.98	29.5	120.4	
Bi	209	No Gas	4497765.05	3.9	4424692.92	101.65	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:49:42 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	63.1	43.33	100	
11	B	6	No Gas	1.702	ppb	4.8	2480.31	1000	
23	Na	45	He	151.612	ppb	4.3	22161.84	200000	
24	Mg	45	He	8.791	ppb	21.5	1111.24	200000	
27	Al	45	He	-1.691	ppb	N/A	8.89	200000	
28	Si	45	H2	7.998	ppb	25.3	550.62	10000	
39	K	45	He	22.439	ppb	11.2	11721.23	200000	
40	Ca	45	H2	6.804	ppb	5.8	4348.61	200000	
51	V	89	He	1.726	ppb	2.7	1660.16	1000	
52	Cr	89	He	0.154	ppb	0.8	191.97	2000	
55	Mn	89	He	0.114	ppb	18.0	67.99	2000	
56	Fe	89	H2	-1.380	ppb	N/A	5884.41	100000	
59	Co	89	He	-0.001	ppb	N/A	6.67	1000	
60	Ni	89	He	-0.021	ppb	N/A	30.00	1000	
63	Cu	89	He	0.187	ppb	23.2	656.70	2000	
66	Zn	89	He	0.101	ppb	116.9	81.11	2000	
75	As	89	He	0.097	ppb	29.4	19.00	1000	
78	Se	89	H2	0.101	ppb	21.2	8.17	1000	
88	Sr	89	He	0.040	ppb	29.6	35.56	2000	
95	Mo	89	He	-0.067	ppb	N/A	64.45	1000	
107	Ag	89	He	0.003	ppb	37.2	20.00	100	
111	Cd	89	He	0.005	ppb	66.6	2.96	1000	
118	Sn	159	He	0.220	ppb	28.7	256.68	1000	
121	Sb	159	No Gas	0.012	ppb	30.5	190.21	1000	
137	Ba	159	No Gas	0.010	ppb	72.9	46.72	2000	
182	W	159	No Gas	0.047	ppb	53.9	413.81	1000	
205	Tl	209	No Gas	0.009	ppb	129.1	156.85	1000	
208	Pb	209	No Gas	0.017	ppb	45.2	507.24	2000	
232	Th	209	No Gas	0.143	ppb	9.9	3023.80	1000	
238	U	209	No Gas	0.009	ppb	103.0	173.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577567.90	1.6	1537409.87	102.61	29.5	120.4	
Sc	45	No Gas	3374521.04	1.2	3373253.08	100.04	29.5	120.4	
Sc	45	H2	376259.39	1.9	415670.69	90.52	29.5	120.4	
Sc	45	He	77314.92	1.5	81171.76	95.25	29.5	120.4	
Ge	72	No Gas	793778.56	1.0	779333.11	101.85	29.5	120.4	
Ge	72	H2	136704.46	1.8	153246.58	89.21	29.5	120.4	
Ge	72	He	59565.35	0.7	63135.03	94.35	29.5	120.4	
Y	89	H2	2451449.67	1.4	2642116.11	92.78	29.5	120.4	
Y	89	He	519568.96	0.9	544041.92	95.5	29.5	120.4	
Tb	159	No Gas	8575629.52	0.9	8117023.84	105.65	29.5	120.4	
Tb	159	He	2833056.41	0.7	2866479.19	98.83	29.5	120.4	
Bi	209	No Gas	4687607.49	0.8	4424692.92	105.94	29.5	120.4	

Sample Report

Sample Name SN5151-004S

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:52:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.120	ppb	0.7	11807.41	100	
11	B	6	No Gas	1305.055	ppb	0.9	215434.28	1000	
23	Na	45	He	1323574.788	ppb	3.0	27929969.20	200000	>LDR
24	Mg	45	He	386458.925	ppb	3.4	4486051.91	200000	
27	Al	45	He	1917.430	ppb	1.1	8670.71	200000	
28	Si	45	H2	6810.770	ppb	0.6	55653.26	10000	
39	K	45	He	68172.741	ppb	2.2	699578.76	200000	
40	Ca	45	H2	386758.472	ppb	1.9	30074279.28	200000	
51	V	89	He	527.863	ppb	3.5	85258.41	1000	
52	Cr	89	He	205.811	ppb	4.3	40941.63	2000	
55	Mn	89	He	9437.566	ppb	3.7	894177.83	2000	
56	Fe	89	H2	1138.914	ppb	2.1	363378.89	100000	
59	Co	89	He	516.944	ppb	3.4	174076.39	1000	
60	Ni	89	He	491.108	ppb	3.6	46890.63	1000	
63	Cu	89	He	249.260	ppb	3.2	64907.01	2000	
66	Zn	89	He	510.138	ppb	4.0	18142.38	2000	
75	As	89	He	107.664	ppb	3.7	3124.70	1000	
78	Se	89	H2	104.637	ppb	2.3	1626.52	1000	
88	Sr	89	He	6503.268	ppb	3.4	920632.40	2000	
95	Mo	89	He	108.676	ppb	5.2	17775.41	1000	
107	Ag	89	He	49.836	ppb	4.5	27553.21	100	
111	Cd	89	He	251.991	ppb	3.7	18560.62	1000	
118	Sn	159	He	503.461	ppb	4.0	82312.34	1000	
121	Sb	159	No Gas	99.804	ppb	1.2	144511.09	1000	
137	Ba	159	No Gas	1749.716	ppb	0.6	996292.14	2000	
182	W	159	No Gas	103.827	ppb	0.7	119663.44	1000	
205	Tl	209	No Gas	101.873	ppb	1.5	250909.11	1000	
208	Pb	209	No Gas	101.233	ppb	0.5	344739.09	2000	
232	Th	209	No Gas	105.853	ppb	1.3	377388.58	1000	
238	U	209	No Gas	144.310	ppb	1.3	482768.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443056.04	0.9	1537409.87	93.86	29.5	120.4	
Sc	45	No Gas	3182947.63	1.4	3373253.08	94.36	29.5	120.4	
Sc	45	H2	387959.28	1.5	415670.69	93.33	29.5	120.4	
Sc	45	He	75976.34	3.3	81171.76	93.6	29.5	120.4	
Ge	72	No Gas	730045.95	0.5	779333.11	93.68	29.5	120.4	
Ge	72	H2	140738.10	1.3	153246.58	91.84	29.5	120.4	
Ge	72	He	57985.41	2.0	63135.03	91.84	29.5	120.4	
Y	89	H2	2500007.10	1.3	2642116.11	94.62	29.5	120.4	
Y	89	He	502980.61	3.7	544041.92	92.45	29.5	120.4	
Tb	159	No Gas	8045105.37	1.0	8117023.84	99.11	29.5	120.4	
Tb	159	He	2732358.59	3.3	2866479.19	95.32	29.5	120.4	
Bi	209	No Gas	4184429.60	0.1	4424692.92	94.57	29.5	120.4	

Sample Report

Sample Name SN5151-004P

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:55:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	44.786	ppb	5.8	11827.44	100	
11	B	6	No Gas	1283.769	ppb	5.4	223368.09	1000	
23	Na	45	He	1313391.780	ppb	0.5	28438833.66	200000	>LDR
24	Mg	45	He	382436.891	ppb	0.4	4555671.71	200000	
27	Al	45	He	1884.545	ppb	1.7	8740.75	200000	
28	Si	45	H2	6990.576	ppb	1.7	57057.14	10000	
39	K	45	He	67073.410	ppb	0.9	706313.08	200000	
40	Ca	45	H2	396205.043	ppb	2.0	30778227.32	200000	
51	V	89	He	517.958	ppb	0.6	85754.00	1000	
52	Cr	89	He	200.465	ppb	1.2	40882.64	2000	
55	Mn	89	He	9312.561	ppb	0.8	904452.54	2000	
56	Fe	89	H2	1179.977	ppb	3.0	372604.75	100000	
59	Co	89	He	509.667	ppb	0.8	175915.18	1000	
60	Ni	89	He	483.822	ppb	0.1	47354.22	1000	
63	Cu	89	He	245.388	ppb	0.9	65496.04	2000	
66	Zn	89	He	489.699	ppb	2.0	17855.33	2000	
75	As	89	He	103.088	ppb	1.2	3067.34	1000	
78	Se	89	H2	106.552	ppb	2.3	1641.02	1000	
88	Sr	89	He	6361.311	ppb	1.0	923028.91	2000	
95	Mo	89	He	107.899	ppb	1.7	18096.94	1000	
107	Ag	89	He	49.021	ppb	1.5	27785.82	100	
111	Cd	89	He	246.737	ppb	0.2	18630.32	1000	
118	Sn	159	He	489.700	ppb	0.2	81634.70	1000	
121	Sb	159	No Gas	98.141	ppb	5.9	145306.83	1000	
137	Ba	159	No Gas	1308.958	ppb	6.6	761966.11	2000	
182	W	159	No Gas	101.604	ppb	7.5	119686.32	1000	
205	Tl	209	No Gas	100.611	ppb	6.3	253190.75	1000	
208	Pb	209	No Gas	98.724	ppb	6.0	343546.73	2000	
232	Th	209	No Gas	103.577	ppb	5.8	377364.00	1000	
238	U	209	No Gas	140.333	ppb	6.6	479626.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1522620.68	3.2	1537409.87	99.04	29.5	120.4	
Sc	45	No Gas	3292164.29	4.1	3373253.08	97.6	29.5	120.4	
Sc	45	H2	387616.46	2.5	415670.69	93.25	29.5	120.4	
Sc	45	He	77907.95	0.2	81171.76	95.98	29.5	120.4	
Ge	72	No Gas	758509.22	4.4	779333.11	97.33	29.5	120.4	
Ge	72	H2	141622.15	1.6	153246.58	92.41	29.5	120.4	
Ge	72	He	59307.90	0.7	63135.03	93.94	29.5	120.4	
Y	89	H2	2476856.87	2.3	2642116.11	93.75	29.5	120.4	
Y	89	He	515146.03	1.0	544041.92	94.69	29.5	120.4	
Tb	159	No Gas	8239500.01	4.2	8117023.84	101.51	29.5	120.4	
Tb	159	He	2783477.11	0.5	2866479.19	97.1	29.5	120.4	
Bi	209	No Gas	4283645.99	4.6	4424692.92	96.81	29.5	120.4	

Sample Report

Sample Name SN5151-005

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 4:57:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.123	ppb	27.3	50.00	100	
11	B	6	No Gas	684.823	ppb	0.9	116848.48	1000	
23	Na	45	He	1292228.936	ppb	4.3	27448193.90	200000	>LDR
24	Mg	45	He	277017.100	ppb	4.8	3236800.99	200000	
27	Al	45	He	0.649	ppb	65.0	50.00	200000	
28	Si	45	H2	5538.989	ppb	3.7	44759.70	10000	
39	K	45	He	6290.431	ppb	6.7	74417.08	200000	
40	Ca	45	H2	502672.743	ppb	2.9	38627303.87	200000	
51	V	89	He	5.405	ppb	2.6	1098.97	1000	
52	Cr	89	He	1.625	ppb	1.0	359.94	2000	
55	Mn	89	He	3.718	ppb	10.3	367.94	2000	
56	Fe	89	H2	-9.118	ppb	N/A	5223.47	100000	
59	Co	89	He	0.425	ppb	30.6	153.34	1000	
60	Ni	89	He	2.640	ppb	22.7	293.35	1000	
63	Cu	89	He	3.834	ppb	6.5	1401.24	2000	
66	Zn	89	He	11.725	ppb	7.9	482.25	2000	
75	As	89	He	0.624	ppb	14.6	22.67	1000	
78	Se	89	H2	13.434	ppb	7.0	205.49	1000	
88	Sr	89	He	5698.493	ppb	3.5	815659.04	2000	
95	Mo	89	He	1.974	ppb	19.9	442.25	1000	
107	Ag	89	He	0.015	ppb	117.7	18.89	100	
111	Cd	89	He	0.165	ppb	11.3	13.33	1000	
118	Sn	159	He	1.454	ppb	13.2	307.80	1000	
121	Sb	159	No Gas	0.222	ppb	19.5	420.47	1000	
137	Ba	159	No Gas	14.295	ppb	1.4	8281.80	2000	
182	W	159	No Gas	0.205	ppb	24.7	357.07	1000	
205	Tl	209	No Gas	0.121	ppb	46.2	327.04	1000	
208	Pb	209	No Gas	0.124	ppb	33.0	600.68	2000	
232	Th	209	No Gas	0.991	ppb	33.7	3731.45	1000	
238	U	209	No Gas	92.768	ppb	0.3	314615.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486142.39	0.3	1537409.87	96.67	29.5	120.4	
Sc	45	No Gas	3265050.30	1.2	3373253.08	96.79	29.5	120.4	
Sc	45	H2	383538.57	2.9	415670.69	92.27	29.5	120.4	
Sc	45	He	76506.27	3.7	81171.76	94.25	29.5	120.4	
Ge	72	No Gas	750180.74	0.6	779333.11	96.26	29.5	120.4	
Ge	72	H2	141129.36	1.7	153246.58	92.09	29.5	120.4	
Ge	72	He	58547.08	2.0	63135.03	92.73	29.5	120.4	
Y	89	H2	2457844.29	2.7	2642116.11	93.03	29.5	120.4	
Y	89	He	508414.36	2.3	544041.92	93.45	29.5	120.4	
Tb	159	No Gas	8168098.91	1.5	8117023.84	100.63	29.5	120.4	
Tb	159	He	2750511.42	2.4	2866479.19	95.95	29.5	120.4	
Bi	209	No Gas	4242071.66	1.0	4424692.92	95.87	29.5	120.4	

Sample Report

Sample Name SN5151-006

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:00:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	466.0	20.00	100	
11	B	6	No Gas	758.937	ppb	13.8	121581.23	1000	
23	Na	45	He	1333936.197	ppb	0.8	28500120.36	200000	>LDR
24	Mg	45	He	287875.459	ppb	0.8	3383853.53	200000	
27	Al	45	He	-1.371	ppb	N/A	41.12	200000	
28	Si	45	H2	5496.092	ppb	1.3	44685.85	10000	
39	K	45	He	6409.778	ppb	2.5	76095.15	200000	
40	Ca	45	H2	522387.312	ppb	1.5	40379924.95	200000	
51	V	89	He	5.729	ppb	3.7	1165.65	1000	
52	Cr	89	He	1.464	ppb	7.7	331.28	2000	
55	Mn	89	He	0.997	ppb	15.3	108.65	2000	
56	Fe	89	H2	-11.393	ppb	N/A	4549.13	100000	
59	Co	89	He	0.233	ppb	54.8	88.90	1000	
60	Ni	89	He	2.741	ppb	10.9	307.79	1000	
63	Cu	89	He	3.928	ppb	4.0	1443.46	2000	
66	Zn	89	He	10.962	ppb	7.6	460.02	2000	
75	As	89	He	0.817	ppb	22.4	28.67	1000	
78	Se	89	H2	14.526	ppb	2.2	223.66	1000	
88	Sr	89	He	5965.378	ppb	0.1	864660.89	2000	
95	Mo	89	He	1.722	ppb	23.8	406.69	1000	
107	Ag	89	He	0.001	ppb	312.9	11.11	100	
111	Cd	89	He	0.094	ppb	91.3	8.15	1000	
118	Sn	159	He	1.129	ppb	9.6	256.68	1000	
121	Sb	159	No Gas	0.141	ppb	47.2	280.32	1000	
137	Ba	159	No Gas	15.024	ppb	17.4	8134.90	2000	
182	W	159	No Gas	0.056	ppb	56.2	173.53	1000	
205	Tl	209	No Gas	0.030	ppb	50.8	93.44	1000	
208	Pb	209	No Gas	0.102	ppb	55.6	480.54	2000	
232	Th	209	No Gas	0.088	ppb	15.2	450.52	1000	
238	U	209	No Gas	108.856	ppb	18.3	342790.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410225.93	10.8	1537409.87	91.73	29.5	120.4	
Sc	45	No Gas	3101126.46	13.4	3373253.08	91.93	29.5	120.4	
Sc	45	H2	385620.75	0.8	415670.69	92.77	29.5	120.4	
Sc	45	He	76878.01	1.1	81171.76	94.71	29.5	120.4	
Ge	72	No Gas	705949.86	12.4	779333.11	90.58	29.5	120.4	
Ge	72	H2	140754.59	2.0	153246.58	91.85	29.5	120.4	
Ge	72	He	59056.48	0.7	63135.03	93.54	29.5	120.4	
Y	89	H2	2471567.78	0.9	2642116.11	93.55	29.5	120.4	
Y	89	He	514579.32	0.6	544041.92	94.58	29.5	120.4	
Tb	159	No Gas	7751091.55	13.0	8117023.84	95.49	29.5	120.4	
Tb	159	He	2777922.29	0.7	2866479.19	96.91	29.5	120.4	
Bi	209	No Gas	4003449.32	13.2	4424692.92	90.48	29.5	120.4	

Sample Report

Sample Name SN5173-001

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:02:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.050	ppb	107.6	32.22	100	
11	B	6	No Gas	97.218	ppb	2.5	17847.10	1000	
23	Na	45	He	67148.612	ppb	0.1	1391842.54	200000	
24	Mg	45	He	31662.163	ppb	0.2	360183.01	200000	
27	Al	45	He	87.870	ppb	6.9	432.24	200000	
28	Si	45	H2	8021.865	ppb	3.4	63323.71	10000	
39	K	45	He	14214.836	ppb	0.8	150741.03	200000	
40	Ca	45	H2	107216.947	ppb	2.3	8062613.49	200000	
51	V	89	He	6.500	ppb	11.0	1256.77	1000	
52	Cr	89	He	1.075	ppb	7.3	245.29	2000	
55	Mn	89	He	2308.912	ppb	0.2	217824.69	2000	
56	Fe	89	H2	53910.228	ppb	2.1	16401741.16	100000	
59	Co	89	He	5.273	ppb	2.9	1775.79	1000	
60	Ni	89	He	4.304	ppb	10.9	447.80	1000	
63	Cu	89	He	1.323	ppb	9.9	732.27	2000	
66	Zn	89	He	3.517	ppb	21.7	184.45	2000	
75	As	89	He	44.527	ppb	6.5	1288.87	1000	
78	Se	89	H2	1.037	ppb	14.7	16.17	1000	
88	Sr	89	He	929.809	ppb	0.8	131051.87	2000	
95	Mo	89	He	-0.005	ppb	N/A	115.56	1000	
107	Ag	89	He	0.006	ppb	107.7	13.33	100	
111	Cd	89	He	0.016	ppb	185.7	2.22	1000	
118	Sn	159	He	1.014	ppb	29.6	237.79	1000	
121	Sb	159	No Gas	0.218	ppb	12.4	420.47	1000	
137	Ba	159	No Gas	113.084	ppb	1.5	66304.48	2000	
182	W	159	No Gas	0.020	ppb	17.9	143.50	1000	
205	Tl	209	No Gas	0.019	ppb	63.5	76.75	1000	
208	Pb	209	No Gas	0.404	ppb	1.6	1645.23	2000	
232	Th	209	No Gas	0.077	ppb	21.7	460.53	1000	
238	U	209	No Gas	0.115	ppb	10.0	413.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1528494.52	2.4	1537409.87	99.42	29.5	120.4	
Sc	45	No Gas	3268996.36	2.4	3373253.08	96.91	29.5	120.4	
Sc	45	H2	375140.55	1.6	415670.69	90.25	29.5	120.4	
Sc	45	He	74292.24	0.0	81171.76	91.52	29.5	120.4	
Ge	72	No Gas	754042.08	2.5	779333.11	96.75	29.5	120.4	
Ge	72	H2	137257.37	1.3	153246.58	89.57	29.5	120.4	
Ge	72	He	57558.43	0.8	63135.03	91.17	29.5	120.4	
Y	89	H2	2437553.77	1.4	2642116.11	92.26	29.5	120.4	
Y	89	He	500354.71	0.6	544041.92	91.97	29.5	120.4	
Tb	159	No Gas	8282817.03	1.1	8117023.84	102.04	29.5	120.4	
Tb	159	He	2781159.47	0.1	2866479.19	97.02	29.5	120.4	
Bi	209	No Gas	4456718.59	1.1	4424692.92	100.72	29.5	120.4	

Sample Report

Sample Name SN5173-002

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:05:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	69.1	38.89	100	
11	B	6	No Gas	95.077	ppb	3.4	15788.05	1000	
23	Na	45	He	65748.904	ppb	1.5	1355026.63	200000	
24	Mg	45	He	30999.058	ppb	1.8	350608.29	200000	
27	Al	45	He	12.174	ppb	47.0	98.89	200000	
28	Si	45	H2	7715.234	ppb	3.3	59968.75	10000	
39	K	45	He	14083.420	ppb	1.5	148573.66	200000	
40	Ca	45	H2	105050.924	ppb	1.4	7778285.02	200000	
51	V	89	He	4.369	ppb	1.9	923.40	1000	
52	Cr	89	He	0.981	ppb	9.7	228.63	2000	
55	Mn	89	He	2287.255	ppb	0.6	217689.23	2000	
56	Fe	89	H2	52680.969	ppb	1.4	16004740.74	100000	
59	Co	89	He	5.358	ppb	7.1	1820.26	1000	
60	Ni	89	He	4.600	ppb	9.6	480.03	1000	
63	Cu	89	He	0.854	ppb	13.0	616.70	2000	
66	Zn	89	He	1.974	ppb	32.4	131.12	2000	
75	As	89	He	42.016	ppb	1.6	1227.52	1000	
78	Se	89	H2	1.116	ppb	14.9	17.33	1000	
88	Sr	89	He	910.043	ppb	1.1	129401.55	2000	
95	Mo	89	He	0.042	ppb	402.9	124.45	1000	
107	Ag	89	He	0.001	ppb	948.1	11.11	100	
111	Cd	89	He	0.021	ppb	41.1	2.59	1000	
118	Sn	159	He	0.967	ppb	7.3	232.24	1000	
121	Sb	159	No Gas	0.235	ppb	16.4	437.17	1000	
137	Ba	159	No Gas	109.405	ppb	1.8	63011.71	2000	
182	W	159	No Gas	0.054	ppb	84.8	180.20	1000	
205	Tl	209	No Gas	0.005	ppb	221.1	40.05	1000	
208	Pb	209	No Gas	0.027	ppb	59.5	273.64	2000	
232	Th	209	No Gas	0.024	ppb	54.1	253.62	1000	
238	U	209	No Gas	0.043	ppb	42.8	153.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1380947.02	1.5	1537409.87	89.82	29.5	120.4	
Sc	45	No Gas	3096172.99	0.1	3373253.08	91.79	29.5	120.4	
Sc	45	H2	369317.44	1.5	415670.69	88.85	29.5	120.4	
Sc	45	He	73867.70	1.0	81171.76	91	29.5	120.4	
Ge	72	No Gas	724871.58	0.2	779333.11	93.01	29.5	120.4	
Ge	72	H2	136932.38	2.0	153246.58	89.35	29.5	120.4	
Ge	72	He	58202.92	0.8	63135.03	92.19	29.5	120.4	
Y	89	H2	2433793.99	1.4	2642116.11	92.12	29.5	120.4	
Y	89	He	504781.84	0.1	544041.92	92.78	29.5	120.4	
Tb	159	No Gas	8135086.68	0.5	8117023.84	100.22	29.5	120.4	
Tb	159	He	2808375.86	0.3	2866479.19	97.97	29.5	120.4	
Bi	209	No Gas	4380972.49	0.3	4424692.92	99.01	29.5	120.4	

Sample Report

Sample Name SN5173-003

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:08:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.066	ppb	109.8	31.11	100	
11	B	6	No Gas	78.567	ppb	7.8	12758.27	1000	
23	Na	45	He	131954.611	ppb	2.0	2777434.11	200000	
24	Mg	45	He	5666.621	ppb	1.6	66070.70	200000	
27	Al	45	He	110.217	ppb	3.0	540.03	200000	
28	Si	45	H2	4567.343	ppb	0.7	35747.84	10000	
39	K	45	He	1833.014	ppb	3.9	28774.35	200000	
40	Ca	45	H2	43206.141	ppb	0.4	3213255.75	200000	
51	V	89	He	2.776	ppb	14.1	671.15	1000	
52	Cr	89	He	0.724	ppb	8.0	178.64	2000	
55	Mn	89	He	1015.278	ppb	1.8	97343.53	2000	
56	Fe	89	H2	254.327	ppb	0.8	85759.51	100000	
59	Co	89	He	0.766	ppb	8.3	268.91	1000	
60	Ni	89	He	2.215	ppb	1.8	253.34	1000	
63	Cu	89	He	1.356	ppb	15.9	752.27	2000	
66	Zn	89	He	13.041	ppb	11.8	528.92	2000	
75	As	89	He	0.681	ppb	7.1	24.33	1000	
78	Se	89	H2	0.331	ppb	20.0	5.50	1000	
88	Sr	89	He	189.264	ppb	1.9	27114.25	2000	
95	Mo	89	He	-0.300	ppb	N/A	68.89	1000	
107	Ag	89	He	0.003	ppb	448.5	12.22	100	
111	Cd	89	He	0.071	ppb	10.1	6.30	1000	
118	Sn	159	He	0.820	ppb	19.5	207.79	1000	
121	Sb	159	No Gas	0.130	ppb	44.1	280.31	1000	
137	Ba	159	No Gas	25.076	ppb	9.3	14390.45	2000	
182	W	159	No Gas	-0.001	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.022	ppb	113.6	83.43	1000	
208	Pb	209	No Gas	0.198	ppb	13.3	894.35	2000	
232	Th	209	No Gas	0.042	ppb	30.9	323.70	1000	
238	U	209	No Gas	0.104	ppb	15.4	370.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1338969.87	5.5	1537409.87	87.09	29.5	120.4	
Sc	45	No Gas	3079437.82	5.6	3373253.08	91.29	29.5	120.4	
Sc	45	H2	370803.50	0.8	415670.69	89.21	29.5	120.4	
Sc	45	He	75615.51	2.3	81171.76	93.15	29.5	120.4	
Ge	72	No Gas	721592.97	5.5	779333.11	92.59	29.5	120.4	
Ge	72	H2	137580.75	1.1	153246.58	89.78	29.5	120.4	
Ge	72	He	59010.23	2.0	63135.03	93.47	29.5	120.4	
Y	89	H2	2450528.80	0.2	2642116.11	92.75	29.5	120.4	
Y	89	He	508591.00	1.9	544041.92	93.48	29.5	120.4	
Tb	159	No Gas	8127025.99	5.6	8117023.84	100.12	29.5	120.4	
Tb	159	He	2810729.65	1.5	2866479.19	98.06	29.5	120.4	
Bi	209	No Gas	4422492.86	5.5	4424692.92	99.95	29.5	120.4	

Sample Report

Sample Name SN5173-004

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:11:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	237.4	22.22	100	
11	B	6	No Gas	70.535	ppb	5.7	12186.67	1000	
23	Na	45	He	124306.802	ppb	0.9	2691406.50	200000	
24	Mg	45	He	5303.782	ppb	0.9	63637.74	200000	
27	Al	45	He	1.456	ppb	345.8	54.45	200000	
28	Si	45	H2	4358.052	ppb	1.2	35520.30	10000	
39	K	45	He	1836.165	ppb	3.6	29628.83	200000	
40	Ca	45	H2	41730.917	ppb	1.4	3230744.08	200000	
51	V	89	He	3.344	ppb	9.4	778.94	1000	
52	Cr	89	He	0.472	ppb	10.5	130.65	2000	
55	Mn	89	He	927.967	ppb	0.7	90825.73	2000	
56	Fe	89	H2	-2.324	ppb	N/A	7507.04	100000	
59	Co	89	He	0.461	ppb	12.9	168.90	1000	
60	Ni	89	He	1.609	ppb	13.1	198.90	1000	
63	Cu	89	He	0.898	ppb	29.3	645.59	2000	
66	Zn	89	He	2.570	ppb	12.3	156.67	2000	
75	As	89	He	0.508	ppb	13.0	19.67	1000	
78	Se	89	H2	0.468	ppb	4.5	7.83	1000	
88	Sr	89	He	179.866	ppb	1.4	26302.57	2000	
95	Mo	89	He	-0.289	ppb	N/A	72.22	1000	
107	Ag	89	He	-0.003	ppb	N/A	8.89	100	
111	Cd	89	He	0.040	ppb	21.9	4.07	1000	
118	Sn	159	He	0.951	ppb	19.4	233.34	1000	
121	Sb	159	No Gas	0.062	ppb	42.1	190.22	1000	
137	Ba	159	No Gas	22.492	ppb	5.7	13375.16	2000	
182	W	159	No Gas	0.011	ppb	336.3	133.48	1000	
205	Tl	209	No Gas	0.017	ppb	92.3	73.42	1000	
208	Pb	209	No Gas	0.038	ppb	78.4	323.70	2000	
232	Th	209	No Gas	0.017	ppb	255.9	236.94	1000	
238	U	209	No Gas	0.157	ppb	61.0	570.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1411728.79	2.2	1537409.87	91.83	29.5	120.4	
Sc	45	No Gas	3245821.07	2.2	3373253.08	96.22	29.5	120.4	
Sc	45	H2	386014.63	0.8	415670.69	92.87	29.5	120.4	
Sc	45	He	77752.86	1.1	81171.76	95.79	29.5	120.4	
Ge	72	No Gas	760866.35	3.0	779333.11	97.63	29.5	120.4	
Ge	72	H2	143563.78	1.3	153246.58	93.68	29.5	120.4	
Ge	72	He	60388.46	0.9	63135.03	95.65	29.5	120.4	
Y	89	H2	2526340.08	0.9	2642116.11	95.62	29.5	120.4	
Y	89	He	519048.41	0.9	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8397261.19	2.1	8117023.84	103.45	29.5	120.4	
Tb	159	He	2854832.70	0.9	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4543702.19	2.8	4424692.92	102.69	29.5	120.4	

Sample Report

Sample Name SN5151-004L

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:13:39 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.023	ppb	N/A	16.67	100	
11	B	6	No Gas	903.819	ppb	2.8	30774.69	1000	
23	Na	45	He	1381851.202	ppb	0.3	6171651.64	200000	
24	Mg	45	He	401160.695	ppb	0.8	985360.85	200000	
27	Al	45	He	0.646	ppb	2002.5	50.00	200000	
28	Si	45	H2	6066.990	ppb	1.4	10428.68	10000	
39	K	45	He	61178.602	ppb	0.9	141747.47	200000	
40	Ca	45	H2	411303.450	ppb	0.9	6597729.48	200000	
51	V	89	He	16.700	ppb	7.4	805.61	1000	
52	Cr	89	He	1.406	ppb	11.1	94.65	2000	
55	Mn	89	He	9355.963	ppb	0.5	189600.26	2000	
56	Fe	89	H2	75.906	ppb	6.0	13237.82	100000	
59	Co	89	He	4.080	ppb	17.6	302.25	1000	
60	Ni	89	He	10.586	ppb	7.7	257.79	1000	
63	Cu	89	He	0.277	ppb	146.4	435.58	2000	
66	Zn	89	He	64.590	ppb	6.2	554.48	2000	
75	As	89	He	2.160	ppb	39.4	18.00	1000	
78	Se	89	H2	1.257	ppb	32.3	4.50	1000	
88	Sr	89	He	6244.108	ppb	0.8	189048.69	2000	
95	Mo	89	He	-0.338	ppb	N/A	113.34	1000	
107	Ag	89	He	-0.055	ppb	N/A	4.44	100	
111	Cd	89	He	-0.046	ppb	N/A	0.37	1000	
118	Sn	159	He	0.804	ppb	7.2	98.89	1000	
121	Sb	159	No Gas	0.325	ppb	27.3	193.55	1000	
137	Ba	159	No Gas	30.245	ppb	11.0	3584.52	2000	
182	W	159	No Gas	-0.108	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.113	ppb	136.0	86.76	1000	
208	Pb	209	No Gas	0.183	ppb	113.3	317.03	2000	
232	Th	209	No Gas	0.000	ppb	192121.7	170.20	1000	
238	U	209	No Gas	37.989	ppb	7.0	27330.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1452371.79	2.3	1537409.87	94.47	29.5	120.4	
Sc	45	No Gas	3332196.04	2.9	3373253.08	98.78	29.5	120.4	
Sc	45	H2	400000.19	0.6	415670.69	96.23	29.5	120.4	
Sc	45	He	80284.43	0.8	81171.76	98.91	29.5	120.4	
Ge	72	No Gas	771839.23	2.9	779333.11	99.04	29.5	120.4	
Ge	72	H2	147022.54	2.4	153246.58	95.94	29.5	120.4	
Ge	72	He	62963.09	0.8	63135.03	99.73	29.5	120.4	
Y	89	H2	2567197.19	0.7	2642116.11	97.16	29.5	120.4	
Y	89	He	537389.66	0.9	544041.92	98.78	29.5	120.4	
Tb	159	No Gas	8350507.24	3.2	8117023.84	102.88	29.5	120.4	
Tb	159	He	2872248.36	0.5	2866479.19	100.2	29.5	120.4	
Bi	209	No Gas	4503249.55	2.5	4424692.92	101.78	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	048_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:16:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.506	ppb	3.9	31327.96	25	98.02	89.8	110.2	
11	B	6	No Gas	25.478	ppb	5.1	22277.85	25	101.91	89.8	110.2	
23	Na	45	He	5223.887	ppb	2.0	579547.54	5000	104.48	89.8	110.2	
24	Mg	45	He	4989.235	ppb	1.5	302002.24	5000	99.78	89.8	110.2	
27	Al	45	He	487.736	ppb	0.7	11460.57	500	97.55	89.8	110.2	
28	Si	45	H2	525.971	ppb	12.1	21379.61	500	105.19	89.8	110.2	
39	K	45	He	4925.879	ppb	1.2	269930.24	5000	98.52	89.8	110.2	
40	Ca	45	H2	5280.373	ppb	9.6	2032410.40	5000	105.61	89.8	110.2	
51	V	89	He	24.643	ppb	1.9	21188.78	25	98.57	89.8	110.2	
52	Cr	89	He	24.652	ppb	0.6	25908.96	25	98.61	89.8	110.2	
55	Mn	89	He	25.125	ppb	2.1	12580.67	25	100.5	89.8	110.2	
56	Fe	89	H2	5248.985	ppb	9.7	8115307.84	5000	104.98	89.8	110.2	
59	Co	89	He	24.722	ppb	0.8	43956.18	25	98.89	89.8	110.2	
60	Ni	89	He	24.520	ppb	2.1	12390.34	25	98.08	89.8	110.2	
63	Cu	89	He	24.904	ppb	1.7	34441.08	25	99.62	89.8	110.2	
66	Zn	89	He	24.972	ppb	1.7	4737.64	25	99.89	89.8	110.2	
75	As	89	He	24.703	ppb	1.4	3784.60	25	98.81	89.8	110.2	
78	Se	89	H2	26.307	ppb	8.9	2025.89	25	105.23	89.8	110.2	
88	Sr	89	He	24.277	ppb	1.4	18150.24	25	97.11	89.8	110.2	
95	Mo	89	He	23.885	ppb	2.2	20620.58	25	95.54	89.8	110.2	
107	Ag	89	He	18.306	ppb	1.1	53433.74	25	73.22	89.8	110.2	> +/- 10%
111	Cd	89	He	24.292	ppb	0.6	9447.08	25	97.17	89.8	110.2	
118	Sn	159	He	23.514	ppb	0.9	20131.14	25	94.06	89.8	110.2	
121	Sb	159	No Gas	24.417	ppb	3.6	181800.37	25	97.67	89.8	110.2	
137	Ba	159	No Gas	24.384	ppb	2.9	71430.20	25	97.54	89.8	110.2	
182	W	159	No Gas	23.922	ppb	2.2	141797.85	25	95.69	89.8	110.2	
205	Tl	209	No Gas	24.270	ppb	3.3	321313.46	25	97.08	89.8	110.2	
208	Pb	209	No Gas	24.028	ppb	3.3	439817.64	25	96.11	89.8	110.2	
232	Th	209	No Gas	23.911	ppb	4.1	458190.82	25	95.64	89.8	110.2	
238	U	209	No Gas	24.125	ppb	3.7	433812.80	25	96.5	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1474384.69	1.6	1537409.87	95.9	29.5	120.4	
Sc	45	No Gas	3381277.54	1.6	3373253.08	100.24	29.5	120.4	
Sc	45	H2	385501.57	7.5	415670.69	92.74	29.5	120.4	
Sc	45	He	79040.06	1.6	81171.76	97.37	29.5	120.4	
Ge	72	No Gas	779756.11	1.9	779333.11	100.05	29.5	120.4	
Ge	72	H2	144638.71	4.7	153246.58	94.38	29.5	120.4	
Ge	72	He	61689.66	1.1	63135.03	97.71	29.5	120.4	
Y	89	H2	2486780.70	6.9	2642116.11	94.12	29.5	120.4	
Y	89	He	530636.49	0.4	544041.92	97.54	29.5	120.4	
Tb	159	No Gas	8277953.70	1.8	8117023.84	101.98	29.5	120.4	
Tb	159	He	2851326.10	0.5	2866479.19	99.47	29.5	120.4	
Bi	209	No Gas	4500115.58	1.6	4424692.92	101.7	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	049_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:18:59 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.034	ppb	22.7	62.23	0.2	
11	B	6	No Gas	1.415	ppb	12.1	2088.01	4	
23	Na	45	He	135.466	ppb	2.3	20952.22	200	Failed DoD
24	Mg	45	He	6.836	ppb	16.4	1022.34	20	
27	Al	45	He	-1.228	ppb	N/A	20.00	20	
28	Si	45	H2	0.513	ppb	183.8	270.30	100	
39	K	45	He	19.023	ppb	42.2	11837.93	200	
40	Ca	45	H2	0.303	ppb	15.5	2006.89	20	
51	V	89	He	0.159	ppb	20.8	363.35	1	
52	Cr	89	He	0.018	ppb	36.0	53.99	1	
55	Mn	89	He	0.072	ppb	22.0	48.66	0.4	
56	Fe	89	H2	-1.415	ppb	N/A	6081.40	20	
59	Co	89	He	-0.001	ppb	N/A	6.67	0.2	
60	Ni	89	He	-0.018	ppb	N/A	32.22	0.4	
63	Cu	89	He	-0.129	ppb	N/A	240.01	0.6	
66	Zn	89	He	0.079	ppb	181.2	78.89	2	
75	As	89	He	-0.001	ppb	N/A	4.33	1	
78	Se	89	H2	0.048	ppb	48.7	4.33	1	
88	Sr	89	He	0.009	ppb	48.3	13.33	1	
95	Mo	89	He	0.002	ppb	1953.7	125.56	1	
107	Ag	89	He	0.002	ppb	83.5	15.55	0.2	
111	Cd	89	He	0.007	ppb	65.5	3.70	0.2	
118	Sn	159	He	0.122	ppb	22.7	174.45	1	
121	Sb	159	No Gas	0.016	ppb	44.0	210.24	0.2	
137	Ba	159	No Gas	0.024	ppb	43.6	86.77	0.4	
182	W	159	No Gas	0.086	ppb	27.2	620.71	1	
205	Tl	209	No Gas	0.017	ppb	52.0	253.62	0.2	
208	Pb	209	No Gas	0.012	ppb	50.6	407.12	0.2	
232	Th	209	No Gas	0.066	ppb	6.2	1425.03	1	
238	U	209	No Gas	0.016	ppb	32.1	287.00	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1481509.20	0.7	1537409.87	96.36	29.5	120.4	
Sc	45	No Gas	3285675.53	0.4	3373253.08	97.4	29.5	120.4	
Sc	45	H2	397703.67	0.8	415670.69	95.68	29.5	120.4	
Sc	45	He	79286.63	0.4	81171.76	97.68	29.5	120.4	
Ge	72	No Gas	757494.67	0.7	779333.11	97.2	29.5	120.4	
Ge	72	H2	147120.29	1.3	153246.58	96	29.5	120.4	
Ge	72	He	61709.45	0.8	63135.03	97.74	29.5	120.4	
Y	89	H2	2556153.46	0.4	2642116.11	96.75	29.5	120.4	
Y	89	He	531956.75	0.4	544041.92	97.78	29.5	120.4	
Tb	159	No Gas	8141242.66	0.7	8117023.84	100.3	29.5	120.4	
Tb	159	He	2846509.79	0.4	2866479.19	99.3	29.5	120.4	
Bi	209	No Gas	4452330.35	0.8	4424692.92	100.62	29.5	120.4	

Sample Report

Sample Name SN5173-005

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:21:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.055	ppb	114.5	32.22	100	
11	B	6	No Gas	52.870	ppb	5.3	9722.48	1000	
23	Na	45	He	8509.901	ppb	3.3	188605.21	200000	
24	Mg	45	He	5773.216	ppb	1.0	68790.48	200000	
27	Al	45	He	95.010	ppb	3.0	482.25	200000	
28	Si	45	H2	7132.832	ppb	0.5	57295.11	10000	
39	K	45	He	3329.273	ppb	2.0	44804.65	200000	
40	Ca	45	H2	117275.510	ppb	0.9	8969131.53	200000	
51	V	89	He	2.749	ppb	3.3	680.04	1000	
52	Cr	89	He	0.465	ppb	19.5	129.31	2000	
55	Mn	89	He	560.140	ppb	0.4	54829.15	2000	
56	Fe	89	H2	11238.072	ppb	0.3	3510362.74	100000	
59	Co	89	He	2.475	ppb	14.7	868.98	1000	
60	Ni	89	He	1.609	ppb	7.4	198.90	1000	
63	Cu	89	He	0.568	ppb	18.7	557.81	2000	
66	Zn	89	He	4.144	ppb	15.0	214.45	2000	
75	As	89	He	2.254	ppb	18.4	72.01	1000	
78	Se	89	H2	0.485	ppb	40.4	8.00	1000	
88	Sr	89	He	496.060	ppb	0.8	72537.22	2000	
95	Mo	89	He	-0.184	ppb	N/A	90.00	1000	
107	Ag	89	He	0.057	ppb	60.9	43.33	100	
111	Cd	89	He	0.171	ppb	12.0	14.07	1000	
118	Sn	159	He	0.917	ppb	12.7	226.68	1000	
121	Sb	159	No Gas	0.271	ppb	11.1	497.23	1000	
137	Ba	159	No Gas	25.747	ppb	3.7	15032.14	2000	
182	W	159	No Gas	0.106	ppb	96.1	243.61	1000	
205	Tl	209	No Gas	0.064	ppb	41.7	196.89	1000	
208	Pb	209	No Gas	0.338	ppb	4.4	1428.30	2000	
232	Th	209	No Gas	0.416	ppb	16.1	1772.10	1000	
238	U	209	No Gas	0.609	ppb	4.3	2206.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1467823.88	1.4	1537409.87	95.47	29.5	120.4	
Sc	45	No Gas	3217461.31	0.4	3373253.08	95.38	29.5	120.4	
Sc	45	H2	381433.56	1.1	415670.69	91.76	29.5	120.4	
Sc	45	He	77269.09	0.3	81171.76	95.19	29.5	120.4	
Ge	72	No Gas	751680.62	0.8	779333.11	96.45	29.5	120.4	
Ge	72	H2	140011.58	1.9	153246.58	91.36	29.5	120.4	
Ge	72	He	60187.58	0.7	63135.03	95.33	29.5	120.4	
Y	89	H2	2497530.78	0.6	2642116.11	94.53	29.5	120.4	
Y	89	He	519082.56	1.1	544041.92	95.41	29.5	120.4	
Tb	159	No Gas	8239238.00	0.6	8117023.84	101.51	29.5	120.4	
Tb	159	He	2844904.09	0.6	2866479.19	99.25	29.5	120.4	
Bi	209	No Gas	4524464.20	1.1	4424692.92	102.25	29.5	120.4	

Sample Report

Sample Name SN5173-006

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:24:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.056	ppb	81.2	31.11	100	
11	B	6	No Gas	56.892	ppb	6.8	10057.16	1000	
23	Na	45	He	8465.666	ppb	0.8	185013.63	200000	
24	Mg	45	He	6058.903	ppb	0.5	71155.43	200000	
27	Al	45	He	1.193	ppb	225.5	52.23	200000	
28	Si	45	H2	7198.933	ppb	3.6	57978.17	10000	
39	K	45	He	3547.905	ppb	0.6	46397.39	200000	
40	Ca	45	H2	121983.202	ppb	2.8	9354410.07	200000	
51	V	89	He	2.874	ppb	14.4	696.71	1000	
52	Cr	89	He	0.378	ppb	6.5	110.65	2000	
55	Mn	89	He	588.477	ppb	1.1	57296.55	2000	
56	Fe	89	H2	11262.597	ppb	2.2	3545550.95	100000	
59	Co	89	He	2.640	ppb	13.3	922.32	1000	
60	Ni	89	He	1.404	ppb	23.6	177.79	1000	
63	Cu	89	He	0.420	ppb	36.8	515.59	2000	
66	Zn	89	He	4.183	ppb	13.5	214.45	2000	
75	As	89	He	1.867	ppb	8.7	60.01	1000	
78	Se	89	H2	0.449	ppb	12.2	7.50	1000	
88	Sr	89	He	520.265	ppb	0.9	75669.63	2000	
95	Mo	89	He	-0.361	ppb	N/A	60.00	1000	
107	Ag	89	He	0.001	ppb	670.2	11.11	100	
111	Cd	89	He	0.143	ppb	31.4	11.85	1000	
118	Sn	159	He	1.347	ppb	17.4	302.24	1000	
121	Sb	159	No Gas	0.203	ppb	24.3	403.79	1000	
137	Ba	159	No Gas	26.576	ppb	4.1	15780.32	2000	
182	W	159	No Gas	0.039	ppb	49.8	166.85	1000	
205	Tl	209	No Gas	0.027	ppb	57.0	100.11	1000	
208	Pb	209	No Gas	0.132	ppb	9.6	680.77	2000	
232	Th	209	No Gas	0.055	ppb	14.8	390.46	1000	
238	U	209	No Gas	0.557	ppb	8.5	2055.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1421290.94	3.1	1537409.87	92.45	29.5	120.4	
Sc	45	No Gas	3247829.98	1.7	3373253.08	96.28	29.5	120.4	
Sc	45	H2	382593.23	1.9	415670.69	92.04	29.5	120.4	
Sc	45	He	76189.57	0.9	81171.76	93.86	29.5	120.4	
Ge	72	No Gas	769076.78	2.1	779333.11	98.68	29.5	120.4	
Ge	72	H2	140889.45	1.9	153246.58	91.94	29.5	120.4	
Ge	72	He	59674.88	1.0	63135.03	94.52	29.5	120.4	
Y	89	H2	2517489.30	1.4	2642116.11	95.28	29.5	120.4	
Y	89	He	516329.14	0.8	544041.92	94.91	29.5	120.4	
Tb	159	No Gas	8382968.63	1.6	8117023.84	103.28	29.5	120.4	
Tb	159	He	2865396.97	0.6	2866479.19	99.96	29.5	120.4	
Bi	209	No Gas	4610657.73	2.0	4424692.92	104.2	29.5	120.4	

Sample Report

Sample Name SN5173-008

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:27:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.028	ppb	128.5	23.33	100	
11	B	6	No Gas	38.450	ppb	3.4	6781.82	1000	
23	Na	45	He	63300.897	ppb	0.8	1312249.14	200000	
24	Mg	45	He	9818.161	ppb	2.0	112058.34	200000	
27	Al	45	He	16.395	ppb	20.3	117.78	200000	
28	Si	45	H2	4833.690	ppb	0.8	37885.63	10000	
39	K	45	He	2804.685	ppb	0.9	37886.52	200000	
40	Ca	45	H2	54711.819	ppb	1.3	4075494.77	200000	
51	V	89	He	2.050	ppb	6.3	548.92	1000	
52	Cr	89	He	0.386	ppb	19.7	109.98	2000	
55	Mn	89	He	9078.176	ppb	0.3	865018.39	2000	
56	Fe	89	H2	25412.420	ppb	2.0	7745710.33	100000	
59	Co	89	He	22.312	ppb	2.8	7562.63	1000	
60	Ni	89	He	11.266	ppb	2.2	1120.08	1000	
63	Cu	89	He	-0.254	ppb	N/A	328.90	2000	
66	Zn	89	He	4.931	ppb	11.6	236.68	2000	
75	As	89	He	11.069	ppb	4.9	327.04	1000	
78	Se	89	H2	0.146	ppb	92.2	2.67	1000	
88	Sr	89	He	246.160	ppb	0.3	35048.90	2000	
95	Mo	89	He	-0.414	ppb	N/A	50.00	1000	
107	Ag	89	He	-0.003	ppb	N/A	8.89	100	
111	Cd	89	He	0.016	ppb	161.0	2.22	1000	
118	Sn	159	He	1.037	ppb	12.5	244.45	1000	
121	Sb	159	No Gas	0.061	ppb	51.3	183.54	1000	
137	Ba	159	No Gas	35.663	ppb	5.0	20532.24	2000	
182	W	159	No Gas	0.043	ppb	73.1	166.85	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	10.01	1000	
208	Pb	209	No Gas	0.025	ppb	27.8	270.31	2000	
232	Th	209	No Gas	0.036	ppb	48.3	303.68	1000	
238	U	209	No Gas	0.040	ppb	34.6	143.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1360982.43	1.4	1537409.87	88.52	29.5	120.4	
Sc	45	No Gas	3092750.12	3.3	3373253.08	91.68	29.5	120.4	
Sc	45	H2	371452.58	0.5	415670.69	89.36	29.5	120.4	
Sc	45	He	74285.31	0.9	81171.76	91.52	29.5	120.4	
Ge	72	No Gas	742504.55	1.8	779333.11	95.27	29.5	120.4	
Ge	72	H2	137258.42	0.7	153246.58	89.57	29.5	120.4	
Ge	72	He	58656.71	0.7	63135.03	92.91	29.5	120.4	
Y	89	H2	2440505.99	0.9	2642116.11	92.37	29.5	120.4	
Y	89	He	505395.09	0.7	544041.92	92.9	29.5	120.4	
Tb	159	No Gas	8133288.91	2.8	8117023.84	100.2	29.5	120.4	
Tb	159	He	2815037.60	0.1	2866479.19	98.21	29.5	120.4	
Bi	209	No Gas	4430730.57	2.4	4424692.92	100.14	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG01IMW1
File Name	053_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:29:37 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.004	ppb	128.9	22.22	0.1	
B	11	6	No Gas	1.027	ppb	2.9	1683.49	2	
Na	23	45	He	91.804	ppb	16.9	15863.62	100	
Mg	24	45	He	5.421	ppb	34.8	920.10	10	
Al	27	45	He	0.522	ppb	130.0	60.00	10	
Si	28	45	H2	5.212	ppb	25.4	450.51	50	
K	39	45	He	24.426	ppb	28.4	11919.61	100	
Ca	40	45	H2	7.183	ppb	15.8	4592.05	10	
V	51	89	He	-0.016	ppb	N/A	208.90	0.5	
Cr	52	89	He	0.035	ppb	38.5	69.32	0.5	
Mn	55	89	He	0.832	ppb	49.9	417.29	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Fe	56	89	H2	-0.319	ppb	N/A	7667.43	10	
Co	59	89	He	-0.002	ppb	N/A	4.45	0.1	
Ni	60	89	He	0.009	ppb	233.7	44.44	0.2	
Cu	63	89	He	-0.015	ppb	N/A	385.58	0.3	
Zn	66	89	He	0.685	ppb	38.8	187.78	1	
As	75	89	He	0.004	ppb	359.1	5.00	0.5	
Se	78	89	H2	-0.004	ppb	N/A	0.17	0.5	
Sr	88	89	He	0.069	ppb	82.8	56.67	0.5	
Mo	95	89	He	-0.123	ppb	N/A	17.78	0.5	
Ag	107	89	He	-0.001	ppb	N/A	8.89	0.1	
Cd	111	89	He	0.001	ppb	394.8	1.48	0.1	
Sn	118	159	He	0.032	ppb	48.4	97.78	0.5	
Sb	121	159	No Gas	0.003	ppb	259.7	120.14	0.1	
Ba	137	159	No Gas	0.087	ppb	81.9	280.32	0.2	
W	182	159	No Gas	0.000	ppb	N/A	120.14	0.5	
Tl	205	209	No Gas	0.007	ppb	196.7	126.82	0.1	
[Pb]	206	209	No Gas	0.016	ppb	46.9	123.47	0.1	
[Pb]	207	209	No Gas	0.010	ppb	77.2	83.43	0.1	
Pb	208	209	No Gas	0.015	ppb	66.7	483.88	0.1	
Th	232	209	No Gas	0.004	ppb	234.9	250.29	0.5	
U	238	209	No Gas	0.008	ppb	165.7	163.53	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1417085.07	3.5	1537409.87	92.17	29.5	120.4	
Sc	45	No Gas	3275038.36	4.0	3373253.08	97.09	29.5	120.4	
Sc	45	H2	384350.98	1.0	415670.69	92.47	29.5	120.4	
Sc	45	He	77957.39	0.9	81171.76	96.04	29.5	120.4	
Ge	72	No Gas	763110.15	3.9	779333.11	97.92	29.5	120.4	
Ge	72	H2	142778.27	1.0	153246.58	93.17	29.5	120.4	
Ge	72	He	60740.69	0.9	63135.03	96.21	29.5	120.4	
Y	89	H2	2503459.36	0.3	2642116.11	94.75	29.5	120.4	
Y	89	He	518595.01	1.2	544041.92	95.32	29.5	120.4	
Tb	159	No Gas	8379617.72	3.9	8117023.84	103.24	29.5	120.4	
Tb	159	He	2835803.88	0.7	2866479.19	98.93	29.5	120.4	
Bi	209	No Gas	4613611.73	4.2	4424692.92	104.27	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG01IMW1
File Name	054_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:32:17 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.246	ppb	4.9	12663.71	50	19.7	79.5	120.4	
B	11	6	No Gas	486.405	ppb	5.6	82953.40	500	19.46	79.5	120.4	
Na	23	45	He	8446.835	ppb	0.7	190922.23	7500	22.52	79.5	120.4	
Mg	24	45	He	5299.861	ppb	1.2	64445.47	5000	21.2	79.5	120.4	
Al	27	45	He	1913.135	ppb	3.3	8974.23	2000	19.13	79.5	120.4	
Si	28	45	H2	1060.316	ppb	1.7	8929.41	1000	21.21	79.5	120.4	
K	39	45	He	10466.801	ppb	0.9	120553.96	10000	20.93	79.5	120.4	
Ca	40	45	H2	2715.893	ppb	0.5	214496.31	2500	21.73	79.5	120.4	
V	51	89	He	513.811	ppb	0.6	86843.12	500	20.55	79.5	120.4	
Cr	52	89	He	206.746	ppb	1.2	43042.69	200	20.67	79.5	120.4	
Mn	55	89	He	521.944	ppb	1.0	51757.55	500	20.88	79.5	120.4	
Fe	56	89	H2	1089.348	ppb	0.5	352084.52	1000	21.79	79.5	120.4	
Co	59	89	He	533.757	ppb	0.4	188067.07	500	21.35	79.5	120.4	
Ni	60	89	He	506.237	ppb	0.6	50576.51	500	20.25	79.5	120.4	
Cu	63	89	He	260.651	ppb	0.3	70994.05	250	20.85	79.5	120.4	
Zn	66	89	He	528.055	ppb	1.2	19650.02	500	21.12	79.5	120.4	
As	75	89	He	103.413	ppb	1.0	3140.70	100	20.68	79.5	120.4	
Se	78	89	H2	105.028	ppb	1.1	1652.19	100	21.01	79.5	120.4	
Sr	88	89	He	512.305	ppb	0.7	75888.43	500	20.49	79.5	120.4	
Mo	95	89	He	102.521	ppb	2.3	17561.78	100	20.5	79.5	120.4	
Ag	107	89	He	53.825	ppb	1.8	31143.21	50	21.53	79.5	120.4	
Cd	111	89	He	262.473	ppb	1.2	20229.99	250	21	79.5	120.4	
Sn	118	159	He	489.478	ppb	0.5	83676.25	500	19.58	79.5	120.4	
Sb	121	159	No Gas	101.746	ppb	4.8	152395.85	100	20.35	79.5	120.4	
Ba	137	159	No Gas	1944.299	ppb	4.8	1145162.77	2000	19.44	79.5	120.4	
W	182	159	No Gas	98.570	ppb	4.5	117531.55	100	19.71	79.5	120.4	
Tl	205	209	No Gas	100.249	ppb	4.2	268153.65	100	20.05	79.5	120.4	
Pb	208	209	No Gas	102.060	ppb	5.2	377379.76	100	20.41	79.5	120.4	
Th	232	209	No Gas	96.296	ppb	5.9	372741.45	100	19.26	79.5	120.4	
U	238	209	No Gas	99.753	ppb	5.3	362336.76	100	19.95	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1482320.10	2.8	1537409.87	96.42	29.5	120.4	
Sc	45	No Gas	3316642.52	2.8	3373253.08	98.32	29.5	120.4	
Sc	45	H2	390592.09	0.5	415670.69	93.97	29.5	120.4	
Sc	45	He	78791.61	0.5	81171.76	97.07	29.5	120.4	
Ge	72	No Gas	764048.13	3.1	779333.11	98.04	29.5	120.4	
Ge	72	H2	145443.35	0.7	153246.58	94.91	29.5	120.4	
Ge	72	He	61138.45	0.4	63135.03	96.84	29.5	120.4	
Y	89	H2	2529544.56	0.3	2642116.11	95.74	29.5	120.4	
Y	89	He	525855.46	0.5	544041.92	96.66	29.5	120.4	
Tb	159	No Gas	8329313.42	2.9	8117023.84	102.62	29.5	120.4	
Tb	159	He	2854366.73	0.5	2866479.19	99.58	29.5	120.4	
Bi	209	No Gas	4548580.51	3.3	4424692.92	102.8	29.5	120.4	

Sample Report

Sample Name SN5286-001

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:34:57 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.025	ppb	0.6	46.67	100	
11	B	6	No Gas	2.702	ppb	8.1	2905.95	1000	
23	Na	45	He	367.765	ppb	1.6	45823.88	200000	
24	Mg	45	He	244.209	ppb	2.3	15171.26	200000	
27	Al	45	He	1.481	ppb	74.5	82.23	200000	
28	Si	45	H2	1136.421	ppb	2.8	46798.21	10000	
39	K	45	He	147.021	ppb	6.7	18303.49	200000	
40	Ca	45	H2	901.889	ppb	1.0	355003.51	200000	
51	V	89	He	0.240	ppb	9.4	426.69	1000	
52	Cr	89	He	0.055	ppb	30.5	91.32	2000	
55	Mn	89	He	0.311	ppb	13.0	165.97	2000	
56	Fe	89	H2	-0.930	ppb	N/A	6755.79	100000	
59	Co	89	He	0.022	ppb	70.5	46.67	1000	
60	Ni	89	He	-0.001	ppb	N/A	40.00	1000	
63	Cu	89	He	-0.103	ppb	N/A	271.13	2000	
66	Zn	89	He	0.565	ppb	23.5	167.79	2000	
75	As	89	He	0.050	ppb	22.8	12.00	1000	
78	Se	89	H2	0.041	ppb	48.0	3.67	1000	
88	Sr	89	He	1.998	ppb	4.4	1482.36	2000	
95	Mo	89	He	-0.010	ppb	N/A	113.34	1000	
107	Ag	89	He	0.002	ppb	193.5	16.66	100	
111	Cd	89	He	0.010	ppb	16.7	4.81	1000	
118	Sn	159	He	0.521	ppb	19.4	512.25	1000	
121	Sb	159	No Gas	0.035	ppb	3.0	333.71	1000	
137	Ba	159	No Gas	0.712	ppb	27.3	1995.90	2000	
182	W	159	No Gas	0.078	ppb	16.7	533.94	1000	
205	Tl	209	No Gas	0.030	ppb	44.6	400.46	1000	
208	Pb	209	No Gas	0.027	ppb	66.9	660.76	2000	
232	Th	209	No Gas	0.256	ppb	4.6	4676.16	1000	
238	U	209	No Gas	0.032	ppb	18.5	547.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1359870.72	12.1	1537409.87	88.45	29.5	120.4	
Sc	45	No Gas	3076845.17	12.9	3373253.08	91.21	29.5	120.4	
Sc	45	H2	390670.89	0.4	415670.69	93.99	29.5	120.4	
Sc	45	He	78068.07	1.4	81171.76	96.18	29.5	120.4	
Ge	72	No Gas	705301.89	13.7	779333.11	90.5	29.5	120.4	
Ge	72	H2	145442.13	0.1	153246.58	94.91	29.5	120.4	
Ge	72	He	61402.80	0.2	63135.03	97.26	29.5	120.4	
Y	89	H2	2519413.31	0.2	2642116.11	95.36	29.5	120.4	
Y	89	He	524482.44	0.6	544041.92	96.4	29.5	120.4	
Tb	159	No Gas	7677970.30	13.1	8117023.84	94.59	29.5	120.4	
Tb	159	He	2835306.73	0.6	2866479.19	98.91	29.5	120.4	
Bi	209	No Gas	4158259.42	13.7	4424692.92	93.98	29.5	120.4	

Sample Report

Sample Name SN5286-002

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:37:40 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	16.6	31.11	100	
11	B	6	No Gas	1.233	ppb	8.2	1899.08	1000	
23	Na	45	He	353.876	ppb	1.0	44206.74	200000	
24	Mg	45	He	231.670	ppb	3.7	14383.75	200000	
27	Al	45	He	2.158	ppb	37.2	97.78	200000	
28	Si	45	H2	1099.075	ppb	0.9	44518.69	10000	
39	K	45	He	128.689	ppb	5.8	17309.57	200000	
40	Ca	45	H2	881.698	ppb	1.3	341371.12	200000	
51	V	89	He	0.301	ppb	12.9	474.47	1000	
52	Cr	89	He	0.049	ppb	11.3	84.65	2000	
55	Mn	89	He	0.349	ppb	12.2	183.30	2000	
56	Fe	89	H2	-2.057	ppb	N/A	4923.01	100000	
59	Co	89	He	0.007	ppb	115.7	20.00	1000	
60	Ni	89	He	-0.001	ppb	N/A	40.00	1000	
63	Cu	89	He	-0.124	ppb	N/A	241.12	2000	
66	Zn	89	He	0.706	ppb	17.9	192.23	2000	
75	As	89	He	0.024	ppb	75.1	8.00	1000	
78	Se	89	H2	0.028	ppb	35.0	2.67	1000	
88	Sr	89	He	2.250	ppb	6.8	1655.72	2000	
95	Mo	89	He	-0.083	ppb	N/A	51.11	1000	
107	Ag	89	He	0.000	ppb	N/A	10.00	100	
111	Cd	89	He	0.004	ppb	111.5	2.59	1000	
118	Sn	159	He	0.150	ppb	28.4	196.68	1000	
121	Sb	159	No Gas	0.002	ppb	216.8	110.12	1000	
137	Ba	159	No Gas	0.314	ppb	25.4	934.41	2000	
182	W	159	No Gas	-0.004	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.001	ppb	159.4	40.04	1000	
208	Pb	209	No Gas	0.003	ppb	106.5	233.60	2000	
232	Th	209	No Gas	0.019	ppb	31.8	543.95	1000	
238	U	209	No Gas	0.004	ppb	36.5	70.08	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455825.88	2.2	1537409.87	94.69	29.5	120.4	
Sc	45	No Gas	3291166.26	2.7	3373253.08	97.57	29.5	120.4	
Sc	45	H2	384241.16	1.6	415670.69	92.44	29.5	120.4	
Sc	45	He	77871.44	1.0	81171.76	95.93	29.5	120.4	
Ge	72	No Gas	762719.40	3.0	779333.11	97.87	29.5	120.4	
Ge	72	H2	141523.66	1.8	153246.58	92.35	29.5	120.4	
Ge	72	He	60951.34	0.2	63135.03	96.54	29.5	120.4	
Y	89	H2	2488232.16	1.0	2642116.11	94.18	29.5	120.4	
Y	89	He	520574.49	0.5	544041.92	95.69	29.5	120.4	
Tb	159	No Gas	8235990.78	2.6	8117023.84	101.47	29.5	120.4	
Tb	159	He	2828562.53	0.8	2866479.19	98.68	29.5	120.4	
Bi	209	No Gas	4512459.44	2.8	4424692.92	101.98	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG02IMS1
File Name	057_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:40:17 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.004	ppb	N/A	16.66	0.5	
B	11	6	No Gas	7.807	ppb	8.2	2140.23	10	
Na	23	45	He	471.057	ppb	4.7	15856.40	500	
Mg	24	45	He	36.929	ppb	19.5	1020.11	50	
Al	27	45	He	5.278	ppb	65.9	71.12	50	
Si	28	45	H2	17.553	ppb	20.4	377.09	250	
K	39	45	He	123.786	ppb	17.7	11732.91	500	
Ca	40	45	H2	45.079	ppb	1.8	5225.60	50	
V	51	89	He	3.368	ppb	1.5	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.769	ppb	3.8	191.97	2.5	
Mn	55	89	He	1.719	ppb	8.6	180.64	1	PB 6020 Fails DoD
Fe	56	89	H2	-3.918	ppb	N/A	6882.71	50	
Co	59	89	He	0.020	ppb	54.1	15.55	0.5	
Ni	60	89	He	0.289	ppb	64.0	68.89	1	
Cu	63	89	He	1.564	ppb	5.9	825.61	1.5	PB 6020 Fails DoD
Zn	66	89	He	4.379	ppb	25.0	223.34	5	
As	75	89	He	0.374	ppb	5.0	15.67	2.5	
Se	78	89	H2	0.154	ppb	81.4	2.83	2.5	
Sr	88	89	He	0.154	ppb	30.9	28.89	2.5	
Mo	95	89	He	-0.548	ppb	N/A	28.89	2.5	
Ag	107	89	He	0.014	ppb	92.9	18.89	0.5	
Cd	111	89	He	0.020	ppb	111.0	2.59	0.5	
Sn	118	159	He	47.091	ppb	2.2	8112.75	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.051	ppb	34.9	170.19	0.5	
Ba	137	159	No Gas	0.194	ppb	39.2	130.14	1	
W	182	159	No Gas	-0.002	ppb	N/A	116.80	2.5	
Tl	205	209	No Gas	0.012	ppb	60.5	60.07	0.5	
Pb	208	209	No Gas	0.107	ppb	20.5	577.32	0.5	
Th	232	209	No Gas	0.200	ppb	18.4	941.10	2.5	
U	238	209	No Gas	0.003	ppb	116.0	13.35	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1434228.42	0.7	1537409.87	93.29	29.5	120.4	
Sc	45	No Gas	3186472.61	0.9	3373253.08	94.46	29.5	120.4	
Sc	45	H2	379217.46	1.2	415670.69	91.23	29.5	120.4	
Sc	45	He	76618.85	0.3	81171.76	94.39	29.5	120.4	
Ge	72	No Gas	755167.24	1.1	779333.11	96.9	29.5	120.4	
Ge	72	H2	139777.42	1.4	153246.58	91.21	29.5	120.4	
Ge	72	He	59887.40	0.7	63135.03	94.86	29.5	120.4	
Y	89	H2	2481626.12	1.1	2642116.11	93.93	29.5	120.4	
Y	89	He	520000.10	0.2	544041.92	95.58	29.5	120.4	
Tb	159	No Gas	8238436.06	1.4	8117023.84	101.5	29.5	120.4	
Tb	159	He	2853734.51	0.5	2866479.19	99.56	29.5	120.4	
Bi	209	No Gas	4523956.25	0.7	4424692.92	102.24	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG02IMS1
File Name	058LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:43:00 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.813	ppb	6.4	11972.02	50	19.13	79.5	120.4	
B	11	6	No Gas	469.727	ppb	6.0	78051.96	500	18.79	79.5	120.4	
Na	23	45	He	8250.060	ppb	0.6	182335.34	7500	22	79.5	120.4	
Mg	24	45	He	5009.048	ppb	0.5	59542.57	5000	20.04	79.5	120.4	
Al	27	45	He	1845.229	ppb	2.0	8458.35	2000	18.45	79.5	120.4	
Si	28	45	H2	941.979	ppb	4.5	7880.90	1000	18.84	79.5	120.4	
K	39	45	He	10180.494	ppb	0.6	114855.70	10000	20.36	79.5	120.4	
Ca	40	45	H2	2598.496	ppb	2.1	203253.34	2500	20.79	79.5	120.4	
V	51	89	He	487.952	ppb	0.9	81761.60	500	19.52	79.5	120.4	
Cr	52	89	He	200.769	ppb	0.8	41434.15	200	20.08	79.5	120.4	
Mn	55	89	He	497.702	ppb	2.5	48924.20	500	19.91	79.5	120.4	
Fe	56	89	H2	1029.237	ppb	1.2	334476.99	1000	20.58	79.5	120.4	
Co	59	89	He	510.466	ppb	0.6	178292.55	500	20.42	79.5	120.4	
Ni	60	89	He	490.408	ppb	1.2	48568.44	500	19.62	79.5	120.4	
Cu	63	89	He	252.803	ppb	1.3	68268.37	250	20.22	79.5	120.4	
Zn	66	89	He	499.671	ppb	1.0	18435.00	500	19.99	79.5	120.4	
As	75	89	He	99.528	ppb	2.9	2996.65	100	19.91	79.5	120.4	
Se	78	89	H2	101.455	ppb	2.6	1602.35	100	20.29	79.5	120.4	
Sr	88	89	He	497.014	ppb	0.1	72982.78	500	19.88	79.5	120.4	
Mo	95	89	He	102.398	ppb	1.6	17386.08	100	20.48	79.5	120.4	
Ag	107	89	He	52.714	ppb	1.8	30235.50	50	21.09	79.5	120.4	
Cd	111	89	He	253.888	ppb	0.1	19397.67	250	20.31	79.5	120.4	
Sn	118	159	He	518.795	ppb	0.3	89390.21	500	20.75	79.5	120.4	
Sb	121	159	No Gas	96.079	ppb	8.7	148440.30	100	19.22	79.5	120.4	
Ba	137	159	No Gas	1831.230	ppb	6.8	1113082.08	2000	18.31	79.5	120.4	
W	182	159	No Gas	97.576	ppb	6.0	120080.89	100	19.52	79.5	120.4	
Tl	205	209	No Gas	97.757	ppb	6.7	268868.34	100	19.55	79.5	120.4	
[Pb]	206	209	No Gas	98.088	ppb	6.5	92870.60	100	19.62	79.5	120.4	
[Pb]	207	209	No Gas	98.268	ppb	7.7	81530.65	100	19.65	79.5	120.4	
Pb	208	209	No Gas	97.258	ppb	7.2	369814.34	100	19.45	79.5	120.4	
Th	232	209	No Gas	94.217	ppb	7.5	375036.38	100	18.84	79.5	120.4	
U	238	209	No Gas	96.453	ppb	8.5	360142.07	100	19.29	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1444110.81	3.4	1537409.87	93.93	29.5	120.4	
Sc	45	No Gas	3314155.32	4.5	3373253.08	98.25	29.5	120.4	
Sc	45	H2	386740.21	1.5	415670.69	93.04	29.5	120.4	
Sc	45	He	76984.13	0.5	81171.76	94.84	29.5	120.4	
Ge	72	No Gas	789977.00	3.7	779333.11	101.37	29.5	120.4	
Ge	72	H2	143179.62	1.6	153246.58	93.43	29.5	120.4	
Ge	72	He	60550.68	0.3	63135.03	95.91	29.5	120.4	
Y	89	H2	2540158.66	1.5	2642116.11	96.14	29.5	120.4	
Y	89	He	521265.82	0.2	544041.92	95.81	29.5	120.4	
Tb	159	No Gas	8602914.66	3.9	8117023.84	105.99	29.5	120.4	
Tb	159	He	2877143.47	0.3	2866479.19	100.37	29.5	120.4	
Bi	209	No Gas	4681094.16	4.0	4424692.92	105.79	29.5	120.4	

Sample Report

Sample Name SN5043-008

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:45:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.836	ppb	9.5	2526.97	100	
11	B	6	No Gas	33.140	ppb	3.0	5861.41	1000	
23	Na	45	He	478.819	ppb	4.6	16013.39	200000	
24	Mg	45	He	5095.484	ppb	0.7	60240.82	200000	
27	Al	45	He	99679.675	ppb	0.6	451976.15	200000	
28	Si	45	H2	2854.944	ppb	4.0	22977.31	10000	
39	K	45	He	3519.261	ppb	0.9	46340.38	200000	
40	Ca	45	H2	6173.778	ppb	2.2	471855.57	200000	
51	V	89	He	816.504	ppb	0.7	138977.65	1000	
52	Cr	89	He	1560.608	ppb	1.3	327281.52	2000	
55	Mn	89	He	3607.741	ppb	1.0	360565.57	2000	
56	Fe	89	H2	454393.943	ppb	1.4	145232730.95	100000	
59	Co	89	He	64.664	ppb	1.5	22976.00	1000	
60	Ni	89	He	70.999	ppb	2.8	7186.56	1000	
63	Cu	89	He	59.137	ppb	1.4	16556.97	2000	
66	Zn	89	He	240.126	ppb	3.2	9043.25	2000	
75	As	89	He	192.004	ppb	2.5	5873.89	1000	
78	Se	89	H2	3.716	ppb	8.7	59.67	1000	
88	Sr	89	He	111.553	ppb	1.3	16662.83	2000	
95	Mo	89	He	26.222	ppb	1.7	4619.83	1000	
107	Ag	89	He	0.307	ppb	17.4	190.01	100	
111	Cd	89	He	0.496	ppb	2.3	39.63	1000	
118	Sn	159	He	42.516	ppb	2.2	7333.38	1000	
121	Sb	159	No Gas	4.706	ppb	4.8	7296.80	1000	
137	Ba	159	No Gas	398.328	ppb	5.9	239695.47	2000	
182	W	159	No Gas	0.687	ppb	7.0	961.11	1000	
205	Tl	209	No Gas	1.086	ppb	7.6	2973.68	1000	
208	Pb	209	No Gas	110.570	ppb	6.1	414997.29	2000	
232	Th	209	No Gas	46.272	ppb	6.0	181930.91	1000	
238	U	209	No Gas	20.536	ppb	8.5	75672.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1339420.44	3.7	1537409.87	87.12	29.5	120.4	
Sc	45	No Gas	3260238.61	3.7	3373253.08	96.65	29.5	120.4	
Sc	45	H2	379859.17	0.9	415670.69	91.38	29.5	120.4	
Sc	45	He	76575.56	0.5	81171.76	94.34	29.5	120.4	
Ge	72	No Gas	762485.73	4.1	779333.11	97.84	29.5	120.4	
Ge	72	H2	135427.47	0.5	153246.58	88.37	29.5	120.4	
Ge	72	He	58793.89	0.6	63135.03	93.12	29.5	120.4	
Y	89	H2	2561379.93	0.3	2642116.11	96.94	29.5	120.4	
Y	89	He	530098.15	0.7	544041.92	97.44	29.5	120.4	
Tb	159	No Gas	8512617.17	3.4	8117023.84	104.87	29.5	120.4	
Tb	159	He	2854674.16	0.4	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4619461.18	4.0	4424692.92	104.4	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	060_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:48:24 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.243	ppb	4.1	29216.88	25	100.97	89.8	110.2	
11	B	6	No Gas	25.399	ppb	3.3	20112.35	25	101.6	89.8	110.2	
23	Na	45	He	5202.909	ppb	1.8	546690.58	5000	104.06	89.8	110.2	
24	Mg	45	He	5013.754	ppb	1.4	287413.39	5000	100.28	89.8	110.2	
27	Al	45	He	491.056	ppb	1.6	10925.63	500	98.21	89.8	110.2	
28	Si	45	H2	508.332	ppb	1.1	19956.16	500	101.67	89.8	110.2	
39	K	45	He	4947.365	ppb	2.1	256677.92	5000	98.95	89.8	110.2	
40	Ca	45	H2	5062.620	ppb	1.8	1879431.03	5000	101.25	89.8	110.2	
51	V	89	He	24.917	ppb	2.4	20468.82	25	99.67	89.8	110.2	
52	Cr	89	He	24.890	ppb	1.3	25000.83	25	99.56	89.8	110.2	
55	Mn	89	He	24.844	ppb	2.2	11891.56	25	99.38	89.8	110.2	
56	Fe	89	H2	5085.339	ppb	1.4	7737960.66	5000	101.71	89.8	110.2	
59	Co	89	He	25.176	ppb	2.0	42776.67	25	100.7	89.8	110.2	
60	Ni	89	He	25.520	ppb	4.4	12325.87	25	102.08	89.8	110.2	
63	Cu	89	He	25.164	ppb	2.3	33253.69	25	100.66	89.8	110.2	
66	Zn	89	He	24.748	ppb	1.7	4487.54	25	98.99	89.8	110.2	
75	As	89	He	24.886	ppb	2.4	3643.22	25	99.54	89.8	110.2	
78	Se	89	H2	24.814	ppb	4.0	1879.21	25	99.26	89.8	110.2	
88	Sr	89	He	24.347	ppb	1.6	17394.87	25	97.39	89.8	110.2	
95	Mo	89	He	24.540	ppb	1.7	20244.49	25	98.16	89.8	110.2	
107	Ag	89	He	18.908	ppb	1.4	52746.58	25	75.63	89.8	110.2	> +/- 10%
111	Cd	89	He	25.362	ppb	2.1	9425.58	25	101.45	89.8	110.2	
118	Sn	159	He	23.685	ppb	2.8	19852.98	25	94.74	89.8	110.2	
121	Sb	159	No Gas	24.087	ppb	3.2	181563.69	25	96.35	89.8	110.2	
137	Ba	159	No Gas	23.661	ppb	3.5	70155.80	25	94.64	89.8	110.2	
182	W	159	No Gas	23.975	ppb	3.1	143844.18	25	95.9	89.8	110.2	
205	Tl	209	No Gas	24.234	ppb	3.5	326386.15	25	96.94	89.8	110.2	
208	Pb	209	No Gas	24.187	ppb	3.7	450360.30	25	96.75	89.8	110.2	
232	Th	209	No Gas	23.688	ppb	3.7	461772.18	25	94.75	89.8	110.2	
238	U	209	No Gas	24.108	ppb	4.1	440968.47	25	96.43	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1334616.11	0.7	1537409.87	86.81	29.5	120.4	
Sc	45	No Gas	3203119.41	1.1	3373253.08	94.96	29.5	120.4	
Sc	45	H2	370080.39	1.2	415670.69	89.03	29.5	120.4	
Sc	45	He	74855.13	1.7	81171.76	92.22	29.5	120.4	
Ge	72	No Gas	753627.56	1.7	779333.11	96.7	29.5	120.4	
Ge	72	H2	137689.82	1.3	153246.58	89.85	29.5	120.4	
Ge	72	He	59797.10	0.5	63135.03	94.71	29.5	120.4	
Y	89	H2	2436387.03	1.5	2642116.11	92.21	29.5	120.4	
Y	89	He	507199.36	1.7	544041.92	93.23	29.5	120.4	
Tb	159	No Gas	8379373.90	1.5	8117023.84	103.23	29.5	120.4	
Tb	159	He	2792430.17	1.4	2866479.19	97.42	29.5	120.4	
Bi	209	No Gas	4578382.49	2.0	4424692.92	103.47	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	061_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 5:51:02 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	30.0	78.89	0.2	
11	B	6	No Gas	0.958	ppb	16.8	1567.92	4	
23	Na	45	He	47.861	ppb	7.4	10862.74	200	
24	Mg	45	He	-1.443	ppb	N/A	500.05	20	
27	Al	45	He	1.715	ppb	189.6	85.56	20	
28	Si	45	H2	1.701	ppb	136.7	300.34	100	
39	K	45	He	16.318	ppb	24.7	11241.09	200	
40	Ca	45	H2	-0.232	ppb	N/A	1685.72	20	
51	V	89	He	-0.037	ppb	N/A	190.01	1	
52	Cr	89	He	0.055	ppb	64.7	89.32	1	
55	Mn	89	He	0.133	ppb	23.2	76.65	0.4	
56	Fe	89	H2	5.896	ppb	3.7	17015.95	20	
59	Co	89	He	0.016	ppb	99.0	35.56	0.2	
60	Ni	89	He	-0.018	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.125	ppb	N/A	236.68	0.6	
66	Zn	89	He	0.057	ppb	166.2	72.23	2	
75	As	89	He	0.022	ppb	63.5	7.67	1	
78	Se	89	H2	0.055	ppb	71.9	4.67	1	
88	Sr	89	He	0.014	ppb	128.3	16.67	1	
95	Mo	89	He	-0.022	ppb	N/A	101.11	1	
107	Ag	89	He	0.008	ppb	57.8	32.22	0.2	
111	Cd	89	He	0.008	ppb	173.4	4.07	0.2	
118	Sn	159	He	0.186	ppb	21.6	226.68	1	
121	Sb	159	No Gas	0.025	ppb	42.1	287.00	0.2	
137	Ba	159	No Gas	0.036	ppb	58.7	123.48	0.4	
182	W	159	No Gas	0.076	ppb	14.2	573.99	1	
205	Tl	209	No Gas	0.022	ppb	24.2	320.36	0.2	
208	Pb	209	No Gas	0.018	ppb	20.0	513.92	0.2	
232	Th	209	No Gas	0.099	ppb	1.5	2089.20	1	
238	U	209	No Gas	0.021	ppb	31.6	393.79	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1366489.51	2.2	1537409.87	88.88	29.5	120.4	
Sc	45	No Gas	3229434.38	2.5	3373253.08	95.74	29.5	120.4	
Sc	45	H2	373794.55	0.5	415670.69	89.93	29.5	120.4	
Sc	45	He	76203.56	0.3	81171.76	93.88	29.5	120.4	
Ge	72	No Gas	752366.18	1.9	779333.11	96.54	29.5	120.4	
Ge	72	H2	139760.47	0.6	153246.58	91.2	29.5	120.4	
Ge	72	He	59903.00	0.2	63135.03	94.88	29.5	120.4	
Y	89	H2	2451932.00	0.4	2642116.11	92.8	29.5	120.4	
Y	89	He	514020.38	0.2	544041.92	94.48	29.5	120.4	
Tb	159	No Gas	8350082.38	2.6	8117023.84	102.87	29.5	120.4	
Tb	159	He	2819652.11	0.4	2866479.19	98.37	29.5	120.4	
Bi	209	No Gas	4554639.32	2.0	4424692.92	102.94	29.5	120.4	

Sample Report

Sample Name SN5043-010

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:53:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	34.012	ppb	7.1	8170.38	100	
11	B	6	No Gas	25.385	ppb	7.1	4833.20	1000	
23	Na	45	He	522.087	ppb	4.0	17299.61	200000	
24	Mg	45	He	21384.237	ppb	1.3	256360.97	200000	
27	Al	45	He	139875.486	ppb	0.4	647974.62	200000	
28	Si	45	H2	2028.224	ppb	3.0	16738.42	10000	
39	K	45	He	6030.848	ppb	1.2	73502.84	200000	
40	Ca	45	H2	193964.284	ppb	1.6	15082818.52	200000	
51	V	89	He	1145.763	ppb	0.7	207149.89	1000	
52	Cr	89	He	1112.323	ppb	0.7	247914.00	2000	
55	Mn	89	He	20123.902	ppb	0.6	2137316.05	2000	>LDR
56	Fe	89	H2	797459.537	ppb	1.6	272483600.67	100000	>LDR
59	Co	89	He	202.902	ppb	0.9	76596.52	1000	
60	Ni	89	He	153.712	ppb	1.1	16482.41	1000	
63	Cu	89	He	165.378	ppb	1.2	48413.58	2000	
66	Zn	89	He	759.694	ppb	0.9	30254.69	2000	
75	As	89	He	475.281	ppb	1.4	15445.24	1000	
78	Se	89	H2	4.759	ppb	6.5	81.50	1000	
88	Sr	89	He	389.606	ppb	0.3	61830.64	2000	
95	Mo	89	He	36.330	ppb	1.2	6750.82	1000	
107	Ag	89	He	0.333	ppb	16.4	217.79	100	
111	Cd	89	He	1.798	ppb	10.0	149.63	1000	
118	Sn	159	He	39.293	ppb	1.6	6735.26	1000	
121	Sb	159	No Gas	2.072	ppb	9.6	3284.06	1000	
137	Ba	159	No Gas	1371.741	ppb	4.9	830604.59	2000	
182	W	159	No Gas	0.424	ppb	10.5	644.07	1000	
205	Tl	209	No Gas	1.898	ppb	11.6	5140.12	1000	
208	Pb	209	No Gas	370.198	ppb	4.9	1379352.07	2000	
232	Th	209	No Gas	50.671	ppb	5.9	197774.11	1000	
238	U	209	No Gas	24.320	ppb	4.7	89058.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1384124.26	2.3	1537409.87	90.03	29.5	120.4	
Sc	45	No Gas	3406064.51	2.8	3373253.08	100.97	29.5	120.4	
Sc	45	H2	387927.85	1.5	415670.69	93.33	29.5	120.4	
Sc	45	He	78238.96	0.9	81171.76	96.39	29.5	120.4	
Ge	72	No Gas	785474.01	3.0	779333.11	100.79	29.5	120.4	
Ge	72	H2	138726.08	1.5	153246.58	90.52	29.5	120.4	
Ge	72	He	59545.94	1.2	63135.03	94.32	29.5	120.4	
Y	89	H2	2738691.98	1.4	2642116.11	103.66	29.5	120.4	
Y	89	He	563348.33	1.1	544041.92	103.55	29.5	120.4	
Tb	159	No Gas	8562860.43	2.8	8117023.84	105.49	29.5	120.4	
Tb	159	He	2834521.07	0.4	2866479.19	98.89	29.5	120.4	
Bi	209	No Gas	4585087.79	3.4	4424692.92	103.62	29.5	120.4	

Sample Report

Sample Name SN5043-012

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:56:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	16.839	ppb	8.0	3976.24	100	
11	B	6	No Gas	31.598	ppb	2.4	5704.64	1000	
23	Na	45	He	475.795	ppb	4.1	16648.16	200000	
24	Mg	45	He	8115.455	ppb	1.9	99769.70	200000	
27	Al	45	He	137963.398	ppb	1.3	652919.67	200000	
28	Si	45	H2	2941.176	ppb	3.1	24454.55	10000	
39	K	45	He	6409.635	ppb	2.6	79114.46	200000	
40	Ca	45	H2	15940.518	ppb	0.8	1256199.48	200000	
51	V	89	He	860.236	ppb	1.2	161578.63	1000	
52	Cr	89	He	1074.681	ppb	0.5	248749.02	2000	
55	Mn	89	He	24595.116	ppb	0.9	2712759.61	2000	>LDR
56	Fe	89	H2	456277.414	ppb	1.4	160529825.84	100000	
59	Co	89	He	236.042	ppb	0.4	92530.28	1000	
60	Ni	89	He	265.940	ppb	1.3	29578.70	1000	
63	Cu	89	He	104.946	ppb	1.6	32073.18	2000	
66	Zn	89	He	737.510	ppb	0.9	30504.14	2000	
75	As	89	He	189.620	ppb	1.9	6402.85	1000	
78	Se	89	H2	2.906	ppb	6.9	51.50	1000	
88	Sr	89	He	103.511	ppb	0.3	17064.43	2000	
95	Mo	89	He	25.086	ppb	2.8	4883.27	1000	
107	Ag	89	He	0.651	ppb	7.3	431.13	100	
111	Cd	89	He	8.091	ppb	5.8	694.84	1000	
118	Sn	159	He	44.186	ppb	1.6	7678.00	1000	
121	Sb	159	No Gas	3.562	ppb	6.4	5580.73	1000	
137	Ba	159	No Gas	1771.749	ppb	2.9	1072973.98	2000	
182	W	159	No Gas	0.880	ppb	4.1	1201.39	1000	
205	Tl	209	No Gas	3.557	ppb	5.1	9614.33	1000	
208	Pb	209	No Gas	304.698	ppb	4.0	1135304.26	2000	
232	Th	209	No Gas	53.497	ppb	3.7	208858.60	1000	
238	U	209	No Gas	35.829	ppb	4.4	131184.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1357616.08	2.0	1537409.87	88.31	29.5	120.4	
Sc	45	No Gas	3402895.25	0.6	3373253.08	100.88	29.5	120.4	
Sc	45	H2	392565.08	1.5	415670.69	94.44	29.5	120.4	
Sc	45	He	79940.80	2.0	81171.76	98.48	29.5	120.4	
Ge	72	No Gas	780057.99	1.7	779333.11	100.09	29.5	120.4	
Ge	72	H2	138907.50	0.5	153246.58	90.64	29.5	120.4	
Ge	72	He	60736.68	0.5	63135.03	96.2	29.5	120.4	
Y	89	H2	2819680.96	1.0	2642116.11	106.72	29.5	120.4	
Y	89	He	585013.91	0.4	544041.92	107.53	29.5	120.4	
Tb	159	No Gas	8557382.16	0.9	8117023.84	105.43	29.5	120.4	
Tb	159	He	2876801.10	0.2	2866479.19	100.36	29.5	120.4	
Bi	209	No Gas	4581719.21	1.6	4424692.92	103.55	29.5	120.4	

Sample Report

Sample Name SN5043-014

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 5:59:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.686	ppb	7.0	1372.34	100	
11	B	6	No Gas	23.974	ppb	6.5	4586.45	1000	
23	Na	45	He	471.522	ppb	3.1	16250.52	200000	
24	Mg	45	He	6091.155	ppb	3.9	73638.57	200000	
27	Al	45	He	80891.350	ppb	3.2	375710.91	200000	
28	Si	45	H2	1993.532	ppb	1.7	16701.76	10000	
39	K	45	He	4731.197	ppb	3.8	60123.82	200000	
40	Ca	45	H2	12728.081	ppb	1.1	1006033.54	200000	
51	V	89	He	268.908	ppb	1.3	47832.08	1000	
52	Cr	89	He	204.198	ppb	2.8	44628.56	2000	
55	Mn	89	He	15500.989	ppb	2.1	1613441.74	2000	>LDR
56	Fe	89	H2	131740.725	ppb	1.8	44096552.50	100000	
59	Co	89	He	146.824	ppb	2.0	54319.19	1000	
60	Ni	89	He	83.035	ppb	1.6	8746.36	1000	
63	Cu	89	He	63.808	ppb	1.8	18572.90	2000	
66	Zn	89	He	301.858	ppb	1.7	11822.08	2000	
75	As	89	He	46.744	ppb	4.1	1492.91	1000	
78	Se	89	H2	1.498	ppb	25.7	25.50	1000	
88	Sr	89	He	69.293	ppb	3.6	10780.17	2000	
95	Mo	89	He	7.284	ppb	3.5	1429.02	1000	
107	Ag	89	He	0.275	ppb	18.6	177.78	100	
111	Cd	89	He	1.671	ppb	3.4	136.30	1000	
118	Sn	159	He	40.283	ppb	4.1	6989.84	1000	
121	Sb	159	No Gas	0.881	ppb	11.5	1478.39	1000	
137	Ba	159	No Gas	1238.161	ppb	3.4	761035.26	2000	
182	W	159	No Gas	0.257	ppb	6.1	443.85	1000	
205	Tl	209	No Gas	1.653	ppb	6.3	4599.31	1000	
208	Pb	209	No Gas	162.720	ppb	4.0	622202.67	2000	
232	Th	209	No Gas	36.472	ppb	4.5	146132.57	1000	
238	U	209	No Gas	8.084	ppb	6.5	30363.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1376649.44	2.8	1537409.87	89.54	29.5	120.4	
Sc	45	No Gas	3430031.92	2.4	3373253.08	101.68	29.5	120.4	
Sc	45	H2	393569.24	1.0	415670.69	94.68	29.5	120.4	
Sc	45	He	78480.60	2.5	81171.76	96.68	29.5	120.4	
Ge	72	No Gas	788405.25	2.0	779333.11	101.16	29.5	120.4	
Ge	72	H2	141453.84	2.6	153246.58	92.3	29.5	120.4	
Ge	72	He	61143.75	1.4	63135.03	96.85	29.5	120.4	
Y	89	H2	2682435.23	1.5	2642116.11	101.53	29.5	120.4	
Y	89	He	552200.93	1.8	544041.92	101.5	29.5	120.4	
Tb	159	No Gas	8687603.97	1.8	8117023.84	107.03	29.5	120.4	
Tb	159	He	2871661.10	2.1	2866479.19	100.18	29.5	120.4	
Bi	209	No Gas	4702548.37	2.6	4424692.92	106.28	29.5	120.4	

Sample Report

Sample Name SN5043-014L

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:01:50 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.414	ppb	9.7	310.01	100	
11	B	6	No Gas	33.670	ppb	9.8	1811.29	1000	
23	Na	45	He	956.502	ppb	13.0	10341.92	200000	
24	Mg	45	He	6145.390	ppb	0.9	15654.11	200000	
27	Al	45	He	84093.417	ppb	0.3	79756.79	200000	
28	Si	45	H2	2253.457	ppb	6.5	3991.69	10000	
39	K	45	He	4967.703	ppb	4.6	21524.84	200000	
40	Ca	45	H2	13738.699	ppb	3.1	219990.64	200000	
51	V	89	He	291.290	ppb	2.0	10360.83	1000	
52	Cr	89	He	213.532	ppb	1.3	9198.02	2000	
55	Mn	89	He	16732.359	ppb	0.6	342190.44	2000	
56	Fe	89	H2	144234.472	ppb	2.2	9355496.21	100000	
59	Co	89	He	155.736	ppb	0.3	11327.61	1000	
60	Ni	89	He	82.622	ppb	1.6	1743.50	1000	
63	Cu	89	He	63.052	ppb	1.2	3946.26	2000	
66	Zn	89	He	323.411	ppb	4.1	2539.22	2000	
75	As	89	He	51.705	ppb	4.0	328.04	1000	
78	Se	89	H2	2.220	ppb	65.8	7.67	1000	
88	Sr	89	He	72.208	ppb	3.1	2212.48	2000	
95	Mo	89	He	5.172	ppb	17.2	307.79	1000	
107	Ag	89	He	0.261	ppb	13.4	42.22	100	
111	Cd	89	He	1.585	ppb	21.3	26.29	1000	
118	Sn	159	He	41.426	ppb	6.5	1511.25	1000	
121	Sb	159	No Gas	0.826	ppb	46.0	337.05	1000	
137	Ba	159	No Gas	1340.343	ppb	3.9	155733.38	2000	
182	W	159	No Gas	0.109	ppb	236.1	143.49	1000	
205	Tl	209	No Gas	1.743	ppb	13.9	941.09	1000	
208	Pb	209	No Gas	177.419	ppb	5.2	128913.88	2000	
232	Th	209	No Gas	36.675	ppb	3.3	28046.30	1000	
238	U	209	No Gas	8.654	ppb	5.4	6175.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1323830.07	3.7	1537409.87	86.11	29.5	120.4	
Sc	45	No Gas	3260947.52	2.8	3373253.08	96.67	29.5	120.4	
Sc	45	H2	396041.56	0.7	415670.69	95.28	29.5	120.4	
Sc	45	He	80046.40	0.5	81171.76	98.61	29.5	120.4	
Ge	72	No Gas	754869.95	3.7	779333.11	96.86	29.5	120.4	
Ge	72	H2	143315.09	1.1	153246.58	93.52	29.5	120.4	
Ge	72	He	62438.97	0.3	63135.03	98.9	29.5	120.4	
Y	89	H2	2597017.47	0.7	2642116.11	98.29	29.5	120.4	
Y	89	He	542355.77	1.0	544041.92	99.69	29.5	120.4	
Tb	159	No Gas	8212440.29	2.5	8117023.84	101.18	29.5	120.4	
Tb	159	He	2902694.64	0.3	2866479.19	101.26	29.5	120.4	
Bi	209	No Gas	4464876.49	3.1	4424692.92	100.91	29.5	120.4	

Sample Report

Sample Name SN5043-014A

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:04:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.671	ppb	3.2	3759.51	100	
11	B	6	No Gas	225.602	ppb	3.3	36236.22	1000	
23	Na	45	He	10750.413	ppb	1.1	243070.40	200000	
24	Mg	45	He	6864.960	ppb	1.9	83879.20	200000	
27	Al	45	He	79382.900	ppb	1.1	372970.85	200000	
28	Si	45	H2	6993.454	ppb	2.6	57958.08	10000	
39	K	45	He	14532.369	ppb	1.5	164344.75	200000	
40	Ca	45	H2	13631.497	ppb	2.3	1077142.33	200000	
51	V	89	He	311.597	ppb	1.4	55714.25	1000	
52	Cr	89	He	245.888	ppb	1.2	54059.47	2000	
55	Mn	89	He	15067.876	ppb	0.7	1577752.49	2000	>LDR
56	Fe	89	H2	130514.628	ppb	1.5	43833192.06	100000	
59	Co	89	He	151.908	ppb	2.0	56532.38	1000	
60	Ni	89	He	99.103	ppb	2.1	10490.96	1000	
63	Cu	89	He	90.340	ppb	2.0	26269.95	2000	
66	Zn	89	He	386.271	ppb	1.5	15198.72	2000	
75	As	89	He	93.521	ppb	1.0	3000.33	1000	
78	Se	89	H2	49.108	ppb	1.5	822.16	1000	
88	Sr	89	He	116.413	ppb	1.0	18219.33	2000	
95	Mo	89	He	56.315	ppb	2.0	10245.31	1000	
107	Ag	89	He	10.991	ppb	2.4	6726.38	100	
111	Cd	89	He	11.671	ppb	0.5	951.16	1000	
118	Sn	159	He	87.906	ppb	1.2	15318.10	1000	
121	Sb	159	No Gas	11.105	ppb	6.6	17273.74	1000	
137	Ba	159	No Gas	1249.095	ppb	3.7	760337.40	2000	
182	W	159	No Gas	49.514	ppb	4.6	61065.53	1000	
205	Tl	209	No Gas	12.143	ppb	4.5	32852.21	1000	
208	Pb	209	No Gas	172.741	ppb	3.9	645579.70	2000	
232	Th	209	No Gas	47.447	ppb	4.5	185760.56	1000	
238	U	209	No Gas	18.324	ppb	3.6	67291.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1378060.25	2.2	1537409.87	89.64	29.5	120.4	
Sc	45	No Gas	3379805.89	1.8	3373253.08	100.19	29.5	120.4	
Sc	45	H2	393526.96	0.5	415670.69	94.67	29.5	120.4	
Sc	45	He	79350.80	0.9	81171.76	97.76	29.5	120.4	
Ge	72	No Gas	782805.11	1.5	779333.11	100.45	29.5	120.4	
Ge	72	H2	142156.96	0.5	153246.58	92.76	29.5	120.4	
Ge	72	He	61522.64	0.8	63135.03	97.45	29.5	120.4	
Y	89	H2	2691099.76	0.3	2642116.11	101.85	29.5	120.4	
Y	89	He	555395.29	0.8	544041.92	102.09	29.5	120.4	
Tb	159	No Gas	8603661.19	1.7	8117023.84	106	29.5	120.4	
Tb	159	He	2898446.42	0.3	2866479.19	101.12	29.5	120.4	
Bi	209	No Gas	4595453.68	2.0	4424692.92	103.86	29.5	120.4	

Sample Report

Sample Name SN5043-014S

File Name 067SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:07:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	55.651	ppb	1.1	12962.86	100	
11	B	6	No Gas	488.723	ppb	2.5	75516.13	1000	
23	Na	45	He	7646.076	ppb	0.5	175327.03	200000	
24	Mg	45	He	12294.897	ppb	1.2	150356.84	200000	
27	Al	45	He	117493.008	ppb	0.9	554248.83	200000	
28	Si	45	H2	2655.428	ppb	7.4	22221.98	10000	
39	K	45	He	16489.711	ppb	1.3	185773.17	200000	
40	Ca	45	H2	14060.935	ppb	5.7	1114534.42	200000	
51	V	89	He	773.362	ppb	1.2	141134.43	1000	
52	Cr	89	He	468.225	ppb	1.1	105301.54	2000	
55	Mn	89	He	10789.711	ppb	0.7	1156128.53	2000	>LDR
56	Fe	89	H2	152481.468	ppb	5.7	52104209.04	100000	
59	Co	89	He	553.318	ppb	0.6	210706.82	1000	
60	Ni	89	He	537.713	ppb	1.5	58056.85	1000	
63	Cu	89	He	291.070	ppb	0.8	85628.91	2000	
66	Zn	89	He	780.469	ppb	1.0	31354.97	2000	
75	As	89	He	142.946	ppb	0.5	4690.31	1000	
78	Se	89	H2	88.933	ppb	3.5	1515.18	1000	
88	Sr	89	He	513.709	ppb	1.2	82239.41	2000	
95	Mo	89	He	92.523	ppb	1.0	17140.20	1000	
107	Ag	89	He	46.468	ppb	1.5	29059.62	100	
111	Cd	89	He	222.140	ppb	1.5	18502.73	1000	
118	Sn	159	He	468.801	ppb	0.4	82105.41	1000	
121	Sb	159	No Gas	32.177	ppb	3.3	48950.36	1000	
137	Ba	159	No Gas	2705.404	ppb	1.5	1616334.44	2000	
182	W	159	No Gas	46.194	ppb	2.2	55932.74	1000	
205	Tl	209	No Gas	98.025	ppb	1.4	261482.01	1000	
208	Pb	209	No Gas	264.879	ppb	1.6	976617.56	2000	
232	Th	209	No Gas	136.543	ppb	2.2	527154.07	1000	
238	U	209	No Gas	105.972	ppb	2.5	383926.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1341845.90	0.8	1537409.87	87.28	29.5	120.4	
Sc	45	No Gas	3336374.38	0.6	3373253.08	98.91	29.5	120.4	
Sc	45	H2	395292.18	3.6	415670.69	95.1	29.5	120.4	
Sc	45	He	79670.29	0.5	81171.76	98.15	29.5	120.4	
Ge	72	No Gas	771425.45	1.5	779333.11	98.99	29.5	120.4	
Ge	72	H2	143176.20	1.9	153246.58	93.43	29.5	120.4	
Ge	72	He	61880.52	0.7	63135.03	98.01	29.5	120.4	
Y	89	H2	2741589.54	3.4	2642116.11	103.76	29.5	120.4	
Y	89	He	568345.12	1.3	544041.92	104.47	29.5	120.4	
Tb	159	No Gas	8441515.92	0.6	8117023.84	104	29.5	120.4	
Tb	159	He	2924170.89	0.8	2866479.19	102.01	29.5	120.4	
Bi	209	No Gas	4532186.45	0.8	4424692.92	102.43	29.5	120.4	

Sample Report

Sample Name SN5043-014P

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:09:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	57.207	ppb	5.5	13306.55	100	
11	B	6	No Gas	471.384	ppb	5.5	72763.55	1000	
23	Na	45	He	7435.250	ppb	0.9	168899.75	200000	
24	Mg	45	He	11416.667	ppb	1.5	138221.90	200000	
27	Al	45	He	108814.768	ppb	1.8	508013.93	200000	
28	Si	45	H2	2785.337	ppb	5.1	23399.58	10000	
39	K	45	He	15238.461	ppb	1.2	170727.51	200000	
40	Ca	45	H2	13445.423	ppb	1.3	1070418.22	200000	
51	V	89	He	1219.363	ppb	0.7	220308.17	1000	
52	Cr	89	He	694.743	ppb	0.8	154764.46	2000	
55	Mn	89	He	30663.372	ppb	0.6	3254700.66	2000	>LDR
56	Fe	89	H2	302552.426	ppb	0.6	104034854.52	100000	
59	Co	89	He	677.348	ppb	0.0	255516.39	1000	
60	Ni	89	He	557.064	ppb	0.2	59580.78	1000	
63	Cu	89	He	299.723	ppb	1.2	87331.61	2000	
66	Zn	89	He	940.205	ppb	0.5	37405.47	2000	
75	As	89	He	181.178	ppb	0.3	5887.56	1000	
78	Se	89	H2	85.411	ppb	1.2	1463.68	1000	
88	Sr	89	He	512.982	ppb	0.6	81356.10	2000	
95	Mo	89	He	96.464	ppb	0.3	17697.55	1000	
107	Ag	89	He	46.385	ppb	1.7	28737.92	100	
111	Cd	89	He	221.296	ppb	0.8	18262.06	1000	
118	Sn	159	He	459.635	ppb	0.4	79797.38	1000	
121	Sb	159	No Gas	35.881	ppb	7.6	56109.50	1000	
137	Ba	159	No Gas	5695.518	ppb	6.8	3499057.66	2000	
182	W	159	No Gas	50.946	ppb	9.3	63372.77	1000	
205	Tl	209	No Gas	94.887	ppb	6.2	259718.58	1000	
208	Pb	209	No Gas	323.099	ppb	6.6	1222236.27	2000	
232	Th	209	No Gas	131.146	ppb	7.2	519426.93	1000	
238	U	209	No Gas	106.839	ppb	7.9	397017.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1341422.19	3.4	1537409.87	87.25	29.5	120.4	
Sc	45	No Gas	3424316.59	4.2	3373253.08	101.51	29.5	120.4	
Sc	45	H2	396493.45	1.4	415670.69	95.39	29.5	120.4	
Sc	45	He	78851.11	0.7	81171.76	97.14	29.5	120.4	
Ge	72	No Gas	792696.99	3.9	779333.11	101.71	29.5	120.4	
Ge	72	H2	141388.27	1.1	153246.58	92.26	29.5	120.4	
Ge	72	He	60914.16	1.2	63135.03	96.48	29.5	120.4	
Y	89	H2	2755541.59	0.7	2642116.11	104.29	29.5	120.4	
Y	89	He	562993.52	0.8	544041.92	103.48	29.5	120.4	
Tb	159	No Gas	8696410.22	4.2	8117023.84	107.14	29.5	120.4	
Tb	159	He	2898730.30	0.9	2866479.19	101.13	29.5	120.4	
Bi	209	No Gas	4658517.26	4.3	4424692.92	105.28	29.5	120.4	

Sample Report

Sample Name SN5043-016

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:12:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.272	ppb	5.0	3453.87	100	
11	B	6	No Gas	44.694	ppb	1.5	7396.59	1000	
23	Na	45	He	563.810	ppb	0.3	17877.66	200000	
24	Mg	45	He	16243.876	ppb	1.5	191330.58	200000	
27	Al	45	He	121154.720	ppb	2.1	550969.81	200000	
28	Si	45	H2	3150.779	ppb	1.2	25942.34	10000	
39	K	45	He	6365.387	ppb	1.7	75584.50	200000	
40	Ca	45	H2	127386.125	ppb	0.8	9933128.60	200000	
51	V	89	He	509.278	ppb	1.2	92992.33	1000	
52	Cr	89	He	508.722	ppb	0.8	114367.53	2000	
55	Mn	89	He	14857.704	ppb	0.6	1591438.51	2000	>LDR
56	Fe	89	H2	263606.258	ppb	1.0	91367510.96	100000	
59	Co	89	He	135.480	ppb	1.5	51577.78	1000	
60	Ni	89	He	105.022	ppb	2.5	11371.66	1000	
63	Cu	89	He	100.835	ppb	1.7	29942.93	2000	
66	Zn	89	He	439.117	ppb	0.4	17666.21	2000	
75	As	89	He	121.620	ppb	0.8	3990.02	1000	
78	Se	89	H2	3.291	ppb	7.6	57.33	1000	
88	Sr	89	He	341.299	ppb	0.9	54624.74	2000	
95	Mo	89	He	14.416	ppb	1.1	2781.49	1000	
107	Ag	89	He	0.334	ppb	14.8	220.01	100	
111	Cd	89	He	1.739	ppb	8.6	145.93	1000	
118	Sn	159	He	44.372	ppb	0.6	7694.69	1000	
121	Sb	159	No Gas	2.064	ppb	4.4	3264.02	1000	
137	Ba	159	No Gas	1145.108	ppb	2.2	691189.98	2000	
182	W	159	No Gas	0.550	ppb	11.5	794.24	1000	
205	Tl	209	No Gas	1.847	ppb	8.9	4996.61	1000	
208	Pb	209	No Gas	426.468	ppb	1.8	1586079.96	2000	
232	Th	209	No Gas	48.832	ppb	2.0	190288.83	1000	
238	U	209	No Gas	15.562	ppb	0.1	56879.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1298840.12	1.5	1537409.87	84.48	29.5	120.4	
Sc	45	No Gas	3331858.62	1.0	3373253.08	98.77	29.5	120.4	
Sc	45	H2	388902.69	0.8	415670.69	93.56	29.5	120.4	
Sc	45	He	76817.03	1.3	81171.76	94.64	29.5	120.4	
Ge	72	No Gas	769559.23	1.2	779333.11	98.75	29.5	120.4	
Ge	72	H2	138662.10	1.6	153246.58	90.48	29.5	120.4	
Ge	72	He	59396.82	1.1	63135.03	94.08	29.5	120.4	
Y	89	H2	2777573.39	0.7	2642116.11	105.13	29.5	120.4	
Y	89	He	568131.28	0.7	544041.92	104.43	29.5	120.4	
Tb	159	No Gas	8527672.72	0.8	8117023.84	105.06	29.5	120.4	
Tb	159	He	2871190.24	0.7	2866479.19	100.16	29.5	120.4	
Bi	209	No Gas	4571567.71	1.2	4424692.92	103.32	29.5	120.4	

Sample Report

Sample Name SN5043-021

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:15:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	26.716	ppb	0.7	5483.46	100	
11	B	6	No Gas	29.717	ppb	1.3	4709.83	1000	
23	Na	45	He	640.322	ppb	3.9	17784.28	200000	
24	Mg	45	He	26610.343	ppb	1.8	285420.65	200000	
27	Al	45	He	118120.853	ppb	1.5	489780.68	200000	
28	Si	45	H2	2995.098	ppb	8.3	21884.40	10000	
39	K	45	He	5267.621	ppb	0.8	58681.71	200000	
40	Ca	45	H2	503600.631	ppb	6.9	34840192.54	200000	
51	V	89	He	933.007	ppb	0.5	154361.33	1000	
52	Cr	89	He	956.591	ppb	0.7	195053.05	2000	
55	Mn	89	He	49564.662	ppb	0.3	4815878.08	2000	>LDR
56	Fe	89	H2	789093.030	ppb	7.8	245219268.97	100000	>LDR
59	Co	89	He	232.659	ppb	0.6	80344.18	1000	
60	Ni	89	He	114.355	ppb	2.9	11227.12	1000	
63	Cu	89	He	113.677	ppb	0.3	30572.01	2000	
66	Zn	89	He	1727.960	ppb	1.1	62875.67	2000	
75	As	89	He	413.972	ppb	0.5	12308.79	1000	
78	Se	89	H2	4.189	ppb	14.4	65.17	1000	
88	Sr	89	He	663.277	ppb	0.7	96291.76	2000	
95	Mo	89	He	32.524	ppb	2.5	5541.32	1000	
107	Ag	89	He	0.281	ppb	4.2	170.01	100	
111	Cd	89	He	1.825	ppb	3.2	138.89	1000	
118	Sn	159	He	44.242	ppb	1.7	7368.96	1000	
121	Sb	159	No Gas	3.697	ppb	4.8	5540.65	1000	
137	Ba	159	No Gas	1702.604	ppb	0.9	987066.23	2000	
182	W	159	No Gas	0.440	ppb	26.6	634.05	1000	
205	Tl	209	No Gas	1.701	ppb	3.8	4452.48	1000	
208	Pb	209	No Gas	353.196	ppb	1.1	1270112.10	2000	
232	Th	209	No Gas	45.341	ppb	1.1	170860.77	1000	
238	U	209	No Gas	23.352	ppb	1.3	82525.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180759.96	1.9	1537409.87	76.8	29.5	120.4	
Sc	45	No Gas	3013179.58	0.2	3373253.08	89.33	29.5	120.4	
Sc	45	H2	345930.42	5.2	415670.69	83.22	29.5	120.4	
Sc	45	He	70037.40	1.4	81171.76	86.28	29.5	120.4	
Ge	72	No Gas	712656.38	0.7	779333.11	91.44	29.5	120.4	
Ge	72	H2	124861.70	4.5	153246.58	81.48	29.5	120.4	
Ge	72	He	54451.29	0.7	63135.03	86.25	29.5	120.4	
Y	89	H2	2497826.44	5.7	2642116.11	94.54	29.5	120.4	
Y	89	He	515357.36	0.4	544041.92	94.73	29.5	120.4	
Tb	159	No Gas	8191007.59	0.4	8117023.84	100.91	29.5	120.4	
Tb	159	He	2757605.38	0.1	2866479.19	96.2	29.5	120.4	
Bi	209	No Gas	4420403.37	0.6	4424692.92	99.9	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	071_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:17:51 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.177	ppb	13.7	51.12	0.5	
B	11	6	No Gas	6.109	ppb	4.2	1545.69	10	
Na	23	45	He	182.119	ppb	3.1	8886.01	500	
Mg	24	45	He	-12.447	ppb	N/A	404.48	50	
Al	27	45	He	38.015	ppb	7.0	201.12	50	
Si	28	45	H2	37.070	ppb	24.9	483.88	250	
K	39	45	He	94.968	ppb	25.2	10472.52	500	
Ca	40	45	H2	167.398	ppb	9.6	13175.44	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
V	51	89	He	0.806	ppb	37.0	336.68	2.5	
Cr	52	89	He	0.917	ppb	6.3	209.30	2.5	
Mn	55	89	He	13.017	ppb	10.8	1213.84	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	286.169	ppb	9.5	91513.81	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.192	ppb	25.3	71.12	0.5	
Ni	60	89	He	0.810	ppb	50.2	113.34	1	
Cu	63	89	He	0.065	ppb	185.7	398.91	1.5	
Zn	66	89	He	10.009	ppb	12.3	404.47	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.217	ppb	23.2	10.33	2.5	
Se	78	89	H2	0.210	ppb	30.4	3.50	2.5	
Sr	88	89	He	0.206	ppb	17.5	34.44	2.5	
Mo	95	89	He	-0.572	ppb	N/A	23.33	2.5	
Ag	107	89	He	0.008	ppb	48.1	14.44	0.5	
Cd	111	89	He	0.012	ppb	149.3	1.85	0.5	
Sn	118	159	He	37.251	ppb	0.7	6277.25	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.020	ppb	85.3	126.81	0.5	
Ba	137	159	No Gas	1.491	ppb	12.0	904.38	1	PB 6020 Fails DoD
W	182	159	No Gas	-0.045	ppb	N/A	66.74	2.5	
Tl	205	209	No Gas	0.009	ppb	117.5	53.39	0.5	
Pb	208	209	No Gas	0.836	ppb	0.7	3333.92	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.184	ppb	39.1	904.38	2.5	
U	238	209	No Gas	0.022	ppb	22.1	86.77	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1190266.98	2.4	1537409.87	77.42	29.5	120.4	
Sc	45	No Gas	3004874.53	2.7	3373253.08	89.08	29.5	120.4	
Sc	45	H2	344286.20	2.0	415670.69	82.83	29.5	120.4	
Sc	45	He	70159.11	1.5	81171.76	86.43	29.5	120.4	
Ge	72	No Gas	717126.42	2.2	779333.11	92.02	29.5	120.4	
Ge	72	H2	129164.93	2.4	153246.58	84.29	29.5	120.4	
Ge	72	He	56048.74	0.8	63135.03	88.78	29.5	120.4	
Y	89	H2	2349926.20	2.3	2642116.11	88.94	29.5	120.4	
Y	89	He	489483.82	1.4	544041.92	89.97	29.5	120.4	
Tb	159	No Gas	8392624.04	2.4	8117023.84	103.4	29.5	120.4	
Tb	159	He	2785274.34	1.6	2866479.19	97.17	29.5	120.4	
Bi	209	No Gas	4623704.90	2.7	4424692.92	104.5	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	072_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:20:33 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.372	ppb	3.0	26289.46	25	101.49	89.8	110.2	
11	B	6	No Gas	25.752	ppb	5.1	18246.74	25	103.01	89.8	110.2	
23	Na	45	He	5079.573	ppb	0.9	523678.99	5000	101.59	89.8	110.2	
24	Mg	45	He	4977.032	ppb	0.6	279857.65	5000	99.54	89.8	110.2	
27	Al	45	He	470.759	ppb	2.5	10276.28	500	94.15	89.8	110.2	
28	Si	45	H2	489.829	ppb	1.6	18763.04	500	97.97	89.8	110.2	
39	K	45	He	4952.956	ppb	0.2	252060.36	5000	99.06	89.8	110.2	
40	Ca	45	H2	4997.762	ppb	0.8	1809619.57	5000	99.96	89.8	110.2	
51	V	89	He	24.218	ppb	0.4	19866.82	25	96.87	89.8	110.2	
52	Cr	89	He	24.523	ppb	0.2	24586.83	25	98.09	89.8	110.2	
55	Mn	89	He	25.580	ppb	1.3	12218.42	25	102.32	89.8	110.2	
56	Fe	89	H2	4878.521	ppb	0.8	7363180.84	5000	97.57	89.8	110.2	
59	Co	89	He	24.890	ppb	0.6	42217.31	25	99.56	89.8	110.2	
60	Ni	89	He	25.204	ppb	1.5	12149.01	25	100.82	89.8	110.2	
63	Cu	89	He	24.866	ppb	1.2	32805.99	25	99.46	89.8	110.2	
66	Zn	89	He	24.521	ppb	2.4	4438.64	25	98.08	89.8	110.2	
75	As	89	He	24.862	ppb	0.7	3633.54	25	99.45	89.8	110.2	
78	Se	89	H2	24.543	ppb	2.3	1844.04	25	98.17	89.8	110.2	
88	Sr	89	He	24.194	ppb	1.5	17254.70	25	96.78	89.8	110.2	
95	Mo	89	He	24.811	ppb	0.3	20430.27	25	99.24	89.8	110.2	
107	Ag	89	He	18.898	ppb	0.8	52623.90	25	75.59	89.8	110.2	> +/- 10%
111	Cd	89	He	24.892	ppb	0.8	9234.71	25	99.57	89.8	110.2	
118	Sn	159	He	23.378	ppb	2.0	19716.16	25	93.51	89.8	110.2	
121	Sb	159	No Gas	24.297	ppb	5.3	173837.43	25	97.19	89.8	110.2	
137	Ba	159	No Gas	24.238	ppb	5.4	68215.91	25	96.95	89.8	110.2	
182	W	159	No Gas	24.232	ppb	6.9	137979.76	25	96.93	89.8	110.2	
205	Tl	209	No Gas	24.649	ppb	5.3	313654.31	25	98.6	89.8	110.2	
208	Pb	209	No Gas	24.676	ppb	4.9	434113.92	25	98.7	89.8	110.2	
232	Th	209	No Gas	24.229	ppb	6.9	446242.94	25	96.92	89.8	110.2	
238	U	209	No Gas	24.734	ppb	5.2	427516.80	25	98.94	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1194439.89	2.5	1537409.87	77.69	29.5	120.4	
Sc	45	No Gas	2977605.91	2.9	3373253.08	88.27	29.5	120.4	
Sc	45	H2	360911.37	0.2	415670.69	86.83	29.5	120.4	
Sc	45	He	73412.08	0.3	81171.76	90.44	29.5	120.4	
Ge	72	No Gas	697070.20	3.9	779333.11	89.44	29.5	120.4	
Ge	72	H2	135839.27	1.1	153246.58	88.64	29.5	120.4	
Ge	72	He	58857.96	1.0	63135.03	93.23	29.5	120.4	
Y	89	H2	2416591.59	0.3	2642116.11	91.46	29.5	120.4	
Y	89	He	506198.03	0.1	544041.92	93.04	29.5	120.4	
Tb	159	No Gas	7956140.50	2.9	8117023.84	98.02	29.5	120.4	
Tb	159	He	2808753.78	0.2	2866479.19	97.99	29.5	120.4	
Bi	209	No Gas	4325946.63	3.7	4424692.92	97.77	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	073_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:23:13 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.060	ppb	10.1	82.23	0.2	
11	B	6	No Gas	1.799	ppb	7.2	2093.55	4	
23	Na	45	He	51.551	ppb	6.9	10482.28	200	
24	Mg	45	He	-4.459	ppb	N/A	302.25	20	
27	Al	45	He	1.836	ppb	43.5	82.23	20	
28	Si	45	H2	5.622	ppb	36.8	427.15	100	
39	K	45	He	16.119	ppb	34.2	10460.81	200	
40	Ca	45	H2	10.653	ppb	9.6	5424.58	20	Failed DoD
51	V	89	He	0.763	ppb	2.1	816.72	1	Failed DoD
52	Cr	89	He	0.127	ppb	1.4	156.64	1	
55	Mn	89	He	1.346	ppb	13.7	639.23	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	13.534	ppb	9.7	27798.31	20	Failed DoD
59	Co	89	He	0.013	ppb	48.3	28.89	0.2	
60	Ni	89	He	-0.032	ppb	N/A	23.33	0.4	
63	Cu	89	He	-0.071	ppb	N/A	296.68	0.6	
66	Zn	89	He	0.066	ppb	221.3	71.11	2	
75	As	89	He	0.087	ppb	11.7	16.67	1	
78	Se	89	H2	0.055	ppb	23.6	4.50	1	
88	Sr	89	He	0.023	ppb	23.2	22.22	1	
95	Mo	89	He	0.023	ppb	177.9	133.34	1	
107	Ag	89	He	0.006	ppb	45.5	25.55	0.2	
111	Cd	89	He	0.015	ppb	44.2	6.30	0.2	
118	Sn	159	He	0.322	ppb	7.7	338.91	1	
121	Sb	159	No Gas	0.025	ppb	24.3	293.67	0.2	
137	Ba	159	No Gas	0.066	ppb	20.9	220.25	0.4	
182	W	159	No Gas	0.114	ppb	20.1	820.95	1	
205	Tl	209	No Gas	0.021	ppb	7.8	317.03	0.2	
208	Pb	209	No Gas	0.050	ppb	15.9	1141.30	0.2	
232	Th	209	No Gas	0.178	ppb	41.9	3761.54	1	
238	U	209	No Gas	0.017	ppb	20.9	320.36	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1285446.70	2.1	1537409.87	83.61	29.5	120.4	
Sc	45	No Gas	3159740.39	2.8	3373253.08	93.67	29.5	120.4	
Sc	45	H2	352009.93	1.3	415670.69	84.68	29.5	120.4	
Sc	45	He	70984.01	0.9	81171.76	87.45	29.5	120.4	
Ge	72	No Gas	748839.33	3.0	779333.11	96.09	29.5	120.4	
Ge	72	H2	129241.62	1.5	153246.58	84.34	29.5	120.4	
Ge	72	He	56249.42	0.5	63135.03	89.09	29.5	120.4	
Y	89	H2	2374872.26	1.1	2642116.11	89.89	29.5	120.4	
Y	89	He	494628.50	0.5	544041.92	90.92	29.5	120.4	
Tb	159	No Gas	8601429.18	2.4	8117023.84	105.97	29.5	120.4	
Tb	159	He	2799075.23	0.3	2866479.19	97.65	29.5	120.4	
Bi	209	No Gas	4695760.02	2.1	4424692.92	106.13	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG07IMS1
File Name	074LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:25:57 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.218	ppb	3.7	10897.81	50	20.09	79.5	120.4	
B	11	6	No Gas	500.668	ppb	5.0	72035.43	500	20.03	79.5	120.4	
Na	23	45	He	7391.634	ppb	0.8	156455.76	7500	19.71	79.5	120.4	
Mg	24	45	He	4992.520	ppb	0.6	56627.81	5000	19.97	79.5	120.4	
Al	27	45	He	1862.935	ppb	1.1	8147.05	2000	18.63	79.5	120.4	
Si	28	45	H2	977.432	ppb	12.3	7557.08	1000	19.55	79.5	120.4	
K	39	45	He	9903.561	ppb	1.0	106882.56	10000	19.81	79.5	120.4	
Ca	40	45	H2	2597.846	ppb	11.9	187986.77	2500	20.78	79.5	120.4	
V	51	89	He	489.907	ppb	1.5	80115.62	500	19.6	79.5	120.4	
Cr	52	89	He	199.757	ppb	0.8	40235.59	200	19.98	79.5	120.4	
Mn	55	89	He	497.193	ppb	1.6	47700.82	500	19.89	79.5	120.4	
Fe	56	89	H2	1098.872	ppb	11.0	339843.09	1000	21.98	79.5	120.4	
Co	59	89	He	505.561	ppb	1.3	172337.35	500	20.22	79.5	120.4	
Ni	60	89	He	490.181	ppb	1.0	47379.84	500	19.61	79.5	120.4	
Cu	63	89	He	252.604	ppb	1.1	66575.80	250	20.21	79.5	120.4	
Zn	66	89	He	498.889	ppb	1.0	17964.37	500	19.96	79.5	120.4	
As	75	89	He	99.356	ppb	0.5	2919.63	100	19.87	79.5	120.4	
Se	78	89	H2	99.813	ppb	10.7	1502.85	100	19.96	79.5	120.4	
Sr	88	89	He	497.384	ppb	1.9	71280.76	500	19.9	79.5	120.4	
Mo	95	89	He	102.023	ppb	1.0	16907.67	100	20.4	79.5	120.4	
Ag	107	89	He	53.438	ppb	1.3	29914.92	50	21.38	79.5	120.4	
Cd	111	89	He	252.182	ppb	0.9	18804.60	250	20.17	79.5	120.4	
Sn	118	159	He	510.425	ppb	1.2	87302.46	500	20.42	79.5	120.4	
Sb	121	159	No Gas	97.530	ppb	3.1	148931.68	100	19.51	79.5	120.4	
Ba	137	159	No Gas	1888.201	ppb	3.9	1133708.70	2000	18.88	79.5	120.4	
W	182	159	No Gas	100.549	ppb	3.4	122208.93	100	20.11	79.5	120.4	
Tl	205	209	No Gas	100.238	ppb	3.6	273318.14	100	20.05	79.5	120.4	
[Pb]	206	209	No Gas	100.472	ppb	2.7	94318.58	100	20.09	79.5	120.4	
[Pb]	207	209	No Gas	101.082	ppb	3.5	83166.48	100	20.22	79.5	120.4	
Pb	208	209	No Gas	99.954	ppb	3.2	376861.02	100	19.99	79.5	120.4	
Th	232	209	No Gas	98.888	ppb	5.0	390231.35	100	19.78	79.5	120.4	
U	238	209	No Gas	99.383	ppb	5.2	367974.79	100	19.88	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1250605.95	2.4	1537409.87	81.34	29.5	120.4	
Sc	45	No Gas	3102586.64	2.3	3373253.08	91.98	29.5	120.4	
Sc	45	H2	359882.95	7.6	415670.69	86.58	29.5	120.4	
Sc	45	He	73454.59	0.1	81171.76	90.49	29.5	120.4	
Ge	72	No Gas	741892.43	2.2	779333.11	95.2	29.5	120.4	
Ge	72	H2	135926.29	4.9	153246.58	88.7	29.5	120.4	
Ge	72	He	58419.06	0.6	63135.03	92.53	29.5	120.4	
Y	89	H2	2433636.34	7.3	2642116.11	92.11	29.5	120.4	
Y	89	He	508755.32	0.5	544041.92	93.51	29.5	120.4	
Tb	159	No Gas	8487049.25	1.9	8117023.84	104.56	29.5	120.4	
Tb	159	He	2856157.53	0.9	2866479.19	99.64	29.5	120.4	
Bi	209	No Gas	4635215.26	2.5	4424692.92	104.76	29.5	120.4	

Sample Report

Sample Name SN5107-028

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:28:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.181	ppb	49.1	53.34	100	
11	B	6	No Gas	17.748	ppb	2.5	3228.25	1000	
23	Na	45	He	232.032	ppb	3.2	10482.19	200000	
24	Mg	45	He	79.775	ppb	33.9	1482.42	200000	
27	Al	45	He	969.179	ppb	13.5	4327.54	200000	
28	Si	45	H2	707.773	ppb	2.6	5670.79	10000	
39	K	45	He	112.249	ppb	22.9	11307.78	200000	
40	Ca	45	H2	261.846	ppb	2.2	20980.57	200000	
51	V	89	He	5.642	ppb	24.1	1155.65	1000	
52	Cr	89	He	5.513	ppb	16.9	1159.85	2000	
55	Mn	89	He	36.079	ppb	84.2	3532.76	2000	
56	Fe	89	H2	462.860	ppb	2.3	150181.18	100000	
59	Co	89	He	0.745	ppb	65.4	266.69	1000	
60	Ni	89	He	0.849	ppb	37.4	123.34	1000	
63	Cu	89	He	0.613	ppb	30.6	566.70	2000	
66	Zn	89	He	5.671	ppb	33.5	268.90	2000	
75	As	89	He	0.925	ppb	42.1	32.00	1000	
78	Se	89	H2	0.242	ppb	34.2	4.17	1000	
88	Sr	89	He	28.054	ppb	2.4	4085.21	2000	
95	Mo	89	He	0.285	ppb	43.9	167.78	1000	
107	Ag	89	He	0.081	ppb	113.1	56.67	100	
111	Cd	89	He	0.201	ppb	103.0	16.29	1000	
118	Sn	159	He	37.498	ppb	1.6	6546.30	1000	
121	Sb	159	No Gas	0.141	ppb	20.5	310.35	1000	
137	Ba	159	No Gas	12.897	ppb	5.2	7674.09	2000	
182	W	159	No Gas	0.239	ppb	21.7	407.13	1000	
205	Tl	209	No Gas	0.080	ppb	13.4	243.60	1000	
208	Pb	209	No Gas	10.411	ppb	1.7	39057.05	2000	
232	Th	209	No Gas	5.384	ppb	3.5	21221.91	1000	
238	U	209	No Gas	1.019	ppb	1.9	3741.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1229740.57	2.0	1537409.87	79.99	29.5	120.4	
Sc	45	No Gas	3089259.78	1.2	3373253.08	91.58	29.5	120.4	
Sc	45	H2	366655.24	1.4	415670.69	88.21	29.5	120.4	
Sc	45	He	74590.15	0.7	81171.76	91.89	29.5	120.4	
Ge	72	No Gas	745543.59	1.3	779333.11	95.66	29.5	120.4	
Ge	72	H2	135207.82	0.3	153246.58	88.23	29.5	120.4	
Ge	72	He	59074.74	0.8	63135.03	93.57	29.5	120.4	
Y	89	H2	2461697.21	1.1	2642116.11	93.17	29.5	120.4	
Y	89	He	516121.12	0.5	544041.92	94.87	29.5	120.4	
Tb	159	No Gas	8388765.43	1.0	8117023.84	103.35	29.5	120.4	
Tb	159	He	2885354.09	0.9	2866479.19	100.66	29.5	120.4	
Bi	209	No Gas	4589926.17	0.9	4424692.92	103.73	29.5	120.4	

Sample Report

Sample Name SN5107-029

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:31:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	56.7	37.78	100	
11	B	6	No Gas	12.096	ppb	10.0	2463.64	1000	
23	Na	45	He	246.983	ppb	7.8	10846.15	200000	
24	Mg	45	He	66.058	ppb	17.2	1331.28	200000	
27	Al	45	He	930.177	ppb	2.0	4175.21	200000	
28	Si	45	H2	777.433	ppb	6.5	6151.58	10000	
39	K	45	He	101.550	ppb	11.3	11259.38	200000	
40	Ca	45	H2	365.030	ppb	34.1	28243.21	200000	
51	V	89	He	5.196	ppb	3.7	1087.86	1000	
52	Cr	89	He	4.006	ppb	10.6	856.54	2000	
55	Mn	89	He	9.318	ppb	7.8	925.20	2000	
56	Fe	89	H2	626.414	ppb	51.0	200018.27	100000	
59	Co	89	He	0.154	ppb	50.7	62.23	1000	
60	Ni	89	He	0.707	ppb	26.9	110.01	1000	
63	Cu	89	He	0.434	ppb	33.1	522.25	2000	
66	Zn	89	He	6.269	ppb	17.4	292.24	2000	
75	As	89	He	0.496	ppb	14.4	19.33	1000	
78	Se	89	H2	0.264	ppb	66.9	4.50	1000	
88	Sr	89	He	24.207	ppb	3.6	3548.36	2000	
95	Mo	89	He	0.027	ppb	738.5	125.56	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.045	ppb	34.1	4.44	1000	
118	Sn	159	He	39.718	ppb	3.6	6973.16	1000	
121	Sb	159	No Gas	0.049	ppb	43.3	176.87	1000	
137	Ba	159	No Gas	10.826	ppb	10.2	6662.45	2000	
182	W	159	No Gas	0.069	ppb	96.5	210.24	1000	
205	Tl	209	No Gas	0.018	ppb	46.5	80.09	1000	
208	Pb	209	No Gas	8.664	ppb	5.2	33565.17	2000	
232	Th	209	No Gas	1.347	ppb	2.7	5620.94	1000	
238	U	209	No Gas	0.316	ppb	5.7	1201.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1244662.95	1.7	1537409.87	80.96	29.5	120.4	
Sc	45	No Gas	3207125.21	3.3	3373253.08	95.08	29.5	120.4	
Sc	45	H2	363211.28	1.0	415670.69	87.38	29.5	120.4	
Sc	45	He	74980.28	1.1	81171.76	92.37	29.5	120.4	
Ge	72	No Gas	769798.01	2.7	779333.11	98.78	29.5	120.4	
Ge	72	H2	134500.49	1.8	153246.58	87.77	29.5	120.4	
Ge	72	He	59662.04	1.3	63135.03	94.5	29.5	120.4	
Y	89	H2	2465654.50	1.4	2642116.11	93.32	29.5	120.4	
Y	89	He	519456.17	1.1	544041.92	95.48	29.5	120.4	
Tb	159	No Gas	8689558.14	3.0	8117023.84	107.05	29.5	120.4	
Tb	159	He	2903769.05	1.1	2866479.19	101.3	29.5	120.4	
Bi	209	No Gas	4740448.30	3.1	4424692.92	107.14	29.5	120.4	

Sample Report

Sample Name SN5107-031

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:33:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.326	ppb	20.5	87.78	100	
11	B	6	No Gas	14.885	ppb	2.4	2940.40	1000	
23	Na	45	He	261.436	ppb	4.1	11280.30	200000	
24	Mg	45	He	235.868	ppb	10.4	3316.18	200000	
27	Al	45	He	15368.499	ppb	1.2	69067.39	200000	
28	Si	45	H2	2792.593	ppb	0.7	22446.15	10000	
39	K	45	He	226.230	ppb	17.9	12651.60	200000	
40	Ca	45	H2	411.232	ppb	1.7	33058.24	200000	
51	V	89	He	15.560	ppb	2.9	2828.17	1000	
52	Cr	89	He	11.286	ppb	2.2	2365.11	2000	
55	Mn	89	He	12.763	ppb	2.6	1268.50	2000	
56	Fe	89	H2	1884.836	ppb	0.4	600742.01	100000	
59	Co	89	He	0.503	ppb	21.3	184.46	1000	
60	Ni	89	He	3.884	ppb	8.3	425.58	1000	
63	Cu	89	He	2.089	ppb	4.9	970.07	2000	
66	Zn	89	He	11.117	ppb	13.4	472.25	2000	
75	As	89	He	0.914	ppb	31.8	32.00	1000	
78	Se	89	H2	0.672	ppb	21.1	11.00	1000	
88	Sr	89	He	7.869	ppb	5.7	1163.43	2000	
95	Mo	89	He	0.043	ppb	161.2	128.90	1000	
107	Ag	89	He	0.678	ppb	7.5	400.02	100	
111	Cd	89	He	0.030	ppb	130.2	3.33	1000	
118	Sn	159	He	39.694	ppb	4.4	6965.36	1000	
121	Sb	159	No Gas	0.067	ppb	44.9	206.90	1000	
137	Ba	159	No Gas	14.173	ppb	5.7	8755.95	2000	
182	W	159	No Gas	0.119	ppb	34.2	273.64	1000	
205	Tl	209	No Gas	0.028	ppb	11.5	106.78	1000	
208	Pb	209	No Gas	15.194	ppb	3.9	59515.07	2000	
232	Th	209	No Gas	4.088	ppb	4.3	16890.33	1000	
238	U	209	No Gas	0.573	ppb	7.1	2199.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1279165.67	2.0	1537409.87	83.2	29.5	120.4	
Sc	45	No Gas	3257973.46	3.2	3373253.08	96.58	29.5	120.4	
Sc	45	H2	379212.23	0.4	415670.69	91.23	29.5	120.4	
Sc	45	He	75855.96	0.4	81171.76	93.45	29.5	120.4	
Ge	72	No Gas	775941.05	3.0	779333.11	99.56	29.5	120.4	
Ge	72	H2	139670.02	0.9	153246.58	91.14	29.5	120.4	
Ge	72	He	59982.37	0.3	63135.03	95.01	29.5	120.4	
Y	89	H2	2519368.45	0.5	2642116.11	95.35	29.5	120.4	
Y	89	He	522143.29	0.7	544041.92	95.97	29.5	120.4	
Tb	159	No Gas	8721566.33	3.6	8117023.84	107.45	29.5	120.4	
Tb	159	He	2902067.88	0.2	2866479.19	101.24	29.5	120.4	
Bi	209	No Gas	4803586.85	3.3	4424692.92	108.56	29.5	120.4	

Sample Report

Sample Name SN5107-032

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:36:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.352	ppb	27.2	93.34	100	
11	B	6	No Gas	13.891	ppb	3.1	2782.58	1000	
23	Na	45	He	267.530	ppb	7.8	11450.64	200000	
24	Mg	45	He	239.015	ppb	6.8	3365.10	200000	
27	Al	45	He	9622.915	ppb	0.6	43424.64	200000	
28	Si	45	H2	1857.631	ppb	1.3	14804.11	10000	
39	K	45	He	209.269	ppb	24.7	12521.56	200000	
40	Ca	45	H2	888.383	ppb	2.8	68339.55	200000	
51	V	89	He	14.158	ppb	3.3	2582.56	1000	
52	Cr	89	He	8.428	ppb	1.9	1767.13	2000	
55	Mn	89	He	14.383	ppb	1.8	1421.82	2000	
56	Fe	89	H2	1184.989	ppb	2.4	376453.41	100000	
59	Co	89	He	0.531	ppb	6.7	193.35	1000	
60	Ni	89	He	2.675	ppb	15.5	304.46	1000	
63	Cu	89	He	3.948	ppb	2.6	1463.46	2000	
66	Zn	89	He	15.649	ppb	9.5	636.71	2000	
75	As	89	He	0.808	ppb	6.7	28.67	1000	
78	Se	89	H2	1.402	ppb	13.4	22.17	1000	
88	Sr	89	He	8.586	ppb	6.3	1263.44	2000	
95	Mo	89	He	0.086	ppb	83.0	135.56	1000	
107	Ag	89	He	3.773	ppb	3.4	2168.03	100	
111	Cd	89	He	0.059	ppb	85.1	5.55	1000	
118	Sn	159	He	38.440	ppb	3.1	6716.36	1000	
121	Sb	159	No Gas	0.156	ppb	10.7	337.05	1000	
137	Ba	159	No Gas	21.659	ppb	5.3	13044.38	2000	
182	W	159	No Gas	0.239	ppb	15.8	413.80	1000	
205	Tl	209	No Gas	0.040	ppb	38.7	140.16	1000	
208	Pb	209	No Gas	29.353	ppb	3.3	112461.88	2000	
232	Th	209	No Gas	3.458	ppb	3.9	14026.78	1000	
238	U	209	No Gas	0.641	ppb	3.5	2412.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273344.82	0.7	1537409.87	82.82	29.5	120.4	
Sc	45	No Gas	3167549.24	1.1	3373253.08	93.9	29.5	120.4	
Sc	45	H2	373966.92	2.8	415670.69	89.97	29.5	120.4	
Sc	45	He	76134.68	1.3	81171.76	93.79	29.5	120.4	
Ge	72	No Gas	762270.22	1.3	779333.11	97.81	29.5	120.4	
Ge	72	H2	139595.76	3.1	153246.58	91.09	29.5	120.4	
Ge	72	He	59813.87	0.3	63135.03	94.74	29.5	120.4	
Y	89	H2	2491567.21	1.6	2642116.11	94.3	29.5	120.4	
Y	89	He	519855.32	0.6	544041.92	95.55	29.5	120.4	
Tb	159	No Gas	8501128.69	1.1	8117023.84	104.73	29.5	120.4	
Tb	159	He	2889015.44	0.7	2866479.19	100.79	29.5	120.4	
Bi	209	No Gas	4702931.72	1.0	4424692.92	106.29	29.5	120.4	

Sample Report

Sample Name SN5107-033

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:39:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.190	ppb	4.2	970.06	100	
11	B	6	No Gas	39.975	ppb	3.6	6769.58	1000	
23	Na	45	He	669.953	ppb	3.8	22790.35	200000	
24	Mg	45	He	3504.827	ppb	3.3	47202.51	200000	
27	Al	45	He	111948.075	ppb	2.8	575782.65	200000	
28	Si	45	H2	2926.046	ppb	3.2	26517.27	10000	
39	K	45	He	2368.928	ppb	4.2	39260.87	200000	
40	Ca	45	H2	32197.729	ppb	1.2	2763019.09	200000	
51	V	89	He	255.304	ppb	2.7	47802.99	1000	
52	Cr	89	He	121.719	ppb	2.8	28015.20	2000	
55	Mn	89	He	1183.917	ppb	2.4	129710.08	2000	
56	Fe	89	H2	125288.766	ppb	0.4	43931121.24	100000	
59	Co	89	He	9.563	ppb	3.6	3731.89	1000	
60	Ni	89	He	72.536	ppb	4.2	8045.94	1000	
63	Cu	89	He	11879.259	ppb	2.4	3554918.73	2000	>LDR
66	Zn	89	He	2306.182	ppb	1.5	94596.79	2000	
75	As	89	He	26.948	ppb	1.9	908.13	1000	
78	Se	89	H2	8.755	ppb	3.8	153.49	1000	
88	Sr	89	He	103.864	ppb	2.9	17005.52	2000	
95	Mo	89	He	6.168	ppb	3.4	1294.55	1000	
107	Ag	89	He	0.852	ppb	6.9	556.70	100	
111	Cd	89	He	0.886	ppb	13.3	76.67	1000	
118	Sn	159	He	44.487	ppb	1.3	8009.34	1000	
121	Sb	159	No Gas	175.028	ppb	0.6	275281.49	1000	
137	Ba	159	No Gas	216.636	ppb	0.8	134019.06	2000	
182	W	159	No Gas	0.228	ppb	27.6	410.47	1000	
205	Tl	209	No Gas	0.657	ppb	7.5	1862.23	1000	
208	Pb	209	No Gas	118076.401	ppb	0.7	455179446.74	2000	>LDR
232	Th	209	No Gas	21.551	ppb	0.6	87165.08	1000	
238	U	209	No Gas	6.261	ppb	0.1	23725.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1313036.90	1.5	1537409.87	85.41	29.5	120.4	
Sc	45	No Gas	3474403.00	2.9	3373253.08	103	29.5	120.4	
Sc	45	H2	427863.34	2.6	415670.69	102.93	29.5	120.4	
Sc	45	He	86892.71	2.3	81171.76	107.05	29.5	120.4	
Ge	72	No Gas	803634.69	1.7	779333.11	103.12	29.5	120.4	
Ge	72	H2	154188.46	2.0	153246.58	100.61	29.5	120.4	
Ge	72	He	65885.80	0.9	63135.03	104.36	29.5	120.4	
Y	89	H2	2809647.75	1.8	2642116.11	106.34	29.5	120.4	
Y	89	He	581155.20	1.3	544041.92	106.82	29.5	120.4	
Tb	159	No Gas	8740017.02	1.7	8117023.84	107.68	29.5	120.4	
Tb	159	He	2981274.54	1.5	2866479.19	104	29.5	120.4	
Bi	209	No Gas	4739255.02	1.2	4424692.92	107.11	29.5	120.4	

Sample Report

Sample Name	SN5107-035
File Name	080SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:42:02 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.265	ppb	5.3	798.94	100	
11	B	6	No Gas	34.752	ppb	3.4	6301.60	1000	
23	Na	45	He	478.478	ppb	6.2	18275.33	200000	
24	Mg	45	He	2494.090	ppb	1.1	34011.33	200000	
27	Al	45	He	82622.505	ppb	1.2	427784.60	200000	
28	Si	45	H2	3097.846	ppb	5.5	27456.88	10000	
39	K	45	He	1650.811	ppb	2.3	31164.91	200000	
40	Ca	45	H2	24194.802	ppb	4.9	2032436.08	200000	
51	V	89	He	167.466	ppb	1.2	31393.64	1000	
52	Cr	89	He	88.032	ppb	1.0	20240.79	2000	
55	Mn	89	He	640.704	ppb	0.2	70092.59	2000	
56	Fe	89	H2	67178.190	ppb	4.2	22849760.62	100000	
59	Co	89	He	6.151	ppb	0.9	2400.39	1000	
60	Ni	89	He	49.621	ppb	1.8	5510.17	1000	
63	Cu	89	He	8662.979	ppb	0.3	2588536.33	2000	
66	Zn	89	He	1389.556	ppb	0.1	56933.47	2000	
75	As	89	He	16.495	ppb	10.1	557.07	1000	
78	Se	89	H2	6.664	ppb	2.5	113.50	1000	
88	Sr	89	He	73.959	ppb	3.4	12092.39	2000	
95	Mo	89	He	3.847	ppb	14.3	856.73	1000	
107	Ag	89	He	0.512	ppb	11.1	338.91	100	
111	Cd	89	He	0.578	ppb	7.1	50.37	1000	
118	Sn	159	He	40.237	ppb	2.2	7312.24	1000	
121	Sb	159	No Gas	135.113	ppb	1.2	214101.01	1000	
137	Ba	159	No Gas	132.959	ppb	2.5	82893.76	2000	
182	W	159	No Gas	0.167	ppb	34.1	337.05	1000	
205	Tl	209	No Gas	0.389	ppb	4.9	1107.96	1000	
208	Pb	209	No Gas	88854.135	ppb	1.7	341178411.39	2000	>LDR
232	Th	209	No Gas	13.536	ppb	2.7	54589.44	1000	
238	U	209	No Gas	4.600	ppb	3.3	17361.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1381188.78	0.3	1537409.87	89.84	29.5	120.4	
Sc	45	No Gas	3657276.71	1.4	3373253.08	108.42	29.5	120.4	
Sc	45	H2	419008.84	2.8	415670.69	100.8	29.5	120.4	
Sc	45	He	87442.72	0.6	81171.76	107.73	29.5	120.4	
Ge	72	No Gas	829635.33	0.1	779333.11	106.45	29.5	120.4	
Ge	72	H2	152396.73	1.4	153246.58	99.45	29.5	120.4	
Ge	72	He	66207.65	0.7	63135.03	104.87	29.5	120.4	
Y	89	H2	2726513.08	2.2	2642116.11	103.19	29.5	120.4	
Y	89	He	580144.05	0.5	544041.92	106.64	29.5	120.4	
Tb	159	No Gas	8805308.97	1.5	8117023.84	108.48	29.5	120.4	
Tb	159	He	3005905.72	0.2	2866479.19	104.86	29.5	120.4	
Bi	209	No Gas	4720333.03	0.8	4424692.92	106.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG07IMW1
File Name	081_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:44:41 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.074	ppb	32.6	33.33	0.5	
B	11	6	No Gas	3.506	ppb	32.2	1333.44	10	
Na	23	45	He	140.720	ppb	6.9	9720.72	500	
Mg	24	45	He	-17.941	ppb	N/A	415.59	50	
Al	27	45	He	12.498	ppb	21.3	114.45	50	
Si	28	45	H2	11.813	ppb	50.2	363.74	250	
K	39	45	He	99.979	ppb	21.0	12658.26	500	
Ca	40	45	H2	21.714	ppb	1.1	3789.53	50	
V	51	89	He	2.574	ppb	8.8	700.04	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.346	ppb	14.8	112.65	2.5	
Mn	55	89	He	3.620	ppb	7.7	393.94	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	25.915	ppb	4.9	17319.86	50	
Co	59	89	He	0.017	ppb	119.6	15.56	0.5	
Ni	60	89	He	0.126	ppb	73.2	56.67	1	
Cu	63	89	He	2.205	ppb	6.5	1070.08	1.5	PB 6020 Fails DoD
Zn	66	89	He	1.932	ppb	31.5	143.34	5	
As	75	89	He	0.162	ppb	83.0	10.00	2.5	
Se	78	89	H2	0.110	ppb	68.7	2.33	2.5	
Sr	88	89	He	0.020	ppb	278.0	10.00	2.5	
Mo	95	89	He	-0.615	ppb	N/A	18.89	2.5	
Ag	107	89	He	0.001	ppb	1268.7	12.22	0.5	
Cd	111	89	He	0.000	ppb	N/A	1.11	0.5	
Sn	118	159	He	0.637	ppb	2.9	186.67	2.5	
Sb	121	159	No Gas	0.183	ppb	42.7	373.76	0.5	
Ba	137	159	No Gas	0.156	ppb	50.5	113.46	1	
W	182	159	No Gas	-0.054	ppb	N/A	56.73	2.5	
Tl	205	209	No Gas	-0.003	ppb	N/A	20.02	0.5	
Pb	208	209	No Gas	81.060	ppb	16.6	297944.34	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.065	ppb	20.3	423.82	2.5	
U	238	209	No Gas	0.007	ppb	95.9	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1337802.62	6.5	1537409.87	87.02	29.5	120.4	
Sc	45	No Gas	3517470.21	7.5	3373253.08	104.28	29.5	120.4	
Sc	45	H2	416666.09	0.7	415670.69	100.24	29.5	120.4	
Sc	45	He	84407.17	0.2	81171.76	103.99	29.5	120.4	
Ge	72	No Gas	803790.52	7.5	779333.11	103.14	29.5	120.4	
Ge	72	H2	152165.67	1.5	153246.58	99.29	29.5	120.4	
Ge	72	He	64664.59	1.2	63135.03	102.42	29.5	120.4	
Y	89	H2	2666408.92	0.0	2642116.11	100.92	29.5	120.4	
Y	89	He	558146.11	0.5	544041.92	102.59	29.5	120.4	
Tb	159	No Gas	8497084.25	7.2	8117023.84	104.68	29.5	120.4	
Tb	159	He	2967499.78	0.7	2866479.19	103.52	29.5	120.4	
Bi	209	No Gas	4547539.31	6.9	4424692.92	102.78	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG07IMW1
File Name	082LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:47:21 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.536	ppb	5.6	12013.15	50	19.81	79.5	120.4	
B	11	6	No Gas	522.733	ppb	4.0	84044.42	500	20.91	79.5	120.4	
Na	23	45	He	7677.040	ppb	0.8	178346.51	7500	20.47	79.5	120.4	
Mg	24	45	He	5191.316	ppb	1.2	64684.47	5000	20.77	79.5	120.4	
Al	27	45	He	1876.563	ppb	1.5	9018.69	2000	18.77	79.5	120.4	
Si	28	45	H2	1104.411	ppb	6.2	9490.43	1000	22.09	0	200	
K	39	45	He	10391.833	ppb	0.6	122706.61	10000	20.78	79.5	120.4	
Ca	40	45	H2	2679.378	ppb	1.9	216221.14	2500	21.44	79.5	120.4	
V	51	89	He	506.753	ppb	0.7	88781.84	500	20.27	79.5	120.4	
Cr	52	89	He	206.055	ppb	0.9	44466.72	200	20.61	79.5	120.4	
Mn	55	89	He	507.001	ppb	0.6	52115.41	500	20.28	79.5	120.4	
Fe	56	89	H2	1098.157	ppb	1.4	364929.65	1000	21.96	79.5	120.4	
Co	59	89	He	530.425	ppb	0.8	193726.43	500	21.22	79.5	120.4	
Ni	60	89	He	510.074	ppb	1.0	52821.53	500	20.4	79.5	120.4	
Cu	63	89	He	262.152	ppb	0.6	74011.02	250	20.97	79.5	120.4	
Zn	66	89	He	509.310	ppb	1.0	19647.75	500	20.37	79.5	120.4	
As	75	89	He	105.941	ppb	1.7	3335.11	100	21.19	79.5	120.4	
Se	78	89	H2	104.108	ppb	2.4	1684.03	100	20.82	79.5	120.4	
Sr	88	89	He	510.435	ppb	0.5	78376.85	500	20.42	79.5	120.4	
Mo	95	89	He	104.126	ppb	1.3	18485.25	100	20.82	79.5	120.4	
Ag	107	89	He	53.434	ppb	1.0	32048.69	50	21.37	79.5	120.4	
Cd	111	89	He	254.700	ppb	1.5	20348.33	250	20.38	79.5	120.4	
Sn	118	159	He	496.665	ppb	1.4	86952.22	500	19.87	79.5	120.4	
Sb	121	159	No Gas	102.486	ppb	3.0	160531.63	100	20.5	79.5	120.4	
Ba	137	159	No Gas	1933.426	ppb	3.1	1190891.45	2000	19.33	79.5	120.4	
W	182	159	No Gas	101.214	ppb	3.4	126186.07	100	20.24	79.5	120.4	
Tl	205	209	No Gas	102.465	ppb	3.9	281640.94	100	20.49	79.5	120.4	
[Pb]	206	209	No Gas	118.853	ppb	3.1	112458.06	100	23.77	79.5	120.4	DoD
[Pb]	207	209	No Gas	117.208	ppb	5.7	97174.07	100	23.44	79.5	120.4	DoD
Pb	208	209	No Gas	117.697	ppb	3.9	447268.87	100	23.54	79.5	120.4	DoD
Th	232	209	No Gas	99.153	ppb	4.8	394480.14	100	19.83	79.5	120.4	
U	238	209	No Gas	100.074	ppb	4.0	373617.04	100	20.02	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397836.45	2.2	1537409.87	90.92	29.5	120.4	
Sc	45	No Gas	3508996.95	2.0	3373253.08	104.02	29.5	120.4	
Sc	45	H2	399071.05	1.5	415670.69	96.01	29.5	120.4	
Sc	45	He	80724.97	0.6	81171.76	99.45	29.5	120.4	
Ge	72	No Gas	814105.05	1.9	779333.11	104.46	29.5	120.4	
Ge	72	H2	146527.39	0.3	153246.58	95.62	29.5	120.4	
Ge	72	He	63083.31	0.3	63135.03	99.92	29.5	120.4	
Y	89	H2	2601466.01	1.2	2642116.11	98.46	29.5	120.4	
Y	89	He	545075.66	0.1	544041.92	100.19	29.5	120.4	
Tb	159	No Gas	8706032.44	2.0	8117023.84	107.26	29.5	120.4	
Tb	159	He	2923282.87	0.2	2866479.19	101.98	29.5	120.4	
Bi	209	No Gas	4672594.25	2.3	4424692.92	105.6	29.5	120.4	

Sample Report

Sample Name SN5146-010

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:50:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	22.7	41.11	100	
11	B	6	No Gas	22.834	ppb	5.6	4319.67	1000	
23	Na	45	He	2961.904	ppb	0.4	71383.55	200000	
24	Mg	45	He	885.048	ppb	3.0	11349.73	200000	
27	Al	45	He	79.902	ppb	66.7	424.49	200000	
28	Si	45	H2	1742.130	ppb	3.8	14533.64	10000	
39	K	45	He	319.279	ppb	15.1	14225.76	200000	
40	Ca	45	H2	729.416	ppb	0.9	59035.76	200000	
51	V	89	He	4.112	ppb	20.6	935.62	1000	
52	Cr	89	He	0.667	ppb	36.3	175.97	2000	
55	Mn	89	He	12.314	ppb	9.3	1256.50	2000	
56	Fe	89	H2	881.875	ppb	1.6	290882.40	100000	
59	Co	89	He	0.342	ppb	82.5	131.12	1000	
60	Ni	89	He	1.076	ppb	59.8	151.12	1000	
63	Cu	89	He	3.997	ppb	145.4	1516.45	2000	
66	Zn	89	He	3.257	ppb	35.7	187.79	2000	
75	As	89	He	0.412	ppb	12.4	17.33	1000	
78	Se	89	H2	0.199	ppb	45.4	3.67	1000	
88	Sr	89	He	3.622	ppb	11.9	553.36	2000	
95	Mo	89	He	-0.361	ppb	N/A	62.22	1000	
107	Ag	89	He	0.019	ppb	140.6	22.22	100	
111	Cd	89	He	0.119	ppb	142.2	10.37	1000	
118	Sn	159	He	1.115	ppb	19.0	266.68	1000	
121	Sb	159	No Gas	0.148	ppb	10.8	330.37	1000	
137	Ba	159	No Gas	6.297	ppb	6.2	3868.22	2000	
182	W	159	No Gas	0.146	ppb	52.6	303.68	1000	
205	Tl	209	No Gas	0.081	ppb	29.0	250.28	1000	
208	Pb	209	No Gas	10.990	ppb	8.0	42007.52	2000	
232	Th	209	No Gas	1.374	ppb	28.3	5664.44	1000	
238	U	209	No Gas	0.068	ppb	19.9	256.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1347859.79	2.0	1537409.87	87.67	29.5	120.4	
Sc	45	No Gas	3402902.55	2.3	3373253.08	100.88	29.5	120.4	
Sc	45	H2	391059.16	1.0	415670.69	94.08	29.5	120.4	
Sc	45	He	79394.11	0.8	81171.76	97.81	29.5	120.4	
Ge	72	No Gas	797884.86	2.2	779333.11	102.38	29.5	120.4	
Ge	72	H2	145182.79	1.3	153246.58	94.74	29.5	120.4	
Ge	72	He	62597.78	0.8	63135.03	99.15	29.5	120.4	
Y	89	H2	2567702.17	1.6	2642116.11	97.18	29.5	120.4	
Y	89	He	536025.92	1.1	544041.92	98.53	29.5	120.4	
Tb	159	No Gas	8633528.55	1.9	8117023.84	106.36	29.5	120.4	
Tb	159	He	2916599.99	0.9	2866479.19	101.75	29.5	120.4	
Bi	209	No Gas	4671807.06	2.4	4424692.92	105.58	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	084_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:52:44 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.095	ppb	3.2	28661.22	25	100.38	89.8	110.2	
11	B	6	No Gas	24.628	ppb	3.1	19268.91	25	98.51	89.8	110.2	
23	Na	45	He	4987.380	ppb	1.9	547447.01	5000	99.75	89.8	110.2	
24	Mg	45	He	4845.593	ppb	2.6	290025.99	5000	96.91	89.8	110.2	
27	Al	45	He	476.024	ppb	1.3	11061.30	500	95.2	89.8	110.2	
28	Si	45	H2	505.359	ppb	2.6	20337.28	500	101.07	89.8	110.2	
39	K	45	He	4864.563	ppb	2.0	263720.70	5000	97.29	89.8	110.2	
40	Ca	45	H2	5078.845	ppb	4.0	1931986.33	5000	101.58	89.8	110.2	
51	V	89	He	24.634	ppb	2.1	20897.22	25	98.54	89.8	110.2	
52	Cr	89	He	24.691	ppb	1.8	25603.75	25	98.76	89.8	110.2	
55	Mn	89	He	24.676	ppb	2.3	12191.07	25	98.7	89.8	110.2	
56	Fe	89	H2	5069.083	ppb	4.5	7847570.00	5000	101.38	89.8	110.2	
59	Co	89	He	25.386	ppb	1.9	44535.30	25	101.54	89.8	110.2	
60	Ni	89	He	25.078	ppb	2.2	12502.69	25	100.31	89.8	110.2	
63	Cu	89	He	25.116	ppb	0.7	34272.83	25	100.46	89.8	110.2	
66	Zn	89	He	25.237	ppb	4.5	4722.08	25	100.95	89.8	110.2	
75	As	89	He	24.754	ppb	1.5	3741.92	25	99.02	89.8	110.2	
78	Se	89	H2	25.398	ppb	2.9	1958.22	25	101.59	89.8	110.2	
88	Sr	89	He	24.220	ppb	2.2	17865.56	25	96.88	89.8	110.2	
95	Mo	89	He	24.272	ppb	3.0	20671.79	25	97.09	89.8	110.2	
107	Ag	89	He	18.786	ppb	2.5	54101.72	25	75.14	89.8	110.2	> +/- 10%
111	Cd	89	He	24.851	ppb	1.4	9536.77	25	99.4	89.8	110.2	
118	Sn	159	He	23.236	ppb	1.7	20053.28	25	92.94	89.8	110.2	
121	Sb	159	No Gas	24.208	ppb	1.1	181908.93	25	96.83	89.8	110.2	
137	Ba	159	No Gas	24.105	ppb	0.2	71255.94	25	96.42	89.8	110.2	
182	W	159	No Gas	23.841	ppb	2.4	142598.67	25	95.36	89.8	110.2	
205	Tl	209	No Gas	24.086	ppb	2.4	321470.24	25	96.34	89.8	110.2	
208	Pb	209	No Gas	25.559	ppb	1.5	471642.08	25	102.24	89.8	110.2	
232	Th	209	No Gas	23.738	ppb	2.6	458611.58	25	94.95	89.8	110.2	
238	U	209	No Gas	24.006	ppb	2.0	435187.34	25	96.02	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1317256.40	1.8	1537409.87	85.68	29.5	120.4	
Sc	45	No Gas	3289645.49	0.8	3373253.08	97.52	29.5	120.4	
Sc	45	H2	379454.82	2.8	415670.69	91.29	29.5	120.4	
Sc	45	He	78166.25	2.0	81171.76	96.3	29.5	120.4	
Ge	72	No Gas	766377.87	1.3	779333.11	98.34	29.5	120.4	
Ge	72	H2	141938.02	2.4	153246.58	92.62	29.5	120.4	
Ge	72	He	61153.24	1.3	63135.03	96.86	29.5	120.4	
Y	89	H2	2481129.01	3.1	2642116.11	93.91	29.5	120.4	
Y	89	He	523647.47	1.4	544041.92	96.25	29.5	120.4	
Tb	159	No Gas	8351043.56	0.8	8117023.84	102.88	29.5	120.4	
Tb	159	He	2874507.11	0.7	2866479.19	100.28	29.5	120.4	
Bi	209	No Gas	4535523.70	0.8	4424692.92	102.5	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	085_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 6:55:22 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.040	ppb	25.2	64.45	0.2	
11	B	6	No Gas	1.639	ppb	5.8	2101.34	4	
23	Na	45	He	45.654	ppb	9.5	10492.26	200	
24	Mg	45	He	-1.755	ppb	N/A	475.60	20	
27	Al	45	He	-0.782	ppb	N/A	28.89	20	
28	Si	45	H2	6.743	ppb	11.8	497.23	100	
39	K	45	He	17.187	ppb	44.7	11137.72	200	
40	Ca	45	H2	5.489	ppb	12.6	3819.56	20	
51	V	89	He	1.331	ppb	5.3	1325.67	1	Fail All Methods□ Failed DoD
52	Cr	89	He	0.121	ppb	28.8	157.31	1	
55	Mn	89	He	0.205	ppb	15.5	111.98	0.4	Failed DoD
56	Fe	89	H2	2.356	ppb	5.7	11701.23	20	
59	Co	89	He	0.009	ppb	47.0	24.45	0.2	
60	Ni	89	He	-0.009	ppb	N/A	35.56	0.4	
63	Cu	89	He	0.074	ppb	35.4	503.36	0.6	
66	Zn	89	He	0.139	ppb	31.7	87.78	2	
75	As	89	He	0.069	ppb	11.2	14.67	1	
78	Se	89	H2	0.078	ppb	21.4	6.50	1	
88	Sr	89	He	0.011	ppb	103.2	14.44	1	
95	Mo	89	He	-0.006	ppb	N/A	115.56	1	
107	Ag	89	He	0.003	ppb	161.5	17.78	0.2	
111	Cd	89	He	0.008	ppb	21.4	4.07	0.2	
118	Sn	159	He	0.348	ppb	11.9	370.02	1	
121	Sb	159	No Gas	0.028	ppb	35.0	323.70	0.2	
137	Ba	159	No Gas	0.029	ppb	16.3	106.78	0.4	
182	W	159	No Gas	0.102	ppb	6.9	767.55	1	
205	Tl	209	No Gas	0.022	ppb	29.5	343.72	0.2	
208	Pb	209	No Gas	1.559	ppb	0.6	30244.54	0.2	Fail All Methods□ Failed DoD
232	Th	209	No Gas	0.183	ppb	27.7	3891.72	1	
238	U	209	No Gas	0.015	ppb	19.0	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1367835.14	2.2	1537409.87	88.97	29.5	120.4	
Sc	45	No Gas	3333672.77	2.4	3373253.08	98.83	29.5	120.4	
Sc	45	H2	372947.44	1.0	415670.69	89.72	29.5	120.4	
Sc	45	He	75207.95	0.5	81171.76	92.65	29.5	120.4	
Ge	72	No Gas	787312.68	2.2	779333.11	101.02	29.5	120.4	
Ge	72	H2	136438.18	0.9	153246.58	89.03	29.5	120.4	
Ge	72	He	58989.22	1.0	63135.03	93.43	29.5	120.4	
Y	89	H2	2472962.15	0.8	2642116.11	93.6	29.5	120.4	
Y	89	He	517462.89	0.9	544041.92	95.11	29.5	120.4	
Tb	159	No Gas	8753189.80	2.3	8117023.84	107.84	29.5	120.4	
Tb	159	He	2868144.02	0.7	2866479.19	100.06	29.5	120.4	
Bi	209	No Gas	4739869.75	2.3	4424692.92	107.12	29.5	120.4	

Sample Report

Sample Name SN5394-003

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 6:58:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.112	ppb	34.6	38.89	100	
11	B	6	No Gas	119.647	ppb	4.6	17343.10	1000	
23	Na	45	He	89253.671	ppb	1.3	1770878.85	200000	
24	Mg	45	He	9127.514	ppb	0.6	99886.82	200000	
27	Al	45	He	9.618	ppb	21.4	84.45	200000	
28	Si	45	H2	3611.407	ppb	2.7	26905.26	10000	
39	K	45	He	9997.572	ppb	0.3	104484.73	200000	
40	Ca	45	H2	110519.247	ppb	2.4	7806270.86	200000	
51	V	89	He	1.074	ppb	14.3	384.46	1000	
52	Cr	89	He	0.868	ppb	7.5	203.30	2000	
55	Mn	89	He	105.152	ppb	1.3	9874.36	2000	
56	Fe	89	H2	1245.950	ppb	0.9	380992.11	100000	
59	Co	89	He	0.542	ppb	7.3	188.91	1000	
60	Ni	89	He	8.167	ppb	5.1	810.05	1000	
63	Cu	89	He	6.300	ppb	3.5	2003.55	2000	
66	Zn	89	He	64.448	ppb	6.1	2322.50	2000	
75	As	89	He	1.456	ppb	15.6	46.01	1000	
78	Se	89	H2	0.170	ppb	31.4	3.00	1000	
88	Sr	89	He	462.442	ppb	1.1	64807.91	2000	
95	Mo	89	He	-0.409	ppb	N/A	50.00	1000	
107	Ag	89	He	0.022	ppb	33.6	22.22	100	
111	Cd	89	He	0.453	ppb	10.3	34.07	1000	
118	Sn	159	He	0.727	ppb	11.0	193.34	1000	
121	Sb	159	No Gas	0.233	ppb	10.1	447.18	1000	
137	Ba	159	No Gas	174.949	ppb	5.6	103791.80	2000	
182	W	159	No Gas	0.120	ppb	59.5	263.63	1000	
205	Tl	209	No Gas	0.024	ppb	72.1	90.10	1000	
208	Pb	209	No Gas	4.374	ppb	2.0	16325.60	2000	
232	Th	209	No Gas	0.007	ppb	118.9	196.89	1000	
238	U	209	No Gas	0.271	ppb	12.7	984.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1219519.75	3.3	1537409.87	79.32	29.5	120.4	
Sc	45	No Gas	3060919.72	3.2	3373253.08	90.74	29.5	120.4	
Sc	45	H2	352457.35	3.4	415670.69	84.79	29.5	120.4	
Sc	45	He	71192.88	1.2	81171.76	87.71	29.5	120.4	
Ge	72	No Gas	729446.33	3.2	779333.11	93.6	29.5	120.4	
Ge	72	H2	132002.33	2.2	153246.58	86.14	29.5	120.4	
Ge	72	He	57444.64	0.8	63135.03	90.99	29.5	120.4	
Y	89	H2	2400538.14	2.1	2642116.11	90.86	29.5	120.4	
Y	89	He	497518.96	1.1	544041.92	91.45	29.5	120.4	
Tb	159	No Gas	8388887.72	2.6	8117023.84	103.35	29.5	120.4	
Tb	159	He	2829756.63	0.8	2866479.19	98.72	29.5	120.4	
Bi	209	No Gas	4536270.02	3.1	4424692.92	102.52	29.5	120.4	

Sample Report

Sample Name SN5394-004

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:00:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.108	ppb	11.8	37.78	100	
11	B	6	No Gas	126.981	ppb	7.9	18334.36	1000	
23	Na	45	He	62472.417	ppb	0.8	1268688.84	200000	
24	Mg	45	He	26639.078	ppb	1.1	296899.44	200000	
27	Al	45	He	3.266	ppb	75.3	58.89	200000	
28	Si	45	H2	8045.042	ppb	1.6	61135.42	10000	
39	K	45	He	16201.856	ppb	1.0	166892.54	200000	
40	Ca	45	H2	106722.779	ppb	0.9	7724867.45	200000	
51	V	89	He	2.420	ppb	6.4	608.92	1000	
52	Cr	89	He	0.633	ppb	17.9	159.31	2000	
55	Mn	89	He	1384.567	ppb	0.5	131968.60	2000	
56	Fe	89	H2	11834.506	ppb	1.4	3617619.60	100000	
59	Co	89	He	4.195	ppb	7.3	1429.06	1000	
60	Ni	89	He	7.708	ppb	1.8	778.94	1000	
63	Cu	89	He	0.501	ppb	38.0	525.59	2000	
66	Zn	89	He	3.465	ppb	17.6	184.45	2000	
75	As	89	He	62.683	ppb	2.6	1831.66	1000	
78	Se	89	H2	0.068	ppb	82.2	1.50	1000	
88	Sr	89	He	454.495	ppb	0.5	64721.93	2000	
95	Mo	89	He	3.929	ppb	1.4	760.05	1000	
107	Ag	89	He	0.023	ppb	102.1	23.33	100	
111	Cd	89	He	0.061	ppb	42.7	5.56	1000	
118	Sn	159	He	0.685	ppb	35.1	188.90	1000	
121	Sb	159	No Gas	0.053	ppb	81.3	180.20	1000	
137	Ba	159	No Gas	58.043	ppb	7.4	35115.16	2000	
182	W	159	No Gas	0.318	ppb	27.1	510.58	1000	
205	Tl	209	No Gas	0.014	ppb	32.7	66.74	1000	
208	Pb	209	No Gas	3.625	ppb	13.5	13741.64	2000	
232	Th	209	No Gas	0.021	ppb	22.6	256.96	1000	
238	U	209	No Gas	57.782	ppb	7.4	212673.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1218708.85	3.5	1537409.87	79.27	29.5	120.4	
Sc	45	No Gas	3124940.19	4.1	3373253.08	92.64	29.5	120.4	
Sc	45	H2	361001.64	0.6	415670.69	86.85	29.5	120.4	
Sc	45	He	72766.63	0.4	81171.76	89.65	29.5	120.4	
Ge	72	No Gas	748729.11	3.7	779333.11	96.07	29.5	120.4	
Ge	72	H2	134809.54	1.2	153246.58	87.97	29.5	120.4	
Ge	72	He	58241.91	0.4	63135.03	92.25	29.5	120.4	
Y	89	H2	2444554.39	0.9	2642116.11	92.52	29.5	120.4	
Y	89	He	505503.57	0.4	544041.92	92.92	29.5	120.4	
Tb	159	No Gas	8558229.04	3.5	8117023.84	105.44	29.5	120.4	
Tb	159	He	2869494.05	0.2	2866479.19	100.11	29.5	120.4	
Bi	209	No Gas	4612416.27	3.9	4424692.92	104.24	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG08IMS1
File Name	088_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:03:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.100	ppb	77.1	36.67	0.5	
B	11	6	No Gas	8.776	ppb	1.3	1982.43	10	
Na	23	45	He	274.648	ppb	10.7	11303.64	500	
Mg	24	45	He	5.062	ppb	63.7	626.73	50	
Al	27	45	He	3.029	ppb	84.6	58.89	50	
Si	28	45	H2	27.014	ppb	10.1	433.82	250	
K	39	45	He	101.958	ppb	23.9	11149.39	500	
Ca	40	45	H2	87.408	ppb	5.9	8101.50	50	PB 6020 Fails DoD
V	51	89	He	4.720	ppb	1.4	1002.29	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.794	ppb	12.7	195.96	2.5	
Mn	55	89	He	1.631	ppb	9.2	170.64	1	PB 6020 Fails DoD
Fe	56	89	H2	16.836	ppb	12.3	13234.46	50	
Co	59	89	He	0.027	ppb	42.2	17.78	0.5	
Ni	60	89	He	0.678	ppb	28.4	106.67	1	
Cu	63	89	He	0.439	ppb	29.5	520.03	1.5	
Zn	66	89	He	9.593	ppb	6.2	411.13	5	PB 6020 Fails DoD
As	75	89	He	0.276	ppb	22.5	12.67	2.5	
Se	78	89	H2	0.089	ppb	57.1	1.83	2.5	
Sr	88	89	He	0.287	ppb	39.7	47.78	2.5	
Mo	95	89	He	-0.527	ppb	N/A	32.22	2.5	
Ag	107	89	He	0.007	ppb	93.4	14.45	0.5	
Cd	111	89	He	0.011	ppb	285.2	1.85	0.5	
Sn	118	159	He	43.460	ppb	1.7	7639.10	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.029	ppb	87.2	143.49	0.5	
Ba	137	159	No Gas	0.384	ppb	33.3	250.28	1	
W	182	159	No Gas	-0.014	ppb	N/A	106.79	2.5	
Tl	205	209	No Gas	0.005	ppb	101.7	43.38	0.5	
Pb	208	209	No Gas	3.613	ppb	4.5	13995.36	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.006	ppb	152.7	200.23	2.5	
U	238	209	No Gas	0.043	ppb	23.7	163.52	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1236904.12	0.7	1537409.87	80.45	29.5	120.4	
Sc	45	No Gas	3127034.06	0.6	3373253.08	92.7	29.5	120.4	
Sc	45	H2	364004.55	1.3	415670.69	87.57	29.5	120.4	
Sc	45	He	74224.43	1.8	81171.76	91.44	29.5	120.4	
Ge	72	No Gas	751387.58	0.7	779333.11	96.41	29.5	120.4	
Ge	72	H2	135780.70	2.5	153246.58	88.6	29.5	120.4	
Ge	72	He	58967.01	1.9	63135.03	93.4	29.5	120.4	
Y	89	H2	2468863.93	1.3	2642116.11	93.44	29.5	120.4	
Y	89	He	516060.04	2.1	544041.92	94.86	29.5	120.4	
Tb	159	No Gas	8568997.79	1.0	8117023.84	105.57	29.5	120.4	
Tb	159	He	2909622.07	1.3	2866479.19	101.51	29.5	120.4	
Bi	209	No Gas	4698077.08	0.6	4424692.92	106.18	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG08IMS1
File Name	089LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:06:03 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.087	ppb	1.1	10685.40	50	20.03	79.5	120.4	
B	11	6	No Gas	505.721	ppb	1.4	71538.44	500	20.23	79.5	120.4	
Na	23	45	He	7936.250	ppb	1.4	169566.80	7500	21.16	79.5	120.4	
Mg	24	45	He	4954.023	ppb	0.9	56864.40	5000	19.82	79.5	120.4	
Al	27	45	He	1820.831	ppb	2.6	8058.12	2000	18.21	79.5	120.4	
Si	28	45	H2	1032.542	ppb	10.1	7750.74	1000	20.65	79.5	120.4	
K	39	45	He	10159.250	ppb	2.7	110674.65	10000	20.32	79.5	120.4	
Ca	40	45	H2	2790.475	ppb	13.7	195738.60	2500	22.32	79.5	120.4	
V	51	89	He	486.565	ppb	3.1	81090.20	500	19.46	79.5	120.4	
Cr	52	89	He	198.430	ppb	2.8	40732.24	200	19.84	79.5	120.4	
Mn	55	89	He	487.041	ppb	1.9	47625.18	500	19.48	79.5	120.4	
Fe	56	89	H2	1109.589	ppb	13.9	334015.49	1000	22.19	79.5	120.4	
Co	59	89	He	505.436	ppb	1.6	175614.57	500	20.22	79.5	120.4	
Ni	60	89	He	485.357	ppb	2.9	47810.25	500	19.41	79.5	120.4	
Cu	63	89	He	251.256	ppb	1.3	67500.08	250	20.1	79.5	120.4	
Zn	66	89	He	488.013	ppb	3.6	17909.79	500	19.52	79.5	120.4	
As	75	89	He	100.333	ppb	1.7	3004.99	100	20.07	79.5	120.4	
Se	78	89	H2	105.324	ppb	12.1	1545.18	100	21.06	79.5	120.4	
Sr	88	89	He	495.585	ppb	2.3	72386.70	500	19.82	79.5	120.4	
Mo	95	89	He	103.170	ppb	3.3	17421.63	100	20.63	79.5	120.4	
Ag	107	89	He	53.606	ppb	2.8	30587.49	50	21.44	79.5	120.4	
Cd	111	89	He	254.661	ppb	1.5	19355.03	250	20.37	79.5	120.4	
Sn	118	159	He	513.833	ppb	2.7	90001.26	500	20.55	79.5	120.4	
Sb	121	159	No Gas	98.482	ppb	4.1	151474.77	100	19.7	79.5	120.4	
Ba	137	159	No Gas	1904.843	ppb	3.2	1152275.01	2000	19.05	79.5	120.4	
W	182	159	No Gas	102.121	ppb	2.7	125056.30	100	20.42	79.5	120.4	
Tl	205	209	No Gas	102.557	ppb	2.1	279391.89	100	20.51	79.5	120.4	
[Pb]	206	209	No Gas	106.248	ppb	3.4	99608.62	100	21.25	79.5	120.4	
[Pb]	207	209	No Gas	104.876	ppb	1.8	86212.32	100	20.98	79.5	120.4	
Pb	208	209	No Gas	105.476	ppb	2.2	397291.73	100	21.1	79.5	120.4	
Th	232	209	No Gas	100.282	ppb	1.9	395504.33	100	20.06	79.5	120.4	
U	238	209	No Gas	101.370	ppb	2.0	375103.75	100	20.27	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1228801.83	1.2	1537409.87	79.93	29.5	120.4	
Sc	45	No Gas	3106489.06	3.0	3373253.08	92.09	29.5	120.4	
Sc	45	H2	350055.74	9.8	415670.69	84.21	29.5	120.4	
Sc	45	He	74332.37	0.9	81171.76	91.57	29.5	120.4	
Ge	72	No Gas	754445.80	2.1	779333.11	96.81	29.5	120.4	
Ge	72	H2	133172.61	6.5	153246.58	86.9	29.5	120.4	
Ge	72	He	59709.35	1.2	63135.03	94.57	29.5	120.4	
Y	89	H2	2377452.47	9.6	2642116.11	89.98	29.5	120.4	
Y	89	He	518627.54	1.7	544041.92	95.33	29.5	120.4	
Tb	159	No Gas	8552649.80	3.4	8117023.84	105.37	29.5	120.4	
Tb	159	He	2925708.19	1.9	2866479.19	102.07	29.5	120.4	
Bi	209	No Gas	4630224.12	2.9	4424692.92	104.65	29.5	120.4	

Sample Report

Sample Name SN5147-001

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:08:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.152	ppb	40.4	47.78	100	
11	B	6	No Gas	19.516	ppb	3.7	3510.55	1000	
23	Na	45	He	254.643	ppb	5.8	10956.31	200000	
24	Mg	45	He	99.427	ppb	9.6	1706.89	200000	
27	Al	45	He	1226.079	ppb	2.0	5463.45	200000	
28	Si	45	H2	605.430	ppb	8.8	4963.24	10000	
39	K	45	He	157.618	ppb	7.8	11764.57	200000	
40	Ca	45	H2	1920.245	ppb	1.3	145050.38	200000	
51	V	89	He	6.926	ppb	1.3	1371.22	1000	
52	Cr	89	He	2.769	ppb	2.8	600.57	2000	
55	Mn	89	He	16.165	ppb	1.6	1589.81	2000	
56	Fe	89	H2	554.233	ppb	0.5	180986.58	100000	
59	Co	89	He	0.283	ppb	21.0	106.68	1000	
60	Ni	89	He	0.992	ppb	25.3	137.78	1000	
63	Cu	89	He	3.657	ppb	13.4	1380.12	2000	
66	Zn	89	He	11.771	ppb	2.8	492.25	2000	
75	As	89	He	0.633	ppb	7.5	23.33	1000	
78	Se	89	H2	0.538	ppb	24.9	8.83	1000	
88	Sr	89	He	9.503	ppb	7.8	1392.35	2000	
95	Mo	89	He	-0.016	ppb	N/A	117.78	1000	
107	Ag	89	He	0.020	ppb	72.0	22.22	100	
111	Cd	89	He	0.137	ppb	21.6	11.48	1000	
118	Sn	159	He	43.063	ppb	3.1	7535.72	1000	
121	Sb	159	No Gas	0.265	ppb	8.0	517.26	1000	
137	Ba	159	No Gas	14.534	ppb	3.0	8999.77	2000	
182	W	159	No Gas	0.105	ppb	22.0	256.96	1000	
205	Tl	209	No Gas	0.088	ppb	59.0	276.98	1000	
208	Pb	209	No Gas	33.122	ppb	3.9	128628.99	2000	
232	Th	209	No Gas	2.302	ppb	15.1	9551.03	1000	
238	U	209	No Gas	0.321	ppb	7.1	1228.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1241963.87	2.0	1537409.87	80.78	29.5	120.4	
Sc	45	No Gas	3180311.42	2.2	3373253.08	94.28	29.5	120.4	
Sc	45	H2	372276.29	1.3	415670.69	89.56	29.5	120.4	
Sc	45	He	74627.11	0.6	81171.76	91.94	29.5	120.4	
Ge	72	No Gas	774044.96	2.3	779333.11	99.32	29.5	120.4	
Ge	72	H2	137064.41	0.7	153246.58	89.44	29.5	120.4	
Ge	72	He	59286.40	0.3	63135.03	93.9	29.5	120.4	
Y	89	H2	2499169.99	1.4	2642116.11	94.59	29.5	120.4	
Y	89	He	517652.88	0.6	544041.92	95.15	29.5	120.4	
Tb	159	No Gas	8731298.55	2.2	8117023.84	107.57	29.5	120.4	
Tb	159	He	2896511.10	0.3	2866479.19	101.05	29.5	120.4	
Bi	209	No Gas	4769582.80	2.1	4424692.92	107.79	29.5	120.4	

Sample Report

Sample Name SN5147-003

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:11:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.193	ppb	20.1	56.67	100	
11	B	6	No Gas	11.048	ppb	3.0	2303.59	1000	
23	Na	45	He	224.702	ppb	6.0	10318.51	200000	
24	Mg	45	He	134.843	ppb	0.7	2106.98	200000	
27	Al	45	He	1595.173	ppb	1.3	7081.99	200000	
28	Si	45	H2	744.382	ppb	6.6	5954.81	10000	
39	K	45	He	171.115	ppb	10.9	11877.97	200000	
40	Ca	45	H2	2606.403	ppb	1.4	193283.86	200000	
51	V	89	He	7.485	ppb	2.9	1461.24	1000	
52	Cr	89	He	5.576	ppb	7.8	1173.17	2000	
55	Mn	89	He	18.976	ppb	4.3	1860.46	2000	
56	Fe	89	H2	843.233	ppb	1.9	269521.39	100000	
59	Co	89	He	0.386	ppb	15.2	142.24	1000	
60	Ni	89	He	0.813	ppb	28.2	120.01	1000	
63	Cu	89	He	5.437	ppb	4.6	1851.30	2000	
66	Zn	89	He	16.737	ppb	6.7	672.26	2000	
75	As	89	He	0.790	ppb	25.5	28.00	1000	
78	Se	89	H2	0.412	ppb	24.8	6.83	1000	
88	Sr	89	He	12.152	ppb	4.8	1774.62	2000	
95	Mo	89	He	-0.142	ppb	N/A	96.67	1000	
107	Ag	89	He	0.030	ppb	58.5	27.78	100	
111	Cd	89	He	0.089	ppb	58.7	7.78	1000	
118	Sn	159	He	41.476	ppb	1.8	7285.57	1000	
121	Sb	159	No Gas	0.126	ppb	25.8	293.66	1000	
137	Ba	159	No Gas	16.851	ppb	2.8	10258.71	2000	
182	W	159	No Gas	0.003	ppb	658.0	126.81	1000	
205	Tl	209	No Gas	0.017	ppb	73.3	76.75	1000	
208	Pb	209	No Gas	23.920	ppb	3.6	92058.47	2000	
232	Th	209	No Gas	1.776	ppb	6.1	7320.37	1000	
238	U	209	No Gas	0.467	ppb	20.3	1765.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237410.94	1.0	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3135227.59	0.9	3373253.08	92.94	29.5	120.4	
Sc	45	H2	366633.49	0.8	415670.69	88.2	29.5	120.4	
Sc	45	He	74500.89	0.2	81171.76	91.78	29.5	120.4	
Ge	72	No Gas	761033.75	1.2	779333.11	97.65	29.5	120.4	
Ge	72	H2	137714.70	1.8	153246.58	89.86	29.5	120.4	
Ge	72	He	59124.92	0.5	63135.03	93.65	29.5	120.4	
Y	89	H2	2484762.62	0.8	2642116.11	94.04	29.5	120.4	
Y	89	He	516738.05	1.0	544041.92	94.98	29.5	120.4	
Tb	159	No Gas	8587056.47	0.4	8117023.84	105.79	29.5	120.4	
Tb	159	He	2906549.09	0.4	2866479.19	101.4	29.5	120.4	
Bi	209	No Gas	4722128.63	0.7	4424692.92	106.72	29.5	120.4	

Sample Report

Sample Name SN5147-004

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:14:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	52.8	44.44	100	
11	B	6	No Gas	11.053	ppb	3.4	2294.71	1000	
23	Na	45	He	208.057	ppb	10.3	9847.66	200000	
24	Mg	45	He	91.036	ppb	5.4	1589.08	200000	
27	Al	45	He	1199.430	ppb	3.2	5270.03	200000	
28	Si	45	H2	595.595	ppb	5.8	4776.27	10000	
39	K	45	He	121.216	ppb	42.1	11239.40	200000	
40	Ca	45	H2	1700.069	ppb	0.5	125834.44	200000	
51	V	89	He	7.055	ppb	2.6	1376.79	1000	
52	Cr	89	He	2.599	ppb	8.7	559.25	2000	
55	Mn	89	He	17.059	ppb	5.3	1657.13	2000	
56	Fe	89	H2	539.693	ppb	0.6	173945.78	100000	
59	Co	89	He	0.326	ppb	28.2	120.01	1000	
60	Ni	89	He	1.078	ppb	11.1	144.45	1000	
63	Cu	89	He	2.243	ppb	2.7	991.18	2000	
66	Zn	89	He	11.439	ppb	1.9	474.47	2000	
75	As	89	He	0.519	ppb	30.6	19.67	1000	
78	Se	89	H2	0.220	ppb	45.2	3.83	1000	
88	Sr	89	He	7.838	ppb	5.0	1135.64	2000	
95	Mo	89	He	-0.183	ppb	N/A	88.89	1000	
107	Ag	89	He	0.011	ppb	233.9	16.67	100	
111	Cd	89	He	0.035	ppb	64.1	3.70	1000	
118	Sn	159	He	41.414	ppb	1.8	7221.09	1000	
121	Sb	159	No Gas	0.089	ppb	45.4	236.93	1000	
137	Ba	159	No Gas	12.037	ppb	2.6	7370.32	2000	
182	W	159	No Gas	-0.025	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.009	ppb	60.0	53.39	1000	
208	Pb	209	No Gas	15.712	ppb	3.4	60576.92	2000	
232	Th	209	No Gas	0.976	ppb	4.6	4105.27	1000	
238	U	209	No Gas	0.260	ppb	11.8	984.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232509.16	1.1	1537409.87	80.17	29.5	120.4	
Sc	45	No Gas	3154436.36	0.8	3373253.08	93.51	29.5	120.4	
Sc	45	H2	364166.60	0.5	415670.69	87.61	29.5	120.4	
Sc	45	He	73592.16	1.8	81171.76	90.66	29.5	120.4	
Ge	72	No Gas	762148.62	2.0	779333.11	97.79	29.5	120.4	
Ge	72	H2	137239.02	1.2	153246.58	89.55	29.5	120.4	
Ge	72	He	58669.90	0.2	63135.03	92.93	29.5	120.4	
Y	89	H2	2463681.80	0.2	2642116.11	93.25	29.5	120.4	
Y	89	He	511665.45	0.9	544041.92	94.05	29.5	120.4	
Tb	159	No Gas	8631166.19	0.8	8117023.84	106.33	29.5	120.4	
Tb	159	He	2884912.11	0.7	2866479.19	100.64	29.5	120.4	
Bi	209	No Gas	4725597.04	0.9	4424692.92	106.8	29.5	120.4	

Sample Report

Sample Name SN5338-001

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:16:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.336	ppb	26.7	85.56	100	
11	B	6	No Gas	67.879	ppb	6.0	10137.21	1000	
23	Na	45	He	31909.450	ppb	0.9	632959.27	200000	
24	Mg	45	He	7882.549	ppb	0.7	85837.73	200000	
27	Al	45	He	10719.294	ppb	1.4	44962.64	200000	
28	Si	45	H2	2588.644	ppb	3.6	19164.40	10000	
39	K	45	He	12571.880	ppb	1.4	128130.65	200000	
40	Ca	45	H2	49813.917	ppb	2.5	3487400.68	200000	
51	V	89	He	22.173	ppb	2.3	3743.97	1000	
52	Cr	89	He	82.444	ppb	1.1	16235.05	2000	
55	Mn	89	He	2540.966	ppb	0.9	237997.66	2000	
56	Fe	89	H2	19945.213	ppb	2.5	5992286.82	100000	
59	Co	89	He	11.013	ppb	2.7	3674.11	1000	
60	Ni	89	He	75.093	ppb	2.5	7119.85	1000	
63	Cu	89	He	746.998	ppb	0.7	191484.86	2000	
66	Zn	89	He	1191.451	ppb	0.5	41811.33	2000	
75	As	89	He	12.792	ppb	3.4	370.72	1000	
78	Se	89	H2	5.143	ppb	6.2	77.33	1000	
88	Sr	89	He	331.786	ppb	1.5	46431.53	2000	
95	Mo	89	He	15.540	ppb	2.6	2612.57	1000	
107	Ag	89	He	6.410	ppb	0.5	3512.81	100	
111	Cd	89	He	1.670	ppb	13.1	122.60	1000	
118	Sn	159	He	67.057	ppb	2.3	11495.27	1000	
121	Sb	159	No Gas	5.373	ppb	7.9	8408.65	1000	
137	Ba	159	No Gas	669.669	ppb	4.6	407786.01	2000	
182	W	159	No Gas	6.836	ppb	2.5	8545.69	1000	
205	Tl	209	No Gas	0.144	ppb	18.4	443.83	1000	
208	Pb	209	No Gas	27.681	ppb	4.4	110852.50	2000	
232	Th	209	No Gas	0.922	ppb	10.4	4038.51	1000	
238	U	209	No Gas	3.575	ppb	4.6	14050.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1217613.96	3.5	1537409.87	79.2	29.5	120.4	
Sc	45	No Gas	3080593.06	3.4	3373253.08	91.32	29.5	120.4	
Sc	45	H2	349168.15	2.1	415670.69	84	29.5	120.4	
Sc	45	He	70781.15	0.6	81171.76	87.2	29.5	120.4	
Ge	72	No Gas	738350.55	3.3	779333.11	94.74	29.5	120.4	
Ge	72	H2	129632.45	2.1	153246.58	84.59	29.5	120.4	
Ge	72	He	55824.04	1.0	63135.03	88.42	29.5	120.4	
Y	89	H2	2405325.16	2.2	2642116.11	91.04	29.5	120.4	
Y	89	He	496781.27	0.5	544041.92	91.31	29.5	120.4	
Tb	159	No Gas	8611115.42	3.0	8117023.84	106.09	29.5	120.4	
Tb	159	He	2847233.60	0.2	2866479.19	99.33	29.5	120.4	
Bi	209	No Gas	4918635.44	3.0	4424692.92	111.16	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMS1
File Name	094_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:19:24 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.028	ppb	N/A	8.89	0.5	
B	11	6	No Gas	5.925	ppb	4.5	1537.92	10	
Na	23	45	He	169.531	ppb	0.6	8959.50	500	
Mg	24	45	He	4.801	ppb	87.5	611.17	50	
Al	27	45	He	10.743	ppb	31.4	91.11	50	
Si	28	45	H2	8.552	ppb	119.2	283.65	250	
K	39	45	He	81.057	ppb	37.7	10725.92	500	
Ca	40	45	H2	55.869	ppb	2.9	5607.99	50	PB 6020 Fails DoD
V	51	89	He	3.015	ppb	5.4	707.82	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.716	ppb	4.0	377.27	2.5	
Mn	55	89	He	1.801	ppb	6.8	183.97	1	PB 6020 Fails DoD
Fe	56	89	H2	16.434	ppb	8.1	12746.72	50	
Co	59	89	He	0.087	ppb	57.0	37.78	0.5	
Ni	60	89	He	0.364	ppb	38.3	74.45	1	
Cu	63	89	He	-0.013	ppb	N/A	393.36	1.5	
Zn	66	89	He	3.666	ppb	33.2	192.23	5	
As	75	89	He	0.352	ppb	61.4	14.67	2.5	
Se	78	89	H2	0.092	ppb	110.8	1.83	2.5	
Sr	88	89	He	0.151	ppb	50.2	27.78	2.5	
Mo	95	89	He	-0.537	ppb	N/A	30.00	2.5	
Ag	107	89	He	0.013	ppb	51.4	17.78	0.5	
Cd	111	89	He	0.001	ppb	1454.7	1.11	0.5	
Sn	118	159	He	38.763	ppb	1.0	6759.72	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.022	ppb	55.1	133.48	0.5	
Ba	137	159	No Gas	0.516	ppb	34.3	333.71	1	
W	182	159	No Gas	-0.055	ppb	N/A	56.73	2.5	
Tl	205	209	No Gas	-0.001	ppb	N/A	26.69	0.5	
Pb	208	209	No Gas	1.109	ppb	4.4	4448.63	0.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.010	ppb	37.7	220.25	2.5	
U	238	209	No Gas	0.002	ppb	273.6	10.01	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203951.21	2.7	1537409.87	78.31	29.5	120.4	
Sc	45	No Gas	3056469.72	2.7	3373253.08	90.61	29.5	120.4	
Sc	45	H2	351807.43	0.8	415670.69	84.64	29.5	120.4	
Sc	45	He	72741.94	0.8	81171.76	89.61	29.5	120.4	
Ge	72	No Gas	741077.59	2.4	779333.11	95.09	29.5	120.4	
Ge	72	H2	133519.32	0.5	153246.58	87.13	29.5	120.4	
Ge	72	He	58107.72	1.1	63135.03	92.04	29.5	120.4	
Y	89	H2	2399679.39	0.9	2642116.11	90.82	29.5	120.4	
Y	89	He	507212.40	0.6	544041.92	93.23	29.5	120.4	
Tb	159	No Gas	8595398.00	3.2	8117023.84	105.89	29.5	120.4	
Tb	159	He	2883396.10	0.6	2866479.19	100.59	29.5	120.4	
Bi	209	No Gas	4723541.92	3.3	4424692.92	106.75	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG09IMS1
File Name	095LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:22:01 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.498	ppb	4.9	10329.59	50	19.4	79.5	120.4	
B	11	6	No Gas	498.845	ppb	6.1	70442.99	500	19.95	79.5	120.4	
Na	23	45	He	7288.815	ppb	1.4	154430.58	7500	19.44	79.5	120.4	
Mg	24	45	He	5044.538	ppb	1.8	57241.78	5000	20.18	79.5	120.4	
Al	27	45	He	1796.902	ppb	1.7	7863.54	2000	17.97	79.5	120.4	
Si	28	45	H2	897.829	ppb	5.5	7019.59	1000	17.96	79.5	120.4	
K	39	45	He	9818.957	ppb	1.2	106105.78	10000	19.64	79.5	120.4	
Ca	40	45	H2	2531.927	ppb	1.8	184916.18	2500	20.26	79.5	120.4	
V	51	89	He	473.961	ppb	0.7	77871.29	500	18.96	79.5	120.4	
Cr	52	89	He	194.968	ppb	0.6	39451.44	200	19.5	79.5	120.4	
Mn	55	89	He	480.825	ppb	0.2	46342.53	500	19.23	79.5	120.4	
Fe	56	89	H2	1041.575	ppb	2.3	325455.34	1000	20.83	79.5	120.4	
Co	59	89	He	498.666	ppb	0.3	170766.88	500	19.95	79.5	120.4	
Ni	60	89	He	477.536	ppb	0.8	46369.90	500	19.1	79.5	120.4	
Cu	63	89	He	246.023	ppb	0.8	65149.08	250	19.68	79.5	120.4	
Zn	66	89	He	484.382	ppb	1.1	17523.78	500	19.38	79.5	120.4	
As	75	89	He	99.642	ppb	2.7	2941.31	100	19.93	79.5	120.4	
Se	78	89	H2	98.869	ppb	2.0	1502.18	100	19.77	79.5	120.4	
Sr	88	89	He	487.054	ppb	1.3	70121.56	500	19.48	79.5	120.4	
Mo	95	89	He	101.686	ppb	1.4	16928.83	100	20.34	79.5	120.4	
Ag	107	89	He	52.709	ppb	0.6	29642.07	50	21.08	79.5	120.4	
Cd	111	89	He	252.060	ppb	0.9	18881.41	250	20.16	79.5	120.4	
Sn	118	159	He	500.678	ppb	1.5	87219.38	500	20.03	79.5	120.4	
Sb	121	159	No Gas	95.176	ppb	5.4	147890.88	100	19.04	79.5	120.4	
Ba	137	159	No Gas	1812.428	ppb	5.1	1107472.35	2000	18.12	79.5	120.4	
W	182	159	No Gas	97.518	ppb	6.0	120599.31	100	19.5	79.5	120.4	
Tl	205	209	No Gas	98.094	ppb	4.0	272261.56	100	19.62	79.5	120.4	
[Pb]	206	209	No Gas	99.184	ppb	4.8	94742.79	100	19.84	79.5	120.4	
[Pb]	207	209	No Gas	99.223	ppb	5.8	83066.09	100	19.84	79.5	120.4	
Pb	208	209	No Gas	98.930	ppb	5.4	379545.72	100	19.79	79.5	120.4	
Th	232	209	No Gas	95.433	ppb	6.8	383215.42	100	19.09	79.5	120.4	
U	238	209	No Gas	96.670	ppb	5.2	364340.30	100	19.33	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1227676.48	2.5	1537409.87	79.85	29.5	120.4	
Sc	45	No Gas	3107111.72	3.0	3373253.08	92.11	29.5	120.4	
Sc	45	H2	361051.84	2.3	415670.69	86.86	29.5	120.4	
Sc	45	He	73492.42	0.5	81171.76	90.54	29.5	120.4	
Ge	72	No Gas	753929.07	3.6	779333.11	96.74	29.5	120.4	
Ge	72	H2	134192.58	2.1	153246.58	87.57	29.5	120.4	
Ge	72	He	58609.05	0.3	63135.03	92.83	29.5	120.4	
Y	89	H2	2443654.77	2.2	2642116.11	92.49	29.5	120.4	
Y	89	He	511075.69	0.1	544041.92	93.94	29.5	120.4	
Tb	159	No Gas	8641302.65	2.8	8117023.84	106.46	29.5	120.4	
Tb	159	He	2908930.55	0.6	2866479.19	101.48	29.5	120.4	
Bi	209	No Gas	4719250.80	3.1	4424692.92	106.66	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	096_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:24:44 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.991	ppb	5.1	26852.24	25	99.96	89.8	110.2	
11	B	6	No Gas	25.986	ppb	5.9	19083.14	25	103.94	89.8	110.2	
23	Na	45	He	4975.934	ppb	0.4	517853.52	5000	99.52	89.8	110.2	
24	Mg	45	He	4851.297	ppb	0.6	275320.19	5000	97.03	89.8	110.2	
27	Al	45	He	471.530	ppb	3.4	10387.48	500	94.31	89.8	110.2	
28	Si	45	H2	484.354	ppb	3.4	18869.96	500	96.87	89.8	110.2	
39	K	45	He	4884.144	ppb	0.6	250994.36	5000	97.68	89.8	110.2	
40	Ca	45	H2	4946.521	ppb	1.0	1821175.98	5000	98.93	89.8	110.2	
51	V	89	He	23.779	ppb	1.7	19775.61	25	95.12	89.8	110.2	
52	Cr	89	He	24.365	ppb	1.2	24760.44	25	97.46	89.8	110.2	
55	Mn	89	He	24.458	ppb	0.9	11841.50	25	97.83	89.8	110.2	
56	Fe	89	H2	4875.729	ppb	0.3	7470338.04	5000	97.51	89.8	110.2	
59	Co	89	He	24.596	ppb	1.1	42286.26	25	98.38	89.8	110.2	
60	Ni	89	He	24.641	ppb	0.2	12040.02	25	98.56	89.8	110.2	
63	Cu	89	He	24.393	ppb	1.9	32627.74	25	97.57	89.8	110.2	
66	Zn	89	He	23.756	ppb	0.7	4360.83	25	95.02	89.8	110.2	
75	As	89	He	24.042	ppb	0.6	3561.52	25	96.17	89.8	110.2	
78	Se	89	H2	24.678	ppb	0.7	1882.37	25	98.71	89.8	110.2	
88	Sr	89	He	24.082	ppb	1.3	17408.24	25	96.33	89.8	110.2	
95	Mo	89	He	24.435	ppb	0.4	20395.79	25	97.74	89.8	110.2	
107	Ag	89	He	18.631	ppb	1.2	52586.86	25	74.52	89.8	110.2	> +/- 10%
111	Cd	89	He	24.745	ppb	0.6	9305.14	25	98.98	89.8	110.2	
118	Sn	159	He	22.960	ppb	0.4	19828.54	25	91.84	89.8	110.2	
121	Sb	159	No Gas	23.540	ppb	4.9	180203.60	25	94.16	89.8	110.2	
137	Ba	159	No Gas	24.053	ppb	4.5	72437.25	25	96.21	89.8	110.2	
182	W	159	No Gas	23.636	ppb	6.0	143975.27	25	94.54	89.8	110.2	
205	Tl	209	No Gas	23.817	ppb	5.6	325747.00	25	95.27	89.8	110.2	
208	Pb	209	No Gas	23.893	ppb	4.9	451889.69	25	95.57	89.8	110.2	
232	Th	209	No Gas	23.676	ppb	6.1	468671.53	25	94.7	89.8	110.2	
238	U	209	No Gas	23.815	ppb	5.9	442401.15	25	95.26	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239881.90	2.7	1537409.87	80.65	29.5	120.4	
Sc	45	No Gas	3170363.06	3.9	3373253.08	93.99	29.5	120.4	
Sc	45	H2	367010.98	1.4	415670.69	88.29	29.5	120.4	
Sc	45	He	74092.33	0.9	81171.76	91.28	29.5	120.4	
Ge	72	No Gas	751170.88	3.1	779333.11	96.39	29.5	120.4	
Ge	72	H2	136958.68	0.4	153246.58	89.37	29.5	120.4	
Ge	72	He	59244.68	0.8	63135.03	93.84	29.5	120.4	
Y	89	H2	2453147.49	0.3	2642116.11	92.85	29.5	120.4	
Y	89	He	513086.34	0.2	544041.92	94.31	29.5	120.4	
Tb	159	No Gas	8517648.55	3.9	8117023.84	104.94	29.5	120.4	
Tb	159	He	2875983.64	0.4	2866479.19	100.33	29.5	120.4	
Bi	209	No Gas	4653632.90	3.6	4424692.92	105.17	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	097_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:27:21 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	19.7	84.45	0.2	
11	B	6	No Gas	1.756	ppb	9.7	2043.55	4	
23	Na	45	He	34.825	ppb	13.0	9012.91	200	
24	Mg	45	He	-2.479	ppb	N/A	417.82	20	
27	Al	45	He	-1.251	ppb	N/A	17.78	20	
28	Si	45	H2	5.802	ppb	12.9	437.16	100	
39	K	45	He	6.840	ppb	8.9	10224.10	200	
40	Ca	45	H2	4.777	ppb	10.8	3376.09	20	
51	V	89	He	0.850	ppb	9.4	905.62	1	Failed DoD
52	Cr	89	He	0.100	ppb	12.4	132.64	1	
55	Mn	89	He	0.181	ppb	6.8	97.98	0.4	
56	Fe	89	H2	0.390	ppb	98.7	8418.50	20	
59	Co	89	He	0.008	ppb	120.8	22.22	0.2	
60	Ni	89	He	-0.042	ppb	N/A	18.89	0.4	
63	Cu	89	He	-0.007	ppb	N/A	386.69	0.6	
66	Zn	89	He	0.038	ppb	276.3	67.78	2	
75	As	89	He	0.071	ppb	23.8	14.67	1	
78	Se	89	H2	0.068	ppb	53.0	5.50	1	
88	Sr	89	He	0.013	ppb	90.1	15.56	1	
95	Mo	89	He	0.007	ppb	479.3	123.34	1	
107	Ag	89	He	0.007	ppb	9.5	28.89	0.2	
111	Cd	89	He	0.007	ppb	48.5	3.70	0.2	
118	Sn	159	He	0.369	ppb	16.9	390.02	1	
121	Sb	159	No Gas	0.046	ppb	37.7	457.19	0.2	
137	Ba	159	No Gas	0.149	ppb	114.4	477.25	0.4	
182	W	159	No Gas	0.135	ppb	36.0	967.79	1	
205	Tl	209	No Gas	0.043	ppb	68.2	630.75	0.2	
208	Pb	209	No Gas	0.351	ppb	14.5	6971.98	0.2	Fail All Methods□ Failed DoD
232	Th	209	No Gas	0.212	ppb	21.2	4485.89	1	
238	U	209	No Gas	0.040	ppb	74.9	757.60	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273165.02	2.8	1537409.87	82.81	29.5	120.4	
Sc	45	No Gas	3132308.21	2.2	3373253.08	92.86	29.5	120.4	
Sc	45	H2	354378.36	1.3	415670.69	85.25	29.5	120.4	
Sc	45	He	72404.79	0.9	81171.76	89.2	29.5	120.4	
Ge	72	No Gas	750879.42	2.6	779333.11	96.35	29.5	120.4	
Ge	72	H2	131369.37	0.9	153246.58	85.72	29.5	120.4	
Ge	72	He	57093.14	0.6	63135.03	90.43	29.5	120.4	
Y	89	H2	2402799.12	1.2	2642116.11	90.94	29.5	120.4	
Y	89	He	505359.59	0.7	544041.92	92.89	29.5	120.4	
Tb	159	No Gas	8710999.87	2.1	8117023.84	107.32	29.5	120.4	
Tb	159	He	2882796.28	0.2	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4754062.64	2.5	4424692.92	107.44	29.5	120.4	

Sample Report

Sample Name SN5233-006

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:30:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.009	ppb	5.9	1054.52	100	
11	B	6	No Gas	161.023	ppb	5.1	22690.71	1000	
23	Na	45	He	45315.959	ppb	1.5	915279.04	200000	
24	Mg	45	He	55802.569	ppb	1.2	616949.84	200000	
27	Al	45	He	86090.173	ppb	1.0	368331.21	200000	
28	Si	45	H2	2196.638	ppb	3.8	16421.33	10000	
39	K	45	He	25933.397	ppb	1.0	259324.48	200000	
40	Ca	45	H2	60267.586	ppb	1.1	4249687.72	200000	
51	V	89	He	265.022	ppb	0.7	44533.65	1000	
52	Cr	89	He	506.043	ppb	0.2	104442.11	2000	
55	Mn	89	He	1831.460	ppb	0.5	180100.83	2000	
56	Fe	89	H2	147942.363	ppb	1.1	45857050.02	100000	
59	Co	89	He	51.554	ppb	1.7	18023.97	1000	
60	Ni	89	He	144.723	ppb	1.3	14368.95	1000	
63	Cu	89	He	815.661	ppb	0.5	219476.48	2000	
66	Zn	89	He	1100.831	ppb	0.7	40561.05	2000	
75	As	89	He	43.800	ppb	3.7	1321.87	1000	
78	Se	89	H2	2.819	ppb	7.7	44.00	1000	
88	Sr	89	He	296.709	ppb	0.9	43596.48	2000	
95	Mo	89	He	14.944	ppb	2.7	2642.57	1000	
107	Ag	89	He	6.620	ppb	4.1	3808.45	100	
111	Cd	89	He	7.894	ppb	2.2	604.47	1000	
118	Sn	159	He	74.792	ppb	2.5	12893.27	1000	
121	Sb	159	No Gas	0.617	ppb	9.8	1051.21	1000	
137	Ba	159	No Gas	335.474	ppb	4.8	203858.65	2000	
182	W	159	No Gas	1.207	ppb	11.6	1605.25	1000	
205	Tl	209	No Gas	2.220	ppb	7.5	6088.27	1000	
208	Pb	209	No Gas	432.527	ppb	4.4	1632946.26	2000	
232	Th	209	No Gas	43.791	ppb	6.8	173187.13	1000	
238	U	209	No Gas	12.034	ppb	3.8	44656.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1198278.67	2.2	1537409.87	77.94	29.5	120.4	
Sc	45	No Gas	3082313.30	2.4	3373253.08	91.38	29.5	120.4	
Sc	45	H2	351642.49	1.3	415670.69	84.6	29.5	120.4	
Sc	45	He	72258.55	1.1	81171.76	89.02	29.5	120.4	
Ge	72	No Gas	738010.92	2.5	779333.11	94.7	29.5	120.4	
Ge	72	H2	130969.85	1.5	153246.58	85.46	29.5	120.4	
Ge	72	He	57286.91	0.4	63135.03	90.74	29.5	120.4	
Y	89	H2	2483749.21	0.6	2642116.11	94.01	29.5	120.4	
Y	89	He	521550.04	0.3	544041.92	95.87	29.5	120.4	
Tb	159	No Gas	8590704.32	2.1	8117023.84	105.84	29.5	120.4	
Tb	159	He	2864797.01	0.5	2866479.19	99.94	29.5	120.4	
Bi	209	No Gas	4644210.04	2.5	4424692.92	104.96	29.5	120.4	

Sample Report

Sample Name SN5233-007

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:32:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.254	ppb	11.6	906.73	100	
11	B	6	No Gas	169.188	ppb	4.0	24037.25	1000	
23	Na	45	He	54949.746	ppb	0.6	1184631.56	200000	
24	Mg	45	He	43231.792	ppb	1.5	510823.56	200000	
27	Al	45	He	77491.811	ppb	1.3	354238.14	200000	
28	Si	45	H2	2141.456	ppb	2.4	16929.02	10000	
39	K	45	He	24656.077	ppb	1.5	263945.96	200000	
40	Ca	45	H2	17909.287	ppb	0.6	1336536.11	200000	
51	V	89	He	215.015	ppb	0.4	38062.26	1000	
52	Cr	89	He	271.078	ppb	0.3	58885.78	2000	
55	Mn	89	He	1503.303	ppb	0.6	155558.30	2000	
56	Fe	89	H2	125571.356	ppb	1.4	40191825.41	100000	
59	Co	89	He	45.110	ppb	0.8	16595.32	1000	
60	Ni	89	He	111.273	ppb	0.7	11635.21	1000	
63	Cu	89	He	499.563	ppb	0.7	141606.20	2000	
66	Zn	89	He	704.868	ppb	1.3	27351.96	2000	
75	As	89	He	37.137	ppb	2.2	1180.18	1000	
78	Se	89	H2	3.032	ppb	12.1	48.83	1000	
88	Sr	89	He	167.198	ppb	0.6	25851.71	2000	
95	Mo	89	He	27.661	ppb	1.8	5037.77	1000	
107	Ag	89	He	3.353	ppb	5.4	2035.78	100	
111	Cd	89	He	3.040	ppb	9.8	245.56	1000	
118	Sn	159	He	53.979	ppb	2.3	9613.74	1000	
121	Sb	159	No Gas	0.419	ppb	5.4	744.18	1000	
137	Ba	159	No Gas	255.731	ppb	1.2	155001.90	2000	
182	W	159	No Gas	0.844	ppb	5.9	1158.01	1000	
205	Tl	209	No Gas	1.977	ppb	5.6	5367.14	1000	
208	Pb	209	No Gas	193.078	ppb	2.3	720738.86	2000	
232	Th	209	No Gas	37.520	ppb	1.2	146774.04	1000	
238	U	209	No Gas	17.807	ppb	1.2	65315.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1209118.40	0.2	1537409.87	78.65	29.5	120.4	
Sc	45	No Gas	3141483.17	0.9	3373253.08	93.13	29.5	120.4	
Sc	45	H2	371804.10	0.6	415670.69	89.45	29.5	120.4	
Sc	45	He	77200.80	0.3	81171.76	95.11	29.5	120.4	
Ge	72	No Gas	746122.75	0.8	779333.11	95.74	29.5	120.4	
Ge	72	H2	134311.26	0.7	153246.58	87.64	29.5	120.4	
Ge	72	He	60528.68	0.3	63135.03	95.87	29.5	120.4	
Y	89	H2	2564823.38	1.0	2642116.11	97.07	29.5	120.4	
Y	89	He	548786.25	0.7	544041.92	100.87	29.5	120.4	
Tb	159	No Gas	8562399.39	0.8	8117023.84	105.49	29.5	120.4	
Tb	159	He	2953475.62	0.6	2866479.19	103.03	29.5	120.4	
Bi	209	No Gas	4587829.23	0.5	4424692.92	103.69	29.5	120.4	

Sample Report

Sample Name SN5233-008

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:35:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.334	ppb	8.7	1174.53	100	
11	B	6	No Gas	226.653	ppb	6.2	33134.36	1000	
23	Na	45	He	58344.182	ppb	1.6	1271871.40	200000	
24	Mg	45	He	59246.178	ppb	1.6	707863.85	200000	
27	Al	45	He	107052.822	ppb	1.7	494964.74	200000	
28	Si	45	H2	2336.497	ppb	0.9	18937.08	10000	
39	K	45	He	31526.389	ppb	1.8	338389.47	200000	
40	Ca	45	H2	38853.557	ppb	0.5	2974078.74	200000	
51	V	89	He	302.666	ppb	0.7	54451.57	1000	
52	Cr	89	He	711.673	ppb	0.5	157331.46	2000	
55	Mn	89	He	2437.270	ppb	0.7	256744.97	2000	
56	Fe	89	H2	184756.334	ppb	0.4	61479967.39	100000	
59	Co	89	He	62.212	ppb	2.7	23296.49	1000	
60	Ni	89	He	180.022	ppb	1.8	19135.84	1000	
63	Cu	89	He	1046.455	ppb	0.7	301514.86	2000	
66	Zn	89	He	1341.909	ppb	1.7	52950.15	2000	
75	As	89	He	64.503	ppb	1.7	2083.38	1000	
78	Se	89	H2	3.790	ppb	6.3	63.33	1000	
88	Sr	89	He	329.801	ppb	0.6	51910.94	2000	
95	Mo	89	He	12.039	ppb	0.1	2305.83	1000	
107	Ag	89	He	7.805	ppb	2.1	4808.81	100	
111	Cd	89	He	8.530	ppb	2.0	699.66	1000	
118	Sn	159	He	93.822	ppb	2.0	16590.78	1000	
121	Sb	159	No Gas	0.645	ppb	12.9	1124.63	1000	
137	Ba	159	No Gas	424.080	ppb	6.0	264209.75	2000	
182	W	159	No Gas	1.555	ppb	16.6	2082.53	1000	
205	Tl	209	No Gas	2.450	ppb	11.2	6799.40	1000	
208	Pb	209	No Gas	619.494	ppb	6.2	2369641.50	2000	
232	Th	209	No Gas	47.623	ppb	7.6	190834.23	1000	
238	U	209	No Gas	11.902	ppb	8.5	44719.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1255653.85	3.6	1537409.87	81.67	29.5	120.4	
Sc	45	No Gas	3342413.83	3.1	3373253.08	99.09	29.5	120.4	
Sc	45	H2	381605.82	1.2	415670.69	91.8	29.5	120.4	
Sc	45	He	78098.08	1.6	81171.76	96.21	29.5	120.4	
Ge	72	No Gas	782912.89	3.7	779333.11	100.46	29.5	120.4	
Ge	72	H2	140176.48	1.9	153246.58	91.47	29.5	120.4	
Ge	72	He	61103.81	1.1	63135.03	96.78	29.5	120.4	
Y	89	H2	2666422.68	0.5	2642116.11	100.92	29.5	120.4	
Y	89	He	558717.59	0.6	544041.92	102.7	29.5	120.4	
Tb	159	No Gas	8813096.53	3.3	8117023.84	108.58	29.5	120.4	
Tb	159	He	2942515.41	1.1	2866479.19	102.65	29.5	120.4	
Bi	209	No Gas	4709402.93	3.8	4424692.92	106.43	29.5	120.4	

Sample Report

Sample Name SN5233-009

File Name 101SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:38:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.609	ppb	4.7	788.94	100	
11	B	6	No Gas	136.190	ppb	3.1	19936.52	1000	
23	Na	45	He	39838.616	ppb	0.7	871097.17	200000	
24	Mg	45	He	38922.133	ppb	0.9	465639.37	200000	
27	Al	45	He	65719.370	ppb	0.9	304142.83	200000	
28	Si	45	H2	1475.029	ppb	1.2	12176.01	10000	
39	K	45	He	19033.648	ppb	1.0	208710.93	200000	
40	Ca	45	H2	29070.198	ppb	0.9	2249965.44	200000	
51	V	89	He	200.334	ppb	1.0	35770.73	1000	
52	Cr	89	He	158.054	ppb	0.5	34632.63	2000	
55	Mn	89	He	1602.338	ppb	0.8	167164.38	2000	
56	Fe	89	H2	123103.083	ppb	0.8	40656591.41	100000	
59	Co	89	He	40.018	ppb	3.2	14842.30	1000	
60	Ni	89	He	85.477	ppb	1.1	9022.09	1000	
63	Cu	89	He	108.755	ppb	0.7	31420.59	2000	
66	Zn	89	He	308.601	ppb	1.5	12112.39	2000	
75	As	89	He	37.330	ppb	2.1	1196.19	1000	
78	Se	89	H2	1.996	ppb	4.9	33.33	1000	
88	Sr	89	He	182.026	ppb	1.6	28379.02	2000	
95	Mo	89	He	41.688	ppb	2.1	7589.02	1000	
107	Ag	89	He	0.590	ppb	10.1	370.02	100	
111	Cd	89	He	1.064	ppb	7.4	87.41	1000	
118	Sn	159	He	43.498	ppb	3.9	7781.40	1000	
121	Sb	159	No Gas	0.190	ppb	18.9	400.46	1000	
137	Ba	159	No Gas	180.491	ppb	4.4	111592.72	2000	
182	W	159	No Gas	0.367	ppb	23.2	584.00	1000	
205	Tl	209	No Gas	1.030	ppb	3.4	2886.90	1000	
208	Pb	209	No Gas	55.009	ppb	4.0	211069.03	2000	
232	Th	209	No Gas	25.713	ppb	5.5	103358.01	1000	
238	U	209	No Gas	18.642	ppb	5.7	70218.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237409.15	2.6	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3325545.46	2.1	3373253.08	98.59	29.5	120.4	
Sc	45	H2	385799.03	0.5	415670.69	92.81	29.5	120.4	
Sc	45	He	78154.92	0.6	81171.76	96.28	29.5	120.4	
Ge	72	No Gas	789092.23	2.7	779333.11	101.25	29.5	120.4	
Ge	72	H2	141439.47	1.8	153246.58	92.3	29.5	120.4	
Ge	72	He	61876.82	0.9	63135.03	98.01	29.5	120.4	
Y	89	H2	2646312.91	0.6	2642116.11	100.16	29.5	120.4	
Y	89	He	553327.39	1.0	544041.92	101.71	29.5	120.4	
Tb	159	No Gas	8740241.61	2.5	8117023.84	107.68	29.5	120.4	
Tb	159	He	2961619.33	0.5	2866479.19	103.32	29.5	120.4	
Bi	209	No Gas	4716047.86	2.7	4424692.92	106.58	29.5	120.4	

Sample Report

Sample Name SN5423-001

File Name 102SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:40:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.558	ppb	26.0	136.67	100	
11	B	6	No Gas	27.735	ppb	6.4	4697.60	1000	
23	Na	45	He	1451.821	ppb	2.2	36851.66	200000	
24	Mg	45	He	4507.399	ppb	1.6	53543.27	200000	
27	Al	45	He	8593.446	ppb	0.4	39147.68	200000	
28	Si	45	H2	2596.565	ppb	2.4	20741.50	10000	
39	K	45	He	4151.784	ppb	1.9	52975.45	200000	
40	Ca	45	H2	24565.334	ppb	0.3	1856249.36	200000	
51	V	89	He	18.072	ppb	2.0	3314.98	1000	
52	Cr	89	He	51.051	ppb	1.6	10793.52	2000	
55	Mn	89	He	2406.813	ppb	1.7	241757.47	2000	
56	Fe	89	H2	32202.015	ppb	0.5	10247696.61	100000	
59	Co	89	He	8.425	ppb	1.7	3016.10	1000	
60	Ni	89	He	33.380	ppb	5.8	3416.11	1000	
63	Cu	89	He	1131.494	ppb	1.6	310834.74	2000	
66	Zn	89	He	3113.534	ppb	1.3	117069.68	2000	
75	As	89	He	12.936	ppb	5.1	402.05	1000	
78	Se	89	H2	10.848	ppb	3.1	172.32	1000	
88	Sr	89	He	159.176	ppb	1.7	23892.60	2000	
95	Mo	89	He	17.720	ppb	1.1	3178.27	1000	
107	Ag	89	He	10.058	ppb	4.4	5904.84	100	
111	Cd	89	He	9.896	ppb	2.7	773.73	1000	
118	Sn	159	He	119.754	ppb	0.6	21362.01	1000	
121	Sb	159	No Gas	4.700	ppb	4.8	7557.22	1000	
137	Ba	159	No Gas	383.595	ppb	4.9	239418.80	2000	
182	W	159	No Gas	4.533	ppb	3.6	5851.15	1000	
205	Tl	209	No Gas	0.231	ppb	18.4	724.16	1000	
208	Pb	209	No Gas	42.420	ppb	4.7	176687.85	2000	
232	Th	209	No Gas	0.427	ppb	24.0	2059.20	1000	
238	U	209	No Gas	4.241	ppb	3.6	17351.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1249693.69	2.9	1537409.87	81.29	29.5	120.4	
Sc	45	No Gas	3317093.51	2.9	3373253.08	98.34	29.5	120.4	
Sc	45	H2	376594.82	1.2	415670.69	90.6	29.5	120.4	
Sc	45	He	76851.31	0.7	81171.76	94.68	29.5	120.4	
Ge	72	No Gas	787820.86	2.8	779333.11	101.09	29.5	120.4	
Ge	72	H2	139481.72	0.9	153246.58	91.02	29.5	120.4	
Ge	72	He	60331.98	0.9	63135.03	95.56	29.5	120.4	
Y	89	H2	2548313.72	0.6	2642116.11	96.45	29.5	120.4	
Y	89	He	532808.79	1.2	544041.92	97.94	29.5	120.4	
Tb	159	No Gas	8824085.01	2.2	8117023.84	108.71	29.5	120.4	
Tb	159	He	2970757.35	1.1	2866479.19	103.64	29.5	120.4	
Bi	209	No Gas	5118349.06	2.4	4424692.92	115.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMW1
File Name	103_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:43:31 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.066	ppb	135.3	28.89	0.5	
B	11	6	No Gas	3.777	ppb	4.8	1254.54	10	
Na	23	45	He	121.650	ppb	13.7	8241.59	500	
Mg	24	45	He	-3.063	ppb	N/A	540.05	50	
Al	27	45	He	15.073	ppb	54.8	113.34	50	
Si	28	45	H2	22.492	ppb	58.6	410.46	250	
K	39	45	He	43.904	ppb	78.5	10685.92	500	
Ca	40	45	H2	24.056	ppb	3.9	3573.90	50	
V	51	89	He	3.925	ppb	5.0	885.62	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.317	ppb	24.1	99.98	2.5	
Mn	55	89	He	4.544	ppb	9.9	461.93	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	24.995	ppb	4.2	16117.11	50	
Co	59	89	He	0.014	ppb	242.3	13.34	0.5	
Ni	60	89	He	-0.119	ppb	N/A	28.89	1	
Cu	63	89	He	-0.430	ppb	N/A	294.46	1.5	
Zn	66	89	He	2.223	ppb	26.4	145.56	5	
As	75	89	He	0.247	ppb	45.9	12.00	2.5	
Se	78	89	H2	0.023	ppb	214.4	0.83	2.5	
Sr	88	89	He	0.084	ppb	15.0	18.89	2.5	
Mo	95	89	He	-0.615	ppb	N/A	17.78	2.5	
Ag	107	89	He	0.001	ppb	2627.7	11.11	0.5	
Cd	111	89	He	-0.009	ppb	N/A	0.37	0.5	
Sn	118	159	He	0.477	ppb	40.2	156.67	2.5	
Sb	121	159	No Gas	0.028	ppb	143.4	143.49	0.5	
Ba	137	159	No Gas	0.389	ppb	13.2	256.96	1	
W	182	159	No Gas	-0.044	ppb	N/A	70.08	2.5	
Tl	205	209	No Gas	-0.003	ppb	N/A	20.02	0.5	
Pb	208	209	No Gas	0.609	ppb	1.8	2522.92	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.010	ppb	57.1	216.92	2.5	
U	238	209	No Gas	0.006	ppb	162.5	26.70	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1214667.40	2.7	1537409.87	79.01	29.5	120.4	
Sc	45	No Gas	3195988.77	2.6	3373253.08	94.75	29.5	120.4	
Sc	45	H2	373693.77	0.5	415670.69	89.9	29.5	120.4	
Sc	45	He	74995.12	1.1	81171.76	92.39	29.5	120.4	
Ge	72	No Gas	761028.76	3.5	779333.11	97.65	29.5	120.4	
Ge	72	H2	139070.56	1.2	153246.58	90.75	29.5	120.4	
Ge	72	He	59816.45	0.8	63135.03	94.74	29.5	120.4	
Y	89	H2	2525858.24	0.2	2642116.11	95.6	29.5	120.4	
Y	89	He	524979.06	0.6	544041.92	96.5	29.5	120.4	
Tb	159	No Gas	8673821.33	2.7	8117023.84	106.86	29.5	120.4	
Tb	159	He	2937914.96	0.6	2866479.19	102.49	29.5	120.4	
Bi	209	No Gas	4707043.86	2.4	4424692.92	106.38	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG09IMW1
File Name	104LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:46:14 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.203	ppb	1.5	10859.97	50	20.08	79.5	120.4	
B	11	6	No Gas	514.366	ppb	1.3	73760.41	500	20.57	79.5	120.4	
Na	23	45	He	7550.210	ppb	0.6	164128.88	7500	20.13	79.5	120.4	
Mg	24	45	He	5254.507	ppb	2.8	61216.10	5000	21.02	79.5	120.4	
Al	27	45	He	1806.153	ppb	0.5	8119.25	2000	18.06	79.5	120.4	
Si	28	45	H2	1138.560	ppb	16.1	8695.69	1000	22.77	0	200	
K	39	45	He	10372.176	ppb	0.2	114558.55	10000	20.74	79.5	120.4	
Ca	40	45	H2	2855.638	ppb	13.0	205177.03	2500	22.85	79.5	120.4	
V	51	89	He	497.012	ppb	0.7	83479.62	500	19.88	79.5	120.4	
Cr	52	89	He	203.497	ppb	0.4	42097.85	200	20.35	79.5	120.4	
Mn	55	89	He	494.917	ppb	0.7	48767.55	500	19.8	79.5	120.4	
Fe	56	89	H2	1128.043	ppb	14.4	343597.77	1000	22.56	79.5	120.4	
Co	59	89	He	520.061	ppb	1.0	182076.89	500	20.8	79.5	120.4	
Ni	60	89	He	496.018	ppb	0.6	49242.97	500	19.84	79.5	120.4	
Cu	63	89	He	257.507	ppb	1.0	69697.40	250	20.6	79.5	120.4	
Zn	66	89	He	502.697	ppb	1.2	18591.87	500	20.11	79.5	120.4	
As	75	89	He	106.481	ppb	2.1	3213.06	100	21.3	79.5	120.4	
Se	78	89	H2	110.425	ppb	14.1	1638.36	100	22.08	79.5	120.4	
Sr	88	89	He	510.113	ppb	0.8	75089.50	500	20.4	79.5	120.4	
Mo	95	89	He	105.750	ppb	1.7	17994.62	100	21.15	79.5	120.4	
Ag	107	89	He	54.612	ppb	1.1	31399.27	50	21.84	79.5	120.4	
Cd	111	89	He	267.651	ppb	1.2	20497.45	250	21.41	79.5	120.4	
Sn	118	159	He	486.944	ppb	0.7	85852.63	500	19.48	79.5	120.4	
Sb	121	159	No Gas	101.652	ppb	1.1	159750.05	100	20.33	79.5	120.4	
Ba	137	159	No Gas	1901.567	ppb	0.8	1175181.56	2000	19.02	79.5	120.4	
W	182	159	No Gas	100.865	ppb	0.7	126189.71	100	20.17	79.5	120.4	
Tl	205	209	No Gas	104.110	ppb	0.7	290176.76	100	20.82	79.5	120.4	
[Pb]	206	209	No Gas	106.364	ppb	1.0	102035.98	100	21.27	79.5	120.4	
[Pb]	207	209	No Gas	106.734	ppb	1.7	89757.07	100	21.35	79.5	120.4	
Pb	208	209	No Gas	105.699	ppb	1.0	407286.48	100	21.14	79.5	120.4	
Th	232	209	No Gas	98.991	ppb	0.9	399433.15	100	19.8	79.5	120.4	
U	238	209	No Gas	100.179	ppb	0.6	379266.60	100	20.04	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1245791.17	1.0	1537409.87	81.03	29.5	120.4	
Sc	45	No Gas	3228275.77	1.4	3373253.08	95.7	29.5	120.4	
Sc	45	H2	358627.32	10.2	415670.69	86.28	29.5	120.4	
Sc	45	He	75493.20	0.7	81171.76	93	29.5	120.4	
Ge	72	No Gas	774313.09	2.0	779333.11	99.36	29.5	120.4	
Ge	72	H2	133529.63	10.3	153246.58	87.13	29.5	120.4	
Ge	72	He	59958.52	0.8	63135.03	94.97	29.5	120.4	
Y	89	H2	2410116.15	10.8	2642116.11	91.22	29.5	120.4	
Y	89	He	522523.30	0.7	544041.92	96.04	29.5	120.4	
Tb	159	No Gas	8732300.70	1.7	8117023.84	107.58	29.5	120.4	
Tb	159	He	2944033.91	1.3	2866479.19	102.71	29.5	120.4	
Bi	209	No Gas	4735286.32	1.5	4424692.92	107.02	29.5	120.4	

Sample Report

Sample Name SN5494-003

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:48:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.169	ppb	33.2	47.78	100	
11	B	6	No Gas	358.973	ppb	1.0	47814.28	1000	
23	Na	45	He	127461.465	ppb	4.8	2504229.25	200000	
24	Mg	45	He	32840.028	ppb	4.8	354758.74	200000	
27	Al	45	He	21.931	ppb	30.0	135.56	200000	
28	Si	45	H2	10478.582	ppb	1.0	77306.95	10000	
39	K	45	He	9331.543	ppb	6.1	97274.17	200000	
40	Ca	45	H2	166096.423	ppb	0.7	11681394.13	200000	
51	V	89	He	0.957	ppb	10.2	365.57	1000	
52	Cr	89	He	0.672	ppb	15.8	163.97	2000	
55	Mn	89	He	6509.029	ppb	3.9	608947.56	2000	
56	Fe	89	H2	35148.851	ppb	0.9	10642865.20	100000	
59	Co	89	He	15.874	ppb	3.8	5285.85	1000	
60	Ni	89	He	20.209	ppb	7.2	1941.32	1000	
63	Cu	89	He	0.251	ppb	49.9	452.25	2000	
66	Zn	89	He	8.034	ppb	6.8	341.13	2000	
75	As	89	He	54.979	ppb	6.4	1576.93	1000	
78	Se	89	H2	0.323	ppb	38.3	5.33	1000	
88	Sr	89	He	948.694	ppb	4.1	132601.86	2000	
95	Mo	89	He	6.464	ppb	1.8	1153.43	1000	
107	Ag	89	He	0.024	ppb	108.9	23.33	100	
111	Cd	89	He	0.073	ppb	46.6	6.30	1000	
118	Sn	159	He	1.151	ppb	20.7	267.79	1000	
121	Sb	159	No Gas	0.223	ppb	23.3	437.16	1000	
137	Ba	159	No Gas	70.088	ppb	1.0	42083.27	2000	
182	W	159	No Gas	0.386	ppb	2.7	590.68	1000	
205	Tl	209	No Gas	0.118	ppb	29.9	340.39	1000	
208	Pb	209	No Gas	0.542	ppb	5.7	2169.17	2000	
232	Th	209	No Gas	1.198	ppb	35.8	4759.66	1000	
238	U	209	No Gas	16.108	ppb	1.9	58025.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1152183.73	1.0	1537409.87	74.94	29.5	120.4	
Sc	45	No Gas	3016039.14	1.2	3373253.08	89.41	29.5	120.4	
Sc	45	H2	350800.34	0.9	415670.69	84.39	29.5	120.4	
Sc	45	He	70631.71	3.5	81171.76	87.02	29.5	120.4	
Ge	72	No Gas	727888.11	0.3	779333.11	93.4	29.5	120.4	
Ge	72	H2	130689.75	1.5	153246.58	85.28	29.5	120.4	
Ge	72	He	56630.40	1.8	63135.03	89.7	29.5	120.4	
Y	89	H2	2424945.25	0.8	2642116.11	91.78	29.5	120.4	
Y	89	He	496545.89	2.7	544041.92	91.27	29.5	120.4	
Tb	159	No Gas	8479423.76	1.4	8117023.84	104.46	29.5	120.4	
Tb	159	He	2865531.48	2.6	2866479.19	99.97	29.5	120.4	
Bi	209	No Gas	4505097.39	0.8	4424692.92	101.82	29.5	120.4	

Sample Report

Sample Name SN5494-004

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:51:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.176	ppb	69.7	50.00	100	
11	B	6	No Gas	173.829	ppb	5.6	23661.21	1000	
23	Na	45	He	104883.696	ppb	4.1	2061738.18	200000	
24	Mg	45	He	32436.067	ppb	4.6	350395.53	200000	
27	Al	45	He	0.800	ppb	241.5	46.67	200000	
28	Si	45	H2	10511.150	ppb	0.9	77097.03	10000	
39	K	45	He	6270.797	ppb	5.0	68542.84	200000	
40	Ca	45	H2	195428.768	ppb	0.6	13664678.27	200000	
51	V	89	He	0.792	ppb	28.6	338.91	1000	
52	Cr	89	He	0.552	ppb	30.3	140.64	2000	
55	Mn	89	He	11421.242	ppb	4.2	1067722.43	2000	>LDR
56	Fe	89	H2	28429.050	ppb	0.4	8558879.20	100000	
59	Co	89	He	14.675	ppb	6.9	4881.19	1000	
60	Ni	89	He	11.118	ppb	14.3	1083.42	1000	
63	Cu	89	He	-0.282	ppb	N/A	316.68	2000	
66	Zn	89	He	2.718	ppb	32.6	154.45	2000	
75	As	89	He	47.515	ppb	5.1	1362.89	1000	
78	Se	89	H2	0.170	ppb	70.5	3.00	1000	
88	Sr	89	He	897.687	ppb	4.5	125379.37	2000	
95	Mo	89	He	13.681	ppb	2.7	2310.29	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.042	ppb	53.7	4.07	1000	
118	Sn	159	He	0.730	ppb	15.2	196.68	1000	
121	Sb	159	No Gas	0.135	ppb	6.5	310.36	1000	
137	Ba	159	No Gas	53.874	ppb	2.0	33017.94	2000	
182	W	159	No Gas	0.002	ppb	1083.5	126.81	1000	
205	Tl	209	No Gas	0.020	ppb	84.0	83.42	1000	
208	Pb	209	No Gas	0.453	ppb	12.2	1888.84	2000	
232	Th	209	No Gas	0.049	ppb	55.7	367.09	1000	
238	U	209	No Gas	31.074	ppb	4.5	114749.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1160296.09	2.1	1537409.87	75.47	29.5	120.4	
Sc	45	No Gas	3050395.24	1.9	3373253.08	90.43	29.5	120.4	
Sc	45	H2	348766.48	0.4	415670.69	83.9	29.5	120.4	
Sc	45	He	70616.17	3.0	81171.76	87	29.5	120.4	
Ge	72	No Gas	740900.16	2.7	779333.11	95.07	29.5	120.4	
Ge	72	H2	132337.05	1.4	153246.58	86.36	29.5	120.4	
Ge	72	He	56782.54	1.9	63135.03	89.94	29.5	120.4	
Y	89	H2	2410565.45	0.5	2642116.11	91.24	29.5	120.4	
Y	89	He	496229.16	2.8	544041.92	91.21	29.5	120.4	
Tb	159	No Gas	8656457.58	2.1	8117023.84	106.65	29.5	120.4	
Tb	159	He	2874202.49	2.7	2866479.19	100.27	29.5	120.4	
Bi	209	No Gas	4621923.85	2.3	4424692.92	104.46	29.5	120.4	

Sample Report

Sample Name SN5494-005

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 7:54:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.067	ppb	12.7	27.78	100	
11	B	6	No Gas	26.063	ppb	2.2	4159.62	1000	
23	Na	45	He	9340.861	ppb	4.0	191897.23	200000	
24	Mg	45	He	10351.800	ppb	5.1	114192.89	200000	
27	Al	45	He	-0.094	ppb	N/A	43.33	200000	
28	Si	45	H2	7762.921	ppb	0.6	57868.25	10000	
39	K	45	He	6104.043	ppb	3.1	68202.44	200000	
40	Ca	45	H2	68379.974	ppb	0.8	4855751.28	200000	
51	V	89	He	1.803	ppb	11.3	508.92	1000	
52	Cr	89	He	0.359	ppb	12.1	104.65	2000	
55	Mn	89	He	29.006	ppb	4.8	2775.11	2000	
56	Fe	89	H2	10.152	ppb	13.3	11010.02	100000	
59	Co	89	He	0.191	ppb	33.5	73.34	1000	
60	Ni	89	He	1.695	ppb	9.3	202.23	1000	
63	Cu	89	He	-0.219	ppb	N/A	338.90	2000	
66	Zn	89	He	1.906	ppb	2.8	128.90	2000	
75	As	89	He	5.624	ppb	5.4	168.35	1000	
78	Se	89	H2	0.135	ppb	112.2	2.50	1000	
88	Sr	89	He	263.657	ppb	3.3	37543.29	2000	
95	Mo	89	He	0.763	ppb	16.6	242.23	1000	
107	Ag	89	He	0.015	ppb	97.3	18.89	100	
111	Cd	89	He	0.041	ppb	136.4	4.07	1000	
118	Sn	159	He	0.594	ppb	3.1	174.46	1000	
121	Sb	159	No Gas	0.030	ppb	173.0	143.49	1000	
137	Ba	159	No Gas	18.197	ppb	4.8	11006.91	2000	
182	W	159	No Gas	-0.021	ppb	N/A	96.78	1000	
205	Tl	209	No Gas	0.010	ppb	21.7	56.73	1000	
208	Pb	209	No Gas	0.431	ppb	11.5	1828.78	2000	
232	Th	209	No Gas	0.025	ppb	25.9	276.98	1000	
238	U	209	No Gas	124.157	ppb	1.2	464329.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164609.43	1.4	1537409.87	75.75	29.5	120.4	
Sc	45	No Gas	3033035.25	1.8	3373253.08	89.91	29.5	120.4	
Sc	45	H2	354102.35	1.1	415670.69	85.19	29.5	120.4	
Sc	45	He	71882.50	3.2	81171.76	88.56	29.5	120.4	
Ge	72	No Gas	738699.17	1.6	779333.11	94.79	29.5	120.4	
Ge	72	H2	133987.62	0.9	153246.58	87.43	29.5	120.4	
Ge	72	He	58763.18	2.1	63135.03	93.08	29.5	120.4	
Y	89	H2	2431446.75	0.4	2642116.11	92.03	29.5	120.4	
Y	89	He	505768.69	3.0	544041.92	92.97	29.5	120.4	
Tb	159	No Gas	8526824.39	2.2	8117023.84	105.05	29.5	120.4	
Tb	159	He	2889843.15	3.4	2866479.19	100.82	29.5	120.4	
Bi	209	No Gas	4677569.33	1.7	4424692.92	105.72	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	108_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:56:53 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.302	ppb	3.0	26586.20	25	101.21	89.8	110.2	
11	B	6	No Gas	25.052	ppb	4.7	18012.83	25	100.21	89.8	110.2	
23	Na	45	He	4992.715	ppb	1.2	513621.61	5000	99.85	89.8	110.2	
24	Mg	45	He	4832.220	ppb	0.7	271108.53	5000	96.64	89.8	110.2	
27	Al	45	He	460.310	ppb	1.8	10024.97	500	92.06	89.8	110.2	
28	Si	45	H2	480.488	ppb	0.4	18455.86	500	96.1	89.8	110.2	
39	K	45	He	4862.926	ppb	1.0	247097.59	5000	97.26	89.8	110.2	
40	Ca	45	H2	5050.180	ppb	1.4	1833310.75	5000	101	89.8	110.2	
51	V	89	He	24.047	ppb	0.8	19899.15	25	96.19	89.8	110.2	
52	Cr	89	He	24.294	ppb	0.2	24568.14	25	97.18	89.8	110.2	
55	Mn	89	He	24.546	ppb	0.9	11826.15	25	98.18	89.8	110.2	
56	Fe	89	H2	4875.394	ppb	1.8	7470340.49	5000	97.51	89.8	110.2	
59	Co	89	He	24.468	ppb	2.1	41858.58	25	97.87	89.8	110.2	
60	Ni	89	He	24.404	ppb	0.8	11866.54	25	97.62	89.8	110.2	
63	Cu	89	He	24.256	ppb	0.5	32288.08	25	97.02	89.8	110.2	
66	Zn	89	He	24.691	ppb	2.8	4507.57	25	98.76	89.8	110.2	
75	As	89	He	24.458	ppb	0.9	3605.53	25	97.83	89.8	110.2	
78	Se	89	H2	24.596	ppb	0.7	1876.38	25	98.38	89.8	110.2	
88	Sr	89	He	24.197	ppb	0.7	17407.11	25	96.79	89.8	110.2	
95	Mo	89	He	24.955	ppb	0.4	20726.30	25	99.82	89.8	110.2	
107	Ag	89	He	18.862	ppb	0.4	52978.44	25	75.45	89.8	110.2	> +/- 10%
111	Cd	89	He	25.310	ppb	0.6	9471.16	25	101.24	89.8	110.2	
118	Sn	159	He	22.850	ppb	0.6	19779.55	25	91.4	89.8	110.2	
121	Sb	159	No Gas	23.554	ppb	5.0	183495.35	25	94.22	89.8	110.2	
137	Ba	159	No Gas	23.417	ppb	5.8	71749.28	25	93.67	89.8	110.2	
182	W	159	No Gas	23.579	ppb	4.4	146229.50	25	94.32	89.8	110.2	
205	Tl	209	No Gas	23.914	ppb	4.6	331379.02	25	95.66	89.8	110.2	
208	Pb	209	No Gas	23.781	ppb	4.1	455661.96	25	95.12	89.8	110.2	
232	Th	209	No Gas	23.857	ppb	4.5	478510.38	25	95.43	89.8	110.2	
238	U	209	No Gas	23.930	ppb	3.7	450479.88	25	95.72	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1212068.92	3.0	1537409.87	78.84	29.5	120.4	
Sc	45	No Gas	3200937.99	3.4	3373253.08	94.89	29.5	120.4	
Sc	45	H2	361830.23	1.6	415670.69	87.05	29.5	120.4	
Sc	45	He	73249.11	1.4	81171.76	90.24	29.5	120.4	
Ge	72	No Gas	762082.96	3.1	779333.11	97.79	29.5	120.4	
Ge	72	H2	137359.12	1.6	153246.58	89.63	29.5	120.4	
Ge	72	He	58806.17	1.1	63135.03	93.14	29.5	120.4	
Y	89	H2	2453729.37	1.9	2642116.11	92.87	29.5	120.4	
Y	89	He	510594.15	0.6	544041.92	93.85	29.5	120.4	
Tb	159	No Gas	8668203.34	3.8	8117023.84	106.79	29.5	120.4	
Tb	159	He	2882691.03	0.5	2866479.19	100.57	29.5	120.4	
Bi	209	No Gas	4713236.25	3.3	4424692.92	106.52	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	109_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 7:59:30 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.043	ppb	30.6	61.12	0.2	
11	B	6	No Gas	1.828	ppb	1.8	2023.55	4	
23	Na	45	He	41.748	ppb	3.3	9563.81	200	
24	Mg	45	He	-2.127	ppb	N/A	431.15	20	
27	Al	45	He	-1.241	ppb	N/A	17.78	20	
28	Si	45	H2	5.399	ppb	55.8	420.48	100	
39	K	45	He	5.278	ppb	150.0	9997.39	200	
40	Ca	45	H2	6.858	ppb	3.8	4096.30	20	
51	V	89	He	0.623	ppb	12.3	715.60	1	Failed DoD
52	Cr	89	He	0.115	ppb	14.5	146.64	1	
55	Mn	89	He	0.298	ppb	11.1	152.64	0.4	Failed DoD
56	Fe	89	H2	1.309	ppb	25.0	9897.93	20	
59	Co	89	He	0.011	ppb	106.2	26.67	0.2	
60	Ni	89	He	-0.030	ppb	N/A	24.44	0.4	
63	Cu	89	He	-0.008	ppb	N/A	382.24	0.6	
66	Zn	89	He	0.118	ppb	50.0	81.11	2	
75	As	89	He	0.074	ppb	19.3	15.00	1	
78	Se	89	H2	0.060	ppb	10.7	5.00	1	
88	Sr	89	He	0.024	ppb	63.6	23.34	1	
95	Mo	89	He	0.013	ppb	228.6	127.78	1	
107	Ag	89	He	0.009	ppb	37.6	34.44	0.2	
111	Cd	89	He	0.002	ppb	74.7	1.85	0.2	
118	Sn	159	He	0.301	ppb	10.4	328.90	1	
121	Sb	159	No Gas	0.025	ppb	15.7	297.00	0.2	
137	Ba	159	No Gas	0.020	ppb	41.6	80.09	0.4	
182	W	159	No Gas	0.118	ppb	10.3	850.99	1	
205	Tl	209	No Gas	0.021	ppb	21.7	313.69	0.2	
208	Pb	209	No Gas	0.170	ppb	6.8	3437.37	0.2	Failed DoD
232	Th	209	No Gas	0.184	ppb	35.7	3838.31	1	
238	U	209	No Gas	0.024	ppb	14.0	450.51	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1230818.99	1.1	1537409.87	80.06	29.5	120.4	
Sc	45	No Gas	3065755.70	1.5	3373253.08	90.88	29.5	120.4	
Sc	45	H2	352702.63	0.9	415670.69	84.85	29.5	120.4	
Sc	45	He	71348.25	2.1	81171.76	87.9	29.5	120.4	
Ge	72	No Gas	740760.54	1.2	779333.11	95.05	29.5	120.4	
Ge	72	H2	130999.35	2.1	153246.58	85.48	29.5	120.4	
Ge	72	He	56436.19	2.7	63135.03	89.39	29.5	120.4	
Y	89	H2	2427128.82	0.3	2642116.11	91.86	29.5	120.4	
Y	89	He	501459.07	2.6	544041.92	92.17	29.5	120.4	
Tb	159	No Gas	8629670.91	1.8	8117023.84	106.32	29.5	120.4	
Tb	159	He	2861260.13	2.7	2866479.19	99.82	29.5	120.4	
Bi	209	No Gas	4688670.80	1.5	4424692.92	105.97	29.5	120.4	

Sample Report

Sample Name SN5494-007

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:02:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	51.8	38.89	100	
11	B	6	No Gas	12.112	ppb	7.6	2308.05	1000	
23	Na	45	He	28195.513	ppb	0.9	582042.24	200000	
24	Mg	45	He	2364.437	ppb	0.7	27160.82	200000	
27	Al	45	He	12.059	ppb	29.6	97.78	200000	
28	Si	45	H2	2860.326	ppb	5.1	22054.77	10000	
39	K	45	He	2491.664	ppb	0.6	34460.84	200000	
40	Ca	45	H2	17637.850	ppb	1.4	1288352.39	200000	
51	V	89	He	2.279	ppb	5.2	598.93	1000	
52	Cr	89	He	0.420	ppb	13.8	119.31	2000	
55	Mn	89	He	1.943	ppb	4.4	201.30	2000	
56	Fe	89	H2	5.728	ppb	16.8	9854.37	100000	
59	Co	89	He	0.008	ppb	143.9	11.11	1000	
60	Ni	89	He	0.146	ppb	93.0	54.45	1000	
63	Cu	89	He	1.209	ppb	3.0	725.60	2000	
66	Zn	89	He	2.011	ppb	17.8	135.56	2000	
75	As	89	He	19.457	ppb	6.0	584.08	1000	
78	Se	89	H2	0.110	ppb	74.4	2.17	1000	
88	Sr	89	He	117.234	ppb	0.9	17064.43	2000	
95	Mo	89	He	10.613	ppb	2.1	1893.53	1000	
107	Ag	89	He	0.007	ppb	177.5	14.45	100	
111	Cd	89	He	0.128	ppb	17.1	10.74	1000	
118	Sn	159	He	0.654	ppb	12.7	187.79	1000	
121	Sb	159	No Gas	0.226	ppb	28.8	427.14	1000	
137	Ba	159	No Gas	7.256	ppb	11.2	4225.43	2000	
182	W	159	No Gas	2.421	ppb	5.1	2963.68	1000	
205	Tl	209	No Gas	0.024	ppb	141.8	90.11	1000	
208	Pb	209	No Gas	0.650	ppb	71.7	2533.11	2000	
232	Th	209	No Gas	0.037	ppb	80.8	310.35	1000	
238	U	209	No Gas	2.047	ppb	5.9	7377.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164173.17	2.2	1537409.87	75.72	29.5	120.4	
Sc	45	No Gas	2981417.85	4.2	3373253.08	88.38	29.5	120.4	
Sc	45	H2	363933.26	1.0	415670.69	87.55	29.5	120.4	
Sc	45	He	73578.41	0.6	81171.76	90.65	29.5	120.4	
Ge	72	No Gas	725809.01	3.4	779333.11	93.13	29.5	120.4	
Ge	72	H2	136228.54	0.7	153246.58	88.89	29.5	120.4	
Ge	72	He	59721.20	0.8	63135.03	94.59	29.5	120.4	
Y	89	H2	2478125.10	0.5	2642116.11	93.79	29.5	120.4	
Y	89	He	516549.38	0.4	544041.92	94.95	29.5	120.4	
Tb	159	No Gas	8220639.04	4.2	8117023.84	101.28	29.5	120.4	
Tb	159	He	2936412.98	0.5	2866479.19	102.44	29.5	120.4	
Bi	209	No Gas	4511842.05	3.9	4424692.92	101.97	29.5	120.4	

Sample Report

Sample Name SN5494-008

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:04:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.086	ppb	54.3	33.33	100	
11	B	6	No Gas	17.701	ppb	11.7	3239.36	1000	
23	Na	45	He	21054.159	ppb	0.3	441804.99	200000	
24	Mg	45	He	12778.618	ppb	1.7	146194.45	200000	
27	Al	45	He	4.206	ppb	68.5	64.45	200000	
28	Si	45	H2	5717.131	ppb	3.1	44271.21	10000	
39	K	45	He	5287.102	ppb	1.7	62651.64	200000	
40	Ca	45	H2	80860.276	ppb	1.9	5956595.33	200000	
51	V	89	He	1.533	ppb	15.7	476.69	1000	
52	Cr	89	He	0.298	ppb	18.0	94.65	2000	
55	Mn	89	He	944.707	ppb	0.9	92259.87	2000	
56	Fe	89	H2	1641.271	ppb	1.9	520335.91	100000	
59	Co	89	He	0.117	ppb	48.3	48.89	1000	
60	Ni	89	He	0.178	ppb	64.1	57.78	1000	
63	Cu	89	He	-0.228	ppb	N/A	344.46	2000	
66	Zn	89	He	2.981	ppb	33.8	171.12	2000	
75	As	89	He	2.688	ppb	8.1	84.68	1000	
78	Se	89	H2	0.055	ppb	87.6	1.33	1000	
88	Sr	89	He	415.245	ppb	0.6	60590.96	2000	
95	Mo	89	He	1.657	ppb	18.4	397.80	1000	
107	Ag	89	He	0.015	ppb	24.2	18.89	100	
111	Cd	89	He	0.161	ppb	26.0	13.33	1000	
118	Sn	159	He	0.354	ppb	27.6	134.45	1000	
121	Sb	159	No Gas	0.045	ppb	55.4	173.53	1000	
137	Ba	159	No Gas	25.730	ppb	10.3	16131.09	2000	
182	W	159	No Gas	0.375	ppb	40.1	597.35	1000	
205	Tl	209	No Gas	0.019	ppb	49.8	83.43	1000	
208	Pb	209	No Gas	0.357	ppb	10.9	1585.15	2000	
232	Th	209	No Gas	0.041	ppb	26.0	350.40	1000	
238	U	209	No Gas	65.093	ppb	10.8	249121.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239897.29	4.4	1537409.87	80.65	29.5	120.4	
Sc	45	No Gas	3249023.60	6.2	3373253.08	96.32	29.5	120.4	
Sc	45	H2	367462.02	1.9	415670.69	88.4	29.5	120.4	
Sc	45	He	74549.11	1.3	81171.76	91.84	29.5	120.4	
Ge	72	No Gas	774690.68	3.4	779333.11	99.4	29.5	120.4	
Ge	72	H2	137444.86	1.0	153246.58	89.69	29.5	120.4	
Ge	72	He	59810.82	1.3	63135.03	94.73	29.5	120.4	
Y	89	H2	2501324.02	1.3	2642116.11	94.67	29.5	120.4	
Y	89	He	517958.55	1.3	544041.92	95.21	29.5	120.4	
Tb	159	No Gas	8882523.48	6.0	8117023.84	109.43	29.5	120.4	
Tb	159	He	2924701.86	1.2	2866479.19	102.03	29.5	120.4	
Bi	209	No Gas	4806148.17	5.5	4424692.92	108.62	29.5	120.4	

Sample Report

Sample Name SN5497-005

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:07:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	56.6	34.45	100	
11	B	6	No Gas	19.953	ppb	2.8	3511.66	1000	
23	Na	45	He	2180.680	ppb	1.9	51155.04	200000	
24	Mg	45	He	2792.119	ppb	0.4	32596.85	200000	
27	Al	45	He	10.850	ppb	19.1	94.45	200000	
28	Si	45	H2	2992.413	ppb	4.3	23294.85	10000	
39	K	45	He	4121.805	ppb	1.6	51412.10	200000	
40	Ca	45	H2	29511.722	ppb	3.7	2176236.23	200000	
51	V	89	He	2.751	ppb	12.3	687.82	1000	
52	Cr	89	He	1.008	ppb	10.1	243.29	2000	
55	Mn	89	He	4.201	ppb	3.7	427.93	2000	
56	Fe	89	H2	34.225	ppb	6.5	18770.17	100000	
59	Co	89	He	0.184	ppb	37.6	73.34	1000	
60	Ni	89	He	1.097	ppb	2.7	150.01	1000	
63	Cu	89	He	3.806	ppb	4.5	1439.02	2000	
66	Zn	89	He	24.076	ppb	5.0	954.52	2000	
75	As	89	He	0.656	ppb	21.5	24.33	1000	
78	Se	89	H2	0.218	ppb	20.1	3.83	1000	
88	Sr	89	He	134.708	ppb	1.0	19919.46	2000	
95	Mo	89	He	-0.340	ppb	N/A	64.45	1000	
107	Ag	89	He	0.010	ppb	56.4	16.67	100	
111	Cd	89	He	0.039	ppb	42.8	4.07	1000	
118	Sn	159	He	0.464	ppb	15.4	155.56	1000	
121	Sb	159	No Gas	0.028	ppb	117.6	143.50	1000	
137	Ba	159	No Gas	46.183	ppb	2.8	28455.47	2000	
182	W	159	No Gas	-0.017	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.020	ppb	37.4	83.43	1000	
208	Pb	209	No Gas	0.363	ppb	2.5	1591.82	2000	
232	Th	209	No Gas	0.003	ppb	298.6	190.22	1000	
238	U	209	No Gas	0.155	ppb	15.0	590.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1221204.89	1.8	1537409.87	79.43	29.5	120.4	
Sc	45	No Gas	3186509.34	1.6	3373253.08	94.46	29.5	120.4	
Sc	45	H2	367765.54	2.2	415670.69	88.48	29.5	120.4	
Sc	45	He	75019.27	1.5	81171.76	92.42	29.5	120.4	
Ge	72	No Gas	775796.83	1.9	779333.11	99.55	29.5	120.4	
Ge	72	H2	138130.50	2.5	153246.58	90.14	29.5	120.4	
Ge	72	He	60418.57	0.5	63135.03	95.7	29.5	120.4	
Y	89	H2	2493394.64	2.8	2642116.11	94.37	29.5	120.4	
Y	89	He	524811.02	0.5	544041.92	96.47	29.5	120.4	
Tb	159	No Gas	8701668.20	1.4	8117023.84	107.2	29.5	120.4	
Tb	159	He	2960531.31	0.0	2866479.19	103.28	29.5	120.4	
Bi	209	No Gas	4734876.58	2.1	4424692.92	107.01	29.5	120.4	

Sample Report

Sample Name SN5520-001

File Name 113SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:10:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.115	ppb	5.9	38.89	100	
11	B	6	No Gas	20.892	ppb	4.7	3609.46	1000	
23	Na	45	He	7050.240	ppb	1.3	152282.22	200000	
24	Mg	45	He	31515.969	ppb	1.3	361105.66	200000	
27	Al	45	He	1.655	ppb	130.1	53.34	200000	
28	Si	45	H2	4022.304	ppb	0.8	31349.35	10000	
39	K	45	He	1451.571	ppb	4.0	24685.15	200000	
40	Ca	45	H2	38181.154	ppb	0.7	2825091.31	200000	
51	V	89	He	2.812	ppb	14.6	696.71	1000	
52	Cr	89	He	0.338	ppb	20.4	103.98	2000	
55	Mn	89	He	516.973	ppb	0.9	51028.45	2000	
56	Fe	89	H2	7792.575	ppb	0.4	2444703.65	100000	
59	Co	89	He	0.895	ppb	12.3	322.25	1000	
60	Ni	89	He	0.184	ppb	59.2	58.89	1000	
63	Cu	89	He	-0.434	ppb	N/A	292.24	2000	
66	Zn	89	He	1.750	ppb	32.9	127.78	2000	
75	As	89	He	49.765	ppb	2.4	1506.92	1000	
78	Se	89	H2	0.023	ppb	211.4	0.83	1000	
88	Sr	89	He	124.803	ppb	0.8	18406.18	2000	
95	Mo	89	He	-0.189	ppb	N/A	90.00	1000	
107	Ag	89	He	-0.001	ppb	N/A	10.00	100	
111	Cd	89	He	0.001	ppb	20.1	1.11	1000	
118	Sn	159	He	0.506	ppb	14.1	162.23	1000	
121	Sb	159	No Gas	0.023	ppb	152.2	136.82	1000	
137	Ba	159	No Gas	20.466	ppb	1.7	12630.03	2000	
182	W	159	No Gas	-0.042	ppb	N/A	73.42	1000	
205	Tl	209	No Gas	0.001	ppb	1394.3	30.03	1000	
208	Pb	209	No Gas	0.291	ppb	10.5	1294.82	2000	
232	Th	209	No Gas	0.001	ppb	2019.7	180.20	1000	
238	U	209	No Gas	0.073	ppb	24.0	273.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1210310.02	1.4	1537409.87	78.72	29.5	120.4	
Sc	45	No Gas	3178842.79	1.0	3373253.08	94.24	29.5	120.4	
Sc	45	H2	368892.66	0.7	415670.69	88.75	29.5	120.4	
Sc	45	He	74838.02	1.7	81171.76	92.2	29.5	120.4	
Ge	72	No Gas	773419.47	1.6	779333.11	99.24	29.5	120.4	
Ge	72	H2	138884.97	0.6	153246.58	90.63	29.5	120.4	
Ge	72	He	60410.35	1.3	63135.03	95.68	29.5	120.4	
Y	89	H2	2505819.37	0.4	2642116.11	94.84	29.5	120.4	
Y	89	He	523418.41	0.8	544041.92	96.21	29.5	120.4	
Tb	159	No Gas	8708173.83	1.4	8117023.84	107.28	29.5	120.4	
Tb	159	He	2945681.27	0.6	2866479.19	102.76	29.5	120.4	
Bi	209	No Gas	4666478.97	1.5	4424692.92	105.46	29.5	120.4	

Sample Report

Sample Name SN5520-002

File Name 114SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:12:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.142	ppb	57.1	44.45	100	
11	B	6	No Gas	15.895	ppb	5.8	2874.84	1000	
23	Na	45	He	9319.761	ppb	1.6	195846.04	200000	
24	Mg	45	He	18637.892	ppb	0.7	209902.43	200000	
27	Al	45	He	3.649	ppb	11.8	61.11	200000	
28	Si	45	H2	3360.229	ppb	0.7	25604.91	10000	
39	K	45	He	712.018	ppb	8.1	17002.55	200000	
40	Ca	45	H2	37874.952	ppb	1.1	2735997.18	200000	
51	V	89	He	2.178	ppb	7.2	577.81	1000	
52	Cr	89	He	0.316	ppb	20.7	97.32	2000	
55	Mn	89	He	922.575	ppb	0.4	89187.61	2000	
56	Fe	89	H2	14921.243	ppb	0.9	4576535.49	100000	
59	Co	89	He	6.446	ppb	4.0	2222.56	1000	
60	Ni	89	He	16.523	ppb	3.3	1647.93	1000	
63	Cu	89	He	-0.643	ppb	N/A	231.12	2000	
66	Zn	89	He	4.283	ppb	10.6	216.68	2000	
75	As	89	He	2.084	ppb	3.2	66.01	1000	
78	Se	89	H2	0.057	ppb	88.0	1.33	1000	
88	Sr	89	He	86.064	ppb	0.9	12434.94	2000	
95	Mo	89	He	-0.646	ppb	N/A	12.22	1000	
107	Ag	89	He	-0.005	ppb	N/A	7.78	100	
111	Cd	89	He	0.011	ppb	79.5	1.85	1000	
118	Sn	159	He	0.360	ppb	24.6	135.56	1000	
121	Sb	159	No Gas	0.003	ppb	154.1	103.45	1000	
137	Ba	159	No Gas	11.275	ppb	2.7	6859.46	2000	
182	W	159	No Gas	-0.029	ppb	N/A	86.76	1000	
205	Tl	209	No Gas	0.002	ppb	282.4	33.37	1000	
208	Pb	209	No Gas	0.285	ppb	20.1	1261.45	2000	
232	Th	209	No Gas	-0.004	ppb	N/A	160.18	1000	
238	U	209	No Gas	0.021	ppb	21.9	83.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1192880.81	5.5	1537409.87	77.59	29.5	120.4	
Sc	45	No Gas	3137045.14	4.1	3373253.08	93	29.5	120.4	
Sc	45	H2	360150.56	1.0	415670.69	86.64	29.5	120.4	
Sc	45	He	73470.14	0.5	81171.76	90.51	29.5	120.4	
Ge	72	No Gas	752388.32	5.8	779333.11	96.54	29.5	120.4	
Ge	72	H2	135889.39	0.5	153246.58	88.67	29.5	120.4	
Ge	72	He	58909.59	0.6	63135.03	93.31	29.5	120.4	
Y	89	H2	2453881.58	0.9	2642116.11	92.88	29.5	120.4	
Y	89	He	512682.17	0.1	544041.92	94.24	29.5	120.4	
Tb	159	No Gas	8578436.19	4.1	8117023.84	105.68	29.5	120.4	
Tb	159	He	2924777.91	0.5	2866479.19	102.03	29.5	120.4	
Bi	209	No Gas	4658669.39	4.7	4424692.92	105.29	29.5	120.4	

Sample Report

Sample Name SN5520-003

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:15:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.042	ppb	99.2	23.33	100	
11	B	6	No Gas	20.360	ppb	6.8	3483.87	1000	
23	Na	45	He	10392.049	ppb	0.1	214815.56	200000	
24	Mg	45	He	13914.116	ppb	0.6	154738.44	200000	
27	Al	45	He	4.109	ppb	73.1	62.23	200000	
28	Si	45	H2	3184.551	ppb	1.6	23856.41	10000	
39	K	45	He	577.588	ppb	1.9	15478.14	200000	
40	Ca	45	H2	23066.494	ppb	2.4	1637902.44	200000	
51	V	89	He	1.319	ppb	17.5	432.24	1000	
52	Cr	89	He	0.367	ppb	19.3	106.65	2000	
55	Mn	89	He	1090.357	ppb	0.6	104310.71	2000	
56	Fe	89	H2	17881.640	ppb	2.7	5400283.11	100000	
59	Co	89	He	11.184	ppb	2.3	3809.68	1000	
60	Ni	89	He	24.378	ppb	3.5	2386.96	1000	
63	Cu	89	He	-0.243	ppb	N/A	333.35	2000	
66	Zn	89	He	44.827	ppb	4.8	1665.72	2000	
75	As	89	He	6.052	ppb	10.3	181.35	1000	
78	Se	89	H2	0.091	ppb	110.9	1.83	1000	
88	Sr	89	He	49.512	ppb	3.4	7080.97	2000	
95	Mo	89	He	-0.591	ppb	N/A	21.11	1000	
107	Ag	89	He	0.003	ppb	207.7	12.22	100	
111	Cd	89	He	-0.004	ppb	N/A	0.74	1000	
118	Sn	159	He	0.479	ppb	13.1	154.45	1000	
121	Sb	159	No Gas	0.016	ppb	191.5	123.47	1000	
137	Ba	159	No Gas	16.014	ppb	6.4	9747.84	2000	
182	W	159	No Gas	-0.049	ppb	N/A	63.41	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	20.02	1000	
208	Pb	209	No Gas	0.282	ppb	8.4	1271.46	2000	
232	Th	209	No Gas	0.000	ppb	N/A	176.87	1000	
238	U	209	No Gas	0.000	ppb	N/A	3.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1192391.58	1.3	1537409.87	77.56	29.5	120.4	
Sc	45	No Gas	3105471.79	1.6	3373253.08	92.06	29.5	120.4	
Sc	45	H2	353951.35	1.7	415670.69	85.15	29.5	120.4	
Sc	45	He	72481.84	0.6	81171.76	89.29	29.5	120.4	
Ge	72	No Gas	752643.57	1.6	779333.11	96.58	29.5	120.4	
Ge	72	H2	133045.38	2.6	153246.58	86.82	29.5	120.4	
Ge	72	He	57880.80	1.1	63135.03	91.68	29.5	120.4	
Y	89	H2	2417489.28	1.7	2642116.11	91.5	29.5	120.4	
Y	89	He	507352.10	0.6	544041.92	93.26	29.5	120.4	
Tb	159	No Gas	8588279.31	1.0	8117023.84	105.81	29.5	120.4	
Tb	159	He	2887789.43	0.4	2866479.19	100.74	29.5	120.4	
Bi	209	No Gas	4704727.84	0.9	4424692.92	106.33	29.5	120.4	

Sample Report

Sample Name SN5520-004

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:18:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	119.9	21.11	100	
11	B	6	No Gas	38.125	ppb	6.0	5882.51	1000	
23	Na	45	He	12871.292	ppb	0.8	263985.36	200000	
24	Mg	45	He	20783.320	ppb	0.8	230190.04	200000	
27	Al	45	He	4.400	ppb	88.8	63.34	200000	
28	Si	45	H2	3277.736	ppb	0.8	24772.58	10000	
39	K	45	He	691.156	ppb	4.0	16525.50	200000	
40	Ca	45	H2	13561.827	ppb	0.2	972586.53	200000	
51	V	89	He	1.321	ppb	14.9	432.25	1000	
52	Cr	89	He	0.374	ppb	26.7	107.98	2000	
55	Mn	89	He	1546.871	ppb	0.9	147935.10	2000	
56	Fe	89	H2	18268.622	ppb	0.2	5551725.02	100000	
59	Co	89	He	16.286	ppb	2.5	5543.71	1000	
60	Ni	89	He	28.890	ppb	5.8	2820.40	1000	
63	Cu	89	He	-0.702	ppb	N/A	213.35	2000	
66	Zn	89	He	41.027	ppb	8.0	1529.03	2000	
75	As	89	He	9.901	ppb	7.0	294.04	1000	
78	Se	89	H2	0.058	ppb	66.7	1.33	1000	
88	Sr	89	He	37.881	ppb	1.7	5417.95	2000	
95	Mo	89	He	-0.612	ppb	N/A	17.78	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.67	100	
111	Cd	89	He	0.001	ppb	1333.8	1.11	1000	
118	Sn	159	He	0.249	ppb	19.5	114.45	1000	
121	Sb	159	No Gas	-0.002	ppb	N/A	96.78	1000	
137	Ba	159	No Gas	10.030	ppb	1.2	6111.59	2000	
182	W	159	No Gas	-0.060	ppb	N/A	50.05	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	26.70	1000	
208	Pb	209	No Gas	0.266	ppb	10.4	1198.03	2000	
232	Th	209	No Gas	-0.010	ppb	N/A	133.48	1000	
238	U	209	No Gas	0.013	ppb	58.1	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1190229.73	2.5	1537409.87	77.42	29.5	120.4	
Sc	45	No Gas	3093957.89	2.5	3373253.08	91.72	29.5	120.4	
Sc	45	H2	357130.69	0.4	415670.69	85.92	29.5	120.4	
Sc	45	He	72275.01	0.8	81171.76	89.04	29.5	120.4	
Ge	72	No Gas	750733.26	2.3	779333.11	96.33	29.5	120.4	
Ge	72	H2	135429.78	1.3	153246.58	88.37	29.5	120.4	
Ge	72	He	58644.33	0.1	63135.03	92.89	29.5	120.4	
Y	89	H2	2431976.47	0.4	2642116.11	92.05	29.5	120.4	
Y	89	He	507240.68	1.1	544041.92	93.24	29.5	120.4	
Tb	159	No Gas	8585813.69	2.5	8117023.84	105.78	29.5	120.4	
Tb	159	He	2883905.65	0.7	2866479.19	100.61	29.5	120.4	
Bi	209	No Gas	4653986.74	2.6	4424692.92	105.18	29.5	120.4	

Sample Report

Sample Name SN5520-005

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:21:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.067	ppb	32.9	27.78	100	
11	B	6	No Gas	22.518	ppb	9.1	3662.82	1000	
23	Na	45	He	9860.257	ppb	1.7	204821.42	200000	
24	Mg	45	He	16669.805	ppb	1.6	185926.55	200000	
27	Al	45	He	6.916	ppb	43.4	74.45	200000	
28	Si	45	H2	3318.213	ppb	1.1	25143.41	10000	
39	K	45	He	572.386	ppb	3.7	15483.15	200000	
40	Ca	45	H2	27448.738	ppb	0.7	1971784.76	200000	
51	V	89	He	1.493	ppb	17.3	461.14	1000	
52	Cr	89	He	0.353	ppb	15.5	103.98	2000	
55	Mn	89	He	816.606	ppb	0.4	78230.18	2000	
56	Fe	89	H2	11490.956	ppb	0.5	3511021.21	100000	
59	Co	89	He	6.348	ppb	3.6	2169.22	1000	
60	Ni	89	He	18.357	ppb	3.5	1810.18	1000	
63	Cu	89	He	-0.653	ppb	N/A	226.67	2000	
66	Zn	89	He	23.524	ppb	9.7	904.51	2000	
75	As	89	He	7.001	ppb	12.1	209.36	1000	
78	Se	89	H2	-0.020	ppb	N/A	0.17	1000	
88	Sr	89	He	60.990	ppb	2.2	8733.09	2000	
95	Mo	89	He	-0.557	ppb	N/A	26.67	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.66	100	
111	Cd	89	He	0.011	ppb	79.9	1.85	1000	
118	Sn	159	He	0.733	ppb	25.5	198.90	1000	
121	Sb	159	No Gas	0.059	ppb	30.4	183.54	1000	
137	Ba	159	No Gas	8.267	ppb	9.9	4822.94	2000	
182	W	159	No Gas	0.047	ppb	124.7	173.53	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	0.286	ppb	3.9	1228.06	2000	
232	Th	209	No Gas	-0.006	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.025	ppb	53.2	93.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1158220.55	4.0	1537409.87	75.34	29.5	120.4	
Sc	45	No Gas	2971621.12	6.4	3373253.08	88.09	29.5	120.4	
Sc	45	H2	358062.46	1.4	415670.69	86.14	29.5	120.4	
Sc	45	He	72750.26	1.7	81171.76	89.63	29.5	120.4	
Ge	72	No Gas	728151.59	5.1	779333.11	93.43	29.5	120.4	
Ge	72	H2	134013.82	0.5	153246.58	87.45	29.5	120.4	
Ge	72	He	58660.08	0.3	63135.03	92.91	29.5	120.4	
Y	89	H2	2443228.56	1.0	2642116.11	92.47	29.5	120.4	
Y	89	He	508041.69	0.9	544041.92	93.38	29.5	120.4	
Tb	159	No Gas	8245279.11	6.4	8117023.84	101.58	29.5	120.4	
Tb	159	He	2893883.32	0.6	2866479.19	100.96	29.5	120.4	
Bi	209	No Gas	4498825.12	5.7	4424692.92	101.68	29.5	120.4	

Sample Report

Sample Name SN5520-006

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:23:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.069	ppb	32.4	28.89	100	
11	B	6	No Gas	26.904	ppb	7.4	4361.93	1000	
23	Na	45	He	8633.353	ppb	2.7	181547.28	200000	
24	Mg	45	He	33869.197	ppb	1.5	380398.64	200000	
27	Al	45	He	0.616	ppb	483.3	47.78	200000	
28	Si	45	H2	3459.614	ppb	3.3	26269.86	10000	
39	K	45	He	1092.549	ppb	3.8	20694.01	200000	
40	Ca	45	H2	37837.430	ppb	2.1	2724655.24	200000	
51	V	89	He	2.077	ppb	6.2	561.14	1000	
52	Cr	89	He	0.303	ppb	0.2	94.65	2000	
55	Mn	89	He	116.041	ppb	2.0	11227.77	2000	
56	Fe	89	H2	6863.626	ppb	2.1	2104464.02	100000	
59	Co	89	He	2.098	ppb	11.1	728.96	1000	
60	Ni	89	He	11.184	ppb	6.5	1127.87	1000	
63	Cu	89	He	-0.626	ppb	N/A	235.57	2000	
66	Zn	89	He	3.355	ppb	22.3	183.34	2000	
75	As	89	He	41.138	ppb	2.7	1220.52	1000	
78	Se	89	H2	0.035	ppb	92.4	1.00	1000	
88	Sr	89	He	112.892	ppb	1.5	16311.33	2000	
95	Mo	89	He	-0.585	ppb	N/A	22.22	1000	
107	Ag	89	He	0.003	ppb	396.1	12.22	100	
111	Cd	89	He	-0.014	ppb	N/A	0.00	1000	
118	Sn	159	He	0.431	ppb	32.5	146.67	1000	
121	Sb	159	No Gas	-0.008	ppb	N/A	86.76	1000	
137	Ba	159	No Gas	14.113	ppb	6.7	8565.61	2000	
182	W	159	No Gas	-0.073	ppb	N/A	33.37	1000	
205	Tl	209	No Gas	0.001	ppb	446.2	30.03	1000	
208	Pb	209	No Gas	0.241	ppb	16.3	1087.91	2000	
232	Th	209	No Gas	0.001	ppb	1412.7	180.21	1000	
238	U	209	No Gas	0.149	ppb	15.5	550.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1189842.89	2.5	1537409.87	77.39	29.5	120.4	
Sc	45	No Gas	3115845.50	3.1	3373253.08	92.37	29.5	120.4	
Sc	45	H2	359031.70	0.7	415670.69	86.37	29.5	120.4	
Sc	45	He	73366.28	1.3	81171.76	90.38	29.5	120.4	
Ge	72	No Gas	749394.75	3.3	779333.11	96.16	29.5	120.4	
Ge	72	H2	135563.91	0.9	153246.58	88.46	29.5	120.4	
Ge	72	He	59140.56	0.2	63135.03	93.67	29.5	120.4	
Y	89	H2	2448264.43	1.0	2642116.11	92.66	29.5	120.4	
Y	89	He	512702.20	1.4	544041.92	94.24	29.5	120.4	
Tb	159	No Gas	8567182.86	2.5	8117023.84	105.55	29.5	120.4	
Tb	159	He	2899205.34	0.9	2866479.19	101.14	29.5	120.4	
Bi	209	No Gas	4609357.11	3.0	4424692.92	104.17	29.5	120.4	

Sample Report

Sample Name SN5520-007

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:26:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	14.44	100	
11	B	6	No Gas	19.412	ppb	7.7	3399.41	1000	
23	Na	45	He	6766.876	ppb	1.0	145567.65	200000	
24	Mg	45	He	29768.230	ppb	0.3	339202.81	200000	
27	Al	45	He	0.935	ppb	362.2	50.00	200000	
28	Si	45	H2	3025.779	ppb	12.5	24070.50	10000	
39	K	45	He	1492.726	ppb	1.1	24955.61	200000	
40	Ca	45	H2	44652.469	ppb	13.2	3361736.44	200000	
51	V	89	He	2.431	ppb	1.6	625.60	1000	
52	Cr	89	He	0.389	ppb	3.9	113.31	2000	
55	Mn	89	He	442.635	ppb	1.4	43221.30	2000	
56	Fe	89	H2	4983.150	ppb	14.5	1588686.64	100000	
59	Co	89	He	0.033	ppb	1.4	20.00	1000	
60	Ni	89	He	-0.093	ppb	N/A	31.11	1000	
63	Cu	89	He	-0.573	ppb	N/A	252.23	2000	
66	Zn	89	He	2.795	ppb	19.8	164.45	2000	
75	As	89	He	22.512	ppb	1.6	676.76	1000	
78	Se	89	H2	0.043	ppb	45.9	1.17	1000	
88	Sr	89	He	140.691	ppb	1.3	20525.99	2000	
95	Mo	89	He	-0.686	ppb	N/A	5.56	1000	
107	Ag	89	He	0.001	ppb	1366.7	11.11	100	
111	Cd	89	He	0.010	ppb	80.0	1.85	1000	
118	Sn	159	He	0.329	ppb	35.1	130.01	1000	
121	Sb	159	No Gas	0.020	ppb	150.3	130.14	1000	
137	Ba	159	No Gas	18.844	ppb	10.3	11544.52	2000	
182	W	159	No Gas	-0.063	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	26.70	1000	
208	Pb	209	No Gas	0.228	ppb	17.4	1057.89	2000	
232	Th	209	No Gas	-0.007	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.008	ppb	23.0	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1209534.20	3.7	1537409.87	78.67	29.5	120.4	
Sc	45	No Gas	3168487.44	4.1	3373253.08	93.93	29.5	120.4	
Sc	45	H2	378579.05	9.6	415670.69	91.08	29.5	120.4	
Sc	45	He	74409.52	0.6	81171.76	91.67	29.5	120.4	
Ge	72	No Gas	764461.17	3.6	779333.11	98.09	29.5	120.4	
Ge	72	H2	141301.57	8.3	153246.58	92.21	29.5	120.4	
Ge	72	He	59168.49	0.7	63135.03	93.72	29.5	120.4	
Y	89	H2	2567396.73	10.4	2642116.11	97.17	29.5	120.4	
Y	89	He	517805.28	0.8	544041.92	95.18	29.5	120.4	
Tb	159	No Gas	8666803.90	4.1	8117023.84	106.77	29.5	120.4	
Tb	159	He	2921745.54	0.6	2866479.19	101.93	29.5	120.4	
Bi	209	No Gas	4676261.10	4.3	4424692.92	105.69	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	120_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:29:05 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.311	ppb	6.6	26109.78	25	97.24	89.8	110.2	
11	B	6	No Gas	23.975	ppb	5.5	17661.24	25	95.9	89.8	110.2	
23	Na	45	He	4981.518	ppb	0.3	516217.18	5000	99.63	89.8	110.2	
24	Mg	45	He	4852.843	ppb	0.3	274237.00	5000	97.06	89.8	110.2	
27	Al	45	He	469.004	ppb	0.8	10288.49	500	93.8	89.8	110.2	
28	Si	45	H2	482.520	ppb	4.0	18863.40	500	96.5	89.8	110.2	
39	K	45	He	4886.339	ppb	0.5	250037.49	5000	97.73	89.8	110.2	
40	Ca	45	H2	4963.542	ppb	1.8	1834073.69	5000	99.27	89.8	110.2	
51	V	89	He	23.770	ppb	1.4	19800.06	25	95.08	89.8	110.2	
52	Cr	89	He	24.194	ppb	1.1	24627.57	25	96.78	89.8	110.2	
55	Mn	89	He	24.388	ppb	0.4	11826.83	25	97.55	89.8	110.2	
56	Fe	89	H2	4867.973	ppb	0.7	7499196.02	5000	97.36	89.8	110.2	
59	Co	89	He	24.625	ppb	2.2	42400.13	25	98.5	89.8	110.2	
60	Ni	89	He	24.562	ppb	2.0	12022.22	25	98.25	89.8	110.2	
63	Cu	89	He	24.622	ppb	0.6	32982.01	25	98.49	89.8	110.2	
66	Zn	89	He	24.325	ppb	4.7	4470.89	25	97.3	89.8	110.2	
75	As	89	He	24.000	ppb	3.0	3561.18	25	96	89.8	110.2	
78	Se	89	H2	24.514	ppb	1.0	1880.04	25	98.06	89.8	110.2	
88	Sr	89	He	23.710	ppb	2.5	17165.72	25	94.84	89.8	110.2	
95	Mo	89	He	24.356	ppb	1.0	20362.46	25	97.42	89.8	110.2	
107	Ag	89	He	18.793	ppb	1.8	53123.64	25	75.17	89.8	110.2	> +/- 10%
111	Cd	89	He	24.899	ppb	1.2	9377.78	25	99.6	89.8	110.2	
118	Sn	159	He	22.869	ppb	1.1	19761.74	25	91.48	89.8	110.2	
121	Sb	159	No Gas	22.928	ppb	5.1	177230.10	25	91.71	89.8	110.2	
137	Ba	159	No Gas	23.075	ppb	4.7	70168.83	25	92.3	89.8	110.2	
182	W	159	No Gas	22.969	ppb	5.3	141303.26	25	91.88	89.8	110.2	
205	Tl	209	No Gas	23.513	ppb	4.4	321857.43	25	94.05	89.8	110.2	
208	Pb	209	No Gas	23.506	ppb	5.0	444808.68	25	94.02	89.8	110.2	
232	Th	209	No Gas	22.985	ppb	6.5	455211.25	25	91.94	89.8	110.2	
238	U	209	No Gas	23.339	ppb	5.4	433850.52	25	93.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1239716.42	2.8	1537409.87	80.64	29.5	120.4	
Sc	45	No Gas	3243080.65	4.0	3373253.08	96.14	29.5	120.4	
Sc	45	H2	368345.30	0.8	415670.69	88.61	29.5	120.4	
Sc	45	He	73775.40	0.1	81171.76	90.89	29.5	120.4	
Ge	72	No Gas	764174.30	4.1	779333.11	98.05	29.5	120.4	
Ge	72	H2	137700.26	1.2	153246.58	89.86	29.5	120.4	
Ge	72	He	59275.69	1.0	63135.03	93.89	29.5	120.4	
Y	89	H2	2466560.09	0.0	2642116.11	93.36	29.5	120.4	
Y	89	He	513909.66	0.7	544041.92	94.46	29.5	120.4	
Tb	159	No Gas	8600531.61	3.8	8117023.84	105.96	29.5	120.4	
Tb	159	He	2877796.66	0.4	2866479.19	100.39	29.5	120.4	
Bi	209	No Gas	4655940.88	3.4	4424692.92	105.23	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	121_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:31:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.048	ppb	33.4	66.67	0.2	
11	B	6	No Gas	1.401	ppb	1.7	1744.61	4	
23	Na	45	He	21.541	ppb	12.9	7633.84	200	
24	Mg	45	He	-1.870	ppb	N/A	448.93	20	
27	Al	45	He	-1.613	ppb	N/A	10.00	20	
28	Si	45	H2	6.195	ppb	13.4	453.84	100	
39	K	45	He	17.718	ppb	3.3	10689.25	200	
40	Ca	45	H2	4.766	ppb	8.3	3387.20	20	
51	V	89	He	0.634	ppb	15.2	730.05	1	Failed DoD
52	Cr	89	He	0.140	ppb	5.7	172.64	1	
55	Mn	89	He	0.132	ppb	12.3	74.66	0.4	
56	Fe	89	H2	0.051	ppb	347.4	7947.85	20	
59	Co	89	He	0.002	ppb	267.9	11.11	0.2	
60	Ni	89	He	-0.017	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.051	ppb	N/A	328.90	0.6	
66	Zn	89	He	0.101	ppb	30.3	78.89	2	
75	As	89	He	0.066	ppb	38.0	14.00	1	
78	Se	89	H2	0.069	ppb	20.2	5.67	1	
88	Sr	89	He	0.012	ppb	102.2	14.44	1	
95	Mo	89	He	-0.023	ppb	N/A	98.89	1	
107	Ag	89	He	0.008	ppb	51.6	33.33	0.2	
111	Cd	89	He	0.006	ppb	47.9	3.33	0.2	
118	Sn	159	He	0.287	ppb	3.7	318.90	1	
121	Sb	159	No Gas	0.033	ppb	6.2	357.08	0.2	
137	Ba	159	No Gas	0.032	ppb	76.1	116.80	0.4	
182	W	159	No Gas	0.116	ppb	16.4	840.97	1	
205	Tl	209	No Gas	0.028	ppb	21.6	423.83	0.2	
208	Pb	209	No Gas	0.142	ppb	15.8	2906.74	0.2	Failed DoD
232	Th	209	No Gas	0.179	ppb	42.4	3784.90	1	
238	U	209	No Gas	0.033	ppb	45.8	620.74	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1245233.86	1.9	1537409.87	81	29.5	120.4	
Sc	45	No Gas	3135267.74	1.4	3373253.08	92.94	29.5	120.4	
Sc	45	H2	355867.58	0.5	415670.69	85.61	29.5	120.4	
Sc	45	He	72007.30	1.4	81171.76	88.71	29.5	120.4	
Ge	72	No Gas	757855.02	2.7	779333.11	97.24	29.5	120.4	
Ge	72	H2	131063.35	1.0	153246.58	85.52	29.5	120.4	
Ge	72	He	57560.77	1.0	63135.03	91.17	29.5	120.4	
Y	89	H2	2412992.44	1.0	2642116.11	91.33	29.5	120.4	
Y	89	He	504937.52	0.5	544041.92	92.81	29.5	120.4	
Tb	159	No Gas	8655732.44	1.5	8117023.84	106.64	29.5	120.4	
Tb	159	He	2880984.82	0.7	2866479.19	100.51	29.5	120.4	
Bi	209	No Gas	4707143.12	1.2	4424692.92	106.38	29.5	120.4	

Sample Report

Sample Name SN5520-008

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:34:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.115	ppb	78.3	38.89	100	
11	B	6	No Gas	19.313	ppb	2.0	3391.63	1000	
23	Na	45	He	6697.699	ppb	1.4	144034.57	200000	
24	Mg	45	He	30144.219	ppb	1.2	343220.45	200000	
27	Al	45	He	0.421	ppb	847.8	47.78	200000	
28	Si	45	H2	3959.665	ppb	1.4	30459.97	10000	
39	K	45	He	1403.486	ppb	1.9	24052.78	200000	
40	Ca	45	H2	37471.579	ppb	2.1	2736307.74	200000	
51	V	89	He	2.212	ppb	11.9	588.92	1000	
52	Cr	89	He	0.324	ppb	12.8	99.98	2000	
55	Mn	89	He	503.135	ppb	1.1	49096.59	2000	
56	Fe	89	H2	7614.075	ppb	1.9	2341677.06	100000	
59	Co	89	He	0.828	ppb	2.4	295.58	1000	
60	Ni	89	He	0.168	ppb	20.2	56.67	1000	
63	Cu	89	He	-0.684	ppb	N/A	222.23	2000	
66	Zn	89	He	2.313	ppb	32.4	146.67	2000	
75	As	89	He	47.962	ppb	2.7	1435.90	1000	
78	Se	89	H2	0.078	ppb	61.6	1.67	1000	
88	Sr	89	He	120.826	ppb	0.1	17617.41	2000	
95	Mo	89	He	0.011	ppb	1421.3	122.23	1000	
107	Ag	89	He	0.003	ppb	233.7	12.22	100	
111	Cd	89	He	0.025	ppb	33.2	2.96	1000	
118	Sn	159	He	0.626	ppb	41.2	182.23	1000	
121	Sb	159	No Gas	0.024	ppb	51.0	136.82	1000	
137	Ba	159	No Gas	18.949	ppb	7.0	11651.46	2000	
182	W	159	No Gas	-0.026	ppb	N/A	93.44	1000	
205	Tl	209	No Gas	0.004	ppb	255.5	40.04	1000	
208	Pb	209	No Gas	0.231	ppb	7.4	1067.88	2000	
232	Th	209	No Gas	0.026	ppb	106.2	283.65	1000	
238	U	209	No Gas	0.090	ppb	27.9	340.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1210214.01	2.4	1537409.87	78.72	29.5	120.4	
Sc	45	No Gas	3198480.66	2.9	3373253.08	94.82	29.5	120.4	
Sc	45	H2	364099.02	1.0	415670.69	87.59	29.5	120.4	
Sc	45	He	74360.28	1.4	81171.76	91.61	29.5	120.4	
Ge	72	No Gas	767008.66	3.1	779333.11	98.42	29.5	120.4	
Ge	72	H2	136569.13	1.9	153246.58	89.12	29.5	120.4	
Ge	72	He	59316.52	0.7	63135.03	93.95	29.5	120.4	
Y	89	H2	2456728.88	1.4	2642116.11	92.98	29.5	120.4	
Y	89	He	517455.48	0.7	544041.92	95.11	29.5	120.4	
Tb	159	No Gas	8684809.73	2.7	8117023.84	107	29.5	120.4	
Tb	159	He	2924419.47	0.7	2866479.19	102.02	29.5	120.4	
Bi	209	No Gas	4680889.27	2.9	4424692.92	105.79	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG09IMW2
File Name	123_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:37:04 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.006	ppb	32.5	21.11	0.1	
B	11	6	No Gas	0.456	ppb	21.9	1064.52	2	
Na	23	45	He	-1.806	ppb	N/A	5346.92	100	
Mg	24	45	He	1.418	ppb	121.5	635.62	10	
Al	27	45	He	-0.298	ppb	N/A	38.89	10	
Si	28	45	H2	3.710	ppb	38.6	380.43	50	
K	39	45	He	18.737	ppb	99.3	10855.96	100	
Ca	40	45	H2	1.272	ppb	24.6	2261.38	10	
V	51	89	He	0.036	ppb	90.6	247.79	0.5	
Cr	52	89	He	0.032	ppb	27.9	65.32	0.5	
Mn	55	89	He	0.126	ppb	11.5	71.99	0.2	
Fe	56	89	H2	-1.464	ppb	N/A	5884.44	10	
Co	59	89	He	-0.002	ppb	N/A	4.44	0.1	
Ni	60	89	He	-0.018	ppb	N/A	30.00	0.2	
Cu	63	89	He	-0.172	ppb	N/A	172.23	0.3	
Zn	66	89	He	0.930	ppb	14.9	226.67	1	
As	75	89	He	0.000	ppb	4713.5	4.33	0.5	
Se	78	89	H2	0.003	ppb	373.4	0.67	0.5	
Sr	88	89	He	0.011	ppb	87.1	14.44	0.5	
Mo	95	89	He	-0.110	ppb	N/A	27.78	0.5	
Ag	107	89	He	0.000	ppb	306.9	11.11	0.1	
Cd	111	89	He	-0.002	ppb	N/A	0.37	0.1	
Sn	118	159	He	-0.014	ppb	N/A	57.78	0.5	
Sb	121	159	No Gas	-0.003	ppb	N/A	73.42	0.1	
Ba	137	159	No Gas	0.019	ppb	27.9	73.42	0.2	
W	182	159	No Gas	-0.008	ppb	N/A	73.42	0.5	
Tl	205	209	No Gas	0.000	ppb	798.1	30.03	0.1	
[Pb]	206	209	No Gas	0.007	ppb	136.9	80.09	0.1	
[Pb]	207	209	No Gas	0.012	ppb	53.5	90.10	0.1	
Pb	208	209	No Gas	0.012	ppb	25.7	413.80	0.1	
Th	232	209	No Gas	-0.001	ppb	N/A	143.50	0.5	
U	238	209	No Gas	0.001	ppb	126.0	23.36	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234382.67	0.9	1537409.87	80.29	29.5	120.4	
Sc	45	No Gas	3169065.67	0.3	3373253.08	93.95	29.5	120.4	
Sc	45	H2	376440.69	4.7	415670.69	90.56	29.5	120.4	
Sc	45	He	73046.36	6.4	81171.76	89.99	29.5	120.4	
Ge	72	No Gas	750725.07	0.0	779333.11	96.33	29.5	120.4	
Ge	72	H2	141072.38	4.2	153246.58	92.06	29.5	120.4	
Ge	72	He	58987.54	3.9	63135.03	93.43	29.5	120.4	
Y	89	H2	2511062.62	4.8	2642116.11	95.04	29.5	120.4	
Y	89	He	506585.75	6.1	544041.92	93.12	29.5	120.4	
Tb	159	No Gas	8352375.36	0.5	8117023.84	102.9	29.5	120.4	
Tb	159	He	2794611.73	5.6	2866479.19	97.49	29.5	120.4	
Bi	209	No Gas	4554540.68	0.8	4424692.92	102.93	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG09IMW2
File Name	124_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:39:47 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.055	ppb	4.8	11265.87	50	20.02	79.5	120.4	
B	11	6	No Gas	503.040	ppb	3.9	75082.83	500	20.12	79.5	120.4	
Na	23	45	He	7354.195	ppb	0.5	161105.44	7500	19.61	79.5	120.4	
Mg	24	45	He	5106.654	ppb	1.6	59917.39	5000	20.43	79.5	120.4	
Al	27	45	He	1906.624	ppb	2.0	8626.23	2000	19.07	79.5	120.4	
Si	28	45	H2	1076.604	ppb	8.9	8652.31	1000	21.53	79.5	120.4	
K	39	45	He	10244.443	ppb	0.4	114046.23	10000	20.49	79.5	120.4	
Ca	40	45	H2	2640.063	ppb	1.3	199235.54	2500	21.12	79.5	120.4	
V	51	89	He	494.376	ppb	0.9	82855.92	500	19.78	79.5	120.4	
Cr	52	89	He	200.184	ppb	1.1	41323.81	200	20.02	79.5	120.4	
Mn	55	89	He	497.355	ppb	1.6	48900.04	500	19.89	79.5	120.4	
Fe	56	89	H2	1063.514	ppb	2.0	335981.99	1000	21.27	79.5	120.4	
Co	59	89	He	517.815	ppb	1.4	180896.96	500	20.71	79.5	120.4	
Ni	60	89	He	493.254	ppb	1.4	48861.86	500	19.73	79.5	120.4	
Cu	63	89	He	255.208	ppb	0.5	68933.73	250	20.42	79.5	120.4	
Zn	66	89	He	513.663	ppb	3.8	18950.15	500	20.55	79.5	120.4	
As	75	89	He	100.886	ppb	1.4	3038.34	100	20.18	79.5	120.4	
Se	78	89	H2	104.481	ppb	0.9	1605.85	100	20.9	79.5	120.4	
Sr	88	89	He	515.059	ppb	1.3	75648.20	500	20.6	79.5	120.4	
Mo	95	89	He	103.591	ppb	0.4	17593.02	100	20.72	79.5	120.4	
Ag	107	89	He	53.202	ppb	1.7	30521.73	50	21.28	79.5	120.4	
Cd	111	89	He	261.435	ppb	1.3	19978.54	250	20.91	79.5	120.4	
Sn	118	159	He	483.917	ppb	0.5	83689.54	500	19.36	79.5	120.4	
Sb	121	159	No Gas	101.081	ppb	5.2	151890.08	100	20.22	79.5	120.4	
Ba	137	159	No Gas	1923.761	ppb	4.2	1136955.63	2000	19.24	79.5	120.4	
W	182	159	No Gas	100.817	ppb	3.3	120623.07	100	20.16	79.5	120.4	
Tl	205	209	No Gas	101.857	ppb	4.1	270708.06	100	20.37	79.5	120.4	
Pb	208	209	No Gas	102.262	ppb	4.8	375732.99	100	20.45	79.5	120.4	
Th	232	209	No Gas	96.388	ppb	6.5	370664.57	100	19.28	79.5	120.4	
U	238	209	No Gas	99.586	ppb	6.0	359363.32	100	19.92	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1296877.76	1.4	1537409.87	84.35	29.5	120.4	
Sc	45	No Gas	3218896.28	2.2	3373253.08	95.42	29.5	120.4	
Sc	45	H2	373165.80	1.3	415670.69	89.77	29.5	120.4	
Sc	45	He	76009.03	1.0	81171.76	93.64	29.5	120.4	
Ge	72	No Gas	759447.75	2.7	779333.11	97.45	29.5	120.4	
Ge	72	H2	138093.07	2.5	153246.58	90.11	29.5	120.4	
Ge	72	He	60303.97	0.3	63135.03	95.52	29.5	120.4	
Y	89	H2	2471436.77	1.2	2642116.11	93.54	29.5	120.4	
Y	89	He	521429.42	1.3	544041.92	95.84	29.5	120.4	
Tb	159	No Gas	8355593.56	2.6	8117023.84	102.94	29.5	120.4	
Tb	159	He	2887688.81	0.7	2866479.19	100.74	29.5	120.4	
Bi	209	No Gas	4519038.51	3.0	4424692.92	102.13	29.5	120.4	

Sample Report

Sample Name SN5513-001

File Name 125SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:42:25 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.041	ppb	48.8	60.00	100	
11	B	6	No Gas	24.103	ppb	5.2	18217.62	1000	
23	Na	45	He	12048.569	ppb	1.0	1262300.50	200000	
24	Mg	45	He	441.095	ppb	1.9	25885.10	200000	
27	Al	45	He	39.172	ppb	5.8	916.73	200000	
28	Si	45	H2	553.873	ppb	7.7	22482.72	10000	
39	K	45	He	2072.577	ppb	0.4	113817.28	200000	
40	Ca	45	H2	3237.772	ppb	6.3	1245361.58	200000	
51	V	89	He	0.174	ppb	27.3	367.80	1000	
52	Cr	89	He	0.138	ppb	17.5	175.30	2000	
55	Mn	89	He	8.444	ppb	1.8	4149.87	2000	
56	Fe	89	H2	55.663	ppb	7.6	96343.48	100000	
59	Co	89	He	0.091	ppb	32.8	166.68	1000	
60	Ni	89	He	0.433	ppb	21.2	254.46	1000	
63	Cu	89	He	2.099	ppb	0.8	3216.05	2000	
66	Zn	89	He	7.534	ppb	3.9	1444.58	2000	
75	As	89	He	0.113	ppb	51.4	21.33	1000	
78	Se	89	H2	0.056	ppb	40.8	4.83	1000	
88	Sr	89	He	15.913	ppb	1.3	11657.57	2000	
95	Mo	89	He	0.057	ppb	113.1	168.90	1000	
107	Ag	89	He	0.007	ppb	85.7	30.00	100	
111	Cd	89	He	0.022	ppb	52.1	9.63	1000	
118	Sn	159	He	0.587	ppb	5.8	576.70	1000	
121	Sb	159	No Gas	0.078	ppb	17.4	680.78	1000	
137	Ba	159	No Gas	1.861	ppb	13.1	5483.95	2000	
182	W	159	No Gas	0.124	ppb	26.8	854.33	1000	
205	Tl	209	No Gas	0.034	ppb	69.4	470.55	1000	
208	Pb	209	No Gas	0.238	ppb	34.5	4515.51	2000	
232	Th	209	No Gas	0.398	ppb	7.4	7821.35	1000	
238	U	209	No Gas	0.040	ppb	67.1	710.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1271865.62	2.2	1537409.87	82.73	29.5	120.4	
Sc	45	No Gas	3211675.96	2.6	3373253.08	95.21	29.5	120.4	
Sc	45	H2	384208.79	6.3	415670.69	92.43	29.5	120.4	
Sc	45	He	75066.13	0.3	81171.76	92.48	29.5	120.4	
Ge	72	No Gas	758290.49	2.3	779333.11	97.3	29.5	120.4	
Ge	72	H2	143773.91	5.1	153246.58	93.82	29.5	120.4	
Ge	72	He	60251.23	0.5	63135.03	95.43	29.5	120.4	
Y	89	H2	2543433.60	6.3	2642116.11	96.27	29.5	120.4	
Y	89	He	519887.03	1.4	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8314188.84	2.7	8117023.84	102.43	29.5	120.4	
Tb	159	He	2876795.75	0.6	2866479.19	100.36	29.5	120.4	
Bi	209	No Gas	4504671.86	3.0	4424692.92	101.81	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG10IMS1
File Name	126_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:45:09 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.036	ppb	89.6	23.33	0.5	
B	11	6	No Gas	8.923	ppb	10.2	2058.01	10	
Na	23	45	He	134.576	ppb	22.2	8278.28	500	
Mg	24	45	He	13.416	ppb	5.0	708.96	50	
Al	27	45	He	5.805	ppb	12.6	70.00	50	
Si	28	45	H2	24.829	ppb	24.8	423.82	250	
K	39	45	He	111.326	ppb	15.5	11051.01	500	
Ca	40	45	H2	59.599	ppb	1.6	6171.54	50	PB 6020 Fails DoD
V	51	89	He	2.346	ppb	17.2	603.37	2.5	
Cr	52	89	He	0.875	ppb	9.4	209.96	2.5	
Mn	55	89	He	3.706	ppb	15.8	369.27	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	11.300	ppb	10.4	11564.30	50	
Co	59	89	He	0.145	ppb	35.1	57.78	0.5	
Ni	60	89	He	0.634	ppb	17.4	101.11	1	
Cu	63	89	He	0.259	ppb	24.2	467.80	1.5	
Zn	66	89	He	8.679	ppb	4.9	374.46	5	PB 6020 Fails DoD
As	75	89	He	0.122	ppb	124.8	8.00	2.5	
Se	78	89	H2	0.078	ppb	87.0	1.67	2.5	
Sr	88	89	He	0.412	ppb	15.1	65.56	2.5	
Mo	95	89	He	-0.518	ppb	N/A	33.33	2.5	
Ag	107	89	He	0.013	ppb	50.9	17.78	0.5	
Cd	111	89	He	0.021	ppb	108.0	2.59	0.5	
Sn	118	159	He	39.859	ppb	1.4	6892.01	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.034	ppb	28.4	146.83	0.5	
Ba	137	159	No Gas	0.457	ppb	12.2	286.99	1	
W	182	159	No Gas	-0.022	ppb	N/A	93.44	2.5	
Tl	205	209	No Gas	0.009	ppb	91.0	50.06	0.5	
Pb	208	209	No Gas	0.547	ppb	1.8	2209.23	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.305	ppb	1.8	1351.61	2.5	
U	238	209	No Gas	0.012	ppb	47.1	46.72	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1270431.57	1.7	1537409.87	82.63	29.5	120.4	
Sc	45	No Gas	3137464.98	0.8	3373253.08	93.01	29.5	120.4	
Sc	45	H2	369776.93	0.5	415670.69	88.96	29.5	120.4	
Sc	45	He	72955.72	0.3	81171.76	89.88	29.5	120.4	
Ge	72	No Gas	754115.16	1.6	779333.11	96.76	29.5	120.4	
Ge	72	H2	136862.03	1.9	153246.58	89.31	29.5	120.4	
Ge	72	He	58964.57	0.2	63135.03	93.39	29.5	120.4	
Y	89	H2	2475560.16	0.8	2642116.11	93.7	29.5	120.4	
Y	89	He	510948.82	1.1	544041.92	93.92	29.5	120.4	
Tb	159	No Gas	8350688.14	0.8	8117023.84	102.88	29.5	120.4	
Tb	159	He	2860101.52	1.2	2866479.19	99.78	29.5	120.4	
Bi	209	No Gas	4548461.90	1.4	4424692.92	102.8	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG10IMS1
File Name	127LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 8:47:45 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.972	ppb	5.5	10706.51	50	19.59	79.5	120.4	
B	11	6	No Gas	494.522	ppb	3.7	71717.88	500	19.78	79.5	120.4	
Na	23	45	He	7337.758	ppb	2.6	159318.69	7500	19.57	79.5	120.4	
Mg	24	45	He	4973.589	ppb	3.1	57848.83	5000	19.89	79.5	120.4	
Al	27	45	He	1775.480	ppb	4.7	7964.69	2000	17.75	79.5	120.4	
Si	28	45	H2	914.312	ppb	2.5	7373.45	1000	18.29	79.5	120.4	
K	39	45	He	10012.050	ppb	3.3	110689.88	10000	20.02	79.5	120.4	
Ca	40	45	H2	2561.433	ppb	1.7	192982.11	2500	20.49	79.5	120.4	
V	51	89	He	488.731	ppb	2.8	81929.66	500	19.55	79.5	120.4	
Cr	52	89	He	199.216	ppb	2.0	41136.63	200	19.92	79.5	120.4	
Mn	55	89	He	493.793	ppb	1.7	48568.28	500	19.75	79.5	120.4	
Fe	56	89	H2	1044.558	ppb	1.9	335832.85	1000	20.89	79.5	120.4	
Co	59	89	He	513.431	ppb	2.2	179420.08	500	20.54	79.5	120.4	
Ni	60	89	He	492.333	ppb	3.3	48779.16	500	19.69	79.5	120.4	
Cu	63	89	He	254.352	ppb	2.3	68720.67	250	20.35	79.5	120.4	
Zn	66	89	He	501.467	ppb	2.3	18510.63	500	20.06	79.5	120.4	
As	75	89	He	101.422	ppb	3.1	3055.01	100	20.28	79.5	120.4	
Se	78	89	H2	97.912	ppb	1.6	1530.68	100	19.58	79.5	120.4	
Sr	88	89	He	501.934	ppb	2.2	73745.80	500	20.08	79.5	120.4	
Mo	95	89	He	103.697	ppb	2.9	17612.98	100	20.74	79.5	120.4	
Ag	107	89	He	53.989	ppb	3.1	30979.47	50	21.6	79.5	120.4	
Cd	111	89	He	253.314	ppb	2.3	19363.55	250	20.27	79.5	120.4	
Sn	118	159	He	513.308	ppb	2.1	90242.51	500	20.53	79.5	120.4	
Sb	121	159	No Gas	97.511	ppb	5.1	150732.87	100	19.5	79.5	120.4	
Ba	137	159	No Gas	1876.977	ppb	3.7	1141074.20	2000	18.77	79.5	120.4	
W	182	159	No Gas	99.544	ppb	3.6	122500.33	100	19.91	79.5	120.4	
Tl	205	209	No Gas	100.656	ppb	3.8	273812.84	100	20.13	79.5	120.4	
[Pb]	206	209	No Gas	101.581	ppb	6.2	95092.31	100	20.32	79.5	120.4	
[Pb]	207	209	No Gas	101.777	ppb	4.3	83532.47	100	20.36	79.5	120.4	
Pb	208	209	No Gas	100.738	ppb	4.4	378870.48	100	20.15	79.5	120.4	
Th	232	209	No Gas	96.410	ppb	4.8	379609.67	100	19.28	79.5	120.4	
U	238	209	No Gas	97.915	ppb	4.9	361735.82	100	19.58	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260005.85	1.9	1537409.87	81.96	29.5	120.4	
Sc	45	No Gas	3200930.71	2.0	3373253.08	94.89	29.5	120.4	
Sc	45	H2	372444.50	1.1	415670.69	89.6	29.5	120.4	
Sc	45	He	75355.65	2.3	81171.76	92.83	29.5	120.4	
Ge	72	No Gas	776020.71	1.7	779333.11	99.57	29.5	120.4	
Ge	72	H2	138878.66	2.1	153246.58	90.62	29.5	120.4	
Ge	72	He	59997.98	2.3	63135.03	95.03	29.5	120.4	
Y	89	H2	2513972.48	0.8	2642116.11	95.15	29.5	120.4	
Y	89	He	521672.17	1.9	544041.92	95.89	29.5	120.4	
Tb	159	No Gas	8592375.43	1.5	8117023.84	105.86	29.5	120.4	
Tb	159	He	2936240.65	1.6	2866479.19	102.43	29.5	120.4	
Bi	209	No Gas	4623791.18	1.9	4424692.92	104.5	29.5	120.4	

Sample Report

Sample Name SN5481-001

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:50:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.558	ppb	38.0	125.56	100	
11	B	6	No Gas	55.072	ppb	12.5	7938.01	1000	
23	Na	45	He	6867.143	ppb	2.0	141946.26	200000	
24	Mg	45	He	13805.155	ppb	2.3	151523.24	200000	
27	Al	45	He	6854.393	ppb	3.8	29069.33	200000	
28	Si	45	H2	1413.681	ppb	3.9	10699.32	10000	
39	K	45	He	18765.773	ppb	1.8	188501.73	200000	
40	Ca	45	H2	18408.055	ppb	2.5	1306088.06	200000	
51	V	89	He	112.247	ppb	1.9	18313.59	1000	
52	Cr	89	He	44.327	ppb	1.2	8853.85	2000	
55	Mn	89	He	159.287	ppb	1.0	15117.36	2000	
56	Fe	89	H2	22455.717	ppb	2.2	6744170.44	100000	
59	Co	89	He	6.103	ppb	2.5	2064.75	1000	
60	Ni	89	He	68.281	ppb	2.2	6558.44	1000	
63	Cu	89	He	1327.010	ppb	1.2	344107.85	2000	
66	Zn	89	He	1757.560	ppb	1.5	62416.08	2000	
75	As	89	He	13.908	ppb	3.7	407.72	1000	
78	Se	89	H2	8.478	ppb	9.8	127.33	1000	
88	Sr	89	He	1061.014	ppb	0.7	150334.42	2000	
95	Mo	89	He	13.295	ppb	4.5	2280.28	1000	
107	Ag	89	He	6.039	ppb	5.2	3350.54	100	
111	Cd	89	He	5.527	ppb	2.4	408.53	1000	
118	Sn	159	He	96.556	ppb	1.3	16608.54	1000	
121	Sb	159	No Gas	3.739	ppb	13.2	5423.83	1000	
137	Ba	159	No Gas	331.029	ppb	14.0	185679.91	2000	
182	W	159	No Gas	4.223	ppb	10.2	4916.44	1000	
205	Tl	209	No Gas	0.297	ppb	27.5	834.31	1000	
208	Pb	209	No Gas	61.099	ppb	11.9	227240.79	2000	
232	Th	209	No Gas	1.985	ppb	26.8	7945.01	1000	
238	U	209	No Gas	5.034	ppb	14.1	18367.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1161028.52	7.8	1537409.87	75.52	29.5	120.4	
Sc	45	No Gas	2944505.39	10.1	3373253.08	87.29	29.5	120.4	
Sc	45	H2	353624.26	2.2	415670.69	85.07	29.5	120.4	
Sc	45	He	71554.19	1.8	81171.76	88.15	29.5	120.4	
Ge	72	No Gas	697396.28	7.2	779333.11	89.49	29.5	120.4	
Ge	72	H2	133449.45	1.6	153246.58	87.08	29.5	120.4	
Ge	72	He	57016.19	0.4	63135.03	90.31	29.5	120.4	
Y	89	H2	2404813.72	1.9	2642116.11	91.02	29.5	120.4	
Y	89	He	503012.44	1.0	544041.92	92.46	29.5	120.4	
Tb	159	No Gas	7994248.15	9.4	8117023.84	98.49	29.5	120.4	
Tb	159	He	2862285.41	0.6	2866479.19	99.85	29.5	120.4	
Bi	209	No Gas	4598520.91	8.4	4424692.92	103.93	29.5	120.4	

Sample Report

Sample Name SN5497-001

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:53:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	21.095	ppb	3.5	4307.45	100	
11	B	6	No Gas	18.647	ppb	3.5	3202.68	1000	
23	Na	45	He	135.499	ppb	13.6	8508.63	200000	
24	Mg	45	He	8049.886	ppb	3.0	92626.40	200000	
27	Al	45	He	115881.123	ppb	3.3	513204.29	200000	
28	Si	45	H2	1886.482	ppb	2.9	14884.30	10000	
39	K	45	He	1954.565	ppb	5.2	29682.32	200000	
40	Ca	45	H2	104771.545	ppb	1.6	7778563.50	200000	
51	V	89	He	1791.592	ppb	2.6	304507.76	1000	
52	Cr	89	He	2872.074	ppb	2.2	601995.26	2000	
55	Mn	89	He	8084.888	ppb	2.3	807595.44	2000	
56	Fe	89	H2	967047.383	ppb	1.3	309017686.80	100000	>LDR
59	Co	89	He	130.921	ppb	3.0	46480.27	1000	
60	Ni	89	He	119.820	ppb	3.1	12091.21	1000	
63	Cu	89	He	88.852	ppb	2.3	24655.81	2000	
66	Zn	89	He	360.043	ppb	3.0	13518.08	2000	
75	As	89	He	402.176	ppb	2.9	12292.45	1000	
78	Se	89	H2	5.214	ppb	4.4	83.50	1000	
88	Sr	89	He	240.771	ppb	3.2	35934.54	2000	
95	Mo	89	He	47.538	ppb	1.6	8270.55	1000	
107	Ag	89	He	0.479	ppb	9.9	290.01	100	
111	Cd	89	He	0.840	ppb	2.0	66.30	1000	
118	Sn	159	He	39.095	ppb	4.1	6748.63	1000	
121	Sb	159	No Gas	10.709	ppb	6.6	16401.77	1000	
137	Ba	159	No Gas	397.608	ppb	4.8	238263.93	2000	
182	W	159	No Gas	1.523	ppb	1.0	1969.03	1000	
205	Tl	209	No Gas	0.704	ppb	4.9	1892.27	1000	
208	Pb	209	No Gas	173.424	ppb	5.2	634763.14	2000	
232	Th	209	No Gas	56.598	ppb	4.5	217038.85	1000	
238	U	209	No Gas	38.659	ppb	4.8	139048.60	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174573.81	3.1	1537409.87	76.4	29.5	120.4	
Sc	45	No Gas	3175603.09	2.0	3373253.08	94.14	29.5	120.4	
Sc	45	H2	370312.20	0.8	415670.69	89.09	29.5	120.4	
Sc	45	He	74829.53	2.2	81171.76	92.19	29.5	120.4	
Ge	72	No Gas	753692.43	2.5	779333.11	96.71	29.5	120.4	
Ge	72	H2	134510.87	1.4	153246.58	87.77	29.5	120.4	
Ge	72	He	58446.42	1.1	63135.03	92.57	29.5	120.4	
Y	89	H2	2560934.05	0.4	2642116.11	96.93	29.5	120.4	
Y	89	He	529921.72	1.5	544041.92	97.4	29.5	120.4	
Tb	159	No Gas	8471633.62	2.2	8117023.84	104.37	29.5	120.4	
Tb	159	He	2855724.06	1.7	2866479.19	99.62	29.5	120.4	
Bi	209	No Gas	4503082.30	3.1	4424692.92	101.77	29.5	120.4	

Sample Report

Sample Name SN5497-002

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:55:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.481	ppb	4.9	5276.70	100	
11	B	6	No Gas	21.901	ppb	9.3	3689.49	1000	
23	Na	45	He	118.611	ppb	5.3	8211.52	200000	
24	Mg	45	He	5365.327	ppb	2.4	62356.22	200000	
27	Al	45	He	82406.293	ppb	1.2	367527.83	200000	
28	Si	45	H2	2101.894	ppb	0.8	16895.53	10000	
39	K	45	He	3475.794	ppb	1.2	45144.10	200000	
40	Ca	45	H2	37487.701	ppb	2.3	2841055.31	200000	
51	V	89	He	917.974	ppb	1.0	159730.83	1000	
52	Cr	89	He	958.495	ppb	1.2	205542.82	2000	
55	Mn	89	He	23532.249	ppb	0.6	2404655.63	2000	>LDR
56	Fe	89	H2	496657.644	ppb	0.9	163325626.54	100000	
59	Co	89	He	111.477	ppb	0.3	40491.96	1000	
60	Ni	89	He	82.234	ppb	0.6	8502.87	1000	
63	Cu	89	He	104.581	ppb	2.0	29613.33	2000	
66	Zn	89	He	372.338	ppb	1.0	14300.03	2000	
75	As	89	He	392.021	ppb	1.6	12258.41	1000	
78	Se	89	H2	3.989	ppb	8.5	65.83	1000	
88	Sr	89	He	114.124	ppb	0.7	17430.44	2000	
95	Mo	89	He	26.587	ppb	1.7	4787.68	1000	
107	Ag	89	He	0.177	ppb	18.3	116.68	100	
111	Cd	89	He	0.904	ppb	15.1	72.96	1000	
118	Sn	159	He	39.860	ppb	3.5	6905.35	1000	
121	Sb	159	No Gas	3.120	ppb	5.3	4856.26	1000	
137	Ba	159	No Gas	963.091	ppb	3.9	577538.39	2000	
182	W	159	No Gas	0.570	ppb	3.8	814.27	1000	
205	Tl	209	No Gas	1.090	ppb	6.2	2946.98	1000	
208	Pb	209	No Gas	231.681	ppb	4.0	858491.37	2000	
232	Th	209	No Gas	28.946	ppb	5.8	112423.38	1000	
238	U	209	No Gas	17.299	ppb	4.3	62988.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1191906.28	2.1	1537409.87	77.53	29.5	120.4	
Sc	45	No Gas	3253040.53	2.0	3373253.08	96.44	29.5	120.4	
Sc	45	H2	377934.89	1.9	415670.69	90.92	29.5	120.4	
Sc	45	He	75322.47	1.1	81171.76	92.79	29.5	120.4	
Ge	72	No Gas	764645.37	2.0	779333.11	98.12	29.5	120.4	
Ge	72	H2	135761.84	1.8	153246.58	88.59	29.5	120.4	
Ge	72	He	59292.78	1.1	63135.03	93.91	29.5	120.4	
Y	89	H2	2635463.32	0.8	2642116.11	99.75	29.5	120.4	
Y	89	He	541995.26	0.8	544041.92	99.62	29.5	120.4	
Tb	159	No Gas	8476128.83	1.9	8117023.84	104.42	29.5	120.4	
Tb	159	He	2865698.15	0.7	2866479.19	99.97	29.5	120.4	
Bi	209	No Gas	4557074.42	2.3	4424692.92	102.99	29.5	120.4	

Sample Report

Sample Name SN5497-003

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 8:58:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	23.822	ppb	4.4	4931.01	100	
11	B	6	No Gas	23.316	ppb	8.0	3877.33	1000	
23	Na	45	He	105.175	ppb	20.1	8214.79	200000	
24	Mg	45	He	4783.931	ppb	0.5	57665.45	200000	
27	Al	45	He	113290.563	ppb	0.8	523414.87	200000	
28	Si	45	H2	2737.632	ppb	2.1	22225.30	10000	
39	K	45	He	3576.405	ppb	1.1	47813.00	200000	
40	Ca	45	H2	19684.121	ppb	1.1	1512894.41	200000	
51	V	89	He	1286.636	ppb	0.4	245397.05	1000	
52	Cr	89	He	2237.519	ppb	0.7	526112.12	2000	
55	Mn	89	He	31185.922	ppb	0.5	3494532.52	2000	>LDR
56	Fe	89	H2	660666.373	ppb	1.0	233969859.95	100000	>LDR
59	Co	89	He	323.205	ppb	0.3	128716.90	1000	
60	Ni	89	He	314.253	ppb	1.6	35500.33	1000	
63	Cu	89	He	121.472	ppb	1.7	37642.77	2000	
66	Zn	89	He	899.107	ppb	0.6	37765.25	2000	
75	As	89	He	253.701	ppb	2.2	8700.67	1000	
78	Se	89	H2	3.371	ppb	4.1	60.00	1000	
88	Sr	89	He	97.170	ppb	0.8	16274.60	2000	
95	Mo	89	He	36.794	ppb	1.0	7212.17	1000	
107	Ag	89	He	1.369	ppb	11.7	907.84	100	
111	Cd	89	He	10.144	ppb	2.9	884.85	1000	
118	Sn	159	He	41.078	ppb	1.9	7222.24	1000	
121	Sb	159	No Gas	7.077	ppb	6.0	10929.97	1000	
137	Ba	159	No Gas	2650.533	ppb	4.7	1596561.36	2000	
182	W	159	No Gas	1.560	ppb	16.1	2019.08	1000	
205	Tl	209	No Gas	5.043	ppb	7.7	13331.98	1000	
208	Pb	209	No Gas	395.320	ppb	4.8	1442611.60	2000	
232	Th	209	No Gas	53.699	ppb	5.7	205272.35	1000	
238	U	209	No Gas	46.959	ppb	6.0	168363.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1191265.17	3.3	1537409.87	77.49	29.5	120.4	
Sc	45	No Gas	3356384.24	3.5	3373253.08	99.5	29.5	120.4	
Sc	45	H2	382986.83	1.2	415670.69	92.14	29.5	120.4	
Sc	45	He	78029.86	0.7	81171.76	96.13	29.5	120.4	
Ge	72	No Gas	780294.74	3.4	779333.11	100.12	29.5	120.4	
Ge	72	H2	134941.47	0.3	153246.58	88.06	29.5	120.4	
Ge	72	He	60021.00	0.3	63135.03	95.07	29.5	120.4	
Y	89	H2	2838329.95	1.4	2642116.11	107.43	29.5	120.4	
Y	89	He	594348.46	0.6	544041.92	109.25	29.5	120.4	
Tb	159	No Gas	8519216.26	3.3	8117023.84	104.95	29.5	120.4	
Tb	159	He	2908752.42	0.3	2866479.19	101.47	29.5	120.4	
Bi	209	No Gas	4490771.18	3.5	4424692.92	101.49	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	132_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:01:27 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.843	ppb	1.9	26970.29	25	103.37	89.8	110.2	
11	B	6	No Gas	25.744	ppb	0.9	18373.32	25	102.98	89.8	110.2	
23	Na	45	He	4937.946	ppb	0.6	521250.64	5000	98.76	89.8	110.2	
24	Mg	45	He	4848.259	ppb	0.7	279062.29	5000	96.97	89.8	110.2	
27	Al	45	He	482.813	ppb	0.7	10786.69	500	96.56	89.8	110.2	
28	Si	45	H2	487.705	ppb	2.4	19364.64	500	97.54	89.8	110.2	
39	K	45	He	4940.486	ppb	0.9	257387.33	5000	98.81	89.8	110.2	
40	Ca	45	H2	4932.758	ppb	0.7	1851374.65	5000	98.66	89.8	110.2	
51	V	89	He	24.643	ppb	1.4	20574.51	25	98.57	89.8	110.2	
52	Cr	89	He	24.935	ppb	1.5	25446.83	25	99.74	89.8	110.2	
55	Mn	89	He	26.316	ppb	1.1	12794.15	25	105.26	89.8	110.2	
56	Fe	89	H2	4962.963	ppb	0.8	7688845.61	5000	99.26	89.8	110.2	
59	Co	89	He	25.301	ppb	0.1	43683.72	25	101.2	89.8	110.2	
60	Ni	89	He	25.280	ppb	2.3	12403.71	25	101.12	89.8	110.2	
63	Cu	89	He	25.178	ppb	0.8	33807.33	25	100.71	89.8	110.2	
66	Zn	89	He	24.216	ppb	2.7	4463.11	25	96.86	89.8	110.2	
75	As	89	He	24.682	ppb	2.1	3671.56	25	98.73	89.8	110.2	
78	Se	89	H2	24.187	ppb	1.3	1865.54	25	96.75	89.8	110.2	
88	Sr	89	He	24.054	ppb	1.1	17461.68	25	96.22	89.8	110.2	
95	Mo	89	He	24.919	ppb	0.7	20885.51	25	99.68	89.8	110.2	
107	Ag	89	He	18.809	ppb	0.9	53313.17	25	75.24	89.8	110.2	> +/- 10%
111	Cd	89	He	24.806	ppb	0.9	9367.76	25	99.22	89.8	110.2	
118	Sn	159	He	23.295	ppb	0.9	19766.20	25	93.18	89.8	110.2	
121	Sb	159	No Gas	24.613	ppb	0.8	179228.75	25	98.45	89.8	110.2	
137	Ba	159	No Gas	24.802	ppb	1.0	71038.72	25	99.21	89.8	110.2	
182	W	159	No Gas	24.146	ppb	1.1	139935.77	25	96.58	89.8	110.2	
205	Tl	209	No Gas	24.777	ppb	1.4	316085.65	25	99.11	89.8	110.2	
208	Pb	209	No Gas	24.664	ppb	2.0	434975.92	25	98.66	89.8	110.2	
232	Th	209	No Gas	24.061	ppb	0.3	444377.41	25	96.24	89.8	110.2	
238	U	209	No Gas	24.549	ppb	1.2	425421.42	25	98.2	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203283.23	1.7	1537409.87	78.27	29.5	120.4	
Sc	45	No Gas	3186879.19	2.4	3373253.08	94.47	29.5	120.4	
Sc	45	H2	374112.56	0.5	415670.69	90	29.5	120.4	
Sc	45	He	75146.56	0.7	81171.76	92.58	29.5	120.4	
Ge	72	No Gas	750022.38	1.9	779333.11	96.24	29.5	120.4	
Ge	72	H2	139106.72	0.8	153246.58	90.77	29.5	120.4	
Ge	72	He	60158.96	0.5	63135.03	95.29	29.5	120.4	
Y	89	H2	2480666.41	0.7	2642116.11	93.89	29.5	120.4	
Y	89	He	515272.90	0.4	544041.92	94.71	29.5	120.4	
Tb	159	No Gas	8092614.67	1.9	8117023.84	99.7	29.5	120.4	
Tb	159	He	2825904.61	0.3	2866479.19	98.58	29.5	120.4	
Bi	209	No Gas	4335524.43	1.7	4424692.92	97.98	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	133_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:04:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.075	ppb	19.5	95.56	0.2	
11	B	6	No Gas	1.516	ppb	11.4	1819.07	4	
23	Na	45	He	2.350	ppb	99.0	5877.74	200	
24	Mg	45	He	-6.185	ppb	N/A	217.79	20	
27	Al	45	He	1.619	ppb	22.0	81.12	20	
28	Si	45	H2	5.969	ppb	26.5	457.18	100	
39	K	45	He	14.455	ppb	27.3	10840.95	200	
40	Ca	45	H2	5.749	ppb	3.1	3838.44	20	
51	V	89	He	0.791	ppb	9.8	868.95	1	Failed DoD
52	Cr	89	He	0.184	ppb	20.6	219.96	1	
55	Mn	89	He	0.996	ppb	2.5	492.59	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	20.505	ppb	4.6	39231.59	20	Fail All Methods□ Failed DoD
59	Co	89	He	0.016	ppb	39.6	35.56	0.2	
60	Ni	89	He	-0.016	ppb	N/A	32.22	0.4	
63	Cu	89	He	-0.092	ppb	N/A	278.90	0.6	
66	Zn	89	He	0.070	ppb	21.3	74.45	2	
75	As	89	He	0.113	ppb	60.5	21.00	1	
78	Se	89	H2	0.040	ppb	17.0	3.50	1	
88	Sr	89	He	0.011	ppb	90.4	14.44	1	
95	Mo	89	He	-0.010	ppb	N/A	111.11	1	
107	Ag	89	He	0.003	ppb	127.9	18.89	0.2	
111	Cd	89	He	0.007	ppb	64.6	3.70	0.2	
118	Sn	159	He	0.343	ppb	13.9	365.58	1	
121	Sb	159	No Gas	0.034	ppb	21.6	347.06	0.2	
137	Ba	159	No Gas	0.057	ppb	18.7	183.54	0.4	
182	W	159	No Gas	0.105	ppb	18.2	734.17	1	
205	Tl	209	No Gas	0.024	ppb	28.6	340.39	0.2	
208	Pb	209	No Gas	0.122	ppb	3.3	2379.44	0.2	Failed DoD
232	Th	209	No Gas	0.118	ppb	33.8	2389.61	1	
238	U	209	No Gas	0.023	ppb	13.5	407.13	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1240228.21	1.5	1537409.87	80.67	29.5	120.4	
Sc	45	No Gas	3165498.02	0.3	3373253.08	93.84	29.5	120.4	
Sc	45	H2	365397.87	0.5	415670.69	87.91	29.5	120.4	
Sc	45	He	74124.36	1.5	81171.76	91.32	29.5	120.4	
Ge	72	No Gas	742416.11	0.4	779333.11	95.26	29.5	120.4	
Ge	72	H2	135115.04	2.1	153246.58	88.17	29.5	120.4	
Ge	72	He	58253.54	1.1	63135.03	92.27	29.5	120.4	
Y	89	H2	2443882.36	0.7	2642116.11	92.5	29.5	120.4	
Y	89	He	512106.49	2.3	544041.92	94.13	29.5	120.4	
Tb	159	No Gas	8221405.57	0.3	8117023.84	101.29	29.5	120.4	
Tb	159	He	2867434.75	1.7	2866479.19	100.03	29.5	120.4	
Bi	209	No Gas	4415512.65	0.5	4424692.92	99.79	29.5	120.4	

Sample Report

Sample Name SN5497-004

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:06:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	7.646	ppb	9.6	1624.60	100	
11	B	6	No Gas	22.921	ppb	3.2	3901.78	1000	
23	Na	45	He	157.418	ppb	21.9	9433.66	200000	
24	Mg	45	He	4905.393	ppb	3.8	59702.69	200000	
27	Al	45	He	85053.570	ppb	4.9	396796.69	200000	
28	Si	45	H2	2798.553	ppb	4.2	22890.63	10000	
39	K	45	He	4809.225	ppb	5.5	61213.04	200000	
40	Ca	45	H2	8963.713	ppb	1.9	695352.34	200000	
51	V	89	He	348.528	ppb	2.8	63566.39	1000	
52	Cr	89	He	309.305	ppb	4.2	69369.67	2000	
55	Mn	89	He	26927.501	ppb	4.4	2876603.35	2000	>LDR
56	Fe	89	H2	177512.463	ppb	2.2	59576828.90	100000	
59	Co	89	He	261.220	ppb	4.5	99177.91	1000	
60	Ni	89	He	106.914	ppb	3.2	11546.27	1000	
63	Cu	89	He	65.429	ppb	4.7	19534.25	2000	
66	Zn	89	He	311.885	ppb	3.9	12534.97	2000	
75	As	89	He	80.701	ppb	3.2	2642.54	1000	
78	Se	89	H2	1.563	ppb	13.6	26.67	1000	
88	Sr	89	He	73.510	ppb	2.9	11742.13	2000	
95	Mo	89	He	13.059	ppb	1.8	2526.99	1000	
107	Ag	89	He	0.304	ppb	2.6	201.12	100	
111	Cd	89	He	5.078	ppb	3.8	422.98	1000	
118	Sn	159	He	39.358	ppb	5.9	6999.84	1000	
121	Sb	159	No Gas	1.403	ppb	7.9	2209.33	1000	
137	Ba	159	No Gas	1649.524	ppb	1.7	976564.31	2000	
182	W	159	No Gas	0.690	ppb	11.5	947.76	1000	
205	Tl	209	No Gas	3.091	ppb	6.4	8158.42	1000	
208	Pb	209	No Gas	336.366	ppb	3.9	1223291.35	2000	
232	Th	209	No Gas	35.795	ppb	4.3	136451.77	1000	
238	U	209	No Gas	10.957	ppb	4.2	39161.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1213610.79	1.2	1537409.87	78.94	29.5	120.4	
Sc	45	No Gas	3278772.98	2.7	3373253.08	97.2	29.5	120.4	
Sc	45	H2	386013.20	1.0	415670.69	92.87	29.5	120.4	
Sc	45	He	78860.57	2.9	81171.76	97.15	29.5	120.4	
Ge	72	No Gas	766216.17	1.4	779333.11	98.32	29.5	120.4	
Ge	72	H2	140370.74	1.9	153246.58	91.6	29.5	120.4	
Ge	72	He	61557.06	2.7	63135.03	97.5	29.5	120.4	
Y	89	H2	2689999.10	1.7	2642116.11	101.81	29.5	120.4	
Y	89	He	567007.58	2.4	544041.92	104.22	29.5	120.4	
Tb	159	No Gas	8362068.63	2.5	8117023.84	103.02	29.5	120.4	
Tb	159	He	2944469.09	3.1	2866479.19	102.72	29.5	120.4	
Bi	209	No Gas	4468760.63	1.3	4424692.92	101	29.5	120.4	

Sample Report

Sample Name SN5497-006

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:09:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.068	ppb	9.6	2374.72	100	
11	B	6	No Gas	17.242	ppb	12.0	3157.11	1000	
23	Na	45	He	117.085	ppb	22.7	8465.24	200000	
24	Mg	45	He	3907.214	ppb	3.3	47185.08	200000	
27	Al	45	He	74678.621	ppb	2.2	344929.40	200000	
28	Si	45	H2	2017.304	ppb	2.8	16782.39	10000	
39	K	45	He	3541.735	ppb	3.8	47431.98	200000	
40	Ca	45	H2	12979.517	ppb	0.4	1019031.33	200000	
51	V	89	He	442.265	ppb	2.5	80385.26	1000	
52	Cr	89	He	456.279	ppb	2.3	102066.23	2000	
55	Mn	89	He	36491.932	ppb	1.3	3889445.53	2000	>LDR
56	Fe	89	H2	256885.294	ppb	0.4	87553011.60	100000	
59	Co	89	He	343.325	ppb	1.9	130051.16	1000	
60	Ni	89	He	110.567	ppb	1.2	11909.89	1000	
63	Cu	89	He	75.819	ppb	1.5	22514.33	2000	
66	Zn	89	He	372.738	ppb	0.7	14934.01	2000	
75	As	89	He	115.594	ppb	2.4	3773.27	1000	
78	Se	89	H2	2.079	ppb	15.2	35.83	1000	
88	Sr	89	He	79.965	ppb	1.9	12739.66	2000	
95	Mo	89	He	19.058	ppb	0.5	3617.27	1000	
107	Ag	89	He	0.287	ppb	15.0	190.01	100	
111	Cd	89	He	2.512	ppb	9.2	209.27	1000	
118	Sn	159	He	39.386	ppb	3.7	6852.00	1000	
121	Sb	159	No Gas	1.802	ppb	6.4	2843.49	1000	
137	Ba	159	No Gas	1847.207	ppb	8.1	1107206.14	2000	
182	W	159	No Gas	0.784	ppb	17.4	1071.24	1000	
205	Tl	209	No Gas	2.993	ppb	7.8	7931.41	1000	
208	Pb	209	No Gas	469.811	ppb	8.3	1714215.43	2000	
232	Th	209	No Gas	35.317	ppb	9.0	135056.64	1000	
238	U	209	No Gas	14.178	ppb	7.6	50845.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232184.28	3.3	1537409.87	80.15	29.5	120.4	
Sc	45	No Gas	3383116.52	2.7	3373253.08	100.29	29.5	120.4	
Sc	45	H2	390945.28	0.9	415670.69	94.05	29.5	120.4	
Sc	45	He	78030.29	2.5	81171.76	96.13	29.5	120.4	
Ge	72	No Gas	787958.34	2.9	779333.11	101.11	29.5	120.4	
Ge	72	H2	139920.56	0.9	153246.58	91.3	29.5	120.4	
Ge	72	He	61227.67	0.8	63135.03	96.98	29.5	120.4	
Y	89	H2	2731183.80	0.5	2642116.11	103.37	29.5	120.4	
Y	89	He	565404.00	1.7	544041.92	103.93	29.5	120.4	
Tb	159	No Gas	8480471.75	2.6	8117023.84	104.48	29.5	120.4	
Tb	159	He	2877727.21	1.4	2866479.19	100.39	29.5	120.4	
Bi	209	No Gas	4492066.44	2.8	4424692.92	101.52	29.5	120.4	

Sample Report

Sample Name SN5498-001

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:12:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.452	ppb	22.6	105.56	100	
11	B	6	No Gas	37.582	ppb	12.9	5705.75	1000	
23	Na	45	He	1997.075	ppb	2.9	45844.29	200000	
24	Mg	45	He	3360.678	ppb	1.6	37883.66	200000	
27	Al	45	He	29047.124	ppb	2.1	124981.52	200000	
28	Si	45	H2	3301.444	ppb	0.8	25848.88	10000	
39	K	45	He	1650.098	ppb	1.6	25888.34	200000	
40	Ca	45	H2	61549.421	ppb	1.6	4566858.20	200000	
51	V	89	He	23.676	ppb	2.1	4019.62	1000	
52	Cr	89	He	60.890	ppb	2.4	12107.00	2000	
55	Mn	89	He	1205.378	ppb	0.9	113939.17	2000	
56	Fe	89	H2	13693.537	ppb	1.5	4230386.07	100000	
59	Co	89	He	4.560	ppb	4.1	1540.21	1000	
60	Ni	89	He	36.441	ppb	2.5	3507.23	1000	
63	Cu	89	He	265.230	ppb	1.3	68861.30	2000	
66	Zn	89	He	302.915	ppb	3.4	10770.05	2000	
75	As	89	He	4.240	ppb	11.1	127.01	1000	
78	Se	89	H2	0.599	ppb	36.1	9.67	1000	
88	Sr	89	He	96.718	ppb	1.7	13663.94	2000	
95	Mo	89	He	8.457	ppb	6.1	1487.92	1000	
107	Ag	89	He	0.502	ppb	16.9	286.68	100	
111	Cd	89	He	2.769	ppb	6.6	204.45	1000	
118	Sn	159	He	53.183	ppb	2.4	9072.26	1000	
121	Sb	159	No Gas	1.292	ppb	16.8	1895.57	1000	
137	Ba	159	No Gas	181.473	ppb	20.3	99465.53	2000	
182	W	159	No Gas	1.224	ppb	19.6	1475.07	1000	
205	Tl	209	No Gas	0.283	ppb	26.8	720.83	1000	
208	Pb	209	No Gas	26.181	ppb	17.5	89677.06	2000	
232	Th	209	No Gas	3.044	ppb	15.5	11070.66	1000	
238	U	209	No Gas	2.121	ppb	15.8	7143.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1175323.07	8.4	1537409.87	76.45	29.5	120.4	
Sc	45	No Gas	3110582.43	12.4	3373253.08	92.21	29.5	120.4	
Sc	45	H2	369998.95	0.0	415670.69	89.01	29.5	120.4	
Sc	45	He	72658.09	1.1	81171.76	89.51	29.5	120.4	
Ge	72	No Gas	725509.57	10.7	779333.11	93.09	29.5	120.4	
Ge	72	H2	136510.37	0.9	153246.58	89.08	29.5	120.4	
Ge	72	He	57116.63	0.9	63135.03	90.47	29.5	120.4	
Y	89	H2	2471146.58	0.2	2642116.11	93.53	29.5	120.4	
Y	89	He	501347.99	1.1	544041.92	92.15	29.5	120.4	
Tb	159	No Gas	7866099.33	11.7	8117023.84	96.91	29.5	120.4	
Tb	159	He	2828704.19	0.9	2866479.19	98.68	29.5	120.4	
Bi	209	No Gas	4257742.80	11.2	4424692.92	96.23	29.5	120.4	

Sample Report

Sample Name SN5498-002

File Name 137SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:14:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.855	ppb	14.1	190.01	100	
11	B	6	No Gas	62.330	ppb	5.6	9117.62	1000	
23	Na	45	He	3859.467	ppb	4.6	84783.70	200000	
24	Mg	45	He	5790.491	ppb	2.8	65934.82	200000	
27	Al	45	He	27153.312	ppb	2.5	118761.76	200000	
28	Si	45	H2	2313.643	ppb	1.1	17410.17	10000	
39	K	45	He	4042.286	ppb	4.0	49823.76	200000	
40	Ca	45	H2	32260.089	ppb	1.5	2292362.95	200000	
51	V	89	He	46.536	ppb	5.9	7859.16	1000	
52	Cr	89	He	44.096	ppb	2.6	8971.92	2000	
55	Mn	89	He	1386.862	ppb	1.3	133991.89	2000	
56	Fe	89	H2	21493.564	ppb	1.8	6494163.94	100000	
59	Co	89	He	8.554	ppb	4.0	2944.96	1000	
60	Ni	89	He	37.939	ppb	5.3	3728.41	1000	
63	Cu	89	He	148.571	ppb	2.0	39600.46	2000	
66	Zn	89	He	449.388	ppb	3.3	16299.98	2000	
75	As	89	He	9.116	ppb	6.6	273.70	1000	
78	Se	89	H2	4.005	ppb	8.3	60.67	1000	
88	Sr	89	He	108.811	ppb	2.5	15709.50	2000	
95	Mo	89	He	4.560	ppb	8.6	874.50	1000	
107	Ag	89	He	0.854	ppb	15.2	491.14	100	
111	Cd	89	He	11.318	ppb	1.3	851.15	1000	
118	Sn	159	He	42.348	ppb	3.5	7334.48	1000	
121	Sb	159	No Gas	0.417	ppb	20.8	710.82	1000	
137	Ba	159	No Gas	243.828	ppb	5.0	141649.34	2000	
182	W	159	No Gas	1.155	ppb	10.2	1475.08	1000	
205	Tl	209	No Gas	0.717	ppb	5.1	1928.98	1000	
208	Pb	209	No Gas	28.929	ppb	6.5	106147.31	2000	
232	Th	209	No Gas	4.974	ppb	9.2	19246.21	1000	
238	U	209	No Gas	3.170	ppb	4.0	11418.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1183586.22	0.8	1537409.87	76.99	29.5	120.4	
Sc	45	No Gas	3068951.34	0.6	3373253.08	90.98	29.5	120.4	
Sc	45	H2	354231.88	0.8	415670.69	85.22	29.5	120.4	
Sc	45	He	73881.61	3.0	81171.76	91.02	29.5	120.4	
Ge	72	No Gas	731104.42	0.8	779333.11	93.81	29.5	120.4	
Ge	72	H2	130939.70	0.8	153246.58	85.44	29.5	120.4	
Ge	72	He	57540.46	2.1	63135.03	91.14	29.5	120.4	
Y	89	H2	2418645.62	0.8	2642116.11	91.54	29.5	120.4	
Y	89	He	512483.02	2.0	544041.92	94.2	29.5	120.4	
Tb	159	No Gas	8207359.81	0.1	8117023.84	101.11	29.5	120.4	
Tb	159	He	2866981.31	2.2	2866479.19	100.02	29.5	120.4	
Bi	209	No Gas	4504311.70	0.7	4424692.92	101.8	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG10IMW1
File Name	138_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:17:12 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.031	ppb	132.0	21.11	0.5	
B	11	6	No Gas	3.108	ppb	17.2	1146.76	10	
Na	23	45	He	-30.055	ppb	N/A	5029.81	500	
Mg	24	45	He	-19.039	ppb	N/A	353.36	50	
Al	27	45	He	15.865	ppb	28.5	115.56	50	
Si	28	45	H2	28.416	ppb	21.9	437.16	250	
K	39	45	He	74.087	ppb	37.4	10885.93	500	
Ca	40	45	H2	70.025	ppb	77.2	6830.78	50	PB 6020 Fails DoD
V	51	89	He	4.412	ppb	5.2	952.29	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.358	ppb	9.7	106.65	2.5	
Mn	55	89	He	4.604	ppb	3.5	460.60	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	103.585	ppb	88.4	39473.26	50	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Co	59	89	He	0.033	ppb	115.2	20.00	0.5	
Ni	60	89	He	-0.206	ppb	N/A	20.00	1	
Cu	63	89	He	-0.658	ppb	N/A	228.90	1.5	
Zn	66	89	He	1.401	ppb	5.8	113.34	5	
As	75	89	He	0.164	ppb	50.6	9.33	2.5	
Se	78	89	H2	0.060	ppb	121.3	1.33	2.5	
Sr	88	89	He	0.079	ppb	45.1	17.78	2.5	
Mo	95	89	He	-0.640	ppb	N/A	13.33	2.5	
Ag	107	89	He	-0.005	ppb	N/A	7.78	0.5	
Cd	111	89	He	0.010	ppb	213.5	1.85	0.5	
Sn	118	159	He	0.675	ppb	18.6	187.78	2.5	
Sb	121	159	No Gas	0.020	ppb	89.7	126.81	0.5	
Ba	137	159	No Gas	0.299	ppb	34.4	193.55	1	
W	182	159	No Gas	-0.067	ppb	N/A	40.04	2.5	
Tl	205	209	No Gas	-0.002	ppb	N/A	23.36	0.5	
Pb	208	209	No Gas	0.226	ppb	8.5	1014.49	0.5	
Th	232	209	No Gas	0.055	ppb	36.1	383.78	2.5	
U	238	209	No Gas	0.004	ppb	45.6	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1198040.12	1.9	1537409.87	77.93	29.5	120.4	
Sc	45	No Gas	3178534.47	2.6	3373253.08	94.23	29.5	120.4	
Sc	45	H2	358769.47	3.9	415670.69	86.31	29.5	120.4	
Sc	45	He	74306.69	0.9	81171.76	91.54	29.5	120.4	
Ge	72	No Gas	753675.58	2.7	779333.11	96.71	29.5	120.4	
Ge	72	H2	133954.33	4.2	153246.58	87.41	29.5	120.4	
Ge	72	He	59272.92	0.5	63135.03	93.88	29.5	120.4	
Y	89	H2	2412190.36	2.9	2642116.11	91.3	29.5	120.4	
Y	89	He	516673.59	0.5	544041.92	94.97	29.5	120.4	
Tb	159	No Gas	8352079.04	2.3	8117023.84	102.9	29.5	120.4	
Tb	159	He	2880939.96	0.5	2866479.19	100.5	29.5	120.4	
Bi	209	No Gas	4518109.51	2.5	4424692.92	102.11	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG10IMW1
File Name	139LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:19:44 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.217	ppb	2.9	10845.54	50	20.89	79.5	120.4	
B	11	6	No Gas	534.024	ppb	3.0	73510.50	500	21.36	79.5	120.4	
Na	23	45	He	7600.503	ppb	0.8	161407.73	7500	20.27	79.5	120.4	
Mg	24	45	He	5280.110	ppb	1.0	60111.37	5000	21.12	79.5	120.4	
Al	27	45	He	1895.357	ppb	1.9	8322.71	2000	18.95	79.5	120.4	
Si	28	45	H2	1067.662	ppb	2.0	8458.55	1000	21.35	0	200	
K	39	45	He	10474.221	ppb	1.1	112939.18	10000	20.95	79.5	120.4	
Ca	40	45	H2	2689.686	ppb	0.4	199923.31	2500	21.52	79.5	120.4	
V	51	89	He	516.839	ppb	0.5	84779.65	500	20.67	79.5	120.4	
Cr	52	89	He	209.808	ppb	1.4	42394.09	200	20.98	79.5	120.4	
Mn	55	89	He	517.163	ppb	0.7	49777.46	500	20.69	79.5	120.4	
Fe	56	89	H2	1114.667	ppb	0.3	349839.28	1000	22.29	79.5	120.4	
Co	59	89	He	537.958	ppb	0.3	183969.30	500	21.52	79.5	120.4	
Ni	60	89	He	524.401	ppb	0.1	50847.73	500	20.98	79.5	120.4	
Cu	63	89	He	265.899	ppb	0.5	70283.90	250	21.27	79.5	120.4	
Zn	66	89	He	518.172	ppb	1.2	18715.40	500	20.73	79.5	120.4	
As	75	89	He	108.075	ppb	0.7	3185.71	100	21.62	79.5	120.4	
Se	78	89	H2	105.739	ppb	2.4	1616.19	100	21.15	79.5	120.4	
Sr	88	89	He	524.512	ppb	0.1	75412.42	500	20.98	79.5	120.4	
Mo	95	89	He	108.667	ppb	1.1	18058.03	100	21.73	79.5	120.4	
Ag	107	89	He	56.296	ppb	1.1	31617.44	50	22.52	79.5	120.4	
Cd	111	89	He	263.983	ppb	1.3	19746.70	250	21.12	79.5	120.4	
Sn	118	159	He	496.786	ppb	0.7	84907.93	500	19.87	79.5	120.4	
Sb	121	159	No Gas	105.277	ppb	1.6	153621.31	100	21.06	79.5	120.4	
Ba	137	159	No Gas	2009.871	ppb	2.1	1153308.25	2000	20.1	79.5	120.4	
W	182	159	No Gas	104.675	ppb	3.0	121558.31	100	20.94	79.5	120.4	
Tl	205	209	No Gas	107.478	ppb	1.5	276493.68	100	21.5	79.5	120.4	
[Pb]	206	209	No Gas	108.143	ppb	2.4	95741.93	100	21.63	79.5	120.4	
[Pb]	207	209	No Gas	107.257	ppb	2.9	83230.31	100	21.45	79.5	120.4	
Pb	208	209	No Gas	107.165	ppb	1.8	381103.11	100	21.43	79.5	120.4	
Th	232	209	No Gas	104.445	ppb	2.2	388857.14	100	20.89	79.5	120.4	
U	238	209	No Gas	104.866	ppb	2.7	366343.14	100	20.97	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1196560.20	1.3	1537409.87	77.83	29.5	120.4	
Sc	45	No Gas	3072313.61	1.6	3373253.08	91.08	29.5	120.4	
Sc	45	H2	367563.66	1.9	415670.69	88.43	29.5	120.4	
Sc	45	He	73771.75	1.2	81171.76	90.88	29.5	120.4	
Ge	72	No Gas	741661.53	0.8	779333.11	95.17	29.5	120.4	
Ge	72	H2	135529.81	0.9	153246.58	88.44	29.5	120.4	
Ge	72	He	58690.55	0.1	63135.03	92.96	29.5	120.4	
Y	89	H2	2457612.27	0.4	2642116.11	93.02	29.5	120.4	
Y	89	He	510383.83	0.7	544041.92	93.81	29.5	120.4	
Tb	159	No Gas	8108750.99	1.9	8117023.84	99.9	29.5	120.4	
Tb	159	He	2853874.26	0.3	2866479.19	99.56	29.5	120.4	
Bi	209	No Gas	4370534.13	1.5	4424692.92	98.78	29.5	120.4	

Sample Report

Sample Name SN5497-007

File Name 140SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:22:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.182	ppb	38.3	52.22	100	
11	B	6	No Gas	25.377	ppb	3.8	4154.08	1000	
23	Na	45	He	2024.909	ppb	3.5	45198.43	200000	
24	Mg	45	He	2702.399	ppb	3.2	29777.38	200000	
27	Al	45	He	10.793	ppb	15.6	88.89	200000	
28	Si	45	H2	2885.907	ppb	4.9	21874.59	10000	
39	K	45	He	3949.069	ppb	0.3	46885.50	200000	
40	Ca	45	H2	28117.961	ppb	3.0	2018544.08	200000	
51	V	89	He	2.338	ppb	14.3	578.92	1000	
52	Cr	89	He	0.983	ppb	10.6	222.63	2000	
55	Mn	89	He	3.306	ppb	5.1	317.28	2000	
56	Fe	89	H2	41.221	ppb	7.6	20267.10	100000	
59	Co	89	He	0.246	ppb	20.1	88.90	1000	
60	Ni	89	He	1.200	ppb	48.8	150.00	1000	
63	Cu	89	He	6.033	ppb	1.6	1909.08	2000	
66	Zn	89	He	4.808	ppb	6.9	225.57	2000	
75	As	89	He	0.758	ppb	28.4	25.67	1000	
78	Se	89	H2	0.290	ppb	40.5	4.83	1000	
88	Sr	89	He	130.999	ppb	2.8	18119.19	2000	
95	Mo	89	He	-0.061	ppb	N/A	104.45	1000	
107	Ag	89	He	0.010	ppb	66.5	15.55	100	
111	Cd	89	He	0.079	ppb	18.0	6.67	1000	
118	Sn	159	He	1.080	ppb	12.3	251.13	1000	
121	Sb	159	No Gas	0.179	ppb	9.1	367.08	1000	
137	Ba	159	No Gas	44.523	ppb	7.8	26369.09	2000	
182	W	159	No Gas	0.183	ppb	33.6	340.39	1000	
205	Tl	209	No Gas	0.152	ppb	31.2	430.50	1000	
208	Pb	209	No Gas	0.420	ppb	6.2	1721.98	2000	
232	Th	209	No Gas	2.510	ppb	39.0	9848.79	1000	
238	U	209	No Gas	0.206	ppb	13.7	747.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1188956.82	2.5	1537409.87	77.34	29.5	120.4	
Sc	45	No Gas	3147545.30	2.8	3373253.08	93.31	29.5	120.4	
Sc	45	H2	357972.34	2.1	415670.69	86.12	29.5	120.4	
Sc	45	He	70784.48	1.5	81171.76	87.2	29.5	120.4	
Ge	72	No Gas	756706.55	2.3	779333.11	97.1	29.5	120.4	
Ge	72	H2	132899.39	2.8	153246.58	86.72	29.5	120.4	
Ge	72	He	56869.81	1.5	63135.03	90.08	29.5	120.4	
Y	89	H2	2412816.59	2.2	2642116.11	91.32	29.5	120.4	
Y	89	He	490968.79	1.4	544041.92	90.24	29.5	120.4	
Tb	159	No Gas	8368455.64	1.6	8117023.84	103.1	29.5	120.4	
Tb	159	He	2808067.25	1.7	2866479.19	97.96	29.5	120.4	
Bi	209	No Gas	4506714.00	1.9	4424692.92	101.85	29.5	120.4	

Sample Report

Sample Name SN5589-001

File Name 141SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:25:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.110	ppb	44.8	33.33	100	
11	B	6	No Gas	3.976	ppb	16.3	1125.64	1000	
23	Na	45	He	-32.285	ppb	N/A	4829.53	200000	
24	Mg	45	He	-12.624	ppb	N/A	413.37	200000	
27	Al	45	He	0.540	ppb	655.4	46.67	200000	
28	Si	45	H2	17.441	ppb	36.1	347.06	10000	
39	K	45	He	15.402	ppb	262.8	9987.38	200000	
40	Ca	45	H2	24.002	ppb	12.6	3346.07	200000	
51	V	89	He	2.046	ppb	7.9	543.37	1000	
52	Cr	89	He	0.815	ppb	6.4	193.97	2000	
55	Mn	89	He	1.387	ppb	8.7	142.64	2000	
56	Fe	89	H2	39.025	ppb	1.9	19221.09	100000	
59	Co	89	He	0.009	ppb	129.6	11.11	1000	
60	Ni	89	He	-0.082	ppb	N/A	31.11	1000	
63	Cu	89	He	-0.877	ppb	N/A	165.56	2000	
66	Zn	89	He	0.808	ppb	38.3	88.89	2000	
75	As	89	He	0.117	ppb	36.3	7.67	1000	
78	Se	89	H2	0.049	ppb	104.1	1.17	1000	
88	Sr	89	He	0.043	ppb	175.3	12.22	2000	
95	Mo	89	He	-0.548	ppb	N/A	27.78	1000	
107	Ag	89	He	-0.002	ppb	N/A	8.89	100	
111	Cd	89	He	0.011	ppb	78.0	1.85	1000	
118	Sn	159	He	0.506	ppb	32.2	156.67	1000	
121	Sb	159	No Gas	0.018	ppb	66.3	110.13	1000	
137	Ba	159	No Gas	0.333	ppb	34.0	190.21	2000	
182	W	159	No Gas	-0.054	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	0.002	ppb	184.8	30.03	1000	
208	Pb	209	No Gas	0.190	ppb	10.6	790.90	2000	
232	Th	209	No Gas	0.058	ppb	50.7	350.40	1000	
238	U	209	No Gas	0.003	ppb	226.1	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1065167.55	3.9	1537409.87	69.28	29.5	120.4	
Sc	45	No Gas	2731907.90	2.5	3373253.08	80.99	29.5	120.4	
Sc	45	H2	350485.62	1.7	415670.69	84.32	29.5	120.4	
Sc	45	He	71997.28	0.9	81171.76	88.7	29.5	120.4	
Ge	72	No Gas	657070.72	3.5	779333.11	84.31	29.5	120.4	
Ge	72	H2	129663.56	2.2	153246.58	84.61	29.5	120.4	
Ge	72	He	57495.18	0.2	63135.03	91.07	29.5	120.4	
Y	89	H2	2363679.77	1.4	2642116.11	89.46	29.5	120.4	
Y	89	He	501113.57	0.9	544041.92	92.11	29.5	120.4	
Tb	159	No Gas	7406051.07	1.6	8117023.84	91.24	29.5	120.4	
Tb	159	He	2846613.46	0.9	2866479.19	99.31	29.5	120.4	
Bi	209	No Gas	4047018.13	2.5	4424692.92	91.46	29.5	120.4	

Sample Report

Sample Name SN5589-002

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:27:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.039	ppb	233.4	22.23	100	
11	B	6	No Gas	24.701	ppb	8.6	3930.69	1000	
23	Na	45	He	9074.963	ppb	1.6	183514.46	200000	
24	Mg	45	He	36407.492	ppb	1.5	393741.42	200000	
27	Al	45	He	1.545	ppb	95.8	50.00	200000	
28	Si	45	H2	2621.296	ppb	3.4	19504.93	10000	
39	K	45	He	2832.538	ppb	1.3	36292.96	200000	
40	Ca	45	H2	49114.185	ppb	4.3	3455002.69	200000	
51	V	89	He	2.321	ppb	19.4	577.81	1000	
52	Cr	89	He	0.324	ppb	21.9	95.32	2000	
55	Mn	89	He	700.898	ppb	1.9	65091.90	2000	
56	Fe	89	H2	1016.039	ppb	3.6	309695.07	100000	
59	Co	89	He	11.565	ppb	3.7	3825.25	1000	
60	Ni	89	He	14.767	ppb	3.2	1419.02	1000	
63	Cu	89	He	-0.485	ppb	N/A	262.23	2000	
66	Zn	89	He	5.554	ppb	21.4	252.24	2000	
75	As	89	He	2.339	ppb	10.9	70.68	1000	
78	Se	89	H2	0.049	ppb	107.8	1.17	1000	
88	Sr	89	He	152.070	ppb	2.1	21103.49	2000	
95	Mo	89	He	-0.518	ppb	N/A	32.22	1000	
107	Ag	89	He	0.002	ppb	364.2	11.11	100	
111	Cd	89	He	0.058	ppb	29.0	5.18	1000	
118	Sn	159	He	0.513	ppb	31.6	155.56	1000	
121	Sb	159	No Gas	0.057	ppb	15.5	180.20	1000	
137	Ba	159	No Gas	20.346	ppb	4.2	11905.25	2000	
182	W	159	No Gas	-0.063	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	0.002	ppb	319.5	33.37	1000	
208	Pb	209	No Gas	0.151	ppb	2.0	727.49	2000	
232	Th	209	No Gas	0.021	ppb	94.3	246.95	1000	
238	U	209	No Gas	0.251	ppb	4.9	894.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1151690.91	2.6	1537409.87	74.91	29.5	120.4	
Sc	45	No Gas	3026455.13	2.9	3373253.08	89.72	29.5	120.4	
Sc	45	H2	351065.77	3.2	415670.69	84.46	29.5	120.4	
Sc	45	He	70648.49	0.9	81171.76	87.04	29.5	120.4	
Ge	72	No Gas	726869.27	3.3	779333.11	93.27	29.5	120.4	
Ge	72	H2	129969.44	2.2	153246.58	84.81	29.5	120.4	
Ge	72	He	56761.27	1.3	63135.03	89.9	29.5	120.4	
Y	89	H2	2382918.43	2.6	2642116.11	90.19	29.5	120.4	
Y	89	He	492549.48	1.4	544041.92	90.54	29.5	120.4	
Tb	159	No Gas	8261119.04	2.4	8117023.84	101.78	29.5	120.4	
Tb	159	He	2802858.08	1.7	2866479.19	97.78	29.5	120.4	
Bi	209	No Gas	4446913.84	2.9	4424692.92	100.5	29.5	120.4	

Sample Report

Sample Name SN5608-001

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:30:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	38.9	30.00	100	
11	B	6	No Gas	62.103	ppb	4.0	8851.89	1000	
23	Na	45	He	30898.273	ppb	0.6	610807.11	200000	
24	Mg	45	He	13029.380	ppb	0.6	141007.17	200000	
27	Al	45	He	10.637	ppb	140.1	87.78	200000	
28	Si	45	H2	6195.454	ppb	1.5	45760.33	10000	
39	K	45	He	4281.370	ppb	1.8	49827.46	200000	
40	Ca	45	H2	65776.046	ppb	1.0	4623376.35	200000	
51	V	89	He	4.693	ppb	4.2	958.96	1000	
52	Cr	89	He	0.434	ppb	55.8	117.31	2000	
55	Mn	89	He	735.361	ppb	1.0	68778.35	2000	
56	Fe	89	H2	23.326	ppb	10.4	14740.96	100000	
59	Co	89	He	0.311	ppb	58.9	111.12	1000	
60	Ni	89	He	1.845	ppb	4.0	212.23	1000	
63	Cu	89	He	0.000	ppb	N/A	387.80	2000	
66	Zn	89	He	2.678	ppb	44.1	153.34	2000	
75	As	89	He	0.329	ppb	79.8	13.67	1000	
78	Se	89	H2	0.048	ppb	39.9	1.17	1000	
88	Sr	89	He	298.350	ppb	0.8	41688.63	2000	
95	Mo	89	He	0.923	ppb	29.2	263.34	1000	
107	Ag	89	He	-0.002	ppb	N/A	8.89	100	
111	Cd	89	He	0.164	ppb	46.8	12.96	1000	
118	Sn	159	He	0.614	ppb	16.1	174.45	1000	
121	Sb	159	No Gas	0.034	ppb	54.4	146.83	1000	
137	Ba	159	No Gas	15.875	ppb	4.5	9337.11	2000	
182	W	159	No Gas	0.422	ppb	20.1	620.72	1000	
205	Tl	209	No Gas	0.015	ppb	40.9	66.74	1000	
208	Pb	209	No Gas	0.213	ppb	13.5	964.44	2000	
232	Th	209	No Gas	0.016	ppb	77.5	230.26	1000	
238	U	209	No Gas	14.647	ppb	4.9	52673.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1153337.37	1.8	1537409.87	75.02	29.5	120.4	
Sc	45	No Gas	3042500.15	2.1	3373253.08	90.19	29.5	120.4	
Sc	45	H2	350560.10	1.9	415670.69	84.34	29.5	120.4	
Sc	45	He	70518.72	0.5	81171.76	86.88	29.5	120.4	
Ge	72	No Gas	736505.44	2.1	779333.11	94.5	29.5	120.4	
Ge	72	H2	130491.52	1.9	153246.58	85.15	29.5	120.4	
Ge	72	He	57004.46	0.6	63135.03	90.29	29.5	120.4	
Y	89	H2	2387875.92	0.4	2642116.11	90.38	29.5	120.4	
Y	89	He	496004.06	0.6	544041.92	91.17	29.5	120.4	
Tb	159	No Gas	8299425.02	1.9	8117023.84	102.25	29.5	120.4	
Tb	159	He	2834268.12	0.5	2866479.19	98.88	29.5	120.4	
Bi	209	No Gas	4500600.23	1.8	4424692.92	101.72	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	144_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:33:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.061	ppb	6.3	25686.83	25	100.24	89.8	110.2	
11	B	6	No Gas	24.792	ppb	5.7	17404.34	25	99.17	89.8	110.2	
23	Na	45	He	5004.111	ppb	0.9	503967.02	5000	100.08	89.8	110.2	
24	Mg	45	He	4847.743	ppb	1.3	266251.57	5000	96.95	89.8	110.2	
27	Al	45	He	475.746	ppb	0.8	10142.84	500	95.15	89.8	110.2	
28	Si	45	H2	486.070	ppb	2.3	18409.03	500	97.21	89.8	110.2	
39	K	45	He	4924.205	ppb	0.8	244820.60	5000	98.48	89.8	110.2	
40	Ca	45	H2	4953.040	ppb	2.1	1772682.63	5000	99.06	89.8	110.2	
51	V	89	He	24.159	ppb	0.9	19571.99	25	96.64	89.8	110.2	
52	Cr	89	He	24.148	ppb	1.3	23909.15	25	96.59	89.8	110.2	
55	Mn	89	He	24.532	ppb	1.3	11571.97	25	98.13	89.8	110.2	
56	Fe	89	H2	4852.868	ppb	2.1	7309270.32	5000	97.06	89.8	110.2	
59	Co	89	He	24.830	ppb	0.7	41590.81	25	99.32	89.8	110.2	
60	Ni	89	He	24.414	ppb	0.4	11622.97	25	97.66	89.8	110.2	
63	Cu	89	He	24.651	ppb	1.1	32119.88	25	98.6	89.8	110.2	
66	Zn	89	He	24.949	ppb	4.5	4458.66	25	99.8	89.8	110.2	
75	As	89	He	24.196	ppb	0.9	3492.16	25	96.78	89.8	110.2	
78	Se	89	H2	24.642	ppb	1.4	1847.87	25	98.57	89.8	110.2	
88	Sr	89	He	24.251	ppb	1.5	17080.03	25	97	89.8	110.2	
95	Mo	89	He	25.048	ppb	2.3	20366.95	25	100.19	89.8	110.2	
107	Ag	89	He	19.028	ppb	0.6	52325.10	25	76.11	89.8	110.2	> +/- 10%
111	Cd	89	He	25.197	ppb	1.6	9231.01	25	100.79	89.8	110.2	
118	Sn	159	He	22.875	ppb	2.2	19253.29	25	91.5	89.8	110.2	
121	Sb	159	No Gas	23.492	ppb	4.6	175528.34	25	93.97	89.8	110.2	
137	Ba	159	No Gas	23.546	ppb	6.4	69179.34	25	94.18	89.8	110.2	
182	W	159	No Gas	23.251	ppb	7.0	138205.98	25	93	89.8	110.2	
205	Tl	209	No Gas	23.941	ppb	5.4	316187.68	25	95.76	89.8	110.2	
208	Pb	209	No Gas	24.015	ppb	5.4	438520.11	25	96.06	89.8	110.2	
232	Th	209	No Gas	23.479	ppb	7.7	448596.40	25	93.92	89.8	110.2	
238	U	209	No Gas	23.960	ppb	6.5	429701.06	25	95.84	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1183085.48	2.8	1537409.87	76.95	29.5	120.4	
Sc	45	No Gas	3119409.74	3.6	3373253.08	92.47	29.5	120.4	
Sc	45	H2	356784.14	1.1	415670.69	85.83	29.5	120.4	
Sc	45	He	71704.38	0.4	81171.76	88.34	29.5	120.4	
Ge	72	No Gas	741157.93	3.6	779333.11	95.1	29.5	120.4	
Ge	72	H2	135023.28	1.0	153246.58	88.11	29.5	120.4	
Ge	72	He	57790.14	0.1	63135.03	91.53	29.5	120.4	
Y	89	H2	2411889.33	1.1	2642116.11	91.29	29.5	120.4	
Y	89	He	499891.85	0.3	544041.92	91.88	29.5	120.4	
Tb	159	No Gas	8312284.18	3.5	8117023.84	102.41	29.5	120.4	
Tb	159	He	2802985.58	0.3	2866479.19	97.78	29.5	120.4	
Bi	209	No Gas	4494090.81	3.9	4424692.92	101.57	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	145_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:35:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	28.1	83.34	0.2	
11	B	6	No Gas	1.433	ppb	12.0	1700.16	4	
23	Na	45	He	7.979	ppb	20.3	6084.68	200	
24	Mg	45	He	-1.810	ppb	N/A	437.82	20	
27	Al	45	He	-1.333	ppb	N/A	15.55	20	
28	Si	45	H2	8.303	ppb	29.2	513.92	100	
39	K	45	He	10.021	ppb	65.4	9999.02	200	
40	Ca	45	H2	7.240	ppb	12.8	4121.86	20	
51	V	89	He	1.028	ppb	9.4	1016.74	1	Fail All Methods□ Failed DoD
52	Cr	89	He	0.111	ppb	14.3	139.31	1	
55	Mn	89	He	0.244	ppb	10.8	123.98	0.4	Failed DoD
56	Fe	89	H2	2.942	ppb	22.9	11961.88	20	
59	Co	89	He	0.003	ppb	3.5	13.33	0.2	
60	Ni	89	He	-0.036	ppb	N/A	21.11	0.4	
63	Cu	89	He	-0.107	ppb	N/A	248.90	0.6	
66	Zn	89	He	0.031	ppb	240.6	64.45	2	
75	As	89	He	0.067	ppb	53.3	13.67	1	
78	Se	89	H2	0.081	ppb	17.5	6.33	1	
88	Sr	89	He	0.020	ppb	47.9	20.00	1	
95	Mo	89	He	0.016	ppb	232.8	126.67	1	
107	Ag	89	He	0.005	ppb	43.1	22.22	0.2	
111	Cd	89	He	0.009	ppb	43.8	4.07	0.2	
118	Sn	159	He	0.337	ppb	10.6	354.46	1	
121	Sb	159	No Gas	0.042	ppb	30.8	413.80	0.2	
137	Ba	159	No Gas	0.021	ppb	15.2	80.09	0.4	
182	W	159	No Gas	0.109	ppb	3.5	777.56	1	
205	Tl	209	No Gas	0.031	ppb	25.7	447.18	0.2	
208	Pb	209	No Gas	0.075	ppb	4.8	1571.80	0.2	
232	Th	209	No Gas	0.199	ppb	26.9	4048.58	1	
238	U	209	No Gas	0.023	ppb	10.7	423.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1197558.05	1.1	1537409.87	77.89	29.5	120.4	
Sc	45	No Gas	3033379.88	1.3	3373253.08	89.92	29.5	120.4	
Sc	45	H2	343708.62	1.9	415670.69	82.69	29.5	120.4	
Sc	45	He	69801.63	2.7	81171.76	85.99	29.5	120.4	
Ge	72	No Gas	729335.74	0.8	779333.11	93.58	29.5	120.4	
Ge	72	H2	127790.03	0.9	153246.58	83.39	29.5	120.4	
Ge	72	He	55791.85	1.0	63135.03	88.37	29.5	120.4	
Y	89	H2	2346823.67	1.3	2642116.11	88.82	29.5	120.4	
Y	89	He	489577.10	1.4	544041.92	89.99	29.5	120.4	
Tb	159	No Gas	8384361.89	0.9	8117023.84	103.29	29.5	120.4	
Tb	159	He	2819331.03	1.6	2866479.19	98.36	29.5	120.4	
Bi	209	No Gas	4570377.61	1.0	4424692.92	103.29	29.5	120.4	

Sample Report

Sample Name	SN5608-002
File Name	146SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 9:38:27 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.117	ppb	61.9	37.78	100	
11	B	6	No Gas	24.241	ppb	5.3	3915.11	1000	
23	Na	45	He	30724.866	ppb	1.2	618095.48	200000	
24	Mg	45	He	23621.876	ppb	1.3	259684.54	200000	
27	Al	45	He	1.151	ppb	410.9	48.89	200000	
28	Si	45	H2	8345.811	ppb	1.1	61534.28	10000	
39	K	45	He	3532.387	ppb	3.3	43551.48	200000	
40	Ca	45	H2	123635.129	ppb	1.1	8683909.73	200000	
51	V	89	He	2.880	ppb	10.2	684.49	1000	
52	Cr	89	He	0.386	ppb	29.0	109.98	2000	
55	Mn	89	He	7.826	ppb	5.6	758.55	2000	
56	Fe	89	H2	33.381	ppb	5.5	17727.65	100000	
59	Co	89	He	0.035	ppb	2.6	20.00	1000	
60	Ni	89	He	0.957	ppb	15.5	131.12	1000	
63	Cu	89	He	-0.432	ppb	N/A	283.35	2000	
66	Zn	89	He	2.224	ppb	46.6	140.01	2000	
75	As	89	He	1.919	ppb	2.1	60.34	1000	
78	Se	89	H2	0.071	ppb	47.2	1.50	1000	
88	Sr	89	He	689.783	ppb	1.9	98289.34	2000	
95	Mo	89	He	0.204	ppb	51.1	151.12	1000	
107	Ag	89	He	-0.007	ppb	N/A	6.67	100	
111	Cd	89	He	0.101	ppb	16.9	8.52	1000	
118	Sn	159	He	0.558	ppb	13.7	168.90	1000	
121	Sb	159	No Gas	0.010	ppb	278.1	113.46	1000	
137	Ba	159	No Gas	4.215	ppb	10.6	2559.78	2000	
182	W	159	No Gas	-0.005	ppb	N/A	116.80	1000	
205	Tl	209	No Gas	0.018	ppb	79.0	76.75	1000	
208	Pb	209	No Gas	0.145	ppb	7.9	730.82	2000	
232	Th	209	No Gas	0.023	ppb	41.5	263.63	1000	
238	U	209	No Gas	147.210	ppb	6.6	540856.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1164330.06	2.2	1537409.87	75.73	29.5	120.4	
Sc	45	No Gas	3086536.82	3.6	3373253.08	91.5	29.5	120.4	
Sc	45	H2	350324.17	0.4	415670.69	84.28	29.5	120.4	
Sc	45	He	71764.79	1.4	81171.76	88.41	29.5	120.4	
Ge	72	No Gas	744944.60	3.3	779333.11	95.59	29.5	120.4	
Ge	72	H2	131002.74	1.9	153246.58	85.48	29.5	120.4	
Ge	72	He	57929.99	1.0	63135.03	91.76	29.5	120.4	
Y	89	H2	2387046.23	0.4	2642116.11	90.35	29.5	120.4	
Y	89	He	505934.57	1.5	544041.92	93	29.5	120.4	
Tb	159	No Gas	8539883.63	3.1	8117023.84	105.21	29.5	120.4	
Tb	159	He	2899500.34	1.5	2866479.19	101.15	29.5	120.4	
Bi	209	No Gas	4602358.55	3.4	4424692.92	104.02	29.5	120.4	

Sample Report

Sample Name SN5608-003

File Name 147SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:41:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.171	ppb	12.8	46.67	100	
11	B	6	No Gas	1046.192	ppb	4.4	133730.99	1000	
23	Na	45	He	113189.804	ppb	1.0	2194881.76	200000	
24	Mg	45	He	40703.919	ppb	0.3	433751.23	200000	
27	Al	45	He	8.736	ppb	74.0	78.89	200000	
28	Si	45	H2	7556.966	ppb	2.0	55160.50	10000	
39	K	45	He	57779.601	ppb	1.2	545002.50	200000	
40	Ca	45	H2	184965.906	ppb	0.8	12857494.39	200000	
51	V	89	He	3.880	ppb	1.0	820.05	1000	
52	Cr	89	He	1.977	ppb	2.3	415.27	2000	
55	Mn	89	He	4782.152	ppb	0.6	441992.40	2000	
56	Fe	89	H2	49998.334	ppb	0.7	14804624.73	100000	
59	Co	89	He	8.846	ppb	10.4	2911.66	1000	
60	Ni	89	He	19.108	ppb	4.5	1815.75	1000	
63	Cu	89	He	0.018	ppb	407.4	387.80	2000	
66	Zn	89	He	1.824	ppb	43.1	122.23	2000	
75	As	89	He	117.301	ppb	3.9	3320.10	1000	
78	Se	89	H2	0.241	ppb	14.0	4.00	1000	
88	Sr	89	He	1102.046	ppb	0.3	152182.70	2000	
95	Mo	89	He	0.899	ppb	22.8	256.68	1000	
107	Ag	89	He	0.006	ppb	344.7	13.34	100	
111	Cd	89	He	0.090	ppb	51.3	7.41	1000	
118	Sn	159	He	0.769	ppb	22.9	202.23	1000	
121	Sb	159	No Gas	0.117	ppb	5.2	273.64	1000	
137	Ba	159	No Gas	301.684	ppb	4.5	178688.39	2000	
182	W	159	No Gas	0.114	ppb	30.5	256.96	1000	
205	Tl	209	No Gas	0.007	ppb	153.2	43.38	1000	
208	Pb	209	No Gas	0.379	ppb	5.4	1545.09	2000	
232	Th	209	No Gas	0.027	ppb	85.3	266.97	1000	
238	U	209	No Gas	23.746	ppb	5.6	84045.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1117107.64	2.5	1537409.87	72.66	29.5	120.4	
Sc	45	No Gas	2983521.96	2.7	3373253.08	88.45	29.5	120.4	
Sc	45	H2	346742.16	1.2	415670.69	83.42	29.5	120.4	
Sc	45	He	69617.47	0.2	81171.76	85.77	29.5	120.4	
Ge	72	No Gas	719683.23	2.9	779333.11	92.35	29.5	120.4	
Ge	72	H2	128170.23	2.6	153246.58	83.64	29.5	120.4	
Ge	72	He	55834.85	0.7	63135.03	88.44	29.5	120.4	
Y	89	H2	2371798.38	0.2	2642116.11	89.77	29.5	120.4	
Y	89	He	490231.53	1.0	544041.92	90.11	29.5	120.4	
Tb	159	No Gas	8374231.40	2.6	8117023.84	103.17	29.5	120.4	
Tb	159	He	2854626.73	0.1	2866479.19	99.59	29.5	120.4	
Bi	209	No Gas	4431918.53	3.1	4424692.92	100.16	29.5	120.4	

Sample Report

Sample Name SN5608-004

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:43:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	49.8	28.89	100	
11	B	6	No Gas	794.795	ppb	2.9	101605.64	1000	
23	Na	45	He	156999.033	ppb	0.5	3074784.00	200000	
24	Mg	45	He	30115.164	ppb	0.2	324475.95	200000	
27	Al	45	He	24.543	ppb	2.4	145.56	200000	
28	Si	45	H2	9534.180	ppb	2.1	68567.03	10000	
39	K	45	He	68460.169	ppb	0.7	650859.75	200000	
40	Ca	45	H2	155727.285	ppb	1.8	10671512.69	200000	
51	V	89	He	2.801	ppb	18.2	653.37	1000	
52	Cr	89	He	5.068	ppb	3.7	1019.86	2000	
55	Mn	89	He	6890.988	ppb	0.1	640145.69	2000	
56	Fe	89	H2	11869.739	ppb	1.2	3467078.47	100000	
59	Co	89	He	10.977	ppb	1.6	3631.84	1000	
60	Ni	89	He	56.171	ppb	4.0	5292.30	1000	
63	Cu	89	He	1.349	ppb	14.4	727.82	2000	
66	Zn	89	He	2.510	ppb	24.2	146.67	2000	
75	As	89	He	40.064	ppb	3.9	1142.84	1000	
78	Se	89	H2	0.211	ppb	33.1	3.50	1000	
88	Sr	89	He	1044.433	ppb	0.6	144957.58	2000	
95	Mo	89	He	1.790	ppb	10.3	400.02	1000	
107	Ag	89	He	0.008	ppb	158.5	14.45	100	
111	Cd	89	He	0.084	ppb	11.1	7.04	1000	
118	Sn	159	He	0.662	ppb	4.4	183.35	1000	
121	Sb	159	No Gas	0.120	ppb	21.6	276.98	1000	
137	Ba	159	No Gas	136.197	ppb	3.4	80805.00	2000	
182	W	159	No Gas	0.058	ppb	63.8	190.21	1000	
205	Tl	209	No Gas	0.052	ppb	11.9	163.52	1000	
208	Pb	209	No Gas	0.415	ppb	2.8	1681.92	2000	
232	Th	209	No Gas	0.024	ppb	53.5	256.96	1000	
238	U	209	No Gas	19.961	ppb	4.9	70940.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1114771.36	0.6	1537409.87	72.51	29.5	120.4	
Sc	45	No Gas	2975002.53	0.3	3373253.08	88.19	29.5	120.4	
Sc	45	H2	341842.09	1.6	415670.69	82.24	29.5	120.4	
Sc	45	He	70359.96	0.5	81171.76	86.68	29.5	120.4	
Ge	72	No Gas	721513.71	1.2	779333.11	92.58	29.5	120.4	
Ge	72	H2	129210.24	1.0	153246.58	84.32	29.5	120.4	
Ge	72	He	56034.51	0.6	63135.03	88.75	29.5	120.4	
Y	89	H2	2335864.25	0.9	2642116.11	88.41	29.5	120.4	
Y	89	He	492714.03	0.5	544041.92	90.57	29.5	120.4	
Tb	159	No Gas	8381913.28	0.8	8117023.84	103.26	29.5	120.4	
Tb	159	He	2845521.21	0.5	2866479.19	99.27	29.5	120.4	
Bi	209	No Gas	4446510.52	0.9	4424692.92	100.49	29.5	120.4	

Sample Report

Sample Name SN5608-005

File Name 149SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:46:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.095	ppb	114.2	33.34	100	
11	B	6	No Gas	23.673	ppb	4.7	3820.64	1000	
23	Na	45	He	26462.791	ppb	0.5	532511.74	200000	
24	Mg	45	He	2632.120	ppb	3.1	29389.82	200000	
27	Al	45	He	2.979	ppb	209.4	56.67	200000	
28	Si	45	H2	5228.366	ppb	19.8	34366.61	10000	
39	K	45	He	3568.921	ppb	0.7	43850.29	200000	
40	Ca	45	H2	16106.912	ppb	18.4	1008886.10	200000	
51	V	89	He	2.259	ppb	12.4	584.48	1000	
52	Cr	89	He	0.371	ppb	6.6	107.31	2000	
55	Mn	89	He	5.763	ppb	8.0	562.58	2000	
56	Fe	89	H2	136.607	ppb	23.0	43301.83	100000	
59	Co	89	He	0.008	ppb	361.4	11.11	1000	
60	Ni	89	He	0.146	ppb	126.7	53.33	1000	
63	Cu	89	He	0.069	ppb	97.5	414.47	2000	
66	Zn	89	He	2.891	ppb	4.7	164.45	2000	
75	As	89	He	10.584	ppb	4.4	313.71	1000	
78	Se	89	H2	0.015	ppb	317.7	0.67	1000	
88	Sr	89	He	71.993	ppb	1.0	10284.22	2000	
95	Mo	89	He	8.756	ppb	1.9	1553.48	1000	
107	Ag	89	He	0.011	ppb	105.6	16.67	100	
111	Cd	89	He	0.041	ppb	55.5	4.07	1000	
118	Sn	159	He	0.468	ppb	6.1	153.34	1000	
121	Sb	159	No Gas	0.018	ppb	106.1	126.81	1000	
137	Ba	159	No Gas	3.363	ppb	2.9	2055.79	2000	
182	W	159	No Gas	9.961	ppb	1.2	12329.81	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	23.36	1000	
208	Pb	209	No Gas	0.229	ppb	16.8	1057.87	2000	
232	Th	209	No Gas	-0.005	ppb	N/A	156.84	1000	
238	U	209	No Gas	0.380	ppb	6.9	1418.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1157773.55	0.0	1537409.87	75.31	29.5	120.4	
Sc	45	No Gas	3068293.26	1.4	3373253.08	90.96	29.5	120.4	
Sc	45	H2	317313.04	13.7	415670.69	76.34	29.5	120.4	
Sc	45	He	71678.69	0.6	81171.76	88.3	29.5	120.4	
Ge	72	No Gas	754234.35	0.9	779333.11	96.78	29.5	120.4	
Ge	72	H2	120056.35	11.6	153246.58	78.34	29.5	120.4	
Ge	72	He	58705.41	0.5	63135.03	92.98	29.5	120.4	
Y	89	H2	2169146.57	13.2	2642116.11	82.1	29.5	120.4	
Y	89	He	506842.00	0.4	544041.92	93.16	29.5	120.4	
Tb	159	No Gas	8562707.23	1.2	8117023.84	105.49	29.5	120.4	
Tb	159	He	2903233.08	0.5	2866479.19	101.28	29.5	120.4	
Bi	209	No Gas	4661036.55	0.8	4424692.92	105.34	29.5	120.4	

Sample Report

Sample Name SN5608-005L

File Name 150SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:49:12 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.329	ppb	65.1	27.78	100	
11	B	6	No Gas	28.081	ppb	9.5	1463.46	1000	
23	Na	45	He	26331.831	ppb	0.9	114874.85	200000	
24	Mg	45	He	2587.326	ppb	3.8	6475.33	200000	
27	Al	45	He	0.852	ppb	1618.9	46.67	200000	
28	Si	45	H2	4710.943	ppb	1.5	7390.15	10000	
39	K	45	He	3520.951	ppb	1.2	17192.66	200000	
40	Ca	45	H2	14542.935	ppb	3.0	212964.42	200000	
51	V	89	He	4.349	ppb	21.2	367.80	1000	
52	Cr	89	He	0.865	ppb	7.9	69.32	2000	
55	Mn	89	He	7.993	ppb	17.1	168.64	2000	
56	Fe	89	H2	105.881	ppb	9.2	14426.87	100000	
59	Co	89	He	0.069	ppb	135.6	13.33	1000	
60	Ni	89	He	-0.468	ppb	N/A	31.11	1000	
63	Cu	89	He	-3.298	ppb	N/A	230.01	2000	
66	Zn	89	He	5.417	ppb	53.7	102.23	2000	
75	As	89	He	9.596	ppb	3.9	62.01	1000	
78	Se	89	H2	0.174	ppb	90.3	1.00	1000	
88	Sr	89	He	72.661	ppb	5.6	2133.58	2000	
95	Mo	89	He	5.032	ppb	20.6	290.01	1000	
107	Ag	89	He	0.043	ppb	103.0	15.56	100	
111	Cd	89	He	0.027	ppb	307.1	1.48	1000	
118	Sn	159	He	-0.066	ppb	N/A	70.00	1000	
121	Sb	159	No Gas	-0.062	ppb	N/A	80.09	1000	
137	Ba	159	No Gas	3.456	ppb	9.1	437.16	2000	
182	W	159	No Gas	9.988	ppb	3.7	2576.50	1000	
205	Tl	209	No Gas	0.003	ppb	531.0	30.03	1000	
208	Pb	209	No Gas	0.204	ppb	64.7	343.72	2000	
232	Th	209	No Gas	-0.036	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.415	ppb	20.6	313.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1177320.18	1.6	1537409.87	76.58	29.5	120.4	
Sc	45	No Gas	3161059.59	1.7	3373253.08	93.71	29.5	120.4	
Sc	45	H2	362576.51	3.8	415670.69	87.23	29.5	120.4	
Sc	45	He	74620.33	0.5	81171.76	91.93	29.5	120.4	
Ge	72	No Gas	768286.88	1.2	779333.11	98.58	29.5	120.4	
Ge	72	H2	137685.97	3.1	153246.58	89.85	29.5	120.4	
Ge	72	He	60636.20	1.0	63135.03	96.04	29.5	120.4	
Y	89	H2	2445367.31	2.9	2642116.11	92.55	29.5	120.4	
Y	89	He	519875.45	1.1	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8578743.76	1.6	8117023.84	105.69	29.5	120.4	
Tb	159	He	2917225.93	1.0	2866479.19	101.77	29.5	120.4	
Bi	209	No Gas	4666001.25	1.7	4424692.92	105.45	29.5	120.4	

Sample Report

Sample Name SN5608-005A

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:51:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.208	ppb	2.4	2120.22	100	
11	B	6	No Gas	217.764	ppb	1.1	30237.95	1000	
23	Na	45	He	35871.461	ppb	1.5	729499.52	200000	
24	Mg	45	He	3529.978	ppb	3.7	39741.75	200000	
27	Al	45	He	913.388	ppb	3.4	3971.80	200000	
28	Si	45	H2	9041.711	ppb	1.3	68792.20	10000	
39	K	45	He	13434.343	ppb	2.7	139807.09	200000	
40	Ca	45	H2	14722.259	ppb	1.8	1068837.82	200000	
51	V	89	He	53.756	ppb	2.6	8997.64	1000	
52	Cr	89	He	49.378	ppb	6.8	9976.39	2000	
55	Mn	89	He	25.336	ppb	0.4	2445.77	2000	
56	Fe	89	H2	1122.002	ppb	2.8	354621.79	100000	
59	Co	89	He	10.788	ppb	7.4	3687.42	1000	
60	Ni	89	He	21.318	ppb	4.6	2100.23	1000	
63	Cu	89	He	31.271	ppb	3.2	8600.71	2000	
66	Zn	89	He	106.009	ppb	3.5	3869.56	2000	
75	As	89	He	61.121	ppb	0.9	1800.32	1000	
78	Se	89	H2	48.498	ppb	2.2	746.99	1000	
88	Sr	89	He	121.539	ppb	2.2	17444.89	2000	
95	Mo	89	He	61.205	ppb	2.2	10203.08	1000	
107	Ag	89	He	11.369	ppb	4.7	6378.38	100	
111	Cd	89	He	11.214	ppb	3.9	838.19	1000	
118	Sn	159	He	48.318	ppb	5.0	8468.51	1000	
121	Sb	159	No Gas	10.163	ppb	3.5	16144.19	1000	
137	Ba	159	No Gas	22.693	ppb	3.2	14119.93	2000	
182	W	159	No Gas	58.171	ppb	0.6	73210.94	1000	
205	Tl	209	No Gas	10.191	ppb	0.6	28664.22	1000	
208	Pb	209	No Gas	10.209	ppb	0.8	39842.74	2000	
232	Th	209	No Gas	9.747	ppb	1.2	39814.08	1000	
238	U	209	No Gas	10.281	ppb	1.1	39245.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1189919.20	0.9	1537409.87	77.4	29.5	120.4	
Sc	45	No Gas	3189389.85	1.3	3373253.08	94.55	29.5	120.4	
Sc	45	H2	361640.99	1.3	415670.69	87	29.5	120.4	
Sc	45	He	72648.67	2.2	81171.76	89.5	29.5	120.4	
Ge	72	No Gas	776333.74	0.8	779333.11	99.62	29.5	120.4	
Ge	72	H2	136212.46	1.4	153246.58	88.88	29.5	120.4	
Ge	72	He	58928.40	1.8	63135.03	93.34	29.5	120.4	
Y	89	H2	2475960.17	1.4	2642116.11	93.71	29.5	120.4	
Y	89	He	509551.49	2.4	544041.92	93.66	29.5	120.4	
Tb	159	No Gas	8777736.46	1.1	8117023.84	108.14	29.5	120.4	
Tb	159	He	2906970.06	3.1	2866479.19	101.41	29.5	120.4	
Bi	209	No Gas	4774188.29	0.7	4424692.92	107.9	29.5	120.4	

Sample Report

Sample Name SN5608-005S

File Name 152SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:54:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.346	ppb	2.7	10058.26	100	
11	B	6	No Gas	524.330	ppb	4.6	70819.33	1000	
23	Na	45	He	31883.568	ppb	1.0	663284.14	200000	
24	Mg	45	He	7399.048	ppb	1.7	84532.93	200000	
27	Al	45	He	2128.210	ppb	1.1	9398.95	200000	
28	Si	45	H2	5696.137	ppb	9.4	41318.89	10000	
39	K	45	He	13008.983	ppb	0.8	138697.03	200000	
40	Ca	45	H2	17528.311	ppb	8.6	1210870.38	200000	
51	V	89	He	474.713	ppb	1.7	79326.76	1000	
52	Cr	89	He	193.231	ppb	0.8	39774.45	2000	
55	Mn	89	He	499.683	ppb	0.5	48985.58	2000	
56	Fe	89	H2	1656.510	ppb	7.9	496131.93	100000	
59	Co	89	He	500.466	ppb	0.4	174329.97	1000	
60	Ni	89	He	477.149	ppb	0.5	47129.04	1000	
63	Cu	89	He	249.716	ppb	0.9	67253.67	2000	
66	Zn	89	He	609.353	ppb	0.6	22407.57	2000	
75	As	89	He	108.325	ppb	2.6	3252.74	1000	
78	Se	89	H2	103.949	ppb	8.7	1527.02	1000	
88	Sr	89	He	557.445	ppb	1.3	81628.85	2000	
95	Mo	89	He	110.353	ppb	0.4	18676.65	1000	
107	Ag	89	He	52.834	ppb	1.1	30221.07	100	
111	Cd	89	He	251.984	ppb	0.9	19199.65	1000	
118	Sn	159	He	467.764	ppb	0.3	82774.00	1000	
121	Sb	159	No Gas	97.087	ppb	4.2	151314.61	1000	
137	Ba	159	No Gas	1859.139	ppb	2.8	1139498.16	2000	
182	W	159	No Gas	110.215	ppb	2.7	136725.45	1000	
205	Tl	209	No Gas	100.092	ppb	3.6	274832.69	1000	
208	Pb	209	No Gas	100.601	ppb	3.1	381955.09	2000	
232	Th	209	No Gas	98.685	ppb	3.5	392247.54	1000	
238	U	209	No Gas	98.556	ppb	3.4	367567.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174443.07	2.4	1537409.87	76.39	29.5	120.4	
Sc	45	No Gas	3126988.81	0.7	3373253.08	92.7	29.5	120.4	
Sc	45	H2	345295.50	5.9	415670.69	83.07	29.5	120.4	
Sc	45	He	74228.54	0.4	81171.76	91.45	29.5	120.4	
Ge	72	No Gas	767153.84	1.0	779333.11	98.44	29.5	120.4	
Ge	72	H2	132030.58	4.4	153246.58	86.16	29.5	120.4	
Ge	72	He	60389.28	0.6	63135.03	95.65	29.5	120.4	
Y	89	H2	2369706.89	5.5	2642116.11	89.69	29.5	120.4	
Y	89	He	519858.71	1.0	544041.92	95.55	29.5	120.4	
Tb	159	No Gas	8660617.86	0.8	8117023.84	106.7	29.5	120.4	
Tb	159	He	2954643.81	1.2	2866479.19	103.08	29.5	120.4	
Bi	209	No Gas	4666310.68	1.4	4424692.92	105.46	29.5	120.4	

Sample Report

Sample Name SN5608-005P

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:57:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.971	ppb	3.1	10501.92	100	
11	B	6	No Gas	538.594	ppb	4.5	73524.93	1000	
23	Na	45	He	32452.116	ppb	1.7	675852.05	200000	
24	Mg	45	He	7440.848	ppb	1.0	85122.68	200000	
27	Al	45	He	1819.786	ppb	3.5	8052.55	200000	
28	Si	45	H2	5520.078	ppb	4.0	42738.22	10000	
39	K	45	He	13299.131	ppb	1.9	141743.37	200000	
40	Ca	45	H2	16132.400	ppb	1.3	1189415.06	200000	
51	V	89	He	481.448	ppb	0.7	81145.23	1000	
52	Cr	89	He	196.452	ppb	0.9	40781.07	2000	
55	Mn	89	He	493.970	ppb	0.6	48841.09	2000	
56	Fe	89	H2	1134.590	ppb	1.2	363370.65	100000	
59	Co	89	He	506.183	ppb	0.1	177832.38	1000	
60	Ni	89	He	484.671	ppb	0.7	48280.75	1000	
63	Cu	89	He	251.754	ppb	0.1	68384.67	2000	
66	Zn	89	He	494.116	ppb	1.9	18337.07	2000	
75	As	89	He	110.092	ppb	1.2	3333.77	1000	
78	Se	89	H2	100.609	ppb	2.6	1569.69	1000	
88	Sr	89	He	564.013	ppb	0.4	83305.85	2000	
95	Mo	89	He	113.645	ppb	1.1	19396.57	1000	
107	Ag	89	He	53.811	ppb	1.0	31044.07	100	
111	Cd	89	He	255.135	ppb	1.0	19606.13	1000	
118	Sn	159	He	475.323	ppb	1.5	84882.32	1000	
121	Sb	159	No Gas	99.187	ppb	3.1	157341.16	1000	
137	Ba	159	No Gas	1887.760	ppb	2.6	1177616.87	2000	
182	W	159	No Gas	111.150	ppb	3.6	140333.60	1000	
205	Tl	209	No Gas	101.935	ppb	3.1	284340.30	1000	
208	Pb	209	No Gas	102.208	ppb	3.1	394183.96	2000	
232	Th	209	No Gas	99.860	ppb	4.3	403179.19	1000	
238	U	209	No Gas	100.421	ppb	4.2	380437.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1187130.19	1.7	1537409.87	77.22	29.5	120.4	
Sc	45	No Gas	3194732.38	0.9	3373253.08	94.71	29.5	120.4	
Sc	45	H2	367289.31	1.0	415670.69	88.36	29.5	120.4	
Sc	45	He	74334.63	1.5	81171.76	91.58	29.5	120.4	
Ge	72	No Gas	780175.32	1.2	779333.11	100.11	29.5	120.4	
Ge	72	H2	138487.54	1.3	153246.58	90.37	29.5	120.4	
Ge	72	He	60635.79	0.3	63135.03	96.04	29.5	120.4	
Y	89	H2	2508970.16	0.5	2642116.11	94.96	29.5	120.4	
Y	89	He	524315.25	0.7	544041.92	96.37	29.5	120.4	
Tb	159	No Gas	8814708.06	0.8	8117023.84	108.6	29.5	120.4	
Tb	159	He	2981848.46	0.5	2866479.19	104.02	29.5	120.4	
Bi	209	No Gas	4740120.53	1.2	4424692.92	107.13	29.5	120.4	

Sample Report

Sample Name PBWNG13IMW2

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 9:59:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.197	ppb	35.9	53.34	100	
11	B	6	No Gas	11.196	ppb	9.0	2159.13	1000	
23	Na	45	He	74.149	ppb	9.4	7269.88	200000	
24	Mg	45	He	-2.208	ppb	N/A	551.16	200000	
27	Al	45	He	0.565	ppb	673.0	48.89	200000	
28	Si	45	H2	17.555	ppb	45.9	363.74	10000	
39	K	45	He	40.004	ppb	43.5	10677.52	200000	
40	Ca	45	H2	25.633	ppb	6.4	3621.70	200000	
51	V	89	He	4.204	ppb	8.9	935.62	1000	
52	Cr	89	He	0.367	ppb	24.3	110.65	2000	
55	Mn	89	He	1.252	ppb	10.7	136.64	2000	
56	Fe	89	H2	-4.243	ppb	N/A	6869.36	100000	
59	Co	89	He	0.202	ppb	9.5	80.01	1000	
60	Ni	89	He	-0.120	ppb	N/A	28.89	1000	
63	Cu	89	He	-0.515	ppb	N/A	272.23	2000	
66	Zn	89	He	2.031	ppb	19.7	138.90	2000	
75	As	89	He	0.313	ppb	37.1	14.00	1000	
78	Se	89	H2	0.204	ppb	32.3	3.67	1000	
88	Sr	89	He	0.106	ppb	32.1	22.22	2000	
95	Mo	89	He	-0.478	ppb	N/A	41.11	1000	
107	Ag	89	He	0.008	ppb	145.4	15.55	100	
111	Cd	89	He	0.053	ppb	31.5	5.18	1000	
118	Sn	159	He	1.158	ppb	13.3	280.01	1000	
121	Sb	159	No Gas	0.126	ppb	24.3	293.66	1000	
137	Ba	159	No Gas	1.368	ppb	10.0	850.99	2000	
182	W	159	No Gas	0.176	ppb	24.9	340.38	1000	
205	Tl	209	No Gas	0.127	ppb	8.9	377.09	1000	
208	Pb	209	No Gas	0.296	ppb	6.9	1314.84	2000	
232	Th	209	No Gas	1.065	ppb	28.8	4419.13	1000	
238	U	209	No Gas	0.093	ppb	21.4	350.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1148819.19	1.4	1537409.87	74.72	29.5	120.4	
Sc	45	No Gas	3132799.33	0.3	3373253.08	92.87	29.5	120.4	
Sc	45	H2	366562.99	1.5	415670.69	88.19	29.5	120.4	
Sc	45	He	75203.50	1.5	81171.76	92.65	29.5	120.4	
Ge	72	No Gas	768607.04	0.9	779333.11	98.62	29.5	120.4	
Ge	72	H2	138342.36	2.2	153246.58	90.27	29.5	120.4	
Ge	72	He	60529.14	0.4	63135.03	95.87	29.5	120.4	
Y	89	H2	2513940.00	0.6	2642116.11	95.15	29.5	120.4	
Y	89	He	526594.13	0.5	544041.92	96.79	29.5	120.4	
Tb	159	No Gas	8606338.97	0.5	8117023.84	106.03	29.5	120.4	
Tb	159	He	2976594.09	0.1	2866479.19	103.84	29.5	120.4	
Bi	209	No Gas	4672934.65	0.7	4424692.92	105.61	29.5	120.4	

Sample Report

Sample Name	LCSWNG13IMW2
File Name	155SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:02:34 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.884	ppb	2.7	10516.34	100	
11	B	6	No Gas	536.593	ppb	0.3	72093.33	1000	
23	Na	45	He	7367.990	ppb	2.7	158650.15	200000	
24	Mg	45	He	5083.001	ppb	3.5	58622.88	200000	
27	Al	45	He	1834.277	ppb	4.7	8157.06	200000	
28	Si	45	H2	1037.117	ppb	6.6	8188.17	10000	
39	K	45	He	10234.900	ppb	1.9	112025.36	200000	
40	Ca	45	H2	2625.817	ppb	2.7	194457.17	200000	
51	V	89	He	496.957	ppb	4.0	83054.84	1000	
52	Cr	89	He	204.080	ppb	3.4	42013.75	2000	
55	Mn	89	He	500.795	ppb	3.1	49111.97	2000	
56	Fe	89	H2	1053.179	ppb	2.7	337461.48	100000	
59	Co	89	He	528.696	ppb	2.9	184223.69	1000	
60	Ni	89	He	500.930	ppb	2.4	49497.26	1000	
63	Cu	89	He	262.595	ppb	2.6	70735.06	2000	
66	Zn	89	He	506.859	ppb	2.7	18656.36	2000	
75	As	89	He	103.083	ppb	3.1	3096.02	1000	
78	Se	89	H2	101.218	ppb	3.9	1577.19	1000	
88	Sr	89	He	513.330	ppb	2.3	75208.21	2000	
95	Mo	89	He	107.630	ppb	1.9	18229.39	1000	
107	Ag	89	He	55.209	ppb	4.1	31585.24	100	
111	Cd	89	He	263.752	ppb	3.3	20103.15	1000	
118	Sn	159	He	487.678	ppb	3.2	86086.66	1000	
121	Sb	159	No Gas	102.947	ppb	2.1	159509.46	1000	
137	Ba	159	No Gas	1967.672	ppb	1.5	1198993.46	2000	
182	W	159	No Gas	104.622	ppb	1.3	129040.12	1000	
205	Tl	209	No Gas	106.021	ppb	0.2	290551.72	1000	
208	Pb	209	No Gas	105.741	ppb	1.7	400591.08	2000	
232	Th	209	No Gas	103.566	ppb	1.7	410746.67	1000	
238	U	209	No Gas	103.645	ppb	2.1	385689.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1167732.59	1.3	1537409.87	75.95	29.5	120.4	
Sc	45	No Gas	3135259.65	2.6	3373253.08	92.94	29.5	120.4	
Sc	45	H2	366267.78	2.1	415670.69	88.11	29.5	120.4	
Sc	45	He	74744.98	2.5	81171.76	92.08	29.5	120.4	
Ge	72	No Gas	771270.65	2.5	779333.11	98.97	29.5	120.4	
Ge	72	H2	136863.22	2.1	153246.58	89.31	29.5	120.4	
Ge	72	He	59794.56	1.3	63135.03	94.71	29.5	120.4	
Y	89	H2	2506341.59	1.4	2642116.11	94.86	29.5	120.4	
Y	89	He	520307.42	2.7	544041.92	95.64	29.5	120.4	
Tb	159	No Gas	8611046.68	2.4	8117023.84	106.09	29.5	120.4	
Tb	159	He	2948801.45	2.1	2866479.19	102.87	29.5	120.4	
Bi	209	No Gas	4656167.93	2.5	4424692.92	105.23	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	156_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:05:18 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.472	ppb	2.1	25930.54	25	101.89	89.8	110.2	
11	B	6	No Gas	27.071	ppb	1.3	18809.52	25	108.28	89.8	110.2	
23	Na	45	He	4867.821	ppb	1.1	513918.50	5000	97.36	89.8	110.2	
24	Mg	45	He	4751.976	ppb	1.4	273524.12	5000	95.04	89.8	110.2	
27	Al	45	He	456.860	ppb	1.7	10210.67	500	91.37	89.8	110.2	
28	Si	45	H2	469.694	ppb	5.1	18325.42	500	93.94	89.8	110.2	
39	K	45	He	4788.789	ppb	1.0	249802.51	5000	95.78	89.8	110.2	
40	Ca	45	H2	4915.746	ppb	1.3	1812507.63	5000	98.31	89.8	110.2	
51	V	89	He	23.473	ppb	2.3	19852.34	25	93.89	89.8	110.2	
52	Cr	89	He	23.877	ppb	1.0	24674.32	25	95.51	89.8	110.2	
55	Mn	89	He	23.492	ppb	2.1	11565.98	25	93.97	89.8	110.2	
56	Fe	89	H2	4844.149	ppb	1.5	7461451.66	5000	96.88	89.8	110.2	
59	Co	89	He	24.439	ppb	0.5	42723.10	25	97.76	89.8	110.2	
60	Ni	89	He	24.402	ppb	0.9	12124.54	25	97.61	89.8	110.2	
63	Cu	89	He	24.199	ppb	1.1	32915.07	25	96.8	89.8	110.2	
66	Zn	89	He	23.195	ppb	4.3	4330.84	25	92.78	89.8	110.2	
75	As	89	He	24.000	ppb	1.2	3615.21	25	96	89.8	110.2	
78	Se	89	H2	24.329	ppb	2.7	1865.38	25	97.32	89.8	110.2	
88	Sr	89	He	23.478	ppb	1.9	17256.94	25	93.91	89.8	110.2	
95	Mo	89	He	24.181	ppb	0.7	20524.94	25	96.72	89.8	110.2	
107	Ag	89	He	18.668	ppb	0.6	53576.36	25	74.67	89.8	110.2	> +/- 10%
111	Cd	89	He	24.421	ppb	1.1	9337.75	25	97.68	89.8	110.2	
118	Sn	159	He	22.553	ppb	1.7	19759.54	25	90.21	89.8	110.2	
121	Sb	159	No Gas	24.100	ppb	2.4	183778.17	25	96.4	89.8	110.2	
137	Ba	159	No Gas	24.509	ppb	2.5	73534.68	25	98.04	89.8	110.2	
182	W	159	No Gas	24.148	ppb	2.1	146582.92	25	96.59	89.8	110.2	
205	Tl	209	No Gas	24.627	ppb	2.2	330466.94	25	98.51	89.8	110.2	
208	Pb	209	No Gas	24.515	ppb	2.6	454770.53	25	98.06	89.8	110.2	
232	Th	209	No Gas	24.221	ppb	0.9	470554.75	25	96.88	89.8	110.2	
238	U	209	No Gas	24.206	ppb	1.0	441274.30	25	96.82	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1174018.30	2.4	1537409.87	76.36	29.5	120.4	
Sc	45	No Gas	3180985.33	3.1	3373253.08	94.3	29.5	120.4	
Sc	45	H2	367550.89	1.2	415670.69	88.42	29.5	120.4	
Sc	45	He	75148.65	1.0	81171.76	92.58	29.5	120.4	
Ge	72	No Gas	759869.53	1.7	779333.11	97.5	29.5	120.4	
Ge	72	H2	135803.07	1.6	153246.58	88.62	29.5	120.4	
Ge	72	He	60277.26	1.1	63135.03	95.47	29.5	120.4	
Y	89	H2	2466510.78	1.3	2642116.11	93.35	29.5	120.4	
Y	89	He	521719.82	0.3	544041.92	95.9	29.5	120.4	
Tb	159	No Gas	8478514.73	3.0	8117023.84	104.45	29.5	120.4	
Tb	159	He	2917437.11	0.7	2866479.19	101.78	29.5	120.4	
Bi	209	No Gas	4561141.76	2.3	4424692.92	103.08	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	157_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:07:55 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.070	ppb	24.7	87.78	0.2	
11	B	6	No Gas	2.013	ppb	2.1	2094.67	4	Failed DoD
23	Na	45	He	14.402	ppb	14.1	6929.45	200	
24	Mg	45	He	-1.731	ppb	N/A	457.82	20	
27	Al	45	He	-0.936	ppb	N/A	24.44	20	
28	Si	45	H2	6.237	ppb	36.0	450.51	100	
39	K	45	He	10.593	ppb	23.4	10367.45	200	
40	Ca	45	H2	5.193	ppb	7.2	3505.02	20	
51	V	89	He	0.655	ppb	5.6	754.50	1	Failed DoD
52	Cr	89	He	0.104	ppb	8.1	137.98	1	
55	Mn	89	He	0.179	ppb	8.8	97.98	0.4	
56	Fe	89	H2	1.034	ppb	28.5	9433.62	20	
59	Co	89	He	0.022	ppb	17.3	46.67	0.2	
60	Ni	89	He	-0.018	ppb	N/A	31.11	0.4	
63	Cu	89	He	-0.102	ppb	N/A	264.46	0.6	
66	Zn	89	He	0.053	ppb	129.8	71.11	2	
75	As	89	He	0.056	ppb	61.4	12.67	1	
78	Se	89	H2	0.081	ppb	9.1	6.50	1	
88	Sr	89	He	0.018	ppb	40.7	18.89	1	
95	Mo	89	He	-0.019	ppb	N/A	103.34	1	
107	Ag	89	He	0.006	ppb	82.1	26.67	0.2	
111	Cd	89	He	0.016	ppb	28.5	7.04	0.2	
118	Sn	159	He	0.373	ppb	7.5	397.80	1	
121	Sb	159	No Gas	0.034	ppb	19.3	373.76	0.2	
137	Ba	159	No Gas	0.088	ppb	17.0	293.67	0.4	
182	W	159	No Gas	0.123	ppb	12.3	901.04	1	
205	Tl	209	No Gas	0.033	ppb	24.4	490.57	0.2	
208	Pb	209	No Gas	0.064	ppb	12.8	1431.64	0.2	
232	Th	209	No Gas	0.306	ppb	34.9	6412.30	1	
238	U	209	No Gas	0.032	ppb	33.2	610.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1197259.70	3.0	1537409.87	77.88	29.5	120.4	
Sc	45	No Gas	3157345.85	2.6	3373253.08	93.6	29.5	120.4	
Sc	45	H2	352342.00	0.8	415670.69	84.76	29.5	120.4	
Sc	45	He	72142.51	1.0	81171.76	88.88	29.5	120.4	
Ge	72	No Gas	770672.57	2.5	779333.11	98.89	29.5	120.4	
Ge	72	H2	131729.97	2.3	153246.58	85.96	29.5	120.4	
Ge	72	He	58046.03	1.5	63135.03	91.94	29.5	120.4	
Y	89	H2	2414427.68	0.9	2642116.11	91.38	29.5	120.4	
Y	89	He	510383.95	0.5	544041.92	93.81	29.5	120.4	
Tb	159	No Gas	8806874.87	2.2	8117023.84	108.5	29.5	120.4	
Tb	159	He	2914620.96	0.8	2866479.19	101.68	29.5	120.4	
Bi	209	No Gas	4767125.50	2.2	4424692.92	107.74	29.5	120.4	

Sample Report

Sample Name SN5646-002

File Name 158SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:10:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.217	ppb	20.1	57.78	100	
11	B	6	No Gas	29.162	ppb	1.2	4528.64	1000	
23	Na	45	He	10335.608	ppb	1.2	214561.10	200000	
24	Mg	45	He	17210.443	ppb	1.1	192063.43	200000	
27	Al	45	He	23.108	ppb	18.4	144.45	200000	
28	Si	45	H2	3317.321	ppb	6.2	25333.97	10000	
39	K	45	He	663.441	ppb	7.3	16377.09	200000	
40	Ca	45	H2	14364.486	ppb	4.2	1041312.61	200000	
51	V	89	He	1.586	ppb	13.3	476.69	1000	
52	Cr	89	He	0.323	ppb	6.6	97.98	2000	
55	Mn	89	He	2108.632	ppb	0.9	202277.99	2000	
56	Fe	89	H2	25937.390	ppb	2.4	8067457.38	100000	
59	Co	89	He	18.320	ppb	2.3	6252.98	1000	
60	Ni	89	He	44.317	ppb	1.3	4319.72	1000	
63	Cu	89	He	-0.713	ppb	N/A	211.12	2000	
66	Zn	89	He	62.071	ppb	2.5	2289.17	2000	
75	As	89	He	6.111	ppb	5.7	183.69	1000	
78	Se	89	H2	0.132	ppb	90.4	2.50	1000	
88	Sr	89	He	38.809	ppb	1.2	5567.99	2000	
95	Mo	89	He	-0.456	ppb	N/A	43.34	1000	
107	Ag	89	He	0.007	ppb	49.2	14.44	100	
111	Cd	89	He	0.071	ppb	100.4	6.29	1000	
118	Sn	159	He	0.685	ppb	17.7	192.23	1000	
121	Sb	159	No Gas	0.069	ppb	17.5	206.90	1000	
137	Ba	159	No Gas	12.817	ppb	6.6	7874.48	2000	
182	W	159	No Gas	0.048	ppb	67.0	183.54	1000	
205	Tl	209	No Gas	0.019	ppb	42.7	80.09	1000	
208	Pb	209	No Gas	0.150	ppb	14.1	767.54	2000	
232	Th	209	No Gas	0.050	ppb	63.6	380.43	1000	
238	U	209	No Gas	0.119	ppb	19.7	453.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1153559.46	2.9	1537409.87	75.03	29.5	120.4	
Sc	45	No Gas	3130520.57	2.5	3373253.08	92.8	29.5	120.4	
Sc	45	H2	361307.10	2.7	415670.69	86.92	29.5	120.4	
Sc	45	He	72785.41	0.7	81171.76	89.67	29.5	120.4	
Ge	72	No Gas	765528.11	1.9	779333.11	98.23	29.5	120.4	
Ge	72	H2	136002.09	2.4	153246.58	88.75	29.5	120.4	
Ge	72	He	59069.21	0.4	63135.03	93.56	29.5	120.4	
Y	89	H2	2490788.80	1.5	2642116.11	94.27	29.5	120.4	
Y	89	He	508789.85	0.5	544041.92	93.52	29.5	120.4	
Tb	159	No Gas	8667014.31	2.4	8117023.84	106.78	29.5	120.4	
Tb	159	He	2919772.04	0.6	2866479.19	101.86	29.5	120.4	
Bi	209	No Gas	4712739.66	3.0	4424692.92	106.51	29.5	120.4	

Sample Report

Sample Name SN5646-003

File Name 159SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:13:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.146	ppb	28.3	42.22	100	
11	B	6	No Gas	26.154	ppb	8.3	4011.81	1000	
23	Na	45	He	106385.608	ppb	1.1	2117380.25	200000	
24	Mg	45	He	5080.800	ppb	2.1	56040.86	200000	
27	Al	45	He	3.268	ppb	63.1	57.78	200000	
28	Si	45	H2	4926.803	ppb	2.8	36781.84	10000	
39	K	45	He	3524.971	ppb	2.2	43287.29	200000	
40	Ca	45	H2	65912.147	ppb	2.9	4676968.47	200000	
51	V	89	He	1.136	ppb	23.5	396.69	1000	
52	Cr	89	He	0.271	ppb	16.3	85.99	2000	
55	Mn	89	He	1408.044	ppb	0.6	132762.78	2000	
56	Fe	89	H2	20163.157	ppb	2.0	6074257.07	100000	
59	Co	89	He	1.361	ppb	17.6	464.49	1000	
60	Ni	89	He	0.469	ppb	15.5	83.34	1000	
63	Cu	89	He	-0.596	ppb	N/A	237.79	2000	
66	Zn	89	He	2.608	ppb	16.9	152.23	2000	
75	As	89	He	36.035	ppb	2.3	1043.49	1000	
78	Se	89	H2	0.147	ppb	24.2	2.67	1000	
88	Sr	89	He	389.226	ppb	0.3	54832.43	2000	
95	Mo	89	He	0.242	ppb	53.4	155.56	1000	
107	Ag	89	He	0.008	ppb	198.3	14.44	100	
111	Cd	89	He	0.011	ppb	77.1	1.85	1000	
118	Sn	159	He	0.783	ppb	53.7	206.72	1000	
121	Sb	159	No Gas	0.026	ppb	120.2	136.82	1000	
137	Ba	159	No Gas	28.327	ppb	7.1	16963.21	2000	
182	W	159	No Gas	-0.031	ppb	N/A	83.43	1000	
205	Tl	209	No Gas	0.015	ppb	38.3	66.74	1000	
208	Pb	209	No Gas	0.116	ppb	8.9	617.36	2000	
232	Th	209	No Gas	0.018	ppb	101.9	243.61	1000	
238	U	209	No Gas	0.026	ppb	16.0	96.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1121236.52	2.8	1537409.87	72.93	29.5	120.4	
Sc	45	No Gas	3034933.55	2.0	3373253.08	89.97	29.5	120.4	
Sc	45	H2	353982.70	2.1	415670.69	85.16	29.5	120.4	
Sc	45	He	71446.48	0.9	81171.76	88.02	29.5	120.4	
Ge	72	No Gas	730682.52	0.4	779333.11	93.76	29.5	120.4	
Ge	72	H2	131190.60	1.7	153246.58	85.61	29.5	120.4	
Ge	72	He	57376.66	0.8	63135.03	90.88	29.5	120.4	
Y	89	H2	2411807.53	2.0	2642116.11	91.28	29.5	120.4	
Y	89	He	500072.12	0.6	544041.92	91.92	29.5	120.4	
Tb	159	No Gas	8457491.89	1.7	8117023.84	104.19	29.5	120.4	
Tb	159	He	2882555.86	0.6	2866479.19	100.56	29.5	120.4	
Bi	209	No Gas	4574724.36	1.6	4424692.92	103.39	29.5	120.4	

Sample Report

Sample Name	SN5646-004
File Name	160SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:15:56 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.058	ppb	49.4	25.56	100	
11	B	6	No Gas	29.555	ppb	9.7	4549.77	1000	
23	Na	45	He	68120.565	ppb	4.1	1357606.94	200000	
24	Mg	45	He	21602.460	ppb	4.9	236396.58	200000	
27	Al	45	He	4.098	ppb	55.4	61.12	200000	
28	Si	45	H2	2400.558	ppb	3.9	18051.50	10000	
39	K	45	He	2007.585	ppb	5.6	28859.58	200000	
40	Ca	45	H2	34358.437	ppb	4.4	2439895.97	200000	
51	V	89	He	1.820	ppb	7.0	505.58	1000	
52	Cr	89	He	0.425	ppb	32.0	116.65	2000	
55	Mn	89	He	2.028	ppb	40.3	199.97	2000	
56	Fe	89	H2	8.297	ppb	21.6	10388.74	100000	
59	Co	89	He	0.259	ppb	18.8	95.56	1000	
60	Ni	89	He	5.497	ppb	3.3	560.03	1000	
63	Cu	89	He	0.727	ppb	37.0	576.70	2000	
66	Zn	89	He	5.842	ppb	8.9	266.68	2000	
75	As	89	He	1.340	ppb	18.8	42.67	1000	
78	Se	89	H2	0.575	ppb	40.0	9.17	1000	
88	Sr	89	He	172.403	ppb	5.1	24245.56	2000	
95	Mo	89	He	-0.568	ppb	N/A	24.44	1000	
107	Ag	89	He	0.022	ppb	82.6	22.22	100	
111	Cd	89	He	0.042	ppb	26.2	4.07	1000	
118	Sn	159	He	0.630	ppb	9.5	177.79	1000	
121	Sb	159	No Gas	0.021	ppb	27.4	133.48	1000	
137	Ba	159	No Gas	3.150	ppb	6.3	1942.31	2000	
182	W	159	No Gas	4.421	ppb	7.3	5584.10	1000	
205	Tl	209	No Gas	0.023	ppb	18.6	90.10	1000	
208	Pb	209	No Gas	0.121	ppb	2.7	644.06	2000	
232	Th	209	No Gas	0.026	ppb	24.1	276.98	1000	
238	U	209	No Gas	0.021	ppb	37.3	80.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1148017.98	3.3	1537409.87	74.67	29.5	120.4	
Sc	45	No Gas	3101587.24	4.9	3373253.08	91.95	29.5	120.4	
Sc	45	H2	354372.70	3.6	415670.69	85.25	29.5	120.4	
Sc	45	He	71543.02	5.6	81171.76	88.14	29.5	120.4	
Ge	72	No Gas	744350.77	1.8	779333.11	95.51	29.5	120.4	
Ge	72	H2	132613.54	2.2	153246.58	86.54	29.5	120.4	
Ge	72	He	58032.37	5.0	63135.03	91.92	29.5	120.4	
Y	89	H2	2417984.44	3.6	2642116.11	91.52	29.5	120.4	
Y	89	He	500106.40	5.7	544041.92	91.92	29.5	120.4	
Tb	159	No Gas	8642818.20	4.5	8117023.84	106.48	29.5	120.4	
Tb	159	He	2840915.62	5.6	2866479.19	99.11	29.5	120.4	
Bi	209	No Gas	4614807.72	4.1	4424692.92	104.3	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 161SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:18:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.096	ppb	30.7	33.34	100	
11	B	6	No Gas	23.176	ppb	2.0	3742.85	1000	
23	Na	45	He	9595.917	ppb	1.2	204810.10	200000	
24	Mg	45	He	2423.732	ppb	1.1	28249.67	200000	
27	Al	45	He	18.317	ppb	39.9	126.67	200000	
28	Si	45	H2	3237.858	ppb	5.6	25123.56	10000	
39	K	45	He	299.960	ppb	10.2	13188.57	200000	
40	Ca	45	H2	4579.580	ppb	2.7	338405.12	200000	
51	V	89	He	2.559	ppb	4.2	650.04	1000	
52	Cr	89	He	0.447	ppb	15.9	125.98	2000	
55	Mn	89	He	6.945	ppb	10.4	693.22	2000	
56	Fe	89	H2	24.250	ppb	3.6	15730.04	100000	
59	Co	89	He	0.320	ppb	32.1	120.01	1000	
60	Ni	89	He	2.629	ppb	6.1	300.01	1000	
63	Cu	89	He	-0.573	ppb	N/A	253.35	2000	
66	Zn	89	He	3.893	ppb	24.0	205.56	2000	
75	As	89	He	1.118	ppb	21.4	38.00	1000	
78	Se	89	H2	0.088	ppb	23.0	1.83	1000	
88	Sr	89	He	31.527	ppb	3.1	4627.62	2000	
95	Mo	89	He	-0.628	ppb	N/A	15.55	1000	
107	Ag	89	He	0.009	ppb	103.4	15.56	100	
111	Cd	89	He	0.083	ppb	54.2	7.41	1000	
118	Sn	159	He	1.083	ppb	29.9	263.36	1000	
121	Sb	159	No Gas	0.041	ppb	131.7	163.52	1000	
137	Ba	159	No Gas	6.534	ppb	7.3	3978.36	2000	
182	W	159	No Gas	0.006	ppb	200.1	130.15	1000	
205	Tl	209	No Gas	0.034	ppb	27.4	120.13	1000	
208	Pb	209	No Gas	0.168	ppb	24.7	820.94	2000	
232	Th	209	No Gas	0.043	ppb	3.5	343.73	1000	
238	U	209	No Gas	0.061	ppb	22.9	230.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1154152.21	1.5	1537409.87	75.07	29.5	120.4	
Sc	45	No Gas	3110364.26	3.3	3373253.08	92.21	29.5	120.4	
Sc	45	H2	366878.24	2.4	415670.69	88.26	29.5	120.4	
Sc	45	He	74686.64	1.5	81171.76	92.01	29.5	120.4	
Ge	72	No Gas	756989.58	3.0	779333.11	97.13	29.5	120.4	
Ge	72	H2	139241.21	3.0	153246.58	90.86	29.5	120.4	
Ge	72	He	60337.88	0.6	63135.03	95.57	29.5	120.4	
Y	89	H2	2502045.32	1.8	2642116.11	94.7	29.5	120.4	
Y	89	He	520456.45	1.0	544041.92	95.66	29.5	120.4	
Tb	159	No Gas	8576826.19	3.0	8117023.84	105.66	29.5	120.4	
Tb	159	He	2938472.56	0.7	2866479.19	102.51	29.5	120.4	
Bi	209	No Gas	4627877.92	2.1	4424692.92	104.59	29.5	120.4	

Sample Report

Sample Name SN5646-005L

File Name 162SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:21:20 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	146.2	16.67	100	
11	B	6	No Gas	32.790	ppb	9.0	1600.14	1000	
23	Na	45	He	10162.117	ppb	2.4	48428.85	200000	
24	Mg	45	He	2627.665	ppb	0.5	6650.89	200000	
27	Al	45	He	6.365	ppb	122.9	52.22	200000	
28	Si	45	H2	3446.229	ppb	1.1	5657.45	10000	
39	K	45	He	512.652	ppb	34.6	11357.80	200000	
40	Ca	45	H2	4912.973	ppb	1.4	75676.60	200000	
51	V	89	He	2.458	ppb	12.0	310.02	1000	
52	Cr	89	He	0.694	ppb	44.8	63.32	2000	
55	Mn	89	He	8.711	ppb	2.5	185.97	2000	
56	Fe	89	H2	-46.745	ppb	N/A	5280.21	100000	
59	Co	89	He	0.129	ppb	168.5	17.78	1000	
60	Ni	89	He	1.832	ppb	47.2	77.78	1000	
63	Cu	89	He	-4.876	ppb	N/A	147.79	2000	
66	Zn	89	He	5.463	ppb	48.3	104.45	2000	
75	As	89	He	0.788	ppb	67.8	9.33	1000	
78	Se	89	H2	-0.045	ppb	N/A	0.33	1000	
88	Sr	89	He	32.729	ppb	3.3	981.18	2000	
95	Mo	89	He	-3.307	ppb	N/A	10.00	1000	
107	Ag	89	He	0.003	ppb	3108.6	11.11	100	
111	Cd	89	He	0.002	ppb	3084.3	1.11	1000	
118	Sn	159	He	1.313	ppb	41.6	118.90	1000	
121	Sb	159	No Gas	-0.060	ppb	N/A	80.09	1000	
137	Ba	159	No Gas	6.111	ppb	2.8	757.54	2000	
182	W	159	No Gas	-0.313	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.022	ppb	162.2	40.04	1000	
208	Pb	209	No Gas	0.050	ppb	102.3	226.92	2000	
232	Th	209	No Gas	-0.035	ppb	N/A	146.83	1000	
238	U	209	No Gas	0.018	ppb	116.7	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1186048.55	1.9	1537409.87	77.15	29.5	120.4	
Sc	45	No Gas	3219922.05	1.3	3373253.08	95.45	29.5	120.4	
Sc	45	H2	375171.45	0.7	415670.69	90.26	29.5	120.4	
Sc	45	He	75568.75	0.5	81171.76	93.1	29.5	120.4	
Ge	72	No Gas	777999.06	2.3	779333.11	99.83	29.5	120.4	
Ge	72	H2	141519.65	0.9	153246.58	92.35	29.5	120.4	
Ge	72	He	61399.71	0.5	63135.03	97.25	29.5	120.4	
Y	89	H2	2519798.10	0.2	2642116.11	95.37	29.5	120.4	
Y	89	He	528694.37	0.6	544041.92	97.18	29.5	120.4	
Tb	159	No Gas	8555221.33	1.3	8117023.84	105.4	29.5	120.4	
Tb	159	He	2933572.53	0.8	2866479.19	102.34	29.5	120.4	
Bi	209	No Gas	4630375.73	1.8	4424692.92	104.65	29.5	120.4	

Sample Report

Sample Name SN5646-005A

File Name 163SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:23:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.169	ppb	6.4	2129.12	100	
11	B	6	No Gas	224.372	ppb	3.8	31393.67	1000	
23	Na	45	He	19296.384	ppb	1.1	408539.36	200000	
24	Mg	45	He	3385.883	ppb	2.4	39461.13	200000	
27	Al	45	He	868.080	ppb	1.5	3907.34	200000	
28	Si	45	H2	8013.697	ppb	6.6	60749.45	10000	
39	K	45	He	10064.511	ppb	1.5	110922.74	200000	
40	Ca	45	H2	5642.082	ppb	5.8	409095.04	200000	
51	V	89	He	50.875	ppb	1.3	8791.95	1000	
52	Cr	89	He	48.985	ppb	1.3	10211.86	2000	
55	Mn	89	He	25.349	ppb	1.2	2522.44	2000	
56	Fe	89	H2	1039.901	ppb	5.9	328271.09	100000	
59	Co	89	He	10.784	ppb	8.2	3800.81	1000	
60	Ni	89	He	22.571	ppb	5.5	2290.27	1000	
63	Cu	89	He	30.602	ppb	1.0	8688.55	2000	
66	Zn	89	He	106.585	ppb	2.3	4012.94	2000	
75	As	89	He	48.838	ppb	0.9	1483.91	1000	
78	Se	89	H2	49.454	ppb	5.2	759.32	1000	
88	Sr	89	He	78.879	ppb	1.1	11677.54	2000	
95	Mo	89	He	49.435	ppb	0.9	8521.84	1000	
107	Ag	89	He	11.045	ppb	0.6	6392.84	100	
111	Cd	89	He	10.467	ppb	4.7	806.70	1000	
118	Sn	159	He	47.271	ppb	0.7	8485.20	1000	
121	Sb	159	No Gas	10.373	ppb	4.1	16204.68	1000	
137	Ba	159	No Gas	25.985	ppb	3.6	15893.91	2000	
182	W	159	No Gas	48.266	ppb	2.9	59753.80	1000	
205	Tl	209	No Gas	10.266	ppb	2.4	28443.84	1000	
208	Pb	209	No Gas	10.296	ppb	3.4	39571.68	2000	
232	Th	209	No Gas	9.813	ppb	3.8	39472.44	1000	
238	U	209	No Gas	10.092	ppb	5.4	37936.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1200539.01	2.5	1537409.87	78.09	29.5	120.4	
Sc	45	No Gas	3178671.08	0.7	3373253.08	94.23	29.5	120.4	
Sc	45	H2	360693.33	3.6	415670.69	86.77	29.5	120.4	
Sc	45	He	75135.49	1.5	81171.76	92.56	29.5	120.4	
Ge	72	No Gas	774990.89	1.5	779333.11	99.44	29.5	120.4	
Ge	72	H2	136813.43	1.9	153246.58	89.28	29.5	120.4	
Ge	72	He	60591.24	1.2	63135.03	95.97	29.5	120.4	
Y	89	H2	2470838.62	3.2	2642116.11	93.52	29.5	120.4	
Y	89	He	525285.07	1.5	544041.92	96.55	29.5	120.4	
Tb	159	No Gas	8631916.54	0.3	8117023.84	106.34	29.5	120.4	
Tb	159	He	2973578.57	2.0	2866479.19	103.74	29.5	120.4	
Bi	209	No Gas	4703150.12	1.1	4424692.92	106.29	29.5	120.4	

Sample Report

Sample Name SN5646-005S

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:26:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.350	ppb	9.1	11059.02	100	
11	B	6	No Gas	552.854	ppb	6.0	75989.88	1000	
23	Na	45	He	17279.474	ppb	1.2	364706.53	200000	
24	Mg	45	He	7706.718	ppb	1.1	88670.36	200000	
27	Al	45	He	1913.513	ppb	0.5	8517.25	200000	
28	Si	45	H2	4391.763	ppb	0.9	34178.80	10000	
39	K	45	He	10721.302	ppb	0.5	116940.99	200000	
40	Ca	45	H2	7363.610	ppb	0.7	545826.39	200000	
51	V	89	He	512.131	ppb	0.6	85612.57	1000	
52	Cr	89	He	208.103	ppb	0.6	42850.76	2000	
55	Mn	89	He	522.454	ppb	0.9	51243.84	2000	
56	Fe	89	H2	1081.142	ppb	1.1	347248.64	100000	
59	Co	89	He	535.237	ppb	0.9	186528.55	1000	
60	Ni	89	He	517.385	ppb	0.7	51123.27	1000	
63	Cu	89	He	267.463	ppb	1.4	72045.24	2000	
66	Zn	89	He	522.942	ppb	1.7	19247.27	2000	
75	As	89	He	106.878	ppb	0.2	3210.39	1000	
78	Se	89	H2	104.964	ppb	2.7	1640.69	1000	
88	Sr	89	He	558.171	ppb	0.5	81781.44	2000	
95	Mo	89	He	107.552	ppb	0.3	18214.89	1000	
107	Ag	89	He	57.756	ppb	1.1	33053.23	100	
111	Cd	89	He	270.240	ppb	0.6	20600.95	1000	
118	Sn	159	He	499.194	ppb	0.5	87787.86	1000	
121	Sb	159	No Gas	102.307	ppb	7.5	160454.61	1000	
137	Ba	159	No Gas	1979.986	ppb	6.2	1221501.22	2000	
182	W	159	No Gas	103.620	ppb	7.3	129363.68	1000	
205	Tl	209	No Gas	105.171	ppb	6.1	289619.73	1000	
208	Pb	209	No Gas	104.779	ppb	6.7	398885.99	2000	
232	Th	209	No Gas	102.056	ppb	8.2	406618.06	1000	
238	U	209	No Gas	102.279	ppb	7.4	382445.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1196740.36	3.8	1537409.87	77.84	29.5	120.4	
Sc	45	No Gas	3202018.03	3.7	3373253.08	94.92	29.5	120.4	
Sc	45	H2	368613.92	1.6	415670.69	88.68	29.5	120.4	
Sc	45	He	74772.99	0.1	81171.76	92.12	29.5	120.4	
Ge	72	No Gas	779268.46	3.2	779333.11	99.99	29.5	120.4	
Ge	72	H2	138136.07	2.9	153246.58	90.14	29.5	120.4	
Ge	72	He	59985.43	0.1	63135.03	95.01	29.5	120.4	
Y	89	H2	2513621.71	1.9	2642116.11	95.14	29.5	120.4	
Y	89	He	520108.29	0.3	544041.92	95.6	29.5	120.4	
Tb	159	No Gas	8728587.99	3.4	8117023.84	107.53	29.5	120.4	
Tb	159	He	2936408.01	0.3	2866479.19	102.44	29.5	120.4	
Bi	209	No Gas	4685508.31	3.6	4424692.92	105.89	29.5	120.4	

Sample Report

Sample Name SN5646-005P

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:29:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.601	ppb	4.5	10700.96	100	
11	B	6	No Gas	540.359	ppb	4.3	74258.92	1000	
23	Na	45	He	17308.028	ppb	6.1	353518.65	200000	
24	Mg	45	He	7722.206	ppb	6.4	85972.44	200000	
27	Al	45	He	1960.881	ppb	8.5	8439.45	200000	
28	Si	45	H2	4335.204	ppb	1.3	33563.42	10000	
39	K	45	He	10792.153	ppb	7.3	113823.16	200000	
40	Ca	45	H2	7076.065	ppb	0.8	521835.53	200000	
51	V	89	He	515.968	ppb	5.1	83371.36	1000	
52	Cr	89	He	208.996	ppb	4.5	41605.96	2000	
55	Mn	89	He	519.510	ppb	4.5	49263.91	2000	
56	Fe	89	H2	1047.732	ppb	0.2	334150.78	100000	
59	Co	89	He	537.329	ppb	5.5	180982.82	1000	
60	Ni	89	He	519.851	ppb	5.0	49655.59	1000	
63	Cu	89	He	267.435	ppb	5.2	69629.81	2000	
66	Zn	89	He	521.660	ppb	5.2	18559.68	2000	
75	As	89	He	106.847	ppb	7.5	3100.02	1000	
78	Se	89	H2	101.966	ppb	2.3	1581.35	1000	
88	Sr	89	He	558.477	ppb	5.3	79088.86	2000	
95	Mo	89	He	111.373	ppb	5.9	18223.79	1000	
107	Ag	89	He	57.806	ppb	5.5	31975.26	100	
111	Cd	89	He	271.907	ppb	5.1	20037.15	1000	
118	Sn	159	He	509.878	ppb	5.2	86649.69	1000	
121	Sb	159	No Gas	99.817	ppb	5.0	156626.71	1000	
137	Ba	159	No Gas	1912.299	ppb	4.2	1180132.46	2000	
182	W	159	No Gas	100.570	ppb	4.5	125622.19	1000	
205	Tl	209	No Gas	102.014	ppb	5.2	281298.15	1000	
208	Pb	209	No Gas	101.853	ppb	4.1	388417.33	2000	
232	Th	209	No Gas	100.247	ppb	4.7	400184.55	1000	
238	U	209	No Gas	100.597	ppb	5.4	376752.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1195187.36	2.0	1537409.87	77.74	29.5	120.4	
Sc	45	No Gas	3206128.91	2.6	3373253.08	95.05	29.5	120.4	
Sc	45	H2	366654.87	0.4	415670.69	88.21	29.5	120.4	
Sc	45	He	72516.79	5.4	81171.76	89.34	29.5	120.4	
Ge	72	No Gas	781898.86	2.4	779333.11	100.33	29.5	120.4	
Ge	72	H2	137843.19	1.1	153246.58	89.95	29.5	120.4	
Ge	72	He	58641.05	4.4	63135.03	92.88	29.5	120.4	
Y	89	H2	2493731.66	0.2	2642116.11	94.38	29.5	120.4	
Y	89	He	503522.71	4.6	544041.92	92.55	29.5	120.4	
Tb	159	No Gas	8725219.31	2.5	8117023.84	107.49	29.5	120.4	
Tb	159	He	2841926.17	4.3	2866479.19	99.14	29.5	120.4	
Bi	209	No Gas	4689576.13	3.0	4424692.92	105.99	29.5	120.4	

Sample Report

Sample Name SN5646-006

File Name 166SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:32:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.189	ppb	72.0	53.34	100	
11	B	6	No Gas	33.027	ppb	3.0	5154.42	1000	
23	Na	45	He	10805.041	ppb	0.6	227788.05	200000	
24	Mg	45	He	7920.074	ppb	1.2	90160.12	200000	
27	Al	45	He	5.828	ppb	71.8	71.11	200000	
28	Si	45	H2	3002.249	ppb	1.6	22923.91	10000	
39	K	45	He	731.569	ppb	3.7	17317.70	200000	
40	Ca	45	H2	8681.681	ppb	1.9	628958.15	200000	
51	V	89	He	3.218	ppb	8.4	752.27	1000	
52	Cr	89	He	0.685	ppb	11.5	173.30	2000	
55	Mn	89	He	1762.661	ppb	1.7	171228.31	2000	
56	Fe	89	H2	11371.250	ppb	1.4	3488048.42	100000	
59	Co	89	He	14.721	ppb	1.6	5090.18	1000	
60	Ni	89	He	36.821	ppb	2.6	3641.72	1000	
63	Cu	89	He	-0.794	ppb	N/A	192.23	2000	
66	Zn	89	He	30.284	ppb	6.0	1162.32	2000	
75	As	89	He	0.873	ppb	7.3	30.33	1000	
78	Se	89	H2	0.242	ppb	42.2	4.17	1000	
88	Sr	89	He	32.708	ppb	2.6	4753.20	2000	
95	Mo	89	He	-0.520	ppb	N/A	33.33	1000	
107	Ag	89	He	0.022	ppb	134.1	23.33	100	
111	Cd	89	He	0.162	ppb	61.7	13.33	1000	
118	Sn	159	He	1.062	ppb	12.3	257.79	1000	
121	Sb	159	No Gas	0.129	ppb	9.0	303.67	1000	
137	Ba	159	No Gas	11.771	ppb	5.3	7283.46	2000	
182	W	159	No Gas	0.252	ppb	11.3	440.51	1000	
205	Tl	209	No Gas	0.133	ppb	14.5	397.12	1000	
208	Pb	209	No Gas	0.171	ppb	17.8	850.97	2000	
232	Th	209	No Gas	1.097	ppb	28.8	4616.12	1000	
238	U	209	No Gas	0.091	ppb	16.0	347.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180987.38	1.7	1537409.87	76.82	29.5	120.4	
Sc	45	No Gas	3221677.27	3.1	3373253.08	95.51	29.5	120.4	
Sc	45	H2	360462.33	1.2	415670.69	86.72	29.5	120.4	
Sc	45	He	73996.02	0.8	81171.76	91.16	29.5	120.4	
Ge	72	No Gas	782930.27	2.9	779333.11	100.46	29.5	120.4	
Ge	72	H2	135407.74	0.8	153246.58	88.36	29.5	120.4	
Ge	72	He	59819.08	0.4	63135.03	94.75	29.5	120.4	
Y	89	H2	2452875.03	1.2	2642116.11	92.84	29.5	120.4	
Y	89	He	515277.57	1.2	544041.92	94.71	29.5	120.4	
Tb	159	No Gas	8726770.08	2.8	8117023.84	107.51	29.5	120.4	
Tb	159	He	2918982.63	0.9	2866479.19	101.83	29.5	120.4	
Bi	209	No Gas	4729699.38	2.6	4424692.92	106.89	29.5	120.4	

Sample Report

Sample Name SN5646-007

File Name 167SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:34:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	45.9	32.22	100	
11	B	6	No Gas	25.987	ppb	4.0	4067.37	1000	
23	Na	45	He	104541.771	ppb	3.0	2084613.84	200000	
24	Mg	45	He	4993.476	ppb	3.6	55184.31	200000	
27	Al	45	He	3.414	ppb	155.7	58.89	200000	
28	Si	45	H2	4826.290	ppb	2.9	36778.24	10000	
39	K	45	He	3377.095	ppb	2.5	41965.68	200000	
40	Ca	45	H2	63451.807	ppb	0.9	4595150.97	200000	
51	V	89	He	1.745	ppb	8.7	495.58	1000	
52	Cr	89	He	0.365	ppb	27.6	104.65	2000	
55	Mn	89	He	1386.460	ppb	2.5	131005.86	2000	
56	Fe	89	H2	19280.067	ppb	1.4	5937150.64	100000	
59	Co	89	He	1.487	ppb	15.9	506.71	1000	
60	Ni	89	He	0.410	ppb	30.9	77.78	1000	
63	Cu	89	He	-0.606	ppb	N/A	235.57	2000	
66	Zn	89	He	2.718	ppb	15.8	156.67	2000	
75	As	89	He	35.940	ppb	5.1	1042.82	1000	
78	Se	89	H2	0.187	ppb	39.7	3.33	1000	
88	Sr	89	He	384.920	ppb	3.4	54334.87	2000	
95	Mo	89	He	0.097	ppb	114.7	132.23	1000	
107	Ag	89	He	0.002	ppb	433.8	11.11	100	
111	Cd	89	He	0.046	ppb	30.6	4.44	1000	
118	Sn	159	He	0.627	ppb	20.3	177.79	1000	
121	Sb	159	No Gas	0.029	ppb	80.3	143.50	1000	
137	Ba	159	No Gas	28.295	ppb	1.1	17136.79	2000	
182	W	159	No Gas	0.008	ppb	194.9	133.48	1000	
205	Tl	209	No Gas	0.024	ppb	38.2	93.44	1000	
208	Pb	209	No Gas	0.100	ppb	22.6	563.97	2000	
232	Th	209	No Gas	0.083	ppb	18.9	500.58	1000	
238	U	209	No Gas	0.052	ppb	11.0	193.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1141405.24	0.1	1537409.87	74.24	29.5	120.4	
Sc	45	No Gas	3116266.16	0.3	3373253.08	92.38	29.5	120.4	
Sc	45	H2	361154.55	1.1	415670.69	86.88	29.5	120.4	
Sc	45	He	71604.55	2.2	81171.76	88.21	29.5	120.4	
Ge	72	No Gas	756554.48	0.7	779333.11	97.08	29.5	120.4	
Ge	72	H2	133515.81	2.3	153246.58	87.12	29.5	120.4	
Ge	72	He	57692.64	1.8	63135.03	91.38	29.5	120.4	
Y	89	H2	2464727.77	0.8	2642116.11	93.29	29.5	120.4	
Y	89	He	501265.99	1.7	544041.92	92.14	29.5	120.4	
Tb	159	No Gas	8547730.36	0.7	8117023.84	105.31	29.5	120.4	
Tb	159	He	2848602.98	1.8	2866479.19	99.38	29.5	120.4	
Bi	209	No Gas	4609571.34	0.2	4424692.92	104.18	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	168_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:37:26 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.034	ppb	3.9	26116.50	25	100.14	89.8	110.2	
11	B	6	No Gas	24.978	ppb	5.0	17835.96	25	99.91	89.8	110.2	
23	Na	45	He	4990.533	ppb	2.5	518260.91	5000	99.81	89.8	110.2	
24	Mg	45	He	4871.265	ppb	2.9	275847.11	5000	97.43	89.8	110.2	
27	Al	45	He	462.697	ppb	1.8	10173.98	500	92.54	89.8	110.2	
28	Si	45	H2	470.076	ppb	1.3	18195.15	500	94.02	89.8	110.2	
39	K	45	He	4913.583	ppb	3.8	251865.30	5000	98.27	89.8	110.2	
40	Ca	45	H2	4935.058	ppb	0.7	1804700.25	5000	98.7	89.8	110.2	
51	V	89	He	24.170	ppb	2.1	20032.64	25	96.68	89.8	110.2	
52	Cr	89	He	24.175	ppb	1.3	24490.06	25	96.7	89.8	110.2	
55	Mn	89	He	24.483	ppb	1.8	11815.47	25	97.93	89.8	110.2	
56	Fe	89	H2	4860.183	ppb	0.7	7423074.22	5000	97.2	89.8	110.2	
59	Co	89	He	24.917	ppb	2.1	42698.52	25	99.67	89.8	110.2	
60	Ni	89	He	24.708	ppb	2.7	12036.67	25	98.83	89.8	110.2	
63	Cu	89	He	25.064	ppb	0.5	33409.64	25	100.26	89.8	110.2	
66	Zn	89	He	23.762	ppb	1.5	4348.64	25	95.05	89.8	110.2	
75	As	89	He	24.172	ppb	2.0	3569.19	25	96.69	89.8	110.2	
78	Se	89	H2	24.686	ppb	1.2	1877.21	25	98.74	89.8	110.2	
88	Sr	89	He	24.569	ppb	0.4	17706.46	25	98.28	89.8	110.2	
95	Mo	89	He	24.952	ppb	1.6	20761.93	25	99.81	89.8	110.2	
107	Ag	89	He	18.909	ppb	1.1	53202.70	25	75.64	89.8	110.2	> +/- 10%
111	Cd	89	He	25.168	ppb	2.0	9433.37	25	100.67	89.8	110.2	
118	Sn	159	He	23.087	ppb	1.7	19847.46	25	92.35	89.8	110.2	
121	Sb	159	No Gas	23.749	ppb	5.3	183397.03	25	95	89.8	110.2	
137	Ba	159	No Gas	23.713	ppb	4.2	72055.00	25	94.85	89.8	110.2	
182	W	159	No Gas	23.536	ppb	4.6	144690.53	25	94.14	89.8	110.2	
205	Tl	209	No Gas	24.073	ppb	5.3	328158.62	25	96.29	89.8	110.2	
208	Pb	209	No Gas	23.951	ppb	4.9	451448.06	25	95.8	89.8	110.2	
232	Th	209	No Gas	23.693	ppb	5.2	467515.26	25	94.77	89.8	110.2	
238	U	209	No Gas	23.794	ppb	5.2	440573.16	25	95.18	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1203471.98	2.5	1537409.87	78.28	29.5	120.4	
Sc	45	No Gas	3213508.52	3.5	3373253.08	95.26	29.5	120.4	
Sc	45	H2	364510.23	0.6	415670.69	87.69	29.5	120.4	
Sc	45	He	73965.07	2.6	81171.76	91.12	29.5	120.4	
Ge	72	No Gas	761921.12	3.8	779333.11	97.77	29.5	120.4	
Ge	72	H2	135555.06	0.3	153246.58	88.46	29.5	120.4	
Ge	72	He	59312.86	0.6	63135.03	93.95	29.5	120.4	
Y	89	H2	2445505.84	0.7	2642116.11	92.56	29.5	120.4	
Y	89	He	511519.45	1.4	544041.92	94.02	29.5	120.4	
Tb	159	No Gas	8593811.47	4.0	8117023.84	105.87	29.5	120.4	
Tb	159	He	2863470.82	1.4	2866479.19	99.9	29.5	120.4	
Bi	209	No Gas	4638646.35	4.1	4424692.92	104.84	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	169_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:40:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.076	ppb	22.2	94.45	0.2	
11	B	6	No Gas	1.835	ppb	2.5	1996.88	4	
23	Na	45	He	21.741	ppb	21.8	7697.29	200	
24	Mg	45	He	-1.348	ppb	N/A	480.05	20	
27	Al	45	He	-0.896	ppb	N/A	25.56	20	
28	Si	45	H2	6.668	ppb	41.4	470.53	100	
39	K	45	He	7.544	ppb	77.6	10264.10	200	
40	Ca	45	H2	5.382	ppb	9.0	3592.81	20	
51	V	89	He	0.616	ppb	3.9	720.04	1	Failed DoD
52	Cr	89	He	0.102	ppb	16.8	135.31	1	
55	Mn	89	He	0.170	ppb	17.8	93.32	0.4	
56	Fe	89	H2	0.932	ppb	23.1	9360.28	20	
59	Co	89	He	0.011	ppb	1.5	26.67	0.2	
60	Ni	89	He	-0.040	ppb	N/A	20.00	0.4	
63	Cu	89	He	-0.108	ppb	N/A	255.57	0.6	
66	Zn	89	He	0.055	ppb	25.2	71.11	2	
75	As	89	He	0.073	ppb	58.0	15.00	1	
78	Se	89	H2	0.073	ppb	39.8	6.00	1	
88	Sr	89	He	0.007	ppb	141.5	11.11	1	
95	Mo	89	He	-0.055	ppb	N/A	73.33	1	
107	Ag	89	He	0.011	ppb	48.3	40.00	0.2	
111	Cd	89	He	0.022	ppb	41.1	9.26	0.2	
118	Sn	159	He	0.346	ppb	6.2	371.13	1	
121	Sb	159	No Gas	0.032	ppb	22.2	350.40	0.2	
137	Ba	159	No Gas	0.051	ppb	3.8	176.86	0.4	
182	W	159	No Gas	0.119	ppb	9.4	871.01	1	
205	Tl	209	No Gas	0.032	ppb	27.7	473.87	0.2	
208	Pb	209	No Gas	0.050	ppb	13.3	1167.99	0.2	
232	Th	209	No Gas	0.273	ppb	42.5	5711.28	1	
238	U	209	No Gas	0.031	ppb	32.1	597.36	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1211571.44	1.1	1537409.87	78.81	29.5	120.4	
Sc	45	No Gas	3172960.87	1.3	3373253.08	94.06	29.5	120.4	
Sc	45	H2	354528.82	1.8	415670.69	85.29	29.5	120.4	
Sc	45	He	72442.78	1.7	81171.76	89.25	29.5	120.4	
Ge	72	No Gas	770652.95	1.6	779333.11	98.89	29.5	120.4	
Ge	72	H2	132528.08	1.3	153246.58	86.48	29.5	120.4	
Ge	72	He	57810.57	0.8	63135.03	91.57	29.5	120.4	
Y	89	H2	2435310.98	2.1	2642116.11	92.17	29.5	120.4	
Y	89	He	508548.56	1.1	544041.92	93.48	29.5	120.4	
Tb	159	No Gas	8773680.15	0.7	8117023.84	108.09	29.5	120.4	
Tb	159	He	2892697.87	0.8	2866479.19	100.91	29.5	120.4	
Bi	209	No Gas	4754138.24	0.5	4424692.92	107.45	29.5	120.4	

Sample Report

Sample Name	SN4647-002
File Name	170SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:42:48 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.081	ppb	71.3	31.11	100	
11	B	6	No Gas	30.428	ppb	5.1	4800.96	1000	
23	Na	45	He	23971.714	ppb	0.7	504526.79	200000	
24	Mg	45	He	20051.646	ppb	0.1	230137.56	200000	
27	Al	45	He	1.405	ppb	402.4	52.22	200000	
28	Si	45	H2	3421.258	ppb	2.9	26169.67	10000	
39	K	45	He	1501.616	ppb	1.6	25202.57	200000	
40	Ca	45	H2	27786.414	ppb	3.3	2015587.68	200000	
51	V	89	He	1.912	ppb	15.6	544.47	1000	
52	Cr	89	He	0.326	ppb	40.7	101.32	2000	
55	Mn	89	He	941.239	ppb	0.4	92724.94	2000	
56	Fe	89	H2	6573.433	ppb	2.8	2025287.44	100000	
59	Co	89	He	14.064	ppb	2.7	4932.34	1000	
60	Ni	89	He	13.866	ppb	1.2	1415.68	1000	
63	Cu	89	He	-0.614	ppb	N/A	243.35	2000	
66	Zn	89	He	16.349	ppb	4.4	665.60	2000	
75	As	89	He	2.496	ppb	2.8	79.68	1000	
78	Se	89	H2	0.156	ppb	74.7	2.83	1000	
88	Sr	89	He	119.362	ppb	1.0	17571.75	2000	
95	Mo	89	He	-0.417	ppb	N/A	51.11	1000	
107	Ag	89	He	0.005	ppb	445.9	13.33	100	
111	Cd	89	He	0.020	ppb	110.8	2.59	1000	
118	Sn	159	He	0.627	ppb	22.0	183.34	1000	
121	Sb	159	No Gas	0.037	ppb	45.1	160.18	1000	
137	Ba	159	No Gas	33.114	ppb	3.4	20505.41	2000	
182	W	159	No Gas	0.150	ppb	14.1	313.69	1000	
205	Tl	209	No Gas	0.017	ppb	64.8	76.75	1000	
208	Pb	209	No Gas	0.088	ppb	11.3	523.92	2000	
232	Th	209	No Gas	0.036	ppb	27.0	320.37	1000	
238	U	209	No Gas	0.032	ppb	14.6	123.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1180395.69	2.1	1537409.87	76.78	29.5	120.4	
Sc	45	No Gas	3205141.96	2.5	3373253.08	95.02	29.5	120.4	
Sc	45	H2	361716.06	2.4	415670.69	87.02	29.5	120.4	
Sc	45	He	74886.33	0.8	81171.76	92.26	29.5	120.4	
Ge	72	No Gas	775568.06	3.1	779333.11	99.52	29.5	120.4	
Ge	72	H2	135720.00	1.6	153246.58	88.56	29.5	120.4	
Ge	72	He	60293.67	1.2	63135.03	95.5	29.5	120.4	
Y	89	H2	2459943.71	1.5	2642116.11	93.11	29.5	120.4	
Y	89	He	522454.39	0.9	544041.92	96.03	29.5	120.4	
Tb	159	No Gas	8745937.58	2.4	8117023.84	107.75	29.5	120.4	
Tb	159	He	2941670.34	0.5	2866479.19	102.62	29.5	120.4	
Bi	209	No Gas	4686697.84	2.7	4424692.92	105.92	29.5	120.4	

Sample Report

Sample Name SN4647-003

File Name 171SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:45:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	110.8	22.22	100	
11	B	6	No Gas	26.531	ppb	10.9	4236.33	1000	
23	Na	45	He	19751.973	ppb	1.0	418295.21	200000	
24	Mg	45	He	17446.714	ppb	0.7	201091.76	200000	
27	Al	45	He	68.296	ppb	11.7	350.02	200000	
28	Si	45	H2	3566.928	ppb	0.2	27610.69	10000	
39	K	45	He	1665.031	ppb	1.0	26936.59	200000	
40	Ca	45	H2	22488.708	ppb	1.9	1651853.86	200000	
51	V	89	He	2.891	ppb	19.0	707.83	1000	
52	Cr	89	He	0.452	ppb	7.4	127.31	2000	
55	Mn	89	He	29.807	ppb	2.4	2946.45	2000	
56	Fe	89	H2	174.888	ppb	2.6	62347.73	100000	
59	Co	89	He	0.433	ppb	7.1	160.01	1000	
60	Ni	89	He	1.757	ppb	26.1	214.45	1000	
63	Cu	89	He	-0.266	ppb	N/A	336.68	2000	
66	Zn	89	He	4.087	ppb	14.4	213.34	2000	
75	As	89	He	0.570	ppb	23.5	21.67	1000	
78	Se	89	H2	0.088	ppb	111.8	1.83	1000	
88	Sr	89	He	118.366	ppb	1.2	17412.71	2000	
95	Mo	89	He	-0.450	ppb	N/A	45.56	1000	
107	Ag	89	He	0.014	ppb	182.6	18.89	100	
111	Cd	89	He	0.035	ppb	106.7	3.70	1000	
118	Sn	159	He	0.893	ppb	10.5	228.90	1000	
121	Sb	159	No Gas	0.059	ppb	89.3	193.55	1000	
137	Ba	159	No Gas	11.673	ppb	11.3	7163.25	2000	
182	W	159	No Gas	-0.012	ppb	N/A	110.12	1000	
205	Tl	209	No Gas	0.023	ppb	34.5	90.10	1000	
208	Pb	209	No Gas	0.230	ppb	14.5	1051.20	2000	
232	Th	209	No Gas	0.041	ppb	60.1	333.71	1000	
238	U	209	No Gas	0.035	ppb	29.5	133.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1171577.77	4.9	1537409.87	76.2	29.5	120.4	
Sc	45	No Gas	3189558.53	5.3	3373253.08	94.55	29.5	120.4	
Sc	45	H2	366047.07	0.2	415670.69	88.06	29.5	120.4	
Sc	45	He	75176.96	1.2	81171.76	92.61	29.5	120.4	
Ge	72	No Gas	781720.06	5.2	779333.11	100.31	29.5	120.4	
Ge	72	H2	137410.54	1.6	153246.58	89.67	29.5	120.4	
Ge	72	He	60379.94	1.1	63135.03	95.64	29.5	120.4	
Y	89	H2	2485605.65	0.2	2642116.11	94.08	29.5	120.4	
Y	89	He	522092.31	0.7	544041.92	95.97	29.5	120.4	
Tb	159	No Gas	8685129.80	5.6	8117023.84	107	29.5	120.4	
Tb	159	He	2926102.25	0.5	2866479.19	102.08	29.5	120.4	
Bi	209	No Gas	4636333.62	5.2	4424692.92	104.78	29.5	120.4	

Sample Report

Sample Name SN4647-004

File Name 172SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:48:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.142	ppb	72.6	43.33	100	
11	B	6	No Gas	40.382	ppb	4.7	6152.64	1000	
23	Na	45	He	42726.340	ppb	2.6	883848.33	200000	
24	Mg	45	He	9320.841	ppb	4.1	105949.98	200000	
27	Al	45	He	4.044	ppb	114.4	63.34	200000	
28	Si	45	H2	2978.391	ppb	2.9	23050.94	10000	
39	K	45	He	3695.938	ppb	4.3	46499.46	200000	
40	Ca	45	H2	18230.687	ppb	1.1	1336598.68	200000	
51	V	89	He	1.950	ppb	8.8	544.47	1000	
52	Cr	89	He	0.384	ppb	13.4	111.98	2000	
55	Mn	89	He	1807.884	ppb	2.4	175994.82	2000	
56	Fe	89	H2	16202.809	ppb	0.9	5036504.03	100000	
59	Co	89	He	0.157	ppb	51.9	62.23	1000	
60	Ni	89	He	0.012	ppb	1060.6	41.11	1000	
63	Cu	89	He	-0.812	ppb	N/A	187.78	2000	
66	Zn	89	He	2.382	ppb	39.0	148.90	2000	
75	As	89	He	2.457	ppb	12.0	77.68	1000	
78	Se	89	H2	0.024	ppb	79.1	0.83	1000	
88	Sr	89	He	95.410	ppb	4.6	13878.57	2000	
95	Mo	89	He	-0.454	ppb	N/A	44.44	1000	
107	Ag	89	He	0.009	ppb	33.5	15.56	100	
111	Cd	89	He	0.025	ppb	64.3	2.96	1000	
118	Sn	159	He	0.572	ppb	17.3	171.12	1000	
121	Sb	159	No Gas	0.052	ppb	182.2	180.21	1000	
137	Ba	159	No Gas	22.312	ppb	11.6	13745.71	2000	
182	W	159	No Gas	-0.001	ppb	N/A	123.48	1000	
205	Tl	209	No Gas	0.055	ppb	132.6	176.87	1000	
208	Pb	209	No Gas	0.125	ppb	52.4	664.10	2000	
232	Th	209	No Gas	0.055	ppb	125.7	393.80	1000	
238	U	209	No Gas	0.062	ppb	149.9	230.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1182946.54	2.3	1537409.87	76.94	29.5	120.4	
Sc	45	No Gas	3218967.58	3.1	3373253.08	95.43	29.5	120.4	
Sc	45	H2	365281.38	1.6	415670.69	87.88	29.5	120.4	
Sc	45	He	74002.05	2.4	81171.76	91.17	29.5	120.4	
Ge	72	No Gas	778819.37	2.5	779333.11	99.93	29.5	120.4	
Ge	72	H2	136649.60	1.3	153246.58	89.17	29.5	120.4	
Ge	72	He	59534.13	1.0	63135.03	94.3	29.5	120.4	
Y	89	H2	2487056.16	0.7	2642116.11	94.13	29.5	120.4	
Y	89	He	516473.81	2.1	544041.92	94.93	29.5	120.4	
Tb	159	No Gas	8710271.95	2.7	8117023.84	107.31	29.5	120.4	
Tb	159	He	2900459.43	1.7	2866479.19	101.19	29.5	120.4	
Bi	209	No Gas	4689077.92	3.1	4424692.92	105.98	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW3
File Name	173_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:50:48 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.018	ppb	79.6	34.45	0.1	
B	11	6	No Gas	0.794	ppb	20.0	1291.21	2	
Na	23	45	He	-6.462	ppb	N/A	5079.88	100	
Mg	24	45	He	0.413	ppb	88.1	604.51	10	
Al	27	45	He	-0.496	ppb	N/A	35.56	10	
Si	28	45	H2	1.914	ppb	65.9	313.69	50	
K	39	45	He	13.244	ppb	16.6	11017.66	100	
Ca	40	45	H2	2.691	ppb	7.6	2827.06	10	
V	51	89	He	-0.025	ppb	N/A	204.46	0.5	
Cr	52	89	He	0.012	ppb	20.0	46.66	0.5	
Mn	55	89	He	0.172	ppb	12.6	97.31	0.2	
Fe	56	89	H2	1.095	ppb	14.5	9924.49	10	
Co	59	89	He	-0.001	ppb	N/A	6.67	0.1	
Ni	60	89	He	-0.031	ppb	N/A	25.55	0.2	
Cu	63	89	He	-0.222	ppb	N/A	111.12	0.3	
Zn	66	89	He	0.413	ppb	14.9	140.01	1	
As	75	89	He	0.010	ppb	241.3	6.00	0.5	
Se	78	89	H2	0.005	ppb	290.7	0.83	0.5	
Sr	88	89	He	0.006	ppb	39.1	11.11	0.5	
Mo	95	89	He	-0.130	ppb	N/A	12.22	0.5	
Ag	107	89	He	-0.001	ppb	N/A	7.78	0.1	
Cd	111	89	He	-0.001	ppb	N/A	0.74	0.1	
Sn	118	159	He	-0.006	ppb	N/A	66.67	0.5	
Sb	121	159	No Gas	-0.005	ppb	N/A	60.07	0.1	
Ba	137	159	No Gas	0.062	ppb	17.0	206.90	0.2	
W	182	159	No Gas	-0.010	ppb	N/A	63.41	0.5	
Tl	205	209	No Gas	0.001	ppb	114.3	46.72	0.1	
[Pb]	206	209	No Gas	0.007	ppb	24.0	80.09	0.1	
[Pb]	207	209	No Gas	0.003	ppb	142.1	53.39	0.1	
Pb	208	209	No Gas	0.006	ppb	50.8	307.01	0.1	
Th	232	209	No Gas	0.000	ppb	329.5	183.54	0.5	
U	238	209	No Gas	0.003	ppb	77.0	50.05	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1225326.23	2.8	1537409.87	79.7	29.5	120.4	
Sc	45	No Gas	3279364.07	3.2	3373253.08	97.22	29.5	120.4	
Sc	45	H2	380106.28	1.4	415670.69	91.44	29.5	120.4	
Sc	45	He	75732.09	1.2	81171.76	93.3	29.5	120.4	
Ge	72	No Gas	775019.13	3.6	779333.11	99.45	29.5	120.4	
Ge	72	H2	141027.09	0.8	153246.58	92.03	29.5	120.4	
Ge	72	He	60965.43	0.7	63135.03	96.56	29.5	120.4	
Y	89	H2	2515975.26	0.7	2642116.11	95.23	29.5	120.4	
Y	89	He	525512.21	1.7	544041.92	96.59	29.5	120.4	
Tb	159	No Gas	8591615.85	3.7	8117023.84	105.85	29.5	120.4	
Tb	159	He	2889188.50	0.8	2866479.19	100.79	29.5	120.4	
Bi	209	No Gas	4652124.82	3.6	4424692.92	105.14	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW3
File Name	174_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 10:53:31 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.771	ppb	0.9	11095.69	50	19.91	79.5	120.4	
B	11	6	No Gas	503.820	ppb	2.3	74473.21	500	20.15	79.5	120.4	
Na	23	45	He	7349.566	ppb	2.4	161472.00	7500	19.6	79.5	120.4	
Mg	24	45	He	5033.105	ppb	2.8	59236.65	5000	20.13	79.5	120.4	
Al	27	45	He	1846.709	ppb	2.0	8382.74	2000	18.47	79.5	120.4	
Si	28	45	H2	1033.497	ppb	2.1	8415.11	1000	20.67	79.5	120.4	
K	39	45	He	10213.489	ppb	1.9	114066.90	10000	20.43	79.5	120.4	
Ca	40	45	H2	2603.925	ppb	1.3	198750.52	2500	20.83	79.5	120.4	
V	51	89	He	489.228	ppb	0.9	82694.01	500	19.57	79.5	120.4	
Cr	52	89	He	198.589	ppb	0.9	41343.90	200	19.86	79.5	120.4	
Mn	55	89	He	492.391	ppb	0.8	48827.60	500	19.7	79.5	120.4	
Fe	56	89	H2	1040.503	ppb	1.5	331762.67	1000	20.81	79.5	120.4	
Co	59	89	He	513.883	ppb	1.1	181057.92	500	20.56	79.5	120.4	
Ni	60	89	He	494.566	ppb	1.4	49407.92	500	19.78	79.5	120.4	
Cu	63	89	He	252.642	ppb	1.6	68821.88	250	20.21	79.5	120.4	
Zn	66	89	He	502.027	ppb	1.5	18684.22	500	20.08	79.5	120.4	
As	75	89	He	102.176	ppb	2.7	3103.03	100	20.43	79.5	120.4	
Se	78	89	H2	104.022	ppb	3.6	1612.36	100	20.8	79.5	120.4	
Sr	88	89	He	504.294	ppb	1.9	74697.58	500	20.17	79.5	120.4	
Mo	95	89	He	102.841	ppb	3.8	17614.17	100	20.57	79.5	120.4	
Ag	107	89	He	53.068	ppb	2.2	30704.29	50	21.23	79.5	120.4	
Cd	111	89	He	256.874	ppb	1.7	19797.14	250	20.55	79.5	120.4	
Sn	118	159	He	482.588	ppb	0.3	83383.42	500	19.3	79.5	120.4	
Sb	121	159	No Gas	99.206	ppb	3.8	149114.79	100	19.84	79.5	120.4	
Ba	137	159	No Gas	1917.604	ppb	2.8	1133521.74	2000	19.18	79.5	120.4	
W	182	159	No Gas	98.547	ppb	3.2	117912.25	100	19.71	79.5	120.4	
Tl	205	209	No Gas	100.054	ppb	2.0	264814.96	100	20.01	79.5	120.4	
Pb	208	209	No Gas	100.523	ppb	3.4	367822.14	100	20.1	79.5	120.4	
Th	232	209	No Gas	94.758	ppb	3.9	362994.77	100	18.95	79.5	120.4	
U	238	209	No Gas	97.429	ppb	3.6	350201.60	100	19.49	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1284047.75	0.8	1537409.87	83.52	29.5	120.4	
Sc	45	No Gas	3262467.82	1.4	3373253.08	96.72	29.5	120.4	
Sc	45	H2	377339.77	0.8	415670.69	90.78	29.5	120.4	
Sc	45	He	76240.14	1.1	81171.76	93.92	29.5	120.4	
Ge	72	No Gas	767003.29	1.5	779333.11	98.42	29.5	120.4	
Ge	72	H2	140178.21	0.7	153246.58	91.47	29.5	120.4	
Ge	72	He	61318.45	0.6	63135.03	97.12	29.5	120.4	
Y	89	H2	2492792.05	0.7	2642116.11	94.35	29.5	120.4	
Y	89	He	525850.86	0.6	544041.92	96.66	29.5	120.4	
Tb	159	No Gas	8353606.47	1.3	8117023.84	102.91	29.5	120.4	
Tb	159	He	2884981.24	0.8	2866479.19	100.65	29.5	120.4	
Bi	209	No Gas	4497366.53	1.3	4424692.92	101.64	29.5	120.4	

Sample Report

Sample Name SN5596-002

File Name 175SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:56:09 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	18.6	63.34	100	
11	B	6	No Gas	21.718	ppb	3.1	16225.13	1000	
23	Na	45	He	13373.261	ppb	0.6	1435995.48	200000	
24	Mg	45	He	14553.130	ppb	1.2	856831.75	200000	
27	Al	45	He	23.477	ppb	4.5	582.25	200000	
28	Si	45	H2	3887.691	ppb	14.4	151084.57	10000	
39	K	45	He	544.514	ppb	1.4	38417.46	200000	
40	Ca	45	H2	1575.552	ppb	11.8	587010.20	200000	
51	V	89	He	1.217	ppb	14.7	1259.00	1000	
52	Cr	89	He	0.517	ppb	3.0	575.91	2000	
55	Mn	89	He	8.504	ppb	0.2	4257.22	2000	
56	Fe	89	H2	44.759	ppb	14.4	76147.11	100000	
59	Co	89	He	0.128	ppb	18.6	235.58	1000	
60	Ni	89	He	3.154	ppb	6.2	1626.82	1000	
63	Cu	89	He	1.905	ppb	1.0	3011.55	2000	
66	Zn	89	He	20.436	ppb	1.6	3880.68	2000	
75	As	89	He	0.398	ppb	17.6	65.34	1000	
78	Se	89	H2	0.040	ppb	25.0	3.50	1000	
88	Sr	89	He	9.275	ppb	1.5	6923.11	2000	
95	Mo	89	He	1.039	ppb	4.1	1013.41	1000	
107	Ag	89	He	0.008	ppb	16.3	34.45	100	
111	Cd	89	He	0.009	ppb	99.6	4.44	1000	
118	Sn	159	He	0.521	ppb	1.9	528.92	1000	
121	Sb	159	No Gas	0.056	ppb	38.4	507.25	1000	
137	Ba	159	No Gas	1.352	ppb	10.8	3948.37	2000	
182	W	159	No Gas	39.139	ppb	2.5	230066.99	1000	
205	Tl	209	No Gas	0.024	ppb	20.6	337.05	1000	
208	Pb	209	No Gas	0.087	ppb	18.8	1725.32	2000	
232	Th	209	No Gas	0.449	ppb	35.4	8512.74	1000	
238	U	209	No Gas	0.105	ppb	10.7	1825.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1250956.58	1.7	1537409.87	81.37	29.5	120.4	
Sc	45	No Gas	3210701.39	1.0	3373253.08	95.18	29.5	120.4	
Sc	45	H2	373114.74	8.6	415670.69	89.76	29.5	120.4	
Sc	45	He	76973.03	0.7	81171.76	94.83	29.5	120.4	
Ge	72	No Gas	761007.83	0.3	779333.11	97.65	29.5	120.4	
Ge	72	H2	140351.09	6.7	153246.58	91.59	29.5	120.4	
Ge	72	He	61180.76	0.3	63135.03	96.9	29.5	120.4	
Y	89	H2	2462169.66	9.7	2642116.11	93.19	29.5	120.4	
Y	89	He	529516.22	0.7	544041.92	97.33	29.5	120.4	
Tb	159	No Gas	8211354.95	1.1	8117023.84	101.16	29.5	120.4	
Tb	159	He	2928519.19	0.7	2866479.19	102.16	29.5	120.4	
Bi	209	No Gas	4353807.88	1.1	4424692.92	98.4	29.5	120.4	

Sample Report

Sample Name SN5621-001

File Name 176SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 10:58:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	20.3	35.55	100	
11	B	6	No Gas	12.327	ppb	0.9	9312.18	1000	
23	Na	45	He	40098.481	ppb	0.6	4220002.72	200000	
24	Mg	45	He	4951.765	ppb	0.8	286913.87	200000	
27	Al	45	He	78.786	ppb	4.4	1811.28	200000	
28	Si	45	H2	440.699	ppb	2.8	17503.56	10000	
39	K	45	He	59609.004	ppb	0.2	3011855.58	200000	
40	Ca	45	H2	9255.107	ppb	2.0	3468444.43	200000	
51	V	89	He	0.634	ppb	6.7	752.27	1000	
52	Cr	89	He	0.123	ppb	16.0	160.64	2000	
55	Mn	89	He	1.626	ppb	5.3	809.88	2000	
56	Fe	89	H2	4.854	ppb	3.1	15492.58	100000	
59	Co	89	He	0.363	ppb	4.9	642.29	1000	
60	Ni	89	He	1.050	ppb	9.3	558.92	1000	
63	Cu	89	He	2.564	ppb	1.6	3844.02	2000	
66	Zn	89	He	1.717	ppb	14.8	377.79	2000	
75	As	89	He	0.730	ppb	13.9	114.01	1000	
78	Se	89	H2	0.014	ppb	128.1	1.50	1000	
88	Sr	89	He	39.139	ppb	1.8	28699.50	2000	
95	Mo	89	He	1.126	ppb	9.0	1068.97	1000	
107	Ag	89	He	0.004	ppb	93.0	22.22	100	
111	Cd	89	He	0.024	ppb	24.5	10.37	1000	
118	Sn	159	He	0.098	ppb	12.4	154.45	1000	
121	Sb	159	No Gas	0.024	ppb	52.5	270.30	1000	
137	Ba	159	No Gas	0.503	ppb	15.9	1445.03	2000	
182	W	159	No Gas	0.104	ppb	29.1	717.49	1000	
205	Tl	209	No Gas	0.010	ppb	13.2	150.17	1000	
208	Pb	209	No Gas	0.017	ppb	23.6	460.52	2000	
232	Th	209	No Gas	0.001	ppb	350.7	173.53	1000	
238	U	209	No Gas	0.003	ppb	56.6	56.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1221300.50	1.0	1537409.87	79.44	29.5	120.4	
Sc	45	No Gas	3155806.37	1.4	3373253.08	93.55	29.5	120.4	
Sc	45	H2	373727.84	0.9	415670.69	89.91	29.5	120.4	
Sc	45	He	75646.68	0.9	81171.76	93.19	29.5	120.4	
Ge	72	No Gas	746174.97	1.0	779333.11	95.75	29.5	120.4	
Ge	72	H2	139992.82	1.0	153246.58	91.35	29.5	120.4	
Ge	72	He	60525.23	1.1	63135.03	95.87	29.5	120.4	
Y	89	H2	2462960.92	0.8	2642116.11	93.22	29.5	120.4	
Y	89	He	520580.11	0.9	544041.92	95.69	29.5	120.4	
Tb	159	No Gas	8038064.18	1.0	8117023.84	99.03	29.5	120.4	
Tb	159	He	2857803.67	1.2	2866479.19	99.7	29.5	120.4	
Bi	209	No Gas	4229012.25	0.6	4424692.92	95.58	29.5	120.4	

Sample Report

Sample Name SN5624-001

File Name 177SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:01:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	10.8	32.22	100	
11	B	6	No Gas	1.570	ppb	16.2	2020.21	1000	
23	Na	45	He	910.394	ppb	4.7	103253.77	200000	
24	Mg	45	He	95.040	ppb	6.6	6184.04	200000	
27	Al	45	He	2.261	ppb	44.1	98.89	200000	
28	Si	45	H2	113.480	ppb	7.6	4799.58	10000	
39	K	45	He	124.074	ppb	27.0	16878.30	200000	
40	Ca	45	H2	423.673	ppb	1.7	164659.24	200000	
51	V	89	He	0.497	ppb	9.1	644.48	1000	
52	Cr	89	He	0.066	ppb	25.9	102.65	2000	
55	Mn	89	He	0.829	ppb	5.7	423.27	2000	
56	Fe	89	H2	-0.971	ppb	N/A	6642.30	100000	
59	Co	89	He	0.012	ppb	162.5	28.89	1000	
60	Ni	89	He	0.012	ppb	47.2	46.67	1000	
63	Cu	89	He	0.048	ppb	34.0	476.69	2000	
66	Zn	89	He	0.352	ppb	52.2	128.89	2000	
75	As	89	He	0.043	ppb	28.7	11.00	1000	
78	Se	89	H2	0.015	ppb	48.0	1.67	1000	
88	Sr	89	He	1.960	ppb	5.7	1457.91	2000	
95	Mo	89	He	-0.025	ppb	N/A	101.11	1000	
107	Ag	89	He	0.002	ppb	201.2	16.67	100	
111	Cd	89	He	0.006	ppb	85.7	3.33	1000	
118	Sn	159	He	0.101	ppb	27.9	157.79	1000	
121	Sb	159	No Gas	0.028	ppb	14.2	303.68	1000	
137	Ba	159	No Gas	0.277	ppb	2.9	820.94	2000	
182	W	159	No Gas	0.009	ppb	112.8	170.20	1000	
205	Tl	209	No Gas	0.002	ppb	72.0	50.06	1000	
208	Pb	209	No Gas	0.011	ppb	17.8	377.09	2000	
232	Th	209	No Gas	0.000	ppb	2733.7	170.19	1000	
238	U	209	No Gas	0.023	ppb	9.0	407.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1351090.74	2.9	1537409.87	87.88	29.5	120.4	
Sc	45	No Gas	3306551.93	3.0	3373253.08	98.02	29.5	120.4	
Sc	45	H2	383541.35	1.9	415670.69	92.27	29.5	120.4	
Sc	45	He	77013.31	0.6	81171.76	94.88	29.5	120.4	
Ge	72	No Gas	776912.40	2.1	779333.11	99.69	29.5	120.4	
Ge	72	H2	144424.74	2.2	153246.58	94.24	29.5	120.4	
Ge	72	He	61220.70	0.8	63135.03	96.97	29.5	120.4	
Y	89	H2	2502019.20	1.3	2642116.11	94.7	29.5	120.4	
Y	89	He	525932.71	1.3	544041.92	96.67	29.5	120.4	
Tb	159	No Gas	8210593.63	2.9	8117023.84	101.15	29.5	120.4	
Tb	159	He	2864354.85	1.5	2866479.19	99.93	29.5	120.4	
Bi	209	No Gas	4429311.34	2.8	4424692.92	100.1	29.5	120.4	

Sample Report

Sample Name SN5625-001

File Name 178SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:04:12 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	32.4	26.67	100	
11	B	6	No Gas	32.340	ppb	2.0	24850.93	1000	
23	Na	45	He	12479.667	ppb	4.9	1289405.87	200000	
24	Mg	45	He	662.886	ppb	4.6	38088.69	200000	
27	Al	45	He	24.832	ppb	19.5	587.81	200000	
28	Si	45	H2	1386.187	ppb	1.1	55539.18	10000	
39	K	45	He	2994.471	ppb	5.6	157681.09	200000	
40	Ca	45	H2	4031.835	ppb	1.5	1539277.37	200000	
51	V	89	He	0.558	ppb	7.5	673.37	1000	
52	Cr	89	He	0.075	ppb	45.4	107.98	2000	
55	Mn	89	He	7.940	ppb	5.1	3819.84	2000	
56	Fe	89	H2	14.669	ppb	1.9	30968.43	100000	
59	Co	89	He	0.083	ppb	17.7	151.12	1000	
60	Ni	89	He	0.492	ppb	16.6	276.68	1000	
63	Cu	89	He	2.038	ppb	9.6	3066.01	2000	
66	Zn	89	He	8.342	ppb	7.4	1560.15	2000	
75	As	89	He	0.041	ppb	43.4	10.33	1000	
78	Se	89	H2	0.033	ppb	39.6	3.00	1000	
88	Sr	89	He	17.744	ppb	5.6	12721.85	2000	
95	Mo	89	He	0.536	ppb	5.9	560.03	1000	
107	Ag	89	He	0.000	ppb	513.4	11.11	100	
111	Cd	89	He	0.016	ppb	52.0	7.04	1000	
118	Sn	159	He	0.078	ppb	33.6	133.34	1000	
121	Sb	159	No Gas	0.044	ppb	14.6	410.47	1000	
137	Ba	159	No Gas	2.560	ppb	1.6	7346.86	2000	
182	W	159	No Gas	-0.007	ppb	N/A	76.75	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	13.35	1000	
208	Pb	209	No Gas	0.103	ppb	2.3	2019.00	2000	
232	Th	209	No Gas	0.000	ppb	625.0	173.53	1000	
238	U	209	No Gas	0.000	ppb	171.6	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1306136.22	0.9	1537409.87	84.96	29.5	120.4	
Sc	45	No Gas	3234546.28	1.0	3373253.08	95.89	29.5	120.4	
Sc	45	H2	380466.73	1.3	415670.69	91.53	29.5	120.4	
Sc	45	He	74140.26	4.2	81171.76	91.34	29.5	120.4	
Ge	72	No Gas	759808.87	0.6	779333.11	97.49	29.5	120.4	
Ge	72	H2	143788.65	0.6	153246.58	93.83	29.5	120.4	
Ge	72	He	59677.92	3.3	63135.03	94.52	29.5	120.4	
Y	89	H2	2494621.44	1.0	2642116.11	94.42	29.5	120.4	
Y	89	He	509382.32	3.5	544041.92	93.63	29.5	120.4	
Tb	159	No Gas	8092028.07	0.7	8117023.84	99.69	29.5	120.4	
Tb	159	He	2782495.17	3.7	2866479.19	97.07	29.5	120.4	
Bi	209	No Gas	4384109.74	1.0	4424692.92	99.08	29.5	120.4	

Sample Report

Sample Name SN5626-001

File Name 179SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:06:48 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	82.6	35.56	100	
11	B	6	No Gas	104.191	ppb	5.4	76234.90	1000	
23	Na	45	He	47070.199	ppb	1.1	4974427.17	200000	
24	Mg	45	He	864.665	ppb	2.7	50797.17	200000	
27	Al	45	He	137.705	ppb	3.6	3143.79	200000	
28	Si	45	H2	308.707	ppb	3.7	12385.85	10000	
39	K	45	He	2938.626	ppb	1.1	158997.91	200000	
40	Ca	45	H2	3086.639	ppb	1.2	1163170.40	200000	
51	V	89	He	0.563	ppb	18.2	697.82	1000	
52	Cr	89	He	0.118	ppb	19.1	155.97	2000	
55	Mn	89	He	10.392	ppb	0.6	5146.01	2000	
56	Fe	89	H2	4.519	ppb	8.1	14981.35	100000	
59	Co	89	He	10.507	ppb	2.5	18455.60	1000	
60	Ni	89	He	20.501	ppb	2.0	10238.53	1000	
63	Cu	89	He	7.822	ppb	0.8	10964.69	2000	
66	Zn	89	He	4.445	ppb	9.9	884.51	2000	
75	As	89	He	0.052	ppb	36.6	12.33	1000	
78	Se	89	H2	0.052	ppb	35.3	4.50	1000	
88	Sr	89	He	29.038	ppb	0.9	21438.53	2000	
95	Mo	89	He	713.471	ppb	0.7	604804.11	1000	
107	Ag	89	He	0.018	ppb	20.5	62.22	100	
111	Cd	89	He	0.154	ppb	13.7	60.37	1000	
118	Sn	159	He	0.062	ppb	21.6	124.45	1000	
121	Sb	159	No Gas	0.058	ppb	14.5	513.92	1000	
137	Ba	159	No Gas	0.973	ppb	6.6	2786.73	2000	
182	W	159	No Gas	8.278	ppb	5.9	47758.45	1000	
205	Tl	209	No Gas	0.001	ppb	87.8	43.38	1000	
208	Pb	209	No Gas	0.312	ppb	7.1	5553.39	2000	
232	Th	209	No Gas	0.000	ppb	1343.7	163.52	1000	
238	U	209	No Gas	0.011	ppb	31.8	196.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1272035.05	1.2	1537409.87	82.74	29.5	120.4	
Sc	45	No Gas	3176531.99	2.1	3373253.08	94.17	29.5	120.4	
Sc	45	H2	375405.18	1.3	415670.69	90.31	29.5	120.4	
Sc	45	He	75979.02	0.5	81171.76	93.6	29.5	120.4	
Ge	72	No Gas	752729.01	1.4	779333.11	96.59	29.5	120.4	
Ge	72	H2	142595.12	2.1	153246.58	93.05	29.5	120.4	
Ge	72	He	60829.26	1.0	63135.03	96.35	29.5	120.4	
Y	89	H2	2463425.08	1.9	2642116.11	93.24	29.5	120.4	
Y	89	He	524041.49	0.4	544041.92	96.32	29.5	120.4	
Tb	159	No Gas	8049808.49	2.4	8117023.84	99.17	29.5	120.4	
Tb	159	He	2872608.85	1.1	2866479.19	100.21	29.5	120.4	
Bi	209	No Gas	4250651.86	2.5	4424692.92	96.07	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	180_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:09:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.586	ppb	6.2	25854.96	25	90.34	89.8	110.2	
11	B	6	No Gas	24.408	ppb	5.5	19146.69	25	97.63	89.8	110.2	
23	Na	45	He	4956.701	ppb	1.1	525785.49	5000	99.13	89.8	110.2	
24	Mg	45	He	4805.392	ppb	1.4	277951.86	5000	96.11	89.8	110.2	
27	Al	45	He	466.772	ppb	3.6	10480.85	500	93.35	89.8	110.2	
28	Si	45	H2	472.311	ppb	2.5	19100.53	500	94.46	89.8	110.2	
39	K	45	He	4909.554	ppb	1.0	257094.07	5000	98.19	89.8	110.2	
40	Ca	45	H2	4851.465	ppb	1.8	1853909.07	5000	97.03	89.8	110.2	
51	V	89	He	23.950	ppb	1.4	20180.59	25	95.8	89.8	110.2	
52	Cr	89	He	24.051	ppb	3.2	24761.14	25	96.2	89.8	110.2	
55	Mn	89	He	23.876	ppb	2.6	11712.11	25	95.5	89.8	110.2	
56	Fe	89	H2	4754.039	ppb	2.3	7483662.41	5000	95.08	89.8	110.2	
59	Co	89	He	24.238	ppb	0.8	42221.66	25	96.95	89.8	110.2	
60	Ni	89	He	24.323	ppb	1.3	12042.24	25	97.29	89.8	110.2	
63	Cu	89	He	24.420	ppb	2.9	33090.07	25	97.68	89.8	110.2	
66	Zn	89	He	23.978	ppb	2.7	4458.66	25	95.91	89.8	110.2	
75	As	89	He	24.162	ppb	1.5	3626.54	25	96.65	89.8	110.2	
78	Se	89	H2	23.998	ppb	0.9	1881.21	25	95.99	89.8	110.2	
88	Sr	89	He	24.245	ppb	0.6	17758.72	25	96.98	89.8	110.2	
95	Mo	89	He	25.666	ppb	2.4	21698.98	25	102.66	89.8	110.2	
107	Ag	89	He	18.422	ppb	0.7	52686.37	25	73.69	89.8	110.2	> +/- 10%
111	Cd	89	He	24.588	ppb	1.4	9368.14	25	98.35	89.8	110.2	
118	Sn	159	He	22.974	ppb	1.7	19770.62	25	91.9	89.8	110.2	
121	Sb	159	No Gas	22.802	ppb	6.8	169038.53	25	91.21	89.8	110.2	
137	Ba	159	No Gas	23.080	ppb	4.6	67324.85	25	92.32	89.8	110.2	
182	W	159	No Gas	22.176	ppb	5.8	130874.84	25	88.7	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.890	ppb	6.5	296796.79	25	91.56	89.8	110.2	
208	Pb	209	No Gas	22.800	ppb	6.7	408758.85	25	91.2	89.8	110.2	
232	Th	209	No Gas	21.902	ppb	7.3	411071.61	25	87.61	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.094	ppb	6.4	389188.34	25	88.38	89.8	110.2	> +/- 10%

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1320606.63	1.8	1537409.87	85.9	29.5	120.4	
Sc	45	No Gas	3268535.09	2.6	3373253.08	96.9	29.5	120.4	
Sc	45	H2	380944.22	1.4	415670.69	91.65	29.5	120.4	
Sc	45	He	75517.70	0.9	81171.76	93.03	29.5	120.4	
Ge	72	No Gas	757948.04	3.6	779333.11	97.26	29.5	120.4	
Ge	72	H2	142944.72	1.3	153246.58	93.28	29.5	120.4	
Ge	72	He	60144.11	0.6	63135.03	95.26	29.5	120.4	
Y	89	H2	2521136.23	2.0	2642116.11	95.42	29.5	120.4	
Y	89	He	519909.15	1.2	544041.92	95.56	29.5	120.4	
Tb	159	No Gas	8245421.96	2.5	8117023.84	101.58	29.5	120.4	
Tb	159	He	2866153.91	1.3	2866479.19	99.99	29.5	120.4	
Bi	209	No Gas	4410201.19	2.7	4424692.92	99.67	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	181_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:11:58 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.050	ppb	4.5	73.34	0.2	
11	B	6	No Gas	1.914	ppb	4.7	2229.14	4	
23	Na	45	He	63.793	ppb	10.6	12082.24	200	
24	Mg	45	He	0.155	ppb	725.2	571.16	20	
27	Al	45	He	-1.466	ppb	N/A	13.33	20	
28	Si	45	H2	5.100	ppb	35.2	420.47	100	
39	K	45	He	28.138	ppb	24.8	11397.81	200	
40	Ca	45	H2	5.144	ppb	0.6	3589.50	20	
51	V	89	He	0.980	ppb	13.5	1016.74	1	Failed DoD
52	Cr	89	He	0.115	ppb	3.8	149.31	1	
55	Mn	89	He	0.131	ppb	21.2	74.66	0.4	
56	Fe	89	H2	0.286	ppb	86.5	8451.92	20	
59	Co	89	He	0.009	ppb	45.2	24.45	0.2	
60	Ni	89	He	-0.013	ppb	N/A	33.33	0.4	
63	Cu	89	He	0.021	ppb	32.1	425.58	0.6	
66	Zn	89	He	0.117	ppb	56.9	82.22	2	
75	As	89	He	0.086	ppb	18.1	17.00	1	
78	Se	89	H2	0.062	ppb	32.0	5.17	1	
88	Sr	89	He	0.008	ppb	61.0	12.22	1	
95	Mo	89	He	0.405	ppb	45.4	453.37	1	
107	Ag	89	He	0.012	ppb	39.1	44.44	0.2	
111	Cd	89	He	0.011	ppb	54.1	5.18	0.2	
118	Sn	159	He	0.350	ppb	4.3	370.02	1	
121	Sb	159	No Gas	0.033	ppb	19.5	343.72	0.2	
137	Ba	159	No Gas	0.020	ppb	74.8	76.75	0.4	
182	W	159	No Gas	0.108	ppb	13.0	760.88	1	
205	Tl	209	No Gas	0.030	ppb	23.3	423.81	0.2	
208	Pb	209	No Gas	0.065	ppb	13.3	1378.24	0.2	
232	Th	209	No Gas	0.282	ppb	28.3	5557.62	1	
238	U	209	No Gas	0.032	ppb	12.3	580.66	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1316674.02	1.2	1537409.87	85.64	29.5	120.4	
Sc	45	No Gas	3148281.08	0.5	3373253.08	93.33	29.5	120.4	
Sc	45	H2	362629.23	1.6	415670.69	87.24	29.5	120.4	
Sc	45	He	73342.14	1.5	81171.76	90.35	29.5	120.4	
Ge	72	No Gas	745860.02	2.1	779333.11	95.7	29.5	120.4	
Ge	72	H2	135156.58	1.8	153246.58	88.2	29.5	120.4	
Ge	72	He	58476.13	2.4	63135.03	92.62	29.5	120.4	
Y	89	H2	2457607.83	1.6	2642116.11	93.02	29.5	120.4	
Y	89	He	508999.12	2.5	544041.92	93.56	29.5	120.4	
Tb	159	No Gas	8316639.32	1.2	8117023.84	102.46	29.5	120.4	
Tb	159	He	2857256.17	2.6	2866479.19	99.68	29.5	120.4	
Bi	209	No Gas	4499954.75	1.0	4424692.92	101.7	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG15IMW1
File Name	182_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:14:38 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.016	ppb	72.9	32.22	0.1	
B	11	6	No Gas	0.828	ppb	5.9	1336.78	2	
Na	23	45	He	11.515	ppb	30.0	7083.00	100	
Mg	24	45	He	-0.169	ppb	N/A	580.06	10	
Al	27	45	He	-0.031	ppb	N/A	46.67	10	
Si	28	45	H2	1.640	ppb	57.2	307.01	50	
K	39	45	He	10.542	ppb	36.1	11051.01	100	
Ca	40	45	H2	-0.239	ppb	N/A	1733.50	10	
V	51	89	He	0.124	ppb	24.2	331.13	0.5	
Cr	52	89	He	0.024	ppb	72.4	59.32	0.5	
Mn	55	89	He	0.065	ppb	37.1	44.66	0.2	
Fe	56	89	H2	-3.104	ppb	N/A	3390.87	10	
Co	59	89	He	0.004	ppb	222.2	15.56	0.1	
Ni	60	89	He	-0.029	ppb	N/A	26.67	0.2	
Cu	63	89	He	-0.180	ppb	N/A	167.79	0.3	
Zn	66	89	He	0.159	ppb	51.4	93.33	1	
As	75	89	He	0.005	ppb	146.6	5.33	0.5	
Se	78	89	H2	0.002	ppb	650.8	0.67	0.5	
Sr	88	89	He	-0.004	ppb	N/A	3.33	0.5	
Mo	95	89	He	-0.001	ppb	N/A	122.23	0.5	
Ag	107	89	He	0.002	ppb	105.2	15.56	0.1	
Cd	111	89	He	-0.002	ppb	N/A	0.37	0.1	
Sn	118	159	He	0.031	ppb	56.4	97.78	0.5	
Sb	121	159	No Gas	-0.005	ppb	N/A	56.73	0.1	
Ba	137	159	No Gas	0.017	ppb	40.2	66.74	0.2	
W	182	159	No Gas	-0.003	ppb	N/A	103.45	0.5	
Tl	205	209	No Gas	0.002	ppb	101.9	56.73	0.1	
[Pb]	206	209	No Gas	0.001	ppb	772.6	50.05	0.1	
[Pb]	207	209	No Gas	0.003	ppb	55.9	53.40	0.1	
Pb	208	209	No Gas	0.004	ppb	91.7	253.62	0.1	
Th	232	209	No Gas	0.001	ppb	193.9	183.54	0.5	
U	238	209	No Gas	0.002	ppb	19.0	36.70	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1244389.70	2.5	1537409.87	80.94	29.5	120.4	
Sc	45	No Gas	3226210.08	3.6	3373253.08	95.64	29.5	120.4	
Sc	45	H2	385151.53	1.1	415670.69	92.66	29.5	120.4	
Sc	45	He	76927.07	1.1	81171.76	94.77	29.5	120.4	
Ge	72	No Gas	761402.98	2.9	779333.11	97.7	29.5	120.4	
Ge	72	H2	143426.63	2.2	153246.58	93.59	29.5	120.4	
Ge	72	He	61166.75	0.8	63135.03	96.88	29.5	120.4	
Y	89	H2	2557031.92	1.2	2642116.11	96.78	29.5	120.4	
Y	89	He	528288.77	0.9	544041.92	97.1	29.5	120.4	
Tb	159	No Gas	8239760.78	3.4	8117023.84	101.51	29.5	120.4	
Tb	159	He	2872470.83	0.2	2866479.19	100.21	29.5	120.4	
Bi	209	No Gas	4442870.74	2.9	4424692.92	100.41	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG15IMW1
File Name	183_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:17:09 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.707	ppb	3.6	11378.19	50	20.28	79.5	120.4	
B	11	6	No Gas	503.082	ppb	1.4	74850.46	500	20.12	79.5	120.4	
Na	23	45	He	7400.000	ppb	1.9	163603.84	7500	19.73	79.5	120.4	
Mg	24	45	He	5196.671	ppb	1.2	61546.34	5000	20.79	79.5	120.4	
Al	27	45	He	1847.672	ppb	3.9	8440.56	2000	18.48	79.5	120.4	
Si	28	45	H2	1047.340	ppb	6.8	8545.41	1000	20.95	79.5	120.4	
K	39	45	He	10373.347	ppb	0.3	116447.13	10000	20.75	79.5	120.4	
Ca	40	45	H2	2647.543	ppb	1.0	202504.91	2500	21.18	79.5	120.4	
V	51	89	He	500.559	ppb	0.6	84170.43	500	20.02	79.5	120.4	
Cr	52	89	He	202.684	ppb	0.3	41979.77	200	20.27	79.5	120.4	
Mn	55	89	He	509.478	ppb	0.2	50262.48	500	20.38	79.5	120.4	
Fe	56	89	H2	1130.250	ppb	1.0	358103.02	1000	22.6	79.5	120.4	
Co	59	89	He	520.381	ppb	1.5	182409.01	500	20.82	79.5	120.4	
Ni	60	89	He	502.507	ppb	0.2	49944.35	500	20.1	79.5	120.4	
Cu	63	89	He	256.922	ppb	1.3	69621.88	250	20.55	79.5	120.4	
Zn	66	89	He	512.138	ppb	2.8	18962.34	500	20.49	79.5	120.4	
As	75	89	He	103.671	ppb	0.7	3132.37	100	20.73	79.5	120.4	
Se	78	89	H2	106.166	ppb	3.9	1638.19	100	21.23	79.5	120.4	
Sr	88	89	He	511.876	ppb	1.2	75433.95	500	20.47	79.5	120.4	
Mo	95	89	He	103.270	ppb	0.5	17596.27	100	20.65	79.5	120.4	
Ag	107	89	He	54.049	ppb	0.3	31113.12	50	21.62	79.5	120.4	
Cd	111	89	He	258.761	ppb	0.7	19840.92	250	20.7	79.5	120.4	
Sn	118	159	He	490.819	ppb	1.1	83787.91	500	19.63	79.5	120.4	
Sb	121	159	No Gas	104.754	ppb	1.3	149703.18	100	20.95	79.5	120.4	
Ba	137	159	No Gas	2006.622	ppb	2.1	1127568.62	2000	20.07	79.5	120.4	
W	182	159	No Gas	103.299	ppb	2.5	117480.19	100	20.66	79.5	120.4	
Tl	205	209	No Gas	103.586	ppb	0.6	260884.23	100	20.72	79.5	120.4	
Pb	208	209	No Gas	104.462	ppb	0.4	363734.89	100	20.89	79.5	120.4	
Th	232	209	No Gas	98.234	ppb	0.6	358137.28	100	19.65	79.5	120.4	
U	238	209	No Gas	100.330	ppb	0.5	343176.39	100	20.07	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1292221.32	0.7	1537409.87	84.05	29.5	120.4	
Sc	45	No Gas	3145438.22	3.2	3373253.08	93.25	29.5	120.4	
Sc	45	H2	378195.93	0.5	415670.69	90.98	29.5	120.4	
Sc	45	He	76730.57	0.5	81171.76	94.53	29.5	120.4	
Ge	72	No Gas	746931.61	2.0	779333.11	95.84	29.5	120.4	
Ge	72	H2	141057.81	1.2	153246.58	92.05	29.5	120.4	
Ge	72	He	60768.62	0.3	63135.03	96.25	29.5	120.4	
Y	89	H2	2481976.96	1.2	2642116.11	93.94	29.5	120.4	
Y	89	He	523139.53	0.3	544041.92	96.16	29.5	120.4	
Tb	159	No Gas	7941629.61	2.5	8117023.84	97.84	29.5	120.4	
Tb	159	He	2850398.33	0.2	2866479.19	99.44	29.5	120.4	
Bi	209	No Gas	4278553.09	1.9	4424692.92	96.7	29.5	120.4	

Sample Report

Sample Name SN5690-001

File Name 184SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:19:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.028	ppb	51.1	44.45	100	
11	B	6	No Gas	2431.032	ppb	8.8	1679375.27	1000	>LDR
23	Na	45	He	313768.951	ppb	2.0	33114379.05	200000	>LDR
24	Mg	45	He	12.200	ppb	18.9	1289.04	200000	
27	Al	45	He	462.683	ppb	2.8	10448.59	200000	
28	Si	45	H2	23.671	ppb	6.4	1101.26	10000	
39	K	45	He	1804.882	ppb	1.3	101633.68	200000	
40	Ca	45	H2	475.687	ppb	5.6	170569.72	200000	
51	V	89	He	0.206	ppb	5.3	391.13	1000	
52	Cr	89	He	24.190	ppb	1.7	24689.00	2000	
55	Mn	89	He	0.495	ppb	9.5	252.62	2000	
56	Fe	89	H2	57.001	ppb	6.9	90366.34	100000	
59	Co	89	He	0.043	ppb	33.5	82.23	1000	
60	Ni	89	He	1.640	ppb	1.3	842.28	1000	
63	Cu	89	He	2.503	ppb	2.6	3723.96	2000	
66	Zn	89	He	1.444	ppb	8.0	324.46	2000	
75	As	89	He	0.044	ppb	15.3	11.00	1000	
78	Se	89	H2	0.057	ppb	44.1	4.67	1000	
88	Sr	89	He	24.867	ppb	0.7	18054.61	2000	
95	Mo	89	He	3.427	ppb	1.4	2975.99	1000	
107	Ag	89	He	0.020	ppb	24.7	66.67	100	
111	Cd	89	He	0.033	ppb	30.9	13.33	1000	
118	Sn	159	He	0.568	ppb	14.0	544.48	1000	
121	Sb	159	No Gas	1.773	ppb	9.5	12900.45	1000	
137	Ba	159	No Gas	2.552	ppb	7.5	7280.13	2000	
182	W	159	No Gas	0.275	ppb	6.3	1702.01	1000	
205	Tl	209	No Gas	0.036	ppb	7.2	463.86	1000	
208	Pb	209	No Gas	0.104	ppb	13.9	1905.53	2000	
232	Th	209	No Gas	0.503	ppb	23.7	9040.32	1000	
238	U	209	No Gas	0.021	ppb	36.3	360.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1215382.63	4.5	1537409.87	79.05	29.5	120.4	
Sc	45	No Gas	3194101.65	7.1	3373253.08	94.69	29.5	120.4	
Sc	45	H2	354949.40	5.5	415670.69	85.39	29.5	120.4	
Sc	45	He	75969.52	2.1	81171.76	93.59	29.5	120.4	
Ge	72	No Gas	727790.51	3.5	779333.11	93.39	29.5	120.4	
Ge	72	H2	134141.80	4.5	153246.58	87.53	29.5	120.4	
Ge	72	He	59134.05	1.1	63135.03	93.66	29.5	120.4	
Y	89	H2	2332753.35	5.3	2642116.11	88.29	29.5	120.4	
Y	89	He	515327.65	0.9	544041.92	94.72	29.5	120.4	
Tb	159	No Gas	8064142.93	7.0	8117023.84	99.35	29.5	120.4	
Tb	159	He	2796968.68	0.5	2866479.19	97.58	29.5	120.4	
Bi	209	No Gas	4103888.77	6.9	4424692.92	92.75	29.5	120.4	

Sample Report

Sample Name SN5691-001

File Name 185SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:22:20 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	22.0	30.00	100	
11	B	6	No Gas	33.610	ppb	11.7	26998.39	1000	
23	Na	45	He	8033.612	ppb	1.0	882851.77	200000	
24	Mg	45	He	2466.349	ppb	0.9	148720.55	200000	
27	Al	45	He	-0.124	ppb	N/A	45.56	200000	
28	Si	45	H2	1201.438	ppb	0.9	49098.45	10000	
39	K	45	He	1032.102	ppb	2.2	64704.75	200000	
40	Ca	45	H2	11073.844	ppb	0.2	4306102.20	200000	
51	V	89	He	0.286	ppb	8.9	476.69	1000	
52	Cr	89	He	0.100	ppb	20.1	141.31	2000	
55	Mn	89	He	0.236	ppb	16.5	131.98	2000	
56	Fe	89	H2	-1.269	ppb	N/A	6281.75	100000	
59	Co	89	He	0.008	ppb	103.4	22.23	1000	
60	Ni	89	He	0.127	ppb	11.3	106.67	1000	
63	Cu	89	He	11.756	ppb	1.6	16689.36	2000	
66	Zn	89	He	3.619	ppb	11.6	751.16	2000	
75	As	89	He	0.271	ppb	17.9	46.67	1000	
78	Se	89	H2	0.019	ppb	32.4	2.00	1000	
88	Sr	89	He	44.689	ppb	1.7	33837.00	2000	
95	Mo	89	He	0.026	ppb	35.7	147.79	1000	
107	Ag	89	He	0.003	ppb	98.2	20.00	100	
111	Cd	89	He	0.004	ppb	113.9	2.59	1000	
118	Sn	159	He	0.122	ppb	34.3	177.79	1000	
121	Sb	159	No Gas	0.004	ppb	76.3	123.47	1000	
137	Ba	159	No Gas	4.422	ppb	5.0	12813.90	2000	
182	W	159	No Gas	-0.003	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.002	ppb	88.3	53.39	1000	
208	Pb	209	No Gas	0.210	ppb	8.0	3897.95	2000	
232	Th	209	No Gas	0.006	ppb	31.2	276.98	1000	
238	U	209	No Gas	0.194	ppb	6.0	3377.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1365471.97	3.0	1537409.87	88.82	29.5	120.4	
Sc	45	No Gas	3345715.86	3.4	3373253.08	99.18	29.5	120.4	
Sc	45	H2	387802.24	0.8	415670.69	93.3	29.5	120.4	
Sc	45	He	78567.34	1.0	81171.76	96.79	29.5	120.4	
Ge	72	No Gas	782123.93	2.7	779333.11	100.36	29.5	120.4	
Ge	72	H2	144923.29	1.0	153246.58	94.57	29.5	120.4	
Ge	72	He	62461.23	0.6	63135.03	98.93	29.5	120.4	
Y	89	H2	2543144.33	0.5	2642116.11	96.25	29.5	120.4	
Y	89	He	537519.35	0.9	544041.92	98.8	29.5	120.4	
Tb	159	No Gas	8185687.65	3.1	8117023.84	100.85	29.5	120.4	
Tb	159	He	2903721.76	0.4	2866479.19	101.3	29.5	120.4	
Bi	209	No Gas	4354817.32	3.0	4424692.92	98.42	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG16IMS1
File Name	186_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:24:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.075	ppb	65.3	36.67	0.5	
B	11	6	No Gas	40.914	ppb	0.9	7581.14	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	1344.709	ppb	53.6	34296.16	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	14.203	ppb	25.3	748.97	50	
Al	27	45	He	4.880	ppb	15.8	68.89	50	
Si	28	45	H2	25.441	ppb	30.8	427.15	250	
K	39	45	He	156.300	ppb	12.5	11987.98	500	
Ca	40	45	H2	55.567	ppb	4.7	5855.88	50	PB 6020 Fails DoD
V	51	89	He	4.178	ppb	7.1	930.07	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.913	ppb	24.6	223.96	2.5	
Mn	55	89	He	1.886	ppb	8.7	199.30	1	PB 6020 Fails DoD
Fe	56	89	H2	13.383	ppb	10.2	12092.06	50	
Co	59	89	He	0.190	ppb	101.7	75.56	0.5	
Ni	60	89	He	0.804	ppb	5.1	121.12	1	
Cu	63	89	He	0.816	ppb	24.4	632.26	1.5	
Zn	66	89	He	4.013	ppb	5.5	212.23	5	
As	75	89	He	0.367	ppb	39.3	15.67	2.5	
Se	78	89	H2	0.265	ppb	1.7	4.50	2.5	
Sr	88	89	He	0.369	ppb	77.6	61.11	2.5	
Mo	95	89	He	-0.080	ppb	N/A	108.90	2.5	
Ag	107	89	He	0.037	ppb	58.5	32.22	0.5	
Cd	111	89	He	0.087	ppb	143.5	7.78	0.5	
Sn	118	159	He	43.258	ppb	3.0	7573.51	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.013	ppb	164.9	113.46	0.5	
Ba	137	159	No Gas	0.369	ppb	9.6	230.26	1	
W	182	159	No Gas	-0.006	ppb	N/A	110.12	2.5	
Tl	205	209	No Gas	0.000	ppb	N/A	26.69	0.5	
Pb	208	209	No Gas	0.359	ppb	10.9	1471.70	0.5	
Th	232	209	No Gas	0.061	ppb	28.0	397.12	2.5	
U	238	209	No Gas	0.009	ppb	101.1	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1439878.80	3.1	1537409.87	93.66	29.5	120.4	
Sc	45	No Gas	3236760.60	1.4	3373253.08	95.95	29.5	120.4	
Sc	45	H2	368733.68	0.8	415670.69	88.71	29.5	120.4	
Sc	45	He	76141.82	1.2	81171.76	93.8	29.5	120.4	
Ge	72	No Gas	764554.48	2.4	779333.11	98.1	29.5	120.4	
Ge	72	H2	137788.67	1.5	153246.58	89.91	29.5	120.4	
Ge	72	He	60470.40	0.6	63135.03	95.78	29.5	120.4	
Y	89	H2	2452478.93	1.6	2642116.11	92.82	29.5	120.4	
Y	89	He	525788.77	0.9	544041.92	96.64	29.5	120.4	
Tb	159	No Gas	8186780.78	1.6	8117023.84	100.86	29.5	120.4	
Tb	159	He	2898335.09	1.1	2866479.19	101.11	29.5	120.4	
Bi	209	No Gas	4432981.83	2.1	4424692.92	100.19	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG16IMS1
File Name	187LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:27:34 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.130	ppb	6.9	10290.68	50	18.05	79.5	120.4	
B	11	6	No Gas	477.705	ppb	5.7	72262.39	500	19.11	79.5	120.4	
Na	23	45	He	7886.002	ppb	1.8	166800.15	7500	21.03	79.5	120.4	
Mg	24	45	He	5118.802	ppb	1.1	58138.64	5000	20.48	79.5	120.4	
Al	27	45	He	1831.621	ppb	1.2	8023.64	2000	18.32	79.5	120.4	
Si	28	45	H2	966.592	ppb	5.2	7560.45	1000	19.33	79.5	120.4	
K	39	45	He	10303.153	ppb	2.5	110948.68	10000	20.61	79.5	120.4	
Ca	40	45	H2	2632.878	ppb	2.5	192743.86	2500	21.06	79.5	120.4	
V	51	89	He	501.839	ppb	1.6	81785.37	500	20.07	79.5	120.4	
Cr	52	89	He	204.297	ppb	2.3	41005.59	200	20.43	79.5	120.4	
Mn	55	89	He	505.498	ppb	1.9	48330.87	500	20.22	79.5	120.4	
Fe	56	89	H2	1082.006	ppb	3.7	333249.09	1000	21.64	79.5	120.4	
Co	59	89	He	529.501	ppb	2.4	179865.46	500	21.18	79.5	120.4	
Ni	60	89	He	504.559	ppb	3.3	48590.77	500	20.18	79.5	120.4	
Cu	63	89	He	260.312	ppb	1.5	68364.20	250	20.82	79.5	120.4	
Zn	66	89	He	501.569	ppb	0.7	18002.24	500	20.06	79.5	120.4	
As	75	89	He	103.368	ppb	4.0	3025.99	100	20.67	79.5	120.4	
Se	78	89	H2	104.264	ppb	4.8	1562.52	100	20.85	79.5	120.4	
Sr	88	89	He	511.272	ppb	1.9	73023.04	500	20.45	79.5	120.4	
Mo	95	89	He	105.268	ppb	3.1	17378.24	100	21.05	79.5	120.4	
Ag	107	89	He	55.545	ppb	2.3	30986.13	50	22.22	79.5	120.4	
Cd	111	89	He	258.710	ppb	2.7	19222.98	250	20.7	79.5	120.4	
Sn	118	159	He	527.212	ppb	1.1	89353.39	500	21.09	79.5	120.4	
Sb	121	159	No Gas	95.348	ppb	5.2	143760.01	100	19.07	79.5	120.4	
Ba	137	159	No Gas	1846.075	ppb	5.6	1094465.53	2000	18.46	79.5	120.4	
W	182	159	No Gas	94.439	ppb	5.9	113340.09	100	18.89	79.5	120.4	
Tl	205	209	No Gas	97.072	ppb	6.1	257118.98	100	19.41	79.5	120.4	
[Pb]	206	209	No Gas	96.786	ppb	6.2	88242.60	100	19.36	79.5	120.4	
[Pb]	207	209	No Gas	96.358	ppb	5.6	77021.17	100	19.27	79.5	120.4	
Pb	208	209	No Gas	96.158	ppb	6.2	352152.57	100	19.23	79.5	120.4	
Th	232	209	No Gas	91.540	ppb	8.4	350919.51	100	18.31	79.5	120.4	
U	238	209	No Gas	93.096	ppb	6.3	334937.95	100	18.62	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1313893.99	1.7	1537409.87	85.46	29.5	120.4	
Sc	45	No Gas	3218991.51	1.2	3373253.08	95.43	29.5	120.4	
Sc	45	H2	362074.21	2.2	415670.69	87.11	29.5	120.4	
Sc	45	He	73582.15	2.0	81171.76	90.65	29.5	120.4	
Ge	72	No Gas	779134.22	0.6	779333.11	99.97	29.5	120.4	
Ge	72	H2	136036.46	2.7	153246.58	88.77	29.5	120.4	
Ge	72	He	58697.40	2.1	63135.03	92.97	29.5	120.4	
Y	89	H2	2411537.55	2.6	2642116.11	91.27	29.5	120.4	
Y	89	He	507144.36	2.3	544041.92	93.22	29.5	120.4	
Tb	159	No Gas	8377169.46	0.7	8117023.84	103.2	29.5	120.4	
Tb	159	He	2830352.32	1.4	2866479.19	98.74	29.5	120.4	
Bi	209	No Gas	4502079.31	1.6	4424692.92	101.75	29.5	120.4	

Sample Report

Sample Name SN5594-002

File Name 188SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:30:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.173	ppb	40.2	52.23	100	
11	B	6	No Gas	1799.704	ppb	15.4	256266.20	1000	
23	Na	45	He	16763.263	ppb	1.3	359476.60	200000	
24	Mg	45	He	31.981	ppb	3.6	953.44	200000	
27	Al	45	He	91.685	ppb	5.2	458.91	200000	
28	Si	45	H2	223.204	ppb	8.5	1969.00	10000	
39	K	45	He	1749.240	ppb	1.4	28059.86	200000	
40	Ca	45	H2	174.216	ppb	2.0	14725.94	200000	
51	V	89	He	3.310	ppb	5.9	781.16	1000	
52	Cr	89	He	1.697	ppb	6.7	385.94	2000	
55	Mn	89	He	4.846	ppb	7.6	491.26	2000	
56	Fe	89	H2	216.727	ppb	1.6	75096.69	100000	
59	Co	89	He	0.267	ppb	18.0	102.23	1000	
60	Ni	89	He	6.937	ppb	8.3	731.16	1000	
63	Cu	89	He	98.256	ppb	0.8	26940.11	2000	
66	Zn	89	He	187.134	ppb	2.4	6984.23	2000	
75	As	89	He	0.557	ppb	13.7	21.33	1000	
78	Se	89	H2	0.154	ppb	54.8	2.83	1000	
88	Sr	89	He	0.739	ppb	22.4	115.56	2000	
95	Mo	89	He	54.582	ppb	1.8	9379.10	1000	
107	Ag	89	He	0.159	ppb	24.2	102.23	100	
111	Cd	89	He	0.237	ppb	45.1	19.26	1000	
118	Sn	159	He	46.734	ppb	2.2	8165.00	1000	
121	Sb	159	No Gas	0.741	ppb	13.4	1194.72	1000	
137	Ba	159	No Gas	5.963	ppb	11.6	3507.72	2000	
182	W	159	No Gas	0.159	ppb	48.6	310.35	1000	
205	Tl	209	No Gas	0.159	ppb	4.7	450.51	1000	
208	Pb	209	No Gas	516.852	ppb	18.6	1874066.48	2000	
232	Th	209	No Gas	2.273	ppb	20.5	8940.12	1000	
238	U	209	No Gas	0.101	ppb	24.1	373.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1258550.30	9.9	1537409.87	81.86	29.5	120.4	
Sc	45	No Gas	3241152.92	13.8	3373253.08	96.08	29.5	120.4	
Sc	45	H2	371325.01	1.8	415670.69	89.33	29.5	120.4	
Sc	45	He	75936.32	0.4	81171.76	93.55	29.5	120.4	
Ge	72	No Gas	768949.69	8.3	779333.11	98.67	29.5	120.4	
Ge	72	H2	140031.69	1.1	153246.58	91.38	29.5	120.4	
Ge	72	He	60699.81	0.6	63135.03	96.14	29.5	120.4	
Y	89	H2	2478256.11	1.7	2642116.11	93.8	29.5	120.4	
Y	89	He	524326.40	0.1	544041.92	96.38	29.5	120.4	
Tb	159	No Gas	8344097.93	13.3	8117023.84	102.8	29.5	120.4	
Tb	159	He	2893960.72	0.1	2866479.19	100.96	29.5	120.4	
Bi	209	No Gas	4525053.02	12.2	4424692.92	102.27	29.5	120.4	

Sample Report

Sample Name SN5594-003

File Name 189SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:32:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.083	ppb	41.8	34.45	100	
11	B	6	No Gas	61.044	ppb	2.6	9723.61	1000	
23	Na	45	He	558.828	ppb	3.0	17182.76	200000	
24	Mg	45	He	324.462	ppb	4.3	4254.27	200000	
27	Al	45	He	24.220	ppb	25.4	152.23	200000	
28	Si	45	H2	66.484	ppb	15.8	734.16	10000	
39	K	45	He	166.090	ppb	13.2	11791.19	200000	
40	Ca	45	H2	2576.560	ppb	1.0	189514.51	200000	
51	V	89	He	4.927	ppb	9.5	1027.85	1000	
52	Cr	89	He	2.084	ppb	2.2	455.26	2000	
55	Mn	89	He	3.855	ppb	7.4	383.94	2000	
56	Fe	89	H2	176.569	ppb	0.6	61466.18	100000	
59	Co	89	He	0.118	ppb	62.1	48.89	1000	
60	Ni	89	He	1.683	ppb	19.8	203.34	1000	
63	Cu	89	He	126.345	ppb	0.5	33703.80	2000	
66	Zn	89	He	3779.770	ppb	0.3	136532.45	2000	
75	As	89	He	0.326	ppb	27.9	14.00	1000	
78	Se	89	H2	0.157	ppb	24.0	2.83	1000	
88	Sr	89	He	1.436	ppb	9.7	213.34	2000	
95	Mo	89	He	34.803	ppb	1.3	5881.48	1000	
107	Ag	89	He	0.033	ppb	55.6	28.89	100	
111	Cd	89	He	2.539	ppb	3.3	191.49	1000	
118	Sn	159	He	41.860	ppb	1.9	7233.33	1000	
121	Sb	159	No Gas	0.071	ppb	27.7	203.56	1000	
137	Ba	159	No Gas	12.660	ppb	7.6	7523.80	2000	
182	W	159	No Gas	-0.014	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	0.035	ppb	39.2	123.47	1000	
208	Pb	209	No Gas	1625.749	ppb	6.9	6108485.46	2000	
232	Th	209	No Gas	0.146	ppb	20.5	747.53	1000	
238	U	209	No Gas	0.057	ppb	21.2	213.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1286259.76	1.7	1537409.87	83.66	29.5	120.4	
Sc	45	No Gas	3212273.43	2.5	3373253.08	95.23	29.5	120.4	
Sc	45	H2	363608.98	1.1	415670.69	87.48	29.5	120.4	
Sc	45	He	74273.25	0.6	81171.76	91.5	29.5	120.4	
Ge	72	No Gas	770458.36	2.0	779333.11	98.86	29.5	120.4	
Ge	72	H2	135022.97	1.5	153246.58	88.11	29.5	120.4	
Ge	72	He	58496.42	0.6	63135.03	92.65	29.5	120.4	
Y	89	H2	2430112.60	1.2	2642116.11	91.98	29.5	120.4	
Y	89	He	511862.68	0.3	544041.92	94.09	29.5	120.4	
Tb	159	No Gas	8385193.42	1.9	8117023.84	103.3	29.5	120.4	
Tb	159	He	2859289.58	0.5	2866479.19	99.75	29.5	120.4	
Bi	209	No Gas	4623273.06	2.0	4424692.92	104.49	29.5	120.4	

Sample Report

Sample Name SN5717-001

File Name 190SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:35:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.043	ppb	4.9	1058.97	100	
11	B	6	No Gas	79.139	ppb	5.1	11489.38	1000	
23	Na	45	He	715.593	ppb	1.9	20126.46	200000	
24	Mg	45	He	40994.124	ppb	0.8	459352.81	200000	
27	Al	45	He	111057.558	ppb	1.1	481383.31	200000	
28	Si	45	H2	2612.746	ppb	1.8	19529.72	10000	
39	K	45	He	14480.337	ppb	0.3	151128.33	200000	
40	Ca	45	H2	32463.829	ppb	0.9	2294613.35	200000	
51	V	89	He	189.685	ppb	0.5	33371.52	1000	
52	Cr	89	He	137.970	ppb	1.2	29779.21	2000	
55	Mn	89	He	4783.194	ppb	0.3	491455.22	2000	
56	Fe	89	H2	220477.819	ppb	0.2	70598763.78	100000	
59	Co	89	He	89.904	ppb	2.1	32835.95	1000	
60	Ni	89	He	203.413	ppb	1.2	21085.42	1000	
63	Cu	89	He	221.324	ppb	0.7	62536.30	2000	
66	Zn	89	He	796.196	ppb	0.3	30671.29	2000	
75	As	89	He	80.113	ppb	1.9	2522.51	1000	
78	Se	89	H2	2.164	ppb	20.6	35.00	1000	
88	Sr	89	He	95.201	ppb	3.2	14620.52	2000	
95	Mo	89	He	18.131	ppb	4.5	3322.75	1000	
107	Ag	89	He	0.386	ppb	1.8	242.23	100	
111	Cd	89	He	2.356	ppb	1.2	189.26	1000	
118	Sn	159	He	40.649	ppb	3.7	6982.06	1000	
121	Sb	159	No Gas	1.189	ppb	17.5	1868.88	1000	
137	Ba	159	No Gas	450.637	ppb	7.8	264908.64	2000	
182	W	159	No Gas	0.217	ppb	21.6	377.10	1000	
205	Tl	209	No Gas	3.250	ppb	8.9	8495.68	1000	
208	Pb	209	No Gas	175.579	ppb	8.1	632485.15	2000	
232	Th	209	No Gas	38.942	ppb	10.2	146941.50	1000	
238	U	209	No Gas	6.750	ppb	9.6	23889.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1195567.39	3.1	1537409.87	77.77	29.5	120.4	
Sc	45	No Gas	3125063.21	3.3	3373253.08	92.64	29.5	120.4	
Sc	45	H2	352370.10	1.4	415670.69	84.77	29.5	120.4	
Sc	45	He	73208.60	0.9	81171.76	90.19	29.5	120.4	
Ge	72	No Gas	742614.05	3.5	779333.11	95.29	29.5	120.4	
Ge	72	H2	128291.35	0.9	153246.58	83.72	29.5	120.4	
Ge	72	He	57277.30	0.1	63135.03	90.72	29.5	120.4	
Y	89	H2	2565896.98	0.4	2642116.11	97.12	29.5	120.4	
Y	89	He	544954.30	0.2	544041.92	100.17	29.5	120.4	
Tb	159	No Gas	8317682.58	2.9	8117023.84	102.47	29.5	120.4	
Tb	159	He	2841385.52	0.2	2866479.19	99.12	29.5	120.4	
Bi	209	No Gas	4434681.50	3.1	4424692.92	100.23	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	191_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:37:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.392	ppb	5.4	25109.15	25	97.57	89.8	110.2	
11	B	6	No Gas	26.746	ppb	3.0	18798.35	25	106.98	89.8	110.2	
23	Na	45	He	4986.798	ppb	2.2	507972.70	5000	99.74	89.8	110.2	
24	Mg	45	He	4854.703	ppb	2.3	269673.70	5000	97.09	89.8	110.2	
27	Al	45	He	474.612	ppb	0.5	10237.37	500	94.92	89.8	110.2	
28	Si	45	H2	477.171	ppb	1.7	17987.92	500	95.43	89.8	110.2	
39	K	45	He	4926.403	ppb	1.6	247743.50	5000	98.53	89.8	110.2	
40	Ca	45	H2	4935.956	ppb	1.3	1758090.60	5000	98.72	89.8	110.2	
51	V	89	He	23.782	ppb	2.9	19346.08	25	95.13	89.8	110.2	
52	Cr	89	He	24.108	ppb	1.5	23967.89	25	96.43	89.8	110.2	
55	Mn	89	He	24.189	ppb	2.8	11455.95	25	96.76	89.8	110.2	
56	Fe	89	H2	4862.669	ppb	1.2	7222849.94	5000	97.25	89.8	110.2	
59	Co	89	He	24.436	ppb	1.6	41100.26	25	97.74	89.8	110.2	
60	Ni	89	He	24.567	ppb	0.0	11745.39	25	98.27	89.8	110.2	
63	Cu	89	He	24.523	ppb	2.4	32083.19	25	98.09	89.8	110.2	
66	Zn	89	He	24.348	ppb	4.1	4369.73	25	97.39	89.8	110.2	
75	As	89	He	24.154	ppb	4.5	3499.16	25	96.62	89.8	110.2	
78	Se	89	H2	24.131	ppb	0.9	1784.54	25	96.52	89.8	110.2	
88	Sr	89	He	24.006	ppb	2.6	16974.35	25	96.02	89.8	110.2	
95	Mo	89	He	24.311	ppb	2.5	19849.44	25	97.24	89.8	110.2	
107	Ag	89	He	18.764	ppb	1.3	51813.08	25	75.06	89.8	110.2	> +/- 10%
111	Cd	89	He	24.942	ppb	2.9	9173.94	25	99.77	89.8	110.2	
118	Sn	159	He	23.042	ppb	0.7	19316.67	25	92.17	89.8	110.2	
121	Sb	159	No Gas	23.368	ppb	3.1	169666.34	25	93.47	89.8	110.2	
137	Ba	159	No Gas	23.192	ppb	3.2	66231.21	25	92.77	89.8	110.2	
182	W	159	No Gas	22.904	ppb	4.4	132362.63	25	91.62	89.8	110.2	
205	Tl	209	No Gas	23.530	ppb	4.1	301369.94	25	94.12	89.8	110.2	
208	Pb	209	No Gas	23.328	ppb	4.3	413095.48	25	93.31	89.8	110.2	
232	Th	209	No Gas	22.770	ppb	4.8	422136.16	25	91.08	89.8	110.2	
238	U	209	No Gas	22.733	ppb	4.8	395472.72	25	90.93	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1186907.40	1.0	1537409.87	77.2	29.5	120.4	
Sc	45	No Gas	3073694.34	0.8	3373253.08	91.12	29.5	120.4	
Sc	45	H2	355076.15	1.6	415670.69	85.42	29.5	120.4	
Sc	45	He	72540.90	1.9	81171.76	89.37	29.5	120.4	
Ge	72	No Gas	730931.49	0.7	779333.11	93.79	29.5	120.4	
Ge	72	H2	132696.65	0.8	153246.58	86.59	29.5	120.4	
Ge	72	He	58307.09	1.4	63135.03	92.35	29.5	120.4	
Y	89	H2	2378446.75	1.1	2642116.11	90.02	29.5	120.4	
Y	89	He	502025.89	1.7	544041.92	92.28	29.5	120.4	
Tb	159	No Gas	8068006.62	0.8	8117023.84	99.4	29.5	120.4	
Tb	159	He	2792085.55	1.4	2866479.19	97.4	29.5	120.4	
Bi	209	No Gas	4352798.58	0.9	4424692.92	98.38	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	192_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/20/2020 11:40:34 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.046	ppb	52.0	63.34	0.2	
11	B	6	No Gas	3.953	ppb	2.7	3438.31	4	Failed DoD
23	Na	45	He	43.230	ppb	11.3	9329.99	200	
24	Mg	45	He	-1.160	ppb	N/A	464.48	20	
27	Al	45	He	0.279	ppb	141.1	47.78	20	
28	Si	45	H2	5.842	ppb	14.2	427.15	100	
39	K	45	He	26.254	ppb	53.1	10559.18	200	
40	Ca	45	H2	4.163	ppb	4.9	3074.88	20	
51	V	89	He	0.436	ppb	13.0	543.37	1	
52	Cr	89	He	0.097	ppb	26.2	123.98	1	
55	Mn	89	He	0.220	ppb	19.0	110.65	0.4	Failed DoD
56	Fe	89	H2	3.195	ppb	10.9	12349.16	20	
59	Co	89	He	0.013	ppb	107.0	28.89	0.2	
60	Ni	89	He	-0.047	ppb	N/A	15.56	0.4	
63	Cu	89	He	-0.104	ppb	N/A	246.68	0.6	
66	Zn	89	He	0.082	ppb	67.0	72.23	2	
75	As	89	He	0.058	ppb	57.2	12.33	1	
78	Se	89	H2	0.069	ppb	26.2	5.50	1	
88	Sr	89	He	0.011	ppb	73.5	13.34	1	
95	Mo	89	He	-0.006	ppb	N/A	107.78	1	
107	Ag	89	He	0.007	ppb	61.2	27.78	0.2	
111	Cd	89	He	0.006	ppb	143.0	2.96	0.2	
118	Sn	159	He	0.351	ppb	11.7	357.79	1	
121	Sb	159	No Gas	0.017	ppb	63.9	220.25	0.2	
137	Ba	159	No Gas	0.049	ppb	29.3	156.84	0.4	
182	W	159	No Gas	0.084	ppb	6.9	604.03	1	
205	Tl	209	No Gas	0.022	ppb	24.7	310.35	0.2	
208	Pb	209	No Gas	0.081	ppb	5.2	1615.21	0.2	
232	Th	209	No Gas	0.264	ppb	39.9	5083.51	1	
238	U	209	No Gas	0.022	ppb	33.3	383.77	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1204197.62	1.4	1537409.87	78.33	29.5	120.4	
Sc	45	No Gas	2989861.66	1.4	3373253.08	88.63	29.5	120.4	
Sc	45	H2	345039.98	2.5	415670.69	83.01	29.5	120.4	
Sc	45	He	68638.83	4.8	81171.76	84.56	29.5	120.4	
Ge	72	No Gas	718398.20	1.4	779333.11	92.18	29.5	120.4	
Ge	72	H2	128368.41	1.5	153246.58	83.77	29.5	120.4	
Ge	72	He	54860.73	3.3	63135.03	86.89	29.5	120.4	
Y	89	H2	2349833.58	1.8	2642116.11	88.94	29.5	120.4	
Y	89	He	481735.09	4.1	544041.92	88.55	29.5	120.4	
Tb	159	No Gas	8095297.03	0.5	8117023.84	99.73	29.5	120.4	
Tb	159	He	2760641.69	4.0	2866479.19	96.31	29.5	120.4	
Bi	209	No Gas	4370942.87	0.8	4424692.92	98.79	29.5	120.4	

Sample Report

Sample Name SN5717-005

File Name 193SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:43:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.609	ppb	12.0	1363.45	100	
11	B	6	No Gas	86.688	ppb	3.0	12335.65	1000	
23	Na	45	He	714.381	ppb	3.9	21927.90	200000	
24	Mg	45	He	48855.375	ppb	2.0	597151.31	200000	
27	Al	45	He	126387.237	ppb	2.3	597677.31	200000	
28	Si	45	H2	3254.438	ppb	3.6	25583.16	10000	
39	K	45	He	16879.991	ppb	1.9	190400.79	200000	
40	Ca	45	H2	40678.012	ppb	3.2	3030583.88	200000	
51	V	89	He	206.337	ppb	0.8	39267.82	1000	
52	Cr	89	He	162.967	ppb	1.6	38059.33	2000	
55	Mn	89	He	5489.793	ppb	1.7	610421.09	2000	
56	Fe	89	H2	267299.112	ppb	2.4	90299002.49	100000	
59	Co	89	He	97.805	ppb	1.4	38658.05	1000	
60	Ni	89	He	259.039	ppb	1.5	29047.58	1000	
63	Cu	89	He	284.551	ppb	1.2	86884.24	2000	
66	Zn	89	He	918.327	ppb	2.0	38272.19	2000	
75	As	89	He	87.221	ppb	1.3	2971.98	1000	
78	Se	89	H2	2.765	ppb	12.7	47.00	1000	
88	Sr	89	He	110.949	ppb	2.1	18437.37	2000	
95	Mo	89	He	18.295	ppb	1.4	3628.40	1000	
107	Ag	89	He	0.739	ppb	5.1	491.14	100	
111	Cd	89	He	2.797	ppb	3.5	242.97	1000	
118	Sn	159	He	42.412	ppb	4.3	7573.51	1000	
121	Sb	159	No Gas	13.878	ppb	3.4	21070.03	1000	
137	Ba	159	No Gas	528.713	ppb	1.2	314309.28	2000	
182	W	159	No Gas	0.388	ppb	14.9	587.34	1000	
205	Tl	209	No Gas	3.369	ppb	3.4	8903.02	1000	
208	Pb	209	No Gas	6131.756	ppb	2.0	22326196.40	2000	
232	Th	209	No Gas	45.350	ppb	1.4	173037.06	1000	
238	U	209	No Gas	7.889	ppb	1.9	28233.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1177124.62	0.7	1537409.87	76.57	29.5	120.4	
Sc	45	No Gas	3165694.47	3.2	3373253.08	93.85	29.5	120.4	
Sc	45	H2	371647.20	2.7	415670.69	89.41	29.5	120.4	
Sc	45	He	79892.49	2.3	81171.76	98.42	29.5	120.4	
Ge	72	No Gas	745655.41	1.4	779333.11	95.68	29.5	120.4	
Ge	72	H2	133717.80	0.8	153246.58	87.26	29.5	120.4	
Ge	72	He	61365.32	1.4	63135.03	97.2	29.5	120.4	
Y	89	H2	2707722.24	1.6	2642116.11	102.48	29.5	120.4	
Y	89	He	589852.45	1.5	544041.92	108.42	29.5	120.4	
Tb	159	No Gas	8397100.71	2.5	8117023.84	103.45	29.5	120.4	
Tb	159	He	2956709.33	1.8	2866479.19	103.15	29.5	120.4	
Bi	209	No Gas	4475250.15	1.6	4424692.92	101.14	29.5	120.4	

Sample Report

Sample Name SN5717-005L

File Name 194SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:45:45 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.006	ppb	3.3	272.23	100	
11	B	6	No Gas	111.051	ppb	2.4	3868.42	1000	
23	Na	45	He	694.405	ppb	11.5	8919.35	200000	
24	Mg	45	He	51969.453	ppb	1.5	124241.78	200000	
27	Al	45	He	136085.254	ppb	2.0	125428.91	200000	
28	Si	45	H2	3202.339	ppb	8.5	5367.00	10000	
39	K	45	He	18253.589	ppb	3.2	48444.82	200000	
40	Ca	45	H2	41030.431	ppb	2.2	630235.23	200000	
51	V	89	He	226.476	ppb	3.0	8120.43	1000	
52	Cr	89	He	179.619	ppb	2.7	7750.73	2000	
55	Mn	89	He	6130.579	ppb	1.0	125531.84	2000	
56	Fe	89	H2	288133.174	ppb	1.6	18488757.07	100000	
59	Co	89	He	113.057	ppb	2.6	8234.10	1000	
60	Ni	89	He	283.411	ppb	6.5	5881.46	1000	
63	Cu	89	He	319.557	ppb	2.8	18292.56	2000	
66	Zn	89	He	1022.536	ppb	2.1	7898.07	2000	
75	As	89	He	94.816	ppb	3.3	598.41	1000	
78	Se	89	H2	2.877	ppb	39.7	9.67	1000	
88	Sr	89	He	121.661	ppb	3.3	3727.30	2000	
95	Mo	89	He	19.436	ppb	6.2	808.95	1000	
107	Ag	89	He	0.884	ppb	5.3	116.67	100	
111	Cd	89	He	3.140	ppb	6.7	51.11	1000	
118	Sn	159	He	43.791	ppb	1.8	1590.16	1000	
121	Sb	159	No Gas	13.677	ppb	12.5	4222.09	1000	
137	Ba	159	No Gas	547.017	ppb	3.5	64949.88	2000	
182	W	159	No Gas	0.220	ppb	43.7	173.53	1000	
205	Tl	209	No Gas	3.132	ppb	3.5	1692.00	1000	
208	Pb	209	No Gas	6165.712	ppb	3.7	4529189.84	2000	
232	Th	209	No Gas	44.133	ppb	4.4	34111.42	1000	
238	U	209	No Gas	7.791	ppb	5.7	5627.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234582.18	0.4	1537409.87	80.3	29.5	120.4	
Sc	45	No Gas	3334683.66	0.4	3373253.08	98.86	29.5	120.4	
Sc	45	H2	382082.80	1.4	415670.69	91.92	29.5	120.4	
Sc	45	He	77830.16	2.3	81171.76	95.88	29.5	120.4	
Ge	72	No Gas	778734.39	0.4	779333.11	99.92	29.5	120.4	
Ge	72	H2	140702.97	1.9	153246.58	91.81	29.5	120.4	
Ge	72	He	61735.07	1.3	63135.03	97.78	29.5	120.4	
Y	89	H2	2570397.71	1.1	2642116.11	97.29	29.5	120.4	
Y	89	He	543033.34	1.6	544041.92	99.81	29.5	120.4	
Tb	159	No Gas	8385680.08	0.3	8117023.84	103.31	29.5	120.4	
Tb	159	He	2896671.20	1.1	2866479.19	101.05	29.5	120.4	
Bi	209	No Gas	4515422.45	0.3	4424692.92	102.05	29.5	120.4	

Sample Report

Sample Name SN5717-005A

File Name 195SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:48:18 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.773	ppb	6.0	3497.22	100	
11	B	6	No Gas	276.001	ppb	5.6	40802.96	1000	
23	Na	45	He	10583.519	ppb	1.0	233302.29	200000	
24	Mg	45	He	50638.613	ppb	0.7	599268.43	200000	
27	Al	45	He	130974.637	ppb	0.6	599719.17	200000	
28	Si	45	H2	8472.717	ppb	10.3	65325.02	10000	
39	K	45	He	26785.053	ppb	0.3	286322.93	200000	
40	Ca	45	H2	43018.357	ppb	10.5	3160452.63	200000	
51	V	89	He	249.680	ppb	2.1	46393.74	1000	
52	Cr	89	He	208.287	ppb	0.9	47546.78	2000	
55	Mn	89	He	5508.017	ppb	0.9	598772.33	2000	
56	Fe	89	H2	278920.791	ppb	9.9	91372944.72	100000	
59	Co	89	He	106.615	ppb	1.5	41196.40	1000	
60	Ni	89	He	275.496	ppb	0.5	30200.01	1000	
63	Cu	89	He	311.902	ppb	1.2	93059.35	2000	
66	Zn	89	He	979.387	ppb	1.1	39901.35	2000	
75	As	89	He	130.627	ppb	1.1	4349.16	1000	
78	Se	89	H2	49.622	ppb	11.4	809.82	1000	
88	Sr	89	He	156.209	ppb	1.6	25378.60	2000	
95	Mo	89	He	64.337	ppb	3.1	12131.31	1000	
107	Ag	89	He	10.642	ppb	2.0	6760.83	100	
111	Cd	89	He	11.973	ppb	2.6	1013.02	1000	
118	Sn	159	He	90.757	ppb	0.7	15721.91	1000	
121	Sb	159	No Gas	23.265	ppb	4.6	34288.28	1000	
137	Ba	159	No Gas	538.998	ppb	4.2	311688.32	2000	
182	W	159	No Gas	46.244	ppb	3.4	54186.64	1000	
205	Tl	209	No Gas	12.984	ppb	3.6	32795.73	1000	
208	Pb	209	No Gas	5948.222	ppb	4.7	20748883.00	2000	
232	Th	209	No Gas	53.295	ppb	5.1	194822.76	1000	
238	U	209	No Gas	17.156	ppb	4.4	58817.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273659.28	1.1	1537409.87	82.84	29.5	120.4	
Sc	45	No Gas	3322604.65	1.1	3373253.08	98.5	29.5	120.4	
Sc	45	H2	368330.19	7.9	415670.69	88.61	29.5	120.4	
Sc	45	He	77334.04	0.8	81171.76	95.27	29.5	120.4	
Ge	72	No Gas	761159.57	1.7	779333.11	97.67	29.5	120.4	
Ge	72	H2	133636.11	5.8	153246.58	87.2	29.5	120.4	
Ge	72	He	60086.44	0.6	63135.03	95.17	29.5	120.4	
Y	89	H2	2637185.82	6.9	2642116.11	99.81	29.5	120.4	
Y	89	He	576614.04	1.0	544041.92	105.99	29.5	120.4	
Tb	159	No Gas	8171035.50	1.7	8117023.84	100.67	29.5	120.4	
Tb	159	He	2881807.49	0.6	2866479.19	100.53	29.5	120.4	
Bi	209	No Gas	4288383.65	1.3	4424692.92	96.92	29.5	120.4	

Sample Report

Sample Name SN5717-005S

File Name 196SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:50:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.446	ppb	3.4	11597.24	100	
11	B	6	No Gas	505.831	ppb	4.1	74168.31	1000	
23	Na	45	He	7187.852	ppb	1.9	161533.58	200000	
24	Mg	45	He	48095.993	ppb	2.4	573416.99	200000	
27	Al	45	He	127982.664	ppb	2.5	590353.41	200000	
28	Si	45	H2	3021.565	ppb	1.3	24124.15	10000	
39	K	45	He	26434.963	ppb	2.2	284815.74	200000	
40	Ca	45	H2	41970.998	ppb	2.6	3170977.87	200000	
51	V	89	He	632.568	ppb	1.7	116425.37	1000	
52	Cr	89	He	330.103	ppb	1.3	74856.33	2000	
55	Mn	89	He	7463.875	ppb	2.3	806195.04	2000	
56	Fe	89	H2	250054.946	ppb	2.8	84443442.97	100000	
59	Co	89	He	537.197	ppb	1.4	206227.73	1000	
60	Ni	89	He	649.527	ppb	1.8	70686.61	1000	
63	Cu	89	He	494.799	ppb	1.6	146433.05	2000	
66	Zn	89	He	1375.594	ppb	1.5	55661.79	2000	
75	As	89	He	182.791	ppb	2.6	6044.32	1000	
78	Se	89	H2	88.267	ppb	5.4	1484.85	1000	
88	Sr	89	He	542.854	ppb	2.6	87608.05	2000	
95	Mo	89	He	103.225	ppb	2.7	19260.82	1000	
107	Ag	89	He	44.467	ppb	1.6	28035.26	100	
111	Cd	89	He	212.570	ppb	2.4	17849.25	1000	
118	Sn	159	He	453.417	ppb	3.5	77870.60	1000	
121	Sb	159	No Gas	24.781	ppb	3.6	37045.93	1000	
137	Ba	159	No Gas	2318.780	ppb	3.4	1360503.18	2000	
182	W	159	No Gas	50.750	ppb	0.3	60340.60	1000	
205	Tl	209	No Gas	96.059	ppb	3.8	244128.39	1000	
208	Pb	209	No Gas	630.315	ppb	1.4	2214407.43	2000	
232	Th	209	No Gas	127.485	ppb	3.5	468976.61	1000	
238	U	209	No Gas	98.038	ppb	2.7	338454.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1273937.21	0.9	1537409.87	82.86	29.5	120.4	
Sc	45	No Gas	3359266.86	0.8	3373253.08	99.59	29.5	120.4	
Sc	45	H2	376881.84	3.1	415670.69	90.67	29.5	120.4	
Sc	45	He	77924.74	1.7	81171.76	96	29.5	120.4	
Ge	72	No Gas	769303.48	1.1	779333.11	98.71	29.5	120.4	
Ge	72	H2	136902.47	1.4	153246.58	89.33	29.5	120.4	
Ge	72	He	59839.33	1.7	63135.03	94.78	29.5	120.4	
Y	89	H2	2707394.62	2.6	2642116.11	102.47	29.5	120.4	
Y	89	He	573018.53	1.5	544041.92	105.33	29.5	120.4	
Tb	159	No Gas	8290894.46	1.1	8117023.84	102.14	29.5	120.4	
Tb	159	He	2868749.05	2.0	2866479.19	100.08	29.5	120.4	
Bi	209	No Gas	4318975.60	1.3	4424692.92	97.61	29.5	120.4	

Sample Report

Sample Name SN5717-005P

File Name 197SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:53:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.803	ppb	8.7	11314.78	100	
11	B	6	No Gas	481.514	ppb	7.2	69801.34	1000	
23	Na	45	He	7044.240	ppb	1.6	158244.86	200000	
24	Mg	45	He	53779.803	ppb	1.2	640445.97	200000	
27	Al	45	He	135901.080	ppb	1.0	626241.22	200000	
28	Si	45	H2	2724.625	ppb	19.6	21540.72	10000	
39	K	45	He	25350.128	ppb	0.8	273279.85	200000	
40	Ca	45	H2	44487.939	ppb	18.4	3330415.33	200000	
51	V	89	He	624.762	ppb	0.7	114952.57	1000	
52	Cr	89	He	339.910	ppb	0.6	77049.41	2000	
55	Mn	89	He	7225.855	ppb	0.2	780264.34	2000	
56	Fe	89	H2	279084.018	ppb	18.2	92933402.63	100000	
59	Co	89	He	535.716	ppb	0.7	205583.84	1000	
60	Ni	89	He	668.134	ppb	1.0	72686.86	1000	
63	Cu	89	He	539.630	ppb	0.9	159603.31	2000	
66	Zn	89	He	1454.415	ppb	0.5	58825.88	2000	
75	As	89	He	190.029	ppb	1.3	6281.77	1000	
78	Se	89	H2	85.261	ppb	15.3	1418.51	1000	
88	Sr	89	He	542.865	ppb	0.4	87585.49	2000	
95	Mo	89	He	110.116	ppb	0.6	20532.71	1000	
107	Ag	89	He	44.022	ppb	1.1	27745.79	100	
111	Cd	89	He	209.737	ppb	0.1	17606.73	1000	
118	Sn	159	He	436.689	ppb	0.2	75250.11	1000	
121	Sb	159	No Gas	22.367	ppb	8.2	33251.63	1000	
137	Ba	159	No Gas	2284.739	ppb	8.8	1332480.49	2000	
182	W	159	No Gas	48.754	ppb	9.8	57602.46	1000	
205	Tl	209	No Gas	92.773	ppb	8.0	235955.36	1000	
208	Pb	209	No Gas	569.344	ppb	8.3	2001147.55	2000	
232	Th	209	No Gas	128.065	ppb	9.6	471254.75	1000	
238	U	209	No Gas	94.144	ppb	10.2	325036.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260677.05	3.6	1537409.87	82	29.5	120.4	
Sc	45	No Gas	3356277.05	3.9	3373253.08	99.5	29.5	120.4	
Sc	45	H2	379366.41	13.2	415670.69	91.27	29.5	120.4	
Sc	45	He	77831.02	1.3	81171.76	95.88	29.5	120.4	
Ge	72	No Gas	776251.84	3.4	779333.11	99.6	29.5	120.4	
Ge	72	H2	137850.91	10.3	153246.58	89.95	29.5	120.4	
Ge	72	He	59987.94	0.7	63135.03	95.02	29.5	120.4	
Y	89	H2	2709979.78	12.7	2642116.11	102.57	29.5	120.4	
Y	89	He	572730.69	0.3	544041.92	105.27	29.5	120.4	
Tb	159	No Gas	8256719.25	3.5	8117023.84	101.72	29.5	120.4	
Tb	159	He	2876992.04	0.8	2866479.19	100.37	29.5	120.4	
Bi	209	No Gas	4329645.75	3.8	4424692.92	97.85	29.5	120.4	

Sample Report

Sample Name SN5717-007

File Name 198SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:56:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.512	ppb	12.5	1311.22	100	
11	B	6	No Gas	110.846	ppb	2.0	15214.02	1000	
23	Na	45	He	1095.916	ppb	2.9	26159.62	200000	
24	Mg	45	He	103157.655	ppb	2.9	1084415.48	200000	
27	Al	45	He	115465.659	ppb	3.2	469865.08	200000	
28	Si	45	H2	3418.618	ppb	1.4	24610.71	10000	
39	K	45	He	18702.131	ppb	2.9	180512.56	200000	
40	Ca	45	H2	279877.464	ppb	2.2	19091016.38	200000	
51	V	89	He	210.021	ppb	0.9	35546.87	1000	
52	Cr	89	He	159.482	ppb	1.8	33130.62	2000	
55	Mn	89	He	5522.066	ppb	2.1	546152.86	2000	
56	Fe	89	H2	238399.040	ppb	2.1	74961080.94	100000	
59	Co	89	He	102.577	ppb	1.7	36064.14	1000	
60	Ni	89	He	258.016	ppb	2.3	25735.49	1000	
63	Cu	89	He	310.709	ppb	2.7	84341.19	2000	
66	Zn	89	He	915.174	ppb	1.4	33928.67	2000	
75	As	89	He	91.599	ppb	4.5	2775.25	1000	
78	Se	89	H2	3.045	ppb	6.4	48.17	1000	
88	Sr	89	He	347.955	ppb	2.5	51419.23	2000	
95	Mo	89	He	18.788	ppb	4.8	3310.53	1000	
107	Ag	89	He	0.598	ppb	4.2	355.58	100	
111	Cd	89	He	2.887	ppb	5.0	222.97	1000	
118	Sn	159	He	43.019	ppb	4.1	7136.62	1000	
121	Sb	159	No Gas	1.877	ppb	4.1	2773.41	1000	
137	Ba	159	No Gas	557.824	ppb	3.6	313653.65	2000	
182	W	159	No Gas	0.390	ppb	17.3	557.30	1000	
205	Tl	209	No Gas	4.423	ppb	4.4	10946.93	1000	
208	Pb	209	No Gas	484.541	ppb	4.2	1653873.62	2000	
232	Th	209	No Gas	52.369	ppb	3.4	187304.93	1000	
238	U	209	No Gas	6.975	ppb	4.4	23401.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1150063.42	1.8	1537409.87	74.81	29.5	120.4	
Sc	45	No Gas	3073501.73	1.6	3373253.08	91.11	29.5	120.4	
Sc	45	H2	340278.95	0.9	415670.69	81.86	29.5	120.4	
Sc	45	He	68756.96	2.2	81171.76	84.71	29.5	120.4	
Ge	72	No Gas	711198.52	1.5	779333.11	91.26	29.5	120.4	
Ge	72	H2	122976.75	1.4	153246.58	80.25	29.5	120.4	
Ge	72	He	54159.52	1.1	63135.03	85.78	29.5	120.4	
Y	89	H2	2519947.85	1.1	2642116.11	95.38	29.5	120.4	
Y	89	He	524668.17	1.3	544041.92	96.44	29.5	120.4	
Tb	159	No Gas	7943749.33	0.7	8117023.84	97.87	29.5	120.4	
Tb	159	He	2747245.69	2.1	2866479.19	95.84	29.5	120.4	
Bi	209	No Gas	4196651.71	1.0	4424692.92	94.85	29.5	120.4	

Sample Report

Sample Name SN5717-007L

File Name 199SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/20/2020 11:58:40 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	7.297	ppb	23.7	303.34	100	
11	B	6	No Gas	134.481	ppb	7.6	4199.65	1000	
23	Na	45	He	991.504	ppb	10.7	8709.05	200000	
24	Mg	45	He	110279.636	ppb	1.4	224399.58	200000	
27	Al	45	He	125016.208	ppb	1.4	98334.32	200000	
28	Si	45	H2	3365.371	ppb	1.7	5183.69	10000	
39	K	45	He	20297.898	ppb	1.8	44970.89	200000	
40	Ca	45	H2	281739.162	ppb	0.5	3973997.93	200000	
51	V	89	He	239.410	ppb	2.5	7425.61	1000	
52	Cr	89	He	179.130	ppb	1.8	6701.75	2000	
55	Mn	89	He	6417.682	ppb	1.6	113911.39	2000	
56	Fe	89	H2	259349.845	ppb	0.4	15529274.67	100000	
59	Co	89	He	109.825	ppb	2.3	6933.36	1000	
60	Ni	89	He	298.676	ppb	2.9	5373.45	1000	
63	Cu	89	He	364.763	ppb	0.8	18055.73	2000	
66	Zn	89	He	1082.709	ppb	0.8	7249.95	2000	
75	As	89	He	101.105	ppb	7.4	553.07	1000	
78	Se	89	H2	2.476	ppb	27.6	7.83	1000	
88	Sr	89	He	393.386	ppb	5.1	10432.15	2000	
95	Mo	89	He	20.289	ppb	9.0	728.94	1000	
107	Ag	89	He	0.712	ppb	2.2	83.34	100	
111	Cd	89	He	3.676	ppb	21.6	51.85	1000	
118	Sn	159	He	47.252	ppb	7.5	1546.81	1000	
121	Sb	159	No Gas	1.643	ppb	13.5	567.31	1000	
137	Ba	159	No Gas	546.599	ppb	7.6	62161.32	2000	
182	W	159	No Gas	0.050	ppb	366.5	126.81	1000	
205	Tl	209	No Gas	3.798	ppb	12.2	1989.06	1000	
208	Pb	209	No Gas	470.264	ppb	6.3	335878.14	2000	
232	Th	209	No Gas	46.574	ppb	6.7	34974.73	1000	
238	U	209	No Gas	6.622	ppb	7.9	4649.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1146079.96	1.8	1537409.87	74.55	29.5	120.4	
Sc	45	No Gas	3004526.90	1.7	3373253.08	89.07	29.5	120.4	
Sc	45	H2	351689.09	1.3	415670.69	84.61	29.5	120.4	
Sc	45	He	66418.81	3.4	81171.76	81.83	29.5	120.4	
Ge	72	No Gas	712261.99	2.3	779333.11	91.39	29.5	120.4	
Ge	72	H2	129100.10	1.6	153246.58	84.24	29.5	120.4	
Ge	72	He	53065.51	3.7	63135.03	84.05	29.5	120.4	
Y	89	H2	2398167.77	0.6	2642116.11	90.77	29.5	120.4	
Y	89	He	470850.03	3.6	544041.92	86.55	29.5	120.4	
Tb	159	No Gas	8038328.84	1.6	8117023.84	99.03	29.5	120.4	
Tb	159	He	2618371.59	3.5	2866479.19	91.34	29.5	120.4	
Bi	209	No Gas	4392206.27	2.3	4424692.92	99.27	29.5	120.4	

Sample Report

Sample Name SN5717-007A

File Name 200SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:01:18 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	15.572	ppb	9.8	3079.34	100	
11	B	6	No Gas	290.748	ppb	7.5	38308.16	1000	
23	Na	45	He	10887.072	ppb	0.6	210539.93	200000	
24	Mg	45	He	100250.925	ppb	0.6	1041000.88	200000	
27	Al	45	He	112342.893	ppb	0.5	451593.38	200000	
28	Si	45	H2	8124.534	ppb	5.7	57298.12	10000	
39	K	45	He	27682.866	ppb	0.2	259466.27	200000	
40	Ca	45	H2	276228.443	ppb	1.5	18561858.33	200000	
51	V	89	He	247.012	ppb	0.5	41311.46	1000	
52	Cr	89	He	199.081	ppb	0.8	40899.38	2000	
55	Mn	89	He	5385.740	ppb	0.3	526904.35	2000	
56	Fe	89	H2	235416.437	ppb	0.9	72953987.25	100000	
59	Co	89	He	106.634	ppb	1.9	37082.38	1000	
60	Ni	89	He	266.624	ppb	1.7	26304.24	1000	
63	Cu	89	He	327.156	ppb	0.4	87826.64	2000	
66	Zn	89	He	973.170	ppb	1.0	35682.10	2000	
75	As	89	He	133.756	ppb	1.5	4007.35	1000	
78	Se	89	H2	46.480	ppb	3.6	717.99	1000	
88	Sr	89	He	381.882	ppb	0.6	55823.06	2000	
95	Mo	89	He	65.138	ppb	1.5	11053.76	1000	
107	Ag	89	He	10.321	ppb	1.8	5901.48	100	
111	Cd	89	He	12.425	ppb	2.0	945.97	1000	
118	Sn	159	He	87.485	ppb	1.3	14521.64	1000	
121	Sb	159	No Gas	11.307	ppb	9.4	16151.28	1000	
137	Ba	159	No Gas	549.018	ppb	9.2	306869.28	2000	
182	W	159	No Gas	46.989	ppb	9.5	53218.75	1000	
205	Tl	209	No Gas	13.871	ppb	9.2	34230.38	1000	
208	Pb	209	No Gas	467.496	ppb	8.5	1593666.02	2000	
232	Th	209	No Gas	59.447	ppb	8.6	212308.53	1000	
238	U	209	No Gas	16.220	ppb	10.8	54319.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1137301.47	2.7	1537409.87	73.98	29.5	120.4	
Sc	45	No Gas	2968204.22	2.8	3373253.08	87.99	29.5	120.4	
Sc	45	H2	335233.51	1.4	415670.69	80.65	29.5	120.4	
Sc	45	He	67887.85	0.4	81171.76	83.63	29.5	120.4	
Ge	72	No Gas	693384.22	3.1	779333.11	88.97	29.5	120.4	
Ge	72	H2	122512.96	0.7	153246.58	79.94	29.5	120.4	
Ge	72	He	53665.18	0.8	63135.03	85	29.5	120.4	
Y	89	H2	2483396.88	0.8	2642116.11	93.99	29.5	120.4	
Y	89	He	518897.17	0.1	544041.92	95.38	29.5	120.4	
Tb	159	No Gas	7907786.68	2.3	8117023.84	97.42	29.5	120.4	
Tb	159	He	2760855.96	0.1	2866479.19	96.32	29.5	120.4	
Bi	209	No Gas	4197003.26	2.8	4424692.92	94.85	29.5	120.4	

Sample Report

Sample Name SN5717-007S

File Name 201SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:03:49 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	55.199	ppb	6.2	10726.54	100	
11	B	6	No Gas	586.029	ppb	5.7	75417.14	1000	
23	Na	45	He	7850.848	ppb	2.5	158932.15	200000	
24	Mg	45	He	95445.815	ppb	1.8	1027821.41	200000	
27	Al	45	He	146228.486	ppb	1.9	609553.79	200000	
28	Si	45	H2	3696.931	ppb	3.3	27106.24	10000	
39	K	45	He	33211.130	ppb	1.9	320885.67	200000	
40	Ca	45	H2	204549.035	ppb	1.4	14222324.09	200000	
51	V	89	He	686.537	ppb	1.5	117619.53	1000	
52	Cr	89	He	365.681	ppb	1.6	77195.59	2000	
55	Mn	89	He	5986.838	ppb	1.5	602078.10	2000	
56	Fe	89	H2	269597.035	ppb	0.6	86119038.51	100000	
59	Co	89	He	554.475	ppb	3.3	198149.75	1000	
60	Ni	89	He	729.073	ppb	2.0	73861.68	1000	
63	Cu	89	He	551.075	ppb	1.2	151788.26	2000	
66	Zn	89	He	1485.950	ppb	1.0	55974.12	2000	
75	As	89	He	184.863	ppb	1.2	5691.45	1000	
78	Se	89	H2	87.009	ppb	0.3	1385.18	1000	
88	Sr	89	He	768.998	ppb	2.0	115540.01	2000	
95	Mo	89	He	127.923	ppb	0.4	22196.45	1000	
107	Ag	89	He	48.898	ppb	3.2	28697.80	100	
111	Cd	89	He	224.092	ppb	2.7	17518.07	1000	
118	Sn	159	He	492.010	ppb	2.0	82110.80	1000	
121	Sb	159	No Gas	24.467	ppb	6.2	35459.86	1000	
137	Ba	159	No Gas	2409.333	ppb	6.6	1370363.01	2000	
182	W	159	No Gas	50.576	ppb	6.4	58286.19	1000	
205	Tl	209	No Gas	100.302	ppb	5.1	251319.16	1000	
208	Pb	209	No Gas	620.011	ppb	6.4	2146744.05	2000	
232	Th	209	No Gas	148.721	ppb	7.7	539184.95	1000	
238	U	209	No Gas	104.212	ppb	7.0	354589.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1120022.01	1.4	1537409.87	72.85	29.5	120.4	
Sc	45	No Gas	2997709.74	0.9	3373253.08	88.87	29.5	120.4	
Sc	45	H2	346834.19	0.8	415670.69	83.44	29.5	120.4	
Sc	45	He	70410.42	1.1	81171.76	86.74	29.5	120.4	
Ge	72	No Gas	701870.84	0.9	779333.11	90.06	29.5	120.4	
Ge	72	H2	124567.05	1.3	153246.58	81.29	29.5	120.4	
Ge	72	He	54772.16	1.2	63135.03	86.75	29.5	120.4	
Y	89	H2	2559755.53	0.2	2642116.11	96.88	29.5	120.4	
Y	89	He	533441.58	1.0	544041.92	98.05	29.5	120.4	
Tb	159	No Gas	8039719.67	1.1	8117023.84	99.05	29.5	120.4	
Tb	159	He	2786967.28	1.1	2866479.19	97.23	29.5	120.4	
Bi	209	No Gas	4259329.65	1.8	4424692.92	96.26	29.5	120.4	

Sample Report

Sample Name SN5717-007P

File Name 202SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:06:27 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.082	ppb	7.7	10317.35	100	
11	B	6	No Gas	592.103	ppb	5.9	76215.50	1000	
23	Na	45	He	7768.463	ppb	1.8	155725.37	200000	
24	Mg	45	He	100331.615	ppb	1.0	1069485.11	200000	
27	Al	45	He	135397.878	ppb	1.6	558680.66	200000	
28	Si	45	H2	3669.226	ppb	2.2	26328.92	10000	
39	K	45	He	34404.928	ppb	1.3	328708.00	200000	
40	Ca	45	H2	274437.603	ppb	2.1	18673223.06	200000	
51	V	89	He	646.249	ppb	0.9	110773.61	1000	
52	Cr	89	He	340.041	ppb	0.6	71813.72	2000	
55	Mn	89	He	5611.275	ppb	0.5	564531.16	2000	
56	Fe	89	H2	245719.157	ppb	1.0	77570216.65	100000	
59	Co	89	He	520.491	ppb	0.6	186095.64	1000	
60	Ni	89	He	653.716	ppb	0.4	66260.73	1000	
63	Cu	89	He	495.430	ppb	0.3	136558.01	2000	
66	Zn	89	He	1272.264	ppb	0.7	47950.91	2000	
75	As	89	He	174.786	ppb	1.8	5383.64	1000	
78	Se	89	H2	86.347	ppb	1.2	1358.51	1000	
88	Sr	89	He	786.038	ppb	0.7	118153.80	2000	
95	Mo	89	He	99.398	ppb	0.3	17280.34	1000	
107	Ag	89	He	45.267	ppb	1.4	26581.22	100	
111	Cd	89	He	213.233	ppb	0.7	16677.41	1000	
118	Sn	159	He	443.247	ppb	0.5	74884.91	1000	
121	Sb	159	No Gas	21.132	ppb	8.3	30699.06	1000	
137	Ba	159	No Gas	2340.175	ppb	7.9	1333670.17	2000	
182	W	159	No Gas	41.345	ppb	8.6	47758.03	1000	
205	Tl	209	No Gas	97.512	ppb	8.2	244881.64	1000	
208	Pb	209	No Gas	558.037	ppb	6.8	1937249.89	2000	
232	Th	209	No Gas	144.224	ppb	9.2	524081.69	1000	
238	U	209	No Gas	99.295	ppb	8.5	338659.60	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1121101.86	3.0	1537409.87	72.92	29.5	120.4	
Sc	45	No Gas	2987468.82	3.1	3373253.08	88.56	29.5	120.4	
Sc	45	H2	339423.65	0.5	415670.69	81.66	29.5	120.4	
Sc	45	He	69694.20	1.1	81171.76	85.86	29.5	120.4	
Ge	72	No Gas	698977.40	3.3	779333.11	89.69	29.5	120.4	
Ge	72	H2	124873.86	1.8	153246.58	81.49	29.5	120.4	
Ge	72	He	54733.45	0.7	63135.03	86.69	29.5	120.4	
Y	89	H2	2529672.66	0.2	2642116.11	95.74	29.5	120.4	
Y	89	He	533614.43	0.7	544041.92	98.08	29.5	120.4	
Tb	159	No Gas	8063725.30	2.9	8117023.84	99.34	29.5	120.4	
Tb	159	He	2820795.55	1.3	2866479.19	98.41	29.5	120.4	
Bi	209	No Gas	4273719.93	3.2	4424692.92	96.59	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	203_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:09:02 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.611	ppb	8.0	23978.33	25	98.44	89.8	110.2	
11	B	6	No Gas	26.964	ppb	4.1	17941.67	25	107.86	89.8	110.2	
23	Na	45	He	4804.543	ppb	0.4	487525.34	5000	96.09	89.8	110.2	
24	Mg	45	He	4720.648	ppb	0.2	261130.27	5000	94.41	89.8	110.2	
27	Al	45	He	473.220	ppb	6.6	10159.50	500	94.64	89.8	110.2	
28	Si	45	H2	461.777	ppb	2.6	16845.23	500	92.36	89.8	110.2	
39	K	45	He	4788.580	ppb	1.1	240043.72	5000	95.77	89.8	110.2	
40	Ca	45	H2	4968.007	ppb	0.9	1711630.50	5000	99.36	89.8	110.2	
51	V	89	He	22.857	ppb	0.6	18740.82	25	91.43	89.8	110.2	
52	Cr	89	He	23.297	ppb	1.0	23331.61	25	93.19	89.8	110.2	
55	Mn	89	He	24.044	ppb	4.0	11469.30	25	96.18	89.8	110.2	
56	Fe	89	H2	4811.388	ppb	1.7	6996552.61	5000	96.23	89.8	110.2	
59	Co	89	He	24.338	ppb	2.3	41225.50	25	97.35	89.8	110.2	
60	Ni	89	He	23.369	ppb	1.0	11253.81	25	93.48	89.8	110.2	
63	Cu	89	He	23.931	ppb	1.8	31545.27	25	95.72	89.8	110.2	
66	Zn	89	He	23.770	ppb	1.4	4299.72	25	95.08	89.8	110.2	
75	As	89	He	23.131	ppb	3.1	3376.11	25	92.52	89.8	110.2	
78	Se	89	H2	24.127	ppb	2.1	1746.70	25	96.51	89.8	110.2	
88	Sr	89	He	23.565	ppb	1.0	16785.29	25	94.26	89.8	110.2	
95	Mo	89	He	23.895	ppb	2.8	19652.56	25	95.58	89.8	110.2	
107	Ag	89	He	18.298	ppb	1.8	50885.08	25	73.19	89.8	110.2	> +/- 10%
111	Cd	89	He	24.583	ppb	0.8	9108.70	25	98.33	89.8	110.2	
118	Sn	159	He	22.568	ppb	2.2	19299.90	25	90.27	89.8	110.2	
121	Sb	159	No Gas	23.076	ppb	5.3	166363.34	25	92.3	89.8	110.2	
137	Ba	159	No Gas	23.474	ppb	5.0	66573.45	25	93.9	89.8	110.2	
182	W	159	No Gas	23.118	ppb	6.0	132640.54	25	92.47	89.8	110.2	
205	Tl	209	No Gas	23.697	ppb	5.0	302205.38	25	94.79	89.8	110.2	
208	Pb	209	No Gas	23.738	ppb	5.3	418529.56	25	94.95	89.8	110.2	
232	Th	209	No Gas	23.196	ppb	5.3	428179.67	25	92.78	89.8	110.2	
238	U	209	No Gas	23.280	ppb	5.1	403262.92	25	93.12	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1124429.53	2.0	1537409.87	73.14	29.5	120.4	
Sc	45	No Gas	2988619.79	2.4	3373253.08	88.6	29.5	120.4	
Sc	45	H2	343440.37	1.3	415670.69	82.62	29.5	120.4	
Sc	45	He	72212.43	0.3	81171.76	88.96	29.5	120.4	
Ge	72	No Gas	709980.70	2.7	779333.11	91.1	29.5	120.4	
Ge	72	H2	129484.01	1.0	153246.58	84.49	29.5	120.4	
Ge	72	He	57552.09	0.7	63135.03	91.16	29.5	120.4	
Y	89	H2	2328766.50	1.8	2642116.11	88.14	29.5	120.4	
Y	89	He	505607.45	1.3	544041.92	92.94	29.5	120.4	
Tb	159	No Gas	8018415.23	2.5	8117023.84	98.79	29.5	120.4	
Tb	159	He	2847710.62	0.2	2866479.19	99.35	29.5	120.4	
Bi	209	No Gas	4336970.57	2.5	4424692.92	98.02	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	204_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:11:39 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.100	ppb	23.1	113.34	0.2	Failed DoD
11	B	6	No Gas	2.823	ppb	4.1	2521.41	4	Failed DoD
23	Na	45	He	13.235	ppb	41.7	6311.76	200	
24	Mg	45	He	0.796	ppb	188.0	557.83	20	
27	Al	45	He	3.449	ppb	46.4	111.12	20	
28	Si	45	H2	3.404	ppb	57.6	333.71	100	
39	K	45	He	22.952	ppb	62.7	10164.09	200	
40	Ca	45	H2	11.540	ppb	4.5	5554.65	20	Failed DoD
51	V	89	He	0.831	ppb	11.5	831.17	1	Failed DoD
52	Cr	89	He	0.111	ppb	6.5	134.64	1	
55	Mn	89	He	0.439	ppb	12.5	207.30	0.4	Fail All Methods□ Failed DoD
56	Fe	89	H2	12.450	ppb	2.7	25651.59	20	Failed DoD
59	Co	89	He	0.032	ppb	52.2	60.01	0.2	
60	Ni	89	He	0.005	ppb	382.9	38.89	0.4	
63	Cu	89	He	-0.065	ppb	N/A	290.01	0.6	
66	Zn	89	He	0.139	ppb	26.7	80.00	2	
75	As	89	He	0.063	ppb	4.6	12.67	1	
78	Se	89	H2	0.082	ppb	42.1	6.33	1	
88	Sr	89	He	0.025	ppb	60.0	22.22	1	
95	Mo	89	He	-0.038	ppb	N/A	81.12	1	
107	Ag	89	He	0.009	ppb	12.4	34.44	0.2	
111	Cd	89	He	0.022	ppb	14.2	8.52	0.2	
118	Sn	159	He	0.364	ppb	11.2	364.46	1	
121	Sb	159	No Gas	0.023	ppb	18.2	253.62	0.2	
137	Ba	159	No Gas	0.084	ppb	6.1	253.62	0.4	
182	W	159	No Gas	0.090	ppb	20.9	627.39	1	
205	Tl	209	No Gas	0.032	ppb	29.0	430.49	0.2	
208	Pb	209	No Gas	0.172	ppb	6.1	3173.73	0.2	Failed DoD
232	Th	209	No Gas	0.248	ppb	30.4	4672.80	1	
238	U	209	No Gas	0.022	ppb	28.5	380.43	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1140466.87	0.4	1537409.87	74.18	29.5	120.4	
Sc	45	No Gas	2936127.33	1.5	3373253.08	87.04	29.5	120.4	
Sc	45	H2	340766.32	2.5	415670.69	81.98	29.5	120.4	
Sc	45	He	67113.52	8.1	81171.76	82.68	29.5	120.4	
Ge	72	No Gas	704449.87	0.7	779333.11	90.39	29.5	120.4	
Ge	72	H2	126914.04	2.1	153246.58	82.82	29.5	120.4	
Ge	72	He	53458.28	7.2	63135.03	84.67	29.5	120.4	
Y	89	H2	2325907.44	1.8	2642116.11	88.03	29.5	120.4	
Y	89	He	473845.91	7.4	544041.92	87.1	29.5	120.4	
Tb	159	No Gas	7957434.88	1.4	8117023.84	98.03	29.5	120.4	
Tb	159	He	2728866.99	7.7	2866479.19	95.2	29.5	120.4	
Bi	209	No Gas	4277979.29	1.5	4424692.92	96.68	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	205_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:14:15 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.762	ppb	9.1	24413.51	25	99.05	89.8	110.2	
11	B	6	No Gas	25.266	ppb	6.8	17055.03	25	101.06	89.8	110.2	
23	Na	45	He	4862.904	ppb	1.2	497506.61	5000	97.26	89.8	110.2	
24	Mg	45	He	4735.108	ppb	1.0	264115.56	5000	94.7	89.8	110.2	
27	Al	45	He	465.804	ppb	1.7	10085.03	500	93.16	89.8	110.2	
28	Si	45	H2	479.994	ppb	2.4	18228.64	500	96	89.8	110.2	
39	K	45	He	4897.911	ppb	0.6	247354.91	5000	97.96	89.8	110.2	
40	Ca	45	H2	4952.648	ppb	2.2	1777293.74	5000	99.05	89.8	110.2	
51	V	89	He	23.832	ppb	0.5	19547.50	25	95.33	89.8	110.2	
52	Cr	89	He	23.797	ppb	1.2	23853.10	25	95.19	89.8	110.2	
55	Mn	89	He	23.784	ppb	1.2	11357.84	25	95.14	89.8	110.2	
56	Fe	89	H2	4819.880	ppb	2.0	7232195.27	5000	96.4	89.8	110.2	
59	Co	89	He	24.507	ppb	1.3	41555.35	25	98.03	89.8	110.2	
60	Ni	89	He	24.358	ppb	2.5	11738.65	25	97.43	89.8	110.2	
63	Cu	89	He	24.389	ppb	1.1	32173.28	25	97.56	89.8	110.2	
66	Zn	89	He	23.968	ppb	4.7	4338.62	25	95.87	89.8	110.2	
75	As	89	He	23.592	ppb	0.9	3447.14	25	94.37	89.8	110.2	
78	Se	89	H2	23.951	ppb	3.0	1789.04	25	95.8	89.8	110.2	
88	Sr	89	He	23.842	ppb	1.2	16998.83	25	95.37	89.8	110.2	
95	Mo	89	He	24.449	ppb	0.8	20127.71	25	97.8	89.8	110.2	
107	Ag	89	He	18.572	ppb	0.5	51700.20	25	74.29	89.8	110.2	> +/- 10%
111	Cd	89	He	24.708	ppb	1.1	9163.56	25	98.83	89.8	110.2	
118	Sn	159	He	23.047	ppb	2.3	19575.91	25	92.19	89.8	110.2	
121	Sb	159	No Gas	23.142	ppb	6.5	168005.94	25	92.57	89.8	110.2	
137	Ba	159	No Gas	23.041	ppb	7.0	65795.61	25	92.16	89.8	110.2	
182	W	159	No Gas	22.968	ppb	7.3	132704.08	25	91.87	89.8	110.2	
205	Tl	209	No Gas	23.561	ppb	7.2	302102.75	25	94.24	89.8	110.2	
208	Pb	209	No Gas	23.430	ppb	7.0	415363.45	25	93.72	89.8	110.2	
232	Th	209	No Gas	22.629	ppb	8.6	419855.65	25	90.52	89.8	110.2	
238	U	209	No Gas	22.848	ppb	8.2	397819.53	25	91.39	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1139085.80	3.5	1537409.87	74.09	29.5	120.4	
Sc	45	No Gas	3057586.49	2.9	3373253.08	90.64	29.5	120.4	
Sc	45	H2	357774.83	1.5	415670.69	86.07	29.5	120.4	
Sc	45	He	72819.33	1.0	81171.76	89.71	29.5	120.4	
Ge	72	No Gas	732206.85	3.2	779333.11	93.95	29.5	120.4	
Ge	72	H2	134316.36	0.7	153246.58	87.65	29.5	120.4	
Ge	72	He	57907.39	0.5	63135.03	91.72	29.5	120.4	
Y	89	H2	2402796.17	1.1	2642116.11	90.94	29.5	120.4	
Y	89	He	506043.61	0.3	544041.92	93.02	29.5	120.4	
Tb	159	No Gas	8077988.91	3.0	8117023.84	99.52	29.5	120.4	
Tb	159	He	2828839.85	0.5	2866479.19	98.69	29.5	120.4	
Bi	209	No Gas	4364155.09	3.5	4424692.92	98.63	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	206_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:16:53 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.101	ppb	13.0	116.67	0.2	Failed DoD
11	B	6	No Gas	2.235	ppb	2.5	2195.80	4	Failed DoD
23	Na	45	He	13.687	ppb	46.4	6612.25	200	
24	Mg	45	He	1.699	ppb	324.4	622.30	20	
27	Al	45	He	2.343	ppb	87.7	91.12	20	
28	Si	45	H2	4.621	ppb	25.3	393.78	100	
39	K	45	He	19.842	ppb	38.0	10404.12	200	
40	Ca	45	H2	7.049	ppb	4.9	4188.55	20	
51	V	89	He	0.617	ppb	4.2	685.60	1	Failed DoD
52	Cr	89	He	0.122	ppb	13.1	147.98	1	
55	Mn	89	He	0.336	ppb	58.6	165.31	0.4	Failed DoD
56	Fe	89	H2	6.263	ppb	2.0	17309.90	20	
59	Co	89	He	0.039	ppb	51.1	71.12	0.2	
60	Ni	89	He	0.005	ppb	590.9	40.00	0.4	
63	Cu	89	He	-0.094	ppb	N/A	261.12	0.6	
66	Zn	89	He	0.095	ppb	82.7	74.45	2	
75	As	89	He	0.088	ppb	33.5	16.33	1	
78	Se	89	H2	0.049	ppb	33.7	4.17	1	
88	Sr	89	He	0.029	ppb	78.4	25.56	1	
95	Mo	89	He	-0.006	ppb	N/A	107.78	1	
107	Ag	89	He	0.015	ppb	48.5	50.00	0.2	
111	Cd	89	He	0.023	ppb	72.8	9.26	0.2	
118	Sn	159	He	0.336	ppb	15.5	346.69	1	
121	Sb	159	No Gas	0.033	ppb	35.3	330.38	0.2	
137	Ba	159	No Gas	0.064	ppb	50.8	196.88	0.4	
182	W	159	No Gas	0.118	ppb	8.6	800.92	1	
205	Tl	209	No Gas	0.038	ppb	56.5	507.25	0.2	
208	Pb	209	No Gas	0.106	ppb	9.2	2062.39	0.2	Failed DoD
232	Th	209	No Gas	0.379	ppb	47.6	7150.25	1	
238	U	209	No Gas	0.032	ppb	25.7	553.97	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1170428.42	1.6	1537409.87	76.13	29.5	120.4	
Sc	45	No Gas	3009328.75	3.1	3373253.08	89.21	29.5	120.4	
Sc	45	H2	354805.40	1.1	415670.69	85.36	29.5	120.4	
Sc	45	He	69438.21	3.2	81171.76	85.54	29.5	120.4	
Ge	72	No Gas	721733.14	2.8	779333.11	92.61	29.5	120.4	
Ge	72	H2	133487.54	0.9	153246.58	87.11	29.5	120.4	
Ge	72	He	54836.58	2.4	63135.03	86.86	29.5	120.4	
Y	89	H2	2414447.85	0.6	2642116.11	91.38	29.5	120.4	
Y	89	He	483743.60	3.2	544041.92	88.92	29.5	120.4	
Tb	159	No Gas	8095459.95	3.8	8117023.84	99.73	29.5	120.4	
Tb	159	He	2773091.69	3.0	2866479.19	96.74	29.5	120.4	
Bi	209	No Gas	4364443.66	3.0	4424692.92	98.64	29.5	120.4	

Sample Report

Sample Name SN5717-008

File Name 207SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:19:26 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.034	ppb	2.7	972.29	100	
11	B	6	No Gas	94.918	ppb	4.6	12534.72	1000	
23	Na	45	He	1392.077	ppb	2.1	32355.77	200000	
24	Mg	45	He	252990.072	ppb	1.8	2704144.68	200000	
27	Al	45	He	88139.410	ppb	1.5	364832.59	200000	
28	Si	45	H2	3319.315	ppb	2.8	24255.07	10000	
39	K	45	He	16745.128	ppb	1.2	165388.37	200000	
40	Ca	45	H2	544173.021	ppb	0.6	37665768.60	200000	
51	V	89	He	180.436	ppb	0.8	30619.57	1000	
52	Cr	89	He	128.943	ppb	2.0	26833.80	2000	
55	Mn	89	He	4576.085	ppb	1.3	453323.79	2000	
56	Fe	89	H2	182292.806	ppb	0.2	57028658.32	100000	
59	Co	89	He	72.994	ppb	3.3	25703.03	1000	
60	Ni	89	He	180.731	ppb	0.7	18067.71	1000	
63	Cu	89	He	251.461	ppb	1.6	68449.23	2000	
66	Zn	89	He	597.265	ppb	3.5	22196.11	2000	
75	As	89	He	67.594	ppb	1.5	2052.71	1000	
78	Se	89	H2	1.767	ppb	12.3	28.00	1000	
88	Sr	89	He	442.784	ppb	1.0	65541.45	2000	
95	Mo	89	He	14.627	ppb	1.2	2608.12	1000	
107	Ag	89	He	0.502	ppb	8.9	301.13	100	
111	Cd	89	He	1.838	ppb	6.4	142.59	1000	
118	Sn	159	He	50.628	ppb	2.9	8658.67	1000	
121	Sb	159	No Gas	2.871	ppb	6.9	4342.25	1000	
137	Ba	159	No Gas	464.113	ppb	5.8	270132.99	2000	
182	W	159	No Gas	0.313	ppb	12.5	487.22	1000	
205	Tl	209	No Gas	2.727	ppb	7.4	6959.66	1000	
208	Pb	209	No Gas	602.817	ppb	7.2	2118661.01	2000	
232	Th	209	No Gas	35.488	ppb	8.7	130702.60	1000	
238	U	209	No Gas	6.640	ppb	11.4	22919.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1098520.20	2.2	1537409.87	71.45	29.5	120.4	
Sc	45	No Gas	3001870.59	2.3	3373253.08	88.99	29.5	120.4	
Sc	45	H2	345279.02	0.9	415670.69	83.07	29.5	120.4	
Sc	45	He	69911.12	1.2	81171.76	86.13	29.5	120.4	
Ge	72	No Gas	707730.97	2.6	779333.11	90.81	29.5	120.4	
Ge	72	H2	125452.35	0.9	153246.58	81.86	29.5	120.4	
Ge	72	He	55017.83	1.1	63135.03	87.14	29.5	120.4	
Y	89	H2	2506814.59	0.9	2642116.11	94.88	29.5	120.4	
Y	89	He	525453.78	1.0	544041.92	96.58	29.5	120.4	
Tb	159	No Gas	8229455.99	2.1	8117023.84	101.39	29.5	120.4	
Tb	159	He	2834851.69	0.6	2866479.19	98.9	29.5	120.4	
Bi	209	No Gas	4326455.68	3.0	4424692.92	97.78	29.5	120.4	

Sample Report

Sample Name SN5717-009

File Name 208SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:22:05 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.310	ppb	2.3	1210.09	100	
11	B	6	No Gas	125.167	ppb	4.6	16248.48	1000	
23	Na	45	He	1051.475	ppb	3.4	26276.65	200000	
24	Mg	45	He	73800.008	ppb	0.7	805743.72	200000	
27	Al	45	He	107867.130	ppb	1.4	455803.63	200000	
28	Si	45	H2	3535.592	ppb	5.3	25582.28	10000	
39	K	45	He	19962.349	ppb	1.7	199400.23	200000	
40	Ca	45	H2	238891.540	ppb	1.0	16385928.78	200000	
51	V	89	He	192.537	ppb	0.9	32801.14	1000	
52	Cr	89	He	167.164	ppb	0.5	34935.89	2000	
55	Mn	89	He	4133.956	ppb	1.3	411349.07	2000	
56	Fe	89	H2	208315.642	ppb	1.0	65444447.98	100000	
59	Co	89	He	82.569	ppb	1.6	29205.46	1000	
60	Ni	89	He	230.237	ppb	2.3	23108.64	1000	
63	Cu	89	He	280.728	ppb	1.2	76708.57	2000	
66	Zn	89	He	647.501	ppb	1.7	24168.30	2000	
75	As	89	He	59.770	ppb	3.6	1823.66	1000	
78	Se	89	H2	1.599	ppb	8.1	25.50	1000	
88	Sr	89	He	364.851	ppb	1.5	54244.30	2000	
95	Mo	89	He	11.643	ppb	4.3	2110.24	1000	
107	Ag	89	He	0.385	ppb	8.6	234.46	100	
111	Cd	89	He	1.830	ppb	7.0	142.60	1000	
118	Sn	159	He	49.486	ppb	4.3	8547.45	1000	
121	Sb	159	No Gas	3.400	ppb	7.5	5193.51	1000	
137	Ba	159	No Gas	521.908	ppb	4.8	307813.99	2000	
182	W	159	No Gas	0.233	ppb	41.3	397.12	1000	
205	Tl	209	No Gas	2.748	ppb	7.7	7170.10	1000	
208	Pb	209	No Gas	822.552	ppb	4.9	2956634.45	2000	
232	Th	209	No Gas	40.883	ppb	4.7	154024.80	1000	
238	U	209	No Gas	5.640	ppb	4.3	19931.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1094132.71	3.2	1537409.87	71.17	29.5	120.4	
Sc	45	No Gas	3040150.90	3.5	3373253.08	90.13	29.5	120.4	
Sc	45	H2	342147.60	0.4	415670.69	82.31	29.5	120.4	
Sc	45	He	71369.32	0.9	81171.76	87.92	29.5	120.4	
Ge	72	No Gas	720049.72	4.1	779333.11	92.39	29.5	120.4	
Ge	72	H2	125712.52	1.5	153246.58	82.03	29.5	120.4	
Ge	72	He	55691.58	0.9	63135.03	88.21	29.5	120.4	
Y	89	H2	2517434.09	0.2	2642116.11	95.28	29.5	120.4	
Y	89	He	527778.97	0.5	544041.92	97.01	29.5	120.4	
Tb	159	No Gas	8339593.00	2.8	8117023.84	102.74	29.5	120.4	
Tb	159	He	2862997.04	0.9	2866479.19	99.88	29.5	120.4	
Bi	209	No Gas	4423025.58	3.1	4424692.92	99.96	29.5	120.4	

Sample Report

Sample Name SN5717-012

File Name 209SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:24:38 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.794	ppb	7.8	1097.86	100	
11	B	6	No Gas	89.360	ppb	4.9	11642.86	1000	
23	Na	45	He	717.861	ppb	4.8	21018.83	200000	
24	Mg	45	He	51236.378	ppb	2.1	598082.14	200000	
27	Al	45	He	92205.481	ppb	1.5	416486.67	200000	
28	Si	45	H2	3099.026	ppb	0.8	24014.60	10000	
39	K	45	He	17005.866	ppb	1.7	183122.75	200000	
40	Ca	45	H2	78001.794	ppb	2.4	5722992.41	200000	
51	V	89	He	170.264	ppb	1.1	31215.40	1000	
52	Cr	89	He	137.460	ppb	1.4	30892.02	2000	
55	Mn	89	He	3327.072	ppb	1.6	355925.40	2000	
56	Fe	89	H2	226125.639	ppb	3.0	75365806.49	100000	
59	Co	89	He	82.759	ppb	4.2	31463.88	1000	
60	Ni	89	He	205.171	ppb	0.9	22147.07	1000	
63	Cu	89	He	275.182	ppb	2.1	80844.95	2000	
66	Zn	89	He	733.266	ppb	1.5	29416.21	2000	
75	As	89	He	93.858	ppb	2.6	3076.02	1000	
78	Se	89	H2	1.635	ppb	9.5	27.67	1000	
88	Sr	89	He	148.545	ppb	2.6	23745.62	2000	
95	Mo	89	He	27.594	ppb	2.9	5197.84	1000	
107	Ag	89	He	0.487	ppb	10.7	315.57	100	
111	Cd	89	He	1.701	ppb	2.2	142.60	1000	
118	Sn	159	He	49.475	ppb	1.5	8797.61	1000	
121	Sb	159	No Gas	4.182	ppb	3.4	6308.58	1000	
137	Ba	159	No Gas	479.083	ppb	2.4	280049.77	2000	
182	W	159	No Gas	0.159	ppb	13.6	307.01	1000	
205	Tl	209	No Gas	2.729	ppb	0.3	7049.84	1000	
208	Pb	209	No Gas	320.185	ppb	3.0	1139409.53	2000	
232	Th	209	No Gas	48.780	ppb	2.3	181866.20	1000	
238	U	209	No Gas	6.519	ppb	2.4	22799.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1079433.44	0.7	1537409.87	70.21	29.5	120.4	
Sc	45	No Gas	3060167.22	1.7	3373253.08	90.72	29.5	120.4	
Sc	45	H2	366013.41	2.2	415670.69	88.05	29.5	120.4	
Sc	45	He	76292.96	1.3	81171.76	93.99	29.5	120.4	
Ge	72	No Gas	728694.38	1.4	779333.11	93.5	29.5	120.4	
Ge	72	H2	133623.03	1.6	153246.58	87.19	29.5	120.4	
Ge	72	He	59677.06	0.8	63135.03	94.52	29.5	120.4	
Y	89	H2	2671743.31	2.1	2642116.11	101.12	29.5	120.4	
Y	89	He	567486.08	1.5	544041.92	104.31	29.5	120.4	
Tb	159	No Gas	8256604.25	1.6	8117023.84	101.72	29.5	120.4	
Tb	159	He	2946990.96	0.9	2866479.19	102.81	29.5	120.4	
Bi	209	No Gas	4373593.75	1.1	4424692.92	98.85	29.5	120.4	

Sample Report

Sample Name SN5717-018

File Name 210SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:27:22 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.394	ppb	10.5	907.84	100	
11	B	6	No Gas	43.543	ppb	3.5	6521.70	1000	
23	Na	45	He	360.825	ppb	3.8	14049.24	200000	
24	Mg	45	He	21370.120	ppb	0.6	260965.12	200000	
27	Al	45	He	117079.479	ppb	0.7	552433.67	200000	
28	Si	45	H2	3528.773	ppb	18.1	28902.85	10000	
39	K	45	He	8240.936	ppb	1.6	98323.11	200000	
40	Ca	45	H2	3359.533	ppb	14.2	263169.11	200000	
51	V	89	He	231.418	ppb	1.2	41925.47	1000	
52	Cr	89	He	130.758	ppb	1.5	29101.92	2000	
55	Mn	89	He	2634.487	ppb	0.6	279100.20	2000	
56	Fe	89	H2	201060.101	ppb	13.4	66983617.92	100000	
59	Co	89	He	60.325	ppb	0.3	22719.95	1000	
60	Ni	89	He	148.660	ppb	1.3	15899.58	1000	
63	Cu	89	He	156.488	ppb	1.4	45716.86	2000	
66	Zn	89	He	644.528	ppb	1.0	25613.12	2000	
75	As	89	He	72.609	ppb	1.2	2357.80	1000	
78	Se	89	H2	4.668	ppb	17.0	77.83	1000	
88	Sr	89	He	35.556	ppb	2.1	5634.70	2000	
95	Mo	89	He	16.852	ppb	2.6	3193.83	1000	
107	Ag	89	He	0.636	ppb	10.9	404.46	100	
111	Cd	89	He	2.540	ppb	4.8	210.37	1000	
118	Sn	159	He	58.884	ppb	1.8	10564.50	1000	
121	Sb	159	No Gas	2.425	ppb	3.2	3818.11	1000	
137	Ba	159	No Gas	332.911	ppb	3.3	200934.66	2000	
182	W	159	No Gas	0.408	ppb	16.0	620.71	1000	
205	Tl	209	No Gas	2.184	ppb	8.7	5841.24	1000	
208	Pb	209	No Gas	933.492	ppb	3.4	3433605.96	2000	
232	Th	209	No Gas	23.278	ppb	2.9	89815.02	1000	
238	U	209	No Gas	4.939	ppb	4.5	17859.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1172464.95	1.6	1537409.87	76.26	29.5	120.4	
Sc	45	No Gas	3372483.15	1.1	3373253.08	99.98	29.5	120.4	
Sc	45	H2	392004.70	10.7	415670.69	94.31	29.5	120.4	
Sc	45	He	79690.17	1.1	81171.76	98.17	29.5	120.4	
Ge	72	No Gas	796901.21	2.2	779333.11	102.25	29.5	120.4	
Ge	72	H2	142184.70	8.7	153246.58	92.78	29.5	120.4	
Ge	72	He	62363.79	1.1	63135.03	98.78	29.5	120.4	
Y	89	H2	2692316.21	9.5	2642116.11	101.9	29.5	120.4	
Y	89	He	561875.83	0.5	544041.92	103.28	29.5	120.4	
Tb	159	No Gas	8527506.54	0.9	8117023.84	105.06	29.5	120.4	
Tb	159	He	2977235.72	0.3	2866479.19	103.86	29.5	120.4	
Bi	209	No Gas	4522760.83	1.3	4424692.92	102.22	29.5	120.4	

Sample Report

Sample Name	SN5717-018L
File Name	211SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:29:59 AM
Sample Type	Sample
Total Dilution	25.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.868	ppb	18.6	260.01	100	
11	B	6	No Gas	54.758	ppb	4.4	2228.04	1000	
23	Na	45	He	-29.538	ppb	N/A	5907.80	200000	
24	Mg	45	He	21811.536	ppb	4.7	53554.09	200000	
27	Al	45	He	123345.830	ppb	4.8	115983.76	200000	
28	Si	45	H2	3828.507	ppb	6.9	6610.41	10000	
39	K	45	He	8898.803	ppb	6.8	29657.48	200000	
40	Ca	45	H2	3441.780	ppb	1.8	56543.40	200000	
51	V	89	He	240.757	ppb	6.7	8668.50	1000	
52	Cr	89	He	135.884	ppb	4.9	5912.18	2000	
55	Mn	89	He	2771.023	ppb	4.6	57131.73	2000	
56	Fe	89	H2	207797.967	ppb	1.2	13738648.48	100000	
59	Co	89	He	64.028	ppb	3.2	4701.14	1000	
60	Ni	89	He	157.525	ppb	10.9	3306.07	1000	
63	Cu	89	He	163.172	ppb	3.4	9618.11	2000	
66	Zn	89	He	692.142	ppb	4.9	5403.46	2000	
75	As	89	He	75.182	ppb	6.0	478.73	1000	
78	Se	89	H2	5.015	ppb	20.4	17.00	1000	
88	Sr	89	He	39.126	ppb	6.1	1211.21	2000	
95	Mo	89	He	15.343	ppb	10.7	670.04	1000	
107	Ag	89	He	0.653	ppb	40.9	88.89	100	
111	Cd	89	He	2.835	ppb	4.6	46.67	1000	
118	Sn	159	He	61.153	ppb	6.3	2216.94	1000	
121	Sb	159	No Gas	2.515	ppb	5.9	847.63	1000	
137	Ba	159	No Gas	342.156	ppb	2.3	40215.75	2000	
182	W	159	No Gas	0.271	ppb	60.3	183.54	1000	
205	Tl	209	No Gas	2.417	ppb	10.8	1284.84	1000	
208	Pb	209	No Gas	971.403	ppb	0.5	698641.91	2000	
232	Th	209	No Gas	22.281	ppb	2.8	16941.91	1000	
238	U	209	No Gas	4.946	ppb	3.6	3497.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1204016.40	1.2	1537409.87	78.31	29.5	120.4	
Sc	45	No Gas	3387506.21	1.9	3373253.08	100.42	29.5	120.4	
Sc	45	H2	396164.22	0.5	415670.69	95.31	29.5	120.4	
Sc	45	He	79478.37	4.1	81171.76	97.91	29.5	120.4	
Ge	72	No Gas	791627.83	1.4	779333.11	101.58	29.5	120.4	
Ge	72	H2	148808.98	0.9	153246.58	97.1	29.5	120.4	
Ge	72	He	62906.81	2.6	63135.03	99.64	29.5	120.4	
Y	89	H2	2647872.31	1.1	2642116.11	100.22	29.5	120.4	
Y	89	He	547376.89	4.3	544041.92	100.61	29.5	120.4	
Tb	159	No Gas	8302169.88	1.9	8117023.84	102.28	29.5	120.4	
Tb	159	He	2934797.32	4.3	2866479.19	102.38	29.5	120.4	
Bi	209	No Gas	4419685.15	0.9	4424692.92	99.89	29.5	120.4	

Sample Report

Sample Name SN5717-018A

File Name 212SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:32:40 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	13.726	ppb	4.6	2953.74	100	
11	B	6	No Gas	237.424	ppb	4.9	34124.33	1000	
23	Na	45	He	10106.417	ppb	1.8	225936.68	200000	
24	Mg	45	He	22069.523	ppb	1.2	264905.83	200000	
27	Al	45	He	117632.991	ppb	1.5	545616.82	200000	
28	Si	45	H2	7989.006	ppb	2.6	65007.83	10000	
39	K	45	He	17996.826	ppb	1.3	198389.18	200000	
40	Ca	45	H2	4260.493	ppb	1.8	331989.69	200000	
51	V	89	He	272.691	ppb	1.6	48508.92	1000	
52	Cr	89	He	174.589	ppb	0.5	38174.30	2000	
55	Mn	89	He	2613.457	ppb	0.6	272098.26	2000	
56	Fe	89	H2	198903.640	ppb	1.1	65457881.41	100000	
59	Co	89	He	68.195	ppb	0.8	25239.92	1000	
60	Ni	89	He	163.940	ppb	1.9	17227.79	1000	
63	Cu	89	He	181.161	ppb	0.8	51947.27	2000	
66	Zn	89	He	739.925	ppb	1.6	28887.41	2000	
75	As	89	He	117.756	ppb	0.3	3754.92	1000	
78	Se	89	H2	52.734	ppb	4.3	864.82	1000	
88	Sr	89	He	84.084	ppb	0.5	13085.59	2000	
95	Mo	89	He	64.985	ppb	3.0	11735.44	1000	
107	Ag	89	He	11.008	ppb	1.6	6697.45	100	
111	Cd	89	He	11.981	ppb	1.0	970.79	1000	
118	Sn	159	He	104.888	ppb	3.2	18457.73	1000	
121	Sb	159	No Gas	12.690	ppb	3.1	19168.51	1000	
137	Ba	159	No Gas	343.832	ppb	3.8	203320.28	2000	
182	W	159	No Gas	48.100	ppb	5.2	57625.83	1000	
205	Tl	209	No Gas	12.095	ppb	4.9	31216.38	1000	
208	Pb	209	No Gas	920.447	ppb	4.5	3280865.72	2000	
232	Th	209	No Gas	32.383	ppb	6.4	120983.20	1000	
238	U	209	No Gas	14.519	ppb	4.7	50863.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1235066.05	2.7	1537409.87	80.33	29.5	120.4	
Sc	45	No Gas	3418871.62	2.0	3373253.08	101.35	29.5	120.4	
Sc	45	H2	386593.93	1.5	415670.69	93	29.5	120.4	
Sc	45	He	78344.53	1.3	81171.76	96.52	29.5	120.4	
Ge	72	No Gas	795077.24	2.5	779333.11	102.02	29.5	120.4	
Ge	72	H2	141883.86	0.9	153246.58	92.59	29.5	120.4	
Ge	72	He	61040.78	0.4	63135.03	96.68	29.5	120.4	
Y	89	H2	2637097.03	1.2	2642116.11	99.81	29.5	120.4	
Y	89	He	552200.55	0.2	544041.92	101.5	29.5	120.4	
Tb	159	No Gas	8357571.89	1.6	8117023.84	102.96	29.5	120.4	
Tb	159	He	2929694.68	0.8	2866479.19	102.21	29.5	120.4	
Bi	209	No Gas	4384346.48	2.0	4424692.92	99.09	29.5	120.4	

Sample Report

Sample Name SN5717-018S

File Name 213SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:35:17 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.814	ppb	5.4	10696.53	100	
11	B	6	No Gas	480.299	ppb	4.7	68425.75	1000	
23	Na	45	He	6713.451	ppb	1.4	155856.55	200000	
24	Mg	45	He	26449.768	ppb	0.9	325237.82	200000	
27	Al	45	He	120792.738	ppb	1.3	574174.88	200000	
28	Si	45	H2	4162.661	ppb	6.0	34313.64	10000	
39	K	45	He	19814.010	ppb	1.2	222724.03	200000	
40	Ca	45	H2	5915.273	ppb	2.6	464694.85	200000	
51	V	89	He	662.903	ppb	1.2	119675.63	1000	
52	Cr	89	He	310.688	ppb	1.1	69104.25	2000	
55	Mn	89	He	2573.619	ppb	0.5	272702.52	2000	
56	Fe	89	H2	177316.632	ppb	1.7	58473084.78	100000	
59	Co	89	He	512.684	ppb	0.7	193052.80	1000	
60	Ni	89	He	569.078	ppb	1.0	60752.57	1000	
63	Cu	89	He	369.784	ppb	0.4	107455.11	2000	
66	Zn	89	He	1019.020	ppb	1.9	40459.56	2000	
75	As	89	He	153.043	ppb	1.6	4965.76	1000	
78	Se	89	H2	91.449	ppb	4.5	1502.35	1000	
88	Sr	89	He	511.894	ppb	0.9	81040.12	2000	
95	Mo	89	He	104.317	ppb	1.2	19092.79	1000	
107	Ag	89	He	47.751	ppb	1.4	29532.87	100	
111	Cd	89	He	222.004	ppb	0.9	18287.26	1000	
118	Sn	159	He	486.655	ppb	1.4	86188.73	1000	
121	Sb	159	No Gas	37.012	ppb	6.7	56293.84	1000	
137	Ba	159	No Gas	2085.873	ppb	6.5	1246239.18	2000	
182	W	159	No Gas	52.903	ppb	5.0	64059.62	1000	
205	Tl	209	No Gas	93.496	ppb	5.7	244230.22	1000	
208	Pb	209	No Gas	980.813	ppb	6.3	3540222.28	2000	
232	Th	209	No Gas	81.847	ppb	6.4	309470.18	1000	
238	U	209	No Gas	94.135	ppb	6.1	333954.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1237400.18	1.5	1537409.87	80.49	29.5	120.4	
Sc	45	No Gas	3435261.29	3.8	3373253.08	101.84	29.5	120.4	
Sc	45	H2	390533.85	3.0	415670.69	93.95	29.5	120.4	
Sc	45	He	80285.65	1.5	81171.76	98.91	29.5	120.4	
Ge	72	No Gas	797541.46	3.8	779333.11	102.34	29.5	120.4	
Ge	72	H2	142440.27	2.4	153246.58	92.95	29.5	120.4	
Ge	72	He	62034.55	0.5	63135.03	98.26	29.5	120.4	
Y	89	H2	2642980.34	1.8	2642116.11	100.03	29.5	120.4	
Y	89	He	561992.87	1.0	544041.92	103.3	29.5	120.4	
Tb	159	No Gas	8454678.83	3.7	8117023.84	104.16	29.5	120.4	
Tb	159	He	2957026.10	0.7	2866479.19	103.16	29.5	120.4	
Bi	209	No Gas	4444012.76	3.7	4424692.92	100.44	29.5	120.4	

Sample Report

Sample Name SN5717-018P

File Name 214SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b

Acq Time 7/21/2020 12:37:58 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	54.718	ppb	2.2	11709.55	100	
11	B	6	No Gas	498.701	ppb	2.6	70780.21	1000	
23	Na	45	He	6878.642	ppb	0.5	162710.32	200000	
24	Mg	45	He	30787.641	ppb	0.9	385959.85	200000	
27	Al	45	He	134001.543	ppb	0.4	649575.33	200000	
28	Si	45	H2	4388.781	ppb	8.5	37067.69	10000	
39	K	45	He	20820.308	ppb	0.5	238112.49	200000	
40	Ca	45	H2	5499.073	ppb	1.3	442484.57	200000	
51	V	89	He	692.845	ppb	0.3	127057.68	1000	
52	Cr	89	He	334.199	ppb	0.4	75523.08	2000	
55	Mn	89	He	2793.935	ppb	0.6	300771.18	2000	
56	Fe	89	H2	219001.202	ppb	1.3	73941884.28	100000	
59	Co	89	He	538.704	ppb	0.9	206094.50	1000	
60	Ni	89	He	615.167	ppb	0.6	66719.50	1000	
63	Cu	89	He	407.284	ppb	0.7	120193.97	2000	
66	Zn	89	He	1092.297	ppb	1.2	44059.31	2000	
75	As	89	He	185.345	ppb	0.6	6108.01	1000	
78	Se	89	H2	96.330	ppb	2.6	1620.69	1000	
88	Sr	89	He	522.149	ppb	0.7	83980.58	2000	
95	Mo	89	He	106.680	ppb	1.5	19833.88	1000	
107	Ag	89	He	48.276	ppb	1.5	30332.48	100	
111	Cd	89	He	224.718	ppb	0.5	18805.75	1000	
118	Sn	159	He	482.909	ppb	1.2	86006.19	1000	
121	Sb	159	No Gas	51.964	ppb	3.5	78787.48	1000	
137	Ba	159	No Gas	2205.690	ppb	2.0	1314380.32	2000	
182	W	159	No Gas	51.456	ppb	2.8	62124.04	1000	
205	Tl	209	No Gas	97.961	ppb	2.4	253062.63	1000	
208	Pb	209	No Gas	897.357	ppb	2.8	3203650.87	2000	
232	Th	209	No Gas	100.101	ppb	3.3	374304.21	1000	
238	U	209	No Gas	97.624	ppb	3.7	342513.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1232851.53	1.0	1537409.87	80.19	29.5	120.4	
Sc	45	No Gas	3443227.22	0.7	3373253.08	102.07	29.5	120.4	
Sc	45	H2	399734.45	1.7	415670.69	96.17	29.5	120.4	
Sc	45	He	81869.22	0.7	81171.76	100.86	29.5	120.4	
Ge	72	No Gas	800442.27	1.1	779333.11	102.71	29.5	120.4	
Ge	72	H2	144729.91	1.4	153246.58	94.44	29.5	120.4	
Ge	72	He	63083.00	1.5	63135.03	99.92	29.5	120.4	
Y	89	H2	2705823.44	1.4	2642116.11	102.41	29.5	120.4	
Y	89	He	570958.32	0.6	544041.92	104.95	29.5	120.4	
Tb	159	No Gas	8419932.58	0.6	8117023.84	103.73	29.5	120.4	
Tb	159	He	2973809.33	0.5	2866479.19	103.74	29.5	120.4	
Bi	209	No Gas	4389368.80	0.8	4424692.92	99.2	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW1
File Name	215_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:40:36 AM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.041	ppb	36.5	58.89	0.1	
B	11	6	No Gas	2.305	ppb	13.7	2363.61	2	200.8 PB Fails DoD
Na	23	45	He	-20.706	ppb	N/A	3791.39	100	
Mg	24	45	He	-2.062	ppb	N/A	486.71	10	
Al	27	45	He	3.844	ppb	9.1	141.12	10	
Si	28	45	H2	4.820	ppb	29.7	457.18	50	
K	39	45	He	24.786	ppb	67.1	12264.81	100	
Ca	40	45	H2	1.579	ppb	29.0	2546.99	10	
V	51	89	He	0.070	ppb	20.6	294.46	0.5	
Cr	52	89	He	0.026	ppb	62.4	62.66	0.5	
Mn	55	89	He	0.261	ppb	6.5	146.64	0.2	200.8 PB Fails DoD
Fe	56	89	H2	16.388	ppb	12.6	35578.08	10	200.8 PB Fails DoD
Co	59	89	He	0.024	ppb	41.8	51.11	0.1	
Ni	60	89	He	-0.012	ppb	N/A	35.56	0.2	
Cu	63	89	He	-0.206	ppb	N/A	135.56	0.3	
Zn	66	89	He	0.088	ppb	60.4	82.23	1	
As	75	89	He	0.023	ppb	79.5	8.33	0.5	
Se	78	89	H2	0.023	ppb	87.7	2.33	0.5	
Sr	88	89	He	0.019	ppb	77.2	21.11	0.5	
Mo	95	89	He	-0.108	ppb	N/A	31.11	0.5	
Ag	107	89	He	0.002	ppb	151.0	16.67	0.1	
Cd	111	89	He	0.009	ppb	43.7	4.81	0.1	
Sn	118	159	He	0.062	ppb	25.0	124.45	0.5	
Sb	121	159	No Gas	0.003	ppb	227.0	116.80	0.1	
Ba	137	159	No Gas	0.261	ppb	15.7	777.56	0.2	200.8 PB Fails DoD
W	182	159	No Gas	0.008	ppb	114.9	163.52	0.5	
Tl	205	209	No Gas	0.022	ppb	21.3	313.70	0.1	
[Pb]	206	209	No Gas	0.167	ppb	10.3	784.24	0.1	200.8 PB Fails DoD
[Pb]	207	209	No Gas	0.168	ppb	10.8	690.79	0.1	200.8 PB Fails DoD
Pb	208	209	No Gas	0.159	ppb	11.8	2993.50	0.1	200.8 PB Fails DoD
Th	232	209	No Gas	0.046	ppb	14.2	1018.04	0.5	
U	238	209	No Gas	0.016	ppb	13.2	276.98	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1234137.00	1.5	1537409.87	80.27	29.5	120.4	
Sc	45	No Gas	3472706.67	1.0	3373253.08	102.95	29.5	120.4	
Sc	45	H2	403465.11	3.9	415670.69	97.06	29.5	120.4	
Sc	45	He	80313.02	6.1	81171.76	98.94	29.5	120.4	
Ge	72	No Gas	805180.52	0.2	779333.11	103.32	29.5	120.4	
Ge	72	H2	150998.13	2.6	153246.58	98.53	29.5	120.4	
Ge	72	He	63529.49	4.5	63135.03	100.62	29.5	120.4	
Y	89	H2	2644369.30	4.2	2642116.11	100.09	29.5	120.4	
Y	89	He	543927.57	6.8	544041.92	99.98	29.5	120.4	
Tb	159	No Gas	8232164.81	0.5	8117023.84	101.42	29.5	120.4	
Tb	159	He	2878391.03	6.7	2866479.19	100.42	29.5	120.4	
Bi	209	No Gas	4361437.95	0.3	4424692.92	98.57	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW1
File Name	216_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:43:19 AM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High
Be	9	6	No Gas	49.550	ppb	4.1	11253.64	50	19.82	79.5	120.4
B	11	6	No Gas	991.068	ppb	3.7	148491.95	500	39.64	79.5	120.4
Na	23	45	He	14329.583	ppb	4.6	319821.49	7500	38.21	79.5	120.4
Mg	24	45	He	10167.574	ppb	4.8	123105.96	5000	40.67	79.5	120.4
Al	27	45	He	1896.940	ppb	7.3	8893.09	2000	18.97	79.5	120.4
Si	28	45	H2	2141.118	ppb	4.5	18198.48	1000	42.82	79.5	120.4
K	39	45	He	20687.081	ppb	4.9	227823.30	10000	41.37	79.5	120.4
Ca	40	45	H2	5103.925	ppb	3.3	410936.85	2500	40.83	79.5	120.4
V	51	89	He	512.911	ppb	4.0	87674.57	500	20.52	79.5	120.4
Cr	52	89	He	205.327	ppb	4.1	43231.16	200	20.53	79.5	120.4
Mn	55	89	He	510.530	ppb	3.9	51204.99	500	20.42	79.5	120.4
Fe	56	89	H2	1066.631	ppb	3.1	355350.01	1000	21.33	79.5	120.4
Co	59	89	He	529.985	ppb	4.4	188839.39	500	21.2	79.5	120.4
Ni	60	89	He	513.676	ppb	4.3	51899.15	500	20.55	79.5	120.4
Cu	63	89	He	264.657	ppb	5.3	72873.86	250	21.17	79.5	120.4
Zn	66	89	He	513.717	ppb	3.5	19338.45	500	20.55	79.5	120.4
As	75	89	He	212.635	ppb	4.9	6525.24	100	42.53	79.5	120.4
Se	78	89	H2	201.044	ppb	3.5	3257.57	100	40.21	79.5	120.4
Sr	88	89	He	1043.564	ppb	3.8	156347.21	500	41.74	79.5	120.4
Mo	95	89	He	207.323	ppb	3.7	35791.01	100	41.46	79.5	120.4
Ag	107	89	He	53.670	ppb	4.3	31405.99	50	21.47	79.5	120.4
Cd	111	89	He	513.756	ppb	4.5	40040.81	250	41.1	79.5	120.4
Sn	118	159	He	1012.276	ppb	4.6	171279.08	500	40.49	79.5	120.4
Sb	121	159	No Gas	200.369	ppb	2.5	292430.50	100	40.07	79.5	120.4
Ba	137	159	No Gas	1944.152	ppb	2.1	1116109.39	2000	19.44	79.5	120.4
W	182	159	No Gas	190.241	ppb	2.2	220959.49	100	38.05	79.5	120.4
Tl	205	209	No Gas	196.811	ppb	2.2	495960.03	100	39.36	79.5	120.4
Pb	208	209	No Gas	197.832	ppb	2.4	689159.19	100	39.57	79.5	120.4
Th	232	209	No Gas	188.777	ppb	3.0	688495.12	100	37.76	79.5	120.4
U	238	209	No Gas	188.417	ppb	2.9	644926.84	100	37.68	79.5	120.4

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)

Laboratory Control Sample (LCS) Report

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)
> +/- 20% (6020)□ > +/- 15% (EPA)
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> +/- 20% (6020)□ > +/- 15% (EPA)

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1308346.79	0.9	1537409.87	85.1	29.5	120.4	
Sc	45	No Gas	3446004.37	0.5	3373253.08	102.16	29.5	120.4	
Sc	45	H2	400041.30	2.9	415670.69	96.24	29.5	120.4	
Sc	45	He	78935.76	5.1	81171.76	97.25	29.5	120.4	
Ge	72	No Gas	794405.21	0.6	779333.11	101.93	29.5	120.4	
Ge	72	H2	149492.17	1.7	153246.58	97.55	29.5	120.4	
Ge	72	He	62143.09	2.9	63135.03	98.43	29.5	120.4	
Y	89	H2	2607560.62	2.8	2642116.11	98.69	29.5	120.4	
Y	89	He	532386.67	4.0	544041.92	97.86	29.5	120.4	
Tb	159	No Gas	8111182.03	0.6	8117023.84	99.93	29.5	120.4	
Tb	159	He	2830143.47	4.2	2866479.19	98.73	29.5	120.4	
Bi	209	No Gas	4281840.75	0.7	4424692.92	96.77	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	217_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:45:57 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.562	ppb	1.9	27948.78	25	102.25	89.8	110.2	
11	B	6	No Gas	28.254	ppb	1.3	21050.36	25	113.02	89.8	110.2	> +/- 10%
23	Na	45	He	4745.336	ppb	1.2	533595.21	5000	94.91	89.8	110.2	
24	Mg	45	He	4648.763	ppb	1.6	284918.33	5000	92.98	89.8	110.2	
27	Al	45	He	455.793	ppb	1.0	10845.58	500	91.16	89.8	110.2	
28	Si	45	H2	491.310	ppb	3.4	20286.96	500	98.26	89.8	110.2	
39	K	45	He	4854.552	ppb	1.2	269474.03	5000	97.09	89.8	110.2	
40	Ca	45	H2	4953.927	ppb	0.8	1933951.45	5000	99.08	89.8	110.2	
51	V	89	He	24.241	ppb	2.8	21266.70	25	96.96	89.8	110.2	
52	Cr	89	He	23.931	ppb	1.0	25660.56	25	95.72	89.8	110.2	
55	Mn	89	He	24.144	ppb	1.1	12334.50	25	96.58	89.8	110.2	
56	Fe	89	H2	4931.790	ppb	1.1	7795869.29	5000	98.64	89.8	110.2	
59	Co	89	He	24.428	ppb	0.9	44312.70	25	97.71	89.8	110.2	
60	Ni	89	He	24.433	ppb	2.1	12597.21	25	97.73	89.8	110.2	
63	Cu	89	He	24.404	ppb	1.9	34442.08	25	97.62	89.8	110.2	
66	Zn	89	He	24.256	ppb	2.0	4696.51	25	97.02	89.8	110.2	
75	As	89	He	24.258	ppb	1.5	3791.93	25	97.03	89.8	110.2	
78	Se	89	H2	24.816	ppb	2.3	1952.72	25	99.26	89.8	110.2	
88	Sr	89	He	24.098	ppb	1.8	18380.68	25	96.39	89.8	110.2	
95	Mo	89	He	23.928	ppb	0.4	21076.87	25	95.71	89.8	110.2	
107	Ag	89	He	18.183	ppb	0.5	54152.05	25	72.73	89.8	110.2	> +/- 10%
111	Cd	89	He	24.094	ppb	1.0	9559.77	25	96.38	89.8	110.2	
118	Sn	159	He	23.881	ppb	2.0	20793.28	25	95.52	89.8	110.2	
121	Sb	159	No Gas	25.086	ppb	1.5	176430.85	25	100.34	89.8	110.2	
137	Ba	159	No Gas	25.272	ppb	1.4	69914.78	25	101.09	89.8	110.2	
182	W	159	No Gas	23.806	ppb	0.9	133266.88	25	95.22	89.8	110.2	
205	Tl	209	No Gas	24.538	ppb	0.8	299672.22	25	98.15	89.8	110.2	
208	Pb	209	No Gas	24.372	ppb	1.6	411519.92	25	97.49	89.8	110.2	
232	Th	209	No Gas	23.999	ppb	1.8	424222.65	25	96	89.8	110.2	
238	U	209	No Gas	23.916	ppb	1.5	396717.17	25	95.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1260602.56	0.3	1537409.87	82	29.5	120.4	
Sc	45	No Gas	3301694.99	0.7	3373253.08	97.88	29.5	120.4	
Sc	45	H2	389141.20	0.9	415670.69	93.62	29.5	120.4	
Sc	45	He	80015.49	1.0	81171.76	98.58	29.5	120.4	
Ge	72	No Gas	769670.05	1.3	779333.11	98.76	29.5	120.4	
Ge	72	H2	144568.92	0.7	153246.58	94.34	29.5	120.4	
Ge	72	He	62436.00	0.8	63135.03	98.89	29.5	120.4	
Y	89	H2	2531190.16	1.1	2642116.11	95.8	29.5	120.4	
Y	89	He	541386.94	0.6	544041.92	99.51	29.5	120.4	
Tb	159	No Gas	7816071.76	0.7	8117023.84	96.29	29.5	120.4	
Tb	159	He	2900293.60	1.1	2866479.19	101.18	29.5	120.4	
Bi	209	No Gas	4149762.17	0.3	4424692.92	93.79	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	218_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG20A_#2.b
Acq Time	7/21/2020 12:48:40 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.075	ppb	4.7	101.11	0.2	
11	B	6	No Gas	2.762	ppb	2.3	2839.26	4	Failed DoD
23	Na	45	He	-0.099	ppb	N/A	5784.29	200	
24	Mg	45	He	-1.020	ppb	N/A	524.49	20	
27	Al	45	He	0.437	ppb	210.1	56.67	20	
28	Si	45	H2	4.366	ppb	37.0	410.47	100	
39	K	45	He	24.357	ppb	19.1	11649.52	200	
40	Ca	45	H2	4.801	ppb	1.8	3620.60	20	
51	V	89	He	1.464	ppb	10.7	1460.13	1	Fail All Methods Failed DoD
52	Cr	89	He	0.119	ppb	4.4	157.97	1	
55	Mn	89	He	0.170	ppb	21.8	96.65	0.4	
56	Fe	89	H2	4.462	ppb	7.3	15235.23	20	
59	Co	89	He	0.027	ppb	16.8	55.56	0.2	
60	Ni	89	He	-0.037	ppb	N/A	22.22	0.4	
63	Cu	89	He	-0.109	ppb	N/A	263.35	0.6	
66	Zn	89	He	0.083	ppb	28.1	78.89	2	
75	As	89	He	0.106	ppb	30.4	20.67	1	
78	Se	89	H2	0.100	ppb	26.3	8.33	1	
88	Sr	89	He	0.032	ppb	57.6	30.00	1	
95	Mo	89	He	0.006	ppb	301.2	127.78	1	
107	Ag	89	He	0.007	ppb	86.9	32.22	0.2	
111	Cd	89	He	0.026	ppb	34.1	11.11	0.2	
118	Sn	159	He	0.749	ppb	4.2	715.60	1	Failed DoD
121	Sb	159	No Gas	0.031	ppb	27.7	327.04	0.2	
137	Ba	159	No Gas	0.068	ppb	40.3	216.91	0.4	
182	W	159	No Gas	0.129	ppb	17.3	884.36	1	
205	Tl	209	No Gas	0.032	ppb	13.4	440.50	0.2	
208	Pb	209	No Gas	0.120	ppb	8.2	2336.04	0.2	Failed DoD
232	Th	209	No Gas	0.230	ppb	32.2	4502.58	1	
238	U	209	No Gas	0.018	ppb	26.3	323.70	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1304437.83	2.6	1537409.87	84.85	29.5	120.4	
Sc	45	No Gas	3373891.14	0.6	3373253.08	100.02	29.5	120.4	
Sc	45	H2	378966.29	0.5	415670.69	91.17	29.5	120.4	
Sc	45	He	76204.71	1.6	81171.76	93.88	29.5	120.4	
Ge	72	No Gas	795908.86	1.0	779333.11	102.13	29.5	120.4	
Ge	72	H2	141426.61	1.3	153246.58	92.29	29.5	120.4	
Ge	72	He	59897.22	1.6	63135.03	94.87	29.5	120.4	
Y	89	H2	2519931.09	0.2	2642116.11	95.38	29.5	120.4	
Y	89	He	526272.00	1.0	544041.92	96.73	29.5	120.4	
Tb	159	No Gas	8313032.03	0.4	8117023.84	102.41	29.5	120.4	
Tb	159	He	2875583.88	1.4	2866479.19	100.32	29.5	120.4	
Bi	209	No Gas	4419379.85	0.3	4424692.92	99.88	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/22/2020

METHOD: **ICP-MS**
- ☐ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED 07/24/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG22A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

AP 7/23/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG22A	07/22/2020	13:31	AP
CalStd	1	LNG22A	07/22/2020	13:34	AP
ICV	1	LNG22A	07/22/2020	13:37	AP
ICB	1	LNG22A	07/22/2020	13:40	AP
PQL	1	LNG22A	07/22/2020	13:42	AP
ICSA	1	LNG22A	07/22/2020	13:45	AP
ICSAB	1	LNG22A	07/22/2020	13:48	AP
LRS1	1	LNG22A	07/22/2020	13:50	AP
LRS2	1	LNG22A	07/22/2020	13:53	AP
RINSE	1	LNG22A	07/22/2020	13:55	AP
RINSE	1	LNG22A	07/22/2020	13:58	AP
ICSAB	1	LNG22A	07/22/2020	14:04	AP
RINSE	1	LNG22A	07/22/2020	14:07	AP
CCV	1	LNG22A	07/22/2020	14:10	AP
CCB	1	LNG22A	07/22/2020	14:13	AP
CCV	1	LNG22A	07/22/2020	14:15	AP
CCB	1	LNG22A	07/22/2020	14:18	AP
PBSNG20IMS2	5	LNG22A	07/22/2020	14:20	AP
LCSONG20IMS2	5	LNG22A	07/22/2020	14:23	AP
SN5717-014	5	LNG22A	07/22/2020	14:25	AP
SN5717-015	5	LNG22A	07/22/2020	14:28	AP
SN5717-016	5	LNG22A	07/22/2020	14:31	AP
CCV	1	LNG22A	07/22/2020	14:33	AP
CCB	1	LNG22A	07/22/2020	14:36	AP
PQL	1	LNG22A	07/22/2020	14:39	AP
RINSE	1	LNG22A	07/22/2020	14:41	AP
RINSE	1	LNG22A	07/22/2020	14:44	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A.b
Acq. Date-Time	7/22/2020 11:20:52 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

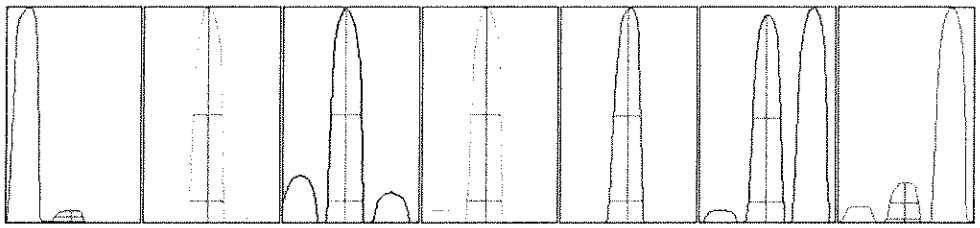
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2620	26199.93	0.523	5.000	
9	1145	11446.67	0.658	5.000	
24	47682	476823.35	0.300	5.000	
59	8832	88318.55	0.387	5.000	
115	154524	1545238.49	0.187	5.000	
205	9718	97182.38	0.626	5.000	
208	21494	214937.46	0.332	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2601	2630	2629	2630	2610
9	1154	1136	1138	1149	1146
24	47440	47813	47739	47684	47736
59	8832	8797	8882	8844	8804
115	154320	154825	154852	154362	154261
205	9619	9713	9778	9729	9752
208	21370	21497	21521	21544	21537

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4292.65	7.00	6.90 - 7.10	
9	1875.72	8.95	8.90 - 9.10	
24	74178.17	23.90	23.90 - 24.10	
59	14147.94	58.95	58.90 - 59.10	
115	261453.84	115.00	114.90 - 115.10	
205	16204.13	205.00	204.90 - 205.10	
208	35584.67	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.63	0.726	0.900	
9	0.64	0.755	0.900	
24	0.68	0.778	0.900	
59	0.65	0.765	0.900	
115	0.61	0.752	0.900	
205	0.63	0.771	0.900	
208	0.63	0.746	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	12.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	494	4935.77	0.665	5.000	
89	76949	769494.88	1.526	5.000	
205	8062	80618.36	1.094	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	488	492	495	496	496
89	75412	76214	76961	77918	78242
205	7929	8027	8075	8142	8136

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.6 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1665	16650.59	0.407	5.000	
89	16031	160310.91	0.495	5.000	
205	4562	45622.36	0.613	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1661	1668	1674	1656	1667
89	16037	15947	15960	16073	16138
205	4562	4538	4540	4565	4607

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.2 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:31:38 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	48.89	15.8
11	B	6	No Gas	2143.57	1.8
23	Na	45	He	3380.84	7.3
24	Mg	45	He	706.74	7.1
27	Al	45	He	32.22	12.0
28	Si	45	H2	497.23	26.0
39	K	45	He	12248.15	0.7
40	Ca	45	H2	1132.31	10.3
51	V	89	He	292.24	8.1
52	Cr	89	He	71.99	13.9
55	Mn	89	He	16.00	45.1
56	Fe	89	H2	3934.92	5.2
59	Co	89	He	13.33	50.0
60	Ni	89	He	98.89	7.8
63	Cu	89	He	225.57	5.6
66	Zn	89	He	60.00	14.7
75	As	89	He	5.00	40.0
78	Se	89	H2	0.67	43.3
88	Sr	89	He	3.33	100.1
95	Mo	89	He	12.22	41.7
107	Ag	89	He	11.11	96.4
111	Cd	89	He	0.37	173.2
118	Sn	159	He	54.45	3.5
121	Sb	159	No Gas	50.06	60.0
137	Ba	159	No Gas	30.04	88.2
182	W	159	No Gas	33.37	69.3
205	Tl	209	No Gas	50.06	20.0
208	Pb	209	No Gas	206.89	11.2
232	Th	209	No Gas	76.76	39.8
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1605283.87	1.4
Sc	45	No Gas	3885855.82	0.9
Sc	45	H2	456147.33	0.8
Sc	45	He	93201.95	0.3
Ge	72	No Gas	853395.25	0.2
Ge	72	H2	164020.04	0.7
Ge	72	He	70436.76	0.4
Y	89	H2	2800847.42	0.4
Y	89	He	596189.55	0.3
Tb	159	No Gas	7843787.66	0.6
Tb	159	He	2988340.23	0.5
Bi	209	No Gas	3902449.55	0.2

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:34:47 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	73240.86	2.4
11	B	6	No Gas	49746.44	2.0
23	Na	45	He	1239442.79	0.2
24	Mg	45	He	680472.25	0.7
27	Al	45	He	26574.29	1.4
28	Si	45	H2	50337.25	1.7
39	K	45	He	624507.89	0.7
40	Ca	45	H2	4644980.90	1.0
51	V	89	He	49320.61	1.9
52	Cr	89	He	60414.43	0.9
55	Mn	89	He	27700.04	0.7
56	Fe	89	H2	18295455.64	0.1
59	Co	89	He	103259.00	0.9
60	Ni	89	He	27977.56	1.1
63	Cu	89	He	79203.56	0.3
66	Zn	89	He	10489.85	2.2
75	As	89	He	8711.35	0.5
78	Se	89	H2	4372.82	0.9
88	Sr	89	He	41760.96	0.5
95	Mo	89	He	47963.80	1.0
107	Ag	89	He	161932.28	0.2
111	Cd	89	He	20254.47	0.5
118	Sn	159	He	44479.63	1.3
121	Sb	159	No Gas	375179.23	1.1
137	Ba	159	No Gas	146190.82	1.9
182	W	159	No Gas	267847.27	2.3
205	Tl	209	No Gas	575083.67	0.9
208	Pb	209	No Gas	786187.04	1.5
232	Th	209	No Gas	786365.36	2.8
238	U	209	No Gas	737059.98	2.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1641641.68	0.9	1605283.87	102.26	29.5	120.4	
Sc	45	No Gas	3937568.29	1.4	3885855.82	101.33	29.5	120.4	
Sc	45	H2	458468.96	2.2	456147.33	100.51	29.5	120.4	
Sc	45	He	91476.66	0.5	93201.95	98.15	29.5	120.4	
Ge	72	No Gas	862482.32	1.8	853395.25	101.06	29.5	120.4	
Ge	72	H2	164836.16	2.0	164020.04	100.5	29.5	120.4	
Ge	72	He	68545.12	0.4	70436.76	97.31	29.5	120.4	
Y	89	H2	2844940.44	2.3	2800847.42	101.57	29.5	120.4	
Y	89	He	585894.67	0.7	596189.55	98.27	29.5	120.4	
Tb	159	No Gas	7958658.77	0.9	7843787.66	101.46	29.5	120.4	
Tb	159	He	2970395.34	0.7	2988340.23	99.4	29.5	120.4	
Bi	209	No Gas	3921217.83	1.0	3902449.55	100.48	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:37:34 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.115	ppb	5.4	30192.21	20	100.57	89.6	110.4	
11	B	6	No Gas	18.276	ppb	7.7	20029.96	20	91.38	89.6	110.4	
23	Na	45	He	4144.415	ppb	0.1	513230.46	4000	103.61	89.6	110.4	
24	Mg	45	He	4044.925	ppb	0.1	274377.07	4000	101.12	89.6	110.4	
27	Al	45	He	381.884	ppb	1.0	10120.60	400	95.47	89.6	110.4	
28	Si	45	H2	427.652	ppb	2.1	21456.73	400	106.91	89.6	110.4	
39	K	45	He	4032.271	ppb	0.7	257790.39	4000	100.81	89.6	110.4	
40	Ca	45	H2	4031.495	ppb	2.8	1842664.35	4000	100.79	89.6	110.4	
51	V	89	He	19.894	ppb	1.5	19845.68	20	99.47	89.6	110.4	
52	Cr	89	He	20.394	ppb	0.8	24745.07	20	101.97	89.6	110.4	
55	Mn	89	He	20.520	ppb	0.9	11404.57	20	102.6	89.6	110.4	
56	Fe	89	H2	4037.339	ppb	2.0	7259591.11	4000	100.93	89.6	110.4	
59	Co	89	He	20.320	ppb	0.7	42072.00	20	101.6	89.6	110.4	
60	Ni	89	He	20.274	ppb	1.9	11429.49	20	101.37	89.6	110.4	
63	Cu	89	He	20.386	ppb	1.3	32505.32	20	101.93	89.6	110.4	
66	Zn	89	He	20.602	ppb	3.8	4367.53	20	103.01	89.6	110.4	
75	As	89	He	20.145	ppb	2.7	3521.50	20	100.72	89.6	110.4	
78	Se	89	H2	20.500	ppb	1.8	1761.70	20	102.5	89.6	110.4	
88	Sr	89	He	19.664	ppb	2.3	16467.12	20	98.32	89.6	110.4	
95	Mo	89	He	39.622	ppb	0.0	38106.19	40	99.06	89.6	110.4	
107	Ag	89	He	20.606	ppb	1.4	66906.56	20	103.03	89.6	110.4	
111	Cd	89	He	20.669	ppb	1.2	8393.80	20	103.34	89.6	110.4	
118	Sn	159	He	19.754	ppb	2.6	17647.73	20	98.77	89.6	110.4	
121	Sb	159	No Gas	20.023	ppb	7.5	150799.73	20	100.12	89.6	110.4	
137	Ba	159	No Gas	20.494	ppb	7.3	60159.07	20	102.47	89.6	110.4	
182	W	159	No Gas	19.882	ppb	6.6	106943.12	20	99.41	89.6	110.4	
205	Tl	209	No Gas	20.396	ppb	7.2	239186.71	20	101.98	89.6	110.4	
208	Pb	209	No Gas	20.212	ppb	6.4	324222.93	20	101.06	89.6	110.4	
232	Th	209	No Gas	20.052	ppb	7.5	321545.37	20	100.26	89.6	110.4	
238	U	209	No Gas	19.851	ppb	7.2	298343.82	20	99.26	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682607.27	4.0	1605283.87	104.82	29.5	120.4	
Sc	45	No Gas	3940493.17	5.1	3885855.82	101.41	29.5	120.4	
Sc	45	H2	451003.69	1.7	456147.33	98.87	29.5	120.4	
Sc	45	He	91051.66	0.3	93201.95	97.69	29.5	120.4	
Ge	72	No Gas	864774.80	4.3	853395.25	101.33	29.5	120.4	
Ge	72	H2	164049.54	1.5	164020.04	100.02	29.5	120.4	
Ge	72	He	69353.61	0.3	70436.76	98.46	29.5	120.4	
Y	89	H2	2794494.53	1.0	2800847.42	99.77	29.5	120.4	
Y	89	He	587314.76	0.5	596189.55	98.51	29.5	120.4	
Tb	159	No Gas	8006933.01	5.2	7843787.66	102.08	29.5	120.4	
Tb	159	He	2977719.78	0.6	2988340.23	99.64	29.5	120.4	
Bi	209	No Gas	4006782.92	5.1	3902449.55	102.67	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:40:15 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.073	ppb	16.8	158.89	0.2	
11	B	6	No Gas	0.078	ppb	120.9	2290.26	4	
23	Na	45	He	4.311	ppb	13.3	3771.35	200	
24	Mg	45	He	-1.628	ppb	N/A	571.17	20	
27	Al	45	He	-0.122	ppb	N/A	27.78	20	
28	Si	45	H2	2.249	ppb	51.7	594.00	100	
39	K	45	He	4.560	ppb	45.3	12044.68	200	
40	Ca	45	H2	0.981	ppb	15.6	1549.03	20	
51	V	89	He	-0.009	ppb	N/A	276.68	1	
52	Cr	89	He	-0.005	ppb	N/A	64.66	1	
55	Mn	89	He	0.007	ppb	252.7	19.33	0.4	
56	Fe	89	H2	1.192	ppb	8.7	5981.27	20	
59	Co	89	He	0.007	ppb	0.7	26.67	0.2	
60	Ni	89	He	0.004	ppb	217.4	98.89	0.4	
63	Cu	89	He	0.023	ppb	53.2	256.68	0.6	
66	Zn	89	He	-0.036	ppb	N/A	51.11	2	
75	As	89	He	-0.009	ppb	N/A	3.33	1	
78	Se	89	H2	0.075	ppb	15.8	7.00	1	
88	Sr	89	He	0.004	ppb	97.4	6.67	1	
95	Mo	89	He	0.153	ppb	12.1	157.78	1	
107	Ag	89	He	0.006	ppb	90.3	30.00	0.2	
111	Cd	89	He	0.005	ppb	59.6	2.22	0.2	
118	Sn	159	He	0.098	ppb	4.5	140.01	1	
121	Sb	159	No Gas	0.041	ppb	66.2	353.76	0.2	
137	Ba	159	No Gas	0.021	ppb	44.8	90.10	0.4	
182	W	159	No Gas	0.084	ppb	26.2	480.55	1	
205	Tl	209	No Gas	0.036	ppb	61.7	467.21	0.2	
208	Pb	209	No Gas	0.039	ppb	70.9	830.96	0.2	
232	Th	209	No Gas	0.048	ppb	46.0	841.02	1	
238	U	209	No Gas	0.033	ppb	44.5	497.27	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659322.12	2.7	1605283.87	103.37	29.5	120.4	
Sc	45	No Gas	3836280.83	2.1	3885855.82	98.72	29.5	120.4	
Sc	45	H2	445365.21	0.3	456147.33	97.64	29.5	120.4	
Sc	45	He	89576.71	0.9	93201.95	96.11	29.5	120.4	
Ge	72	No Gas	841984.60	3.2	853395.25	98.66	29.5	120.4	
Ge	72	H2	161215.64	1.0	164020.04	98.29	29.5	120.4	
Ge	72	He	67899.84	0.6	70436.76	96.4	29.5	120.4	
Y	89	H2	2754697.93	0.9	2800847.42	98.35	29.5	120.4	
Y	89	He	581550.17	0.4	596189.55	97.54	29.5	120.4	
Tb	159	No Gas	7908543.35	2.4	7843787.66	100.83	29.5	120.4	
Tb	159	He	2951248.88	0.8	2988340.23	98.76	29.5	120.4	
Bi	209	No Gas	3972271.24	3.0	3902449.55	101.79	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:42:54 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.218	ppb	9.0	372.24	0.2	109	79.5	120.4
11	B	6	No Gas	3.606	ppb	11.2	5660.19	4	90.15	79.5	120.4
23	Na	45	He	218.750	ppb	1.5	29907.74	200	109.38	79.5	120.4
24	Mg	45	He	19.965	ppb	8.6	2020.29	20	99.82	79.5	120.4
27	Al	45	He	18.993	ppb	17.0	527.81	20	94.96	79.5	120.4
28	Si	45	H2	99.116	ppb	1.7	5290.22	100	99.12	79.5	120.4
39	K	45	He	213.748	ppb	2.8	24740.18	200	106.87	79.5	120.4
40	Ca	45	H2	22.587	ppb	0.4	11311.58	20	112.94	79.5	120.4
51	V	89	He	1.189	ppb	2.5	1446.79	1	118.9	79.5	120.4
52	Cr	89	He	1.060	ppb	1.2	1343.82	1	106	79.5	120.4
55	Mn	89	He	0.541	ppb	9.5	313.95	0.4	135.25	79.5	120.4
56	Fe	89	H2	21.757	ppb	1.0	42712.46	20	108.78	79.5	120.4
59	Co	89	He	0.196	ppb	13.8	415.59	0.2	98	79.5	120.4
60	Ni	89	He	0.450	ppb	6.0	346.68	0.4	112.5	79.5	120.4
63	Cu	89	He	0.641	ppb	3.7	1228.99	0.6	106.83	79.5	120.4
66	Zn	89	He	2.097	ppb	8.8	494.47	2	104.85	79.5	120.4
75	As	89	He	0.914	ppb	7.5	163.35	1	91.4	79.5	120.4
78	Se	89	H2	1.110	ppb	9.2	95.33	1	111	79.5	120.4
88	Sr	89	He	0.949	ppb	5.2	792.28	1	94.9	79.5	120.4
95	Mo	89	He	1.049	ppb	0.9	1013.41	1	104.9	79.5	120.4
107	Ag	89	He	0.210	ppb	13.7	687.82	0.2	105	79.5	120.4
111	Cd	89	He	0.220	ppb	8.4	88.89	0.2	110	79.5	120.4
118	Sn	159	He	1.134	ppb	5.1	1063.42	1	113.4	79.5	120.4
121	Sb	159	No Gas	0.212	ppb	14.0	1658.63	0.2	106	79.5	120.4
137	Ba	159	No Gas	0.373	ppb	19.7	1127.98	0.4	93.25	79.5	120.4
182	W	159	No Gas	0.954	ppb	8.1	5190.20	1	95.4	79.5	120.4
205	Tl	209	No Gas	0.192	ppb	14.3	2306.12	0.2	96	79.5	120.4
208	Pb	209	No Gas	0.216	ppb	7.1	3694.36	0.2	108	79.5	120.4
232	Th	209	No Gas	0.205	ppb	9.2	3387.61	0.2	102.5	79.5	120.4
238	U	209	No Gas	0.199	ppb	4.1	3017.10	0.2	99.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1654936.50	3.3	1605283.87	103.09	29.5	120.4	
Sc	45	No Gas	3888768.66	3.8	3885855.82	100.07	29.5	120.4	
Sc	45	H2	445915.04	1.3	456147.33	97.76	29.5	120.4	
Sc	45	He	90116.88	0.1	93201.95	96.69	29.5	120.4	
Ge	72	No Gas	851633.74	3.5	853395.25	99.79	29.5	120.4	
Ge	72	H2	162591.39	1.5	164020.04	99.13	29.5	120.4	
Ge	72	He	68630.87	0.3	70436.76	97.44	29.5	120.4	
Y	89	H2	2773937.90	1.3	2800847.42	99.04	29.5	120.4	
Y	89	He	583340.63	0.1	596189.55	97.84	29.5	120.4	
Tb	159	No Gas	8047356.55	4.1	7843787.66	102.6	29.5	120.4	
Tb	159	He	2974097.01	0.3	2988340.23	99.52	29.5	120.4	
Bi	209	No Gas	4028168.05	4.1	3902449.55	103.22	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:45:24 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.008	ppb	144.9	57.78	0.2	-50	50	
B	11	6	No Gas	0.206	ppb	132.2	2250.25	4	-50	100	
Na	23	45	He	96772.045	ppb	0.6	11207721.28	100000	80	120	
Mg	24	45	He	97235.848	ppb	0.6	6191784.21	100000	80	120	
Al	27	45	He	92025.096	ppb	0.5	2287891.46	100000	80	120	
Si	28	45	H2	5.121	ppb	73.1	694.13	100	-50	50	
K	39	45	He	95710.139	ppb	0.7	5501978.10	100000	80	120	
Ca	40	45	H2	99865.834	ppb	0.8	42681100.47	100000	80	120	
V	51	89	He	0.040	ppb	85.0	314.46	1	-50	100	
Cr	52	89	He	0.271	ppb	6.3	383.27	0.78	-100	100	
Mn	55	89	He	0.457	ppb	14.9	259.29	0.0826	100	100	
Fe	56	89	H2	96989.033	ppb	1.4	166297980.46	100000	80	120	
Co	59	89	He	0.291	ppb	15.3	591.17	0.2	-50	100	
Ni	60	89	He	0.280	ppb	15.4	244.46	0.114	100	100	
Cu	63	89	He	0.448	ppb	8.6	896.73	-0.043	100	100	
Zn	66	89	He	0.566	ppb	30.9	171.12	-0.7632	100	100	
As	75	89	He	0.053	ppb	27.6	13.67	1	-50	100	
Se	78	89	H2	0.092	ppb	24.7	8.17	1	-50	100	
Sr	88	89	He	0.723	ppb	12.8	585.59	0.0578	100	100	
Mo	95	89	He	1979.509	ppb	0.8	1831857.18	2000	80	120	
Ag	107	89	He	0.019	ppb	14.8	70.00	0.2	-50	50	
Cd	111	89	He	0.322	ppb	16.4	125.93	0.268	100	100	
Sn	118	159	He	0.325	ppb	8.1	338.91	-0.24	100	100	
Sb	121	159	No Gas	0.148	ppb	8.4	1144.67	0.089	100	100	
Ba	137	159	No Gas	0.157	ppb	13.2	480.55	-0.0794	100	100	
W	182	159	No Gas	0.199	ppb	18.1	1081.26	0.32	-100	100	
Tl	205	209	No Gas	0.007	ppb	17.1	120.14	0.2	-50	50	
Pb	208	209	No Gas	0.094	ppb	5.6	1605.17	0.03	100	100	
Th	232	209	No Gas	0.017	ppb	16.6	323.71	0.2	-50	50	
U	238	209	No Gas	0.004	ppb	81.5	60.07	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1549640.19	3.2	1605283.87	96.53	29.5	120.4	
Sc	45	No Gas	3692085.58	2.9	3885855.82	95.01	29.5	120.4	
Sc	45	H2	421831.57	0.2	456147.33	92.48	29.5	120.4	
Sc	45	He	85682.99	0.4	93201.95	91.93	29.5	120.4	
Ge	72	No Gas	815369.06	2.5	853395.25	95.54	29.5	120.4	
Ge	72	H2	151149.15	1.6	164020.04	92.15	29.5	120.4	
Ge	72	He	64885.49	0.9	70436.76	92.12	29.5	120.4	
Y	89	H2	2665949.26	1.0	2800847.42	95.18	29.5	120.4	
Y	89	He	565330.49	0.9	596189.55	94.82	29.5	120.4	
Tb	159	No Gas	7832446.62	1.8	7843787.66	99.86	29.5	120.4	
Tb	159	He	2935078.46	0.7	2988340.23	98.22	29.5	120.4	
Bi	209	No Gas	3747520.15	2.3	3902449.55	96.03	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:48:04 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	18.848	ppb	4.3	24637.70	20	79.5	120.4	
11	B	6	No Gas	18.779	ppb	3.9	17869.65	20	79.5	120.4	
23	Na	45	He	95153.154	ppb	0.9	11514768.95	100000	79.5	120.4	
24	Mg	45	He	95357.189	ppb	1.0	6344594.63	100000	79.5	120.4	
27	Al	45	He	89743.610	ppb	0.9	2331297.88	100000	79.5	120.4	
28	Si	45	H2	472.595	ppb	2.6	22713.48	500	79.5	120.4	
39	K	45	He	93594.031	ppb	1.2	5621897.41	100000	79.5	120.4	
40	Ca	45	H2	98416.173	ppb	1.0	43160300.47	100000	79.5	120.4	
51	V	89	He	19.823	ppb	1.3	19409.51	20	79.5	120.4	
52	Cr	89	He	19.345	ppb	0.7	23045.20	20	79.5	120.4	
55	Mn	89	He	19.805	ppb	0.9	10804.86	20	79.5	120.4	
56	Fe	89	H2	96374.972	ppb	0.8	168783015.40	100000	79.5	120.4	
59	Co	89	He	19.238	ppb	3.2	39094.62	20	79.5	120.4	
60	Ni	89	He	19.647	ppb	2.0	10873.48	20	79.5	120.4	
63	Cu	89	He	19.222	ppb	0.4	30094.24	20	79.5	120.4	
66	Zn	89	He	18.701	ppb	1.0	3897.35	20	79.5	120.4	
75	As	89	He	19.771	ppb	0.5	3392.46	20	79.5	120.4	
78	Se	89	H2	19.549	ppb	0.6	1637.02	20	79.5	120.4	
88	Sr	89	He	19.659	ppb	0.0	16157.78	20	79.5	120.4	
95	Mo	89	He	1991.238	ppb	0.7	1879093.29	2000	79.5	120.4	
107	Ag	89	He	13.603	ppb	1.3	43353.49	20	79.5	120.4	> +/- 10%
111	Cd	89	He	19.474	ppb	0.2	7762.68	20	79.5	120.4	
118	Sn	159	He	19.535	ppb	0.7	17437.33	20	79.5	120.4	
121	Sb	159	No Gas	18.616	ppb	4.0	133595.32	20	79.5	120.4	
137	Ba	159	No Gas	19.350	ppb	5.2	54143.29	20	79.5	120.4	
182	W	159	No Gas	19.621	ppb	4.5	100553.17	20	79.5	120.4	
205	Tl	209	No Gas	19.531	ppb	4.5	209026.94	20	79.5	120.4	
208	Pb	209	No Gas	19.819	ppb	2.9	289867.86	20	79.5	120.4	
232	Th	209	No Gas	20.775	ppb	4.9	304107.01	20	79.5	120.4	
238	U	209	No Gas	20.329	ppb	4.0	278775.44	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1460638.11	5.9	1605283.87	90.99	29.5	120.4	
Sc	45	No Gas	3513586.43	5.4	3885855.82	90.42	29.5	120.4	
Sc	45	H2	432848.95	0.5	456147.33	94.89	29.5	120.4	
Sc	45	He	89534.34	1.5	93201.95	96.06	29.5	120.4	
Ge	72	No Gas	768724.52	8.1	853395.25	90.08	29.5	120.4	
Ge	72	H2	153101.03	1.5	164020.04	93.34	29.5	120.4	
Ge	72	He	66862.59	0.7	70436.76	94.93	29.5	120.4	
Y	89	H2	2722849.86	0.7	2800847.42	97.22	29.5	120.4	
Y	89	He	576490.79	1.1	596189.55	96.7	29.5	120.4	
Tb	159	No Gas	7596958.22	6.2	7843787.66	96.85	29.5	120.4	
Tb	159	He	2974831.31	1.1	2988340.23	99.55	29.5	120.4	
Bi	209	No Gas	3640909.53	6.2	3902449.55	93.3	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 1:50:48 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	98.951	ppb	4.9	146113.59	100	98.95	89.5	110.4	
11	B	6	No Gas	466.715	ppb	5.7	449800.60	500	93.34	89.5	110.4	
51	V	89	He	1024.004	ppb	1.5	993046.66	1000	102.4	89.5	110.4	
52	Cr	89	He	2024.062	ppb	1.7	2415170.10	2000	101.2	89.5	110.4	
55	Mn	89	He	2036.067	ppb	1.6	1114515.06	2000	101.8	89.5	110.4	
59	Co	89	He	1022.742	ppb	1.2	2087905.31	1000	102.27	89.5	110.4	
60	Ni	89	He	1044.204	ppb	1.3	575742.76	1000	104.42	89.5	110.4	
63	Cu	89	He	1985.334	ppb	1.8	3100607.28	2000	99.27	89.5	110.4	
66	Zn	89	He	2036.574	ppb	1.2	420149.48	2000	101.83	89.5	110.4	
75	As	89	He	1013.502	ppb	1.3	174488.60	1000	101.35	89.5	110.4	
78	Se	89	H2	964.800	ppb	12.5	88108.11	1000	96.48	89.5	110.4	
88	Sr	89	He	2009.693	ppb	1.4	1659334.37	2000	100.48	89.5	110.4	
95	Mo	89	He	1016.617	ppb	1.8	963927.70	1000	101.66	89.5	110.4	
107	Ag	89	He	109.355	ppb	1.8	350116.33	100	109.36	89.5	110.4	
111	Cd	89	He	1050.896	ppb	1.7	420860.84	1000	105.09	89.5	110.4	
118	Sn	159	He	989.516	ppb	1.8	884672.13	1000	98.95	89.5	110.4	
121	Sb	159	No Gas	933.222	ppb	4.7	7375009.33	1000	93.32	89.5	110.4	
137	Ba	159	No Gas	1899.197	ppb	4.4	5848266.55	2000	94.96	89.5	110.4	
182	W	159	No Gas	982.569	ppb	5.2	5543733.49	1000	98.26	89.5	110.4	
205	Tl	209	No Gas	963.254	ppb	3.3	11996700.55	1000	96.33	89.5	110.4	
208	Pb	209	No Gas	1894.697	ppb	3.8	32253087.78	2000	94.73	89.5	110.4	
232	Th	209	No Gas	960.273	ppb	5.1	16352260.75	1000	96.03	89.5	110.4	
238	U	209	No Gas	938.148	ppb	4.9	14975067.56	1000	93.81	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1656139.36	1.9	1605283.87	103.17	29.5	120.4	
Sc	45	No Gas	4015410.32	1.9	3885855.82	103.33	29.5	120.4	
Ge	72	No Gas	889094.50	2.2	853395.25	104.18	29.5	120.4	
Tb	159	No Gas	8386348.49	1.5	7843787.66	106.92	29.5	120.4	
Bi	209	No Gas	4246969.89	1.3	3902449.55	108.83	29.5	120.4	
Sc	45	H2	475713.67	10.2	456147.33	104.29	29.5	120.4	
Ge	72	H2	170827.72	8.8	164020.04	104.15	29.5	120.4	
Y	89	H2	2996886.29	10.6	2800847.42	107	29.5	120.4	
Sc	45	He	89272.72	2.0	93201.95	95.78	29.5	120.4	
Ge	72	He	68254.67	1.6	70436.76	96.9	29.5	120.4	
Y	89	He	579307.69	1.5	596189.55	97.17	29.5	120.4	
Tb	159	He	2989251.80	1.3	2988340.23	100.03	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:53:14 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.593	ppb	58.4	840.06	100	
11	B	6	No Gas	9.383	ppb	16.0	10135.03	1000	
23	Na	45	He	194722.043	ppb	0.9	23378068.49	200000	
24	Mg	45	He	196479.864	ppb	0.9	12970918.97	200000	
27	Al	45	He	189631.639	ppb	0.6	4888110.79	200000	
28	Si	45	H2	9753.535	ppb	1.5	462131.79	10000	
39	K	45	He	194247.893	ppb	0.7	11565439.43	200000	
40	Ca	45	H2	199004.524	ppb	1.2	87779409.80	200000	
51	V	89	He	0.077	ppb	35.7	353.35	1000	
52	Cr	89	He	1.479	ppb	4.2	1807.79	2000	
55	Mn	89	He	7.716	ppb	0.8	4177.87	2000	
56	Fe	89	H2	97111.661	ppb	0.8	168947376.42	100000	
59	Co	89	He	0.718	ppb	7.6	1455.74	1000	
60	Ni	89	He	2.061	ppb	7.9	1214.54	1000	
63	Cu	89	He	1.257	ppb	5.3	2150.25	2000	
66	Zn	89	He	2.779	ppb	5.5	622.26	2000	
75	As	89	He	0.353	ppb	18.1	64.68	1000	
78	Se	89	H2	0.915	ppb	11.5	76.67	1000	
88	Sr	89	He	1.226	ppb	2.3	1001.19	2000	
95	Mo	89	He	1.816	ppb	8.0	1707.95	1000	
107	Ag	89	He	0.115	ppb	7.6	374.47	100	
111	Cd	89	He	0.178	ppb	14.7	70.74	1000	
118	Sn	159	He	1.276	ppb	8.4	1156.76	1000	
121	Sb	159	No Gas	3.234	ppb	81.8	23875.78	1000	
137	Ba	159	No Gas	5.971	ppb	77.0	17162.54	2000	
182	W	159	No Gas	4.951	ppb	64.1	26044.38	1000	
205	Tl	209	No Gas	2.139	ppb	67.7	23018.46	1000	
208	Pb	209	No Gas	5.322	ppb	79.1	78410.32	2000	
232	Th	209	No Gas	6.751	ppb	74.4	99313.80	1000	
238	U	209	No Gas	5.228	ppb	81.2	72082.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1494572.08	1.6	1605283.87	93.1	29.5	120.4	
Sc	45	No Gas	3672783.72	1.1	3885855.82	94.52	29.5	120.4	
Sc	45	H2	435347.91	1.4	456147.33	95.44	29.5	120.4	
Sc	45	He	88838.73	1.3	93201.95	95.32	29.5	120.4	
Ge	72	No Gas	795532.98	2.0	853395.25	93.22	29.5	120.4	
Ge	72	H2	152099.27	1.9	164020.04	92.73	29.5	120.4	
Ge	72	He	66110.86	0.7	70436.76	93.86	29.5	120.4	
Y	89	H2	2704779.84	1.0	2800847.42	96.57	29.5	120.4	
Y	89	He	570798.29	0.7	596189.55	95.74	29.5	120.4	
Tb	159	No Gas	7770343.29	1.2	7843787.66	99.06	29.5	120.4	
Tb	159	He	2893004.92	0.7	2988340.23	96.81	29.5	120.4	
Bi	209	No Gas	3636986.20	1.7	3902449.55	93.2	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:55:52 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.078	ppb	23.7	177.78	100	
11	B	6	No Gas	1.122	ppb	10.0	3517.22	1000	
23	Na	45	He	200.486	ppb	7.2	28934.50	200000	
24	Mg	45	He	29.598	ppb	10.9	2784.91	200000	
27	Al	45	He	31.859	ppb	4.9	903.40	200000	
28	Si	45	H2	3.349	ppb	84.0	684.11	10000	
39	K	45	He	66.737	ppb	8.0	16590.44	200000	
40	Ca	45	H2	55.827	ppb	11.7	27729.34	200000	
51	V	89	He	0.411	ppb	21.9	713.38	1000	
52	Cr	89	He	0.140	ppb	5.8	247.96	2000	
55	Mn	89	He	0.168	ppb	15.6	112.65	2000	
56	Fe	89	H2	37.653	ppb	10.3	74981.50	100000	
59	Co	89	He	0.052	ppb	33.6	124.46	1000	
60	Ni	89	He	0.234	ppb	31.7	235.57	1000	
63	Cu	89	He	1.292	ppb	3.4	2341.39	2000	
66	Zn	89	He	0.515	ppb	1.7	172.23	2000	
75	As	89	He	0.090	ppb	13.1	21.33	1000	
78	Se	89	H2	0.287	ppb	26.6	26.50	1000	
88	Sr	89	He	0.094	ppb	42.0	84.45	2000	
95	Mo	89	He	0.562	ppb	14.6	571.15	1000	
107	Ag	89	He	0.016	ppb	41.5	65.56	100	
111	Cd	89	He	0.074	ppb	27.7	31.48	1000	
118	Sn	159	He	0.515	ppb	13.7	523.36	1000	
121	Sb	159	No Gas	0.150	ppb	29.2	1188.04	1000	
137	Ba	159	No Gas	0.267	ppb	43.9	817.60	2000	
182	W	159	No Gas	0.324	ppb	4.4	1785.44	1000	
205	Tl	209	No Gas	0.153	ppb	28.6	1848.90	1000	
208	Pb	209	No Gas	0.343	ppb	19.7	5706.95	2000	
232	Th	209	No Gas	0.174	ppb	23.1	2866.87	1000	
238	U	209	No Gas	0.130	ppb	25.7	1962.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1771573.71	1.4	1605283.87	110.36	29.5	120.4	
Sc	45	No Gas	3935609.72	1.6	3885855.82	101.28	29.5	120.4	
Sc	45	H2	469804.69	1.6	456147.33	102.99	29.5	120.4	
Sc	45	He	94216.79	1.2	93201.95	101.09	29.5	120.4	
Ge	72	No Gas	861139.33	0.8	853395.25	100.91	29.5	120.4	
Ge	72	H2	167639.71	0.7	164020.04	102.21	29.5	120.4	
Ge	72	He	71710.64	1.3	70436.76	101.81	29.5	120.4	
Y	89	H2	2926653.22	0.9	2800847.42	104.49	29.5	120.4	
Y	89	He	606520.89	1.9	596189.55	101.73	29.5	120.4	
Tb	159	No Gas	8044292.45	1.0	7843787.66	102.56	29.5	120.4	
Tb	159	He	3037041.24	1.3	2988340.23	101.63	29.5	120.4	
Bi	209	No Gas	4000490.19	1.2	3902449.55	102.51	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 1:58:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	29.6	121.12	100	
11	B	6	No Gas	0.285	ppb	79.5	2623.67	1000	
23	Na	45	He	101.987	ppb	6.0	16738.29	200000	
24	Mg	45	He	10.296	ppb	10.0	1464.62	200000	
27	Al	45	He	10.439	ppb	4.3	324.46	200000	
28	Si	45	H2	1.860	ppb	167.0	604.02	10000	
39	K	45	He	25.422	ppb	20.7	14274.09	200000	
40	Ca	45	H2	18.445	ppb	8.8	9893.81	200000	
51	V	89	He	0.561	ppb	4.5	873.40	1000	
52	Cr	89	He	0.096	ppb	20.2	194.63	2000	
55	Mn	89	He	0.175	ppb	22.3	117.31	2000	
56	Fe	89	H2	15.486	ppb	8.0	33195.98	100000	
59	Co	89	He	0.045	ppb	27.0	111.12	1000	
60	Ni	89	He	0.175	ppb	24.2	203.35	1000	
63	Cu	89	He	0.795	ppb	3.8	1541.25	2000	
66	Zn	89	He	0.580	ppb	20.7	187.79	2000	
75	As	89	He	0.080	ppb	37.4	19.67	1000	
78	Se	89	H2	0.183	ppb	17.8	17.17	1000	
88	Sr	89	He	0.047	ppb	36.3	44.44	2000	
95	Mo	89	He	0.318	ppb	24.2	331.13	1000	
107	Ag	89	He	0.015	ppb	37.6	61.11	100	
111	Cd	89	He	0.055	ppb	17.6	23.70	1000	
118	Sn	159	He	0.301	ppb	21.5	330.02	1000	
121	Sb	159	No Gas	0.043	ppb	31.8	387.11	1000	
137	Ba	159	No Gas	0.055	ppb	26.5	200.23	2000	
182	W	159	No Gas	0.121	ppb	25.7	710.82	1000	
205	Tl	209	No Gas	0.034	ppb	6.8	460.53	1000	
208	Pb	209	No Gas	0.114	ppb	5.3	2105.78	2000	
232	Th	209	No Gas	0.048	ppb	16.3	874.35	1000	
238	U	209	No Gas	0.026	ppb	13.5	403.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1748799.38	3.6	1605283.87	108.94	29.5	120.4	
Sc	45	No Gas	4109153.69	3.2	3885855.82	105.75	29.5	120.4	
Sc	45	H2	467117.77	0.9	456147.33	102.41	29.5	120.4	
Sc	45	He	96168.89	0.8	93201.95	103.18	29.5	120.4	
Ge	72	No Gas	897071.30	3.5	853395.25	105.12	29.5	120.4	
Ge	72	H2	169778.49	1.6	164020.04	103.51	29.5	120.4	
Ge	72	He	72211.00	0.5	70436.76	102.52	29.5	120.4	
Y	89	H2	2920585.35	0.2	2800847.42	104.28	29.5	120.4	
Y	89	He	611274.20	0.8	596189.55	102.53	29.5	120.4	
Tb	159	No Gas	8308163.62	3.4	7843787.66	105.92	29.5	120.4	
Tb	159	He	3048476.62	0.4	2988340.23	102.01	29.5	120.4	
Bi	209	No Gas	4130588.62	4.0	3902449.55	105.85	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	017ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:04:51 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	19.070	ppb	7.8	26451.52	20	79.5	120.4	
11	B	6	No Gas	19.243	ppb	8.4	19386.90	20	79.5	120.4	
23	Na	45	He	95287.944	ppb	1.3	11742408.77	100000	79.5	120.4	
24	Mg	45	He	95589.713	ppb	1.4	6476583.79	100000	79.5	120.4	
27	Al	45	He	90025.527	ppb	1.3	2381514.63	100000	79.5	120.4	
28	Si	45	H2	498.093	ppb	0.4	23799.68	500	79.5	120.4	
39	K	45	He	93692.871	ppb	1.2	5731271.27	100000	79.5	120.4	
40	Ca	45	H2	101379.256	ppb	1.4	44249104.34	100000	79.5	120.4	
51	V	89	He	19.672	ppb	2.3	19356.17	20	79.5	120.4	
52	Cr	89	He	19.682	ppb	1.4	23557.27	20	79.5	120.4	
55	Mn	89	He	19.915	ppb	0.3	10918.92	20	79.5	120.4	
56	Fe	89	H2	99086.585	ppb	2.1	173315367.60	100000	79.5	120.4	
59	Co	89	He	19.792	ppb	2.1	40418.23	20	79.5	120.4	
60	Ni	89	He	19.422	ppb	2.1	10803.41	20	79.5	120.4	
63	Cu	89	He	19.321	ppb	2.0	30393.71	20	79.5	120.4	
66	Zn	89	He	18.720	ppb	3.7	3919.59	20	79.5	120.4	
75	As	89	He	19.611	ppb	0.8	3381.78	20	79.5	120.4	
78	Se	89	H2	20.528	ppb	2.7	1717.03	20	79.5	120.4	
88	Sr	89	He	20.124	ppb	2.8	16625.04	20	79.5	120.4	
95	Mo	89	He	1996.173	ppb	1.6	1892934.66	2000	79.5	120.4	
107	Ag	89	He	18.779	ppb	2.0	60138.41	20	79.5	120.4	
111	Cd	89	He	19.823	ppb	1.7	7939.81	20	79.5	120.4	
118	Sn	159	He	19.507	ppb	1.2	17593.11	20	79.5	120.4	
121	Sb	159	No Gas	18.238	ppb	7.8	144283.07	20	79.5	120.4	
137	Ba	159	No Gas	18.418	ppb	6.6	56797.68	20	79.5	120.4	
182	W	159	No Gas	18.777	ppb	9.5	106018.26	20	79.5	120.4	
205	Tl	209	No Gas	19.365	ppb	6.5	225713.51	20	79.5	120.4	
208	Pb	209	No Gas	19.074	ppb	7.1	303973.68	20	79.5	120.4	
232	Th	209	No Gas	19.506	ppb	9.2	310728.07	20	79.5	120.4	
238	U	209	No Gas	19.222	ppb	8.4	286993.83	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1554944.43	3.0	1605283.87	96.86	29.5	120.4	
Sc	45	No Gas	3996568.07	3.3	3885855.82	102.85	29.5	120.4	
Sc	45	H2	430822.48	1.4	456147.33	94.45	29.5	120.4	
Sc	45	He	91181.06	1.8	93201.95	97.83	29.5	120.4	
Ge	72	No Gas	872225.08	3.5	853395.25	102.21	29.5	120.4	
Ge	72	H2	153567.05	1.6	164020.04	93.63	29.5	120.4	
Ge	72	He	67607.89	1.4	70436.76	95.98	29.5	120.4	
Y	89	H2	2719966.64	1.6	2800847.42	97.11	29.5	120.4	
Y	89	He	579332.22	1.1	596189.55	97.17	29.5	120.4	
Tb	159	No Gas	8401443.56	3.1	7843787.66	107.11	29.5	120.4	
Tb	159	He	3005939.57	1.1	2988340.23	100.59	29.5	120.4	
Bi	209	No Gas	3978329.02	3.5	3902449.55	101.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 018SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:07:39 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.047	ppb	22.3	121.11	100	
11	B	6	No Gas	0.148	ppb	68.6	2383.61	1000	
23	Na	45	He	97.121	ppb	9.8	16027.68	200000	
24	Mg	45	He	21.543	ppb	39.3	2258.41	200000	
27	Al	45	He	20.942	ppb	39.4	614.53	200000	
28	Si	45	H2	1.875	ppb	66.8	610.69	10000	
39	K	45	He	39.915	ppb	13.3	15139.79	200000	
40	Ca	45	H2	20.509	ppb	6.7	10990.16	200000	
51	V	89	He	0.414	ppb	9.8	723.38	1000	
52	Cr	89	He	0.053	ppb	50.2	141.31	2000	
55	Mn	89	He	0.082	ppb	19.8	63.99	2000	
56	Fe	89	H2	25.763	ppb	4.4	52999.21	100000	
59	Co	89	He	0.024	ppb	52.5	64.45	1000	
60	Ni	89	He	0.154	ppb	27.3	191.12	1000	
63	Cu	89	He	0.577	ppb	8.1	1182.32	2000	
66	Zn	89	He	0.508	ppb	15.6	172.23	2000	
75	As	89	He	0.050	ppb	38.5	14.33	1000	
78	Se	89	H2	0.069	ppb	23.5	7.00	1000	
88	Sr	89	He	0.016	ppb	10.9	17.78	2000	
95	Mo	89	He	1.868	ppb	14.8	1882.45	1000	
107	Ag	89	He	0.010	ppb	26.1	45.56	100	
111	Cd	89	He	0.017	ppb	23.7	7.78	1000	
118	Sn	159	He	0.093	ppb	21.1	140.01	1000	
121	Sb	159	No Gas	0.026	ppb	48.5	266.97	1000	
137	Ba	159	No Gas	0.028	ppb	36.0	120.13	2000	
182	W	159	No Gas	0.061	ppb	6.7	387.10	1000	
205	Tl	209	No Gas	0.027	ppb	37.4	390.45	1000	
208	Pb	209	No Gas	0.054	ppb	7.6	1147.99	2000	
232	Th	209	No Gas	0.047	ppb	1.0	881.02	1000	
238	U	209	No Gas	0.022	ppb	38.5	360.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1675693.45	3.3	1605283.87	104.39	29.5	120.4	
Sc	45	No Gas	4126899.98	2.9	3885855.82	106.2	29.5	120.4	
Sc	45	H2	472420.61	0.9	456147.33	103.57	29.5	120.4	
Sc	45	He	95743.95	2.8	93201.95	102.73	29.5	120.4	
Ge	72	No Gas	909325.84	2.7	853395.25	106.55	29.5	120.4	
Ge	72	H2	169757.42	0.5	164020.04	103.5	29.5	120.4	
Ge	72	He	72270.33	2.3	70436.76	102.6	29.5	120.4	
Y	89	H2	2948537.73	1.6	2800847.42	105.27	29.5	120.4	
Y	89	He	611967.74	2.3	596189.55	102.65	29.5	120.4	
Tb	159	No Gas	8532520.29	2.6	7843787.66	108.78	29.5	120.4	
Tb	159	He	3052656.65	2.8	2988340.23	102.15	29.5	120.4	
Bi	209	No Gas	4230016.17	3.2	3902449.55	108.39	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	019_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:10:20 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.503	ppb	5.1	34849.42	25	94.01	89.8	110.2	
11	B	6	No Gas	23.474	ppb	5.5	24800.78	25	93.9	89.8	110.2	
23	Na	45	He	5108.900	ppb	1.8	670023.70	5000	102.18	89.8	110.2	
24	Mg	45	He	4948.419	ppb	1.4	355763.04	5000	98.97	89.8	110.2	
27	Al	45	He	481.164	ppb	3.8	13509.04	500	96.23	89.8	110.2	
28	Si	45	H2	461.143	ppb	1.5	25280.83	500	92.23	89.8	110.2	
39	K	45	He	4933.720	ppb	1.1	331637.49	5000	98.67	89.8	110.2	
40	Ca	45	H2	4738.805	ppb	1.1	2370656.23	5000	94.78	89.8	110.2	
51	V	89	He	25.117	ppb	2.1	26293.00	25	100.47	89.8	110.2	
52	Cr	89	He	24.858	ppb	1.1	31732.35	25	99.43	89.8	110.2	
55	Mn	89	He	25.029	ppb	0.6	14639.61	25	100.12	89.8	110.2	
56	Fe	89	H2	4785.071	ppb	0.5	9402135.76	5000	95.7	89.8	110.2	
59	Co	89	He	24.752	ppb	0.9	53944.68	25	99.01	89.8	110.2	
60	Ni	89	He	25.433	ppb	0.6	15067.45	25	101.73	89.8	110.2	
63	Cu	89	He	24.991	ppb	1.1	41891.34	25	99.96	89.8	110.2	
66	Zn	89	He	24.972	ppb	1.9	5560.21	25	99.89	89.8	110.2	
75	As	89	He	24.676	ppb	0.5	4539.58	25	98.7	89.8	110.2	
78	Se	89	H2	24.177	ppb	1.8	2270.42	25	96.71	89.8	110.2	
88	Sr	89	He	23.455	ppb	1.4	20672.79	25	93.82	89.8	110.2	
95	Mo	89	He	24.838	ppb	1.1	25151.58	25	99.35	89.8	110.2	
107	Ag	89	He	24.563	ppb	0.5	83953.08	25	98.25	89.8	110.2	
111	Cd	89	He	24.740	ppb	0.9	10575.70	25	98.96	89.8	110.2	
118	Sn	159	He	24.406	ppb	1.7	22537.24	25	97.62	89.8	110.2	
121	Sb	159	No Gas	23.723	ppb	5.4	190917.27	25	94.89	89.8	110.2	
137	Ba	159	No Gas	23.655	ppb	3.8	74208.73	25	94.62	89.8	110.2	
182	W	159	No Gas	23.540	ppb	3.4	135305.95	25	94.16	89.8	110.2	
205	Tl	209	No Gas	23.973	ppb	3.3	296388.44	25	95.89	89.8	110.2	
208	Pb	209	No Gas	23.761	ppb	4.1	401641.06	25	95.04	89.8	110.2	
232	Th	209	No Gas	23.450	ppb	5.4	396350.53	25	93.8	89.8	110.2	
238	U	209	No Gas	23.611	ppb	4.3	374069.35	25	94.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1661591.31	2.5	1605283.87	103.51	29.5	120.4	
Sc	45	No Gas	4241927.56	2.6	3885855.82	109.16	29.5	120.4	
Sc	45	H2	493554.65	1.1	456147.33	108.2	29.5	120.4	
Sc	45	He	96563.95	1.8	93201.95	103.61	29.5	120.4	
Ge	72	No Gas	918040.53	1.7	853395.25	107.58	29.5	120.4	
Ge	72	H2	174554.34	1.1	164020.04	106.42	29.5	120.4	
Ge	72	He	73241.43	1.2	70436.76	103.98	29.5	120.4	
Y	89	H2	3053545.70	0.6	2800847.42	109.02	29.5	120.4	
Y	89	He	618246.09	0.8	596189.55	103.7	29.5	120.4	
Tb	159	No Gas	8542218.28	2.8	7843787.66	108.9	29.5	120.4	
Tb	159	He	3079891.00	1.1	2988340.23	103.06	29.5	120.4	
Bi	209	No Gas	4216559.80	2.8	3902449.55	108.05	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	020_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:13:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	17.9	117.78	0.2	
11	B	6	No Gas	0.199	ppb	60.1	2408.07	4	
23	Na	45	He	69.891	ppb	50.4	12845.58	200	
24	Mg	45	He	21.388	ppb	166.2	2308.44	20	Fail All Methods□ Failed DoD
27	Al	45	He	17.806	ppb	162.1	542.41	20	Failed DoD
28	Si	45	H2	0.745	ppb	86.2	563.97	100	
39	K	45	He	29.833	ppb	106.4	14867.24	200	
40	Ca	45	H2	3.814	ppb	11.9	3059.33	20	
51	V	89	He	0.279	ppb	47.5	595.59	1	
52	Cr	89	He	0.063	ppb	130.5	156.64	1	
55	Mn	89	He	0.096	ppb	84.3	73.32	0.4	
56	Fe	89	H2	6.788	ppb	4.6	17129.68	20	
59	Co	89	He	0.046	ppb	151.5	115.57	0.2	
60	Ni	89	He	0.118	ppb	75.7	173.34	0.4	
63	Cu	89	He	0.185	ppb	49.6	545.59	0.6	
66	Zn	89	He	0.243	ppb	100.7	116.67	2	
75	As	89	He	0.047	ppb	98.0	14.00	1	
78	Se	89	H2	0.071	ppb	25.0	7.17	1	
88	Sr	89	He	0.056	ppb	162.1	53.34	1	
95	Mo	89	He	0.524	ppb	99.8	547.88	1	Failed DoD
107	Ag	89	He	0.020	ppb	132.9	81.11	0.2	
111	Cd	89	He	0.041	ppb	150.1	18.15	0.2	
118	Sn	159	He	0.104	ppb	53.6	152.23	1	
121	Sb	159	No Gas	0.019	ppb	39.4	200.23	0.2	
137	Ba	159	No Gas	0.014	ppb	65.9	76.75	0.4	
182	W	159	No Gas	0.065	ppb	13.1	403.80	1	
205	Tl	209	No Gas	0.014	ppb	57.0	223.59	0.2	
208	Pb	209	No Gas	0.034	ppb	34.9	784.22	0.2	
232	Th	209	No Gas	0.033	ppb	14.6	637.40	1	
238	U	209	No Gas	0.018	ppb	26.9	283.65	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1660226.35	1.7	1605283.87	103.42	29.5	120.4	
Sc	45	No Gas	4156079.89	1.1	3885855.82	106.95	29.5	120.4	
Sc	45	H2	481796.34	0.6	456147.33	105.62	29.5	120.4	
Sc	45	He	98199.97	1.0	93201.95	105.36	29.5	120.4	
Ge	72	No Gas	908764.87	1.8	853395.25	106.49	29.5	120.4	
Ge	72	H2	171051.03	0.4	164020.04	104.29	29.5	120.4	
Ge	72	He	73852.03	0.1	70436.76	104.85	29.5	120.4	
Y	89	H2	2968952.21	0.8	2800847.42	106	29.5	120.4	
Y	89	He	622052.13	0.7	596189.55	104.34	29.5	120.4	
Tb	159	No Gas	8376072.10	1.6	7843787.66	106.79	29.5	120.4	
Tb	159	He	3083738.15	0.5	2988340.23	103.19	29.5	120.4	
Bi	209	No Gas	4152536.97	1.9	3902449.55	106.41	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	021_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:15:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.481	ppb	8.5	34640.05	25	93.92	89.8	110.2	
11	B	6	No Gas	22.813	ppb	9.5	24041.87	25	91.25	89.8	110.2	
23	Na	45	He	5085.753	ppb	3.5	669504.05	5000	101.72	89.8	110.2	
24	Mg	45	He	4948.200	ppb	3.8	357049.69	5000	98.96	89.8	110.2	
27	Al	45	He	478.496	ppb	5.1	13485.67	500	95.7	89.8	110.2	
28	Si	45	H2	466.891	ppb	3.7	25150.42	500	93.38	89.8	110.2	
39	K	45	He	4955.621	ppb	3.3	334294.33	5000	99.11	89.8	110.2	
40	Ca	45	H2	4834.584	ppb	1.3	2376841.62	5000	96.69	89.8	110.2	
51	V	89	He	25.069	ppb	4.3	26052.54	25	100.28	89.8	110.2	
52	Cr	89	He	25.048	ppb	3.7	31744.37	25	100.19	89.8	110.2	
55	Mn	89	He	25.051	ppb	4.3	14546.18	25	100.2	89.8	110.2	
56	Fe	89	H2	4841.430	ppb	1.4	9417589.96	5000	96.83	89.8	110.2	
59	Co	89	He	25.487	ppb	3.4	55149.60	25	101.95	89.8	110.2	
60	Ni	89	He	25.502	ppb	1.2	15004.10	25	102.01	89.8	110.2	
63	Cu	89	He	25.089	ppb	2.3	41758.78	25	100.36	89.8	110.2	
66	Zn	89	He	25.209	ppb	5.4	5571.30	25	100.84	89.8	110.2	
75	As	89	He	24.777	ppb	3.6	4525.23	25	99.11	89.8	110.2	
78	Se	89	H2	24.137	ppb	0.7	2244.08	25	96.55	89.8	110.2	
88	Sr	89	He	24.107	ppb	0.2	21104.59	25	96.43	89.8	110.2	
95	Mo	89	He	24.518	ppb	4.1	24646.31	25	98.07	89.8	110.2	
107	Ag	89	He	24.655	ppb	2.0	83675.53	25	98.62	89.8	110.2	
111	Cd	89	He	24.690	ppb	3.1	10478.97	25	98.76	89.8	110.2	
118	Sn	159	He	24.705	ppb	1.7	22551.71	25	98.82	89.8	110.2	
121	Sb	159	No Gas	23.089	ppb	8.3	184265.23	25	92.36	89.8	110.2	
137	Ba	159	No Gas	23.594	ppb	7.5	73390.51	25	94.38	89.8	110.2	
182	W	159	No Gas	22.552	ppb	7.2	128524.85	25	90.21	89.8	110.2	
205	Tl	209	No Gas	23.500	ppb	5.9	287750.87	25	94	89.8	110.2	
208	Pb	209	No Gas	23.320	ppb	8.1	390269.98	25	93.28	89.8	110.2	
232	Th	209	No Gas	22.674	ppb	8.5	379470.06	25	90.7	89.8	110.2	
238	U	209	No Gas	22.839	ppb	8.6	358192.40	25	91.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1655049.62	3.5	1605283.87	103.1	29.5	120.4	
Sc	45	No Gas	4240727.45	2.8	3885855.82	109.13	29.5	120.4	
Sc	45	H2	485045.15	1.3	456147.33	106.34	29.5	120.4	
Sc	45	He	96965.37	2.7	93201.95	104.04	29.5	120.4	
Ge	72	No Gas	919608.33	3.7	853395.25	107.76	29.5	120.4	
Ge	72	H2	174803.04	1.3	164020.04	106.57	29.5	120.4	
Ge	72	He	73304.45	1.6	70436.76	104.07	29.5	120.4	
Y	89	H2	3023301.29	1.3	2800847.42	107.94	29.5	120.4	
Y	89	He	614064.62	1.9	596189.55	103	29.5	120.4	
Tb	159	No Gas	8477144.80	3.2	7843787.66	108.07	29.5	120.4	
Tb	159	He	3044952.49	2.2	2988340.23	101.89	29.5	120.4	
Bi	209	No Gas	4179996.26	3.9	3902449.55	107.11	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	022_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:18:10 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	35.9	193.34	0.2	
11	B	6	No Gas	0.391	ppb	28.4	2608.11	4	
23	Na	45	He	48.372	ppb	2.5	10011.42	200	
24	Mg	45	He	15.430	ppb	15.9	1878.04	20	Failed DoD
27	Al	45	He	9.005	ppb	8.9	291.12	20	
28	Si	45	H2	1.815	ppb	59.9	620.71	100	
39	K	45	He	18.915	ppb	39.6	14182.40	200	
40	Ca	45	H2	14.926	ppb	3.9	8490.64	20	Failed DoD
51	V	89	He	0.187	ppb	11.3	500.03	1	
52	Cr	89	He	0.054	ppb	15.1	144.64	1	
55	Mn	89	He	0.088	ppb	18.9	68.66	0.4	
56	Fe	89	H2	15.712	ppb	2.7	34336.82	20	Failed DoD
59	Co	89	He	0.034	ppb	38.2	88.89	0.2	
60	Ni	89	He	0.102	ppb	32.2	163.34	0.4	
63	Cu	89	He	0.108	ppb	14.9	416.69	0.6	
66	Zn	89	He	0.067	ppb	128.5	77.78	2	
75	As	89	He	0.044	ppb	40.8	13.33	1	
78	Se	89	H2	0.072	ppb	4.5	7.33	1	
88	Sr	89	He	0.053	ppb	27.9	50.00	1	
95	Mo	89	He	0.267	ppb	15.8	285.57	1	
107	Ag	89	He	0.014	ppb	38.9	58.89	0.2	
111	Cd	89	He	0.032	ppb	51.6	14.07	0.2	
118	Sn	159	He	0.098	ppb	28.6	146.67	1	
121	Sb	159	No Gas	0.070	ppb	29.7	614.04	0.2	
137	Ba	159	No Gas	0.050	ppb	35.7	186.88	0.4	
182	W	159	No Gas	0.105	ppb	48.7	637.40	1	
205	Tl	209	No Gas	0.045	ppb	17.7	600.69	0.2	
208	Pb	209	No Gas	0.083	ppb	11.8	1601.83	0.2	
232	Th	209	No Gas	0.120	ppb	28.3	2092.53	1	
238	U	209	No Gas	0.072	ppb	33.9	1127.99	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1670112.91	3.3	1605283.87	104.04	29.5	120.4	
Sc	45	No Gas	4220485.70	3.3	3885855.82	108.61	29.5	120.4	
Sc	45	H2	482138.57	1.0	456147.33	105.7	29.5	120.4	
Sc	45	He	98483.64	2.4	93201.95	105.67	29.5	120.4	
Ge	72	No Gas	918053.32	3.0	853395.25	107.58	29.5	120.4	
Ge	72	H2	173427.28	1.6	164020.04	105.74	29.5	120.4	
Ge	72	He	73616.52	1.6	70436.76	104.51	29.5	120.4	
Y	89	H2	2982921.46	0.3	2800847.42	106.5	29.5	120.4	
Y	89	He	622470.27	2.6	596189.55	104.41	29.5	120.4	
Tb	159	No Gas	8449718.28	3.5	7843787.66	107.72	29.5	120.4	
Tb	159	He	3087323.04	2.7	2988340.23	103.31	29.5	120.4	
Bi	209	No Gas	4149074.19	3.2	3902449.55	106.32	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS2
File Name	023_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:20:47 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.228	ppb	29.9	120.00	0.5	
B	11	6	No Gas	1.904	ppb	59.9	2614.77	10	
Na	23	45	He	266.521	ppb	1.2	10505.60	500	
Mg	24	45	He	30.526	ppb	0.7	1175.69	50	
Al	27	45	He	15.904	ppb	18.9	123.34	50	
Si	28	45	H2	16.771	ppb	36.5	700.80	250	
K	39	45	He	102.022	ppb	34.4	14063.97	500	
Ca	40	45	H2	66.374	ppb	3.1	7672.32	50	PB 6020 Fails DoD
V	51	89	He	3.181	ppb	10.8	948.96	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.023	ppb	9.9	331.94	2.5	
Mn	55	89	He	1.530	ppb	10.0	193.30	1	PB 6020 Fails DoD
Fe	56	89	H2	52.264	ppb	3.1	24244.52	50	PB 6020 Fails DoD
Co	59	89	He	0.180	ppb	8.1	91.12	0.5	
Ni	60	89	He	1.138	ppb	21.1	233.35	1	PB 6020 Fails DoD
Cu	63	89	He	1.401	ppb	9.6	692.26	1.5	
Zn	66	89	He	4.379	ppb	20.1	252.24	5	
As	75	89	He	0.449	ppb	29.9	21.33	2.5	
Se	78	89	H2	0.314	ppb	44.6	6.50	2.5	
Sr	88	89	He	0.224	ppb	43.8	42.22	2.5	
Mo	95	89	He	0.548	ppb	34.0	122.23	2.5	
Ag	107	89	He	0.033	ppb	59.5	33.33	0.5	
Cd	111	89	He	0.069	ppb	74.9	6.30	0.5	
Sn	118	159	He	43.383	ppb	1.2	7974.85	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.165	ppb	50.9	323.70	0.5	
Ba	137	159	No Gas	0.427	ppb	36.8	303.68	1	
W	182	159	No Gas	0.226	ppb	11.0	297.00	2.5	
Tl	205	209	No Gas	0.129	ppb	54.9	377.10	0.5	
Pb	208	209	No Gas	1.405	ppb	12.2	4996.00	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.243	ppb	21.8	911.05	2.5	
U	238	209	No Gas	0.106	ppb	71.6	343.72	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682164.18	2.9	1605283.87	104.79	29.5	120.4	
Sc	45	No Gas	4275393.47	3.1	3885855.82	110.02	29.5	120.4	
Sc	45	H2	481668.30	1.6	456147.33	105.59	29.5	120.4	
Sc	45	He	97000.19	2.9	93201.95	104.08	29.5	120.4	
Ge	72	No Gas	926424.87	3.4	853395.25	108.56	29.5	120.4	
Ge	72	H2	168859.55	1.7	164020.04	102.95	29.5	120.4	
Ge	72	He	72152.58	2.6	70436.76	102.44	29.5	120.4	
Y	89	H2	2983336.41	1.4	2800847.42	106.52	29.5	120.4	
Y	89	He	611122.01	3.0	596189.55	102.5	29.5	120.4	
Tb	159	No Gas	8572101.68	3.1	7843787.66	109.29	29.5	120.4	
Tb	159	He	3051420.82	3.3	2988340.23	102.11	29.5	120.4	
Bi	209	No Gas	4235729.49	2.6	3902449.55	108.54	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG20IMS2
File Name	024LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:23:17 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	42.212	ppb	9.3	12500.26	50	16.88	79.5	120.4	
B	11	6	No Gas	438.299	ppb	9.3	86203.21	500	17.53	79.5	120.4	
Na	23	45	He	7160.276	ppb	0.9	192546.73	7500	19.09	79.5	120.4	
Mg	24	45	He	4859.174	ppb	1.8	71266.66	5000	19.44	79.5	120.4	
Al	27	45	He	1723.425	ppb	0.9	9801.48	2000	17.23	79.5	120.4	
Si	28	45	H2	950.891	ppb	2.7	10355.38	1000	19.02	79.5	120.4	
K	39	45	He	9503.579	ppb	1.3	137121.86	10000	19.01	79.5	120.4	
Ca	40	45	H2	2429.401	ppb	1.0	235404.64	2500	19.44	79.5	120.4	
V	51	89	He	478.446	ppb	0.7	99161.46	500	19.14	79.5	120.4	
Cr	52	89	He	195.381	ppb	0.5	49763.27	200	19.54	79.5	120.4	
Mn	55	89	He	485.719	ppb	0.3	56682.81	500	19.43	79.5	120.4	
Fe	56	89	H2	1032.335	ppb	0.6	396914.62	1000	20.65	79.5	120.4	
Co	59	89	He	490.587	ppb	0.3	213464.09	500	19.62	79.5	120.4	
Ni	60	89	He	497.153	ppb	1.3	58511.94	500	19.89	79.5	120.4	
Cu	63	89	He	243.095	ppb	0.6	81147.69	250	19.45	79.5	120.4	
Zn	66	89	He	466.982	ppb	1.0	20592.47	500	18.68	79.5	120.4	
As	75	89	He	96.225	ppb	2.3	3535.51	100	19.24	79.5	120.4	
Se	78	89	H2	94.495	ppb	1.7	1719.03	100	18.9	79.5	120.4	
Sr	88	89	He	459.670	ppb	1.5	80893.79	500	18.39	79.5	120.4	
Mo	95	89	He	96.120	ppb	1.3	19438.84	100	19.22	79.5	120.4	
Ag	107	89	He	48.645	ppb	0.3	33205.87	50	19.46	79.5	120.4	
Cd	111	89	He	236.817	ppb	0.5	20214.79	250	18.95	79.5	120.4	
Sn	118	159	He	505.370	ppb	0.3	92842.40	500	20.21	79.5	120.4	
Sb	121	159	No Gas	85.740	ppb	10.4	142004.67	100	17.15	79.5	120.4	
Ba	137	159	No Gas	1681.530	ppb	10.2	1084868.19	2000	16.82	79.5	120.4	DoD
W	182	159	No Gas	85.100	ppb	10.7	100626.35	100	17.02	79.5	120.4	
Tl	205	209	No Gas	88.151	ppb	9.7	221761.15	100	17.63	79.5	120.4	
[Pb]	206	209	No Gas	88.283	ppb	8.9	75892.70	100	17.66	79.5	120.4	
[Pb]	207	209	No Gas	87.020	ppb	9.2	65765.51	100	17.4	79.5	120.4	
Pb	208	209	No Gas	87.676	ppb	9.2	301679.68	100	17.54	79.5	120.4	
Th	232	209	No Gas	83.255	ppb	10.4	286404.58	100	16.65	79.5	120.4	
U	238	209	No Gas	84.359	ppb	11.3	271854.35	100	16.87	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1656231.23	2.6	1605283.87	103.17	29.5	120.4	
Sc	45	No Gas	4348618.15	3.4	3885855.82	111.91	29.5	120.4	
Sc	45	H2	475808.65	0.6	456147.33	104.31	29.5	120.4	
Sc	45	He	97672.29	1.3	93201.95	104.8	29.5	120.4	
Ge	72	No Gas	942767.29	2.1	853395.25	110.47	29.5	120.4	
Ge	72	H2	168702.78	1.1	164020.04	102.85	29.5	120.4	
Ge	72	He	72649.83	0.7	70436.76	103.14	29.5	120.4	
Y	89	H2	2957628.41	0.5	2800847.42	105.6	29.5	120.4	
Y	89	He	617255.88	0.7	596189.55	103.53	29.5	120.4	
Tb	159	No Gas	8805446.61	4.1	7843787.66	112.26	29.5	120.4	
Tb	159	He	3069083.43	0.9	2988340.23	102.7	29.5	120.4	
Bi	209	No Gas	4298061.61	4.0	3902449.55	110.14	29.5	120.4	

Sample Report

Sample Name SN5717-014

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:25:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.423	ppb	15.6	1220.09	100	
11	B	6	No Gas	46.303	ppb	13.7	9999.37	1000	
23	Na	45	He	540.920	ppb	3.6	18926.95	200000	
24	Mg	45	He	22462.854	ppb	1.0	347141.76	200000	
27	Al	45	He	91891.825	ppb	1.7	553221.46	200000	
28	Si	45	H2	2776.604	ppb	4.4	31019.74	10000	
39	K	45	He	7761.013	ppb	1.4	121457.16	200000	
40	Ca	45	H2	8531.065	ppb	1.1	873555.97	200000	
51	V	89	He	174.771	ppb	2.6	39916.49	1000	
52	Cr	89	He	109.535	ppb	2.0	30619.47	2000	
55	Mn	89	He	3299.832	ppb	1.5	422097.72	2000	
56	Fe	89	H2	154880.906	ppb	0.6	65348568.77	100000	
59	Co	89	He	60.731	ppb	3.9	28980.84	1000	
60	Ni	89	He	154.798	ppb	2.1	20050.53	1000	
63	Cu	89	He	139.671	ppb	1.7	51224.77	2000	
66	Zn	89	He	491.993	ppb	3.5	23773.17	2000	
75	As	89	He	53.590	ppb	3.4	2160.74	1000	
78	Se	89	H2	2.085	ppb	5.7	42.83	1000	
88	Sr	89	He	54.338	ppb	1.8	10491.19	2000	
95	Mo	89	He	12.226	ppb	1.8	2723.70	1000	
107	Ag	89	He	0.254	ppb	17.8	202.23	100	
111	Cd	89	He	1.799	ppb	2.4	168.89	1000	
118	Sn	159	He	42.065	ppb	1.6	7893.73	1000	
121	Sb	159	No Gas	1.157	ppb	12.6	1858.87	1000	
137	Ba	159	No Gas	349.749	ppb	11.3	212774.34	2000	
182	W	159	No Gas	0.601	ppb	16.1	704.14	1000	
205	Tl	209	No Gas	2.022	ppb	9.7	4819.65	1000	
208	Pb	209	No Gas	194.889	ppb	11.8	627813.63	2000	
232	Th	209	No Gas	29.136	ppb	10.6	93998.08	1000	
238	U	209	No Gas	5.333	ppb	14.2	16094.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1501068.02	8.5	1605283.87	93.51	29.5	120.4	
Sc	45	No Gas	4207591.82	5.9	3885855.82	108.28	29.5	120.4	
Sc	45	H2	504601.58	0.6	456147.33	110.62	29.5	120.4	
Sc	45	He	103761.09	2.3	93201.95	111.33	29.5	120.4	
Ge	72	No Gas	906155.29	7.2	853395.25	106.18	29.5	120.4	
Ge	72	H2	176368.84	0.8	164020.04	107.53	29.5	120.4	
Ge	72	He	76747.53	2.3	70436.76	108.96	29.5	120.4	
Y	89	H2	3279727.29	0.2	2800847.42	117.1	29.5	120.4	
Y	89	He	676928.81	2.8	596189.55	113.54	29.5	120.4	
Tb	159	No Gas	8317455.92	6.3	7843787.66	106.04	29.5	120.4	
Tb	159	He	3114204.57	2.1	2988340.23	104.21	29.5	120.4	
Bi	209	No Gas	4035893.88	6.6	3902449.55	103.42	29.5	120.4	

Sample Report

Sample Name SN5717-015

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:28:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.164	ppb	2.2	1465.68	100	
11	B	6	No Gas	32.418	ppb	2.4	7843.48	1000	
23	Na	45	He	501.549	ppb	3.9	18439.15	200000	
24	Mg	45	He	29841.514	ppb	1.7	476793.40	200000	
27	Al	45	He	103584.591	ppb	1.1	645199.12	200000	
28	Si	45	H2	2159.612	ppb	4.9	24795.09	10000	
39	K	45	He	6975.479	ppb	2.8	114343.33	200000	
40	Ca	45	H2	9909.864	ppb	1.1	1037334.33	200000	
51	V	89	He	169.621	ppb	0.8	39960.83	1000	
52	Cr	89	He	126.014	ppb	0.5	36309.88	2000	
55	Mn	89	He	4092.676	ppb	0.3	539759.89	2000	
56	Fe	89	H2	201923.256	ppb	0.7	87289822.58	100000	
59	Co	89	He	84.633	ppb	0.6	41639.94	1000	
60	Ni	89	He	201.974	ppb	1.9	26940.00	1000	
63	Cu	89	He	192.922	ppb	0.9	72849.32	2000	
66	Zn	89	He	571.795	ppb	1.7	28484.22	2000	
75	As	89	He	67.846	ppb	1.8	2819.93	1000	
78	Se	89	H2	2.357	ppb	4.3	49.50	1000	
88	Sr	89	He	52.727	ppb	0.6	10492.13	2000	
95	Mo	89	He	17.362	ppb	5.1	3980.75	1000	
107	Ag	89	He	0.274	ppb	23.3	224.45	100	
111	Cd	89	He	2.015	ppb	10.0	194.82	1000	
118	Sn	159	He	41.983	ppb	2.4	8019.31	1000	
121	Sb	159	No Gas	1.075	ppb	8.6	1805.48	1000	
137	Ba	159	No Gas	376.356	ppb	4.1	238743.59	2000	
182	W	159	No Gas	0.356	ppb	23.2	450.51	1000	
205	Tl	209	No Gas	1.947	ppb	6.7	4792.95	1000	
208	Pb	209	No Gas	242.255	ppb	4.9	806536.98	2000	
232	Th	209	No Gas	33.820	ppb	4.2	112721.04	1000	
238	U	209	No Gas	5.382	ppb	4.3	16803.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1540207.17	0.5	1605283.87	95.95	29.5	120.4	
Sc	45	No Gas	4434269.37	1.8	3885855.82	114.11	29.5	120.4	
Sc	45	H2	515966.44	1.1	456147.33	113.11	29.5	120.4	
Sc	45	He	107338.19	1.5	93201.95	115.17	29.5	120.4	
Ge	72	No Gas	960760.55	1.2	853395.25	112.58	29.5	120.4	
Ge	72	H2	178039.35	1.2	164020.04	108.55	29.5	120.4	
Ge	72	He	78051.80	0.5	70436.76	110.81	29.5	120.4	
Y	89	H2	3360278.94	0.5	2800847.42	119.97	29.5	120.4	
Y	89	He	697744.82	0.4	596189.55	117.03	29.5	120.4	
Tb	159	No Gas	8632667.79	1.6	7843787.66	110.06	29.5	120.4	
Tb	159	He	3169993.18	0.1	2988340.23	106.08	29.5	120.4	
Bi	209	No Gas	4152030.48	2.0	3902449.55	106.4	29.5	120.4	

Sample Report

Sample Name SN5717-016

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b

Acq Time 7/22/2020 2:31:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.619	ppb	1.0	1218.99	100	
11	B	6	No Gas	39.962	ppb	8.6	8501.67	1000	
23	Na	45	He	477.310	ppb	1.2	17570.19	200000	
24	Mg	45	He	27241.559	ppb	1.1	431232.72	200000	
27	Al	45	He	89844.335	ppb	0.8	554341.84	200000	
28	Si	45	H2	2361.159	ppb	2.7	27281.34	10000	
39	K	45	He	7329.114	ppb	1.4	118314.94	200000	
40	Ca	45	H2	7106.858	ppb	1.6	750298.40	200000	
51	V	89	He	159.828	ppb	1.9	37065.08	1000	
52	Cr	89	He	127.793	ppb	1.1	36225.56	2000	
55	Mn	89	He	2105.803	ppb	0.7	273236.78	2000	
56	Fe	89	H2	156833.947	ppb	2.2	67304558.85	100000	
59	Co	89	He	68.821	ppb	1.2	33314.84	1000	
60	Ni	89	He	164.697	ppb	1.4	21635.15	1000	
63	Cu	89	He	147.099	ppb	0.4	54711.31	2000	
66	Zn	89	He	396.557	ppb	0.5	19457.48	2000	
75	As	89	He	48.979	ppb	2.2	2004.37	1000	
78	Se	89	H2	1.832	ppb	11.7	38.33	1000	
88	Sr	89	He	47.369	ppb	2.1	9274.57	2000	
95	Mo	89	He	8.570	ppb	6.1	1940.21	1000	
107	Ag	89	He	0.118	ppb	15.6	102.22	100	
111	Cd	89	He	0.881	ppb	19.6	84.08	1000	
118	Sn	159	He	44.443	ppb	2.2	8368.46	1000	
121	Sb	159	No Gas	0.489	ppb	8.5	804.26	1000	
137	Ba	159	No Gas	395.287	ppb	4.7	236138.41	2000	
182	W	159	No Gas	0.309	ppb	7.4	373.76	1000	
205	Tl	209	No Gas	2.091	ppb	10.2	4802.94	1000	
208	Pb	209	No Gas	88.014	ppb	5.7	273806.99	2000	
232	Th	209	No Gas	34.347	ppb	3.7	106994.08	1000	
238	U	209	No Gas	4.383	ppb	4.3	12790.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1427183.99	4.2	1605283.87	88.91	29.5	120.4	
Sc	45	No Gas	4202651.72	5.7	3885855.82	108.15	29.5	120.4	
Sc	45	H2	520213.49	1.8	456147.33	114.05	29.5	120.4	
Sc	45	He	106311.57	0.7	93201.95	114.07	29.5	120.4	
Ge	72	No Gas	894494.16	4.1	853395.25	104.82	29.5	120.4	
Ge	72	H2	175945.16	1.8	164020.04	107.27	29.5	120.4	
Ge	72	He	77368.32	0.7	70436.76	109.84	29.5	120.4	
Y	89	H2	3336442.13	1.5	2800847.42	119.12	29.5	120.4	
Y	89	He	686463.03	0.5	596189.55	115.14	29.5	120.4	
Tb	159	No Gas	8143073.49	5.4	7843787.66	103.82	29.5	120.4	
Tb	159	He	3126022.60	0.7	2988340.23	104.61	29.5	120.4	
Bi	209	No Gas	3885353.03	6.0	3902449.55	99.56	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	028_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:33:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.735	ppb	6.7	34546.54	25	98.94	89.8	110.2	
11	B	6	No Gas	24.753	ppb	6.9	24521.46	25	99.01	89.8	110.2	
23	Na	45	He	5046.637	ppb	2.0	685290.99	5000	100.93	89.8	110.2	
24	Mg	45	He	4906.322	ppb	0.6	365209.97	5000	98.13	89.8	110.2	
27	Al	45	He	480.943	ppb	0.8	13983.92	500	96.19	89.8	110.2	
28	Si	45	H2	470.614	ppb	1.9	25648.33	500	94.12	89.8	110.2	
39	K	45	He	4945.865	ppb	0.1	344161.06	5000	98.92	89.8	110.2	
40	Ca	45	H2	4930.094	ppb	2.0	2452744.63	5000	98.6	89.8	110.2	
51	V	89	He	25.360	ppb	0.9	27148.12	25	101.44	89.8	110.2	
52	Cr	89	He	25.314	ppb	1.1	33048.40	25	101.26	89.8	110.2	
55	Mn	89	He	25.545	ppb	0.5	15281.49	25	102.18	89.8	110.2	
56	Fe	89	H2	4983.578	ppb	1.6	9763746.53	5000	99.67	89.8	110.2	
59	Co	89	He	25.315	ppb	1.6	56425.37	25	101.26	89.8	110.2	
60	Ni	89	He	26.155	ppb	1.1	15843.93	25	104.62	89.8	110.2	
63	Cu	89	He	25.149	ppb	1.1	43112.85	25	100.6	89.8	110.2	
66	Zn	89	He	25.125	ppb	5.0	5720.27	25	100.5	89.8	110.2	
75	As	89	He	25.088	ppb	1.2	4719.99	25	100.35	89.8	110.2	
78	Se	89	H2	24.312	ppb	2.6	2276.42	25	97.25	89.8	110.2	
88	Sr	89	He	23.669	ppb	1.6	21337.10	25	94.68	89.8	110.2	
95	Mo	89	He	24.282	ppb	1.7	25144.90	25	97.13	89.8	110.2	
107	Ag	89	He	17.760	ppb	0.8	62081.65	25	71.04	89.8	110.2	> +/- 10%
111	Cd	89	He	24.386	ppb	1.4	10661.32	25	97.54	89.8	110.2	
118	Sn	159	He	24.603	ppb	1.0	22926.83	25	98.41	89.8	110.2	
121	Sb	159	No Gas	23.492	ppb	6.1	192614.57	25	93.97	89.8	110.2	
137	Ba	159	No Gas	23.681	ppb	5.8	75675.56	25	94.72	89.8	110.2	
182	W	159	No Gas	22.603	ppb	7.5	132285.15	25	90.41	89.8	110.2	
205	Tl	209	No Gas	23.093	ppb	6.7	285470.66	25	92.37	89.8	110.2	
208	Pb	209	No Gas	23.435	ppb	6.5	396141.51	25	93.74	89.8	110.2	
232	Th	209	No Gas	22.946	ppb	7.3	387875.50	25	91.78	89.8	110.2	
238	U	209	No Gas	22.740	ppb	7.1	360247.15	25	90.96	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1565144.05	2.0	1605283.87	97.5	29.5	120.4	
Sc	45	No Gas	4462804.68	3.3	3885855.82	114.85	29.5	120.4	
Sc	45	H2	490891.85	1.4	456147.33	107.62	29.5	120.4	
Sc	45	He	99962.08	0.4	93201.95	107.25	29.5	120.4	
Ge	72	No Gas	957568.10	1.7	853395.25	112.21	29.5	120.4	
Ge	72	H2	173717.05	2.2	164020.04	105.91	29.5	120.4	
Ge	72	He	75105.00	0.8	70436.76	106.63	29.5	120.4	
Y	89	H2	3045112.09	1.3	2800847.42	108.72	29.5	120.4	
Y	89	He	632301.83	0.6	596189.55	106.06	29.5	120.4	
Tb	159	No Gas	8704215.91	2.8	7843787.66	110.97	29.5	120.4	
Tb	159	He	3107873.98	0.4	2988340.23	104	29.5	120.4	
Bi	209	No Gas	4218297.37	2.6	3902449.55	108.09	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	029_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A_#2.b
Acq Time	7/22/2020 2:36:27 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.047	ppb	16.6	115.56	0.2	
11	B	6	No Gas	0.231	ppb	22.0	2355.83	4	
23	Na	45	He	14.813	ppb	11.2	5634.02	200	
24	Mg	45	He	4.380	ppb	12.3	1084.56	20	
27	Al	45	He	0.601	ppb	80.9	52.23	20	
28	Si	45	H2	1.469	ppb	77.8	610.69	100	
39	K	45	He	7.940	ppb	81.3	13687.12	200	
40	Ca	45	H2	3.642	ppb	52.5	3017.24	20	
51	V	89	He	0.106	ppb	0.8	420.02	1	
52	Cr	89	He	0.023	ppb	64.0	105.98	1	
55	Mn	89	He	0.069	ppb	27.7	57.99	0.4	
56	Fe	89	H2	14.616	ppb	52.0	32565.45	20	Failed DoD
59	Co	89	He	0.010	ppb	37.6	35.56	0.2	
60	Ni	89	He	-0.007	ppb	N/A	100.00	0.4	
63	Cu	89	He	-0.002	ppb	N/A	234.45	0.6	
66	Zn	89	He	0.049	ppb	140.0	74.45	2	
75	As	89	He	0.020	ppb	53.0	9.00	1	
78	Se	89	H2	0.053	ppb	32.6	5.67	1	
88	Sr	89	He	0.008	ppb	23.5	11.11	1	
95	Mo	89	He	0.067	ppb	33.1	82.22	1	
107	Ag	89	He	0.004	ppb	37.1	24.44	0.2	
111	Cd	89	He	0.004	ppb	62.8	2.22	0.2	
118	Sn	159	He	0.046	ppb	42.4	98.89	1	
121	Sb	159	No Gas	0.019	ppb	36.5	203.57	0.2	
137	Ba	159	No Gas	0.020	ppb	43.9	93.44	0.4	
182	W	159	No Gas	0.039	ppb	24.9	256.96	1	
205	Tl	209	No Gas	0.019	ppb	21.9	290.33	0.2	
208	Pb	209	No Gas	0.024	ppb	13.7	620.71	0.2	
232	Th	209	No Gas	0.032	ppb	7.1	624.06	1	
238	U	209	No Gas	0.014	ppb	11.1	220.25	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1602980.92	2.3	1605283.87	99.86	29.5	120.4	
Sc	45	No Gas	4302524.40	2.9	3885855.82	110.72	29.5	120.4	
Sc	45	H2	488837.47	0.5	456147.33	107.17	29.5	120.4	
Sc	45	He	100113.91	1.8	93201.95	107.42	29.5	120.4	
Ge	72	No Gas	934488.30	3.7	853395.25	109.5	29.5	120.4	
Ge	72	H2	173816.09	0.8	164020.04	105.97	29.5	120.4	
Ge	72	He	74554.07	1.9	70436.76	105.85	29.5	120.4	
Y	89	H2	3013733.32	0.1	2800847.42	107.6	29.5	120.4	
Y	89	He	629027.28	2.1	596189.55	105.51	29.5	120.4	
Tb	159	No Gas	8513208.69	3.0	7843787.66	108.53	29.5	120.4	
Tb	159	He	3080656.90	1.7	2988340.23	103.09	29.5	120.4	
Bi	209	No Gas	4180207.40	3.1	3902449.55	107.12	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/24/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
07/30/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG24A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
AP (initials) on 7/24/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (17:24) fails high for Cu (0.933 ug/L) ; Closing PQL (22:14) fails low for Ni and high for Pb (0.352 ug/L)

ICSA (17:26) fails high for Mn (0.52 ug/L) Cu (0.751 ug/L)

CCB fails at 20:53 for Be (0.114 ug/L) Ca (12.785 ug/L) Ni (-0.32 ug/L) Ba (0.262 ug/L)

CCBs fails at 21:26 for Ca (28.152 ug/L) Fe (10.36 ug/L) Ni (-0.325 ug/L) Pb (0.132 ug/L), 21:58 for Ni (-0.252 ug/L) Pb (0.188 ug/L)

For high failing ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element

concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

100x diln.: 0.1 mL of sample (pipet M27) + 9.9mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG24A	07/24/2020	17:13	AP
CalStd	1	LNG24A	07/24/2020	17:16	AP
ICV	1	LNG24A	07/24/2020	17:19	AP
ICB	1	LNG24A	07/24/2020	17:21	AP
PQL	1	LNG24A	07/24/2020	17:24	AP
ICSA	1	LNG24A	07/24/2020	17:26	AP
ICSAB	1	LNG24A	07/24/2020	17:29	AP
LRS1	1	LNG24A	07/24/2020	17:32	AP
LRS2	1	LNG24A	07/24/2020	17:34	AP
RINSE	1	LNG24A	07/24/2020	17:37	AP
RINSE	1	LNG24A	07/24/2020	17:40	AP
CCV	1	LNG24A	07/24/2020	17:42	AP
CCB	1	LNG24A	07/24/2020	17:45	AP
missed	1	LNG24A	07/24/2020	17:47	AP
SN5980-002	1	LNG24A	07/24/2020	17:50	AP
SN5980-003	1	LNG24A	07/24/2020	17:53	AP
SN5980-004	1	LNG24A	07/24/2020	17:55	AP
SN5980-005	1	LNG24A	07/24/2020	17:58	AP
SN5980-001	1	LNG24A	07/24/2020	18:00	AP
SN5980-006	1	LNG24A	07/24/2020	18:03	AP
SN5980-007	1	LNG24A	07/24/2020	18:05	AP
SN5980-008	1	LNG24A	07/24/2020	18:08	AP
SN5980-009	1	LNG24A	07/24/2020	18:11	AP
CCV	1	LNG24A	07/24/2020	18:13	AP
CCB	1	LNG24A	07/24/2020	18:16	AP
SN5980-010	1	LNG24A	07/24/2020	18:18	AP
UNDIGESTED LCS TE	5	LNG24A	07/24/2020	18:21	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	18:24	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	18:26	AP
SN5286-001R	1	LNG24A	07/24/2020	18:29	AP
SN5286-002R	1	LNG24A	07/24/2020	18:31	AP
PBWNG13IMW1	5	LNG24A	07/24/2020	18:34	AP
LCSWNG13IMW1	5	LNG24A	07/24/2020	18:37	AP
SN5589-007	5	LNG24A	07/24/2020	18:39	AP
PBWNG17IMW1	5	LNG24A	07/24/2020	18:42	AP
CCV	1	LNG24A	07/24/2020	18:44	AP
CCB	1	LNG24A	07/24/2020	18:47	AP
LCSWNG17IMW1	5	LNG24A	07/24/2020	18:50	AP
SN5772-003R	5	LNG24A	07/24/2020	18:53	AP
PBSNG20IMS1	5	LNG24A	07/24/2020	18:55	AP
LCSONG20IMS1	5	LNG24A	07/24/2020	18:58	AP
SN5515-001R	10	LNG24A	07/24/2020	19:00	AP
SN5515-001R	20	LNG24A	07/24/2020	19:03	AP
PBWNG20IMW1	5	LNG24A	07/24/2020	19:06	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
LCSWNG20IMW1	5	LNG24A	07/24/2020	19:08	AP
SN5920-001	5	LNG24A	07/24/2020	19:11	AP
SN5920-002	5	LNG24A	07/24/2020	19:13	AP
CCV	1	LNG24A	07/24/2020	19:16	AP
CCB	1	LNG24A	07/24/2020	19:19	AP
SN5920-003	5	LNG24A	07/24/2020	19:21	AP
PBSNG21IMW2	5	LNG24A	07/24/2020	19:24	AP
LCSWNG21IMW2	5	LNG24A	07/24/2020	19:27	AP
SN5717-020	5	LNG24A	07/24/2020	19:29	AP
SN5830-002	5	LNG24A	07/24/2020	19:32	AP
SN5832-001	5	LNG24A	07/24/2020	19:35	AP
SN5832-002	5	LNG24A	07/24/2020	19:37	AP
SN5832-003	5	LNG24A	07/24/2020	19:40	AP
SN5832-004	5	LNG24A	07/24/2020	19:43	AP
SN5859-001	5	LNG24A	07/24/2020	19:45	AP
CCV	1	LNG24A	07/24/2020	19:48	AP
CCB	1	LNG24A	07/24/2020	19:51	AP
SN5859-002	5	LNG24A	07/24/2020	19:53	AP
SN5859-003	5	LNG24A	07/24/2020	19:56	AP
SN5897-001	5	LNG24A	07/24/2020	19:58	AP
SN5897-002	5	LNG24A	07/24/2020	20:01	AP
SN5897-002L	25	LNG24A	07/24/2020	20:03	AP
SN5897-002A	5	LNG24A	07/24/2020	20:06	AP
SN5897-002S	5	LNG24A	07/24/2020	20:08	AP
SN5897-002P	5	LNG24A	07/24/2020	20:11	AP
SN5946-001	5	LNG24A	07/24/2020	20:14	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	20:16	AP
CCV	1	LNG24A	07/24/2020	20:19	AP
CCB	1	LNG24A	07/24/2020	20:21	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	20:24	AP
SN5286-001R	1	LNG24A	07/24/2020	20:27	AP
SN5286-002R	1	LNG24A	07/24/2020	20:29	AP
SN5907-001	100	LNG24A	07/24/2020	20:32	AP
SN5923-001	1	LNG24A	07/24/2020	20:35	AP
SN5997-001	1	LNG24A	07/24/2020	20:37	AP
SN5997-001L	5	LNG24A	07/24/2020	20:40	AP
SN5997-001A	1	LNG24A	07/24/2020	20:43	AP
SN5997-001S	1	LNG24A	07/24/2020	20:45	AP
SN5997-001P	1	LNG24A	07/24/2020	20:48	AP
CCV	1	LNG24A	07/24/2020	20:51	AP
CCB	1	LNG24A	07/24/2020	20:53	AP
PBWNG22IMW2	5	LNG24A	07/24/2020	20:56	AP
LCSWNG22IMW2	5	LNG24A	07/24/2020	20:59	AP
SN5920-004	5	LNG24A	07/24/2020	21:01	AP
PBSNG23IMS1	5	LNG24A	07/24/2020	21:04	AP
LCSONG23IMS1	5	LNG24A	07/24/2020	21:07	AP
LC2ONG23IMS1	5	LNG24A	07/24/2020	21:09	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6056-005	5	LNG24A	07/24/2020	21:12	AP
SN6056-006	5	LNG24A	07/24/2020	21:15	AP
SN6056-007	5	LNG24A	07/24/2020	21:17	AP
SN6056-008	5	LNG24A	07/24/2020	21:20	AP
CCV	1	LNG24A	07/24/2020	21:23	AP
CCB	1	LNG24A	07/24/2020	21:26	AP
SN6056-009	5	LNG24A	07/24/2020	21:28	AP
SN6056-009L	25	LNG24A	07/24/2020	21:31	AP
SN6056-009A	5	LNG24A	07/24/2020	21:34	AP
SN6056-009S	5	LNG24A	07/24/2020	21:36	AP
SN6056-009P	5	LNG24A	07/24/2020	21:39	AP
SN6056-010	5	LNG24A	07/24/2020	21:42	AP
SN6056-011	5	LNG24A	07/24/2020	21:44	AP
SN6056-012	5	LNG24A	07/24/2020	21:47	AP
SN6056-013	5	LNG24A	07/24/2020	21:50	AP
SN6056-014	5	LNG24A	07/24/2020	21:52	AP
CCV	1	LNG24A	07/24/2020	21:55	AP
CCB	1	LNG24A	07/24/2020	21:58	AP
SN6056-015	5	LNG24A	07/24/2020	22:01	AP
SN6056-016	5	LNG24A	07/24/2020	22:03	AP
SN6056-017	5	LNG24A	07/24/2020	22:06	AP
CCV	1	LNG24A	07/24/2020	22:08	AP
CCB	1	LNG24A	07/24/2020	22:11	AP
PQL	1	LNG24A	07/24/2020	22:14	AP
RINSE	1	LNG24A	07/24/2020	22:17	AP
RINSE	1	LNG24A	07/24/2020	22:19	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq. Date-Time	7/24/2020 4:41:08 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

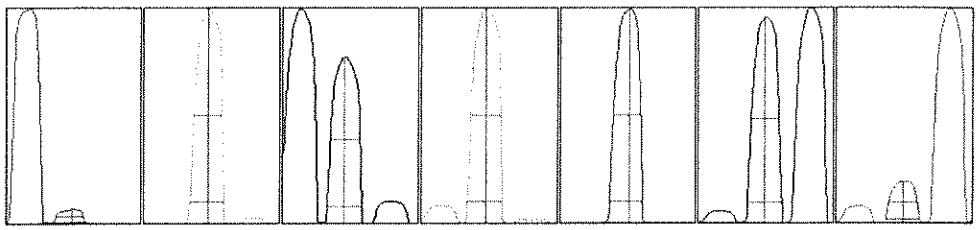
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	4432	44321.35	0.771	5.000	
9	1161	11608.37	0.925	5.000	
24	48564	485644.47	0.299	5.000	
59	9076	90755.10	0.378	5.000	
115	151195	1511950.56	0.395	5.000	
205	9665	96645.71	0.587	5.000	
208	21345	213446.86	0.560	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	4484	4447	4400	4423	4406
9	1151	1166	1150	1161	1176
24	48420	48394	48641	48673	48694
59	9036	9058	9070	9088	9127
115	150453	150647	151531	151597	151747
205	9662	9632	9682	9599	9749
208	21209	21234	21489	21414	21377

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	7328.00	7.00	6.90 - 7.10	
9	1929.84	8.95	8.90 - 9.10	
24	76565.05	23.90	23.90 - 24.10	
59	14388.91	58.95	58.90 - 59.10	
115	254344.15	115.05	114.90 - 115.10	
205	16055.77	205.00	204.90 - 205.10	
208	35395.17	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.706	0.900	
9	0.62	0.739	0.900	
24	0.67	0.773	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.63	0.764	0.900	
208	0.63	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	12.4 V
Extract 2	-125.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	543	5428.54	1.623	5.000	
89	81836	818356.85	1.327	5.000	
205	8500	84996.41	0.414	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	531	541	546	555	541
89	80111	81553	82148	82429	82937
205	8450	8542	8499	8522	8485

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.6 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1730	17299.49	0.939	5.000	
89	17530	175302.74	0.724	5.000	
205	4780	47799.55	0.593	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1730	1713	1715	1741	1751
89	17435	17445	17434	17653	17685
205	4765	4746	4770	4810	4809

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.2 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:13:00 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	32.22	6.0
11	B	6	No Gas	1895.75	7.5
23	Na	45	He	10849.49	3.0
24	Mg	45	He	891.20	3.0
27	Al	45	He	20.00	33.4
28	Si	45	H2	560.63	1.8
39	K	45	He	12795.01	1.8
40	Ca	45	H2	876.73	7.6
51	V	89	He	361.13	15.4
52	Cr	89	He	72.66	15.7
55	Mn	89	He	12.00	44.1
56	Fe	89	H2	2496.33	9.9
59	Co	89	He	15.56	24.7
60	Ni	89	He	323.35	4.5
63	Cu	89	He	492.25	3.9
66	Zn	89	He	74.45	27.4
75	As	89	He	7.00	28.6
78	Se	89	H2	0.83	69.3
88	Sr	89	He	6.66	86.6
95	Mo	89	He	2.22	86.6
107	Ag	89	He	14.45	26.7
111	Cd	89	He	0.37	173.2
118	Sn	159	He	66.67	31.2
121	Sb	159	No Gas	36.71	56.8
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	23.36	137.8
205	Tl	209	No Gas	140.16	28.6
208	Pb	209	No Gas	223.59	23.0
232	Th	209	No Gas	93.44	24.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1881686.03	0.6
Sc	45	No Gas	3915123.71	0.9
Sc	45	H2	507902.10	3.4
Sc	45	He	102593.00	2.7
Ge	72	No Gas	852546.94	0.2
Ge	72	H2	193980.16	2.8
Ge	72	He	77385.19	1.8
Y	89	H2	3089458.15	2.9
Y	89	He	678154.65	3.0
Tb	159	No Gas	7727080.72	1.1
Tb	159	He	3280980.40	3.2
Bi	209	No Gas	3977089.87	0.9

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:16:01 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	67502.29	2.9
11	B	6	No Gas	45358.57	0.9
23	Na	45	He	1125490.00	0.5
24	Mg	45	He	624674.37	1.0
27	Al	45	He	24971.38	0.6
28	Si	45	H2	52561.46	1.0
39	K	45	He	603436.61	0.4
40	Ca	45	H2	4660697.01	1.1
51	V	89	He	46795.15	0.1
52	Cr	89	He	56590.09	0.8
55	Mn	89	He	26977.50	0.6
56	Fe	89	H2	18067101.26	0.9
59	Co	89	He	97479.57	1.0
60	Ni	89	He	26403.45	2.3
63	Cu	89	He	74433.98	0.3
66	Zn	89	He	9826.01	1.0
75	As	89	He	8412.13	0.8
78	Se	89	H2	4414.17	0.8
88	Sr	89	He	42557.76	1.5
95	Mo	89	He	45670.27	1.1
107	Ag	89	He	153875.52	0.6
111	Cd	89	He	20006.34	0.9
118	Sn	159	He	44445.21	0.8
121	Sb	159	No Gas	320641.43	3.0
137	Ba	159	No Gas	123351.38	2.7
182	W	159	No Gas	230565.80	3.6
205	Tl	209	No Gas	501343.10	2.6
208	Pb	209	No Gas	694163.43	3.0
232	Th	209	No Gas	698065.23	3.5
238	U	209	No Gas	660958.09	4.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1921569.14	0.6	1881686.03	102.12	29.5	120.4	
Sc	45	No Gas	3909481.43	0.6	3915123.71	99.86	29.5	120.4	
Sc	45	H2	504747.77	0.4	507902.1	99.38	29.5	120.4	
Sc	45	He	97531.06	0.3	102593	95.07	29.5	120.4	
Ge	72	No Gas	855194.93	0.6	852546.94	100.31	29.5	120.4	
Ge	72	H2	190993.11	1.1	193980.16	98.46	29.5	120.4	
Ge	72	He	74746.31	0.4	77385.19	96.59	29.5	120.4	
Y	89	H2	3116398.06	1.1	3089458.15	100.87	29.5	120.4	
Y	89	He	655460.68	0.1	678154.65	96.65	29.5	120.4	
Tb	159	No Gas	7802752.94	0.5	7727080.72	100.98	29.5	120.4	
Tb	159	He	3257769.19	0.1	3280980.4	99.29	29.5	120.4	
Bi	209	No Gas	3989935.89	0.7	3977089.87	100.32	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:19:02 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.308	ppb	9.0	26839.01	20	101.54	89.6	110.4	
11	B	6	No Gas	18.860	ppb	7.6	17922.78	20	94.3	89.6	110.4	
23	Na	45	He	4100.386	ppb	0.6	473255.47	4000	102.51	89.6	110.4	
24	Mg	45	He	4025.915	ppb	1.2	255045.65	4000	100.65	89.6	110.4	
27	Al	45	He	391.943	ppb	1.9	9917.09	400	97.99	89.6	110.4	
28	Si	45	H2	432.375	ppb	0.9	23040.75	400	108.09	89.6	110.4	
39	K	45	He	4014.472	ppb	0.2	252570.40	4000	100.36	89.6	110.4	
40	Ca	45	H2	3973.945	ppb	1.7	1852319.40	4000	99.35	89.6	110.4	
51	V	89	He	20.121	ppb	0.7	19163.63	20	100.6	89.6	110.4	
52	Cr	89	He	20.465	ppb	0.9	23354.28	20	102.32	89.6	110.4	
55	Mn	89	He	20.838	ppb	1.7	11321.83	20	104.19	89.6	110.4	
56	Fe	89	H2	3948.943	ppb	2.5	7184436.53	4000	98.72	89.6	110.4	
59	Co	89	He	20.275	ppb	0.5	39792.17	20	101.38	89.6	110.4	
60	Ni	89	He	20.522	ppb	0.7	11092.51	20	102.61	89.6	110.4	
63	Cu	89	He	20.518	ppb	0.8	31025.17	20	102.59	89.6	110.4	
66	Zn	89	He	20.156	ppb	0.8	4029.62	20	100.78	89.6	110.4	
75	As	89	He	20.560	ppb	1.6	3485.49	20	102.8	89.6	110.4	
78	Se	89	H2	20.170	ppb	1.8	1793.37	20	100.85	89.6	110.4	
88	Sr	89	He	19.756	ppb	2.3	16928.72	20	98.78	89.6	110.4	
95	Mo	89	He	40.064	ppb	1.8	36827.10	40	100.16	89.6	110.4	
107	Ag	89	He	20.697	ppb	0.2	64112.90	20	103.48	89.6	110.4	
111	Cd	89	He	20.603	ppb	1.1	8297.44	20	103.02	89.6	110.4	
118	Sn	159	He	19.990	ppb	1.6	17887.94	20	99.95	89.6	110.4	
121	Sb	159	No Gas	19.688	ppb	9.2	128352.62	20	98.44	89.6	110.4	
137	Ba	159	No Gas	19.783	ppb	8.6	49620.80	20	98.92	89.6	110.4	
182	W	159	No Gas	19.382	ppb	10.1	90842.74	20	96.91	89.6	110.4	
205	Tl	209	No Gas	20.503	ppb	9.3	210825.97	20	102.52	89.6	110.4	
208	Pb	209	No Gas	19.827	ppb	8.5	282367.61	20	99.14	89.6	110.4	
232	Th	209	No Gas	19.945	ppb	9.5	285489.78	20	99.72	89.6	110.4	
238	U	209	No Gas	19.627	ppb	9.6	265949.72	20	98.14	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1882886.82	3.0	1881686.03	100.06	29.5	120.4	
Sc	45	No Gas	3918917.09	3.9	3915123.71	100.1	29.5	120.4	
Sc	45	H2	504756.38	2.1	507902.1	99.38	29.5	120.4	
Sc	45	He	98716.83	1.0	102593	96.22	29.5	120.4	
Ge	72	No Gas	858014.60	2.5	852546.94	100.64	29.5	120.4	
Ge	72	H2	190817.99	0.2	193980.16	98.37	29.5	120.4	
Ge	72	He	75705.89	0.5	77385.19	97.83	29.5	120.4	
Y	89	H2	3138177.70	2.2	3089458.15	101.58	29.5	120.4	
Y	89	He	659673.25	0.7	678154.65	97.27	29.5	120.4	
Tb	159	No Gas	7948454.60	3.8	7727080.72	102.86	29.5	120.4	
Tb	159	He	3271947.49	0.5	3280980.4	99.72	29.5	120.4	
Bi	209	No Gas	4099612.54	4.0	3977089.87	103.08	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:21:41 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.057	ppb	29.5	105.56	0.2	
11	B	6	No Gas	0.503	ppb	38.7	2273.59	4	
23	Na	45	He	1.378	ppb	138.7	10522.15	200	
24	Mg	45	He	-2.210	ppb	N/A	713.40	20	
27	Al	45	He	0.479	ppb	86.8	31.11	20	
28	Si	45	H2	0.973	ppb	123.2	600.69	100	
39	K	45	He	0.641	ppb	281.7	12263.18	200	
40	Ca	45	H2	1.354	ppb	2.7	1483.46	20	
51	V	89	He	-0.083	ppb	N/A	272.24	1	
52	Cr	89	He	-0.010	ppb	N/A	59.32	1	
55	Mn	89	He	0.010	ppb	82.4	16.67	0.4	
56	Fe	89	H2	2.570	ppb	4.1	7022.86	20	
59	Co	89	He	0.000	ppb	1819.2	15.56	0.2	
60	Ni	89	He	-0.143	ppb	N/A	237.79	0.4	
63	Cu	89	He	0.032	ppb	105.0	521.14	0.6	
66	Zn	89	He	-0.072	ppb	N/A	57.78	2	
75	As	89	He	-0.008	ppb	N/A	5.33	1	
78	Se	89	H2	0.016	ppb	84.4	2.17	1	
88	Sr	89	He	-0.001	ppb	N/A	5.56	1	
95	Mo	89	He	0.171	ppb	20.0	157.79	1	
107	Ag	89	He	0.006	ppb	64.3	32.22	0.2	
111	Cd	89	He	0.005	ppb	159.1	2.22	0.2	
118	Sn	159	He	0.071	ppb	73.0	127.79	1	
121	Sb	159	No Gas	0.024	ppb	27.6	190.21	0.2	
137	Ba	159	No Gas	0.025	ppb	35.9	73.42	0.4	
182	W	159	No Gas	0.052	ppb	60.3	260.30	1	
205	Tl	209	No Gas	0.024	ppb	6.9	387.10	0.2	
208	Pb	209	No Gas	0.022	ppb	15.2	537.28	0.2	
232	Th	209	No Gas	0.046	ppb	16.2	740.85	1	
238	U	209	No Gas	0.021	ppb	12.8	276.98	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841311.05	0.4	1881686.03	97.85	29.5	120.4	
Sc	45	No Gas	3786276.74	1.3	3915123.71	96.71	29.5	120.4	
Sc	45	H2	498730.53	1.1	507902.1	98.19	29.5	120.4	
Sc	45	He	97952.29	1.3	102593	95.48	29.5	120.4	
Ge	72	No Gas	835863.08	1.9	852546.94	98.04	29.5	120.4	
Ge	72	H2	187819.55	1.2	193980.16	96.82	29.5	120.4	
Ge	72	He	74710.41	0.7	77385.19	96.54	29.5	120.4	
Y	89	H2	3053927.60	1.0	3089458.15	98.85	29.5	120.4	
Y	89	He	653526.53	1.3	678154.65	96.37	29.5	120.4	
Tb	159	No Gas	7709154.33	1.8	7727080.72	99.77	29.5	120.4	
Tb	159	He	3223734.74	1.3	3280980.4	98.26	29.5	120.4	
Bi	209	No Gas	4005113.07	1.9	3977089.87	100.7	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:24:16 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.200	ppb	20.1	303.35	0.2	100	79.5	120.4
11	B	6	No Gas	3.805	ppb	9.1	5244.46	4	95.12	79.5	120.4
23	Na	45	He	228.917	ppb	2.7	35871.37	200	114.46	79.5	120.4
24	Mg	45	He	19.220	ppb	12.3	2049.18	20	96.1	79.5	120.4
27	Al	45	He	20.031	ppb	8.1	518.92	20	100.16	79.5	120.4
28	Si	45	H2	94.581	ppb	6.0	5300.20	100	94.58	79.5	120.4
39	K	45	He	209.155	ppb	1.5	24555.12	200	104.58	79.5	120.4
40	Ca	45	H2	21.944	ppb	6.9	10737.77	20	109.72	79.5	120.4
51	V	89	He	1.284	ppb	14.2	1524.58	1	128.4	79.5	120.4
52	Cr	89	He	1.049	ppb	1.8	1241.17	1	104.9	79.5	120.4
55	Mn	89	He	0.416	ppb	6.2	233.29	0.4	104	79.5	120.4
56	Fe	89	H2	23.115	ppb	5.2	43023.56	20	115.57	79.5	120.4
59	Co	89	He	0.211	ppb	13.9	422.26	0.2	105.5	79.5	120.4
60	Ni	89	He	0.383	ppb	10.9	506.69	0.4	95.75	79.5	120.4
63	Cu	89	He	0.933	ppb	6.8	1833.52	0.6	155.5	79.5	120.4
66	Zn	89	He	2.103	ppb	3.6	476.69	2	105.15	79.5	120.4
75	As	89	He	1.007	ppb	7.8	174.02	1	100.7	79.5	120.4
78	Se	89	H2	0.987	ppb	9.5	85.33	1	98.7	79.5	120.4
88	Sr	89	He	1.035	ppb	8.8	876.73	1	103.5	79.5	120.4
95	Mo	89	He	1.123	ppb	3.8	1015.63	1	112.3	79.5	120.4
107	Ag	89	He	0.218	ppb	8.8	677.82	0.2	109	79.5	120.4
111	Cd	89	He	0.224	ppb	6.0	88.89	0.2	112	79.5	120.4
118	Sn	159	He	1.139	ppb	3.2	1063.42	1	113.9	79.5	120.4
121	Sb	159	No Gas	0.206	ppb	20.2	1358.25	0.2	103	79.5	120.4
137	Ba	159	No Gas	0.427	ppb	15.1	1071.24	0.4	106.75	79.5	120.4
182	W	159	No Gas	1.006	ppb	8.2	4672.74	1	100.6	79.5	120.4
205	Tl	209	No Gas	0.210	ppb	16.4	2276.10	0.2	105	79.5	120.4
208	Pb	209	No Gas	0.225	ppb	3.6	3397.33	0.2	112.5	79.5	120.4
232	Th	209	No Gas	0.259	ppb	3.3	3764.78	0.2	129.5	79.5	120.4
238	U	209	No Gas	0.192	ppb	9.7	2579.83	0.2	96	79.5	120.4

QC Flag
Failed DoD

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1923469.77	0.8	1881686.03	102.22	29.5	120.4	
Sc	45	No Gas	3842597.57	0.8	3915123.71	98.15	29.5	120.4	
Sc	45	H2	489247.15	4.8	507902.1	96.33	29.5	120.4	
Sc	45	He	97593.17	0.9	102593	95.13	29.5	120.4	
Ge	72	No Gas	848119.85	1.3	852546.94	99.48	29.5	120.4	
Ge	72	H2	185277.17	3.9	193980.16	95.51	29.5	120.4	
Ge	72	He	74019.00	0.3	77385.19	95.65	29.5	120.4	
Y	89	H2	3031936.33	4.4	3089458.15	98.14	29.5	120.4	
Y	89	He	647814.80	0.6	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	7821809.40	1.2	7727080.72	101.23	29.5	120.4	
Tb	159	He	3216718.01	1.6	3280980.4	98.04	29.5	120.4	
Bi	209	No Gas	4055537.89	1.4	3977089.87	101.97	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:26:51 PM
Sample Type	ICSA
Total Dilution	1.0000
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass

Analyte Table:

Name	Mass	ISTD	Tune Step	Tune Mode	Conc.	Units	Det.	CPS	Ratio	Integ Time
[Li]	7	6	1	No Gas	116.028	ppb	Pulse	109257.29	0.0611	0.0999
Be	9	6	1	No Gas	0.028	ppb	Pulse	65.56	0.0000	0.3000
B	11	6	1	No Gas	0.365	ppb	Pulse	2098.01	0.0012	0.3000
Sb	121	159	1	No Gas	0.165	ppb	Pulse	1111.29	0.0001	0.0999
Ba	137	159	1	No Gas	0.163	ppb	Pulse	420.48	0.0001	0.0999
W	182	159	1	No Gas	0.209	ppb	Pulse	1001.16	0.0001	0.0999
Tl	205	209	1	No Gas	0.009	ppb	Pulse	226.92	0.0001	0.0999
[Pb]	206	209	1	No Gas	0.068	ppb	Pulse	307.01	0.0001	0.0999
[Pb]	207	209	1	No Gas	0.087	ppb	Pulse	307.01	0.0001	0.0999
Pb	208	209	1	No Gas	0.085	ppb	Pulse	1364.89	0.0004	0.0999
Th	232	209	1	No Gas	0.037	ppb	Pulse	600.69	0.0002	0.0999
U	238	209	1	No Gas	0.005	ppb	Pulse	70.08	0.0000	0.0999
Si	28	45	2	H2	5.615	ppb	Pulse	790.90	0.0017	0.0999
Ca	40	45	2	H2	97945.288	ppb	Analog	42490864.37	90.4270	0.3000
Fe	56	89	2	H2	96464.178	ppb	Analog	165386936.11	55.9247	0.0999
Se	78	89	2	H2	0.078	ppb	Pulse	7.33	0.0000	2.0001
Na	23	45	3	He	101176.764	ppb	Analog	10286230.35	115.7916	0.0999
Mg	24	45	3	He	101202.852	ppb	Analog	5751294.15	64.7414	0.1500
Al	27	45	3	He	97196.564	ppb	Analog	2208949.80	24.8671	0.3000
K	39	45	3	He	97416.537	ppb	Analog	5257550.66	59.1821	0.2001
V	51	89	3	He	0.034	ppb	Pulse	351.13	0.0006	0.3000
Cr	52	89	3	He	0.293	ppb	Pulse	369.94	0.0006	0.5001
Mn	55	89	3	He	0.520	ppb	Pulse	269.29	0.0004	0.5001
Co	59	89	3	He	0.305	ppb	Pulse	560.06	0.0009	0.1500
Ni	60	89	3	He	0.116	ppb	Pulse	344.46	0.0006	0.3000
Cu	63	89	3	He	0.751	ppb	Pulse	1460.14	0.0024	0.3000
Zn	66	89	3	He	0.526	ppb	Pulse	161.12	0.0003	0.3000
As	75	89	3	He	0.065	ppb	Pulse	16.33	0.0000	0.9999
Sr	88	89	3	He	0.810	ppb	Pulse	641.15	0.0011	0.3000
Mo	95	89	3	He	2114.343	ppb	Analog	1778699.78	2.9463	0.3000
Ag	107	89	3	He	0.027	ppb	Pulse	90.01	0.0001	0.3000
Cd	111	89	3	He	0.358	ppb	Pulse	132.60	0.0002	0.9000
Sn	118	159	3	He	0.388	ppb	Pulse	393.35	0.0001	0.3000

ISTD Table:

Name	Mass	ISTD Conc.	Units	Det.	Tune Step	Tune Mode	CPS	CPS RSD
Li	6	1	ppb	Analog	1	No Gas	1788832.90	0.9
Sc	45	1	ppb	Analog	1	No Gas	3769213.51	0.7
Ge	72	1	ppb	Pulse	1	No Gas	831279.97	0.8
Tb	159	1	ppb	Analog	1	No Gas	7905431.55	0.4
Bi	209	1	ppb	Analog	1	No Gas	3890679.26	0.3
Sc	45	1	ppb	Pulse	2	H2	469893.26	0.5
Ge	72	1	ppb	Pulse	2	H2	174741.38	1.5
Y	89	1	ppb	Analog	2	H2	2957468.95	1.0
Sc	45	1	ppb	Pulse	3	He	88885.87	2.7
Ge	72	1	ppb	Pulse	3	He	67975.61	2.2
Y	89	1	ppb	Pulse	3	He	603985.91	2.4
Tb	159	1	ppb	Analog	3	He	3125184.43	2.5
Bi	209	1	ppb	Analog	3	He	1785607.96	2.2

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:29:29 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.266	ppb	1.9	23693.39	20	79.5	120.4	
11	B	6	No Gas	20.783	ppb	3.5	17294.23	20	79.5	120.4	
23	Na	45	He	97298.408	ppb	4.0	10268265.82	100000	79.5	120.4	
24	Mg	45	He	96860.913	ppb	4.6	5712881.17	100000	79.5	120.4	
27	Al	45	He	92943.980	ppb	4.7	2192346.72	100000	79.5	120.4	
28	Si	45	H2	463.937	ppb	1.9	22532.95	500	79.5	120.4	
39	K	45	He	93389.437	ppb	4.0	5232108.85	100000	79.5	120.4	
40	Ca	45	H2	97685.991	ppb	0.9	41547806.05	100000	79.5	120.4	
51	V	89	He	19.758	ppb	4.4	17829.58	20	79.5	120.4	
52	Cr	89	He	20.187	ppb	4.9	21816.85	20	79.5	120.4	
55	Mn	89	He	19.735	ppb	3.9	10158.49	20	79.5	120.4	
56	Fe	89	H2	95228.334	ppb	0.5	162998067.33	100000	79.5	120.4	
59	Co	89	He	19.823	ppb	5.5	36841.98	20	79.5	120.4	
60	Ni	89	He	19.247	ppb	5.9	9870.47	20	79.5	120.4	
63	Cu	89	He	19.595	ppb	5.3	28077.82	20	79.5	120.4	
66	Zn	89	He	20.080	ppb	7.0	3800.66	20	79.5	120.4	
75	As	89	He	20.072	ppb	3.9	3223.40	20	79.5	120.4	
78	Se	89	H2	19.500	ppb	0.3	1631.52	20	79.5	120.4	
88	Sr	89	He	20.087	ppb	2.7	16307.97	20	79.5	120.4	
95	Mo	89	He	2054.763	ppb	4.4	1789077.77	2000	79.5	120.4	
107	Ag	89	He	19.562	ppb	3.5	57409.78	20	79.5	120.4	
111	Cd	89	He	20.008	ppb	5.0	7631.11	20	79.5	120.4	
118	Sn	159	He	19.256	ppb	4.4	17093.61	20	79.5	120.4	
121	Sb	159	No Gas	19.663	ppb	2.3	127974.68	20	79.5	120.4	
137	Ba	159	No Gas	20.074	ppb	2.5	50263.99	20	79.5	120.4	
182	W	159	No Gas	20.443	ppb	2.0	95652.09	20	79.5	120.4	
205	Tl	209	No Gas	20.613	ppb	1.8	202547.18	20	79.5	120.4	
208	Pb	209	No Gas	20.513	ppb	1.9	279116.55	20	79.5	120.4	
232	Th	209	No Gas	21.322	ppb	2.9	291707.24	20	79.5	120.4	
238	U	209	No Gas	21.019	ppb	2.7	272233.34	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1662402.72	1.4	1881686.03	88.35	29.5	120.4	
Sc	45	No Gas	3605738.16	2.5	3915123.71	92.1	29.5	120.4	
Sc	45	H2	460676.27	1.5	507902.1	90.7	29.5	120.4	
Sc	45	He	92293.53	3.4	102593	89.96	29.5	120.4	
Ge	72	No Gas	807331.66	1.8	852546.94	94.7	29.5	120.4	
Ge	72	H2	171822.68	1.6	193980.16	88.58	29.5	120.4	
Ge	72	He	70832.22	2.4	77385.19	91.53	29.5	120.4	
Y	89	H2	2952330.82	1.0	3089458.15	95.56	29.5	120.4	
Y	89	He	625462.29	3.5	678154.65	92.23	29.5	120.4	
Tb	159	No Gas	7914497.04	2.3	7727080.72	102.43	29.5	120.4	
Tb	159	He	3248608.91	3.5	3280980.4	99.01	29.5	120.4	
Bi	209	No Gas	3907124.59	2.0	3977089.87	98.24	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:32:11 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	104.956	ppb	2.6	135725.96	100	104.96	89.5	110.4	
11	B	6	No Gas	490.873	ppb	3.3	410272.68	500	98.17	89.5	110.4	
51	V	89	He	1016.899	ppb	1.0	918085.99	1000	101.69	89.5	110.4	
52	Cr	89	He	2027.483	ppb	0.6	2226814.42	2000	101.37	89.5	110.4	
55	Mn	89	He	2007.160	ppb	0.5	1051756.59	2000	100.36	89.5	110.4	
59	Co	89	He	1017.142	ppb	1.1	1926362.61	1000	101.71	89.5	110.4	
60	Ni	89	He	1052.454	ppb	0.7	533885.07	1000	105.25	89.5	110.4	
63	Cu	89	He	1985.579	ppb	0.7	2853997.53	2000	99.28	89.5	110.4	
66	Zn	89	He	2072.485	ppb	0.9	392880.42	2000	103.62	89.5	110.4	
75	As	89	He	1014.457	ppb	0.6	165699.00	1000	101.45	89.5	110.4	
78	Se	89	H2	1016.637	ppb	3.9	87140.66	1000	101.66	89.5	110.4	
88	Sr	89	He	1993.216	ppb	0.7	1648095.60	2000	99.66	89.5	110.4	
95	Mo	89	He	1026.151	ppb	0.6	910624.89	1000	102.62	89.5	110.4	
107	Ag	89	He	110.605	ppb	0.9	330701.82	100	110.6	89.5	110.4	> +/- 10%
111	Cd	89	He	1047.209	ppb	0.6	407103.71	1000	104.72	89.5	110.4	
118	Sn	159	He	976.915	ppb	0.2	870993.67	1000	97.69	89.5	110.4	
121	Sb	159	No Gas	961.506	ppb	2.3	6618258.23	1000	96.15	89.5	110.4	
137	Ba	159	No Gas	1964.766	ppb	2.2	5202706.53	2000	98.24	89.5	110.4	
182	W	159	No Gas	1016.831	ppb	2.1	5033038.07	1000	101.68	89.5	110.4	
205	Tl	209	No Gas	981.300	ppb	1.3	10715099.30	1000	98.13	89.5	110.4	
208	Pb	209	No Gas	1937.836	ppb	1.5	29297348.46	2000	96.89	89.5	110.4	
232	Th	209	No Gas	1004.584	ppb	2.0	15276578.75	1000	100.46	89.5	110.4	
238	U	209	No Gas	978.859	ppb	2.3	14096233.03	1000	97.89	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841098.35	0.9	1881686.03	97.84	29.5	120.4	
Sc	45	No Gas	3948146.63	0.5	3915123.71	100.84	29.5	120.4	
Ge	72	No Gas	883094.38	0.1	852546.94	103.58	29.5	120.4	
Tb	159	No Gas	8375370.01	0.7	7727080.72	108.39	29.5	120.4	
Bi	209	No Gas	4345439.82	0.4	3977089.87	109.26	29.5	120.4	
Sc	45	H2	477440.07	4.5	507902.1	94	29.5	120.4	
Ge	72	H2	182263.16	3.7	193980.16	93.96	29.5	120.4	
Y	89	H2	3028896.89	3.6	3089458.15	98.04	29.5	120.4	
Sc	45	He	94755.94	0.9	102593	92.36	29.5	120.4	
Ge	72	He	73231.33	0.6	77385.19	94.63	29.5	120.4	
Y	89	He	636849.38	0.6	678154.65	93.91	29.5	120.4	
Tb	159	He	3272217.59	0.4	3280980.4	99.73	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS2
File Name	014SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:34:42 PM
Sample Type	Sample
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.255	ppb	23.5	302.24				100	
11	B	6	No Gas	11.382	ppb	11.8	9489.02				100	
23	Na	45	He	196781.367	ppb	3.3	21676874.65				100	
24	Mg	45	He	197105.781	ppb	3.6	12140325.79				100	
27	Al	45	He	193693.161	ppb	3.6	4771636.77				100	
28	Si	45	H2	9315.914	ppb	1.1	459359.41				100	
39	K	45	He	192559.354	ppb	2.8	11254985.58				100	
40	Ca	45	H2	194327.006	ppb	1.5	85762528.16				100	
51	V	89	He	0.096	ppb	234.0	427.81				100	
52	Cr	89	He	1.670	ppb	27.5	1915.20				100	
55	Mn	89	He	7.903	ppb	7.9	4196.56				100	
56	Fe	89	H2	95634.266	ppb	1.0	167005678.13				100	
59	Co	89	He	0.818	ppb	35.8	1571.37				100	
60	Ni	89	He	1.981	ppb	10.1	1322.33				100	
63	Cu	89	He	1.466	ppb	34.3	2584.92				100	
66	Zn	89	He	2.443	ppb	15.2	538.92				100	
75	As	89	He	0.447	ppb	55.9	79.68				100	
78	Se	89	H2	0.702	ppb	5.5	60.67				100	
88	Sr	89	He	1.491	ppb	38.4	1243.49				100	
95	Mo	89	He	2.013	ppb	21.7	1802.47				100	
107	Ag	89	He	0.128	ppb	38.7	398.91				100	
111	Cd	89	He	0.257	ppb	93.8	99.26				100	
118	Sn	159	He	1.395	ppb	18.3	1293.46				100	
121	Sb	159	No Gas	0.864	ppb	23.1	5667.61				100	
137	Ba	159	No Gas	1.682	ppb	18.1	4232.08				100	
182	W	159	No Gas	1.825	ppb	12.3	8569.10				100	
205	Tl	209	No Gas	0.728	ppb	29.2	7130.09				100	
208	Pb	209	No Gas	1.505	ppb	24.9	20239.44				100	
232	Th	209	No Gas	1.794	ppb	31.4	24125.28				100	
238	U	209	No Gas	0.827	ppb	31.6	10489.78				100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1541932.76	1.7	1881686.03	81.94	29.5	120.4	
Sc	45	No Gas	3611270.00	1.0	3915123.71	92.24	29.5	120.4	
Ge	72	No Gas	793851.05	1.0	852546.94	93.12	29.5	120.4	
Tb	159	No Gas	7926284.60	1.4	7727080.72	102.58	29.5	120.4	
Bi	209	No Gas	3821340.40	1.2	3977089.87	96.08	29.5	120.4	
Sc	45	H2	478039.09	1.5	507902.1	94.12	29.5	120.4	
Ge	72	H2	176594.89	1.0	193980.16	91.04	29.5	120.4	
Y	89	H2	3012324.72	1.8	3089458.15	97.5	29.5	120.4	
Sc	45	He	96381.41	4.1	102593	93.95	29.5	120.4	
Ge	72	He	72838.11	3.1	77385.19	94.12	29.5	120.4	
Y	89	He	644738.89	3.5	678154.65	95.07	29.5	120.4	
Tb	159	He	3240489.78	3.0	3280980.4	98.77	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:42:37 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.077	ppb	6.4	32745.62	25	96.31	89.8	110.2	
11	B	6	No Gas	24.361	ppb	4.2	23257.08	25	97.44	89.8	110.2	
23	Na	45	He	4958.049	ppb	1.9	587025.73	5000	99.16	89.8	110.2	
24	Mg	45	He	4793.145	ppb	2.2	312521.63	5000	95.86	89.8	110.2	
27	Al	45	He	485.294	ppb	3.8	12639.37	500	97.06	89.8	110.2	
28	Si	45	H2	464.055	ppb	1.5	25126.88	500	92.81	89.8	110.2	
39	K	45	He	4782.742	ppb	2.6	307403.47	5000	95.65	89.8	110.2	
40	Ca	45	H2	4787.558	ppb	0.9	2271281.74	5000	95.75	89.8	110.2	
51	V	89	He	24.334	ppb	3.2	23640.52	25	97.34	89.8	110.2	
52	Cr	89	He	24.560	ppb	2.0	28668.44	25	98.24	89.8	110.2	
55	Mn	89	He	24.952	ppb	1.7	13873.65	25	99.81	89.8	110.2	
56	Fe	89	H2	4840.930	ppb	0.7	8988732.37	5000	96.82	89.8	110.2	
59	Co	89	He	24.721	ppb	1.3	49653.12	25	98.88	89.8	110.2	
60	Ni	89	He	24.672	ppb	1.9	13583.71	25	98.69	89.8	110.2	
63	Cu	89	He	25.103	ppb	1.5	38737.95	25	100.41	89.8	110.2	
66	Zn	89	He	24.527	ppb	3.8	5002.19	25	98.11	89.8	110.2	
75	As	89	He	24.502	ppb	2.6	4249.79	25	98.01	89.8	110.2	
78	Se	89	H2	23.916	ppb	2.5	2169.91	25	95.66	89.8	110.2	
88	Sr	89	He	23.459	ppb	2.1	20571.56	25	93.84	89.8	110.2	
95	Mo	89	He	24.881	ppb	1.6	23410.72	25	99.52	89.8	110.2	
107	Ag	89	He	24.824	ppb	1.9	78695.92	25	99.3	89.8	110.2	
111	Cd	89	He	24.575	ppb	2.9	10127.58	25	98.3	89.8	110.2	
118	Sn	159	He	24.016	ppb	2.9	22232.31	25	96.06	89.8	110.2	
121	Sb	159	No Gas	24.327	ppb	4.8	165434.82	25	97.31	89.8	110.2	
137	Ba	159	No Gas	24.880	ppb	4.0	65091.58	25	99.52	89.8	110.2	
182	W	159	No Gas	23.943	ppb	4.7	117079.59	25	95.77	89.8	110.2	
205	Tl	209	No Gas	24.172	ppb	3.2	257556.90	25	96.69	89.8	110.2	
208	Pb	209	No Gas	24.325	ppb	5.0	358838.44	25	97.3	89.8	110.2	
232	Th	209	No Gas	24.292	ppb	6.9	360244.61	25	97.17	89.8	110.2	
238	U	209	No Gas	23.928	ppb	5.6	335972.43	25	95.71	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1935971.03	1.8	1881686.03	102.88	29.5	120.4	
Sc	45	No Gas	4058156.14	1.7	3915123.71	103.65	29.5	120.4	
Sc	45	H2	513691.53	1.0	507902.1	101.14	29.5	120.4	
Sc	45	He	101668.83	1.4	102593	99.1	29.5	120.4	
Ge	72	No Gas	900139.75	1.3	852546.94	105.58	29.5	120.4	
Ge	72	H2	190859.46	0.2	193980.16	98.39	29.5	120.4	
Ge	72	He	77228.25	1.1	77385.19	99.8	29.5	120.4	
Y	89	H2	3201945.24	0.2	3089458.15	103.64	29.5	120.4	
Y	89	He	675255.16	1.4	678154.65	99.57	29.5	120.4	
Tb	159	No Gas	8274975.36	1.0	7727080.72	107.09	29.5	120.4	
Tb	159	He	3387911.89	1.3	3280980.4	103.26	29.5	120.4	
Bi	209	No Gas	4239102.60	1.2	3977089.87	106.59	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:45:11 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.110	ppb	30.7	178.90	0.2	Failed DoD
11	B	6	No Gas	1.113	ppb	4.9	2871.49	4	
23	Na	45	He	24.662	ppb	29.7	13898.95	200	
24	Mg	45	He	1.431	ppb	352.7	995.69	20	
27	Al	45	He	3.295	ppb	90.9	107.79	20	
28	Si	45	H2	1.161	ppb	172.0	640.73	100	
39	K	45	He	7.277	ppb	125.6	13400.25	200	
40	Ca	45	H2	2.374	ppb	3.4	2048.00	20	
51	V	89	He	0.155	ppb	32.5	517.81	1	
52	Cr	89	He	0.028	ppb	112.1	107.32	1	
55	Mn	89	He	0.079	ppb	17.6	56.66	0.4	
56	Fe	89	H2	6.436	ppb	3.5	14857.68	20	
59	Co	89	He	0.033	ppb	25.8	82.23	0.2	
60	Ni	89	He	-0.067	ppb	N/A	291.12	0.4	
63	Cu	89	He	0.341	ppb	13.5	1026.74	0.6	Failed DoD
66	Zn	89	He	0.045	ppb	147.9	84.45	2	
75	As	89	He	0.018	ppb	170.9	10.33	1	
78	Se	89	H2	0.064	ppb	12.5	6.83	1	
88	Sr	89	He	0.021	ppb	60.8	25.56	1	
95	Mo	89	He	0.158	ppb	15.2	153.34	1	
107	Ag	89	He	0.009	ppb	44.8	44.45	0.2	
111	Cd	89	He	0.019	ppb	87.0	8.52	0.2	
118	Sn	159	He	0.067	ppb	66.7	131.12	1	
121	Sb	159	No Gas	0.070	ppb	38.5	513.92	0.2	
137	Ba	159	No Gas	0.071	ppb	28.5	200.22	0.4	
182	W	159	No Gas	0.101	ppb	14.9	520.59	1	
205	Tl	209	No Gas	0.060	ppb	40.4	780.91	0.2	
208	Pb	209	No Gas	0.113	ppb	31.4	1895.51	0.2	Failed DoD
232	Th	209	No Gas	0.092	ppb	19.4	1451.73	1	
238	U	209	No Gas	0.047	ppb	44.1	654.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1900884.16	0.7	1881686.03	101.02	29.5	120.4	
Sc	45	No Gas	4095714.89	0.1	3915123.71	104.61	29.5	120.4	
Sc	45	H2	522988.05	1.1	507902.1	102.97	29.5	120.4	
Sc	45	He	103711.63	1.5	102593	101.09	29.5	120.4	
Ge	72	No Gas	897216.83	0.7	852546.94	105.24	29.5	120.4	
Ge	72	H2	197900.57	1.0	193980.16	102.02	29.5	120.4	
Ge	72	He	79345.51	0.8	77385.19	102.53	29.5	120.4	
Y	89	H2	3271730.39	0.5	3089458.15	105.9	29.5	120.4	
Y	89	He	686535.85	1.1	678154.65	101.24	29.5	120.4	
Tb	159	No Gas	8268609.25	0.4	7727080.72	107.01	29.5	120.4	
Tb	159	He	3378528.14	2.1	3280980.4	102.97	29.5	120.4	
Bi	209	No Gas	4213319.58	0.5	3977089.87	105.94	29.5	120.4	

Sample Report

Sample Name missed

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:47:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	13.1	73.33	100	
11	B	6	No Gas	-0.139	ppb	N/A	2180.25	1000	
23	Na	45	He	1095.572	ppb	113.1	9483.74	200000	
24	Mg	45	He	511.268	ppb	107.3	2189.23	200000	
27	Al	45	He	69.314	ppb	96.8	120.00	200000	
28	Si	45	H2	18.924	ppb	91.0	43.38	10000	
39	K	45	He	1033.270	ppb	129.7	5262.01	200000	
40	Ca	45	H2	199.703	ppb	21.7	2445.93	200000	
51	V	89	He	-0.145	ppb	N/A	35.56	1000	
52	Cr	89	He	0.767	ppb	107.2	64.66	2000	
55	Mn	89	He	1.781	ppb	104.5	66.66	2000	
56	Fe	89	H2	540.478	ppb	24.8	24419.44	100000	
59	Co	89	He	0.574	ppb	112.1	73.34	1000	
60	Ni	89	He	12.183	ppb	122.1	416.69	1000	
63	Cu	89	He	3.735	ppb	117.5	475.58	2000	
66	Zn	89	He	0.704	ppb	88.7	33.34	2000	
75	As	89	He	0.434	ppb	113.0	6.67	1000	
78	Se	89	H2	1.138	ppb	51.9	2.50	1000	
88	Sr	89	He	0.250	ppb	93.5	18.89	2000	
95	Mo	89	He	0.646	ppb	78.1	48.89	1000	
107	Ag	89	He	0.086	ppb	101.0	24.45	100	
111	Cd	89	He	0.273	ppb	103.4	6.67	1000	
118	Sn	159	He	1.737	ppb	126.1	86.67	1000	
121	Sb	159	No Gas	0.014	ppb	41.1	153.50	1000	
137	Ba	159	No Gas	0.009	ppb	73.3	46.72	2000	
182	W	159	No Gas	0.043	ppb	16.0	276.98	1000	
205	Tl	209	No Gas	0.009	ppb	20.7	283.65	1000	
208	Pb	209	No Gas	0.030	ppb	31.7	774.21	2000	
232	Th	209	No Gas	0.020	ppb	25.3	467.20	1000	
238	U	209	No Gas	0.005	ppb	30.6	86.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2341816.97	15.6	1881686.03	124.45	29.5	120.4	6020/DoD
Sc	45	No Gas	5013852.69	15.7	3915123.71	128.06	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	13286.51	47.9	507902.1	2.62	29.5	120.4	6020/DoD□ EPA
Sc	45	He	27335.44	132.6	102593	26.64	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	1056074.75	17.4	852546.94	123.87	29.5	120.4	6020/DoD
Ge	72	H2	5297.22	47.9	193980.16	2.73	29.5	120.4	6020/DoD□ EPA
Ge	72	He	19834.71	130.5	77385.19	25.63	29.5	120.4	6020/DoD□ EPA
Y	89	H2	83832.24	44.5	3089458.15	2.71	29.5	120.4	6020/DoD□ EPA
Y	89	He	172416.18	132.4	678154.65	25.42	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	9851205.96	15.5	7727080.72	127.49	29.5	120.4	6020/DoD□ EPA
Tb	159	He	838432.26	131.6	3280980.4	25.55	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	4972585.17	16.6	3977089.87	125.03	29.5	120.4	6020/DoD

Sample Report

Sample Name	SN5980-002
File Name	020SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:50:25 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	11.4	68.89	100	
11	B	6	No Gas	18.673	ppb	9.5	16766.89	1000	
23	Na	45	He	42165.018	ppb	0.6	4635049.78	200000	
24	Mg	45	He	7386.534	ppb	0.6	454068.31	200000	
27	Al	45	He	7.895	ppb	18.2	212.23	200000	
28	Si	45	H2	6847.596	ppb	1.5	341564.03	10000	
39	K	45	He	4940.108	ppb	0.8	299267.30	200000	
40	Ca	45	H2	57709.129	ppb	0.2	25752963.50	200000	
51	V	89	He	-0.159	ppb	N/A	198.90	1000	
52	Cr	89	He	0.098	ppb	14.6	178.64	2000	
55	Mn	89	He	0.718	ppb	9.5	391.93	2000	
56	Fe	89	H2	26.637	ppb	6.1	49456.04	100000	
59	Co	89	He	0.033	ppb	46.9	77.79	1000	
60	Ni	89	He	2.453	ppb	3.3	1566.81	1000	
63	Cu	89	He	103.177	ppb	1.1	150563.25	2000	
66	Zn	89	He	47.910	ppb	2.4	9263.38	2000	
75	As	89	He	0.734	ppb	4.2	128.01	1000	
78	Se	89	H2	0.033	ppb	26.9	3.67	1000	
88	Sr	89	He	207.362	ppb	1.0	173564.66	2000	
95	Mo	89	He	0.188	ppb	12.0	171.12	1000	
107	Ag	89	He	0.014	ppb	5.0	55.56	100	
111	Cd	89	He	0.028	ppb	34.7	11.48	1000	
118	Sn	159	He	0.201	ppb	32.3	248.90	1000	
121	Sb	159	No Gas	0.675	ppb	1.6	4512.48	1000	
137	Ba	159	No Gas	2.613	ppb	7.2	6665.73	2000	
182	W	159	No Gas	0.081	ppb	20.2	407.13	1000	
205	Tl	209	No Gas	0.005	ppb	68.9	193.55	1000	
208	Pb	209	No Gas	1.164	ppb	6.0	16843.31	2000	
232	Th	209	No Gas	0.021	ppb	16.4	393.78	1000	
238	U	209	No Gas	0.332	ppb	5.6	4509.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778431.12	3.7	1881686.03	94.51	29.5	120.4	
Sc	45	No Gas	3860232.75	3.1	3915123.71	98.6	29.5	120.4	
Sc	45	H2	483344.21	1.0	507902.1	95.16	29.5	120.4	
Sc	45	He	95932.25	0.9	102593	93.51	29.5	120.4	
Ge	72	No Gas	846221.68	3.1	852546.94	99.26	29.5	120.4	
Ge	72	H2	181794.51	0.7	193980.16	93.72	29.5	120.4	
Ge	72	He	73826.97	0.9	77385.19	95.4	29.5	120.4	
Y	89	H2	3042409.57	0.7	3089458.15	98.48	29.5	120.4	
Y	89	He	644663.43	0.8	678154.65	95.06	29.5	120.4	
Tb	159	No Gas	8060990.16	2.8	7727080.72	104.32	29.5	120.4	
Tb	159	He	3301007.07	0.6	3280980.4	100.61	29.5	120.4	
Bi	209	No Gas	4108172.04	2.6	3977089.87	103.3	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:53:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	40.1	73.34	100	
11	B	6	No Gas	19.730	ppb	6.4	17643.49	1000	
23	Na	45	He	42042.733	ppb	0.4	4698009.51	200000	
24	Mg	45	He	7422.513	ppb	1.0	463802.64	200000	
27	Al	45	He	1.692	ppb	46.5	61.11	200000	
28	Si	45	H2	7001.658	ppb	2.4	342903.50	10000	
39	K	45	He	4927.784	ppb	0.5	303486.64	200000	
40	Ca	45	H2	58862.262	ppb	2.2	25792818.78	200000	
51	V	89	He	-0.065	ppb	N/A	286.68	1000	
52	Cr	89	He	0.048	ppb	33.3	122.65	2000	
55	Mn	89	He	0.405	ppb	10.8	227.30	2000	
56	Fe	89	H2	9.483	ppb	4.6	18753.31	100000	
59	Co	89	He	0.037	ppb	8.4	86.67	1000	
60	Ni	89	He	2.893	ppb	9.6	1801.30	1000	
63	Cu	89	He	136.934	ppb	0.6	200658.24	2000	
66	Zn	89	He	95.488	ppb	2.5	18480.55	2000	
75	As	89	He	0.757	ppb	9.9	132.35	1000	
78	Se	89	H2	0.058	ppb	18.8	5.67	1000	
88	Sr	89	He	209.401	ppb	1.0	176132.56	2000	
95	Mo	89	He	0.100	ppb	38.1	92.23	1000	
107	Ag	89	He	0.024	ppb	21.9	85.56	100	
111	Cd	89	He	0.018	ppb	54.9	7.41	1000	
118	Sn	159	He	0.103	ppb	11.5	161.12	1000	
121	Sb	159	No Gas	0.730	ppb	8.6	4966.44	1000	
137	Ba	159	No Gas	2.497	ppb	7.0	6498.86	2000	
182	W	159	No Gas	0.098	ppb	23.2	500.57	1000	
205	Tl	209	No Gas	0.023	ppb	48.3	390.45	1000	
208	Pb	209	No Gas	1.321	ppb	6.7	19390.80	2000	
232	Th	209	No Gas	0.031	ppb	12.7	550.64	1000	
238	U	209	No Gas	0.332	ppb	8.2	4589.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778590.92	1.6	1881686.03	94.52	29.5	120.4	
Sc	45	No Gas	3884904.09	1.9	3915123.71	99.23	29.5	120.4	
Sc	45	H2	474815.52	3.0	507902.1	93.49	29.5	120.4	
Sc	45	He	97513.06	0.6	102593	95.05	29.5	120.4	
Ge	72	No Gas	854192.20	1.8	852546.94	100.19	29.5	120.4	
Ge	72	H2	179633.21	2.3	193980.16	92.6	29.5	120.4	
Ge	72	He	74688.20	0.2	77385.19	96.51	29.5	120.4	
Y	89	H2	2975237.77	2.5	3089458.15	96.3	29.5	120.4	
Y	89	He	647831.52	0.8	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	8222208.07	1.8	7727080.72	106.41	29.5	120.4	
Tb	159	He	3317860.75	0.1	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4173378.91	2.7	3977089.87	104.94	29.5	120.4	

Sample Report

Sample Name	SN5980-004
File Name	022SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:55:38 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	53.4	83.34	100	
11	B	6	No Gas	20.720	ppb	6.0	18975.26	1000	
23	Na	45	He	42728.012	ppb	3.4	4895212.80	200000	
24	Mg	45	He	7633.963	ppb	4.0	489014.70	200000	
27	Al	45	He	1.579	ppb	18.0	60.00	200000	
28	Si	45	H2	6963.396	ppb	1.8	356335.39	10000	
39	K	45	He	5146.778	ppb	3.1	324455.54	200000	
40	Ca	45	H2	59959.259	ppb	1.1	27453260.70	200000	
51	V	89	He	-0.035	ppb	N/A	321.13	1000	
52	Cr	89	He	0.035	ppb	51.1	110.65	2000	
55	Mn	89	He	0.477	ppb	4.3	271.29	2000	
56	Fe	89	H2	13.343	ppb	2.5	26507.87	100000	
59	Co	89	He	0.047	ppb	47.1	106.67	1000	
60	Ni	89	He	5.509	ppb	6.0	3218.27	1000	
63	Cu	89	He	259.755	ppb	4.1	388465.48	2000	
66	Zn	89	He	213.732	ppb	4.2	42175.78	2000	
75	As	89	He	0.556	ppb	14.9	101.01	1000	
78	Se	89	H2	0.032	ppb	26.0	3.67	1000	
88	Sr	89	He	214.531	ppb	3.6	184389.74	2000	
95	Mo	89	He	0.074	ppb	16.8	70.01	1000	
107	Ag	89	He	0.025	ppb	28.5	91.11	100	
111	Cd	89	He	0.048	ppb	25.1	19.63	1000	
118	Sn	159	He	0.142	ppb	3.1	200.01	1000	
121	Sb	159	No Gas	0.690	ppb	14.0	4726.12	1000	
137	Ba	159	No Gas	2.629	ppb	8.4	6896.20	2000	
182	W	159	No Gas	0.080	ppb	17.9	417.14	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	123.47	1000	
208	Pb	209	No Gas	1.447	ppb	3.9	21477.88	2000	
232	Th	209	No Gas	0.007	ppb	58.4	200.23	1000	
238	U	209	No Gas	0.300	ppb	8.2	4188.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1830158.73	1.3	1881686.03	97.26	29.5	120.4	
Sc	45	No Gas	3960858.06	2.2	3915123.71	101.17	29.5	120.4	
Sc	45	H2	495953.62	1.3	507902.1	97.65	29.5	120.4	
Sc	45	He	100042.60	2.8	102593	97.51	29.5	120.4	
Ge	72	No Gas	868011.49	2.1	852546.94	101.81	29.5	120.4	
Ge	72	H2	186199.77	2.0	193980.16	95.99	29.5	120.4	
Ge	72	He	76391.29	2.2	77385.19	98.72	29.5	120.4	
Y	89	H2	3102248.65	1.1	3089458.15	100.41	29.5	120.4	
Y	89	He	662443.79	3.1	678154.65	97.68	29.5	120.4	
Tb	159	No Gas	8288027.52	2.4	7727080.72	107.26	29.5	120.4	
Tb	159	He	3383454.98	3.0	3280980.4	103.12	29.5	120.4	
Bi	209	No Gas	4222160.97	2.6	3977089.87	106.16	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:58:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	83.0	58.89	100	
11	B	6	No Gas	20.918	ppb	2.7	18561.32	1000	
23	Na	45	He	41472.415	ppb	1.1	4663041.00	200000	
24	Mg	45	He	7478.083	ppb	0.7	470183.08	200000	
27	Al	45	He	1.806	ppb	10.1	64.45	200000	
28	Si	45	H2	6879.574	ppb	0.9	350849.44	10000	
39	K	45	He	4928.567	ppb	1.4	305400.15	200000	
40	Ca	45	H2	58352.051	ppb	1.3	26624107.66	200000	
51	V	89	He	0.068	ppb	24.1	412.24	1000	
52	Cr	89	He	0.042	ppb	39.5	117.31	2000	
55	Mn	89	He	0.608	ppb	7.6	338.61	2000	
56	Fe	89	H2	8.628	ppb	5.3	18068.41	100000	
59	Co	89	He	0.025	ppb	15.8	64.45	1000	
60	Ni	89	He	17.839	ppb	1.3	9601.40	1000	
63	Cu	89	He	169.186	ppb	1.0	250186.85	2000	
66	Zn	89	He	192.694	ppb	0.3	37583.70	2000	
75	As	89	He	0.655	ppb	7.6	116.68	1000	
78	Se	89	H2	0.036	ppb	14.7	4.00	1000	
88	Sr	89	He	210.165	ppb	1.0	178476.66	2000	
95	Mo	89	He	0.079	ppb	25.7	74.45	1000	
107	Ag	89	He	0.067	ppb	13.4	220.01	100	
111	Cd	89	He	0.032	ppb	25.6	13.33	1000	
118	Sn	159	He	0.139	ppb	23.1	195.56	1000	
121	Sb	159	No Gas	0.713	ppb	3.3	4619.27	1000	
137	Ba	159	No Gas	2.867	ppb	3.0	7103.21	2000	
182	W	159	No Gas	0.068	ppb	15.3	337.05	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	2.024	ppb	2.0	28427.68	2000	
232	Th	209	No Gas	0.011	ppb	23.9	246.95	1000	
238	U	209	No Gas	0.347	ppb	0.9	4616.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773479.05	2.5	1881686.03	94.25	29.5	120.4	
Sc	45	No Gas	3704745.24	5.6	3915123.71	94.63	29.5	120.4	
Sc	45	H2	494257.40	1.6	507902.1	97.31	29.5	120.4	
Sc	45	He	98124.15	1.1	102593	95.64	29.5	120.4	
Ge	72	No Gas	824691.38	4.8	852546.94	96.73	29.5	120.4	
Ge	72	H2	183614.17	1.6	193980.16	94.66	29.5	120.4	
Ge	72	He	75501.98	0.3	77385.19	97.57	29.5	120.4	
Y	89	H2	3109946.74	1.4	3089458.15	100.66	29.5	120.4	
Y	89	He	654079.81	0.8	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7828894.95	5.4	7727080.72	101.32	29.5	120.4	
Tb	159	He	3354393.35	0.3	3280980.4	102.24	29.5	120.4	
Bi	209	No Gas	4007559.97	4.7	3977089.87	100.77	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:00:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	52.6	55.56	100	
11	B	6	No Gas	19.345	ppb	5.1	17920.50	1000	
23	Na	45	He	43305.426	ppb	2.4	4787214.75	200000	
24	Mg	45	He	7575.873	ppb	2.6	468319.50	200000	
27	Al	45	He	2.284	ppb	79.6	74.45	200000	
28	Si	45	H2	6821.025	ppb	0.9	349600.18	10000	
39	K	45	He	5030.219	ppb	2.4	306248.89	200000	
40	Ca	45	H2	57382.005	ppb	1.6	26311859.05	200000	
51	V	89	He	0.099	ppb	38.1	435.58	1000	
52	Cr	89	He	0.094	ppb	10.0	173.97	2000	
55	Mn	89	He	0.952	ppb	7.9	516.59	2000	
56	Fe	89	H2	46.705	ppb	1.5	87055.67	100000	
59	Co	89	He	0.067	ppb	28.8	142.24	1000	
60	Ni	89	He	18.634	ppb	6.0	9873.83	1000	
63	Cu	89	He	231.403	ppb	3.1	337345.71	2000	
66	Zn	89	He	168.692	ppb	3.3	32458.57	2000	
75	As	89	He	0.533	ppb	12.0	94.68	1000	
78	Se	89	H2	0.047	ppb	41.9	5.00	1000	
88	Sr	89	He	212.028	ppb	3.2	177597.10	2000	
95	Mo	89	He	0.075	ppb	37.4	70.00	1000	
107	Ag	89	He	0.111	ppb	6.4	348.90	100	
111	Cd	89	He	0.036	ppb	34.2	14.44	1000	
118	Sn	159	He	0.187	ppb	9.6	236.68	1000	
121	Sb	159	No Gas	0.710	ppb	2.1	4903.07	1000	
137	Ba	159	No Gas	2.478	ppb	5.8	6542.30	2000	
182	W	159	No Gas	0.051	ppb	21.1	273.65	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	146.84	1000	
208	Pb	209	No Gas	2.868	ppb	3.3	42729.45	2000	
232	Th	209	No Gas	0.007	ppb	24.7	200.23	1000	
238	U	209	No Gas	0.343	ppb	0.6	4846.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1838228.24	0.7	1881686.03	97.69	29.5	120.4	
Sc	45	No Gas	3933916.72	0.8	3915123.71	100.48	29.5	120.4	
Sc	45	H2	496695.12	1.1	507902.1	97.79	29.5	120.4	
Sc	45	He	96511.96	2.4	102593	94.07	29.5	120.4	
Ge	72	No Gas	862642.42	0.9	852546.94	101.18	29.5	120.4	
Ge	72	H2	186293.71	1.5	193980.16	96.04	29.5	120.4	
Ge	72	He	74388.50	2.0	77385.19	96.13	29.5	120.4	
Y	89	H2	3122254.77	1.6	3089458.15	101.06	29.5	120.4	
Y	89	He	645433.64	2.4	678154.65	95.17	29.5	120.4	
Tb	159	No Gas	8336254.60	1.3	7727080.72	107.88	29.5	120.4	
Tb	159	He	3317832.48	2.4	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4259294.30	1.5	3977089.87	107.1	29.5	120.4	

Sample Report

Sample Name SN5980-006

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:03:23 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	141.4	41.11	100	
11	B	6	No Gas	19.445	ppb	3.2	18047.38	1000	
23	Na	45	He	42782.118	ppb	0.2	4797311.31	200000	
24	Mg	45	He	7674.093	ppb	0.5	481194.68	200000	
27	Al	45	He	6.699	ppb	39.9	186.68	200000	
28	Si	45	H2	6908.462	ppb	1.0	355950.70	10000	
39	K	45	He	5125.709	ppb	0.4	316297.99	200000	
40	Ca	45	H2	59135.670	ppb	1.3	27259028.48	200000	
51	V	89	He	0.096	ppb	35.3	438.91	1000	
52	Cr	89	He	0.072	ppb	10.5	151.30	2000	
55	Mn	89	He	0.775	ppb	6.5	429.27	2000	
56	Fe	89	H2	14.563	ppb	2.0	28737.98	100000	
59	Co	89	He	0.056	ppb	37.7	124.46	1000	
60	Ni	89	He	13.517	ppb	3.2	7363.30	1000	
63	Cu	89	He	246.432	ppb	0.2	364885.03	2000	
66	Zn	89	He	227.532	ppb	1.0	44446.14	2000	
75	As	89	He	0.604	ppb	11.4	108.34	1000	
78	Se	89	H2	0.030	ppb	50.9	3.50	1000	
88	Sr	89	He	214.914	ppb	0.4	182856.77	2000	
95	Mo	89	He	0.078	ppb	5.2	73.34	1000	
107	Ag	89	He	0.039	ppb	21.4	133.34	100	
111	Cd	89	He	0.052	ppb	18.2	21.11	1000	
118	Sn	159	He	0.058	ppb	47.1	122.23	1000	
121	Sb	159	No Gas	0.650	ppb	6.4	4559.21	1000	
137	Ba	159	No Gas	2.459	ppb	6.8	6592.34	2000	
182	W	159	No Gas	0.072	ppb	15.0	387.11	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	106.79	1000	
208	Pb	209	No Gas	2.216	ppb	4.4	33414.59	2000	
232	Th	209	No Gas	0.004	ppb	88.3	163.52	1000	
238	U	209	No Gas	0.295	ppb	3.5	4202.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842440.72	1.3	1881686.03	97.91	29.5	120.4	
Sc	45	No Gas	3973341.25	2.4	3915123.71	101.49	29.5	120.4	
Sc	45	H2	499305.70	1.4	507902.1	98.31	29.5	120.4	
Sc	45	He	97858.63	0.3	102593	95.39	29.5	120.4	
Ge	72	No Gas	870052.42	0.4	852546.94	102.05	29.5	120.4	
Ge	72	H2	185150.92	0.8	193980.16	95.45	29.5	120.4	
Ge	72	He	75215.51	0.2	77385.19	97.2	29.5	120.4	
Y	89	H2	3106283.15	1.1	3089458.15	100.54	29.5	120.4	
Y	89	He	655278.84	0.5	678154.65	96.63	29.5	120.4	
Tb	159	No Gas	8460322.03	2.0	7727080.72	109.49	29.5	120.4	
Tb	159	He	3362272.59	0.4	3280980.4	102.48	29.5	120.4	
Bi	209	No Gas	4302429.83	1.7	3977089.87	108.18	29.5	120.4	

Sample Report

Sample Name SN5980-007

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:05:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	77.3	54.45	100	
11	B	6	No Gas	21.088	ppb	6.5	19394.73	1000	
23	Na	45	He	42744.334	ppb	1.4	4744010.77	200000	
24	Mg	45	He	7657.893	ppb	1.7	475262.71	200000	
27	Al	45	He	2.381	ppb	32.0	77.78	200000	
28	Si	45	H2	6854.418	ppb	2.1	350565.28	10000	
39	K	45	He	5040.604	ppb	1.4	308062.69	200000	
40	Ca	45	H2	57900.689	ppb	2.0	26494606.27	200000	
51	V	89	He	0.129	ppb	33.8	462.25	1000	
52	Cr	89	He	0.023	ppb	52.2	94.65	2000	
55	Mn	89	He	0.621	ppb	8.7	340.61	2000	
56	Fe	89	H2	11.995	ppb	2.3	24013.94	100000	
59	Co	89	He	0.173	ppb	26.8	346.69	1000	
60	Ni	89	He	13.206	ppb	5.4	7087.62	1000	
63	Cu	89	He	200.828	ppb	2.5	292764.99	2000	
66	Zn	89	He	222.989	ppb	2.7	42873.35	2000	
75	As	89	He	0.710	ppb	11.8	124.01	1000	
78	Se	89	H2	0.038	ppb	10.6	4.17	1000	
88	Sr	89	He	210.546	ppb	2.6	176315.16	2000	
95	Mo	89	He	0.073	ppb	24.0	67.78	1000	
107	Ag	89	He	0.086	ppb	5.0	273.35	100	
111	Cd	89	He	0.061	ppb	9.1	24.45	1000	
118	Sn	159	He	0.165	ppb	26.2	217.79	1000	
121	Sb	159	No Gas	0.657	ppb	3.8	4569.22	1000	
137	Ba	159	No Gas	2.497	ppb	13.0	6632.46	2000	
182	W	159	No Gas	0.059	ppb	15.3	320.37	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	2.763	ppb	6.4	41446.21	2000	
232	Th	209	No Gas	0.006	ppb	17.4	193.56	1000	
238	U	209	No Gas	0.369	ppb	14.5	5233.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841381.09	1.5	1881686.03	97.86	29.5	120.4	
Sc	45	No Gas	3943353.58	1.7	3915123.71	100.72	29.5	120.4	
Sc	45	H2	495698.08	1.2	507902.1	97.6	29.5	120.4	
Sc	45	He	96863.28	0.8	102593	94.42	29.5	120.4	
Ge	72	No Gas	869552.20	1.5	852546.94	101.99	29.5	120.4	
Ge	72	H2	185429.22	1.5	193980.16	95.59	29.5	120.4	
Ge	72	He	74179.70	1.0	77385.19	95.86	29.5	120.4	
Y	89	H2	3093708.24	1.6	3089458.15	100.14	29.5	120.4	
Y	89	He	645107.92	1.5	678154.65	95.13	29.5	120.4	
Tb	159	No Gas	8396157.10	1.8	7727080.72	108.66	29.5	120.4	
Tb	159	He	3322489.57	1.2	3280980.4	101.27	29.5	120.4	
Bi	209	No Gas	4290905.18	2.3	3977089.87	107.89	29.5	120.4	

Sample Report

Sample Name	SN5980-008
File Name	027SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:08:34 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	64.9	40.00	100	
11	B	6	No Gas	21.595	ppb	15.2	18133.20	1000	
23	Na	45	He	41836.870	ppb	1.1	4690233.71	200000	
24	Mg	45	He	7493.153	ppb	1.3	469734.22	200000	
27	Al	45	He	1.813	ppb	46.4	64.45	200000	
28	Si	45	H2	6960.287	ppb	1.2	352838.38	10000	
39	K	45	He	4983.281	ppb	0.8	307773.08	200000	
40	Ca	45	H2	59067.660	ppb	0.8	26791624.32	200000	
51	V	89	He	0.118	ppb	34.7	458.91	1000	
52	Cr	89	He	0.035	ppb	50.8	109.31	2000	
55	Mn	89	He	0.406	ppb	5.4	229.96	2000	
56	Fe	89	H2	5.456	ppb	1.3	12262.37	100000	
59	Co	89	He	0.032	ppb	26.0	77.78	1000	
60	Ni	89	He	10.291	ppb	5.1	5669.13	1000	
63	Cu	89	He	223.460	ppb	1.4	330258.83	2000	
66	Zn	89	He	215.234	ppb	1.9	41963.96	2000	
75	As	89	He	0.526	ppb	10.6	95.01	1000	
78	Se	89	H2	0.034	ppb	69.5	3.83	1000	
88	Sr	89	He	209.625	ppb	0.6	178009.82	2000	
95	Mo	89	He	0.051	ppb	28.5	48.89	1000	
107	Ag	89	He	0.032	ppb	22.3	113.34	100	
111	Cd	89	He	0.055	ppb	12.8	22.22	1000	
118	Sn	159	He	0.071	ppb	33.5	134.45	1000	
121	Sb	159	No Gas	0.746	ppb	19.0	4625.99	1000	
137	Ba	159	No Gas	2.867	ppb	22.8	6769.36	2000	
182	W	159	No Gas	0.065	ppb	38.2	307.01	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	66.75	1000	
208	Pb	209	No Gas	2.025	ppb	17.2	27068.51	2000	
232	Th	209	No Gas	0.005	ppb	81.2	156.84	1000	
238	U	209	No Gas	0.336	ppb	15.5	4245.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1701708.25	11.7	1881686.03	90.44	29.5	120.4	
Sc	45	No Gas	3556170.89	14.8	3915123.71	90.83	29.5	120.4	
Sc	45	H2	491279.03	0.9	507902.1	96.73	29.5	120.4	
Sc	45	He	97840.94	1.4	102593	95.37	29.5	120.4	
Ge	72	No Gas	784744.91	14.8	852546.94	92.05	29.5	120.4	
Ge	72	H2	184844.78	1.2	193980.16	95.29	29.5	120.4	
Ge	72	He	75286.54	1.4	77385.19	97.29	29.5	120.4	
Y	89	H2	3086348.35	0.7	3089458.15	99.9	29.5	120.4	
Y	89	He	654056.04	1.4	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7629541.69	15.1	7727080.72	98.74	29.5	120.4	
Tb	159	He	3378060.05	1.0	3280980.4	102.96	29.5	120.4	
Bi	209	No Gas	3880714.59	15.6	3977089.87	97.58	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:11:06 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.016	ppb	60.3	51.11	100	
11	B	6	No Gas	19.573	ppb	4.9	17892.68	1000	
23	Na	45	He	42614.181	ppb	0.8	4757629.70	200000	
24	Mg	45	He	7625.623	ppb	0.4	476078.37	200000	
27	Al	45	He	3.609	ppb	14.5	108.89	200000	
28	Si	45	H2	6989.211	ppb	1.1	350238.27	10000	
39	K	45	He	5114.264	ppb	0.4	314242.91	200000	
40	Ca	45	H2	60611.413	ppb	1.2	27175127.09	200000	
51	V	89	He	0.139	ppb	10.8	475.58	1000	
52	Cr	89	He	0.051	ppb	42.0	126.64	2000	
55	Mn	89	He	0.434	ppb	6.4	243.29	2000	
56	Fe	89	H2	8.120	ppb	0.3	16875.59	100000	
59	Co	89	He	0.073	ppb	7.2	155.57	1000	
60	Ni	89	He	6.105	ppb	3.0	3468.32	1000	
63	Cu	89	He	193.057	ppb	0.5	283586.68	2000	
66	Zn	89	He	197.676	ppb	1.5	38303.38	2000	
75	As	89	He	0.674	ppb	7.7	119.01	1000	
78	Se	89	H2	0.033	ppb	56.2	3.67	1000	
88	Sr	89	He	214.029	ppb	0.5	180589.90	2000	
95	Mo	89	He	0.060	ppb	42.8	56.67	1000	
107	Ag	89	He	0.023	ppb	33.2	83.33	100	
111	Cd	89	He	0.072	ppb	28.2	28.89	1000	
118	Sn	159	He	0.040	ppb	49.8	105.56	1000	
121	Sb	159	No Gas	0.648	ppb	14.0	4469.07	1000	
137	Ba	159	No Gas	2.632	ppb	5.8	6942.91	2000	
182	W	159	No Gas	0.062	ppb	8.1	330.37	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	1.881	ppb	6.3	28056.88	2000	
232	Th	209	No Gas	0.003	ppb	95.0	150.17	1000	
238	U	209	No Gas	0.336	ppb	11.0	4736.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1816397.20	1.3	1881686.03	96.53	29.5	120.4	
Sc	45	No Gas	3872740.73	1.8	3915123.71	98.92	29.5	120.4	
Sc	45	H2	485648.02	0.7	507902.1	95.62	29.5	120.4	
Sc	45	He	97432.28	0.4	102593	94.97	29.5	120.4	
Ge	72	No Gas	859639.83	1.6	852546.94	100.83	29.5	120.4	
Ge	72	H2	182133.49	0.6	193980.16	93.89	29.5	120.4	
Ge	72	He	74101.80	0.5	77385.19	95.76	29.5	120.4	
Y	89	H2	3058651.64	0.2	3089458.15	99	29.5	120.4	
Y	89	He	649842.75	0.1	678154.65	95.83	29.5	120.4	
Tb	159	No Gas	8330882.58	2.3	7727080.72	107.81	29.5	120.4	
Tb	159	He	3358171.86	0.2	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4255191.97	2.2	3977089.87	106.99	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:13:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.379	ppb	6.9	30253.55	25	93.52	89.8	110.2	
11	B	6	No Gas	23.322	ppb	8.4	21252.94	25	93.29	89.8	110.2	
23	Na	45	He	5152.453	ppb	1.5	562303.88	5000	103.05	89.8	110.2	
24	Mg	45	He	4976.930	ppb	1.0	299297.77	5000	99.54	89.8	110.2	
27	Al	45	He	479.705	ppb	1.5	11525.04	500	95.94	89.8	110.2	
28	Si	45	H2	461.673	ppb	0.9	23040.86	500	92.33	89.8	110.2	
39	K	45	He	4813.505	ppb	1.3	285304.18	5000	96.27	89.8	110.2	
40	Ca	45	H2	4880.974	ppb	0.5	2134044.62	5000	97.62	89.8	110.2	
51	V	89	He	24.479	ppb	2.3	22344.99	25	97.92	89.8	110.2	
52	Cr	89	He	24.655	ppb	0.9	27042.16	25	98.62	89.8	110.2	
55	Mn	89	He	24.808	ppb	1.8	12960.27	25	99.23	89.8	110.2	
56	Fe	89	H2	4863.523	ppb	0.5	8500385.61	5000	97.27	89.8	110.2	
59	Co	89	He	24.617	ppb	1.9	46455.17	25	98.47	89.8	110.2	
60	Ni	89	He	24.627	ppb	0.7	12740.68	25	98.51	89.8	110.2	
63	Cu	89	He	25.100	ppb	2.7	36391.56	25	100.4	89.8	110.2	
66	Zn	89	He	25.282	ppb	0.9	4843.23	25	101.13	89.8	110.2	
75	As	89	He	24.395	ppb	1.3	3975.68	25	97.58	89.8	110.2	
78	Se	89	H2	24.313	ppb	1.8	2076.39	25	97.25	89.8	110.2	
88	Sr	89	He	23.640	ppb	0.9	19477.68	25	94.56	89.8	110.2	
95	Mo	89	He	25.195	ppb	2.6	22273.17	25	100.78	89.8	110.2	
107	Ag	89	He	25.383	ppb	1.3	75612.05	25	101.53	89.8	110.2	
111	Cd	89	He	25.519	ppb	1.4	9882.58	25	102.08	89.8	110.2	
118	Sn	159	He	23.571	ppb	0.8	21432.10	25	94.28	89.8	110.2	
121	Sb	159	No Gas	23.339	ppb	8.3	161022.81	25	93.36	89.8	110.2	
137	Ba	159	No Gas	23.530	ppb	8.8	62442.37	25	94.12	89.8	110.2	
182	W	159	No Gas	23.407	ppb	10.1	116078.78	25	93.63	89.8	110.2	
205	Tl	209	No Gas	24.000	ppb	9.0	261936.85	25	96	89.8	110.2	
208	Pb	209	No Gas	24.107	ppb	8.4	364368.75	25	96.43	89.8	110.2	
232	Th	209	No Gas	23.661	ppb	10.0	359460.40	25	94.64	89.8	110.2	
238	U	209	No Gas	23.784	ppb	8.8	342180.06	25	95.14	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842827.46	2.7	1881686.03	97.93	29.5	120.4	
Sc	45	No Gas	3810947.12	3.6	3915123.71	97.34	29.5	120.4	
Sc	45	H2	473401.52	0.6	507902.1	93.21	29.5	120.4	
Sc	45	He	93767.90	1.0	102593	91.4	29.5	120.4	
Ge	72	No Gas	857017.51	3.7	852546.94	100.52	29.5	120.4	
Ge	72	H2	178813.37	0.4	193980.16	92.18	29.5	120.4	
Ge	72	He	72523.87	0.3	77385.19	93.72	29.5	120.4	
Y	89	H2	3013949.94	0.3	3089458.15	97.56	29.5	120.4	
Y	89	He	634407.47	0.6	678154.65	93.55	29.5	120.4	
Tb	159	No Gas	8407759.18	3.5	7727080.72	108.81	29.5	120.4	
Tb	159	He	3326899.43	0.5	3280980.4	101.4	29.5	120.4	
Bi	209	No Gas	4350678.18	3.7	3977089.87	109.39	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:16:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	53.4	87.78	0.2	
11	B	6	No Gas	0.544	ppb	17.4	2266.93	4	
23	Na	45	He	39.932	ppb	13.7	13902.11	200	
24	Mg	45	He	-1.125	ppb	N/A	731.18	20	
27	Al	45	He	0.368	ppb	63.7	26.67	20	
28	Si	45	H2	0.299	ppb	46.9	543.95	100	
39	K	45	He	4.002	ppb	223.0	11674.59	200	
40	Ca	45	H2	8.450	ppb	1.7	4565.33	20	
51	V	89	He	0.096	ppb	32.1	415.58	1	
52	Cr	89	He	0.002	ppb	583.1	68.66	1	
55	Mn	89	He	0.015	ppb	124.2	18.67	0.4	
56	Fe	89	H2	2.381	ppb	4.4	6635.74	20	
59	Co	89	He	0.008	ppb	139.8	28.89	0.2	
60	Ni	89	He	-0.193	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.217	ppb	23.3	754.49	0.6	
66	Zn	89	He	0.070	ppb	53.6	81.11	2	
75	As	89	He	-0.011	ppb	N/A	4.67	1	
78	Se	89	H2	0.031	ppb	48.7	3.50	1	
88	Sr	89	He	0.027	ppb	68.9	27.78	1	
95	Mo	89	He	0.088	ppb	18.5	77.78	1	
107	Ag	89	He	0.000	ppb	627.3	14.45	0.2	
111	Cd	89	He	0.008	ppb	132.6	3.33	0.2	
118	Sn	159	He	0.025	ppb	36.3	87.78	1	
121	Sb	159	No Gas	0.023	ppb	13.3	193.55	0.2	
137	Ba	159	No Gas	0.016	ppb	61.0	56.73	0.4	
182	W	159	No Gas	0.041	ppb	5.9	223.59	1	
205	Tl	209	No Gas	0.011	ppb	24.9	276.98	0.2	
208	Pb	209	No Gas	0.021	ppb	27.5	550.62	0.2	
232	Th	209	No Gas	0.067	ppb	9.1	1111.30	1	
238	U	209	No Gas	0.016	ppb	13.7	226.92	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809766.02	2.8	1881686.03	96.18	29.5	120.4	
Sc	45	No Gas	3773656.15	3.6	3915123.71	96.39	29.5	120.4	
Sc	45	H2	479226.70	1.3	507902.1	94.35	29.5	120.4	
Sc	45	He	91863.02	4.4	102593	89.54	29.5	120.4	
Ge	72	No Gas	847782.64	3.5	852546.94	99.44	29.5	120.4	
Ge	72	H2	180855.50	0.7	193980.16	93.23	29.5	120.4	
Ge	72	He	71533.82	3.7	77385.19	92.44	29.5	120.4	
Y	89	H2	3029958.26	0.7	3089458.15	98.07	29.5	120.4	
Y	89	He	619770.68	4.6	678154.65	91.39	29.5	120.4	
Tb	159	No Gas	8303100.29	3.8	7727080.72	107.45	29.5	120.4	
Tb	159	He	3217690.71	4.3	3280980.4	98.07	29.5	120.4	
Bi	209	No Gas	4330710.82	4.5	3977089.87	108.89	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:18:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	59.6	55.56	100	
11	B	6	No Gas	19.745	ppb	6.9	17333.14	1000	
23	Na	45	He	41386.508	ppb	1.3	4466271.48	200000	
24	Mg	45	He	7432.758	ppb	1.3	448524.67	200000	
27	Al	45	He	1.773	ppb	17.4	61.11	200000	
28	Si	45	H2	7002.213	ppb	2.8	335345.17	10000	
39	K	45	He	4946.948	ppb	1.3	294174.22	200000	
40	Ca	45	H2	59588.371	ppb	3.1	25531725.18	200000	
51	V	89	He	0.152	ppb	47.9	473.36	1000	
52	Cr	89	He	0.044	ppb	41.4	115.98	2000	
55	Mn	89	He	0.344	ppb	8.1	189.97	2000	
56	Fe	89	H2	6.746	ppb	1.7	13878.96	100000	
59	Co	89	He	0.031	ppb	20.6	73.34	1000	
60	Ni	89	He	8.986	ppb	5.0	4816.57	1000	
63	Cu	89	He	221.522	ppb	0.9	316041.92	2000	
66	Zn	89	He	210.195	ppb	2.3	39559.11	2000	
75	As	89	He	0.620	ppb	9.9	107.01	1000	
78	Se	89	H2	0.035	ppb	55.1	3.67	1000	
88	Sr	89	He	207.133	ppb	0.6	169786.67	2000	
95	Mo	89	He	0.061	ppb	14.0	55.56	1000	
107	Ag	89	He	0.032	ppb	18.2	108.89	100	
111	Cd	89	He	0.049	ppb	38.5	19.26	1000	
118	Sn	159	He	0.192	ppb	18.2	241.12	1000	
121	Sb	159	No Gas	0.629	ppb	0.8	4255.45	1000	
137	Ba	159	No Gas	2.534	ppb	4.9	6552.29	2000	
182	W	159	No Gas	0.070	ppb	18.1	363.75	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.291	ppb	4.8	33755.66	2000	
232	Th	209	No Gas	0.046	ppb	13.6	780.90	1000	
238	U	209	No Gas	0.296	ppb	8.8	4122.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1745263.44	0.5	1881686.03	92.75	29.5	120.4	
Sc	45	No Gas	3704255.45	0.9	3915123.71	94.61	29.5	120.4	
Sc	45	H2	464317.70	2.4	507902.1	91.42	29.5	120.4	
Sc	45	He	94183.34	1.6	102593	91.8	29.5	120.4	
Ge	72	No Gas	826960.63	1.0	852546.94	97	29.5	120.4	
Ge	72	H2	174902.51	0.9	193980.16	90.17	29.5	120.4	
Ge	72	He	72308.32	0.5	77385.19	93.44	29.5	120.4	
Y	89	H2	2940454.00	2.3	3089458.15	95.18	29.5	120.4	
Y	89	He	631319.86	0.9	678154.65	93.09	29.5	120.4	
Tb	159	No Gas	8161365.64	0.7	7727080.72	105.62	29.5	120.4	
Tb	159	He	3312891.79	0.6	3280980.4	100.97	29.5	120.4	
Bi	209	No Gas	4207775.75	1.8	3977089.87	105.8	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	UNDIGESTED LCS TEST
File Name	032LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:21:28 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.327	ppb	6.8	13811.52	50	20.53	79.5	120.4	
B	11	6	No Gas	528.962	ppb	7.3	93296.56	500	21.16	79.5	120.4	
Na	23	45	He	9428.917	ppb	1.7	208329.28	7500	25.14	79.5	120.4	6020□ DoD
Mg	24	45	He	5952.505	ppb	0.5	70938.08	5000	23.81	79.5	120.4	DoD
Al	27	45	He	2144.204	ppb	1.3	10123.91	2000	21.44	79.5	120.4	
Si	28	45	H2	1094.166	ppb	2.3	11036.47	1000	21.88	0	200	
K	39	45	He	11413.759	ppb	1.5	138951.17	10000	22.83	79.5	120.4	
Ca	40	45	H2	2933.249	ppb	0.9	253537.78	2500	23.47	79.5	120.4	
V	51	89	He	569.533	ppb	1.0	101197.63	500	22.78	79.5	120.4	
Cr	52	89	He	232.964	ppb	1.2	50273.02	200	23.3	79.5	120.4	DoD
Mn	55	89	He	581.830	ppb	0.7	59838.43	500	23.27	79.5	120.4	DoD
Fe	56	89	H2	1168.560	ppb	0.7	406349.15	1000	23.37	79.5	120.4	
Co	59	89	He	578.884	ppb	1.0	215148.78	500	23.16	79.5	120.4	DoD
Ni	60	89	He	592.467	ppb	1.2	59239.46	500	23.7	79.5	120.4	DoD
Cu	63	89	He	293.200	ppb	1.6	83133.89	250	23.46	79.5	120.4	
Zn	66	89	He	599.034	ppb	0.6	22349.66	500	23.96	79.5	120.4	DoD
As	75	89	He	118.246	ppb	2.1	3795.94	100	23.65	79.5	120.4	DoD
Se	78	89	H2	112.189	ppb	1.0	1895.54	100	22.44	79.5	120.4	
Sr	88	89	He	569.593	ppb	0.3	92428.10	500	22.78	79.5	120.4	
Mo	95	89	He	118.594	ppb	2.7	20650.63	100	23.72	79.5	120.4	DoD
Ag	107	89	He	61.468	ppb	1.1	36075.43	50	24.59	79.5	120.4	6020□ DoD
Cd	111	89	He	303.379	ppb	1.3	23144.27	250	24.27	79.5	120.4	6020□ DoD
Sn	118	159	He	558.438	ppb	0.9	100650.73	500	22.34	79.5	120.4	
Sb	121	159	No Gas	109.717	ppb	7.7	152316.27	100	21.94	79.5	120.4	
Ba	137	159	No Gas	2150.159	ppb	8.8	1147760.79	2000	21.5	79.5	120.4	
W	182	159	No Gas	113.538	ppb	7.8	113348.47	100	22.71	79.5	120.4	
Tl	205	209	No Gas	114.339	ppb	8.6	253476.18	100	22.87	79.5	120.4	
[Pb]	206	209	No Gas	114.743	ppb	7.9	88040.79	100	22.95	79.5	120.4	
[Pb]	207	209	No Gas	114.903	ppb	7.9	77269.23	100	22.98	79.5	120.4	
Pb	208	209	No Gas	113.950	ppb	8.2	349837.01	100	22.79	79.5	120.4	
Th	232	209	No Gas	112.879	ppb	10.5	348226.66	100	22.58	79.5	120.4	
U	238	209	No Gas	112.648	ppb	9.0	329116.24	100	22.53	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1913019.11	2.3	1881686.03	101.67	29.5	120.4	
Sc	45	No Gas	3736818.59	3.8	3915123.71	95.45	29.5	120.4	
Sc	45	H2	466659.33	1.0	507902.1	91.88	29.5	120.4	
Sc	45	He	92109.83	1.3	102593	89.78	29.5	120.4	
Ge	72	No Gas	851017.70	3.2	852546.94	99.82	29.5	120.4	
Ge	72	H2	175742.23	0.9	193980.16	90.6	29.5	120.4	
Ge	72	He	71396.68	1.0	77385.19	92.26	29.5	120.4	
Y	89	H2	2981391.52	1.1	3089458.15	96.5	29.5	120.4	
Y	89	He	624874.92	1.2	678154.65	92.14	29.5	120.4	
Tb	159	No Gas	8459115.29	3.7	7727080.72	109.47	29.5	120.4	
Tb	159	He	3305682.45	1.0	3280980.4	100.75	29.5	120.4	
Bi	209	No Gas	4417907.96	3.7	3977089.87	111.08	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW11
File Name	033_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:24:04 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.043	ppb	27.6	85.56	0.1	
B	11	6	No Gas	2.426	ppb	4.9	3806.19	2	200.8 PB Fails DoD
Na	23	45	He	40.446	ppb	5.2	14293.12	100	
Mg	24	45	He	2.115	ppb	85.2	944.54	10	
Al	27	45	He	3.858	ppb	27.2	111.12	10	
Si	28	45	H2	17.438	ppb	17.8	1351.57	50	
K	39	45	He	-5.458	ppb	N/A	11417.87	100	
Ca	40	45	H2	6.179	ppb	3.5	3464.99	10	
V	51	89	He	0.456	ppb	14.0	747.82	0.5	
Cr	52	89	He	0.287	ppb	3.2	381.27	0.5	
Mn	55	89	He	0.375	ppb	2.3	206.63	0.2	200.8 PB Fails DoD
Fe	56	89	H2	3.936	ppb	5.5	9183.26	10	
Co	59	89	He	0.060	ppb	15.9	126.67	0.1	
Ni	60	89	He	-0.062	ppb	N/A	271.12	0.2	
Cu	63	89	He	0.322	ppb	8.8	920.07	0.3	200.8 PB Fails DoD
Zn	66	89	He	39.917	ppb	2.0	7595.67	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.017	ppb	74.9	9.33	0.5	
Se	78	89	H2	0.040	ppb	52.7	4.17	0.5	
Sr	88	89	He	0.064	ppb	38.6	58.89	0.5	
Mo	95	89	He	0.081	ppb	12.2	73.34	0.5	
Ag	107	89	He	0.007	ppb	68.2	35.56	0.1	
Cd	111	89	He	0.026	ppb	94.3	10.37	0.1	
Sn	118	159	He	0.325	ppb	12.2	362.24	0.5	
Sb	121	159	No Gas	0.025	ppb	30.1	213.57	0.1	
Ba	137	159	No Gas	0.524	ppb	8.8	1411.65	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.050	ppb	7.2	273.64	0.5	
Tl	205	209	No Gas	0.019	ppb	19.2	360.41	0.1	
[Pb]	206	209	No Gas	0.047	ppb	3.6	266.97	0.1	
[Pb]	207	209	No Gas	0.046	ppb	23.1	210.24	0.1	
Pb	208	209	No Gas	0.048	ppb	6.4	974.44	0.1	
Th	232	209	No Gas	0.111	ppb	13.0	1812.15	0.5	
U	238	209	No Gas	0.015	ppb	4.7	213.58	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1808600.60	1.6	1881686.03	96.12	29.5	120.4	
Sc	45	No Gas	3782994.03	2.4	3915123.71	96.63	29.5	120.4	
Sc	45	H2	466548.48	2.0	507902.1	91.86	29.5	120.4	
Sc	45	He	93966.04	0.5	102593	91.59	29.5	120.4	
Ge	72	No Gas	857696.15	2.1	852546.94	100.6	29.5	120.4	
Ge	72	H2	180246.87	2.4	193980.16	92.92	29.5	120.4	
Ge	72	He	73056.70	0.4	77385.19	94.41	29.5	120.4	
Y	89	H2	2971746.51	1.7	3089458.15	96.19	29.5	120.4	
Y	89	He	633492.69	0.2	678154.65	93.41	29.5	120.4	
Tb	159	No Gas	8421805.57	2.4	7727080.72	108.99	29.5	120.4	
Tb	159	He	3321401.10	0.2	3280980.4	101.23	29.5	120.4	
Bi	209	No Gas	4398287.92	2.7	3977089.87	110.59	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	034_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:26:36 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	43.702	ppb	6.7	58828.13	50	87.4	79.5	120.4	
B	11	6	No Gas	439.983	ppb	7.3	382821.37	500	88	79.5	120.4	
Na	23	45	He	7047.578	ppb	1.4	761335.37	7500	93.97	79.5	120.4	
Mg	24	45	He	5035.581	ppb	1.1	301181.45	5000	100.71	79.5	120.4	
Al	27	45	He	1858.693	ppb	0.1	44367.55	2000	92.93	79.5	120.4	
Si	28	45	H2	974.518	ppb	3.9	47534.85	1000	97.45	79.5	120.4	
K	39	45	He	9634.897	ppb	1.1	556346.81	10000	96.35	79.5	120.4	
Ca	40	45	H2	2432.081	ppb	1.1	1052149.38	2500	97.28	79.5	120.4	
V	51	89	He	480.471	ppb	0.1	430793.17	500	96.09	79.5	120.4	
Cr	52	89	He	193.983	ppb	0.2	211557.87	200	96.99	79.5	120.4	
Mn	55	89	He	491.455	ppb	0.6	255645.07	500	98.29	79.5	120.4	
Fe	56	89	H2	977.789	ppb	0.4	1692288.53	1000	97.78	79.5	120.4	
Co	59	89	He	487.732	ppb	0.7	916959.98	500	97.55	79.5	120.4	
Ni	60	89	He	495.597	ppb	0.3	249726.14	500	99.12	79.5	120.4	
Cu	63	89	He	241.505	ppb	0.5	344992.90	250	96.6	79.5	120.4	
Zn	66	89	He	501.425	ppb	0.7	94412.01	500	100.28	79.5	120.4	
As	75	89	He	99.032	ppb	0.6	16063.01	100	99.03	79.5	120.4	
Se	78	89	H2	96.081	ppb	0.9	8114.15	100	96.08	79.5	120.4	
Sr	88	89	He	483.568	ppb	0.4	396922.32	500	96.71	79.5	120.4	
Mo	95	89	He	100.959	ppb	0.3	88939.45	100	100.96	79.5	120.4	
Ag	107	89	He	50.453	ppb	0.8	149751.93	50	100.91	79.5	120.4	
Cd	111	89	He	253.970	ppb	0.9	98007.58	250	101.59	79.5	120.4	
Sn	118	159	He	469.773	ppb	0.6	425211.63	500	93.95	79.5	120.4	
Sb	121	159	No Gas	93.044	ppb	7.7	637331.35	100	93.04	79.5	120.4	
Ba	137	159	No Gas	1833.337	ppb	8.1	4830275.47	2000	91.67	79.5	120.4	
W	182	159	No Gas	96.276	ppb	8.2	474183.57	100	96.28	79.5	120.4	
Tl	205	209	No Gas	95.654	ppb	5.2	1029175.90	100	95.65	79.5	120.4	
Pb	208	209	No Gas	97.442	ppb	8.3	1450589.20	100	97.44	79.5	120.4	
Th	232	209	No Gas	96.772	ppb	9.7	1448467.62	100	96.77	79.5	120.4	
U	238	209	No Gas	95.496	ppb	9.0	1353677.94	100	95.5	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1917212.20	2.0	1881686.03	101.89	29.5	120.4	
Sc	45	No Gas	3743286.20	3.5	3915123.71	95.61	29.5	120.4	
Sc	45	H2	468235.92	1.0	507902.1	92.19	29.5	120.4	
Sc	45	He	93262.65	1.0	102593	90.91	29.5	120.4	
Ge	72	No Gas	845717.74	3.5	852546.94	99.2	29.5	120.4	
Ge	72	H2	175819.61	1.3	193980.16	90.64	29.5	120.4	
Ge	72	He	72363.86	0.4	77385.19	93.51	29.5	120.4	
Y	89	H2	2981074.41	0.4	3089458.15	96.49	29.5	120.4	
Y	89	He	632179.30	0.4	678154.65	93.22	29.5	120.4	
Tb	159	No Gas	8346003.90	2.9	7727080.72	108.01	29.5	120.4	
Tb	159	He	3321799.05	0.5	3280980.4	101.24	29.5	120.4	
Bi	209	No Gas	4286575.23	3.6	3977089.87	107.78	29.5	120.4	

Sample Report

Sample Name SN5286-001R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:29:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.133	ppb	27.2	195.56	100	
11	B	6	No Gas	8.629	ppb	8.5	8704.02	1000	
23	Na	45	He	1454.195	ppb	4.1	161121.46	200000	
24	Mg	45	He	1160.635	ppb	2.6	68435.57	200000	
27	Al	45	He	13.412	ppb	15.2	330.02	200000	
28	Si	45	H2	5098.274	ppb	2.5	244003.59	10000	
39	K	45	He	634.741	ppb	3.5	46434.16	200000	
40	Ca	45	H2	4203.492	ppb	1.6	1799754.66	200000	
51	V	89	He	0.748	ppb	7.0	987.86	1000	
52	Cr	89	He	0.245	ppb	24.5	327.28	2000	
55	Mn	89	He	1.043	ppb	5.0	542.58	2000	
56	Fe	89	H2	23.821	ppb	0.3	43364.75	100000	
59	Co	89	He	0.110	ppb	30.3	215.57	1000	
60	Ni	89	He	-0.124	ppb	N/A	234.45	1000	
63	Cu	89	He	0.469	ppb	11.2	1104.53	2000	
66	Zn	89	He	1.686	ppb	6.1	378.91	2000	
75	As	89	He	0.272	ppb	11.3	49.67	1000	
78	Se	89	H2	0.175	ppb	3.9	15.50	1000	
88	Sr	89	He	9.577	ppb	4.9	7709.09	2000	
95	Mo	89	He	0.269	ppb	25.3	235.57	1000	
107	Ag	89	He	0.009	ppb	97.2	38.89	100	
111	Cd	89	He	0.033	ppb	32.8	12.96	1000	
118	Sn	159	He	0.883	ppb	15.8	852.28	1000	
121	Sb	159	No Gas	0.115	ppb	44.4	817.63	1000	
137	Ba	159	No Gas	2.650	ppb	33.7	6934.12	2000	
182	W	159	No Gas	0.251	ppb	18.8	1248.12	1000	
205	Tl	209	No Gas	0.099	ppb	53.9	1238.17	1000	
208	Pb	209	No Gas	0.117	ppb	33.8	2025.72	2000	
232	Th	209	No Gas	0.383	ppb	22.6	5968.31	1000	
238	U	209	No Gas	0.124	ppb	33.0	1792.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773096.33	2.0	1881686.03	94.23	29.5	120.4	
Sc	45	No Gas	3712944.82	2.6	3915123.71	94.84	29.5	120.4	
Sc	45	H2	463581.34	0.5	507902.1	91.27	29.5	120.4	
Sc	45	He	91143.66	1.8	102593	88.84	29.5	120.4	
Ge	72	No Gas	841586.65	2.6	852546.94	98.71	29.5	120.4	
Ge	72	H2	177437.73	0.9	193980.16	91.47	29.5	120.4	
Ge	72	He	71402.37	2.0	77385.19	92.27	29.5	120.4	
Y	89	H2	2966171.14	0.5	3089458.15	96.01	29.5	120.4	
Y	89	He	619807.45	2.1	678154.65	91.4	29.5	120.4	
Tb	159	No Gas	8278548.00	3.0	7727080.72	107.14	29.5	120.4	
Tb	159	He	3267126.30	2.1	3280980.4	99.58	29.5	120.4	
Bi	209	No Gas	4371998.56	2.9	3977089.87	109.93	29.5	120.4	

Sample Report

Sample Name SN5286-002R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:31:45 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	68.3	88.89	100	
11	B	6	No Gas	3.517	ppb	15.3	4510.94	1000	
23	Na	45	He	1363.699	ppb	1.1	153609.80	200000	
24	Mg	45	He	1047.770	ppb	1.3	62628.91	200000	
27	Al	45	He	15.145	ppb	9.1	375.57	200000	
28	Si	45	H2	4817.122	ppb	0.7	228990.26	10000	
39	K	45	He	519.577	ppb	1.6	40572.27	200000	
40	Ca	45	H2	4000.978	ppb	0.8	1701210.22	200000	
51	V	89	He	0.849	ppb	3.7	1084.52	1000	
52	Cr	89	He	0.206	ppb	4.3	289.28	2000	
55	Mn	89	He	0.565	ppb	5.1	301.28	2000	
56	Fe	89	H2	9.298	ppb	0.9	18258.72	100000	
59	Co	89	He	0.052	ppb	45.9	111.12	1000	
60	Ni	89	He	-0.117	ppb	N/A	240.01	1000	
63	Cu	89	He	0.359	ppb	11.3	958.96	2000	
66	Zn	89	He	1.742	ppb	13.4	392.24	2000	
75	As	89	He	0.205	ppb	31.4	39.34	1000	
78	Se	89	H2	0.042	ppb	20.7	4.33	1000	
88	Sr	89	He	10.314	ppb	1.7	8366.18	2000	
95	Mo	89	He	0.157	ppb	11.1	138.90	1000	
107	Ag	89	He	0.005	ppb	34.8	27.78	100	
111	Cd	89	He	0.019	ppb	39.9	7.41	1000	
118	Sn	159	He	0.244	ppb	13.0	285.57	1000	
121	Sb	159	No Gas	0.050	ppb	99.6	380.46	1000	
137	Ba	159	No Gas	1.937	ppb	28.5	5084.09	2000	
182	W	159	No Gas	0.079	ppb	51.7	413.82	1000	
205	Tl	209	No Gas	0.030	ppb	140.9	490.62	1000	
208	Pb	209	No Gas	0.065	ppb	62.3	1238.13	2000	
232	Th	209	No Gas	0.067	ppb	73.8	1138.14	1000	
238	U	209	No Gas	0.045	ppb	95.1	667.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1737784.30	1.9	1881686.03	92.35	29.5	120.4	
Sc	45	No Gas	3670029.88	1.9	3915123.71	93.74	29.5	120.4	
Sc	45	H2	460388.62	1.7	507902.1	90.65	29.5	120.4	
Sc	45	He	92257.08	0.8	102593	89.93	29.5	120.4	
Ge	72	No Gas	838759.03	2.2	852546.94	98.38	29.5	120.4	
Ge	72	H2	175397.25	1.4	193980.16	90.42	29.5	120.4	
Ge	72	He	71571.70	0.4	77385.19	92.49	29.5	120.4	
Y	89	H2	2944778.97	1.0	3089458.15	95.32	29.5	120.4	
Y	89	He	624306.68	0.3	678154.65	92.06	29.5	120.4	
Tb	159	No Gas	8245936.33	2.1	7727080.72	106.71	29.5	120.4	
Tb	159	He	3285965.51	0.0	3280980.4	100.15	29.5	120.4	
Bi	209	No Gas	4358451.06	2.8	3977089.87	109.59	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW1
File Name	037_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:34:25 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.130	ppb	15.5	65.56	0.5	
B	11	6	No Gas	6.197	ppb	10.6	2901.50	10	
Na	23	45	He	185.900	ppb	12.9	13561.53	500	
Mg	24	45	He	-0.699	ppb	N/A	786.75	50	
Al	27	45	He	53.650	ppb	5.3	268.90	50	PB 6020 Fails DoD
Si	28	45	H2	21.556	ppb	48.9	697.46	250	
K	39	45	He	-40.156	ppb	N/A	10962.68	500	
Ca	40	45	H2	43.621	ppb	3.2	4407.52	50	
V	51	89	He	5.738	ppb	7.1	1343.45	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	0.516	ppb	29.7	177.31	2.5	
Mn	55	89	He	2.083	ppb	12.4	223.96	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	15.703	ppb	7.5	7704.00	50	
Co	59	89	He	0.076	ppb	138.1	42.22	0.5	
Ni	60	89	He	-0.723	ppb	N/A	225.57	1	
Cu	63	89	He	4.843	ppb	9.5	1811.30	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	2.923	ppb	11.4	176.67	5	
As	75	89	He	0.331	ppb	32.8	17.00	2.5	
Se	78	89	H2	0.304	ppb	13.8	5.83	2.5	
Sr	88	89	He	0.458	ppb	7.9	80.00	2.5	
Mo	95	89	He	0.283	ppb	17.4	51.11	2.5	
Ag	107	89	He	0.025	ppb	94.1	27.78	0.5	
Cd	111	89	He	0.079	ppb	84.5	6.30	0.5	
Sn	118	159	He	2.053	ppb	7.1	436.69	2.5	
Sb	121	159	No Gas	0.042	ppb	85.5	96.78	0.5	
Ba	137	159	No Gas	0.263	ppb	25.5	153.50	1	
W	182	159	No Gas	0.164	ppb	22.2	186.88	2.5	
Tl	205	209	No Gas	-0.004	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.176	ppb	19.3	784.22	0.5	
Th	232	209	No Gas	0.278	ppb	16.8	954.44	2.5	
U	238	209	No Gas	0.006	ppb	66.1	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1851631.11	2.7	1881686.03	98.4	29.5	120.4	
Sc	45	No Gas	3647038.47	4.0	3915123.71	93.15	29.5	120.4	
Sc	45	H2	450687.80	1.8	507902.1	88.74	29.5	120.4	
Sc	45	He	91439.52	1.7	102593	89.13	29.5	120.4	
Ge	72	No Gas	832295.58	1.2	852546.94	97.62	29.5	120.4	
Ge	72	H2	170555.05	1.6	193980.16	87.92	29.5	120.4	
Ge	72	He	70251.78	1.1	77385.19	90.78	29.5	120.4	
Y	89	H2	2927774.05	1.3	3089458.15	94.77	29.5	120.4	
Y	89	He	621995.20	1.2	678154.65	91.72	29.5	120.4	
Tb	159	No Gas	8394441.82	3.5	7727080.72	108.64	29.5	120.4	
Tb	159	He	3300763.01	1.0	3280980.4	100.6	29.5	120.4	
Bi	209	No Gas	4394589.96	3.1	3977089.87	110.5	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW1
File Name	038LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:37:05 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.759	ppb	3.3	12588.07	50	19.1	79.5	120.4	
B	11	6	No Gas	495.188	ppb	6.1	85620.53	500	19.81	79.5	120.4	
Na	23	45	He	7899.366	ppb	0.6	176996.18	7500	21.06	79.5	120.4	
Mg	24	45	He	5375.095	ppb	0.8	64448.04	5000	21.5	79.5	120.4	
Al	27	45	He	2012.510	ppb	1.4	9549.09	2000	20.13	79.5	120.4	
Si	28	45	H2	1012.247	ppb	6.1	10204.91	1000	20.24	0	200	
K	39	45	He	10097.979	ppb	1.0	124873.64	10000	20.2	79.5	120.4	
Ca	40	45	H2	2629.903	ppb	0.6	226487.00	2500	21.04	79.5	120.4	
V	51	89	He	518.233	ppb	0.8	92545.71	500	20.73	79.5	120.4	
Cr	52	89	He	211.845	ppb	0.2	45937.14	200	21.18	79.5	120.4	
Mn	55	89	He	524.603	ppb	0.5	54206.25	500	20.98	79.5	120.4	
Fe	56	89	H2	1083.611	ppb	0.8	376337.28	1000	21.67	79.5	120.4	
Co	59	89	He	530.404	ppb	0.4	198061.23	500	21.22	79.5	120.4	
Ni	60	89	He	535.531	ppb	0.4	53828.59	500	21.42	79.5	120.4	
Cu	63	89	He	266.534	ppb	0.3	75973.17	250	21.32	79.5	120.4	
Zn	66	89	He	533.793	ppb	2.6	20017.19	500	21.35	79.5	120.4	
As	75	89	He	105.476	ppb	2.1	3402.79	100	21.1	79.5	120.4	
Se	78	89	H2	98.562	ppb	1.6	1662.53	100	19.71	79.5	120.4	
Sr	88	89	He	504.939	ppb	0.7	82319.68	500	20.2	79.5	120.4	
Mo	95	89	He	108.780	ppb	0.9	19033.81	100	21.76	79.5	120.4	
Ag	107	89	He	55.046	ppb	1.0	32460.78	50	22.02	79.5	120.4	
Cd	111	89	He	270.432	ppb	0.8	20726.33	250	21.63	79.5	120.4	
Sn	118	159	He	485.917	ppb	0.8	88668.75	500	19.44	79.5	120.4	
Sb	121	159	No Gas	100.738	ppb	6.2	142648.68	100	20.15	79.5	120.4	
Ba	137	159	No Gas	2005.007	ppb	6.3	1091914.94	2000	20.05	79.5	120.4	
W	182	159	No Gas	106.182	ppb	5.4	108142.50	100	21.24	79.5	120.4	
Tl	205	209	No Gas	106.630	ppb	6.5	238614.37	100	21.33	79.5	120.4	
[Pb]	206	209	No Gas	105.956	ppb	8.6	82008.58	100	21.19	79.5	120.4	
[Pb]	207	209	No Gas	106.889	ppb	6.7	72542.99	100	21.38	79.5	120.4	
Pb	208	209	No Gas	106.223	ppb	7.0	329107.97	100	21.24	79.5	120.4	
Th	232	209	No Gas	105.673	ppb	6.8	329195.52	100	21.14	79.5	120.4	
U	238	209	No Gas	104.791	ppb	7.2	309007.63	100	20.96	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1872376.67	2.3	1881686.03	99.51	29.5	120.4	
Sc	45	No Gas	3745985.20	3.3	3915123.71	95.68	29.5	120.4	
Sc	45	H2	464772.10	0.9	507902.1	91.51	29.5	120.4	
Sc	45	He	92555.40	0.6	102593	90.22	29.5	120.4	
Ge	72	No Gas	868154.90	2.4	852546.94	101.83	29.5	120.4	
Ge	72	H2	173827.30	1.7	193980.16	89.61	29.5	120.4	
Ge	72	He	71628.38	0.5	77385.19	92.56	29.5	120.4	
Y	89	H2	2976244.37	0.9	3089458.15	96.34	29.5	120.4	
Y	89	He	627762.25	0.5	678154.65	92.57	29.5	120.4	
Tb	159	No Gas	8624334.18	3.4	7727080.72	111.61	29.5	120.4	
Tb	159	He	3346282.87	0.2	3280980.4	101.99	29.5	120.4	
Bi	209	No Gas	4456858.05	3.6	3977089.87	112.06	29.5	120.4	

Sample Report

Sample Name SN5589-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:39:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.151	ppb	48.3	70.00	100	
11	B	6	No Gas	30.529	ppb	8.9	6887.42	1000	
23	Na	45	He	10752.862	ppb	2.1	231848.37	200000	
24	Mg	45	He	8657.809	ppb	3.2	100888.23	200000	
27	Al	45	He	15.434	ppb	13.7	88.89	200000	
28	Si	45	H2	3100.433	ppb	1.0	29948.39	10000	
39	K	45	He	416.723	ppb	4.1	15851.68	200000	
40	Ca	45	H2	10818.457	ppb	0.5	921287.94	200000	
51	V	89	He	2.938	ppb	18.7	842.28	1000	
52	Cr	89	He	0.458	ppb	29.1	163.31	2000	
55	Mn	89	He	1230.722	ppb	1.7	124916.90	2000	
56	Fe	89	H2	27740.360	ppb	0.7	9586127.35	100000	
59	Co	89	He	13.428	ppb	2.5	4941.24	1000	
60	Ni	89	He	36.961	ppb	4.8	3924.03	1000	
63	Cu	89	He	4.198	ppb	8.3	1615.71	2000	
66	Zn	89	He	53.098	ppb	2.7	2016.89	2000	
75	As	89	He	2.551	ppb	10.2	87.01	1000	
78	Se	89	H2	0.239	ppb	25.2	4.83	1000	
88	Sr	89	He	34.006	ppb	3.2	5452.39	2000	
95	Mo	89	He	0.260	ppb	24.7	46.67	1000	
107	Ag	89	He	0.012	ppb	52.9	20.00	100	
111	Cd	89	He	0.050	ppb	46.8	4.07	1000	
118	Sn	159	He	1.544	ppb	5.5	346.69	1000	
121	Sb	159	No Gas	0.397	ppb	3.7	604.02	1000	
137	Ba	159	No Gas	4.561	ppb	2.3	2503.02	2000	
182	W	159	No Gas	0.237	ppb	30.8	266.97	1000	
205	Tl	209	No Gas	0.049	ppb	78.1	270.31	1000	
208	Pb	209	No Gas	0.186	ppb	21.4	834.28	2000	
232	Th	209	No Gas	0.819	ppb	19.7	2690.01	1000	
238	U	209	No Gas	0.069	ppb	46.5	206.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1829225.02	1.4	1881686.03	97.21	29.5	120.4	
Sc	45	No Gas	3754199.07	1.4	3915123.71	95.89	29.5	120.4	
Sc	45	H2	460806.80	0.4	507902.1	90.73	29.5	120.4	
Sc	45	He	90417.83	1.9	102593	88.13	29.5	120.4	
Ge	72	No Gas	871667.07	2.0	852546.94	102.24	29.5	120.4	
Ge	72	H2	173220.23	0.4	193980.16	89.3	29.5	120.4	
Ge	72	He	70970.45	1.1	77385.19	91.71	29.5	120.4	
Y	89	H2	2979647.12	0.5	3089458.15	96.45	29.5	120.4	
Y	89	He	616824.14	1.5	678154.65	90.96	29.5	120.4	
Tb	159	No Gas	8627061.26	1.2	7727080.72	111.65	29.5	120.4	
Tb	159	He	3315118.56	1.2	3280980.4	101.04	29.5	120.4	
Bi	209	No Gas	4500646.37	1.8	3977089.87	113.16	29.5	120.4	

Sample Report

Sample Name PBWNG17IMW1

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:42:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	56.8	50.00	100	
11	B	6	No Gas	4.473	ppb	18.0	2532.54	1000	
23	Na	45	He	140.437	ppb	7.9	12706.48	200000	
24	Mg	45	He	-13.098	ppb	N/A	646.73	200000	
27	Al	45	He	6.560	ppb	33.4	48.89	200000	
28	Si	45	H2	16.719	ppb	51.4	654.07	10000	
39	K	45	He	-34.923	ppb	N/A	11104.38	200000	
40	Ca	45	H2	47.148	ppb	0.5	4709.83	200000	
51	V	89	He	3.655	ppb	4.8	978.96	1000	
52	Cr	89	He	0.361	ppb	17.4	144.64	2000	
55	Mn	89	He	1.687	ppb	12.6	183.97	2000	
56	Fe	89	H2	21.721	ppb	4.8	9827.64	100000	
59	Co	89	He	0.058	ppb	49.4	35.56	1000	
60	Ni	89	He	-0.793	ppb	N/A	218.90	1000	
63	Cu	89	He	3.799	ppb	11.2	1521.26	2000	
66	Zn	89	He	3.513	ppb	22.6	198.90	2000	
75	As	89	He	0.226	ppb	15.1	13.67	1000	
78	Se	89	H2	0.132	ppb	77.4	3.00	1000	
88	Sr	89	He	0.031	ppb	74.8	11.11	2000	
95	Mo	89	He	0.135	ppb	31.9	25.56	1000	
107	Ag	89	He	0.032	ppb	28.2	32.22	100	
111	Cd	89	He	0.034	ppb	88.1	2.96	1000	
118	Sn	159	He	1.573	ppb	24.2	353.37	1000	
121	Sb	159	No Gas	0.030	ppb	45.5	83.43	1000	
137	Ba	159	No Gas	0.360	ppb	33.4	210.24	2000	
182	W	159	No Gas	0.083	ppb	45.2	110.12	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.167	ppb	13.4	777.55	2000	
232	Th	209	No Gas	0.115	ppb	14.7	467.20	1000	
238	U	209	No Gas	0.008	ppb	21.9	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794812.07	2.4	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3698832.22	2.8	3915123.71	94.48	29.5	120.4	
Sc	45	H2	451565.74	1.3	507902.1	88.91	29.5	120.4	
Sc	45	He	92091.87	1.2	102593	89.76	29.5	120.4	
Ge	72	No Gas	846479.29	1.3	852546.94	99.29	29.5	120.4	
Ge	72	H2	170775.26	1.8	193980.16	88.04	29.5	120.4	
Ge	72	He	71319.68	0.9	77385.19	92.16	29.5	120.4	
Y	89	H2	2952126.79	0.9	3089458.15	95.55	29.5	120.4	
Y	89	He	623360.64	0.9	678154.65	91.92	29.5	120.4	
Tb	159	No Gas	8634619.73	2.7	7727080.72	111.74	29.5	120.4	
Tb	159	He	3330376.44	0.6	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4505633.97	2.7	3977089.87	113.29	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:44:58 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.589	ppb	10.8	28991.00	25	94.36	89.8	110.2	
11	B	6	No Gas	24.172	ppb	10.6	20862.34	25	96.69	89.8	110.2	
23	Na	45	He	5095.640	ppb	1.8	551013.40	5000	101.91	89.8	110.2	
24	Mg	45	He	4900.341	ppb	1.8	291957.57	5000	98.01	89.8	110.2	
27	Al	45	He	482.853	ppb	1.5	11492.81	500	96.57	89.8	110.2	
28	Si	45	H2	445.263	ppb	2.6	21787.60	500	89.05	89.8	110.2	> +/- 10%
39	K	45	He	4796.745	ppb	1.7	281700.35	5000	95.93	89.8	110.2	
40	Ca	45	H2	4826.826	ppb	1.2	2067104.69	5000	96.54	89.8	110.2	
51	V	89	He	24.411	ppb	3.8	22171.40	25	97.64	89.8	110.2	
52	Cr	89	He	24.592	ppb	4.0	26832.46	25	98.37	89.8	110.2	
55	Mn	89	He	24.577	ppb	2.0	12775.48	25	98.31	89.8	110.2	
56	Fe	89	H2	4765.732	ppb	1.4	8323306.45	5000	95.31	89.8	110.2	
59	Co	89	He	24.646	ppb	1.3	46283.50	25	98.58	89.8	110.2	
60	Ni	89	He	24.350	ppb	2.8	12536.01	25	97.4	89.8	110.2	
63	Cu	89	He	24.795	ppb	3.3	35772.28	25	99.18	89.8	110.2	
66	Zn	89	He	25.285	ppb	2.5	4819.89	25	101.14	89.8	110.2	
75	As	89	He	23.997	ppb	1.9	3891.31	25	95.99	89.8	110.2	
78	Se	89	H2	23.910	ppb	2.2	2040.39	25	95.64	89.8	110.2	
88	Sr	89	He	23.378	ppb	2.3	19165.06	25	93.51	89.8	110.2	
95	Mo	89	He	25.163	ppb	2.9	22132.98	25	100.65	89.8	110.2	
107	Ag	89	He	25.799	ppb	2.2	76464.06	25	103.2	89.8	110.2	
111	Cd	89	He	25.163	ppb	4.3	9693.55	25	100.65	89.8	110.2	
118	Sn	159	He	23.492	ppb	3.5	21611.21	25	93.97	89.8	110.2	
121	Sb	159	No Gas	23.090	ppb	9.9	163703.09	25	92.36	89.8	110.2	
137	Ba	159	No Gas	23.455	ppb	9.7	63975.08	25	93.82	89.8	110.2	
182	W	159	No Gas	23.478	ppb	8.6	119720.68	25	93.91	89.8	110.2	
205	Tl	209	No Gas	23.878	ppb	9.1	269616.31	25	95.51	89.8	110.2	
208	Pb	209	No Gas	23.766	ppb	9.8	371519.22	25	95.06	89.8	110.2	
232	Th	209	No Gas	23.624	ppb	11.2	371162.65	25	94.5	89.8	110.2	
238	U	209	No Gas	23.698	ppb	10.3	352557.55	25	94.79	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752098.64	3.3	1881686.03	93.11	29.5	120.4	
Sc	45	No Gas	3778384.01	3.5	3915123.71	96.51	29.5	120.4	
Sc	45	H2	463728.13	1.1	507902.1	91.3	29.5	120.4	
Sc	45	He	92900.25	1.5	102593	90.55	29.5	120.4	
Ge	72	No Gas	866180.65	3.4	852546.94	101.6	29.5	120.4	
Ge	72	H2	176442.82	1.9	193980.16	90.96	29.5	120.4	
Ge	72	He	72398.66	1.3	77385.19	93.56	29.5	120.4	
Y	89	H2	3011895.04	0.9	3089458.15	97.49	29.5	120.4	
Y	89	He	631338.88	1.7	678154.65	93.1	29.5	120.4	
Tb	159	No Gas	8644671.61	3.7	7727080.72	111.88	29.5	120.4	
Tb	159	He	3367241.41	1.9	3280980.4	102.63	29.5	120.4	
Bi	209	No Gas	4502300.11	4.2	3977089.87	113.21	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:47:37 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	34.9	93.34	0.2	
11	B	6	No Gas	0.746	ppb	23.3	2345.83	4	
23	Na	45	He	-2.520	ppb	N/A	9653.99	200	
24	Mg	45	He	-2.104	ppb	N/A	688.95	20	
27	Al	45	He	0.305	ppb	114.0	25.56	20	
28	Si	45	H2	1.084	ppb	80.4	573.98	100	
39	K	45	He	-4.892	ppb	N/A	11424.45	200	
40	Ca	45	H2	4.750	ppb	65.0	2882.92	20	
51	V	89	He	-0.067	ppb	N/A	278.90	1	
52	Cr	89	He	0.001	ppb	1104.8	69.32	1	
55	Mn	89	He	0.021	ppb	49.2	22.00	0.4	
56	Fe	89	H2	3.461	ppb	34.8	8472.70	20	
59	Co	89	He	0.010	ppb	34.5	33.34	0.2	
60	Ni	89	He	-0.266	ppb	N/A	168.89	0.4	Failed DoD
63	Cu	89	He	0.027	ppb	49.1	500.03	0.6	
66	Zn	89	He	0.037	ppb	319.4	76.67	2	
75	As	89	He	-0.012	ppb	N/A	4.67	1	
78	Se	89	H2	0.043	ppb	36.6	4.50	1	
88	Sr	89	He	0.006	ppb	103.8	11.11	1	
95	Mo	89	He	0.068	ppb	3.1	62.23	1	
107	Ag	89	He	0.007	ppb	94.6	33.34	0.2	
111	Cd	89	He	0.003	ppb	150.8	1.48	0.2	
118	Sn	159	He	0.030	ppb	6.8	95.56	1	
121	Sb	159	No Gas	0.018	ppb	20.1	166.86	0.2	
137	Ba	159	No Gas	0.020	ppb	57.9	66.74	0.4	
182	W	159	No Gas	0.053	ppb	13.3	286.99	1	
205	Tl	209	No Gas	0.008	ppb	62.6	240.27	0.2	
208	Pb	209	No Gas	0.023	ppb	15.9	597.35	0.2	
232	Th	209	No Gas	0.057	ppb	11.2	981.14	1	
238	U	209	No Gas	0.016	ppb	37.7	236.94	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1746346.04	2.9	1881686.03	92.81	29.5	120.4	
Sc	45	No Gas	3764984.62	3.6	3915123.71	96.17	29.5	120.4	
Sc	45	H2	471809.95	0.9	507902.1	92.89	29.5	120.4	
Sc	45	He	93765.61	0.4	102593	91.4	29.5	120.4	
Ge	72	No Gas	853742.86	3.9	852546.94	100.14	29.5	120.4	
Ge	72	H2	178681.31	1.5	193980.16	92.11	29.5	120.4	
Ge	72	He	72857.13	0.2	77385.19	94.15	29.5	120.4	
Y	89	H2	3009209.83	0.9	3089458.15	97.4	29.5	120.4	
Y	89	He	635287.21	0.6	678154.65	93.68	29.5	120.4	
Tb	159	No Gas	8425275.64	3.8	7727080.72	109.04	29.5	120.4	
Tb	159	He	3330615.65	0.2	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4416349.16	4.1	3977089.87	111.04	29.5	120.4	

Sample Report

Sample Name LCSWNG17IMW1

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:50:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.851	ppb	5.0	13507.85	100	
11	B	6	No Gas	524.377	ppb	4.9	89570.46	1000	
23	Na	45	He	8467.346	ppb	1.6	188311.55	200000	
24	Mg	45	He	5765.628	ppb	0.9	68817.41	200000	
27	Al	45	He	2126.110	ppb	1.6	10049.44	200000	
28	Si	45	H2	1057.276	ppb	4.2	10555.76	10000	
39	K	45	He	10897.568	ppb	2.0	133336.76	200000	
40	Ca	45	H2	2840.396	ppb	0.7	242673.89	200000	
51	V	89	He	557.793	ppb	1.8	98644.46	1000	
52	Cr	89	He	225.938	ppb	2.3	48523.85	2000	
55	Mn	89	He	563.410	ppb	3.1	57657.78	2000	
56	Fe	89	H2	1141.868	ppb	1.3	394870.83	100000	
59	Co	89	He	569.294	ppb	2.0	210568.48	1000	
60	Ni	89	He	574.493	ppb	2.0	57176.34	1000	
63	Cu	89	He	283.710	ppb	2.1	80073.80	2000	
66	Zn	89	He	578.749	ppb	2.1	21490.53	2000	
75	As	89	He	110.814	ppb	2.4	3541.18	1000	
78	Se	89	H2	110.518	ppb	3.7	1856.71	1000	
88	Sr	89	He	547.140	ppb	2.0	88353.84	2000	
95	Mo	89	He	117.893	ppb	2.1	20432.54	1000	
107	Ag	89	He	59.207	ppb	1.7	34584.85	100	
111	Cd	89	He	293.825	ppb	1.5	22308.42	1000	
118	Sn	159	He	529.371	ppb	2.2	96122.74	1000	
121	Sb	159	No Gas	109.045	ppb	5.6	152829.25	1000	
137	Ba	159	No Gas	2126.820	ppb	5.3	1146485.25	2000	
182	W	159	No Gas	113.980	ppb	5.4	114878.13	1000	
205	Tl	209	No Gas	114.518	ppb	3.9	255883.23	1000	
208	Pb	209	No Gas	113.216	ppb	4.9	350248.14	2000	
232	Th	209	No Gas	113.913	ppb	6.0	354257.73	1000	
238	U	209	No Gas	112.264	ppb	6.2	330514.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1850887.52	1.0	1881686.03	98.36	29.5	120.4	
Sc	45	No Gas	3695606.52	2.2	3915123.71	94.39	29.5	120.4	
Sc	45	H2	461201.60	0.5	507902.1	90.81	29.5	120.4	
Sc	45	He	92223.11	1.7	102593	89.89	29.5	120.4	
Ge	72	No Gas	854074.05	2.1	852546.94	100.18	29.5	120.4	
Ge	72	H2	172651.26	0.7	193980.16	89	29.5	120.4	
Ge	72	He	71269.90	1.8	77385.19	92.1	29.5	120.4	
Y	89	H2	2964415.28	0.3	3089458.15	95.95	29.5	120.4	
Y	89	He	621969.05	1.8	678154.65	91.71	29.5	120.4	
Tb	159	No Gas	8530661.47	2.0	7727080.72	110.4	29.5	120.4	
Tb	159	He	3330789.29	1.6	3280980.4	101.52	29.5	120.4	
Bi	209	No Gas	4445999.13	2.1	3977089.87	111.79	29.5	120.4	

Sample Report

Sample Name SN5772-003R

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:53:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.215	ppb	26.5	80.00	100	
11	B	6	No Gas	614.128	ppb	10.9	95003.98	1000	
23	Na	45	He	126597.959	ppb	1.0	2656458.87	200000	
24	Mg	45	He	8718.907	ppb	0.9	102771.06	200000	
27	Al	45	He	555.616	ppb	1.7	2617.01	200000	
28	Si	45	H2	10206.928	ppb	2.8	96088.38	10000	
39	K	45	He	954.483	ppb	2.2	21992.01	200000	
40	Ca	45	H2	72589.729	ppb	0.9	6092247.06	200000	
51	V	89	He	5.088	ppb	2.1	1221.21	1000	
52	Cr	89	He	2.009	ppb	5.1	494.59	2000	
55	Mn	89	He	18.394	ppb	1.2	1881.12	2000	
56	Fe	89	H2	538.820	ppb	0.8	185994.29	100000	
59	Co	89	He	0.318	ppb	21.5	131.12	1000	
60	Ni	89	He	0.413	ppb	98.7	335.57	1000	
63	Cu	89	He	4.242	ppb	9.8	1631.27	2000	
66	Zn	89	He	5.980	ppb	14.2	287.79	2000	
75	As	89	He	0.461	ppb	53.7	21.00	1000	
78	Se	89	H2	1.304	ppb	7.1	22.50	1000	
88	Sr	89	He	1101.475	ppb	0.9	176734.09	2000	
95	Mo	89	He	0.608	ppb	11.3	106.67	1000	
107	Ag	89	He	0.029	ppb	39.5	30.00	100	
111	Cd	89	He	0.064	ppb	147.6	5.18	1000	
118	Sn	159	He	1.650	ppb	8.0	367.80	1000	
121	Sb	159	No Gas	0.163	ppb	32.3	253.62	1000	
137	Ba	159	No Gas	45.523	ppb	10.2	23326.45	2000	
182	W	159	No Gas	0.294	ppb	5.3	307.01	1000	
205	Tl	209	No Gas	0.065	ppb	64.0	283.66	1000	
208	Pb	209	No Gas	0.606	ppb	17.8	1995.64	2000	
232	Th	209	No Gas	0.802	ppb	18.0	2442.98	1000	
238	U	209	No Gas	3.703	ppb	17.7	10215.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1690839.79	8.4	1881686.03	89.86	29.5	120.4	
Sc	45	No Gas	3508447.31	8.7	3915123.71	89.61	29.5	120.4	
Sc	45	H2	454490.09	0.6	507902.1	89.48	29.5	120.4	
Sc	45	He	91427.67	0.7	102593	89.12	29.5	120.4	
Ge	72	No Gas	814621.23	9.4	852546.94	95.55	29.5	120.4	
Ge	72	H2	171393.06	0.4	193980.16	88.36	29.5	120.4	
Ge	72	He	71303.60	0.9	77385.19	92.14	29.5	120.4	
Y	89	H2	2939085.05	0.5	3089458.15	95.13	29.5	120.4	
Y	89	He	617884.08	0.2	678154.65	91.11	29.5	120.4	
Tb	159	No Gas	8148333.70	9.1	7727080.72	105.45	29.5	120.4	
Tb	159	He	3332826.93	0.4	3280980.4	101.58	29.5	120.4	
Bi	209	No Gas	4209907.36	9.4	3977089.87	105.85	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS1
File Name	045_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:55:40 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.079	ppb	17.3	51.12	0.5	
B	11	6	No Gas	11.017	ppb	8.4	3627.25	10	PB 6020 Fails DoD
Na	23	45	He	136.985	ppb	9.9	12596.28	500	
Mg	24	45	He	-3.729	ppb	N/A	755.63	50	
Al	27	45	He	17.077	ppb	40.2	97.78	50	
Si	28	45	H2	9.295	ppb	117.4	594.01	250	
K	39	45	He	-7.655	ppb	N/A	11376.17	500	
Ca	40	45	H2	64.599	ppb	6.2	6252.70	50	PB 6020 Fails DoD
V	51	89	He	4.873	ppb	10.2	1187.87	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.031	ppb	3.4	287.28	2.5	
Mn	55	89	He	1.407	ppb	9.3	154.64	1	PB 6020 Fails DoD
Fe	56	89	H2	34.953	ppb	2.3	14450.18	50	
Co	59	89	He	0.070	ppb	43.2	40.00	0.5	
Ni	60	89	He	-0.334	ppb	N/A	263.35	1	
Cu	63	89	He	3.484	ppb	6.3	1425.68	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	3.680	ppb	24.6	204.45	5	
As	75	89	He	0.292	ppb	67.1	15.67	2.5	
Se	78	89	H2	0.221	ppb	59.4	4.50	2.5	
Sr	88	89	He	0.320	ppb	24.4	57.78	2.5	
Mo	95	89	He	0.213	ppb	28.1	38.89	2.5	
Ag	107	89	He	0.013	ppb	28.5	21.11	0.5	
Cd	111	89	He	0.030	ppb	103.8	2.59	0.5	
Sn	118	159	He	41.575	ppb	2.3	7644.70	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.050	ppb	19.6	113.46	0.5	
Ba	137	159	No Gas	0.413	ppb	20.6	243.60	1	
W	182	159	No Gas	0.072	ppb	60.0	100.11	2.5	
Tl	205	209	No Gas	-0.006	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.276	ppb	15.8	1127.95	0.5	
Th	232	209	No Gas	0.131	ppb	11.6	523.94	2.5	
U	238	209	No Gas	0.011	ppb	18.2	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1810305.65	1.0	1881686.03	96.21	29.5	120.4	
Sc	45	No Gas	3726847.47	1.2	3915123.71	95.19	29.5	120.4	
Sc	45	H2	458168.88	1.8	507902.1	90.21	29.5	120.4	
Sc	45	He	91845.86	1.7	102593	89.52	29.5	120.4	
Ge	72	No Gas	865178.32	0.8	852546.94	101.48	29.5	120.4	
Ge	72	H2	171378.89	1.3	193980.16	88.35	29.5	120.4	
Ge	72	He	71231.45	1.2	77385.19	92.05	29.5	120.4	
Y	89	H2	2971303.28	1.3	3089458.15	96.18	29.5	120.4	
Y	89	He	620630.07	1.6	678154.65	91.52	29.5	120.4	
Tb	159	No Gas	8736699.66	1.1	7727080.72	113.07	29.5	120.4	
Tb	159	He	3345231.20	1.7	3280980.4	101.96	29.5	120.4	
Bi	209	No Gas	4546186.60	1.7	3977089.87	114.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG20IMS1
File Name	046LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:58:13 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.558	ppb	4.2	12312.31	50	19.42	79.5	120.4	
B	11	6	No Gas	502.842	ppb	2.3	83687.52	500	20.11	79.5	120.4	
Na	23	45	He	7667.161	ppb	1.7	171764.39	7500	20.45	79.5	120.4	
Mg	24	45	He	5241.419	ppb	1.7	62747.11	5000	20.97	79.5	120.4	
Al	27	45	He	1886.011	ppb	2.0	8933.10	2000	18.86	79.5	120.4	
Si	28	45	H2	904.687	ppb	4.3	9119.69	1000	18.09	79.5	120.4	
K	39	45	He	9947.464	ppb	0.9	122964.90	10000	19.89	79.5	120.4	
Ca	40	45	H2	2558.925	ppb	0.7	219022.73	2500	20.47	79.5	120.4	
V	51	89	He	496.416	ppb	1.7	88789.49	500	19.86	79.5	120.4	
Cr	52	89	He	204.769	ppb	1.9	44468.74	200	20.48	79.5	120.4	
Mn	55	89	He	515.474	ppb	0.2	53349.21	500	20.62	79.5	120.4	
Fe	56	89	H2	1046.584	ppb	1.7	365317.25	1000	20.93	79.5	120.4	
Co	59	89	He	514.051	ppb	1.1	192243.78	500	20.56	79.5	120.4	
Ni	60	89	He	518.764	ppb	1.2	52229.15	500	20.75	79.5	120.4	
Cu	63	89	He	257.983	ppb	1.6	73656.50	250	20.64	79.5	120.4	
Zn	66	89	He	512.569	ppb	0.6	19253.91	500	20.5	79.5	120.4	
As	75	89	He	100.386	ppb	0.8	3244.40	100	20.08	79.5	120.4	
Se	78	89	H2	96.689	ppb	1.6	1638.85	100	19.34	79.5	120.4	
Sr	88	89	He	489.763	ppb	1.0	79964.93	500	19.59	79.5	120.4	
Mo	95	89	He	105.834	ppb	2.1	18544.25	100	21.17	79.5	120.4	
Ag	107	89	He	53.478	ppb	0.6	31584.27	50	21.39	79.5	120.4	
Cd	111	89	He	262.241	ppb	1.6	20128.03	250	20.98	79.5	120.4	
Sn	118	159	He	514.248	ppb	1.3	94930.19	500	20.57	79.5	120.4	
Sb	121	159	No Gas	102.414	ppb	7.0	142092.86	100	20.48	79.5	120.4	
Ba	137	159	No Gas	2027.619	ppb	6.6	1082125.68	2000	20.28	79.5	120.4	
W	182	159	No Gas	109.435	ppb	7.0	109176.14	100	21.89	79.5	120.4	
Tl	205	209	No Gas	110.019	ppb	5.1	241117.19	100	22	79.5	120.4	
[Pb]	206	209	No Gas	109.092	ppb	6.5	82679.25	100	21.82	79.5	120.4	
[Pb]	207	209	No Gas	108.610	ppb	6.0	72160.47	100	21.72	79.5	120.4	
Pb	208	209	No Gas	108.515	ppb	5.8	329196.96	100	21.7	79.5	120.4	
Th	232	209	No Gas	110.059	ppb	6.4	335594.83	100	22.01	79.5	120.4	
U	238	209	No Gas	108.979	ppb	6.0	314671.99	100	21.8	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1802187.23	4.0	1881686.03	95.78	29.5	120.4	
Sc	45	No Gas	3616120.34	6.6	3915123.71	92.36	29.5	120.4	
Sc	45	H2	461862.51	0.4	507902.1	90.94	29.5	120.4	
Sc	45	He	92399.04	1.6	102593	90.06	29.5	120.4	
Ge	72	No Gas	851671.33	4.9	852546.94	99.9	29.5	120.4	
Ge	72	H2	171883.88	0.1	193980.16	88.61	29.5	120.4	
Ge	72	He	72186.68	1.4	77385.19	93.28	29.5	120.4	
Y	89	H2	2990635.48	0.5	3089458.15	96.8	29.5	120.4	
Y	89	He	628774.14	1.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8463453.21	6.4	7727080.72	109.53	29.5	120.4	
Tb	159	He	3385674.78	1.1	3280980.4	103.19	29.5	120.4	
Bi	209	No Gas	4366822.30	6.0	3977089.87	109.8	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:00:52 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.627	ppb	17.1	224.45	100	
11	B	6	No Gas	325.409	ppb	5.1	26857.78	1000	
23	Na	45	He	1936.370	ppb	3.7	28824.09	200000	
24	Mg	45	He	29851.626	ppb	0.8	168920.72	200000	
27	Al	45	He	35605.609	ppb	0.3	80244.35	200000	
28	Si	45	H2	2533.668	ppb	1.6	12028.72	10000	
39	K	45	He	9268.683	ppb	0.7	60478.44	200000	
40	Ca	45	H2	204982.603	ppb	0.4	8367086.40	200000	
51	V	89	He	73.290	ppb	2.6	6685.15	1000	
52	Cr	89	He	372.925	ppb	0.3	39436.80	2000	
55	Mn	89	He	9396.269	ppb	0.2	473297.93	2000	
56	Fe	89	H2	295682.493	ppb	0.4	49863275.27	100000	
59	Co	89	He	44.969	ppb	2.1	8200.80	1000	
60	Ni	89	He	234.527	ppb	0.6	11721.95	1000	
63	Cu	89	He	3441.335	ppb	0.4	475854.54	2000	
66	Zn	89	He	4086.864	ppb	0.3	74528.30	2000	
75	As	89	He	49.535	ppb	3.1	784.11	1000	
78	Se	89	H2	39.229	ppb	2.3	323.99	1000	
88	Sr	89	He	1388.583	ppb	1.0	110374.23	2000	
95	Mo	89	He	114.812	ppb	3.2	9796.09	1000	
107	Ag	89	He	21.434	ppb	2.1	6173.87	100	
111	Cd	89	He	6.820	ppb	0.8	255.19	1000	
118	Sn	159	He	303.052	ppb	1.1	27430.84	1000	
121	Sb	159	No Gas	11.652	ppb	9.3	8258.42	1000	
137	Ba	159	No Gas	2649.444	ppb	4.9	718979.63	2000	
182	W	159	No Gas	21.111	ppb	8.2	10733.08	1000	
205	Tl	209	No Gas	0.573	ppb	16.4	897.70	1000	
208	Pb	209	No Gas	248.985	ppb	4.6	433404.83	2000	
232	Th	209	No Gas	1.967	ppb	8.6	3561.16	1000	
238	U	209	No Gas	20.127	ppb	6.1	33348.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1709584.03	1.0	1881686.03	90.85	29.5	120.4	
Sc	45	No Gas	3629404.09	0.7	3915123.71	92.7	29.5	120.4	
Sc	45	H2	442093.00	0.2	507902.1	87.04	29.5	120.4	
Sc	45	He	88070.69	0.9	102593	85.84	29.5	120.4	
Ge	72	No Gas	834412.95	1.5	852546.94	97.87	29.5	120.4	
Ge	72	H2	164444.72	0.6	193980.16	84.77	29.5	120.4	
Ge	72	He	68424.16	1.3	77385.19	88.42	29.5	120.4	
Y	89	H2	2908729.28	0.1	3089458.15	94.15	29.5	120.4	
Y	89	He	612162.10	0.7	678154.65	90.27	29.5	120.4	
Tb	159	No Gas	8584228.06	0.6	7727080.72	111.09	29.5	120.4	
Tb	159	He	3313886.76	1.0	3280980.4	101	29.5	120.4	
Bi	209	No Gas	5001292.21	0.8	3977089.87	125.75	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5515-001R

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:03:25 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.832	ppb	29.5	136.67	100	
11	B	6	No Gas	332.351	ppb	9.7	14311.98	1000	
23	Na	45	He	2027.431	ppb	3.4	19621.77	200000	
24	Mg	45	He	31763.654	ppb	1.1	90656.39	200000	
27	Al	45	He	37515.577	ppb	0.3	42482.95	200000	
28	Si	45	H2	2712.678	ppb	3.4	6689.12	10000	
39	K	45	He	9529.047	ppb	2.2	36603.52	200000	
40	Ca	45	H2	215616.885	ppb	1.8	4416731.53	200000	
51	V	89	He	73.069	ppb	0.7	3511.67	1000	
52	Cr	89	He	391.679	ppb	0.4	20830.91	2000	
55	Mn	89	He	9910.920	ppb	0.5	250697.04	2000	
56	Fe	89	H2	311079.926	ppb	1.3	26319446.23	100000	
59	Co	89	He	47.184	ppb	2.9	4327.68	1000	
60	Ni	89	He	233.693	ppb	1.7	6012.62	1000	
63	Cu	89	He	3638.563	ppb	0.7	252863.41	2000	
66	Zn	89	He	4213.347	ppb	0.8	38616.50	2000	
75	As	89	He	50.936	ppb	9.2	408.05	1000	
78	Se	89	H2	39.105	ppb	6.7	162.49	1000	
88	Sr	89	He	1444.916	ppb	0.5	57677.15	2000	
95	Mo	89	He	121.381	ppb	2.2	5201.18	1000	
107	Ag	89	He	22.008	ppb	4.6	3189.38	100	
111	Cd	89	He	7.796	ppb	5.6	146.67	1000	
118	Sn	159	He	315.378	ppb	1.2	14419.28	1000	
121	Sb	159	No Gas	11.606	ppb	10.6	4208.70	1000	
137	Ba	159	No Gas	2731.225	ppb	10.4	377282.81	2000	
182	W	159	No Gas	21.886	ppb	16.8	5671.01	1000	
205	Tl	209	No Gas	0.310	ppb	30.8	363.74	1000	
208	Pb	209	No Gas	268.029	ppb	8.7	228761.21	2000	
232	Th	209	No Gas	0.585	ppb	23.4	617.38	1000	
238	U	209	No Gas	21.450	ppb	11.7	17408.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1683346.07	3.4	1881686.03	89.46	29.5	120.4	
Sc	45	No Gas	3666159.57	4.4	3915123.71	93.64	29.5	120.4	
Sc	45	H2	443709.79	1.1	507902.1	87.36	29.5	120.4	
Sc	45	He	88489.62	0.9	102593	86.25	29.5	120.4	
Ge	72	No Gas	842244.46	3.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	167680.79	1.7	193980.16	86.44	29.5	120.4	
Ge	72	He	69916.69	1.1	77385.19	90.35	29.5	120.4	
Y	89	H2	2918663.25	1.1	3089458.15	94.47	29.5	120.4	
Y	89	He	614811.83	0.4	678154.65	90.66	29.5	120.4	
Tb	159	No Gas	8762440.43	4.1	7727080.72	113.4	29.5	120.4	
Tb	159	He	3340319.50	0.4	3280980.4	101.81	29.5	120.4	
Bi	209	No Gas	4911973.57	4.0	3977089.87	123.51	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBWNG20IMW1
File Name	049_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:06:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.032	ppb	91.5	35.56	0.5	
B	11	6	No Gas	6.170	ppb	33.1	2549.20	10	
Na	23	45	He	45.861	ppb	18.6	10472.17	500	
Mg	24	45	He	-18.214	ppb	N/A	573.39	50	
Al	27	45	He	9.721	ppb	49.9	62.22	50	
Si	28	45	H2	11.267	ppb	36.5	597.34	250	
K	39	45	He	-30.816	ppb	N/A	10897.61	500	
Ca	40	45	H2	42.798	ppb	3.7	4303.03	50	
V	51	89	He	0.802	ppb	14.3	468.91	2.5	
Cr	52	89	He	0.345	ppb	17.7	139.31	2.5	
Mn	55	89	He	1.370	ppb	22.3	149.31	1	PB 6020 Fails DoD
Fe	56	89	H2	32.699	ppb	1.6	13511.54	50	
Co	59	89	He	0.028	ppb	184.8	24.44	0.5	
Ni	60	89	He	-1.093	ppb	N/A	186.67	1	PB 6020 Fails DoD
Cu	63	89	He	2.739	ppb	8.0	1207.88	1.5	PB 6020 Fails DoD
Zn	66	89	He	2.522	ppb	2.4	160.01	5	
As	75	89	He	0.136	ppb	47.5	10.67	2.5	
Se	78	89	H2	0.133	ppb	22.4	3.00	2.5	
Sr	88	89	He	0.136	ppb	22.8	27.78	2.5	
Mo	95	89	He	0.125	ppb	15.7	23.33	2.5	
Ag	107	89	He	0.012	ppb	45.8	20.00	0.5	
Cd	111	89	He	0.020	ppb	43.2	1.85	0.5	
Sn	118	159	He	1.380	ppb	5.4	318.91	2.5	
Sb	121	159	No Gas	0.037	ppb	67.4	90.10	0.5	
Ba	137	159	No Gas	1.430	ppb	62.2	760.88	1	PB 6020 Fails DoD
W	182	159	No Gas	0.056	ppb	61.3	83.43	2.5	
Tl	205	209	No Gas	-0.038	ppb	N/A	70.08	0.5	
Pb	208	209	No Gas	0.220	ppb	38.2	911.04	0.5	
Th	232	209	No Gas	0.100	ppb	39.1	407.14	2.5	
U	238	209	No Gas	0.024	ppb	80.2	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1637241.48	6.9	1881686.03	87.01	29.5	120.4	
Sc	45	No Gas	3557206.59	8.0	3915123.71	90.86	29.5	120.4	
Sc	45	H2	447033.60	0.8	507902.1	88.02	29.5	120.4	
Sc	45	He	90002.44	1.0	102593	87.73	29.5	120.4	
Ge	72	No Gas	812366.41	9.3	852546.94	95.29	29.5	120.4	
Ge	72	H2	168307.35	0.6	193980.16	86.77	29.5	120.4	
Ge	72	He	70569.94	0.9	77385.19	91.19	29.5	120.4	
Y	89	H2	2936424.50	0.1	3089458.15	95.05	29.5	120.4	
Y	89	He	615476.55	1.4	678154.65	90.76	29.5	120.4	
Tb	159	No Gas	8459546.40	8.0	7727080.72	109.48	29.5	120.4	
Tb	159	He	3334140.64	1.0	3280980.4	101.62	29.5	120.4	
Bi	209	No Gas	4405576.93	8.8	3977089.87	110.77	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG20IMW1
File Name	050LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:08:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.715	ppb	7.8	12630.33	50	20.29	79.5	120.4	
B	11	6	No Gas	529.882	ppb	7.3	86506.72	500	21.2	79.5	120.4	
Na	23	45	He	8181.968	ppb	1.1	180231.59	7500	21.82	79.5	120.4	
Mg	24	45	He	5643.564	ppb	0.2	66615.67	5000	22.57	79.5	120.4	
Al	27	45	He	2038.406	ppb	2.7	9525.74	2000	20.38	79.5	120.4	
Si	28	45	H2	1022.105	ppb	1.6	10131.60	1000	20.44	0	200	
K	39	45	He	10565.230	ppb	1.0	128173.11	10000	21.13	79.5	120.4	
Ca	40	45	H2	2713.322	ppb	0.8	229751.46	2500	21.71	79.5	120.4	
V	51	89	He	543.694	ppb	0.5	95876.40	500	21.75	79.5	120.4	
Cr	52	89	He	224.397	ppb	0.1	48054.41	200	22.44	79.5	120.4	
Mn	55	89	He	553.186	ppb	0.9	56453.75	500	22.13	79.5	120.4	
Fe	56	89	H2	1125.257	ppb	0.9	391845.33	1000	22.51	79.5	120.4	
Co	59	89	He	564.330	ppb	0.3	208126.52	500	22.57	79.5	120.4	
Ni	60	89	He	578.723	ppb	1.1	57424.02	500	23.15	79.5	120.4	
Cu	63	89	He	284.745	ppb	0.7	80133.03	250	22.78	79.5	120.4	
Zn	66	89	He	564.100	ppb	2.3	20884.07	500	22.56	79.5	120.4	
As	75	89	He	110.927	ppb	1.8	3534.51	100	22.18	79.5	120.4	
Se	78	89	H2	105.423	ppb	1.8	1783.37	100	21.08	79.5	120.4	
Sr	88	89	He	535.334	ppb	1.0	86197.96	500	21.41	79.5	120.4	
Mo	95	89	He	116.227	ppb	0.8	20084.36	100	23.24	79.5	120.4	DoD
Ag	107	89	He	59.978	ppb	1.6	34926.83	50	23.99	79.5	120.4	DoD
Cd	111	89	He	287.101	ppb	1.0	21731.99	250	22.97	79.5	120.4	
Sn	118	159	He	514.214	ppb	0.8	94320.46	500	20.57	79.5	120.4	
Sb	121	159	No Gas	101.835	ppb	9.1	149524.29	100	20.37	79.5	120.4	
Ba	137	159	No Gas	2020.089	ppb	9.7	1140575.96	2000	20.2	79.5	120.4	
W	182	159	No Gas	107.783	ppb	8.6	113810.26	100	21.56	79.5	120.4	
Tl	205	209	No Gas	108.365	ppb	7.9	252375.41	100	21.67	79.5	120.4	
[Pb]	206	209	No Gas	108.002	ppb	10.0	87000.08	100	21.6	79.5	120.4	
[Pb]	207	209	No Gas	107.979	ppb	7.8	76272.18	100	21.6	79.5	120.4	
Pb	208	209	No Gas	107.600	ppb	9.0	346901.78	100	21.52	79.5	120.4	
Th	232	209	No Gas	108.094	ppb	10.7	350271.53	100	21.62	79.5	120.4	
U	238	209	No Gas	107.105	ppb	10.1	328589.59	100	21.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1770750.91	2.2	1881686.03	94.1	29.5	120.4	
Sc	45	No Gas	3799028.53	3.3	3915123.71	97.03	29.5	120.4	
Sc	45	H2	457037.87	1.2	507902.1	89.99	29.5	120.4	
Sc	45	He	91172.20	0.8	102593	88.87	29.5	120.4	
Ge	72	No Gas	875948.99	3.3	852546.94	102.74	29.5	120.4	
Ge	72	H2	170813.22	0.1	193980.16	88.06	29.5	120.4	
Ge	72	He	71282.04	0.8	77385.19	92.11	29.5	120.4	
Y	89	H2	2984826.44	0.4	3089458.15	96.61	29.5	120.4	
Y	89	He	620010.87	0.9	678154.65	91.43	29.5	120.4	
Tb	159	No Gas	8948514.10	3.4	7727080.72	115.81	29.5	120.4	
Tb	159	He	3363909.71	0.5	3280980.4	102.53	29.5	120.4	
Bi	209	No Gas	4640064.07	3.6	3977089.87	116.67	29.5	120.4	

Sample Report

Sample Name SN5920-001

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:11:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.119	ppb	27.3	58.89	100	
11	B	6	No Gas	16.822	ppb	2.7	4410.82	1000	
23	Na	45	He	11619.957	ppb	1.5	249464.50	200000	
24	Mg	45	He	5455.673	ppb	1.6	63804.90	200000	
27	Al	45	He	55.550	ppb	10.8	274.46	200000	
28	Si	45	H2	11093.059	ppb	0.1	104680.60	10000	
39	K	45	He	1597.808	ppb	2.0	28761.02	200000	
40	Ca	45	H2	6675.357	ppb	0.4	562525.30	200000	
51	V	89	He	2.178	ppb	4.5	710.04	1000	
52	Cr	89	He	0.573	ppb	14.8	187.97	2000	
55	Mn	89	He	2103.002	ppb	1.0	213399.09	2000	
56	Fe	89	H2	8432.091	ppb	0.3	2902257.60	100000	
59	Co	89	He	13.840	ppb	0.9	5090.18	1000	
60	Ni	89	He	10.041	ppb	1.1	1280.10	1000	
63	Cu	89	He	2.676	ppb	1.1	1192.32	2000	
66	Zn	89	He	5.209	ppb	7.7	258.90	2000	
75	As	89	He	5.627	ppb	1.3	184.35	1000	
78	Se	89	H2	0.340	ppb	23.0	6.50	1000	
88	Sr	89	He	41.413	ppb	5.1	6638.51	2000	
95	Mo	89	He	0.758	ppb	4.2	132.23	1000	
107	Ag	89	He	0.025	ppb	49.2	27.78	100	
111	Cd	89	He	0.069	ppb	43.9	5.56	1000	
118	Sn	159	He	1.846	ppb	10.9	404.46	1000	
121	Sb	159	No Gas	0.132	ppb	19.7	236.93	1000	
137	Ba	159	No Gas	14.774	ppb	4.1	8352.04	2000	
182	W	159	No Gas	0.250	ppb	27.2	290.33	1000	
205	Tl	209	No Gas	0.055	ppb	93.4	293.66	1000	
208	Pb	209	No Gas	0.180	ppb	9.4	840.95	2000	
232	Th	209	No Gas	0.782	ppb	10.0	2639.90	1000	
238	U	209	No Gas	0.088	ppb	28.5	270.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744859.19	2.1	1881686.03	92.73	29.5	120.4	
Sc	45	No Gas	3782001.35	2.1	3915123.71	96.6	29.5	120.4	
Sc	45	H2	455746.27	0.8	507902.1	89.73	29.5	120.4	
Sc	45	He	90295.92	1.4	102593	88.01	29.5	120.4	
Ge	72	No Gas	874047.04	1.6	852546.94	102.52	29.5	120.4	
Ge	72	H2	170626.95	1.0	193980.16	87.96	29.5	120.4	
Ge	72	He	70912.09	1.1	77385.19	91.64	29.5	120.4	
Y	89	H2	2966041.49	0.6	3089458.15	96.01	29.5	120.4	
Y	89	He	616639.50	1.2	678154.65	90.93	29.5	120.4	
Tb	159	No Gas	8928031.95	1.8	7727080.72	115.54	29.5	120.4	
Tb	159	He	3343441.93	1.2	3280980.4	101.9	29.5	120.4	
Bi	209	No Gas	4624510.08	1.9	3977089.87	116.28	29.5	120.4	

Sample Report

Sample Name SN5920-002

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:13:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.113	ppb	45.0	55.56	100	
11	B	6	No Gas	12.011	ppb	5.5	3521.66	1000	
23	Na	45	He	9794.093	ppb	2.7	215665.49	200000	
24	Mg	45	He	5493.776	ppb	1.9	65423.86	200000	
27	Al	45	He	14.382	ppb	12.6	85.56	200000	
28	Si	45	H2	5239.000	ppb	1.1	49621.14	10000	
39	K	45	He	2131.730	ppb	1.3	35247.54	200000	
40	Ca	45	H2	13008.357	ppb	0.8	1093655.30	200000	
51	V	89	He	1.848	ppb	5.8	661.15	1000	
52	Cr	89	He	0.455	ppb	18.0	165.30	2000	
55	Mn	89	He	811.482	ppb	3.3	83405.10	2000	
56	Fe	89	H2	4319.663	ppb	1.1	1489591.34	100000	
59	Co	89	He	2.555	ppb	14.9	962.33	1000	
60	Ni	89	He	2.344	ppb	9.9	531.14	1000	
63	Cu	89	He	2.251	ppb	13.1	1087.86	2000	
66	Zn	89	He	8.554	ppb	1.3	386.69	2000	
75	As	89	He	4.151	ppb	13.9	139.35	1000	
78	Se	89	H2	0.190	ppb	15.2	4.00	1000	
88	Sr	89	He	47.457	ppb	3.3	7703.54	2000	
95	Mo	89	He	0.717	ppb	19.8	126.67	1000	
107	Ag	89	He	0.017	ppb	90.1	23.33	100	
111	Cd	89	He	0.059	ppb	15.5	4.81	1000	
118	Sn	159	He	1.124	ppb	22.7	275.57	1000	
121	Sb	159	No Gas	0.161	ppb	54.7	266.97	1000	
137	Ba	159	No Gas	6.863	ppb	26.3	3714.80	2000	
182	W	159	No Gas	0.586	ppb	8.2	617.38	1000	
205	Tl	209	No Gas	0.013	ppb	586.0	183.55	1000	
208	Pb	209	No Gas	0.218	ppb	55.8	921.06	2000	
232	Th	209	No Gas	0.155	ppb	66.8	584.02	1000	
238	U	209	No Gas	0.081	ppb	123.7	236.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682595.15	1.6	1881686.03	89.42	29.5	120.4	
Sc	45	No Gas	3611849.77	2.9	3915123.71	92.25	29.5	120.4	
Sc	45	H2	455006.42	0.6	507902.1	89.59	29.5	120.4	
Sc	45	He	91971.17	1.6	102593	89.65	29.5	120.4	
Ge	72	No Gas	842266.63	3.1	852546.94	98.79	29.5	120.4	
Ge	72	H2	168773.67	0.9	193980.16	87.01	29.5	120.4	
Ge	72	He	71313.06	1.0	77385.19	92.15	29.5	120.4	
Y	89	H2	2969426.20	0.8	3089458.15	96.11	29.5	120.4	
Y	89	He	624727.58	1.8	678154.65	92.12	29.5	120.4	
Tb	159	No Gas	8559443.41	2.7	7727080.72	110.77	29.5	120.4	
Tb	159	He	3377887.13	1.4	3280980.4	102.95	29.5	120.4	
Bi	209	No Gas	4449705.49	3.0	3977089.87	111.88	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:16:24 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.850	ppb	7.9	29428.52	25	99.4	89.8	110.2	
11	B	6	No Gas	24.916	ppb	7.7	20668.72	25	99.66	89.8	110.2	
23	Na	45	He	5169.954	ppb	1.0	554495.08	5000	103.4	89.8	110.2	
24	Mg	45	He	4970.752	ppb	1.4	293787.06	5000	99.42	89.8	110.2	
27	Al	45	He	470.788	ppb	1.9	11116.91	500	94.16	89.8	110.2	
28	Si	45	H2	453.557	ppb	0.7	21957.94	500	90.71	89.8	110.2	
39	K	45	He	4840.659	ppb	1.5	281917.27	5000	96.81	89.8	110.2	
40	Ca	45	H2	4835.682	ppb	1.9	2049757.68	5000	96.71	89.8	110.2	
51	V	89	He	24.332	ppb	0.2	21918.77	25	97.33	89.8	110.2	
52	Cr	89	He	25.163	ppb	1.3	27231.13	25	100.65	89.8	110.2	
55	Mn	89	He	24.638	ppb	0.4	12700.76	25	98.55	89.8	110.2	
56	Fe	89	H2	4804.847	ppb	1.4	8320350.16	5000	96.1	89.8	110.2	
59	Co	89	He	25.223	ppb	1.7	46968.14	25	100.89	89.8	110.2	
60	Ni	89	He	25.429	ppb	0.2	12970.87	25	101.72	89.8	110.2	
63	Cu	89	He	25.129	ppb	1.2	35951.56	25	100.52	89.8	110.2	
66	Zn	89	He	25.592	ppb	2.0	4836.57	25	102.37	89.8	110.2	
75	As	89	He	24.525	ppb	1.2	3943.66	25	98.1	89.8	110.2	
78	Se	89	H2	23.670	ppb	3.0	2002.72	25	94.68	89.8	110.2	
88	Sr	89	He	23.622	ppb	1.3	19204.06	25	94.49	89.8	110.2	
95	Mo	89	He	25.351	ppb	1.7	22115.20	25	101.4	89.8	110.2	
107	Ag	89	He	26.209	ppb	0.5	77033.06	25	104.84	89.8	110.2	
111	Cd	89	He	25.807	ppb	0.3	9861.46	25	103.23	89.8	110.2	
118	Sn	159	He	23.261	ppb	0.7	21350.88	25	93.04	89.8	110.2	
121	Sb	159	No Gas	23.195	ppb	9.8	168348.67	25	92.78	89.8	110.2	
137	Ba	159	No Gas	23.723	ppb	9.6	66238.45	25	94.89	89.8	110.2	
182	W	159	No Gas	23.761	ppb	8.6	124043.08	25	95.04	89.8	110.2	
205	Tl	209	No Gas	24.230	ppb	7.9	279345.22	25	96.92	89.8	110.2	
208	Pb	209	No Gas	24.135	ppb	9.0	385185.48	25	96.54	89.8	110.2	
232	Th	209	No Gas	24.026	ppb	8.0	385619.31	25	96.1	89.8	110.2	
238	U	209	No Gas	24.159	ppb	9.4	366998.37	25	96.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686115.81	2.0	1881686.03	89.61	29.5	120.4	
Sc	45	No Gas	3791856.88	3.0	3915123.71	96.85	29.5	120.4	
Sc	45	H2	459029.55	1.3	507902.1	90.38	29.5	120.4	
Sc	45	He	92158.72	1.3	102593	89.83	29.5	120.4	
Ge	72	No Gas	870662.35	2.9	852546.94	102.12	29.5	120.4	
Ge	72	H2	173561.88	0.3	193980.16	89.47	29.5	120.4	
Ge	72	He	71719.82	0.2	77385.19	92.68	29.5	120.4	
Y	89	H2	2986338.14	0.9	3089458.15	96.66	29.5	120.4	
Y	89	He	625952.34	0.2	678154.65	92.3	29.5	120.4	
Tb	159	No Gas	8847471.95	3.3	7727080.72	114.5	29.5	120.4	
Tb	159	He	3358240.71	0.1	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4594067.97	3.6	3977089.87	115.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:19:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.051	ppb	20.4	91.12	0.2	
11	B	6	No Gas	0.844	ppb	11.4	2406.95	4	
23	Na	45	He	-10.409	ppb	N/A	8678.98	200	
24	Mg	45	He	-2.495	ppb	N/A	655.62	20	
27	Al	45	He	0.086	ppb	568.6	20.00	20	
28	Si	45	H2	1.603	ppb	102.6	600.68	100	
39	K	45	He	-6.145	ppb	N/A	11186.08	200	
40	Ca	45	H2	2.101	ppb	6.9	1732.39	20	
51	V	89	He	-0.170	ppb	N/A	185.56	1	
52	Cr	89	He	-0.004	ppb	N/A	63.32	1	
55	Mn	89	He	0.054	ppb	45.8	39.32	0.4	
56	Fe	89	H2	2.271	ppb	7.7	6411.93	20	
59	Co	89	He	0.011	ppb	127.8	35.56	0.2	
60	Ni	89	He	-0.259	ppb	N/A	171.12	0.4	Failed DoD
63	Cu	89	He	-0.009	ppb	N/A	445.58	0.6	
66	Zn	89	He	0.075	ppb	25.4	83.34	2	
75	As	89	He	0.009	ppb	244.4	8.00	1	
78	Se	89	H2	0.012	ppb	29.5	1.83	1	
88	Sr	89	He	0.010	ppb	60.7	14.44	1	
95	Mo	89	He	0.076	ppb	29.2	68.89	1	
107	Ag	89	He	0.005	ppb	66.6	28.89	0.2	
111	Cd	89	He	0.010	ppb	86.6	4.07	0.2	
118	Sn	159	He	0.019	ppb	155.1	85.56	1	
121	Sb	159	No Gas	0.019	ppb	17.7	176.87	0.2	
137	Ba	159	No Gas	0.023	ppb	37.1	76.75	0.4	
182	W	159	No Gas	0.057	ppb	17.2	310.35	1	
205	Tl	209	No Gas	0.016	ppb	36.5	333.71	0.2	
208	Pb	209	No Gas	0.020	ppb	18.7	567.31	0.2	
232	Th	209	No Gas	0.108	ppb	10.5	1788.80	1	
238	U	209	No Gas	0.021	ppb	38.3	317.02	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1732743.96	3.0	1881686.03	92.08	29.5	120.4	
Sc	45	No Gas	3805595.67	3.6	3915123.71	97.2	29.5	120.4	
Sc	45	H2	472622.84	1.3	507902.1	93.05	29.5	120.4	
Sc	45	He	92379.88	0.4	102593	90.05	29.5	120.4	
Ge	72	No Gas	861880.72	3.7	852546.94	101.09	29.5	120.4	
Ge	72	H2	179558.89	0.7	193980.16	92.57	29.5	120.4	
Ge	72	He	72619.95	0.6	77385.19	93.84	29.5	120.4	
Y	89	H2	3014323.85	1.0	3089458.15	97.57	29.5	120.4	
Y	89	He	631017.63	0.3	678154.65	93.05	29.5	120.4	
Tb	159	No Gas	8553647.37	3.7	7727080.72	110.7	29.5	120.4	
Tb	159	He	3330175.37	0.2	3280980.4	101.5	29.5	120.4	
Bi	209	No Gas	4471469.17	3.8	3977089.87	112.43	29.5	120.4	

Sample Report

Sample Name SN5920-003

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:21:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.126	ppb	44.4	61.11	100	
11	B	6	No Gas	29.794	ppb	9.4	6471.67	1000	
23	Na	45	He	15036.095	ppb	1.0	320202.50	200000	
24	Mg	45	He	6770.606	ppb	0.7	79036.67	200000	
27	Al	45	He	13.965	ppb	24.5	82.23	200000	
28	Si	45	H2	4071.755	ppb	1.1	37898.94	10000	
39	K	45	He	864.381	ppb	0.9	20745.73	200000	
40	Ca	45	H2	10569.514	ppb	1.1	870837.66	200000	
51	V	89	He	1.464	ppb	30.9	584.48	1000	
52	Cr	89	He	0.557	ppb	13.5	184.63	2000	
55	Mn	89	He	1040.159	ppb	0.2	105471.60	2000	
56	Fe	89	H2	15490.956	ppb	0.7	5238662.59	100000	
59	Co	89	He	25.348	ppb	3.7	9301.51	1000	
60	Ni	89	He	65.391	ppb	1.7	6708.53	1000	
63	Cu	89	He	2.093	ppb	11.2	1028.97	2000	
66	Zn	89	He	78.081	ppb	3.7	2931.54	2000	
75	As	89	He	3.448	ppb	6.5	115.34	1000	
78	Se	89	H2	0.225	ppb	34.9	4.50	1000	
88	Sr	89	He	45.630	ppb	2.1	7306.63	2000	
95	Mo	89	He	0.196	ppb	32.2	35.55	1000	
107	Ag	89	He	0.019	ppb	16.7	24.44	100	
111	Cd	89	He	0.050	ppb	74.8	4.07	1000	
118	Sn	159	He	1.212	ppb	9.1	286.68	1000	
121	Sb	159	No Gas	0.081	ppb	7.6	153.51	1000	
137	Ba	159	No Gas	11.165	ppb	10.0	6038.10	2000	
182	W	159	No Gas	0.240	ppb	23.2	266.97	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	0.118	ppb	12.9	617.36	2000	
232	Th	209	No Gas	0.438	ppb	6.0	1475.09	1000	
238	U	209	No Gas	0.017	ppb	65.9	50.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1750600.81	2.5	1881686.03	93.03	29.5	120.4	
Sc	45	No Gas	3681495.22	2.8	3915123.71	94.03	29.5	120.4	
Sc	45	H2	445855.07	1.1	507902.1	87.78	29.5	120.4	
Sc	45	He	90346.24	0.9	102593	88.06	29.5	120.4	
Ge	72	No Gas	853722.37	2.4	852546.94	100.14	29.5	120.4	
Ge	72	H2	170005.50	2.6	193980.16	87.64	29.5	120.4	
Ge	72	He	71340.89	1.0	77385.19	92.19	29.5	120.4	
Y	89	H2	2915371.05	0.7	3089458.15	94.37	29.5	120.4	
Y	89	He	616117.46	0.6	678154.65	90.85	29.5	120.4	
Tb	159	No Gas	8541320.57	2.5	7727080.72	110.54	29.5	120.4	
Tb	159	He	3314930.89	0.5	3280980.4	101.03	29.5	120.4	
Bi	209	No Gas	4465687.93	3.1	3977089.87	112.29	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	056_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:24:24 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.068	ppb	106.2	46.67	0.5	
B	11	6	No Gas	3.718	ppb	16.2	2354.71	10	
Na	23	45	He	45.745	ppb	10.5	10595.70	500	
Mg	24	45	He	-11.921	ppb	N/A	653.40	50	
Al	27	45	He	9.317	ppb	43.7	61.11	50	
Si	28	45	H2	22.590	ppb	21.7	714.14	250	
K	39	45	He	-54.984	ppb	N/A	10762.58	500	
Ca	40	45	H2	33.866	ppb	3.3	3630.60	50	
V	51	89	He	1.514	ppb	13.7	595.59	2.5	
Cr	52	89	He	0.385	ppb	15.3	148.64	2.5	
Mn	55	89	He	0.853	ppb	39.1	97.32	1	
Fe	56	89	H2	15.965	ppb	8.0	7850.93	50	
Co	59	89	He	0.016	ppb	302.6	20.00	0.5	
Ni	60	89	He	-1.033	ppb	N/A	193.34	1	PB 6020 Fails DoD
Cu	63	89	He	1.819	ppb	12.2	955.62	1.5	PB 6020 Fails DoD
Zn	66	89	He	14.442	ppb	9.1	598.93	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.072	ppb	50.6	8.67	2.5	
Se	78	89	H2	0.073	ppb	84.0	2.00	2.5	
Sr	88	89	He	0.074	ppb	117.4	17.78	2.5	
Mo	95	89	He	0.098	ppb	21.2	18.89	2.5	
Ag	107	89	He	0.004	ppb	357.8	15.56	0.5	
Cd	111	89	He	0.005	ppb	332.1	0.74	0.5	
Sn	118	159	He	1.023	ppb	26.7	254.46	2.5	
Sb	121	159	No Gas	0.015	ppb	144.1	63.40	0.5	
Ba	137	159	No Gas	0.194	ppb	13.4	123.47	1	
W	182	159	No Gas	0.023	ppb	87.0	50.06	2.5	
Tl	205	209	No Gas	-0.034	ppb	N/A	83.43	0.5	
Pb	208	209	No Gas	0.064	ppb	30.3	460.53	0.5	
Th	232	209	No Gas	0.081	ppb	23.2	367.08	2.5	
U	238	209	No Gas	0.011	ppb	42.9	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752221.57	1.9	1881686.03	93.12	29.5	120.4	
Sc	45	No Gas	3775386.48	2.5	3915123.71	96.43	29.5	120.4	
Sc	45	H2	455085.41	1.2	507902.1	89.6	29.5	120.4	
Sc	45	He	91100.88	1.7	102593	88.8	29.5	120.4	
Ge	72	No Gas	866775.01	2.9	852546.94	101.67	29.5	120.4	
Ge	72	H2	169491.37	1.4	193980.16	87.38	29.5	120.4	
Ge	72	He	70721.42	1.8	77385.19	91.39	29.5	120.4	
Y	89	H2	2951431.22	1.2	3089458.15	95.53	29.5	120.4	
Y	89	He	618070.08	1.5	678154.65	91.14	29.5	120.4	
Tb	159	No Gas	8835323.34	2.5	7727080.72	114.34	29.5	120.4	
Tb	159	He	3342464.15	1.5	3280980.4	101.87	29.5	120.4	
Bi	209	No Gas	4579504.66	3.0	3977089.87	115.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	057LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:27:06 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.044	ppb	3.8	13134.15	50	20.82	79.5	120.4	
B	11	6	No Gas	529.237	ppb	3.5	87560.46	500	21.17	79.5	120.4	
Na	23	45	He	8135.469	ppb	1.5	179368.45	7500	21.69	79.5	120.4	
Mg	24	45	He	5564.197	ppb	1.1	65727.47	5000	22.26	79.5	120.4	
Al	27	45	He	2004.774	ppb	0.5	9375.60	2000	20.05	79.5	120.4	
Si	28	45	H2	991.928	ppb	3.1	9834.34	1000	19.84	0	200	
K	39	45	He	10391.842	ppb	0.9	126327.97	10000	20.78	79.5	120.4	
Ca	40	45	H2	2653.800	ppb	1.3	224441.10	2500	21.23	79.5	120.4	
V	51	89	He	535.605	ppb	0.7	94839.38	500	21.42	79.5	120.4	
Cr	52	89	He	217.130	ppb	1.1	46688.77	200	21.71	79.5	120.4	
Mn	55	89	He	541.491	ppb	0.9	55482.87	500	21.66	79.5	120.4	
Fe	56	89	H2	1078.823	ppb	1.1	376062.78	1000	21.58	79.5	120.4	
Co	59	89	He	549.594	ppb	0.2	203515.78	500	21.98	79.5	120.4	
Ni	60	89	He	557.499	ppb	0.4	55556.42	500	22.3	79.5	120.4	
Cu	63	89	He	278.250	ppb	0.7	78632.56	250	22.26	79.5	120.4	
Zn	66	89	He	560.871	ppb	2.0	20850.60	500	22.43	79.5	120.4	
As	75	89	He	107.454	ppb	1.3	3437.81	100	21.49	79.5	120.4	
Se	78	89	H2	103.309	ppb	1.9	1749.03	100	20.66	79.5	120.4	
Sr	88	89	He	514.229	ppb	0.8	83136.91	500	20.57	79.5	120.4	
Mo	95	89	He	111.391	ppb	1.6	19328.68	100	22.28	79.5	120.4	
Ag	107	89	He	58.000	ppb	0.5	33915.35	50	23.2	79.5	120.4	
Cd	111	89	He	276.892	ppb	0.5	21044.94	250	22.15	79.5	120.4	
Sn	118	159	He	499.059	ppb	0.4	91372.05	500	19.96	79.5	120.4	
Sb	121	159	No Gas	103.030	ppb	4.0	149412.81	100	20.61	79.5	120.4	
Ba	137	159	No Gas	2050.585	ppb	4.2	1143665.31	2000	20.51	79.5	120.4	
W	182	159	No Gas	107.459	ppb	3.9	112057.25	100	21.49	79.5	120.4	
Tl	205	209	No Gas	110.078	ppb	4.8	252980.62	100	22.02	79.5	120.4	
[Pb]	206	209	No Gas	108.285	ppb	5.2	86111.78	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	108.705	ppb	4.5	75772.37	100	21.74	79.5	120.4	
Pb	208	209	No Gas	108.121	ppb	4.7	344079.38	100	21.62	79.5	120.4	
Th	232	209	No Gas	108.371	ppb	4.9	346723.89	100	21.67	79.5	120.4	
U	238	209	No Gas	108.508	ppb	6.0	328611.37	100	21.7	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1793011.78	1.2	1881686.03	95.29	29.5	120.4	
Sc	45	No Gas	3792854.34	2.0	3915123.71	96.88	29.5	120.4	
Sc	45	H2	456428.00	0.7	507902.1	89.87	29.5	120.4	
Sc	45	He	91224.88	0.5	102593	88.92	29.5	120.4	
Ge	72	No Gas	875735.46	1.7	852546.94	102.72	29.5	120.4	
Ge	72	H2	172139.51	1.6	193980.16	88.74	29.5	120.4	
Ge	72	He	71598.82	0.7	77385.19	92.52	29.5	120.4	
Y	89	H2	2987112.58	0.6	3089458.15	96.69	29.5	120.4	
Y	89	He	622538.18	0.7	678154.65	91.8	29.5	120.4	
Tb	159	No Gas	8823935.63	1.6	7727080.72	114.19	29.5	120.4	
Tb	159	He	3357533.67	0.3	3280980.4	102.33	29.5	120.4	
Bi	209	No Gas	4573238.44	2.1	3977089.87	114.99	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:29:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.120	ppb	28.0	61.11	100	
11	B	6	No Gas	8.518	ppb	6.8	3187.13	1000	
23	Na	45	He	242.708	ppb	8.2	14900.97	200000	
24	Mg	45	He	19.711	ppb	23.5	1035.67	200000	
27	Al	45	He	95.376	ppb	7.2	468.92	200000	
28	Si	45	H2	116.645	ppb	9.3	1605.21	10000	
39	K	45	He	88.267	ppb	20.0	12519.91	200000	
40	Ca	45	H2	108.958	ppb	1.4	9994.97	200000	
51	V	89	He	1.744	ppb	25.5	644.49	1000	
52	Cr	89	He	0.984	ppb	5.0	279.95	2000	
55	Mn	89	He	5.565	ppb	0.8	584.58	2000	
56	Fe	89	H2	125.910	ppb	2.7	45869.21	100000	
59	Co	89	He	0.153	ppb	18.8	71.12	1000	
60	Ni	89	He	0.368	ppb	146.4	335.57	1000	
63	Cu	89	He	2.329	ppb	16.7	1113.42	2000	
66	Zn	89	He	23.391	ppb	6.4	941.18	2000	
75	As	89	He	0.359	ppb	10.2	18.00	1000	
78	Se	89	H2	0.220	ppb	35.7	4.50	1000	
88	Sr	89	He	0.386	ppb	30.0	68.89	2000	
95	Mo	89	He	0.357	ppb	24.9	64.45	1000	
107	Ag	89	He	0.032	ppb	49.4	32.22	100	
111	Cd	89	He	0.039	ppb	36.5	3.33	1000	
118	Sn	159	He	1.379	ppb	18.2	320.01	1000	
121	Sb	159	No Gas	0.109	ppb	41.5	203.56	1000	
137	Ba	159	No Gas	2.148	ppb	4.1	1234.78	2000	
182	W	159	No Gas	0.231	ppb	21.6	270.31	1000	
205	Tl	209	No Gas	0.035	ppb	56.6	246.95	1000	
208	Pb	209	No Gas	3.855	ppb	11.9	12653.29	2000	
232	Th	209	No Gas	0.962	ppb	19.6	3264.10	1000	
238	U	209	No Gas	0.037	ppb	31.6	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794755.50	5.9	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3864360.34	9.3	3915123.71	98.7	29.5	120.4	
Sc	45	H2	457607.48	0.8	507902.1	90.1	29.5	120.4	
Sc	45	He	92377.74	1.7	102593	90.04	29.5	120.4	
Ge	72	No Gas	880584.68	7.4	852546.94	103.29	29.5	120.4	
Ge	72	H2	169769.99	1.1	193980.16	87.52	29.5	120.4	
Ge	72	He	71733.65	1.4	77385.19	92.7	29.5	120.4	
Y	89	H2	2976735.82	0.7	3089458.15	96.35	29.5	120.4	
Y	89	He	626298.47	1.0	678154.65	92.35	29.5	120.4	
Tb	159	No Gas	8991530.28	8.4	7727080.72	116.36	29.5	120.4	
Tb	159	He	3349347.90	0.8	3280980.4	102.08	29.5	120.4	
Bi	209	No Gas	4651524.12	8.6	3977089.87	116.96	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:32:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	14.8	62.23	100	
11	B	6	No Gas	381.007	ppb	7.4	60418.30	1000	
23	Na	45	He	114927.589	ppb	1.1	2402825.56	200000	
24	Mg	45	He	14441.774	ppb	0.8	169024.80	200000	
27	Al	45	He	48.435	ppb	4.7	243.35	200000	
28	Si	45	H2	10136.194	ppb	1.3	93788.42	10000	
39	K	45	He	274.248	ppb	11.3	14392.46	200000	
40	Ca	45	H2	133458.532	ppb	1.0	11007526.78	200000	
51	V	89	He	1.952	ppb	27.8	664.48	1000	
52	Cr	89	He	0.665	ppb	21.5	205.96	2000	
55	Mn	89	He	319.294	ppb	0.6	32139.85	2000	
56	Fe	89	H2	21.498	ppb	1.7	9664.16	100000	
59	Co	89	He	0.725	ppb	13.1	277.80	1000	
60	Ni	89	He	1.661	ppb	39.6	453.36	1000	
63	Cu	89	He	2.513	ppb	20.0	1137.87	2000	
66	Zn	89	He	24.627	ppb	4.4	963.40	2000	
75	As	89	He	0.181	ppb	122.3	12.00	1000	
78	Se	89	H2	0.174	ppb	36.5	3.67	1000	
88	Sr	89	He	1833.340	ppb	0.9	291106.29	2000	
95	Mo	89	He	0.726	ppb	25.7	125.56	1000	
107	Ag	89	He	0.020	ppb	35.4	24.45	100	
111	Cd	89	He	0.070	ppb	56.3	5.56	1000	
118	Sn	159	He	1.178	ppb	7.1	283.35	1000	
121	Sb	159	No Gas	0.054	ppb	82.0	120.14	1000	
137	Ba	159	No Gas	33.654	ppb	9.1	18837.66	2000	
182	W	159	No Gas	0.080	ppb	26.8	110.12	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	143.50	1000	
208	Pb	209	No Gas	0.341	ppb	8.2	1338.19	2000	
232	Th	209	No Gas	0.140	ppb	18.8	553.96	1000	
238	U	209	No Gas	3.828	ppb	9.4	11565.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706339.61	2.4	1881686.03	90.68	29.5	120.4	
Sc	45	No Gas	3773385.05	3.3	3915123.71	96.38	29.5	120.4	
Sc	45	H2	446686.20	0.9	507902.1	87.95	29.5	120.4	
Sc	45	He	91063.77	0.9	102593	88.76	29.5	120.4	
Ge	72	No Gas	875919.05	2.8	852546.94	102.74	29.5	120.4	
Ge	72	H2	169673.49	1.4	193980.16	87.47	29.5	120.4	
Ge	72	He	70546.45	0.6	77385.19	91.16	29.5	120.4	
Y	89	H2	2926195.03	0.9	3089458.15	94.72	29.5	120.4	
Y	89	He	611489.06	0.8	678154.65	90.17	29.5	120.4	
Tb	159	No Gas	8860174.80	2.9	7727080.72	114.66	29.5	120.4	
Tb	159	He	3345790.96	0.7	3280980.4	101.98	29.5	120.4	
Bi	209	No Gas	4565423.39	2.7	3977089.87	114.79	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:35:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	39.5	50.00	100	
11	B	6	No Gas	2186.275	ppb	2.4	327254.81	1000	
23	Na	45	He	1272872.922	ppb	0.5	26958548.85	200000	>LDR
24	Mg	45	He	261607.181	ppb	0.5	3099164.78	200000	
27	Al	45	He	11.914	ppb	33.5	74.45	200000	
28	Si	45	H2	8725.794	ppb	4.2	83372.46	10000	
39	K	45	He	8147.257	ppb	0.8	103011.27	200000	
40	Ca	45	H2	496829.799	ppb	1.0	42273052.70	200000	
51	V	89	He	5.777	ppb	12.0	1352.33	1000	
52	Cr	89	He	0.995	ppb	2.2	280.62	2000	
55	Mn	89	He	31.867	ppb	1.6	3276.47	2000	
56	Fe	89	H2	182.914	ppb	0.9	65659.04	100000	
59	Co	89	He	0.538	ppb	9.6	213.35	1000	
60	Ni	89	He	8.499	ppb	3.5	1140.09	1000	
63	Cu	89	He	4.741	ppb	1.9	1784.62	2000	
66	Zn	89	He	22.375	ppb	4.1	897.84	2000	
75	As	89	He	0.435	ppb	19.9	20.33	1000	
78	Se	89	H2	1.382	ppb	11.9	24.17	1000	
88	Sr	89	He	7120.059	ppb	0.5	1151393.17	2000	
95	Mo	89	He	0.494	ppb	30.9	87.78	1000	
107	Ag	89	He	0.057	ppb	19.6	46.67	100	
111	Cd	89	He	0.112	ppb	46.7	8.89	1000	
118	Sn	159	He	1.503	ppb	4.5	341.13	1000	
121	Sb	159	No Gas	0.110	ppb	39.9	193.55	1000	
137	Ba	159	No Gas	16.099	ppb	1.0	8675.79	2000	
182	W	159	No Gas	0.051	ppb	69.2	76.75	1000	
205	Tl	209	No Gas	-0.015	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	1.867	ppb	4.1	5736.92	2000	
232	Th	209	No Gas	0.084	ppb	18.8	347.06	1000	
238	U	209	No Gas	8.588	ppb	2.7	24083.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1647402.83	0.5	1881686.03	87.55	29.5	120.4	
Sc	45	No Gas	3659947.14	0.2	3915123.71	93.48	29.5	120.4	
Sc	45	H2	460780.49	1.4	507902.1	90.72	29.5	120.4	
Sc	45	He	92580.64	0.4	102593	90.24	29.5	120.4	
Ge	72	No Gas	845351.38	0.2	852546.94	99.16	29.5	120.4	
Ge	72	H2	170688.84	1.8	193980.16	87.99	29.5	120.4	
Ge	72	He	71652.49	1.0	77385.19	92.59	29.5	120.4	
Y	89	H2	2982115.71	1.5	3089458.15	96.53	29.5	120.4	
Y	89	He	622739.18	0.8	678154.65	91.83	29.5	120.4	
Tb	159	No Gas	8508112.79	0.5	7727080.72	110.11	29.5	120.4	
Tb	159	He	3332356.83	0.6	3280980.4	101.57	29.5	120.4	
Bi	209	No Gas	4232103.15	0.9	3977089.87	106.41	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:37:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	62.2	61.11	100	
11	B	6	No Gas	2163.780	ppb	4.6	349179.23	1000	
23	Na	45	He	1206551.601	ppb	0.6	26204648.94	200000	>LDR
24	Mg	45	He	220736.084	ppb	0.6	2681655.52	200000	
27	Al	45	He	87.471	ppb	3.4	443.36	200000	
28	Si	45	H2	8375.970	ppb	0.4	81499.01	10000	
39	K	45	He	10855.195	ppb	1.4	136801.53	200000	
40	Ca	45	H2	555730.987	ppb	0.3	48145654.28	200000	
51	V	89	He	7.037	ppb	2.5	1590.15	1000	
52	Cr	89	He	5.817	ppb	4.5	1329.16	2000	
55	Mn	89	He	238.473	ppb	0.7	24688.44	2000	
56	Fe	89	H2	6638.947	ppb	0.7	2319648.24	100000	
59	Co	89	He	2.386	ppb	2.8	906.76	1000	
60	Ni	89	He	9.666	ppb	4.5	1267.88	1000	
63	Cu	89	He	5.475	ppb	1.7	2010.22	2000	
66	Zn	89	He	25.209	ppb	9.0	1012.30	2000	
75	As	89	He	1.100	ppb	24.5	42.00	1000	
78	Se	89	H2	0.344	ppb	39.7	6.67	1000	
88	Sr	89	He	9044.283	ppb	0.3	1476801.21	2000	
95	Mo	89	He	0.838	ppb	1.5	148.90	1000	
107	Ag	89	He	0.064	ppb	44.8	51.11	100	
111	Cd	89	He	0.082	ppb	35.9	6.67	1000	
118	Sn	159	He	1.198	ppb	7.7	287.79	1000	
121	Sb	159	No Gas	0.089	ppb	34.0	170.19	1000	
137	Ba	159	No Gas	18.025	ppb	9.6	10048.38	2000	
182	W	159	No Gas	0.065	ppb	62.8	93.44	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	83.42	1000	
208	Pb	209	No Gas	3.372	ppb	5.4	10433.36	2000	
232	Th	209	No Gas	0.056	ppb	10.1	273.65	1000	
238	U	209	No Gas	6.034	ppb	7.9	17358.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1777309.14	2.3	1881686.03	94.45	29.5	120.4	
Sc	45	No Gas	3877319.03	2.6	3915123.71	99.03	29.5	120.4	
Sc	45	H2	469191.21	0.2	507902.1	92.38	29.5	120.4	
Sc	45	He	94940.13	0.9	102593	92.54	29.5	120.4	
Ge	72	No Gas	875107.58	2.2	852546.94	102.65	29.5	120.4	
Ge	72	H2	174003.58	0.9	193980.16	89.7	29.5	120.4	
Ge	72	He	72247.35	1.1	77385.19	93.36	29.5	120.4	
Y	89	H2	3010297.41	0.3	3089458.15	97.44	29.5	120.4	
Y	89	He	628813.93	0.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8815817.72	2.5	7727080.72	114.09	29.5	120.4	
Tb	159	He	3358153.63	0.7	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4347631.64	3.0	3977089.87	109.32	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:40:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.097	ppb	103.6	53.34	100	
11	B	6	No Gas	2337.026	ppb	11.9	364561.61	1000	
23	Na	45	He	1235819.546	ppb	1.3	26821218.19	200000	>LDR
24	Mg	45	He	225454.844	ppb	1.4	2737028.61	200000	
27	Al	45	He	55.559	ppb	18.6	287.79	200000	
28	Si	45	H2	8486.305	ppb	1.5	81827.53	10000	
39	K	45	He	11236.807	ppb	0.9	141103.03	200000	
40	Ca	45	H2	569929.909	ppb	0.7	48935104.27	200000	
51	V	89	He	6.935	ppb	9.2	1571.26	1000	
52	Cr	89	He	3.758	ppb	6.7	881.21	2000	
55	Mn	89	He	257.089	ppb	0.8	26587.48	2000	
56	Fe	89	H2	7226.943	ppb	0.6	2519358.04	100000	
59	Co	89	He	3.050	ppb	5.8	1153.46	1000	
60	Ni	89	He	8.566	ppb	5.8	1156.76	1000	
63	Cu	89	He	4.846	ppb	2.4	1830.19	2000	
66	Zn	89	He	21.988	ppb	0.7	891.18	2000	
75	As	89	He	0.698	ppb	18.8	29.00	1000	
78	Se	89	H2	0.178	ppb	53.0	3.83	1000	
88	Sr	89	He	9123.306	ppb	0.9	1488132.18	2000	
95	Mo	89	He	0.775	ppb	4.7	137.79	1000	
107	Ag	89	He	0.022	ppb	25.9	26.67	100	
111	Cd	89	He	0.034	ppb	23.9	2.96	1000	
118	Sn	159	He	0.934	ppb	8.7	240.01	1000	
121	Sb	159	No Gas	0.083	ppb	27.2	156.84	1000	
137	Ba	159	No Gas	20.127	ppb	15.5	10723.06	2000	
182	W	159	No Gas	0.051	ppb	35.2	76.75	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.922	ppb	12.0	5797.04	2000	
232	Th	209	No Gas	0.034	ppb	55.3	196.89	1000	
238	U	209	No Gas	6.364	ppb	14.7	17505.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1729003.66	8.4	1881686.03	91.89	29.5	120.4	
Sc	45	No Gas	3747467.23	9.3	3915123.71	95.72	29.5	120.4	
Sc	45	H2	464995.29	1.0	507902.1	91.55	29.5	120.4	
Sc	45	He	94883.09	1.5	102593	92.48	29.5	120.4	
Ge	72	No Gas	842248.24	10.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	172855.44	0.4	193980.16	89.11	29.5	120.4	
Ge	72	He	72444.31	1.3	77385.19	93.62	29.5	120.4	
Y	89	H2	3003630.01	0.5	3089458.15	97.22	29.5	120.4	
Y	89	He	628188.98	1.2	678154.65	92.63	29.5	120.4	
Tb	159	No Gas	8498552.37	9.9	7727080.72	109.98	29.5	120.4	
Tb	159	He	3362151.75	1.0	3280980.4	102.47	29.5	120.4	
Bi	209	No Gas	4193350.57	10.5	3977089.87	105.44	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:43:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.056	ppb	114.4	46.67	100	
11	B	6	No Gas	703.360	ppb	4.7	120750.08	1000	
23	Na	45	He	356269.602	ppb	0.5	7762372.30	200000	
24	Mg	45	He	46075.355	ppb	0.5	561689.97	200000	
27	Al	45	He	21.526	ppb	12.4	123.34	200000	
28	Si	45	H2	7216.041	ppb	4.1	70894.71	10000	
39	K	45	He	3337.668	ppb	0.7	50384.10	200000	
40	Ca	45	H2	160552.499	ppb	1.7	14029772.29	200000	
51	V	89	He	8.281	ppb	7.2	1822.41	1000	
52	Cr	89	He	0.926	ppb	3.8	269.95	2000	
55	Mn	89	He	64.642	ppb	0.1	6739.74	2000	
56	Fe	89	H2	202.755	ppb	1.2	74363.42	100000	
59	Co	89	He	0.470	ppb	29.5	191.13	1000	
60	Ni	89	He	-0.140	ppb	N/A	287.79	1000	
63	Cu	89	He	3.413	ppb	3.9	1433.47	2000	
66	Zn	89	He	47.144	ppb	5.4	1844.64	2000	
75	As	89	He	0.877	ppb	12.3	35.00	1000	
78	Se	89	H2	0.491	ppb	47.2	9.33	1000	
88	Sr	89	He	1739.889	ppb	0.9	285779.11	2000	
95	Mo	89	He	0.833	ppb	14.8	148.90	1000	
107	Ag	89	He	0.020	ppb	80.0	25.56	100	
111	Cd	89	He	0.043	ppb	101.6	3.70	1000	
118	Sn	159	He	1.246	ppb	6.6	302.24	1000	
121	Sb	159	No Gas	0.162	ppb	28.4	290.33	1000	
137	Ba	159	No Gas	51.094	ppb	4.7	29746.29	2000	
182	W	159	No Gas	0.064	ppb	32.1	96.77	1000	
205	Tl	209	No Gas	-0.039	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	0.130	ppb	31.8	687.44	2000	
232	Th	209	No Gas	0.032	ppb	23.1	216.91	1000	
238	U	209	No Gas	3.520	ppb	9.1	10943.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1870712.13	2.0	1881686.03	99.42	29.5	120.4	
Sc	45	No Gas	4017057.57	2.7	3915123.71	102.6	29.5	120.4	
Sc	45	H2	473274.44	1.4	507902.1	93.18	29.5	120.4	
Sc	45	He	95153.85	0.3	102593	92.75	29.5	120.4	
Ge	72	No Gas	923537.90	2.3	852546.94	108.33	29.5	120.4	
Ge	72	H2	175313.47	1.1	193980.16	90.38	29.5	120.4	
Ge	72	He	73372.42	0.5	77385.19	94.81	29.5	120.4	
Y	89	H2	3057678.19	0.8	3089458.15	98.97	29.5	120.4	
Y	89	He	632526.92	0.4	678154.65	93.27	29.5	120.4	
Tb	159	No Gas	9208050.07	2.3	7727080.72	119.17	29.5	120.4	
Tb	159	He	3422088.77	0.7	3280980.4	104.3	29.5	120.4	
Bi	209	No Gas	4697354.43	2.2	3977089.87	118.11	29.5	120.4	

Sample Report

Sample Name SN5859-001

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:45:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.098	ppb	78.5	57.78	100	
11	B	6	No Gas	36.522	ppb	3.7	8066.97	1000	
23	Na	45	He	23102.446	ppb	1.2	509168.39	200000	
24	Mg	45	He	9915.850	ppb	0.6	120676.26	200000	
27	Al	45	He	12.523	ppb	19.9	78.89	200000	
28	Si	45	H2	5797.133	ppb	0.6	56474.16	10000	
39	K	45	He	2648.794	ppb	0.7	42138.05	200000	
40	Ca	45	H2	50387.545	ppb	1.6	4358513.83	200000	
51	V	89	He	8.634	ppb	2.1	1894.64	1000	
52	Cr	89	He	0.607	ppb	14.4	201.30	2000	
55	Mn	89	He	693.472	ppb	0.7	72527.60	2000	
56	Fe	89	H2	193.904	ppb	1.2	71226.07	100000	
59	Co	89	He	0.979	ppb	5.4	384.48	1000	
60	Ni	89	He	1.296	ppb	16.3	434.47	1000	
63	Cu	89	He	3.856	ppb	12.7	1566.81	2000	
66	Zn	89	He	19.218	ppb	5.2	796.72	2000	
75	As	89	He	3.511	ppb	0.5	121.01	1000	
78	Se	89	H2	0.126	ppb	92.4	3.00	1000	
88	Sr	89	He	223.507	ppb	0.7	36886.95	2000	
95	Mo	89	He	0.358	ppb	11.7	65.56	1000	
107	Ag	89	He	0.001	ppb	223.9	14.44	100	
111	Cd	89	He	0.014	ppb	150.8	1.48	1000	
118	Sn	159	He	0.892	ppb	28.6	236.68	1000	
121	Sb	159	No Gas	0.079	ppb	62.2	163.52	1000	
137	Ba	159	No Gas	19.185	ppb	2.2	11220.64	2000	
182	W	159	No Gas	0.048	ppb	87.3	80.09	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	70.08	1000	
208	Pb	209	No Gas	0.094	ppb	32.1	580.66	2000	
232	Th	209	No Gas	0.032	ppb	32.0	220.25	1000	
238	U	209	No Gas	0.783	ppb	2.7	2476.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1871948.68	0.4	1881686.03	99.48	29.5	120.4	
Sc	45	No Gas	3980161.30	0.6	3915123.71	101.66	29.5	120.4	
Sc	45	H2	468445.91	1.3	507902.1	92.23	29.5	120.4	
Sc	45	He	94487.03	0.5	102593	92.1	29.5	120.4	
Ge	72	No Gas	919360.11	1.3	852546.94	107.84	29.5	120.4	
Ge	72	H2	175476.61	0.3	193980.16	90.46	29.5	120.4	
Ge	72	He	73691.20	0.8	77385.19	95.23	29.5	120.4	
Y	89	H2	3058076.67	0.8	3089458.15	98.98	29.5	120.4	
Y	89	He	635455.61	0.5	678154.65	93.7	29.5	120.4	
Tb	159	No Gas	9237170.21	0.9	7727080.72	119.54	29.5	120.4	
Tb	159	He	3427399.64	0.5	3280980.4	104.46	29.5	120.4	
Bi	209	No Gas	4770006.24	0.8	3977089.87	119.94	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:48:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.552	ppb	5.0	31599.66	25	102.21	89.8	110.2	
11	B	6	No Gas	27.153	ppb	3.6	23367.41	25	108.61	89.8	110.2	
23	Na	45	He	5237.152	ppb	0.9	559763.01	5000	104.74	89.8	110.2	
24	Mg	45	He	5017.999	ppb	1.0	295607.68	5000	100.36	89.8	110.2	
27	Al	45	He	473.020	ppb	2.2	11132.48	500	94.6	89.8	110.2	
28	Si	45	H2	463.555	ppb	1.8	22730.06	500	92.71	89.8	110.2	
39	K	45	He	4786.285	ppb	0.6	277989.36	5000	95.73	89.8	110.2	
40	Ca	45	H2	4870.245	ppb	0.8	2092256.09	5000	97.4	89.8	110.2	
51	V	89	He	24.721	ppb	2.6	22170.30	25	98.88	89.8	110.2	
52	Cr	89	He	24.934	ppb	0.4	26869.21	25	99.74	89.8	110.2	
55	Mn	89	He	24.919	ppb	0.5	12790.83	25	99.68	89.8	110.2	
56	Fe	89	H2	4816.005	ppb	0.7	8447550.48	5000	96.32	89.8	110.2	
59	Co	89	He	24.623	ppb	0.9	45657.00	25	98.49	89.8	110.2	
60	Ni	89	He	24.794	ppb	0.4	12600.60	25	99.18	89.8	110.2	
63	Cu	89	He	24.953	ppb	0.3	35551.64	25	99.81	89.8	110.2	
66	Zn	89	He	25.631	ppb	1.4	4823.23	25	102.52	89.8	110.2	
75	As	89	He	24.168	ppb	1.6	3869.96	25	96.67	89.8	110.2	
78	Se	89	H2	23.770	ppb	1.1	2037.56	25	95.08	89.8	110.2	
88	Sr	89	He	23.453	ppb	0.1	18985.96	25	93.81	89.8	110.2	
95	Mo	89	He	25.484	ppb	0.3	22136.33	25	101.94	89.8	110.2	
107	Ag	89	He	26.200	ppb	0.6	76680.98	25	104.8	89.8	110.2	
111	Cd	89	He	25.588	ppb	0.5	9736.55	25	102.35	89.8	110.2	
118	Sn	159	He	22.936	ppb	0.8	21262.88	25	91.74	89.8	110.2	
121	Sb	159	No Gas	23.731	ppb	5.1	175698.46	25	94.92	89.8	110.2	
137	Ba	159	No Gas	24.286	ppb	5.4	69166.48	25	97.14	89.8	110.2	
182	W	159	No Gas	24.829	ppb	4.3	132198.66	25	99.32	89.8	110.2	
205	Tl	209	No Gas	24.762	ppb	5.1	291402.78	25	99.05	89.8	110.2	
208	Pb	209	No Gas	24.932	ppb	4.5	406319.97	25	99.73	89.8	110.2	
232	Th	209	No Gas	24.881	ppb	4.9	407681.63	25	99.52	89.8	110.2	
238	U	209	No Gas	25.025	ppb	5.6	388148.19	25	100.1	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1760387.82	2.1	1881686.03	93.55	29.5	120.4	
Sc	45	No Gas	3877909.26	2.9	3915123.71	99.05	29.5	120.4	
Sc	45	H2	465138.12	0.7	507902.1	91.58	29.5	120.4	
Sc	45	He	91854.91	1.0	102593	89.53	29.5	120.4	
Ge	72	No Gas	883440.48	3.2	852546.94	103.62	29.5	120.4	
Ge	72	H2	176011.94	2.0	193980.16	90.74	29.5	120.4	
Ge	72	He	71515.40	0.3	77385.19	92.41	29.5	120.4	
Y	89	H2	3024800.61	0.9	3089458.15	97.91	29.5	120.4	
Y	89	He	623304.05	0.2	678154.65	91.91	29.5	120.4	
Tb	159	No Gas	9013312.99	2.4	7727080.72	116.65	29.5	120.4	
Tb	159	He	3391599.64	0.5	3280980.4	103.37	29.5	120.4	
Bi	209	No Gas	4685305.45	2.8	3977089.87	117.81	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:51:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.039	ppb	16.4	75.56	0.2	
11	B	6	No Gas	1.755	ppb	10.2	3070.44	4	
23	Na	45	He	51.319	ppb	7.1	15111.45	200	
24	Mg	45	He	-0.804	ppb	N/A	751.19	20	
27	Al	45	He	0.185	ppb	40.5	22.22	20	
28	Si	45	H2	1.846	ppb	40.8	590.67	100	
39	K	45	He	-9.278	ppb	N/A	10947.69	200	
40	Ca	45	H2	5.043	ppb	3.3	2911.52	20	
51	V	89	He	0.076	ppb	23.2	400.02	1	
52	Cr	89	He	0.000	ppb	N/A	66.66	1	
55	Mn	89	He	0.032	ppb	31.1	27.33	0.4	
56	Fe	89	H2	1.350	ppb	18.5	4719.40	20	
59	Co	89	He	-0.004	ppb	N/A	6.67	0.2	
60	Ni	89	He	-0.356	ppb	N/A	121.11	0.4	Failed DoD
63	Cu	89	He	-0.062	ppb	N/A	365.57	0.6	
66	Zn	89	He	0.086	ppb	115.4	84.45	2	
75	As	89	He	-0.007	ppb	N/A	5.33	1	
78	Se	89	H2	0.020	ppb	29.5	2.50	1	
88	Sr	89	He	0.032	ppb	19.1	32.22	1	
95	Mo	89	He	0.046	ppb	10.0	42.22	1	
107	Ag	89	He	0.001	ppb	361.1	16.67	0.2	
111	Cd	89	He	0.004	ppb	113.3	1.85	0.2	
118	Sn	159	He	0.005	ppb	572.0	73.33	1	
121	Sb	159	No Gas	0.022	ppb	48.3	196.88	0.2	
137	Ba	159	No Gas	0.019	ppb	87.8	66.74	0.4	
182	W	159	No Gas	0.045	ppb	11.8	253.62	1	
205	Tl	209	No Gas	0.010	ppb	18.8	280.32	0.2	
208	Pb	209	No Gas	0.011	ppb	11.2	430.49	0.2	
232	Th	209	No Gas	0.051	ppb	18.4	921.07	1	
238	U	209	No Gas	0.020	ppb	19.8	310.35	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706210.44	2.7	1881686.03	90.67	29.5	120.4	
Sc	45	No Gas	3721119.61	2.7	3915123.71	95.04	29.5	120.4	
Sc	45	H2	456262.05	0.4	507902.1	89.83	29.5	120.4	
Sc	45	He	91843.31	1.1	102593	89.52	29.5	120.4	
Ge	72	No Gas	848365.94	1.9	852546.94	99.51	29.5	120.4	
Ge	72	H2	173109.13	1.0	193980.16	89.24	29.5	120.4	
Ge	72	He	71678.17	0.4	77385.19	92.63	29.5	120.4	
Y	89	H2	2964302.17	0.5	3089458.15	95.95	29.5	120.4	
Y	89	He	623568.50	0.4	678154.65	91.95	29.5	120.4	
Tb	159	No Gas	8658977.30	3.1	7727080.72	112.06	29.5	120.4	
Tb	159	He	3351006.41	0.6	3280980.4	102.13	29.5	120.4	
Bi	209	No Gas	4569808.55	3.3	3977089.87	114.9	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/27/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNG27A

REVIEWED 07/30/20 KATAHDIN ANALYTICAL METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by AP (initials) on 7/27/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

AP 7/29/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

50x diln.: 0.20 mL of sample (pipet M27) + 9.8 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG27A	07/27/2020	16:21	AP
CalStd	1	LNG27A	07/27/2020	16:24	AP
ICV	1	LNG27A	07/27/2020	16:27	AP
ICB	1	LNG27A	07/27/2020	16:30	AP
PQL	1	LNG27A	07/27/2020	16:32	AP
ICSA	1	LNG27A	07/27/2020	16:35	AP
ICSAB	1	LNG27A	07/27/2020	16:38	AP
LRS1	1	LNG27A	07/27/2020	16:40	AP
LRS2	1	LNG27A	07/27/2020	16:43	AP
RINSE	1	LNG27A	07/27/2020	16:46	AP
RINSE	1	LNG27A	07/27/2020	16:48	AP
CCV	1	LNG27A	07/27/2020	16:51	AP
CCB	1	LNG27A	07/27/2020	16:54	AP
PBSNG06IMS1	5	LNG27A	07/27/2020	16:57	AP
PBSNG07IMS1	5	LNG27A	07/27/2020	16:59	AP
PBWNF29IMW1	5	LNG27A	07/27/2020	17:02	AP
LCSWNF26IMW2	5	LNG27A	07/27/2020	17:04	AP
SN5124-002	5	LNG27A	07/27/2020	17:07	AP
SN5124-002L	25	LNG27A	07/27/2020	17:10	AP
SN5124-002A	5	LNG27A	07/27/2020	17:12	AP
SN5014-002	5	LNG27A	07/27/2020	17:15	AP
SN5014-002L	25	LNG27A	07/27/2020	17:18	AP
SN5014-002A	5	LNG27A	07/27/2020	17:20	AP
CCV	1	LNG27A	07/27/2020	17:23	AP
CCB	1	LNG27A	07/27/2020	17:26	AP
SN5014-002S	5	LNG27A	07/27/2020	17:28	AP
SN5014-002P	5	LNG27A	07/27/2020	17:31	AP
SN5980-001	1	LNG27A	07/27/2020	17:33	AP
SN5980-002	1	LNG27A	07/27/2020	17:36	AP
SN5980-003	1	LNG27A	07/27/2020	17:39	AP
SN5980-004	1	LNG27A	07/27/2020	17:41	AP
SN5980-005	1	LNG27A	07/27/2020	17:44	AP
SN5980-006	1	LNG27A	07/27/2020	17:47	AP
SN5980-007	1	LNG27A	07/27/2020	17:49	AP
SN5980-008	1	LNG27A	07/27/2020	17:52	AP
CCV	1	LNG27A	07/27/2020	17:55	AP
CCB	1	LNG27A	07/27/2020	17:57	AP
SN5980-009	1	LNG27A	07/27/2020	18:00	AP
SN5980-010	1	LNG27A	07/27/2020	18:03	AP
SN5515-001R	50	LNG27A	07/27/2020	18:05	AP
PBWNG21IMW2	5	LNG27A	07/27/2020	18:08	AP
LCSWNG21IMW2	5	LNG27A	07/27/2020	18:11	AP
SN5717-020	5	LNG27A	07/27/2020	18:13	AP
SN5830-002	5	LNG27A	07/27/2020	18:16	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5832-001	5	LNG27A	07/27/2020	18:19	AP
SN5832-002	5	LNG27A	07/27/2020	18:21	AP
SN5832-003	5	LNG27A	07/27/2020	18:24	AP
CCV	1	LNG27A	07/27/2020	18:27	AP
CCB	1	LNG27A	07/27/2020	18:29	AP
SN5832-004	5	LNG27A	07/27/2020	18:32	AP
SN5897-001	5	LNG27A	07/27/2020	18:35	AP
SN5897-002	5	LNG27A	07/27/2020	18:37	AP
SN5897-002L	25	LNG27A	07/27/2020	18:40	AP
SN5897-002A	5	LNG27A	07/27/2020	18:43	AP
SN5897-002S	5	LNG27A	07/27/2020	18:45	AP
SN5897-002P	5	LNG27A	07/27/2020	18:48	AP
SN5946-001	5	LNG27A	07/27/2020	18:51	AP
PBWNG22IMW1	1	LNG27A	07/27/2020	18:53	AP
LCSWNG22IMW1	5	LNG27A	07/27/2020	18:56	AP
CCV	1	LNG27A	07/27/2020	18:59	AP
CCB	1	LNG27A	07/27/2020	19:01	AP
SN5923-001	1	LNG27A	07/27/2020	19:04	AP
PBSNG23IMS1	5	LNG27A	07/27/2020	19:07	AP
LCSONG23IMS1	5	LNG27A	07/27/2020	19:09	AP
LC2ONG23IMS1	5	LNG27A	07/27/2020	19:12	AP
SN6056-005	5	LNG27A	07/27/2020	19:15	AP
SN6056-006	5	LNG27A	07/27/2020	19:17	AP
SN6056-007	5	LNG27A	07/27/2020	19:20	AP
SN6056-008	5	LNG27A	07/27/2020	19:23	AP
SN6056-009	5	LNG27A	07/27/2020	19:25	AP
SN6056-009L	25	LNG27A	07/27/2020	19:28	AP
CCV	1	LNG27A	07/27/2020	19:31	AP
CCB	1	LNG27A	07/27/2020	19:33	AP
SN6056-009A	5	LNG27A	07/27/2020	19:36	AP
SN6056-009S	5	LNG27A	07/27/2020	19:39	AP
SN6056-009P	5	LNG27A	07/27/2020	19:41	AP
SN6056-010	5	LNG27A	07/27/2020	19:44	AP
SN6056-011	5	LNG27A	07/27/2020	19:47	AP
SN6056-012	5	LNG27A	07/27/2020	19:49	AP
SN6056-013	5	LNG27A	07/27/2020	19:52	AP
SN6056-014	5	LNG27A	07/27/2020	19:54	AP
SN6056-015	5	LNG27A	07/27/2020	19:57	AP
SN6056-016	5	LNG27A	07/27/2020	20:00	AP
CCV	1	LNG27A	07/27/2020	20:02	AP
CCB	1	LNG27A	07/27/2020	20:05	AP
SN6056-017	5	LNG27A	07/27/2020	20:07	AP
PBWNG23IMW1	1	LNG27A	07/27/2020	20:10	AP
LCSWNG23IMW1	5	LNG27A	07/27/2020	20:13	AP
SN5815-002	1	LNG27A	07/27/2020	20:15	AP
SN5815-002R	1	LNG27A	07/27/2020	20:18	AP
SN5815-007	1	LNG27A	07/27/2020	20:20	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-014	1	LNG27A	07/27/2020	20:23	AP
SN6032-001	1	LNG27A	07/27/2020	20:26	AP
RINSE	1	LNG27A	07/27/2020	20:28	AP
RINSE	1	LNG27A	07/27/2020	20:31	AP
CCV	1	LNG27A	07/27/2020	20:34	AP
CCB	1	LNG27A	07/27/2020	20:36	AP
SN6071-001	1	LNG27A	07/27/2020	20:39	AP
PBWNG23IMW2	5	LNG27A	07/27/2020	20:41	AP
LCSWNG23IMW2	5	LNG27A	07/27/2020	20:44	AP
SN5815-004	5	LNG27A	07/27/2020	20:47	AP
SN5815-009	5	LNG27A	07/27/2020	20:50	AP
SN5815-016	5	LNG27A	07/27/2020	20:52	AP
SN5815-036	5	LNG27A	07/27/2020	20:55	AP
SN6059-001	5	LNG27A	07/27/2020	20:58	AP
SN6059-001L	25	LNG27A	07/27/2020	21:00	AP
SN6059-001A	5	LNG27A	07/27/2020	21:03	AP
CCV	1	LNG27A	07/27/2020	21:06	AP
CCB	1	LNG27A	07/27/2020	21:08	AP
SN6059-001S	5	LNG27A	07/27/2020	21:11	AP
SN6059-001P	5	LNG27A	07/27/2020	21:13	AP
SN6059-002	5	LNG27A	07/27/2020	21:16	AP
SN6059-003	5	LNG27A	07/27/2020	21:19	AP
SN6090-001	5	LNG27A	07/27/2020	21:21	AP
PBWNG24IMW1	1	LNG27A	07/27/2020	21:24	AP
LCSWNG24IMW1	5	LNG27A	07/27/2020	21:27	AP
SN6091-001	1	LNG27A	07/27/2020	21:29	AP
SN6091-002	1	LNG27A	07/27/2020	21:32	AP
SN6091-003	1	LNG27A	07/27/2020	21:35	AP
CCV	1	LNG27A	07/27/2020	21:37	AP
CCB	1	LNG27A	07/27/2020	21:40	AP
SN6092-001	1	LNG27A	07/27/2020	21:43	AP
SN6092-001L	5	LNG27A	07/27/2020	21:45	AP
SN6092-001A	1	LNG27A	07/27/2020	21:48	AP
SN6092-001S	1	LNG27A	07/27/2020	21:51	AP
SN6092-001P	1	LNG27A	07/27/2020	21:54	AP
PBWNG24IMW2	5	LNG27A	07/27/2020	21:56	AP
LCSWNG24IMW2	5	LNG27A	07/27/2020	21:59	AP
SN6090-002	5	LNG27A	07/27/2020	22:01	AP
SN6090-003	5	LNG27A	07/27/2020	22:04	AP
SN6090-004	5	LNG27A	07/27/2020	22:07	AP
CCV	1	LNG27A	07/27/2020	22:10	AP
CCB	1	LNG27A	07/27/2020	22:12	AP
SN6090-005	5	LNG27A	07/27/2020	22:15	AP
SN6090-006	5	LNG27A	07/27/2020	22:17	AP
SN6090-007	5	LNG27A	07/27/2020	22:20	AP
SN6090-008	5	LNG27A	07/27/2020	22:23	AP
SN6090-009	5	LNG27A	07/27/2020	22:25	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6090-010S	5	LNG27A	07/27/2020	22:28	AP
SN6090-010P	5	LNG27A	07/27/2020	22:30	AP
PBWNG24IMW3	5	LNG27A	07/27/2020	22:33	AP
LCSWNG24IMW3	5	LNG27A	07/27/2020	22:36	AP
SN6124-001	5	LNG27A	07/27/2020	22:38	AP
CCV	1	LNG27A	07/27/2020	22:41	AP
CCB	1	LNG27A	07/27/2020	22:43	AP
SN6124-003	5	LNG27A	07/27/2020	22:46	AP
SN6124-005	5	LNG27A	07/27/2020	22:49	AP
SN6124-005L	25	LNG27A	07/27/2020	22:52	AP
SN6124-005A	5	LNG27A	07/27/2020	22:54	AP
SN6124-005S	5	LNG27A	07/27/2020	22:57	AP
SN6124-005P	5	LNG27A	07/27/2020	23:00	AP
PBWNG27IMW1	5	LNG27A	07/27/2020	23:02	AP
LCSWNG27IMW1	5	LNG27A	07/27/2020	23:05	AP
SN6146-001	5	LNG27A	07/27/2020	23:08	AP
PBWNG27IMW2	5	LNG27A	07/27/2020	23:10	AP
CCV	1	LNG27A	07/27/2020	23:13	AP
CCB	1	LNG27A	07/27/2020	23:16	AP
LCSWNG27IMW2	5	LNG27A	07/27/2020	23:18	AP
SN6090-010R	5	LNG27A	07/27/2020	23:21	AP
SN6090-010RL	25	LNG27A	07/27/2020	23:24	AP
SN6090-010RA	5	LNG27A	07/27/2020	23:26	AP
SN6146-002	5	LNG27A	07/27/2020	23:29	AP
SN6146-003	5	LNG27A	07/27/2020	23:32	AP
SN6146-004	5	LNG27A	07/27/2020	23:35	AP
SN6146-004L	25	LNG27A	07/27/2020	23:37	AP
SN6146-004A	5	LNG27A	07/27/2020	23:40	AP
SN6146-004S	5	LNG27A	07/27/2020	23:42	AP
CCV	1	LNG27A	07/27/2020	23:45	AP
CCB	1	LNG27A	07/27/2020	23:48	AP
SN6146-004P	5	LNG27A	07/27/2020	23:51	AP
SN6146-005	5	LNG27A	07/27/2020	23:53	AP
SN6146-006	5	LNG27A	07/27/2020	23:56	AP
SN6146-007	5	LNG27A	07/27/2020	23:58	AP
PBSNG27IMS1	5	LNG27A	07/28/2020	00:01	AP
LCSONG27IMS1	5	LNG27A	07/28/2020	00:04	AP
SN6056-018	5	LNG27A	07/28/2020	00:07	AP
SN6056-018L	25	LNG27A	07/28/2020	00:09	AP
SN6056-018A	5	LNG27A	07/28/2020	00:12	AP
SN6056-018S	5	LNG27A	07/28/2020	00:14	AP
CCV	1	LNG27A	07/28/2020	00:17	AP
CCB	1	LNG27A	07/28/2020	00:20	AP
SN6056-018P	5	LNG27A	07/28/2020	00:23	AP
SN6056-019	5	LNG27A	07/28/2020	00:25	AP
SN6056-020	5	LNG27A	07/28/2020	00:28	AP
CCV	1	LNG27A	07/28/2020	00:30	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1	LNG27A	07/28/2020	00:33	AP
PQL	1	LNG27A	07/28/2020	00:36	AP
RINSE	1	LNG27A	07/28/2020	00:38	AP
RINSE	1	LNG27A	07/28/2020	00:41	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG27A.b
Acq. Date-Time	7/27/2020 3:23:34 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

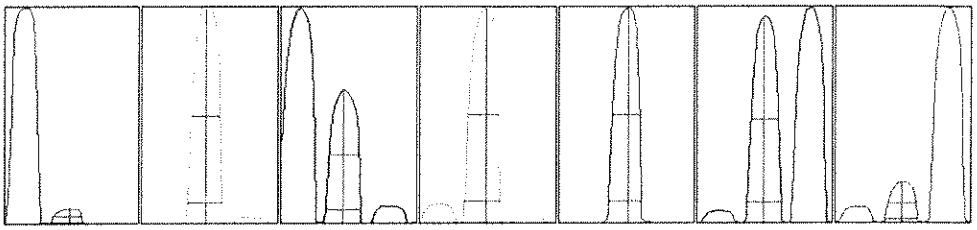
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2553	25527.18	0.536	5.000	
9	842	8418.07	0.581	5.000	
24	33917	339169.64	0.800	5.000	
59	6703	67034.72	0.535	5.000	
115	125260	1252597.85	0.708	5.000	
205	8266	82657.86	0.816	5.000	
208	18460	184597.99	1.075	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2557	2570	2548	2555	2533
9	846	837	839	848	839
24	33464	33914	33956	34104	34147
59	6643	6710	6728	6733	6703
115	123910	125163	125104	126046	126076
205	8167	8242	8262	8329	8328
208	18156	18426	18442	18643	18633

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4187.84	7.00	6.90 - 7.10	
9	1352.67	8.95	8.90 - 9.10	
24	53176.41	23.90	23.90 - 24.10	
59	10625.56	59.00	58.90 - 59.10	
115	210387.17	115.05	114.90 - 115.10	
205	13962.60	205.00	204.90 - 205.10	
208	30859.99	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.718	0.900	
9	0.64	0.751	0.900	
24	0.67	0.775	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.62	0.762	0.900	
208	0.62	0.733	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	12.4 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	412	4119.14	1.159	5.000	
89	63687	636867.78	1.342	5.000	
205	7210	72095.29	0.526	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	404	412	415	415	414
89	62375	63376	63841	64365	64476
205	7149	7208	7228	7211	7252

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.6 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1316	13160.82	0.942	5.000	
89	13812	138121.24	0.918	5.000	
205	4300	42999.01	0.339	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1305	1313	1329	1304	1329
89	13658	13705	13843	13956	13897
205	4287	4296	4286	4316	4315

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.2 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:21:17 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	37.78	13.5
11	B	6	No Gas	1447.91	4.9
23	Na	45	He	8642.19	3.3
24	Mg	45	He	615.62	5.1
27	Al	45	He	20.00	44.1
28	Si	45	H2	483.89	8.6
39	K	45	He	10945.99	2.9
40	Ca	45	H2	1101.19	2.8
51	V	89	He	173.34	8.8
52	Cr	89	He	71.32	20.7
55	Mn	89	He	27.33	25.7
56	Fe	89	H2	6431.98	1.8
59	Co	89	He	22.22	45.8
60	Ni	89	He	342.24	10.3
63	Cu	89	He	141.12	19.2
66	Zn	89	He	64.45	37.4
75	As	89	He	3.33	45.8
78	Se	89	H2	0.17	173.2
88	Sr	89	He	6.67	50.0
95	Mo	89	He	11.11	17.3
107	Ag	89	He	16.67	34.6
111	Cd	89	He	0.37	173.2
118	Sn	159	He	56.67	10.2
121	Sb	159	No Gas	26.69	57.3
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	63.40	32.9
205	Tl	209	No Gas	110.12	50.6
208	Pb	209	No Gas	196.88	19.3
232	Th	209	No Gas	100.11	20.0
238	U	209	No Gas	6.67	86.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1483357.64	1.0
Sc	45	No Gas	3141192.51	0.7
Sc	45	H2	418309.46	2.0
Sc	45	He	85440.95	0.7
Ge	72	No Gas	694668.88	1.1
Ge	72	H2	157206.79	1.4
Ge	72	He	64721.85	0.3
Y	89	H2	2572670.23	1.1
Y	89	He	574051.42	0.5
Tb	159	No Gas	6821698.44	0.4
Tb	159	He	2982140.20	0.3
Bi	209	No Gas	3547037.46	0.7

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:24:26 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	53677.02	0.9
11	B	6	No Gas	35620.19	1.8
23	Na	45	He	940406.72	0.2
24	Mg	45	He	519311.68	0.4
27	Al	45	He	21208.56	0.4
28	Si	45	H2	41988.46	1.7
39	K	45	He	495993.07	0.3
40	Ca	45	H2	3687380.64	0.9
51	V	89	He	37980.88	1.1
52	Cr	89	He	46599.76	0.5
55	Mn	89	He	22215.38	1.6
56	Fe	89	H2	14357346.95	0.7
59	Co	89	He	78360.45	1.1
60	Ni	89	He	21464.84	2.2
63	Cu	89	He	60334.39	0.4
66	Zn	89	He	8084.86	1.4
75	As	89	He	6702.69	1.6
78	Se	89	H2	3452.44	1.9
88	Sr	89	He	35176.94	1.2
95	Mo	89	He	37651.45	0.6
107	Ag	89	He	129052.87	0.5
111	Cd	89	He	16995.94	1.1
118	Sn	159	He	37895.22	1.3
121	Sb	159	No Gas	281577.40	0.9
137	Ba	159	No Gas	111276.29	0.5
182	W	159	No Gas	209547.07	0.8
205	Tl	209	No Gas	453668.28	0.3
208	Pb	209	No Gas	625855.81	1.3
232	Th	209	No Gas	643461.33	1.7
238	U	209	No Gas	601070.87	1.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1444605.42	1.0	1483357.64	97.39	29.5	120.4	
Sc	45	No Gas	3103944.23	0.7	3141192.51	98.81	29.5	120.4	
Sc	45	H2	404200.40	0.8	418309.46	96.63	29.5	120.4	
Sc	45	He	80155.11	1.6	85440.95	93.81	29.5	120.4	
Ge	72	No Gas	689532.18	1.1	694668.88	99.26	29.5	120.4	
Ge	72	H2	151559.26	1.4	157206.79	96.41	29.5	120.4	
Ge	72	He	61423.83	1.3	64721.85	94.9	29.5	120.4	
Y	89	H2	2522718.20	1.1	2572670.23	98.06	29.5	120.4	
Y	89	He	543887.00	1.4	574051.42	94.75	29.5	120.4	
Tb	159	No Gas	6892845.18	1.2	6821698.44	101.04	29.5	120.4	
Tb	159	He	2893308.43	1.2	2982140.2	97.02	29.5	120.4	
Bi	209	No Gas	3555161.39	1.0	3547037.46	100.23	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:27:28 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.472	ppb	4.8	22462.50	20	102.36	89.6	110.4	
11	B	6	No Gas	18.669	ppb	5.2	14481.04	20	93.34	89.6	110.4	
23	Na	45	He	4031.577	ppb	2.1	400006.44	4000	100.79	89.6	110.4	
24	Mg	45	He	3955.828	ppb	1.8	214375.94	4000	98.9	89.6	110.4	
27	Al	45	He	371.367	ppb	0.5	8218.20	400	92.84	89.6	110.4	
28	Si	45	H2	415.412	ppb	1.5	17891.31	400	103.85	89.6	110.4	
39	K	45	He	3935.044	ppb	0.8	209834.47	4000	98.38	89.6	110.4	
40	Ca	45	H2	4024.591	ppb	0.9	1499462.62	4000	100.61	89.6	110.4	
51	V	89	He	20.142	ppb	1.4	15879.47	20	100.71	89.6	110.4	
52	Cr	89	He	20.013	ppb	1.9	19275.62	20	100.06	89.6	110.4	
55	Mn	89	He	20.197	ppb	1.5	9270.04	20	100.98	89.6	110.4	
56	Fe	89	H2	4035.384	ppb	1.3	5832564.13	4000	100.88	89.6	110.4	
59	Co	89	He	20.514	ppb	3.4	33163.36	20	102.57	89.6	110.4	
60	Ni	89	He	20.313	ppb	2.0	9193.33	20	101.56	89.6	110.4	
63	Cu	89	He	20.217	ppb	1.4	25239.07	20	101.08	89.6	110.4	
66	Zn	89	He	20.854	ppb	1.0	3513.91	20	104.27	89.6	110.4	
75	As	89	He	20.560	ppb	1.9	2843.94	20	102.8	89.6	110.4	
78	Se	89	H2	20.491	ppb	1.1	1423.51	20	102.46	89.6	110.4	
88	Sr	89	He	19.620	ppb	2.9	14238.94	20	98.1	89.6	110.4	
95	Mo	89	He	39.823	ppb	2.2	30924.62	40	99.56	89.6	110.4	
107	Ag	89	He	20.348	ppb	1.5	54163.08	20	101.74	89.6	110.4	
111	Cd	89	He	20.122	ppb	2.5	7053.76	20	100.61	89.6	110.4	
118	Sn	159	He	19.417	ppb	0.8	15115.62	20	97.08	89.6	110.4	
121	Sb	159	No Gas	20.167	ppb	5.9	114847.90	20	100.84	89.6	110.4	
137	Ba	159	No Gas	19.797	ppb	5.9	44560.60	20	98.98	89.6	110.4	
182	W	159	No Gas	19.617	ppb	5.4	83181.91	20	98.08	89.6	110.4	
205	Tl	209	No Gas	20.900	ppb	6.7	193585.02	20	104.5	89.6	110.4	
208	Pb	209	No Gas	20.315	ppb	6.2	259637.01	20	101.58	89.6	110.4	
232	Th	209	No Gas	19.775	ppb	7.5	259699.14	20	98.87	89.6	110.4	
238	U	209	No Gas	19.837	ppb	6.1	243390.95	20	99.18	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1475931.10	2.1	1483357.64	99.5	29.5	120.4	
Sc	45	No Gas	3144287.51	3.2	3141192.51	100.1	29.5	120.4	
Sc	45	H2	408227.63	0.2	418309.46	97.59	29.5	120.4	
Sc	45	He	83500.55	1.2	85440.95	97.73	29.5	120.4	
Ge	72	No Gas	697280.60	3.8	694668.88	100.38	29.5	120.4	
Ge	72	H2	154725.68	1.6	157206.79	98.42	29.5	120.4	
Ge	72	He	62826.50	0.2	64721.85	97.07	29.5	120.4	
Y	89	H2	2538091.94	0.9	2572670.23	98.66	29.5	120.4	
Y	89	He	560794.38	0.8	574051.42	97.69	29.5	120.4	
Tb	159	No Gas	6979373.65	3.8	6821698.44	102.31	29.5	120.4	
Tb	159	He	2964676.17	0.9	2982140.2	99.41	29.5	120.4	
Bi	209	No Gas	3634265.72	4.0	3547037.46	102.46	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:30:08 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.067	ppb	23.6	111.12	0.2	
11	B	6	No Gas	0.528	ppb	40.9	1804.62	4	
23	Na	45	He	-1.170	ppb	N/A	8164.75	200	
24	Mg	45	He	-0.034	ppb	N/A	588.95	20	
27	Al	45	He	0.183	ppb	334.6	23.33	20	
28	Si	45	H2	0.352	ppb	722.6	480.55	100	
39	K	45	He	0.674	ppb	1308.0	10520.87	200	
40	Ca	45	H2	2.301	ppb	40.9	1910.21	20	
51	V	89	He	-0.028	ppb	N/A	145.56	1	
52	Cr	89	He	-0.007	ppb	N/A	62.66	1	
55	Mn	89	He	-0.002	ppb	N/A	25.33	0.4	
56	Fe	89	H2	3.070	ppb	30.4	10612.48	20	
59	Co	89	He	-0.001	ppb	N/A	20.00	0.2	
60	Ni	89	He	-0.076	ppb	N/A	296.68	0.4	
63	Cu	89	He	-0.006	ppb	N/A	128.89	0.6	
66	Zn	89	He	0.026	ppb	328.3	66.67	2	
75	As	89	He	0.031	ppb	77.9	7.33	1	
78	Se	89	H2	0.110	ppb	15.2	7.67	1	
88	Sr	89	He	0.000	ppb	1374.2	6.67	1	
95	Mo	89	He	0.196	ppb	5.7	161.12	1	
107	Ag	89	He	0.005	ppb	146.9	27.78	0.2	
111	Cd	89	He	0.009	ppb	5.9	3.33	0.2	
118	Sn	159	He	0.087	ppb	16.1	122.23	1	
121	Sb	159	No Gas	0.025	ppb	32.1	170.19	0.2	
137	Ba	159	No Gas	0.012	ppb	42.1	40.04	0.4	
182	W	159	No Gas	0.075	ppb	13.0	380.43	1	
205	Tl	209	No Gas	0.026	ppb	29.1	353.73	0.2	
208	Pb	209	No Gas	0.025	ppb	27.9	520.59	0.2	
232	Th	209	No Gas	0.066	ppb	20.8	961.12	1	
238	U	209	No Gas	0.020	ppb	18.9	246.95	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1473623.57	2.8	1483357.64	99.34	29.5	120.4	
Sc	45	No Gas	3109806.18	3.4	3141192.51	99	29.5	120.4	
Sc	45	H2	403252.38	0.7	418309.46	96.4	29.5	120.4	
Sc	45	He	81969.15	5.2	85440.95	95.94	29.5	120.4	
Ge	72	No Gas	691524.97	4.0	694668.88	99.55	29.5	120.4	
Ge	72	H2	152136.00	0.9	157206.79	96.77	29.5	120.4	
Ge	72	He	63117.81	3.9	64721.85	97.52	29.5	120.4	
Y	89	H2	2499411.28	0.2	2572670.23	97.15	29.5	120.4	
Y	89	He	555077.98	5.4	574051.42	96.69	29.5	120.4	
Tb	159	No Gas	6913489.97	4.1	6821698.44	101.35	29.5	120.4	
Tb	159	He	2938186.93	5.5	2982140.2	98.53	29.5	120.4	
Bi	209	No Gas	3596690.18	4.5	3547037.46	101.4	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:32:47 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.225	ppb	22.8	283.35	0.2	112.5	79.5	120.4	
11	B	6	No Gas	4.051	ppb	4.6	4259.67	4	101.28	79.5	120.4	
23	Na	45	He	218.829	ppb	5.0	28770.52	200	109.41	79.5	120.4	
24	Mg	45	He	20.501	ppb	7.0	1655.78	20	102.5	79.5	120.4	
27	Al	45	He	18.774	ppb	13.8	420.02	20	93.87	79.5	120.4	
28	Si	45	H2	102.458	ppb	8.4	4645.98	100	102.46	79.5	120.4	
39	K	45	He	201.860	ppb	3.3	20261.94	200	100.93	79.5	120.4	
40	Ca	45	H2	22.187	ppb	1.4	9099.91	20	110.94	79.5	120.4	
51	V	89	He	1.262	ppb	2.1	1118.98	1	126.2	79.5	120.4	Failed DoD
52	Cr	89	He	1.034	ppb	4.6	1029.86	1	103.4	79.5	120.4	
55	Mn	89	He	0.450	ppb	4.6	225.29	0.4	112.5	79.5	120.4	
56	Fe	89	H2	21.675	ppb	4.7	37223.88	20	108.38	79.5	120.4	
59	Co	89	He	0.225	ppb	8.9	373.37	0.2	112.5	79.5	120.4	
60	Ni	89	He	0.410	ppb	21.8	496.69	0.4	102.5	79.5	120.4	
63	Cu	89	He	0.714	ppb	7.6	993.40	0.6	119	79.5	120.4	
66	Zn	89	He	2.193	ppb	9.0	412.24	2	109.65	79.5	120.4	
75	As	89	He	1.067	ppb	4.0	146.02	1	106.7	79.5	120.4	
78	Se	89	H2	1.140	ppb	5.5	78.50	1	114	79.5	120.4	
88	Sr	89	He	1.023	ppb	4.7	725.60	1	102.3	79.5	120.4	
95	Mo	89	He	1.063	ppb	3.0	810.05	1	106.3	79.5	120.4	
107	Ag	89	He	0.197	ppb	5.2	524.48	0.2	98.5	79.5	120.4	
111	Cd	89	He	0.217	ppb	15.5	74.08	0.2	108.5	79.5	120.4	
118	Sn	159	He	1.099	ppb	9.9	885.62	1	109.9	79.5	120.4	
121	Sb	159	No Gas	0.209	ppb	14.6	1218.09	0.2	104.5	79.5	120.4	
137	Ba	159	No Gas	0.412	ppb	11.5	941.11	0.4	103	79.5	120.4	
182	W	159	No Gas	1.033	ppb	8.0	4445.73	1	103.3	79.5	120.4	
205	Tl	209	No Gas	0.209	ppb	2.5	2069.16	0.2	104.5	79.5	120.4	
208	Pb	209	No Gas	0.222	ppb	4.7	3063.60	0.2	111	79.5	120.4	
232	Th	209	No Gas	0.250	ppb	2.1	3424.33	0.2	125	79.5	120.4	Failed DoD
238	U	209	No Gas	0.207	ppb	5.7	2576.55	0.2	103.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1471942.98	1.7	1483357.64	99.23	29.5	120.4	
Sc	45	No Gas	3122592.30	2.5	3141192.51	99.41	29.5	120.4	
Sc	45	H2	397940.12	1.0	418309.46	95.13	29.5	120.4	
Sc	45	He	80925.42	2.6	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	695757.14	2.8	694668.88	100.16	29.5	120.4	
Ge	72	H2	150271.07	2.1	157206.79	95.59	29.5	120.4	
Ge	72	He	60991.22	2.1	64721.85	94.24	29.5	120.4	
Y	89	H2	2510863.28	1.5	2572670.23	97.6	29.5	120.4	
Y	89	He	543717.21	2.9	574051.42	94.72	29.5	120.4	
Tb	159	No Gas	6985945.94	2.7	6821698.44	102.41	29.5	120.4	
Tb	159	He	2894083.95	2.8	2982140.2	97.05	29.5	120.4	
Bi	209	No Gas	3669170.08	3.0	3547037.46	103.44	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:35:30 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.022	ppb	25.8	57.78	0.2	-50	50	
B	11	6	No Gas	0.472	ppb	32.4	1656.82	4	-50	100	
Na	23	45	He	98444.567	ppb	1.3	8810681.10	100000	80	120	
Mg	24	45	He	101869.862	ppb	1.2	5068937.29	100000	80	120	
Al	27	45	He	93327.606	ppb	1.2	1896776.48	100000	80	120	
Si	28	45	H2	2.930	ppb	75.6	553.97	100	-50	50	
K	39	45	He	96134.049	ppb	0.9	4488691.56	100000	80	120	
Ca	40	45	H2	101196.788	ppb	1.4	35053500.59	100000	80	120	
V	51	89	He	0.181	ppb	23.2	292.24	1	-50	100	
Cr	52	89	He	0.395	ppb	3.5	422.60	0.78	-100	100	
Mn	55	89	He	0.501	ppb	2.5	241.29	0.0826	100	100	DoD
Fe	56	89	H2	98471.876	ppb	1.4	136756885.40	100000	80	120	
Co	59	89	He	0.298	ppb	12.4	473.37	0.2	-50	100	
Ni	60	89	He	0.323	ppb	32.5	447.80	0.114	100	100	
Cu	63	89	He	0.546	ppb	6.0	768.94	-0.043	100	100	
Zn	66	89	He	0.461	ppb	22.5	131.12	-0.7632	100	100	
As	75	89	He	0.081	ppb	15.4	13.67	1	-50	100	
Se	78	89	H2	0.087	ppb	51.5	6.00	1	-50	100	
Sr	88	89	He	0.812	ppb	7.7	561.14	0.0578	100	100	
Mo	95	89	He	2077.932	ppb	0.9	1520448.95	2000	80	120	
Ag	107	89	He	0.015	ppb	76.0	53.33	0.2	-50	50	
Cd	111	89	He	0.309	ppb	8.7	102.59	0.268	100	100	
Sn	118	159	He	0.366	ppb	8.9	331.13	-0.24	100	100	
Sb	121	159	No Gas	0.158	ppb	16.6	951.10	0.089	100	100	
Ba	137	159	No Gas	0.201	ppb	19.2	477.21	-0.0794	100	100	
W	182	159	No Gas	0.208	ppb	17.4	967.79	0.32	-100	100	
Tl	205	209	No Gas	0.000	ppb	2162.5	110.12	0.2	-50	50	
Pb	208	209	No Gas	0.094	ppb	3.7	1361.56	0.03	100	100	
Th	232	209	No Gas	0.023	ppb	25.0	397.12	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	153.5	16.68	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1381833.79	2.4	1483357.64	93.16	29.5	120.4	
Sc	45	No Gas	3114966.97	3.1	3141192.51	99.17	29.5	120.4	
Sc	45	H2	379841.36	1.1	418309.46	90.8	29.5	120.4	
Sc	45	He	76876.01	1.6	85440.95	89.98	29.5	120.4	
Ge	72	No Gas	693165.86	2.6	694668.88	99.78	29.5	120.4	
Ge	72	H2	141016.09	0.8	157206.79	89.7	29.5	120.4	
Ge	72	He	58437.29	0.9	64721.85	90.29	29.5	120.4	
Y	89	H2	2441381.64	1.0	2572670.23	94.9	29.5	120.4	
Y	89	He	528570.16	1.3	574051.42	92.08	29.5	120.4	
Tb	159	No Gas	7150594.75	2.5	6821698.44	104.82	29.5	120.4	
Tb	159	He	2888153.50	1.0	2982140.2	96.85	29.5	120.4	
Bi	209	No Gas	3510054.33	2.3	3547037.46	98.96	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:38:13 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.179	ppb	4.5	20331.53	20	79.5	120.4	
11	B	6	No Gas	20.377	ppb	5.3	14393.18	20	79.5	120.4	
23	Na	45	He	96442.338	ppb	0.5	8994781.86	100000	79.5	120.4	
24	Mg	45	He	99295.067	ppb	0.2	5148702.98	100000	79.5	120.4	
27	Al	45	He	90492.652	ppb	0.5	1916511.20	100000	79.5	120.4	
28	Si	45	H2	458.887	ppb	6.9	19077.29	500	79.5	120.4	
39	K	45	He	93391.144	ppb	0.3	4544266.59	100000	79.5	120.4	
40	Ca	45	H2	96094.682	ppb	8.3	34583447.26	100000	79.5	120.4	
51	V	89	He	19.818	ppb	1.6	15206.49	20	79.5	120.4	
52	Cr	89	He	19.758	ppb	1.0	18518.06	20	79.5	120.4	
55	Mn	89	He	19.877	ppb	0.8	8877.88	20	79.5	120.4	
56	Fe	89	H2	93815.111	ppb	8.6	134929099.35	100000	79.5	120.4	
59	Co	89	He	20.017	ppb	2.2	31490.60	20	79.5	120.4	
60	Ni	89	He	19.487	ppb	0.4	8594.05	20	79.5	120.4	
63	Cu	89	He	19.031	ppb	0.6	23125.29	20	79.5	120.4	
66	Zn	89	He	20.127	ppb	4.9	3301.62	20	79.5	120.4	
75	As	89	He	20.186	ppb	0.8	2717.23	20	79.5	120.4	
78	Se	89	H2	19.548	ppb	8.7	1352.67	20	79.5	120.4	
88	Sr	89	He	20.343	ppb	1.6	14364.64	20	79.5	120.4	
95	Mo	89	He	2048.571	ppb	0.8	1547482.49	2000	79.5	120.4	
107	Ag	89	He	19.069	ppb	1.2	49390.63	20	79.5	120.4	
111	Cd	89	He	19.433	ppb	1.3	6628.73	20	79.5	120.4	
118	Sn	159	He	19.773	ppb	0.7	15405.99	20	79.5	120.4	
121	Sb	159	No Gas	19.416	ppb	3.5	116650.36	20	79.5	120.4	
137	Ba	159	No Gas	18.804	ppb	5.3	44637.93	20	79.5	120.4	
182	W	159	No Gas	20.344	ppb	5.6	90958.67	20	79.5	120.4	
205	Tl	209	No Gas	19.869	ppb	5.0	184015.18	20	79.5	120.4	
208	Pb	209	No Gas	20.044	ppb	5.2	256094.63	20	79.5	120.4	
232	Th	209	No Gas	20.970	ppb	5.1	275398.65	20	79.5	120.4	
238	U	209	No Gas	20.813	ppb	5.6	255248.09	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1355568.24	2.9	1483357.64	91.39	29.5	120.4	
Sc	45	No Gas	3118878.90	3.2	3141192.51	99.29	29.5	120.4	
Sc	45	H2	395773.34	5.4	418309.46	94.61	29.5	120.4	
Sc	45	He	80100.55	0.7	85440.95	93.75	29.5	120.4	
Ge	72	No Gas	695099.87	2.8	694668.88	100.06	29.5	120.4	
Ge	72	H2	146620.83	5.7	157206.79	93.27	29.5	120.4	
Ge	72	He	60850.84	0.7	64721.85	94.02	29.5	120.4	
Y	89	H2	2536094.13	5.5	2572670.23	98.58	29.5	120.4	
Y	89	He	545661.21	0.9	574051.42	95.05	29.5	120.4	
Tb	159	No Gas	7357603.57	3.1	6821698.44	107.86	29.5	120.4	
Tb	159	He	2967276.38	0.8	2982140.2	99.5	29.5	120.4	
Bi	209	No Gas	3631526.97	3.6	3547037.46	102.38	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:40:55 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	103.193	ppb	3.9	113601.61	100	103.19	89.5	110.4	
11	B	6	No Gas	485.686	ppb	4.3	342281.65	500	97.14	89.5	110.4	
51	V	89	He	1026.250	ppb	0.8	779770.40	1000	102.63	89.5	110.4	
52	Cr	89	He	2036.837	ppb	0.8	1903866.12	2000	101.84	89.5	110.4	
55	Mn	89	He	2071.287	ppb	0.5	923318.66	2000	103.56	89.5	110.4	
59	Co	89	He	1047.676	ppb	0.7	1648733.64	1000	104.77	89.5	110.4	
60	Ni	89	He	1068.844	ppb	1.0	454277.36	1000	106.88	89.5	110.4	
63	Cu	89	He	2009.747	ppb	0.7	2430347.27	2000	100.49	89.5	110.4	
66	Zn	89	He	2089.906	ppb	0.3	336864.60	2000	104.5	89.5	110.4	
75	As	89	He	1038.210	ppb	0.5	139716.58	1000	103.82	89.5	110.4	
78	Se	89	H2	1004.606	ppb	2.9	69632.23	1000	100.46	89.5	110.4	
88	Sr	89	He	2033.521	ppb	0.1	1436732.77	2000	101.68	89.5	110.4	
95	Mo	89	He	1048.213	ppb	0.4	792576.29	1000	104.82	89.5	110.4	
107	Ag	89	He	111.120	ppb	0.6	288009.74	100	111.12	89.5	110.4	> +/- 10%
111	Cd	89	He	1045.135	ppb	0.6	356818.90	1000	104.51	89.5	110.4	
118	Sn	159	He	995.403	ppb	0.4	769801.97	1000	99.54	89.5	110.4	
121	Sb	159	No Gas	953.177	ppb	3.1	5962443.27	1000	95.32	89.5	110.4	
137	Ba	159	No Gas	1901.364	ppb	3.2	4700529.84	2000	95.07	89.5	110.4	
182	W	159	No Gas	993.715	ppb	3.0	4625370.31	1000	99.37	89.5	110.4	
205	Tl	209	No Gas	957.347	ppb	3.0	9799470.69	1000	95.73	89.5	110.4	
208	Pb	209	No Gas	1905.281	ppb	2.9	26901627.29	2000	95.26	89.5	110.4	
232	Th	209	No Gas	962.138	ppb	3.4	13968978.28	1000	96.21	89.5	110.4	
238	U	209	No Gas	958.295	ppb	3.3	12998441.22	1000	95.83	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1482742.95	2.3	1483357.64	99.96	29.5	120.4	
Sc	45	No Gas	3330517.14	1.9	3141192.51	106.03	29.5	120.4	
Ge	72	No Gas	748309.16	1.1	694668.88	107.72	29.5	120.4	
Tb	159	No Gas	7659483.50	1.8	6821698.44	112.28	29.5	120.4	
Bi	209	No Gas	4012855.89	1.8	3547037.46	113.13	29.5	120.4	
Sc	45	H2	399356.89	5.0	418309.46	95.47	29.5	120.4	
Ge	72	H2	148750.93	6.7	157206.79	94.62	29.5	120.4	
Y	89	H2	2530579.34	6.2	2572670.23	98.36	29.5	120.4	
Sc	45	He	80100.29	0.3	85440.95	93.75	29.5	120.4	
Ge	72	He	61909.84	0.3	64721.85	95.66	29.5	120.4	
Y	89	He	546167.43	0.7	574051.42	95.14	29.5	120.4	
Tb	159	He	2955907.21	0.3	2982140.2	99.12	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:43:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.320	ppb	31.4	344.46	100	
11	B	6	No Gas	12.213	ppb	10.1	8840.79	1000	
23	Na	45	He	198790.799	ppb	1.0	19689667.10	200000	
24	Mg	45	He	204836.528	ppb	0.9	11284072.33	200000	>LDR
27	Al	45	He	190726.576	ppb	0.7	4291675.67	200000	
28	Si	45	H2	9656.240	ppb	1.7	397291.33	10000	
39	K	45	He	194451.191	ppb	0.8	10040871.33	200000	
40	Ca	45	H2	203017.403	ppb	1.2	74079842.79	200000	>LDR
51	V	89	He	0.131	ppb	56.3	274.46	1000	
52	Cr	89	He	1.592	ppb	5.5	1616.47	2000	
55	Mn	89	He	7.957	ppb	1.2	3712.49	2000	
56	Fe	89	H2	100320.822	ppb	0.2	143456895.18	100000	>LDR
59	Co	89	He	0.741	ppb	12.4	1233.48	1000	
60	Ni	89	He	2.124	ppb	7.1	1275.66	1000	
63	Cu	89	He	1.244	ppb	9.1	1702.39	2000	
66	Zn	89	He	2.193	ppb	10.4	431.14	2000	
75	As	89	He	0.329	ppb	14.3	49.34	1000	
78	Se	89	H2	1.342	ppb	57.6	93.17	1000	
88	Sr	89	He	1.294	ppb	2.6	956.74	2000	
95	Mo	89	He	1.722	ppb	4.1	1363.45	1000	
107	Ag	89	He	0.112	ppb	19.8	318.90	100	
111	Cd	89	He	0.161	ppb	27.5	57.41	1000	
118	Sn	159	He	1.393	ppb	8.6	1150.09	1000	
121	Sb	159	No Gas	1.277	ppb	39.6	7494.16	1000	
137	Ba	159	No Gas	2.320	ppb	42.2	5373.91	2000	
182	W	159	No Gas	2.519	ppb	21.1	11007.22	1000	
205	Tl	209	No Gas	0.937	ppb	35.0	8392.53	1000	
208	Pb	209	No Gas	2.118	ppb	40.7	26044.70	2000	
232	Th	209	No Gas	3.470	ppb	53.2	43699.74	1000	
238	U	209	No Gas	1.742	ppb	61.1	20475.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1307448.97	0.6	1483357.64	88.14	29.5	120.4	
Sc	45	No Gas	3091077.01	0.7	3141192.51	98.4	29.5	120.4	
Sc	45	H2	400189.76	3.0	418309.46	95.67	29.5	120.4	
Sc	45	He	85102.62	0.4	85440.95	99.6	29.5	120.4	
Ge	72	No Gas	677011.35	0.7	694668.88	97.46	29.5	120.4	
Ge	72	H2	145452.02	2.4	157206.79	92.52	29.5	120.4	
Ge	72	He	63020.80	1.3	64721.85	97.37	29.5	120.4	
Y	89	H2	2513599.37	2.1	2572670.23	97.7	29.5	120.4	
Y	89	He	567513.13	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7132215.80	1.3	6821698.44	104.55	29.5	120.4	
Tb	159	He	2999314.12	0.4	2982140.2	100.58	29.5	120.4	
Bi	209	No Gas	3454647.36	1.5	3547037.46	97.4	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:46:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	27.7	152.23	100	
11	B	6	No Gas	2.517	ppb	5.8	3462.76	1000	
23	Na	45	He	142.693	ppb	10.9	23508.54	200000	
24	Mg	45	He	27.849	ppb	10.2	2220.34	200000	
27	Al	45	He	28.329	ppb	5.2	680.04	200000	
28	Si	45	H2	2.522	ppb	80.2	610.70	10000	
39	K	45	He	55.998	ppb	2.1	14262.43	200000	
40	Ca	45	H2	31.485	ppb	7.9	13535.80	200000	
51	V	89	He	0.223	ppb	13.4	361.13	1000	
52	Cr	89	He	0.114	ppb	21.7	187.97	2000	
55	Mn	89	He	0.114	ppb	10.3	82.65	2000	
56	Fe	89	H2	23.521	ppb	6.8	42588.91	100000	
59	Co	89	He	0.100	ppb	27.0	193.35	1000	
60	Ni	89	He	0.017	ppb	404.3	358.91	1000	
63	Cu	89	He	0.355	ppb	11.6	607.81	2000	
66	Zn	89	He	0.137	ppb	16.2	90.00	2000	
75	As	89	He	0.110	ppb	27.8	19.33	1000	
78	Se	89	H2	0.141	ppb	16.9	10.50	1000	
88	Sr	89	He	0.113	ppb	3.7	93.34	2000	
95	Mo	89	He	0.592	ppb	4.9	494.47	1000	
107	Ag	89	He	0.015	ppb	20.8	58.89	100	
111	Cd	89	He	0.067	ppb	17.8	25.18	1000	
118	Sn	159	He	0.388	ppb	9.9	370.02	1000	
121	Sb	159	No Gas	0.040	ppb	21.0	280.31	1000	
137	Ba	159	No Gas	0.028	ppb	67.6	83.42	2000	
182	W	159	No Gas	0.191	ppb	35.0	951.11	1000	
205	Tl	209	No Gas	0.033	ppb	18.4	450.52	1000	
208	Pb	209	No Gas	0.113	ppb	5.0	1782.05	2000	
232	Th	209	No Gas	0.031	ppb	25.4	550.63	1000	
238	U	209	No Gas	0.019	ppb	9.5	260.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1596645.90	2.8	1483357.64	107.64	29.5	120.4	
Sc	45	No Gas	3482637.18	3.3	3141192.51	110.87	29.5	120.4	
Sc	45	H2	431843.65	0.7	418309.46	103.24	29.5	120.4	
Sc	45	He	88017.99	0.6	85440.95	103.02	29.5	120.4	
Ge	72	No Gas	764489.46	2.8	694668.88	110.05	29.5	120.4	
Ge	72	H2	161437.63	1.9	157206.79	102.69	29.5	120.4	
Ge	72	He	67348.13	0.6	64721.85	104.06	29.5	120.4	
Y	89	H2	2682029.51	0.3	2572670.23	104.25	29.5	120.4	
Y	89	He	589124.14	0.8	574051.42	102.63	29.5	120.4	
Tb	159	No Gas	7626315.86	3.4	6821698.44	111.79	29.5	120.4	
Tb	159	He	3069151.55	0.9	2982140.2	102.92	29.5	120.4	
Bi	209	No Gas	3929717.81	3.5	3547037.46	110.79	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:48:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	18.8	127.78	100	
11	B	6	No Gas	1.680	ppb	6.6	2763.69	1000	
23	Na	45	He	52.400	ppb	12.9	14306.40	200000	
24	Mg	45	He	2.055	ppb	55.9	753.41	200000	
27	Al	45	He	3.973	ppb	20.4	113.34	200000	
28	Si	45	H2	0.336	ppb	408.7	517.25	10000	
39	K	45	He	11.512	ppb	37.4	11919.67	200000	
40	Ca	45	H2	5.488	ppb	21.3	3321.63	200000	
51	V	89	He	0.195	ppb	14.5	336.69	1000	
52	Cr	89	He	0.013	ppb	200.5	85.99	2000	
55	Mn	89	He	0.038	ppb	61.9	45.99	2000	
56	Fe	89	H2	8.165	ppb	6.9	19234.54	100000	
59	Co	89	He	0.029	ppb	48.3	71.12	1000	
60	Ni	89	He	-0.054	ppb	N/A	325.57	1000	
63	Cu	89	He	0.242	ppb	14.0	458.91	2000	
66	Zn	89	He	0.106	ppb	54.7	84.45	2000	
75	As	89	He	0.066	ppb	41.6	13.00	1000	
78	Se	89	H2	0.097	ppb	34.8	7.33	1000	
88	Sr	89	He	0.023	ppb	10.8	24.44	2000	
95	Mo	89	He	0.243	ppb	12.8	208.90	1000	
107	Ag	89	He	0.001	ppb	559.1	18.89	100	
111	Cd	89	He	0.024	ppb	7.3	9.26	1000	
118	Sn	159	He	0.119	ppb	42.4	153.34	1000	
121	Sb	159	No Gas	0.114	ppb	106.3	714.31	1000	
137	Ba	159	No Gas	0.213	ppb	110.2	520.70	2000	
182	W	159	No Gas	0.216	ppb	56.9	1031.29	1000	
205	Tl	209	No Gas	0.123	ppb	111.2	1312.08	1000	
208	Pb	209	No Gas	0.252	ppb	86.9	3582.11	2000	
232	Th	209	No Gas	0.097	ppb	103.0	1442.34	1000	
238	U	209	No Gas	0.112	ppb	114.9	1452.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559939.18	1.0	1483357.64	105.16	29.5	120.4	
Sc	45	No Gas	3379704.61	1.2	3141192.51	107.59	29.5	120.4	
Sc	45	H2	434707.92	1.8	418309.46	103.92	29.5	120.4	
Sc	45	He	88239.61	0.3	85440.95	103.28	29.5	120.4	
Ge	72	No Gas	748683.04	0.3	694668.88	107.78	29.5	120.4	
Ge	72	H2	163203.20	0.7	157206.79	103.81	29.5	120.4	
Ge	72	He	67031.14	0.3	64721.85	103.57	29.5	120.4	
Y	89	H2	2693159.39	1.7	2572670.23	104.68	29.5	120.4	
Y	89	He	587753.95	0.1	574051.42	102.39	29.5	120.4	
Tb	159	No Gas	7318490.59	1.1	6821698.44	107.28	29.5	120.4	
Tb	159	He	3057766.00	0.2	2982140.2	102.54	29.5	120.4	
Bi	209	No Gas	3790688.32	0.8	3547037.46	106.87	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:51:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.651	ppb	6.2	27129.44	25	94.6	89.8	110.2	
11	B	6	No Gas	24.213	ppb	6.2	19193.30	25	96.85	89.8	110.2	
23	Na	45	He	5007.642	ppb	0.3	502789.59	5000	100.15	89.8	110.2	
24	Mg	45	He	4844.992	ppb	0.5	266655.91	5000	96.9	89.8	110.2	
27	Al	45	He	478.447	ppb	2.4	10752.19	500	95.69	89.8	110.2	
28	Si	45	H2	460.019	ppb	2.9	20423.87	500	92	89.8	110.2	
39	K	45	He	4849.527	ppb	0.2	260218.16	5000	96.99	89.8	110.2	
40	Ca	45	H2	4897.838	ppb	0.9	1885458.03	5000	97.96	89.8	110.2	
51	V	89	He	24.964	ppb	1.3	19989.22	25	99.86	89.8	110.2	
52	Cr	89	He	24.460	ppb	0.9	23961.22	25	97.84	89.8	110.2	
55	Mn	89	He	25.074	ppb	0.5	11706.74	25	100.3	89.8	110.2	
56	Fe	89	H2	4949.127	ppb	0.9	7442020.09	5000	98.98	89.8	110.2	
59	Co	89	He	25.059	ppb	1.3	41231.80	25	100.24	89.8	110.2	
60	Ni	89	He	24.892	ppb	1.3	11388.33	25	99.57	89.8	110.2	
63	Cu	89	He	25.057	ppb	0.4	31802.59	25	100.23	89.8	110.2	
66	Zn	89	He	25.211	ppb	3.3	4309.71	25	100.84	89.8	110.2	
75	As	89	He	24.618	ppb	1.7	3465.15	25	98.47	89.8	110.2	
78	Se	89	H2	25.129	ppb	0.3	1816.54	25	100.52	89.8	110.2	
88	Sr	89	He	23.723	ppb	0.9	17521.74	25	94.89	89.8	110.2	
95	Mo	89	He	25.002	ppb	0.9	19765.98	25	100.01	89.8	110.2	
107	Ag	89	He	24.456	ppb	0.6	66251.96	25	97.82	89.8	110.2	
111	Cd	89	He	24.329	ppb	1.2	8681.01	25	97.32	89.8	110.2	
118	Sn	159	He	23.858	ppb	1.0	18904.89	25	95.43	89.8	110.2	
121	Sb	159	No Gas	23.978	ppb	4.2	145222.85	25	95.91	89.8	110.2	
137	Ba	159	No Gas	23.946	ppb	5.3	57310.75	25	95.78	89.8	110.2	
182	W	159	No Gas	23.496	ppb	5.5	105915.26	25	93.98	89.8	110.2	
205	Tl	209	No Gas	24.074	ppb	5.0	235008.19	25	96.3	89.8	110.2	
208	Pb	209	No Gas	23.898	ppb	5.5	321808.72	25	95.59	89.8	110.2	
232	Th	209	No Gas	23.582	ppb	5.8	326418.18	25	94.33	89.8	110.2	
238	U	209	No Gas	23.578	ppb	6.5	304785.23	25	94.31	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1543934.68	2.5	1483357.64	104.08	29.5	120.4	
Sc	45	No Gas	3369565.07	2.7	3141192.51	107.27	29.5	120.4	
Sc	45	H2	421855.07	0.7	418309.46	100.85	29.5	120.4	
Sc	45	He	84834.37	0.4	85440.95	99.29	29.5	120.4	
Ge	72	No Gas	748315.12	2.9	694668.88	107.72	29.5	120.4	
Ge	72	H2	157744.59	0.5	157206.79	100.34	29.5	120.4	
Ge	72	He	64409.35	1.0	64721.85	99.52	29.5	120.4	
Y	89	H2	2641000.96	0.8	2572670.23	102.66	29.5	120.4	
Y	89	He	570736.37	0.8	574051.42	99.42	29.5	120.4	
Tb	159	No Gas	7416926.70	2.5	6821698.44	108.73	29.5	120.4	
Tb	159	He	3019849.92	0.8	2982140.2	101.26	29.5	120.4	
Bi	209	No Gas	3827007.92	2.6	3547037.46	107.89	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:54:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	48.1	148.89	0.2	
11	B	6	No Gas	1.018	ppb	25.1	2252.48	4	
23	Na	45	He	18.722	ppb	8.3	10826.11	200	
24	Mg	45	He	0.595	ppb	257.1	668.96	20	
27	Al	45	He	1.453	ppb	45.6	54.45	20	
28	Si	45	H2	-1.798	ppb	N/A	417.14	100	
39	K	45	He	3.961	ppb	166.0	11489.50	200	
40	Ca	45	H2	3.591	ppb	18.3	2547.00	20	
51	V	89	He	0.138	ppb	28.0	292.23	1	
52	Cr	89	He	0.008	ppb	107.9	81.32	1	
55	Mn	89	He	0.039	ppb	47.2	46.66	0.4	
56	Fe	89	H2	6.368	ppb	12.3	16414.61	20	
59	Co	89	He	0.005	ppb	187.6	31.11	0.2	
60	Ni	89	He	-0.102	ppb	N/A	305.57	0.4	
63	Cu	89	He	0.158	ppb	19.1	352.24	0.6	
66	Zn	89	He	-0.005	ppb	N/A	65.56	2	
75	As	89	He	0.054	ppb	24.7	11.33	1	
78	Se	89	H2	0.115	ppb	7.9	8.67	1	
88	Sr	89	He	0.010	ppb	64.3	14.44	1	
95	Mo	89	He	0.147	ppb	27.4	132.23	1	
107	Ag	89	He	0.005	ppb	48.8	32.22	0.2	
111	Cd	89	He	0.014	ppb	20.1	5.56	0.2	
118	Sn	159	He	0.087	ppb	22.0	128.89	1	
121	Sb	159	No Gas	0.032	ppb	26.5	220.25	0.2	
137	Ba	159	No Gas	0.034	ppb	21.8	96.77	0.4	
182	W	159	No Gas	0.082	ppb	17.5	437.16	1	
205	Tl	209	No Gas	0.031	ppb	24.8	417.14	0.2	
208	Pb	209	No Gas	0.060	ppb	14.3	1017.84	0.2	
232	Th	209	No Gas	0.147	ppb	9.3	2152.62	1	
238	U	209	No Gas	0.034	ppb	17.4	450.52	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1545827.48	2.5	1483357.64	104.21	29.5	120.4	
Sc	45	No Gas	3395481.43	3.7	3141192.51	108.1	29.5	120.4	
Sc	45	H2	430903.93	6.1	418309.46	103.01	29.5	120.4	
Sc	45	He	88076.74	2.0	85440.95	103.08	29.5	120.4	
Ge	72	No Gas	747880.22	3.1	694668.88	107.66	29.5	120.4	
Ge	72	H2	162797.76	3.9	157206.79	103.56	29.5	120.4	
Ge	72	He	66979.55	0.8	64721.85	103.49	29.5	120.4	
Y	89	H2	2686037.45	5.9	2572670.23	104.41	29.5	120.4	
Y	89	He	591452.08	1.7	574051.42	103.03	29.5	120.4	
Tb	159	No Gas	7413936.97	3.9	6821698.44	108.68	29.5	120.4	
Tb	159	He	3074533.70	2.1	2982140.2	103.1	29.5	120.4	
Bi	209	No Gas	3840482.66	4.1	3547037.46	108.27	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG06IMS1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:57:00 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.166	ppb	35.3	78.89	0.5	
B	11	6	No Gas	5.252	ppb	3.9	2324.72	10	
Na	23	45	He	162.425	ppb	5.2	11911.56	500	
Mg	24	45	He	15.465	ppb	46.0	788.97	50	
Al	27	45	He	15.453	ppb	39.1	90.00	50	
Si	28	45	H2	11.345	ppb	41.7	580.66	250	
K	39	45	He	59.667	ppb	105.7	11601.18	500	
Ca	40	45	H2	63.707	ppb	7.4	5962.58	50	PB 6020 Fails DoD
V	51	89	He	4.048	ppb	8.3	818.95	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.805	ppb	9.2	229.29	2.5	
Mn	55	89	He	5.639	ppb	6.2	555.25	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	39.466	ppb	3.0	18506.28	50	
Co	59	89	He	0.148	ppb	8.6	71.12	0.5	
Ni	60	89	He	0.571	ppb	108.5	393.35	1	
Cu	63	89	He	2.916	ppb	13.7	881.17	1.5	PB 6020 Fails DoD
Zn	66	89	He	6.435	ppb	5.0	282.24	5	PB 6020 Fails DoD
As	75	89	He	0.330	ppb	4.8	12.67	2.5	
Se	78	89	H2	0.723	ppb	44.0	10.67	2.5	
Sr	88	89	He	0.225	ppb	36.2	40.00	2.5	
Mo	95	89	He	0.595	ppb	17.8	105.56	2.5	
Ag	107	89	He	0.033	ppb	59.2	34.45	0.5	
Cd	111	89	He	0.135	ppb	35.5	10.00	0.5	
Sn	118	159	He	40.526	ppb	1.6	6472.86	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	32.4	200.23	0.5	
Ba	137	159	No Gas	0.241	ppb	46.2	130.15	1	
W	182	159	No Gas	0.359	ppb	11.9	390.44	2.5	
Tl	205	209	No Gas	0.055	ppb	62.8	226.92	0.5	
Pb	208	209	No Gas	0.459	ppb	1.9	1458.34	0.5	
Th	232	209	No Gas	0.346	ppb	9.6	1074.58	2.5	
U	238	209	No Gas	0.057	ppb	44.3	156.84	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577533.99	1.9	1483357.64	106.35	29.5	120.4	
Sc	45	No Gas	3367926.84	2.6	3141192.51	107.22	29.5	120.4	
Sc	45	H2	418250.64	0.9	418309.46	99.99	29.5	120.4	
Sc	45	He	85721.05	0.8	85440.95	100.33	29.5	120.4	
Ge	72	No Gas	748011.27	2.5	694668.88	107.68	29.5	120.4	
Ge	72	H2	157640.14	0.9	157206.79	100.28	29.5	120.4	
Ge	72	He	64726.67	0.9	64721.85	100.01	29.5	120.4	
Y	89	H2	2647144.81	0.5	2572670.23	102.89	29.5	120.4	
Y	89	He	573743.83	1.0	574051.42	99.95	29.5	120.4	
Tb	159	No Gas	7384013.43	2.5	6821698.44	108.24	29.5	120.4	
Tb	159	He	3025172.32	1.3	2982140.2	101.44	29.5	120.4	
Bi	209	No Gas	3849682.72	2.8	3547037.46	108.53	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	020_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:59:38 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.198	ppb	32.3	86.67	0.5	
B	11	6	No Gas	5.098	ppb	9.6	2295.82	10	
Na	23	45	He	113.812	ppb	21.0	10922.94	500	
Mg	24	45	He	13.523	ppb	72.0	766.75	50	
Al	27	45	He	15.205	ppb	20.0	88.89	50	
Si	28	45	H2	3.500	ppb	302.2	513.91	250	
K	39	45	He	77.915	ppb	35.2	11771.31	500	
Ca	40	45	H2	62.345	ppb	3.2	5869.21	50	PB 6020 Fails DoD
V	51	89	He	3.932	ppb	7.6	797.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.901	ppb	12.2	247.29	2.5	
Mn	55	89	He	1.666	ppb	11.2	182.64	1	PB 6020 Fails DoD
Fe	56	89	H2	33.449	ppb	4.4	16578.21	50	
Co	59	89	He	0.081	ppb	14.6	48.89	0.5	
Ni	60	89	He	0.830	ppb	17.7	414.47	1	
Cu	63	89	He	2.558	ppb	7.3	787.83	1.5	PB 6020 Fails DoD
Zn	66	89	He	8.738	ppb	7.2	358.91	5	PB 6020 Fails DoD
As	75	89	He	0.521	ppb	17.8	18.00	2.5	
Se	78	89	H2	0.463	ppb	15.4	6.83	2.5	
Sr	88	89	He	0.286	ppb	16.2	48.89	2.5	
Mo	95	89	He	0.534	ppb	5.9	95.56	2.5	
Ag	107	89	He	0.010	ppb	190.4	22.22	0.5	
Cd	111	89	He	0.093	ppb	9.4	7.04	0.5	
Sn	118	159	He	43.400	ppb	3.0	6905.35	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.076	ppb	48.5	123.47	0.5	
Ba	137	159	No Gas	0.274	ppb	24.7	146.83	1	
W	182	159	No Gas	0.132	ppb	50.2	190.21	2.5	
Tl	205	209	No Gas	0.056	ppb	43.5	230.26	0.5	
Pb	208	209	No Gas	0.714	ppb	9.2	2152.50	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.109	ppb	37.0	413.81	2.5	
U	238	209	No Gas	0.028	ppb	78.1	80.09	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573862.43	2.3	1483357.64	106.1	29.5	120.4	
Sc	45	No Gas	3391258.59	2.7	3141192.51	107.96	29.5	120.4	
Sc	45	H2	419140.15	1.2	418309.46	100.2	29.5	120.4	
Sc	45	He	85583.11	0.2	85440.95	100.17	29.5	120.4	
Ge	72	No Gas	758631.67	1.8	694668.88	109.21	29.5	120.4	
Ge	72	H2	157275.71	1.2	157206.79	100.04	29.5	120.4	
Ge	72	He	65365.19	0.2	64721.85	100.99	29.5	120.4	
Y	89	H2	2629501.00	1.2	2572670.23	102.21	29.5	120.4	
Y	89	He	571551.70	0.2	574051.42	99.56	29.5	120.4	
Tb	159	No Gas	7496627.74	2.9	6821698.44	109.89	29.5	120.4	
Tb	159	He	3015659.68	0.4	2982140.2	101.12	29.5	120.4	
Bi	209	No Gas	3863262.61	3.0	3547037.46	108.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF29IMW1
File Name	021_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:02:20 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.105	ppb	34.3	64.45	0.5	
B	11	6	No Gas	2.453	ppb	4.1	1889.08	10	
Na	23	45	He	103.472	ppb	15.0	10759.31	500	
Mg	24	45	He	61.363	ppb	38.4	1302.38	50	PB 6020 Fails DoD
Al	27	45	He	47.387	ppb	57.8	235.57	50	
Si	28	45	H2	15.206	ppb	92.0	620.71	250	
K	39	45	He	82.467	ppb	26.6	11864.61	500	
Ca	40	45	H2	46.854	ppb	21.7	4732.09	50	
V	51	89	He	3.820	ppb	3.9	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.457	ppb	13.8	161.30	2.5	
Mn	55	89	He	1.072	ppb	15.4	127.98	1	PB 6020 Fails DoD
Fe	56	89	H2	28.111	ppb	25.4	15168.64	50	
Co	59	89	He	0.134	ppb	15.0	66.67	0.5	
Ni	60	89	He	-0.514	ppb	N/A	296.68	1	
Cu	63	89	He	1.894	ppb	5.4	623.37	1.5	PB 6020 Fails DoD
Zn	66	89	He	3.306	ppb	23.8	176.67	5	
As	75	89	He	0.506	ppb	22.4	17.67	2.5	
Se	78	89	H2	0.422	ppb	30.0	6.33	2.5	
Sr	88	89	He	0.239	ppb	57.2	42.22	2.5	
Mo	95	89	He	0.789	ppb	34.7	136.67	2.5	
Ag	107	89	He	0.016	ppb	57.5	25.56	0.5	
Cd	111	89	He	0.186	ppb	24.1	13.71	0.5	
Sn	118	159	He	0.939	ppb	12.2	206.68	2.5	
Sb	121	159	No Gas	0.063	ppb	44.2	106.79	0.5	
Ba	137	159	No Gas	0.300	ppb	7.4	160.18	1	
W	182	159	No Gas	0.098	ppb	45.0	160.18	2.5	
Tl	205	209	No Gas	0.021	ppb	13.0	160.18	0.5	
Pb	208	209	No Gas	0.206	ppb	9.3	774.21	0.5	
Th	232	209	No Gas	0.107	ppb	27.8	407.13	2.5	
U	238	209	No Gas	0.023	ppb	37.5	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562708.37	3.5	1483357.64	105.35	29.5	120.4	
Sc	45	No Gas	3426858.74	3.7	3141192.51	109.09	29.5	120.4	
Sc	45	H2	423208.83	1.4	418309.46	101.17	29.5	120.4	
Sc	45	He	85908.58	0.7	85440.95	100.55	29.5	120.4	
Ge	72	No Gas	756002.16	3.0	694668.88	108.83	29.5	120.4	
Ge	72	H2	158297.10	1.4	157206.79	100.69	29.5	120.4	
Ge	72	He	65520.74	0.2	64721.85	101.23	29.5	120.4	
Y	89	H2	2661227.62	0.8	2572670.23	103.44	29.5	120.4	
Y	89	He	574847.31	0.1	574051.42	100.14	29.5	120.4	
Tb	159	No Gas	7502371.00	3.3	6821698.44	109.98	29.5	120.4	
Tb	159	He	3034186.48	0.2	2982140.2	101.75	29.5	120.4	
Bi	209	No Gas	3862038.39	3.4	3547037.46	108.88	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF26IMW2
File Name	022LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:04:55 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	38.895	ppb	6.3	9277.72	50	15.56	79.5	120.4	6020□ DoD
B	11	6	No Gas	489.959	ppb	5.0	75775.01	500	19.6	79.5	120.4	
Na	23	45	He	8240.949	ppb	1.1	175753.30	7500	21.98	79.5	120.4	
Mg	24	45	He	5340.001	ppb	1.4	60816.00	5000	21.36	79.5	120.4	
Al	27	45	He	1515.315	ppb	2.0	6997.50	2000	15.15	79.5	120.4	6020□ DoD
Si	28	45	H2	988.428	ppb	6.3	9096.30	1000	19.77	0	200	
K	39	45	He	10632.925	ppb	1.0	123381.84	10000	21.27	79.5	120.4	
Ca	40	45	H2	2798.362	ppb	0.8	217382.19	2500	22.39	79.5	120.4	
V	51	89	He	408.574	ppb	0.5	66717.32	500	16.34	79.5	120.4	DoD
Cr	52	89	He	163.895	ppb	0.7	32914.08	200	16.39	79.5	120.4	DoD
Mn	55	89	He	404.942	ppb	0.9	38725.16	500	16.2	79.5	120.4	DoD
Fe	56	89	H2	902.497	ppb	0.7	281825.65	1000	18.05	79.5	120.4	
Co	59	89	He	416.576	ppb	0.5	140564.86	500	16.66	79.5	120.4	DoD
Ni	60	89	He	419.920	ppb	0.9	38584.05	500	16.8	79.5	120.4	DoD
Cu	63	89	He	208.137	ppb	1.1	54099.79	250	16.65	79.5	120.4	DoD
Zn	66	89	He	413.802	ppb	0.6	14362.29	500	16.55	79.5	120.4	DoD
As	75	89	He	108.779	ppb	2.0	3141.71	100	21.76	79.5	120.4	
Se	78	89	H2	106.903	ppb	3.6	1567.85	100	21.38	79.5	120.4	
Sr	88	89	He	507.563	ppb	1.0	76884.96	500	20.3	79.5	120.4	
Mo	95	89	He	106.261	ppb	2.1	17235.86	100	21.25	79.5	120.4	
Ag	107	89	He	40.694	ppb	1.6	22627.26	50	16.28	79.5	120.4	DoD
Cd	111	89	He	262.299	ppb	0.8	19198.90	250	20.98	79.5	120.4	
Sn	118	159	He	510.921	ppb	0.7	82059.19	500	20.44	79.5	120.4	
Sb	121	159	No Gas	103.605	ppb	4.3	128168.88	100	20.72	79.5	120.4	
Ba	137	159	No Gas	1566.788	ppb	4.1	765879.99	2000	15.67	79.5	120.4	6020□ DoD
W	182	159	No Gas	100.689	ppb	5.7	92717.49	100	20.14	79.5	120.4	
Tl	205	209	No Gas	104.429	ppb	5.0	206861.51	100	20.89	79.5	120.4	
[Pb]	206	209	No Gas	104.114	ppb	5.5	71700.10	100	20.82	79.5	120.4	
[Pb]	207	209	No Gas	106.103	ppb	4.8	63666.32	100	21.22	79.5	120.4	
Pb	208	209	No Gas	105.166	ppb	4.5	287417.74	100	21.03	79.5	120.4	
Th	232	209	No Gas	99.815	ppb	5.2	280400.25	100	19.96	79.5	120.4	
U	238	209	No Gas	100.638	ppb	6.3	263976.09	100	20.13	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1600048.95	1.8	1483357.64	107.87	29.5	120.4	
Sc	45	No Gas	3470176.51	1.6	3141192.51	110.47	29.5	120.4	
Sc	45	H2	423679.82	1.0	418309.46	101.28	29.5	120.4	
Sc	45	He	87072.14	0.7	85440.95	101.91	29.5	120.4	
Ge	72	No Gas	775902.97	1.8	694668.88	111.69	29.5	120.4	
Ge	72	H2	159147.55	1.5	157206.79	101.23	29.5	120.4	
Ge	72	He	66577.52	0.2	64721.85	102.87	29.5	120.4	
Y	89	H2	2679371.26	0.7	2572670.23	104.15	29.5	120.4	
Y	89	He	585431.47	0.2	574051.42	101.98	29.5	120.4	
Tb	159	No Gas	7573021.00	1.7	6821698.44	111.01	29.5	120.4	
Tb	159	He	3067482.98	0.3	2982140.2	102.86	29.5	120.4	
Bi	209	No Gas	3882074.20	2.3	3547037.46	109.45	29.5	120.4	

Sample Report

Sample Name SN5124-002

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:07:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.124	ppb	18.6	65.56	100	
11	B	6	No Gas	113.279	ppb	6.3	17492.24	1000	
23	Na	45	He	212653.052	ppb	1.5	4106232.34	200000	
24	Mg	45	He	15886.014	ppb	1.8	170920.54	200000	
27	Al	45	He	18.381	ppb	32.0	100.00	200000	
28	Si	45	H2	5826.514	ppb	2.2	48633.11	10000	
39	K	45	He	1559.700	ppb	2.2	26268.99	200000	
40	Ca	45	H2	52400.623	ppb	2.2	3847287.10	200000	
51	V	89	He	1.611	ppb	16.7	416.69	1000	
52	Cr	89	He	0.293	ppb	25.0	124.65	2000	
55	Mn	89	He	442.943	ppb	2.1	40195.62	2000	
56	Fe	89	H2	159.964	ppb	2.9	52991.97	100000	
59	Co	89	He	1.757	ppb	11.0	584.50	1000	
60	Ni	89	He	3.435	ppb	16.3	627.82	1000	
63	Cu	89	He	1.733	ppb	12.4	563.37	2000	
66	Zn	89	He	3.585	ppb	30.5	180.01	2000	
75	As	89	He	0.454	ppb	30.5	15.67	1000	
78	Se	89	H2	0.595	ppb	27.1	8.50	1000	
88	Sr	89	He	336.592	ppb	2.7	48384.71	2000	
95	Mo	89	He	0.499	ppb	47.7	87.78	1000	
107	Ag	89	He	0.020	ppb	62.5	26.67	100	
111	Cd	89	He	0.207	ppb	77.2	14.82	1000	
118	Sn	159	He	1.057	ppb	5.1	222.23	1000	
121	Sb	159	No Gas	0.136	ppb	21.3	196.89	1000	
137	Ba	159	No Gas	16.396	ppb	7.7	7991.34	2000	
182	W	159	No Gas	0.224	ppb	32.6	276.98	1000	
205	Tl	209	No Gas	0.042	ppb	101.4	200.23	1000	
208	Pb	209	No Gas	0.187	ppb	2.7	717.48	2000	
232	Th	209	No Gas	0.826	ppb	11.3	2402.92	1000	
238	U	209	No Gas	0.079	ppb	16.2	210.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1496223.31	3.4	1483357.64	100.87	29.5	120.4	
Sc	45	No Gas	3389818.92	4.0	3141192.51	107.92	29.5	120.4	
Sc	45	H2	402494.77	1.5	418309.46	96.22	29.5	120.4	
Sc	45	He	82831.00	1.0	85440.95	96.95	29.5	120.4	
Ge	72	No Gas	756048.82	2.9	694668.88	108.84	29.5	120.4	
Ge	72	H2	151208.54	0.8	157206.79	96.18	29.5	120.4	
Ge	72	He	63365.48	1.1	64721.85	97.9	29.5	120.4	
Y	89	H2	2560357.61	1.0	2572670.23	99.52	29.5	120.4	
Y	89	He	555667.36	1.3	574051.42	96.8	29.5	120.4	
Tb	159	No Gas	7544666.00	3.3	6821698.44	110.6	29.5	120.4	
Tb	159	He	2989196.38	1.6	2982140.2	100.24	29.5	120.4	
Bi	209	No Gas	3831262.17	3.4	3547037.46	108.01	29.5	120.4	

Sample Report

Sample Name SN5124-002L

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:10:13 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.321	ppb	59.7	52.23	100	
11	B	6	No Gas	129.479	ppb	6.9	5101.06	1000	
23	Na	45	He	225928.120	ppb	1.2	891354.27	200000	
24	Mg	45	He	16914.097	ppb	1.2	37379.73	200000	
27	Al	45	He	46.630	ppb	32.4	61.12	200000	
28	Si	45	H2	6025.291	ppb	1.8	10796.27	10000	
39	K	45	He	1595.952	ppb	1.2	14007.24	200000	
40	Ca	45	H2	54238.187	ppb	0.4	825432.68	200000	
51	V	89	He	4.511	ppb	31.0	314.46	1000	
52	Cr	89	He	0.447	ppb	80.4	87.99	2000	
55	Mn	89	He	466.434	ppb	1.7	8684.45	2000	
56	Fe	89	H2	188.761	ppb	3.1	17881.32	100000	
59	Co	89	He	1.258	ppb	4.7	104.46	1000	
60	Ni	89	He	-1.700	ppb	N/A	308.90	1000	
63	Cu	89	He	2.435	ppb	20.3	262.23	2000	
66	Zn	89	He	5.893	ppb	52.1	103.34	2000	
75	As	89	He	0.125	ppb	246.0	4.00	1000	
78	Se	89	H2	0.633	ppb	72.2	2.00	1000	
88	Sr	89	He	362.585	ppb	0.4	10673.42	2000	
95	Mo	89	He	0.603	ppb	46.0	30.00	1000	
107	Ag	89	He	-0.040	ppb	N/A	12.22	100	
111	Cd	89	He	0.183	ppb	89.6	2.96	1000	
118	Sn	159	He	0.827	ppb	59.0	83.33	1000	
121	Sb	159	No Gas	0.219	ppb	28.8	83.43	1000	
137	Ba	159	No Gas	16.653	ppb	9.2	1631.92	2000	
182	W	159	No Gas	0.373	ppb	118.3	136.82	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.218	ppb	26.4	337.05	2000	
232	Th	209	No Gas	0.041	ppb	200.4	133.48	1000	
238	U	209	No Gas	0.081	ppb	23.2	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1488483.13	2.0	1483357.64	100.35	29.5	120.4	
Sc	45	No Gas	3366188.70	3.4	3141192.51	107.16	29.5	120.4	
Sc	45	H2	416625.78	0.7	418309.46	99.6	29.5	120.4	
Sc	45	He	83981.65	1.0	85440.95	98.29	29.5	120.4	
Ge	72	No Gas	751611.50	3.2	694668.88	108.2	29.5	120.4	
Ge	72	H2	157080.72	0.6	157206.79	99.92	29.5	120.4	
Ge	72	He	64851.64	0.8	64721.85	100.2	29.5	120.4	
Y	89	H2	2631164.98	0.6	2572670.23	102.27	29.5	120.4	
Y	89	He	568536.61	0.4	574051.42	99.04	29.5	120.4	
Tb	159	No Gas	7534632.11	3.5	6821698.44	110.45	29.5	120.4	
Tb	159	He	3013423.95	0.1	2982140.2	101.05	29.5	120.4	
Bi	209	No Gas	3902031.19	3.4	3547037.46	110.01	29.5	120.4	

Sample Report

Sample Name SN5124-002A

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:12:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.732	ppb	12.8	2245.81	100	
11	B	6	No Gas	330.979	ppb	8.4	44881.78	1000	
23	Na	45	He	230184.631	ppb	0.8	4380547.63	200000	
24	Mg	45	He	17454.650	ppb	0.3	185064.82	200000	
27	Al	45	He	945.966	ppb	1.1	4102.96	200000	
28	Si	45	H2	10881.110	ppb	2.9	88776.11	10000	
39	K	45	He	11756.971	ppb	0.2	126809.79	200000	
40	Ca	45	H2	54866.307	ppb	1.0	3954952.30	200000	
51	V	89	He	55.177	ppb	2.6	8558.44	1000	
52	Cr	89	He	53.474	ppb	0.4	10076.45	2000	
55	Mn	89	He	480.569	ppb	0.7	42921.08	2000	
56	Fe	89	H2	1240.251	ppb	0.7	362501.19	100000	
59	Co	89	He	12.373	ppb	4.8	3920.84	1000	
60	Ni	89	He	25.510	ppb	5.1	2495.87	1000	
63	Cu	89	He	33.194	ppb	3.0	8172.67	2000	
66	Zn	89	He	112.949	ppb	2.9	3706.18	2000	
75	As	89	He	54.824	ppb	2.7	1480.58	1000	
78	Se	89	H2	52.948	ppb	3.6	731.66	1000	
88	Sr	89	He	401.114	ppb	0.6	56753.36	2000	
95	Mo	89	He	54.272	ppb	2.4	8228.33	1000	
107	Ag	89	He	10.785	ppb	4.8	5613.57	100	
111	Cd	89	He	11.014	ppb	2.7	753.36	1000	
118	Sn	159	He	50.907	ppb	1.8	7945.93	1000	
121	Sb	159	No Gas	11.236	ppb	10.4	12857.14	1000	
137	Ba	159	No Gas	39.068	ppb	12.4	17628.04	2000	
182	W	159	No Gas	54.666	ppb	11.9	46491.84	1000	
205	Tl	209	No Gas	11.241	ppb	12.2	20589.76	1000	
208	Pb	209	No Gas	11.225	ppb	11.2	28407.55	2000	
232	Th	209	No Gas	11.183	ppb	10.2	29029.71	1000	
238	U	209	No Gas	11.375	ppb	13.4	27447.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1391595.30	4.4	1483357.64	93.81	29.5	120.4	
Sc	45	No Gas	3091260.66	7.2	3141192.51	98.41	29.5	120.4	
Sc	45	H2	395090.49	0.6	418309.46	94.45	29.5	120.4	
Sc	45	He	81641.19	0.5	85440.95	95.55	29.5	120.4	
Ge	72	No Gas	692612.33	5.5	694668.88	99.7	29.5	120.4	
Ge	72	H2	149091.57	1.5	157206.79	94.84	29.5	120.4	
Ge	72	He	62069.45	0.2	64721.85	95.9	29.5	120.4	
Y	89	H2	2524125.65	0.4	2572670.23	98.11	29.5	120.4	
Y	89	He	546821.35	0.5	574051.42	95.26	29.5	120.4	
Tb	159	No Gas	7021451.70	6.8	6821698.44	102.93	29.5	120.4	
Tb	159	He	2961970.79	0.3	2982140.2	99.32	29.5	120.4	
Bi	209	No Gas	3587103.36	6.5	3547037.46	101.13	29.5	120.4	

Sample Report

Sample Name SN5014-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:15:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	133.5	47.78	100	
11	B	6	No Gas	54.688	ppb	2.8	9022.00	1000	
23	Na	45	He	131622.315	ppb	1.2	2508685.10	200000	
24	Mg	45	He	8222.772	ppb	0.2	87503.91	200000	
27	Al	45	He	8.947	ppb	35.9	57.78	200000	
28	Si	45	H2	3010.401	ppb	1.0	25270.25	10000	
39	K	45	He	2641.041	ppb	1.7	36598.75	200000	
40	Ca	45	H2	31760.035	ppb	1.6	2324679.69	200000	
51	V	89	He	2.677	ppb	9.3	576.70	1000	
52	Cr	89	He	0.334	ppb	15.0	131.31	2000	
55	Mn	89	He	539.690	ppb	0.5	48566.74	2000	
56	Fe	89	H2	423.047	ppb	1.8	129688.87	100000	
59	Co	89	He	2.529	ppb	14.0	824.53	1000	
60	Ni	89	He	1.820	ppb	30.3	484.47	1000	
63	Cu	89	He	1.412	ppb	8.3	480.03	2000	
66	Zn	89	He	6.089	ppb	20.8	260.01	2000	
75	As	89	He	1.244	ppb	24.9	37.00	1000	
78	Se	89	H2	0.369	ppb	44.0	5.33	1000	
88	Sr	89	He	165.077	ppb	1.6	23540.88	2000	
95	Mo	89	He	0.499	ppb	32.2	86.67	1000	
107	Ag	89	He	0.005	ppb	129.5	18.89	100	
111	Cd	89	He	0.059	ppb	47.7	4.44	1000	
118	Sn	159	He	0.711	ppb	17.6	167.79	1000	
121	Sb	159	No Gas	0.085	ppb	61.8	133.48	1000	
137	Ba	159	No Gas	18.915	ppb	4.2	9126.60	2000	
182	W	159	No Gas	0.121	ppb	47.1	180.21	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.113	ppb	31.2	517.25	2000	
232	Th	209	No Gas	0.108	ppb	29.6	407.13	1000	
238	U	209	No Gas	0.055	ppb	9.5	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465918.37	2.1	1483357.64	98.82	29.5	120.4	
Sc	45	No Gas	3253281.84	2.9	3141192.51	103.57	29.5	120.4	
Sc	45	H2	401146.05	1.6	418309.46	95.9	29.5	120.4	
Sc	45	He	81651.32	0.4	85440.95	95.56	29.5	120.4	
Ge	72	No Gas	731819.54	3.1	694668.88	105.35	29.5	120.4	
Ge	72	H2	150214.21	0.8	157206.79	95.55	29.5	120.4	
Ge	72	He	63154.26	0.3	64721.85	97.58	29.5	120.4	
Y	89	H2	2561371.99	0.6	2572670.23	99.56	29.5	120.4	
Y	89	He	551011.08	0.6	574051.42	95.99	29.5	120.4	
Tb	159	No Gas	7463705.72	2.8	6821698.44	109.41	29.5	120.4	
Tb	159	He	2985454.95	0.6	2982140.2	100.11	29.5	120.4	
Bi	209	No Gas	3826044.95	2.8	3547037.46	107.87	29.5	120.4	

Sample Report

Sample Name SN5014-002L

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:18:12 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	999.4	40.00	100	
11	B	6	No Gas	71.322	ppb	9.0	3508.32	1000	
23	Na	45	He	141993.543	ppb	0.4	563741.31	200000	
24	Mg	45	He	8602.027	ppb	0.5	19321.02	200000	
27	Al	45	He	22.866	ppb	50.1	40.00	200000	
28	Si	45	H2	3327.541	ppb	5.2	6068.01	10000	
39	K	45	He	2764.505	ppb	3.2	16397.02	200000	
40	Ca	45	H2	34002.487	ppb	0.9	508605.87	200000	
51	V	89	He	7.240	ppb	5.1	400.02	1000	
52	Cr	89	He	0.451	ppb	20.6	87.99	2000	
55	Mn	89	He	570.010	ppb	1.2	10588.05	2000	
56	Fe	89	H2	450.184	ppb	1.0	33172.55	100000	
59	Co	89	He	3.368	ppb	25.7	242.24	1000	
60	Ni	89	He	-3.051	ppb	N/A	284.46	1000	
63	Cu	89	He	2.090	ppb	29.2	244.46	2000	
66	Zn	89	He	8.898	ppb	4.7	123.34	2000	
75	As	89	He	1.738	ppb	54.9	13.00	1000	
78	Se	89	H2	0.291	ppb	60.2	1.00	1000	
88	Sr	89	He	165.817	ppb	4.3	4875.49	2000	
95	Mo	89	He	0.747	ppb	50.6	34.44	1000	
107	Ag	89	He	-0.060	ppb	N/A	10.00	100	
111	Cd	89	He	0.053	ppb	149.8	1.11	1000	
118	Sn	159	He	0.987	ppb	59.9	88.90	1000	
121	Sb	159	No Gas	0.182	ppb	82.5	73.41	1000	
137	Ba	159	No Gas	19.764	ppb	5.2	1922.29	2000	
182	W	159	No Gas	0.078	ppb	259.8	83.43	1000	
205	Tl	209	No Gas	-0.168	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	0.180	ppb	40.1	313.68	2000	
232	Th	209	No Gas	0.001	ppb	6932.4	110.13	1000	
238	U	209	No Gas	0.037	ppb	80.8	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1508599.55	2.4	1483357.64	101.7	29.5	120.4	
Sc	45	No Gas	3327368.79	2.8	3141192.51	105.93	29.5	120.4	
Sc	45	H2	409159.92	0.5	418309.46	97.81	29.5	120.4	
Sc	45	He	84032.82	0.4	85440.95	98.35	29.5	120.4	
Ge	72	No Gas	739632.75	2.9	694668.88	106.47	29.5	120.4	
Ge	72	H2	156460.76	1.0	157206.79	99.53	29.5	120.4	
Ge	72	He	64949.19	0.2	64721.85	100.35	29.5	120.4	
Y	89	H2	2602890.56	0.2	2572670.23	101.17	29.5	120.4	
Y	89	He	567530.05	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7481093.22	3.0	6821698.44	109.67	29.5	120.4	
Tb	159	He	3030525.02	0.4	2982140.2	101.62	29.5	120.4	
Bi	209	No Gas	3881873.01	3.6	3547037.46	109.44	29.5	120.4	

Sample Report

Sample Name SN5014-002A

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:20:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.855	ppb	4.3	2383.61	100	
11	B	6	No Gas	260.792	ppb	0.8	37378.15	1000	
23	Na	45	He	151228.456	ppb	1.4	2856259.65	200000	
24	Mg	45	He	9827.989	ppb	1.6	103568.64	200000	
27	Al	45	He	963.878	ppb	0.5	4145.21	200000	
28	Si	45	H2	8270.520	ppb	2.0	67312.64	10000	
39	K	45	He	13077.225	ppb	2.2	138679.94	200000	
40	Ca	45	H2	35157.349	ppb	1.4	2524520.61	200000	
51	V	89	He	56.848	ppb	1.7	8785.27	1000	
52	Cr	89	He	53.514	ppb	2.1	10052.46	2000	
55	Mn	89	He	601.185	ppb	2.1	53517.75	2000	
56	Fe	89	H2	1536.983	ppb	1.3	444574.53	100000	
59	Co	89	He	14.101	ppb	7.8	4449.92	1000	
60	Ni	89	He	24.781	ppb	3.4	2425.85	1000	
63	Cu	89	He	33.982	ppb	2.7	8336.13	2000	
66	Zn	89	He	115.148	ppb	5.3	3765.08	2000	
75	As	89	He	54.242	ppb	2.2	1460.24	1000	
78	Se	89	H2	52.026	ppb	1.4	713.99	1000	
88	Sr	89	He	227.691	ppb	3.0	32116.15	2000	
95	Mo	89	He	53.517	ppb	2.2	8088.24	1000	
107	Ag	89	He	10.893	ppb	2.3	5652.49	100	
111	Cd	89	He	11.141	ppb	0.6	759.66	1000	
118	Sn	159	He	50.469	ppb	5.3	7901.49	1000	
121	Sb	159	No Gas	10.723	ppb	1.8	12787.00	1000	
137	Ba	159	No Gas	41.439	ppb	0.3	19499.40	2000	
182	W	159	No Gas	52.524	ppb	1.6	46571.95	1000	
205	Tl	209	No Gas	10.801	ppb	2.6	20810.33	1000	
208	Pb	209	No Gas	10.863	ppb	1.2	28918.74	2000	
232	Th	209	No Gas	10.624	ppb	1.9	28978.97	1000	
238	U	209	No Gas	10.893	ppb	2.0	27668.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455655.86	1.2	1483357.64	98.13	29.5	120.4	
Sc	45	No Gas	3183534.86	1.4	3141192.51	101.35	29.5	120.4	
Sc	45	H2	393544.60	1.0	418309.46	94.08	29.5	120.4	
Sc	45	He	80951.33	1.0	85440.95	94.75	29.5	120.4	
Ge	72	No Gas	717928.14	0.9	694668.88	103.35	29.5	120.4	
Ge	72	H2	149191.35	0.6	157206.79	94.9	29.5	120.4	
Ge	72	He	62498.53	0.5	64721.85	96.56	29.5	120.4	
Y	89	H2	2506593.95	0.8	2572670.23	97.43	29.5	120.4	
Y	89	He	545140.63	0.6	574051.42	94.96	29.5	120.4	
Tb	159	No Gas	7281450.59	1.4	6821698.44	106.74	29.5	120.4	
Tb	159	He	2971532.94	0.7	2982140.2	99.64	29.5	120.4	
Bi	209	No Gas	3754206.16	1.2	3547037.46	105.84	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:23:30 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.376	ppb	4.9	26625.20	25	97.5	89.8	110.2	
11	B	6	No Gas	24.562	ppb	6.7	18512.37	25	98.25	89.8	110.2	
23	Na	45	He	5086.074	ppb	0.2	495526.71	5000	101.72	89.8	110.2	
24	Mg	45	He	4923.787	ppb	0.1	263015.04	5000	98.48	89.8	110.2	
27	Al	45	He	468.679	ppb	0.6	10222.87	500	93.74	89.8	110.2	
28	Si	45	H2	467.151	ppb	2.7	19732.15	500	93.43	89.8	110.2	
39	K	45	He	4803.624	ppb	0.7	250273.75	5000	96.07	89.8	110.2	
40	Ca	45	H2	4911.474	ppb	1.0	1799805.51	5000	98.23	89.8	110.2	
51	V	89	He	24.472	ppb	1.6	19148.05	25	97.89	89.8	110.2	
52	Cr	89	He	24.520	ppb	0.2	23466.48	25	98.08	89.8	110.2	
55	Mn	89	He	24.727	ppb	1.1	11278.48	25	98.91	89.8	110.2	
56	Fe	89	H2	4893.385	ppb	1.4	7144235.70	5000	97.87	89.8	110.2	
59	Co	89	He	25.216	ppb	1.0	40532.06	25	100.86	89.8	110.2	
60	Ni	89	He	24.933	ppb	1.8	11142.58	25	99.73	89.8	110.2	
63	Cu	89	He	24.771	ppb	0.9	30715.62	25	99.08	89.8	110.2	
66	Zn	89	He	24.920	ppb	5.1	4161.88	25	99.68	89.8	110.2	
75	As	89	He	24.538	ppb	2.1	3374.11	25	98.15	89.8	110.2	
78	Se	89	H2	24.426	ppb	1.0	1714.53	25	97.7	89.8	110.2	
88	Sr	89	He	23.518	ppb	0.9	16968.79	25	94.07	89.8	110.2	
95	Mo	89	He	25.296	ppb	1.7	19535.62	25	101.18	89.8	110.2	
107	Ag	89	He	25.051	ppb	0.1	66298.90	25	100.2	89.8	110.2	
111	Cd	89	He	24.324	ppb	0.3	8478.29	25	97.3	89.8	110.2	
118	Sn	159	He	23.575	ppb	1.6	18661.25	25	94.3	89.8	110.2	
121	Sb	159	No Gas	23.660	ppb	7.5	144143.92	25	94.64	89.8	110.2	
137	Ba	159	No Gas	23.686	ppb	6.9	57041.62	25	94.74	89.8	110.2	
182	W	159	No Gas	23.465	ppb	6.8	106437.59	25	93.86	89.8	110.2	
205	Tl	209	No Gas	23.898	ppb	6.0	234792.98	25	95.59	89.8	110.2	
208	Pb	209	No Gas	24.109	ppb	6.6	326726.53	25	96.44	89.8	110.2	
232	Th	209	No Gas	23.430	ppb	7.6	326343.21	25	93.72	89.8	110.2	
238	U	209	No Gas	23.997	ppb	7.6	312172.91	25	95.99	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470459.81	3.7	1483357.64	99.13	29.5	120.4	
Sc	45	No Gas	3264973.38	3.5	3141192.51	103.94	29.5	120.4	
Sc	45	H2	401584.48	0.7	418309.46	96	29.5	120.4	
Sc	45	He	82340.75	0.8	85440.95	96.37	29.5	120.4	
Ge	72	No Gas	729974.99	3.2	694668.88	105.08	29.5	120.4	
Ge	72	H2	150071.46	2.0	157206.79	95.46	29.5	120.4	
Ge	72	He	63502.49	0.4	64721.85	98.12	29.5	120.4	
Y	89	H2	2564298.03	1.1	2572670.23	99.67	29.5	120.4	
Y	89	He	557564.15	0.4	574051.42	97.13	29.5	120.4	
Tb	159	No Gas	7468926.35	3.5	6821698.44	109.49	29.5	120.4	
Tb	159	He	3016463.29	0.1	2982140.2	101.15	29.5	120.4	
Bi	209	No Gas	3853138.73	3.1	3547037.46	108.63	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:26:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	8.7	90.00	0.2	
11	B	6	No Gas	0.955	ppb	7.8	2179.13	4	
23	Na	45	He	5.411	ppb	89.5	9186.41	200	
24	Mg	45	He	2.573	ppb	65.4	757.85	20	
27	Al	45	He	-0.249	ppb	N/A	14.44	20	
28	Si	45	H2	-0.020	ppb	N/A	480.55	100	
39	K	45	He	-2.925	ppb	N/A	10799.21	200	
40	Ca	45	H2	1.163	ppb	9.2	1539.03	20	
51	V	89	He	0.093	ppb	8.7	246.68	1	
52	Cr	89	He	0.003	ppb	325.8	73.99	1	
55	Mn	89	He	0.003	ppb	1210.2	28.66	0.4	
56	Fe	89	H2	1.251	ppb	20.6	8428.60	20	
59	Co	89	He	0.000	ppb	9781.3	22.22	0.2	
60	Ni	89	He	-0.289	ppb	N/A	212.23	0.4	Failed DoD
63	Cu	89	He	0.035	ppb	43.3	185.56	0.6	
66	Zn	89	He	0.106	ppb	96.1	82.23	2	
75	As	89	He	0.026	ppb	106.9	7.00	1	
78	Se	89	H2	0.065	ppb	16.4	4.83	1	
88	Sr	89	He	0.005	ppb	199.7	10.00	1	
95	Mo	89	He	0.084	ppb	38.7	77.78	1	
107	Ag	89	He	0.001	ppb	201.0	20.00	0.2	
111	Cd	89	He	0.004	ppb	86.6	1.85	0.2	
118	Sn	159	He	0.028	ppb	102.9	80.01	1	
121	Sb	159	No Gas	0.031	ppb	15.6	216.91	0.2	
137	Ba	159	No Gas	0.019	ppb	80.5	60.07	0.4	
182	W	159	No Gas	0.061	ppb	22.0	347.06	1	
205	Tl	209	No Gas	0.013	ppb	24.7	250.28	0.2	
208	Pb	209	No Gas	0.019	ppb	30.4	477.20	0.2	
232	Th	209	No Gas	0.048	ppb	10.4	780.90	1	
238	U	209	No Gas	0.018	ppb	29.8	243.61	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525208.28	1.7	1483357.64	102.82	29.5	120.4	
Sc	45	No Gas	3352657.80	2.6	3141192.51	106.73	29.5	120.4	
Sc	45	H2	416582.72	0.6	418309.46	99.59	29.5	120.4	
Sc	45	He	85478.49	1.0	85440.95	100.04	29.5	120.4	
Ge	72	No Gas	740152.82	2.6	694668.88	106.55	29.5	120.4	
Ge	72	H2	157299.41	1.0	157206.79	100.06	29.5	120.4	
Ge	72	He	65245.14	0.7	64721.85	100.81	29.5	120.4	
Y	89	H2	2623830.54	0.7	2572670.23	101.99	29.5	120.4	
Y	89	He	571782.93	1.5	574051.42	99.6	29.5	120.4	
Tb	159	No Gas	7469585.44	3.1	6821698.44	109.5	29.5	120.4	
Tb	159	He	3025691.76	0.9	2982140.2	101.46	29.5	120.4	
Bi	209	No Gas	3881647.16	3.3	3547037.46	109.43	29.5	120.4	

Sample Report

Sample Name SN5014-002S

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:28:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.325	ppb	3.1	11402.63	100	
11	B	6	No Gas	555.951	ppb	5.3	79927.98	1000	
23	Na	45	He	141739.851	ppb	1.5	2729954.54	200000	
24	Mg	45	He	13552.257	ppb	1.9	145375.46	200000	
27	Al	45	He	1932.853	ppb	3.4	8452.79	200000	
28	Si	45	H2	4219.673	ppb	0.6	34844.64	10000	
39	K	45	He	13225.211	ppb	1.9	142871.41	200000	
40	Ca	45	H2	35516.127	ppb	1.3	2570493.54	200000	
51	V	89	He	535.692	ppb	0.7	82562.97	1000	
52	Cr	89	He	212.012	ppb	0.9	40191.49	2000	
55	Mn	89	He	1090.647	ppb	1.0	98460.07	2000	
56	Fe	89	H2	1536.466	ppb	1.4	449467.75	100000	
59	Co	89	He	546.683	ppb	0.8	174210.54	1000	
60	Ni	89	He	548.640	ppb	1.3	47509.16	1000	
63	Cu	89	He	269.459	ppb	1.0	66108.10	2000	
66	Zn	89	He	546.468	ppb	3.2	17891.98	2000	
75	As	89	He	111.929	ppb	3.3	3053.00	1000	
78	Se	89	H2	106.422	ppb	4.0	1476.51	1000	
88	Sr	89	He	688.979	ppb	0.6	98563.86	2000	
95	Mo	89	He	111.111	ppb	1.1	17021.15	1000	
107	Ag	89	He	54.302	ppb	1.6	28510.67	100	
111	Cd	89	He	271.975	ppb	2.1	18800.17	1000	
118	Sn	159	He	518.952	ppb	1.0	81645.76	1000	
121	Sb	159	No Gas	105.532	ppb	3.9	127310.05	1000	
137	Ba	159	No Gas	2030.708	ppb	4.1	967960.89	2000	
182	W	159	No Gas	105.657	ppb	4.7	94878.17	1000	
205	Tl	209	No Gas	105.239	ppb	4.1	204051.84	1000	
208	Pb	209	No Gas	106.644	ppb	5.1	285230.34	2000	
232	Th	209	No Gas	104.088	ppb	5.3	286161.88	1000	
238	U	209	No Gas	104.934	ppb	5.4	269422.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1491556.97	2.6	1483357.64	100.55	29.5	120.4	
Sc	45	No Gas	3243843.62	2.2	3141192.51	103.27	29.5	120.4	
Sc	45	H2	396681.13	1.4	418309.46	94.83	29.5	120.4	
Sc	45	He	82540.90	1.6	85440.95	96.61	29.5	120.4	
Ge	72	No Gas	729004.30	1.5	694668.88	104.94	29.5	120.4	
Ge	72	H2	149228.81	0.4	157206.79	94.93	29.5	120.4	
Ge	72	He	63390.88	0.4	64721.85	97.94	29.5	120.4	
Y	89	H2	2535125.76	1.1	2572670.23	98.54	29.5	120.4	
Y	89	He	552911.61	0.4	574051.42	96.32	29.5	120.4	
Tb	159	No Gas	7385443.43	2.0	6821698.44	108.26	29.5	120.4	
Tb	159	He	3004838.57	0.7	2982140.2	100.76	29.5	120.4	
Bi	209	No Gas	3799337.43	2.1	3547037.46	107.11	29.5	120.4	

Sample Report

Sample Name SN5014-002P

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:31:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.407	ppb	7.6	11982.02	100	
11	B	6	No Gas	582.863	ppb	6.9	84605.72	1000	
23	Na	45	He	149277.944	ppb	0.4	2911820.93	200000	
24	Mg	45	He	14136.782	ppb	1.2	153578.66	200000	
27	Al	45	He	1982.803	ppb	2.0	8785.23	200000	
28	Si	45	H2	4313.389	ppb	1.5	36182.39	10000	
39	K	45	He	13883.961	ppb	0.8	151394.73	200000	
40	Ca	45	H2	37485.540	ppb	1.0	2756171.77	200000	
51	V	89	He	559.041	ppb	0.7	86760.32	1000	
52	Cr	89	He	224.920	ppb	0.3	42935.63	2000	
55	Mn	89	He	1140.000	ppb	0.9	103636.87	2000	
56	Fe	89	H2	1600.221	ppb	1.0	475028.56	100000	
59	Co	89	He	574.232	ppb	0.5	184283.58	1000	
60	Ni	89	He	568.701	ppb	0.3	49581.83	1000	
63	Cu	89	He	279.963	ppb	1.3	69162.63	2000	
66	Zn	89	He	571.395	ppb	1.8	18837.71	2000	
75	As	89	He	116.596	ppb	1.2	3202.72	1000	
78	Se	89	H2	111.259	ppb	1.4	1567.52	1000	
88	Sr	89	He	719.787	ppb	0.8	103700.63	2000	
95	Mo	89	He	117.208	ppb	2.1	18080.28	1000	
107	Ag	89	He	56.967	ppb	0.4	30120.88	100	
111	Cd	89	He	281.095	ppb	1.0	19569.02	1000	
118	Sn	159	He	543.637	ppb	0.1	85670.50	1000	
121	Sb	159	No Gas	108.063	ppb	6.9	132938.07	1000	
137	Ba	159	No Gas	2086.891	ppb	7.5	1014241.73	2000	
182	W	159	No Gas	107.360	ppb	7.8	98298.45	1000	
205	Tl	209	No Gas	110.651	ppb	6.5	216555.18	1000	
208	Pb	209	No Gas	110.153	ppb	6.5	297415.54	2000	
232	Th	209	No Gas	108.426	ppb	7.2	300875.92	1000	
238	U	209	No Gas	108.381	ppb	7.9	280832.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1507718.12	2.7	1483357.64	101.64	29.5	120.4	
Sc	45	No Gas	3303998.23	4.2	3141192.51	105.18	29.5	120.4	
Sc	45	H2	402994.08	1.6	418309.46	96.34	29.5	120.4	
Sc	45	He	83593.52	0.6	85440.95	97.84	29.5	120.4	
Ge	72	No Gas	740133.13	4.0	694668.88	106.54	29.5	120.4	
Ge	72	H2	151892.24	1.2	157206.79	96.62	29.5	120.4	
Ge	72	He	63504.66	0.5	64721.85	98.12	29.5	120.4	
Y	89	H2	2573955.79	1.5	2572670.23	100.05	29.5	120.4	
Y	89	He	556814.26	0.8	574051.42	97	29.5	120.4	
Tb	159	No Gas	7540987.81	4.0	6821698.44	110.54	29.5	120.4	
Tb	159	He	3009837.24	0.4	2982140.2	100.93	29.5	120.4	
Bi	209	No Gas	3839189.73	3.9	3547037.46	108.24	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:33:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	53.5	68.89	100	
11	B	6	No Gas	22.690	ppb	5.1	17223.03	1000	
23	Na	45	He	43092.060	ppb	0.3	4251486.02	200000	
24	Mg	45	He	7518.450	ppb	0.4	412497.63	200000	
27	Al	45	He	1.543	ppb	48.4	54.45	200000	
28	Si	45	H2	6936.471	ppb	4.7	298214.06	10000	
39	K	45	He	5011.609	ppb	0.4	267933.84	200000	
40	Ca	45	H2	58763.566	ppb	4.9	22394609.11	200000	
51	V	89	He	0.101	ppb	84.9	250.01	1000	
52	Cr	89	He	0.090	ppb	15.4	157.30	2000	
55	Mn	89	He	0.914	ppb	7.3	448.59	2000	
56	Fe	89	H2	44.861	ppb	4.7	74077.02	100000	
59	Co	89	He	0.097	ppb	30.5	180.01	1000	
60	Ni	89	He	18.520	ppb	1.8	8469.51	1000	
63	Cu	89	He	233.196	ppb	1.1	291709.31	2000	
66	Zn	89	He	166.811	ppb	0.7	27860.82	2000	
75	As	89	He	0.674	ppb	8.7	97.01	1000	
78	Se	89	H2	0.058	ppb	16.7	4.33	1000	
88	Sr	89	He	211.879	ppb	1.3	154798.81	2000	
95	Mo	89	He	0.077	ppb	29.5	71.11	1000	
107	Ag	89	He	0.115	ppb	1.5	324.46	100	
111	Cd	89	He	0.058	ppb	38.4	20.74	1000	
118	Sn	159	He	0.247	ppb	33.0	254.46	1000	
121	Sb	159	No Gas	0.738	ppb	11.0	4595.91	1000	
137	Ba	159	No Gas	2.914	ppb	7.5	7149.91	2000	
182	W	159	No Gas	0.094	ppb	24.9	503.91	1000	
205	Tl	209	No Gas	0.019	ppb	19.6	307.01	1000	
208	Pb	209	No Gas	2.882	ppb	6.8	39284.55	2000	
232	Th	209	No Gas	0.131	ppb	7.3	1932.32	1000	
238	U	209	No Gas	0.374	ppb	7.5	4879.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470646.44	3.1	1483357.64	99.14	29.5	120.4	
Sc	45	No Gas	3378198.26	4.1	3141192.51	107.55	29.5	120.4	
Sc	45	H2	418428.84	4.5	418309.46	100.03	29.5	120.4	
Sc	45	He	84637.25	0.8	85440.95	99.06	29.5	120.4	
Ge	72	No Gas	743519.83	3.2	694668.88	107.03	29.5	120.4	
Ge	72	H2	153306.53	1.9	157206.79	97.52	29.5	120.4	
Ge	72	He	64379.45	0.8	64721.85	99.47	29.5	120.4	
Y	89	H2	2646363.01	3.9	2572670.23	102.86	29.5	120.4	
Y	89	He	564765.30	1.2	574051.42	98.38	29.5	120.4	
Tb	159	No Gas	7598684.19	3.9	6821698.44	111.39	29.5	120.4	
Tb	159	He	3041324.36	1.0	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3858279.84	4.2	3547037.46	108.77	29.5	120.4	

Sample Report

Sample Name SN5980-002

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:36:38 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	88.8	47.78	100	
11	B	6	No Gas	21.085	ppb	3.4	16388.72	1000	
23	Na	45	He	43651.777	ppb	4.0	4380044.63	200000	
24	Mg	45	He	7581.949	ppb	4.6	423019.82	200000	
27	Al	45	He	3.541	ppb	14.9	101.11	200000	
28	Si	45	H2	7050.298	ppb	3.0	303301.31	10000	
39	K	45	He	5069.146	ppb	4.5	275482.41	200000	
40	Ca	45	H2	60001.301	ppb	2.7	22882821.88	200000	
51	V	89	He	0.098	ppb	26.1	251.12	1000	
52	Cr	89	He	0.046	ppb	33.0	115.98	2000	
55	Mn	89	He	0.707	ppb	18.6	357.28	2000	
56	Fe	89	H2	21.844	ppb	4.1	39562.80	100000	
59	Co	89	He	0.056	ppb	37.6	115.57	1000	
60	Ni	89	He	2.193	ppb	11.8	1316.78	1000	
63	Cu	89	He	106.107	ppb	4.9	134636.84	2000	
66	Zn	89	He	50.300	ppb	2.9	8565.11	2000	
75	As	89	He	0.726	ppb	11.2	105.68	1000	
78	Se	89	H2	0.041	ppb	41.8	3.17	1000	
88	Sr	89	He	213.597	ppb	4.4	158212.46	2000	
95	Mo	89	He	0.053	ppb	60.9	53.34	1000	
107	Ag	89	He	0.014	ppb	14.1	54.45	100	
111	Cd	89	He	0.013	ppb	66.1	4.81	1000	
118	Sn	159	He	0.151	ppb	24.4	178.90	1000	
121	Sb	159	No Gas	0.703	ppb	5.3	4345.56	1000	
137	Ba	159	No Gas	2.734	ppb	2.0	6659.13	2000	
182	W	159	No Gas	0.050	ppb	13.3	297.00	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.158	ppb	3.7	15831.60	2000	
232	Th	209	No Gas	0.028	ppb	11.4	490.56	1000	
238	U	209	No Gas	0.353	ppb	2.0	4579.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1495463.89	1.7	1483357.64	100.82	29.5	120.4	
Sc	45	No Gas	3355479.42	1.7	3141192.51	106.82	29.5	120.4	
Sc	45	H2	418238.82	1.4	418309.46	99.98	29.5	120.4	
Sc	45	He	86155.77	3.3	85440.95	100.84	29.5	120.4	
Ge	72	No Gas	738161.15	1.8	694668.88	106.26	29.5	120.4	
Ge	72	H2	157301.50	0.9	157206.79	100.06	29.5	120.4	
Ge	72	He	65525.42	1.2	64721.85	101.24	29.5	120.4	
Y	89	H2	2651103.25	1.2	2572670.23	103.05	29.5	120.4	
Y	89	He	573090.07	3.2	574051.42	99.83	29.5	120.4	
Tb	159	No Gas	7523896.48	1.8	6821698.44	110.29	29.5	120.4	
Tb	159	He	3064004.05	2.9	2982140.2	102.75	29.5	120.4	
Bi	209	No Gas	3833975.69	2.0	3547037.46	108.09	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:39:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	56.1	46.67	100	
11	B	6	No Gas	21.176	ppb	4.0	16929.35	1000	
23	Na	45	He	43600.737	ppb	3.7	4364631.98	200000	
24	Mg	45	He	7672.674	ppb	3.7	427119.26	200000	
27	Al	45	He	1.652	ppb	15.3	57.78	200000	
28	Si	45	H2	7034.852	ppb	1.1	309042.87	10000	
39	K	45	He	5091.673	ppb	3.6	276037.69	200000	
40	Ca	45	H2	59529.040	ppb	0.4	23182481.88	200000	
51	V	89	He	0.134	ppb	33.8	280.01	1000	
52	Cr	89	He	0.013	ppb	66.7	83.98	2000	
55	Mn	89	He	0.355	ppb	4.5	192.64	2000	
56	Fe	89	H2	5.214	ppb	4.2	14800.95	100000	
59	Co	89	He	0.022	ppb	87.3	57.78	1000	
60	Ni	89	He	2.812	ppb	12.2	1587.93	1000	
63	Cu	89	He	142.932	ppb	3.3	180929.82	2000	
66	Zn	89	He	96.473	ppb	3.8	16325.66	2000	
75	As	89	He	0.686	ppb	13.5	99.68	1000	
78	Se	89	H2	0.031	ppb	20.7	2.50	1000	
88	Sr	89	He	215.335	ppb	2.6	159167.96	2000	
95	Mo	89	He	0.049	ppb	36.2	50.00	1000	
107	Ag	89	He	0.023	ppb	36.4	80.00	100	
111	Cd	89	He	0.030	ppb	50.4	11.11	1000	
118	Sn	159	He	0.084	ppb	28.9	125.56	1000	
121	Sb	159	No Gas	0.698	ppb	11.8	4388.99	1000	
137	Ba	159	No Gas	2.568	ppb	9.7	6345.24	2000	
182	W	159	No Gas	0.046	ppb	13.5	283.66	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	100.11	1000	
208	Pb	209	No Gas	1.347	ppb	7.8	18632.82	2000	
232	Th	209	No Gas	0.016	ppb	39.5	340.39	1000	
238	U	209	No Gas	0.303	ppb	7.5	3988.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1539151.02	2.4	1483357.64	103.76	29.5	120.4	
Sc	45	No Gas	3444121.79	2.9	3141192.51	109.64	29.5	120.4	
Sc	45	H2	426992.83	1.4	418309.46	102.08	29.5	120.4	
Sc	45	He	85936.17	2.7	85440.95	100.58	29.5	120.4	
Ge	72	No Gas	753331.79	2.6	694668.88	108.44	29.5	120.4	
Ge	72	H2	159910.81	0.5	157206.79	101.72	29.5	120.4	
Ge	72	He	65148.45	2.6	64721.85	100.66	29.5	120.4	
Y	89	H2	2707359.25	0.9	2572670.23	105.24	29.5	120.4	
Y	89	He	571647.39	2.9	574051.42	99.58	29.5	120.4	
Tb	159	No Gas	7647619.82	2.7	6821698.44	112.11	29.5	120.4	
Tb	159	He	3053871.48	2.3	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3891287.19	2.9	3547037.46	109.71	29.5	120.4	

Sample Report

Sample Name SN5980-004

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:41:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	138.5	54.45	100	
11	B	6	No Gas	20.918	ppb	6.5	16957.13	1000	
23	Na	45	He	44228.246	ppb	0.2	4473884.40	200000	
24	Mg	45	He	7850.902	ppb	0.4	441622.91	200000	
27	Al	45	He	1.583	ppb	15.8	56.67	200000	
28	Si	45	H2	7150.341	ppb	1.3	312936.71	10000	
39	K	45	He	5290.212	ppb	0.4	289370.93	200000	
40	Ca	45	H2	62240.388	ppb	1.2	24147967.42	200000	
51	V	89	He	0.230	ppb	25.2	358.91	1000	
52	Cr	89	He	0.029	ppb	28.2	100.65	2000	
55	Mn	89	He	0.559	ppb	2.6	290.62	2000	
56	Fe	89	H2	10.499	ppb	4.9	22610.05	100000	
59	Co	89	He	0.040	ppb	47.0	88.90	1000	
60	Ni	89	He	5.490	ppb	2.0	2807.06	1000	
63	Cu	89	He	264.908	ppb	1.1	338500.64	2000	
66	Zn	89	He	217.264	ppb	1.7	37047.80	2000	
75	As	89	He	0.687	ppb	10.0	101.01	1000	
78	Se	89	H2	0.032	ppb	43.1	2.50	1000	
88	Sr	89	He	219.314	ppb	1.0	163675.74	2000	
95	Mo	89	He	0.083	ppb	19.5	77.78	1000	
107	Ag	89	He	0.031	ppb	11.1	102.23	100	
111	Cd	89	He	0.035	ppb	22.9	12.96	1000	
118	Sn	159	He	0.122	ppb	6.0	156.67	1000	
121	Sb	159	No Gas	0.679	ppb	9.0	4315.52	1000	
137	Ba	159	No Gas	2.556	ppb	7.7	6388.70	2000	
182	W	159	No Gas	0.051	ppb	22.4	310.35	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	1.473	ppb	4.4	20569.56	2000	
232	Th	209	No Gas	0.011	ppb	30.1	266.97	1000	
238	U	209	No Gas	0.328	ppb	8.7	4359.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559634.16	2.5	1483357.64	105.14	29.5	120.4	
Sc	45	No Gas	3473324.45	3.4	3141192.51	110.57	29.5	120.4	
Sc	45	H2	425405.96	0.3	418309.46	101.7	29.5	120.4	
Sc	45	He	86781.96	0.1	85440.95	101.57	29.5	120.4	
Ge	72	No Gas	759995.55	3.3	694668.88	109.4	29.5	120.4	
Ge	72	H2	159334.68	1.6	157206.79	101.35	29.5	120.4	
Ge	72	He	66059.93	0.3	64721.85	102.07	29.5	120.4	
Y	89	H2	2668555.70	0.3	2572670.23	103.73	29.5	120.4	
Y	89	He	576916.28	0.7	574051.42	100.5	29.5	120.4	
Tb	159	No Gas	7738442.59	3.6	6821698.44	113.44	29.5	120.4	
Tb	159	He	3072288.53	0.5	2982140.2	103.02	29.5	120.4	
Bi	209	No Gas	3928696.86	3.1	3547037.46	110.76	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:44:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	77.0	47.78	100	
11	B	6	No Gas	20.378	ppb	7.4	16633.51	1000	
23	Na	45	He	42484.113	ppb	0.4	4310892.15	200000	
24	Mg	45	He	7627.010	ppb	1.3	430337.73	200000	
27	Al	45	He	3.079	ppb	39.1	91.12	200000	
28	Si	45	H2	7126.674	ppb	2.2	310439.42	10000	
39	K	45	He	5038.751	ppb	1.2	276972.64	200000	
40	Ca	45	H2	60807.361	ppb	1.4	23482037.70	200000	
51	V	89	He	0.201	ppb	32.6	337.80	1000	
52	Cr	89	He	0.017	ppb	127.1	88.65	2000	
55	Mn	89	He	0.565	ppb	18.3	295.28	2000	
56	Fe	89	H2	6.147	ppb	4.9	15973.37	100000	
59	Co	89	He	0.041	ppb	20.0	91.12	1000	
60	Ni	89	He	17.652	ppb	0.5	8313.87	1000	
63	Cu	89	He	170.891	ppb	0.2	219759.83	2000	
66	Zn	89	He	193.066	ppb	1.0	33132.36	2000	
75	As	89	He	0.683	ppb	16.5	101.01	1000	
78	Se	89	H2	0.041	ppb	24.8	3.17	1000	
88	Sr	89	He	212.694	ppb	0.4	159710.38	2000	
95	Mo	89	He	0.044	ppb	24.7	46.67	1000	
107	Ag	89	He	0.064	ppb	17.3	193.34	100	
111	Cd	89	He	0.037	ppb	51.0	13.70	1000	
118	Sn	159	He	0.073	ppb	23.8	117.78	1000	
121	Sb	159	No Gas	0.674	ppb	7.2	4258.81	1000	
137	Ba	159	No Gas	2.613	ppb	3.7	6498.83	2000	
182	W	159	No Gas	0.033	ppb	39.3	226.92	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	1.913	ppb	8.1	26654.08	2000	
232	Th	209	No Gas	0.003	ppb	26.0	160.18	1000	
238	U	209	No Gas	0.348	ppb	8.2	4629.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1567120.63	2.9	1483357.64	105.65	29.5	120.4	
Sc	45	No Gas	3464735.24	4.5	3141192.51	110.3	29.5	120.4	
Sc	45	H2	423434.17	0.6	418309.46	101.23	29.5	120.4	
Sc	45	He	87048.60	1.0	85440.95	101.88	29.5	120.4	
Ge	72	No Gas	757611.02	3.6	694668.88	109.06	29.5	120.4	
Ge	72	H2	158483.47	1.2	157206.79	100.81	29.5	120.4	
Ge	72	He	65826.87	0.5	64721.85	101.71	29.5	120.4	
Y	89	H2	2663518.69	0.6	2572670.23	103.53	29.5	120.4	
Y	89	He	580441.06	0.2	574051.42	101.11	29.5	120.4	
Tb	159	No Gas	7694300.72	4.6	6821698.44	112.79	29.5	120.4	
Tb	159	He	3095687.66	0.2	2982140.2	103.81	29.5	120.4	
Bi	209	No Gas	3935498.90	4.7	3547037.46	110.95	29.5	120.4	

Sample Report

Sample Name	SN5980-006
File Name	038SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:47:12 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	217.8	58.89	100	
11	B	6	No Gas	20.477	ppb	6.2	16657.93	1000	
23	Na	45	He	43789.650	ppb	0.5	4414112.76	200000	
24	Mg	45	He	7768.617	ppb	1.0	435467.92	200000	
27	Al	45	He	5.675	ppb	10.6	150.01	200000	
28	Si	45	H2	7153.383	ppb	1.5	312541.08	10000	
39	K	45	He	5162.364	ppb	1.0	281663.99	200000	
40	Ca	45	H2	61772.194	ppb	1.8	23925430.20	200000	
51	V	89	He	0.255	ppb	29.5	380.02	1000	
52	Cr	89	He	0.063	ppb	34.5	133.98	2000	
55	Mn	89	He	0.872	ppb	6.8	439.26	2000	
56	Fe	89	H2	12.447	ppb	2.1	25575.12	100000	
59	Co	89	He	0.047	ppb	23.0	100.01	1000	
60	Ni	89	He	13.929	ppb	2.0	6608.47	1000	
63	Cu	89	He	251.010	ppb	0.6	321494.53	2000	
66	Zn	89	He	228.111	ppb	0.6	38985.37	2000	
75	As	89	He	0.655	ppb	15.0	96.68	1000	
78	Se	89	H2	0.025	ppb	27.9	2.00	1000	
88	Sr	89	He	216.315	ppb	1.0	161811.64	2000	
95	Mo	89	He	0.025	ppb	54.3	31.11	1000	
107	Ag	89	He	0.036	ppb	16.2	116.67	100	
111	Cd	89	He	0.031	ppb	66.8	11.48	1000	
118	Sn	159	He	0.081	ppb	12.3	124.45	1000	
121	Sb	159	No Gas	0.687	ppb	7.1	4295.45	1000	
137	Ba	159	No Gas	2.659	ppb	6.8	6535.58	2000	
182	W	159	No Gas	0.050	ppb	8.7	300.34	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	2.253	ppb	7.4	30949.24	2000	
232	Th	209	No Gas	0.005	ppb	54.4	183.55	1000	
238	U	209	No Gas	0.302	ppb	4.4	3961.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562077.06	2.6	1483357.64	105.31	29.5	120.4	
Sc	45	No Gas	3433848.65	3.3	3141192.51	109.32	29.5	120.4	
Sc	45	H2	424720.42	1.0	418309.46	101.53	29.5	120.4	
Sc	45	He	86479.88	0.5	85440.95	101.22	29.5	120.4	
Ge	72	No Gas	752457.53	3.5	694668.88	108.32	29.5	120.4	
Ge	72	H2	158583.48	0.8	157206.79	100.88	29.5	120.4	
Ge	72	He	65601.77	0.4	64721.85	101.36	29.5	120.4	
Y	89	H2	2669416.30	0.7	2572670.23	103.76	29.5	120.4	
Y	89	He	578237.50	0.5	574051.42	100.73	29.5	120.4	
Tb	159	No Gas	7606174.96	3.5	6821698.44	111.5	29.5	120.4	
Tb	159	He	3091730.86	0.4	2982140.2	103.67	29.5	120.4	
Bi	209	No Gas	3882593.60	3.4	3547037.46	109.46	29.5	120.4	

Sample Report

Sample Name SN5980-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:49:54 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	176.3	46.67	100	
11	B	6	No Gas	22.436	ppb	14.9	16828.60	1000	
23	Na	45	He	43212.238	ppb	0.5	4400880.78	200000	
24	Mg	45	He	7652.978	ppb	0.4	433420.89	200000	
27	Al	45	He	2.628	ppb	55.6	81.12	200000	
28	Si	45	H2	7119.617	ppb	1.3	313170.63	10000	
39	K	45	He	5054.323	ppb	0.6	278836.67	200000	
40	Ca	45	H2	60515.571	ppb	1.1	23597864.92	200000	
51	V	89	He	0.352	ppb	16.7	456.69	1000	
52	Cr	89	He	0.015	ppb	12.5	85.99	2000	
55	Mn	89	He	0.631	ppb	11.5	324.61	2000	
56	Fe	89	H2	10.796	ppb	2.2	23151.35	100000	
59	Co	89	He	0.183	ppb	12.0	326.69	1000	
60	Ni	89	He	13.096	ppb	1.2	6218.27	1000	
63	Cu	89	He	203.414	ppb	0.3	259940.30	2000	
66	Zn	89	He	226.241	ppb	0.6	38574.37	2000	
75	As	89	He	0.708	ppb	5.1	104.01	1000	
78	Se	89	H2	0.038	ppb	76.9	3.00	1000	
88	Sr	89	He	213.219	ppb	0.2	159116.19	2000	
95	Mo	89	He	0.042	ppb	49.9	44.45	1000	
107	Ag	89	He	0.078	ppb	9.8	230.01	100	
111	Cd	89	He	0.047	ppb	33.4	17.41	1000	
118	Sn	159	He	0.120	ppb	26.0	155.56	1000	
121	Sb	159	No Gas	0.722	ppb	21.0	4115.27	1000	
137	Ba	159	No Gas	2.694	ppb	13.0	6084.92	2000	
182	W	159	No Gas	0.053	ppb	49.7	283.66	1000	
205	Tl	209	No Gas	-0.009	ppb	N/A	30.03	1000	
208	Pb	209	No Gas	2.931	ppb	15.3	36916.48	2000	
232	Th	209	No Gas	0.007	ppb	99.7	180.21	1000	
238	U	209	No Gas	0.394	ppb	12.2	4752.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465745.47	12.6	1483357.64	98.81	29.5	120.4	
Sc	45	No Gas	3204044.90	15.9	3141192.51	102	29.5	120.4	
Sc	45	H2	427596.18	1.4	418309.46	102.22	29.5	120.4	
Sc	45	He	87370.81	0.7	85440.95	102.26	29.5	120.4	
Ge	72	No Gas	692318.70	13.0	694668.88	99.66	29.5	120.4	
Ge	72	H2	158932.48	1.1	157206.79	101.1	29.5	120.4	
Ge	72	He	65736.87	0.4	64721.85	101.57	29.5	120.4	
Y	89	H2	2678933.11	1.0	2572670.23	104.13	29.5	120.4	
Y	89	He	576856.57	0.4	574051.42	100.49	29.5	120.4	
Tb	159	No Gas	7070926.49	15.2	6821698.44	103.65	29.5	120.4	
Tb	159	He	3092043.53	0.2	2982140.2	103.69	29.5	120.4	
Bi	209	No Gas	3606655.80	14.2	3547037.46	101.68	29.5	120.4	

Sample Report

Sample Name SN5980-008

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:52:29 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	38.89	100	
11	B	6	No Gas	19.656	ppb	8.0	15918.15	1000	
23	Na	45	He	43147.031	ppb	0.3	4343048.21	200000	
24	Mg	45	He	7638.736	ppb	0.6	427570.73	200000	
27	Al	45	He	2.617	ppb	5.6	80.00	200000	
28	Si	45	H2	7043.137	ppb	0.6	308585.64	10000	
39	K	45	He	5081.467	ppb	0.9	277009.90	200000	
40	Ca	45	H2	60365.379	ppb	0.7	23446106.87	200000	
51	V	89	He	0.279	ppb	21.5	395.58	1000	
52	Cr	89	He	0.008	ppb	123.8	79.32	2000	
55	Mn	89	He	0.389	ppb	8.2	209.30	2000	
56	Fe	89	H2	3.909	ppb	3.8	12579.61	100000	
59	Co	89	He	0.026	ppb	18.2	64.45	1000	
60	Ni	89	He	10.196	ppb	2.5	4889.92	1000	
63	Cu	89	He	230.391	ppb	0.4	292731.34	2000	
66	Zn	89	He	219.104	ppb	1.3	37148.18	2000	
75	As	89	He	0.488	ppb	3.6	72.34	1000	
78	Se	89	H2	0.020	ppb	38.6	1.67	1000	
88	Sr	89	He	214.434	ppb	1.1	159117.58	2000	
95	Mo	89	He	0.045	ppb	40.9	46.67	1000	
107	Ag	89	He	0.031	ppb	28.9	100.00	100	
111	Cd	89	He	0.032	ppb	24.3	11.85	1000	
118	Sn	159	He	0.045	ppb	60.6	95.56	1000	
121	Sb	159	No Gas	0.660	ppb	10.1	4118.55	1000	
137	Ba	159	No Gas	2.557	ppb	9.0	6275.12	2000	
182	W	159	No Gas	0.043	ppb	12.9	270.30	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	50.05	1000	
208	Pb	209	No Gas	1.813	ppb	4.7	24977.56	2000	
232	Th	209	No Gas	0.003	ppb	66.5	150.17	1000	
238	U	209	No Gas	0.312	ppb	9.2	4095.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1549510.25	2.5	1483357.64	104.46	29.5	120.4	
Sc	45	No Gas	3401071.37	3.0	3141192.51	108.27	29.5	120.4	
Sc	45	H2	425864.72	0.6	418309.46	101.81	29.5	120.4	
Sc	45	He	86350.90	0.1	85440.95	101.07	29.5	120.4	
Ge	72	No Gas	750431.43	3.0	694668.88	108.03	29.5	120.4	
Ge	72	H2	158486.65	0.6	157206.79	100.81	29.5	120.4	
Ge	72	He	65769.60	0.2	64721.85	101.62	29.5	120.4	
Y	89	H2	2662863.22	0.4	2572670.23	103.51	29.5	120.4	
Y	89	He	573592.62	0.0	574051.42	99.92	29.5	120.4	
Tb	159	No Gas	7599123.91	3.4	6821698.44	111.4	29.5	120.4	
Tb	159	He	3106874.09	0.4	2982140.2	104.18	29.5	120.4	
Bi	209	No Gas	3884142.94	3.0	3547037.46	109.5	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:55:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.178	ppb	2.2	27089.42	25	96.71	89.8	110.2	
11	B	6	No Gas	24.445	ppb	2.1	18911.78	25	97.78	89.8	110.2	
23	Na	45	He	5097.356	ppb	1.3	499789.44	5000	101.95	89.8	110.2	
24	Mg	45	He	4938.591	ppb	2.0	265489.90	5000	98.77	89.8	110.2	
27	Al	45	He	466.147	ppb	0.5	10234.01	500	93.23	89.8	110.2	
28	Si	45	H2	464.784	ppb	2.0	19852.57	500	92.96	89.8	110.2	
39	K	45	He	4770.072	ppb	0.9	250204.78	5000	95.4	89.8	110.2	
40	Ca	45	H2	4947.542	ppb	1.9	1832800.67	5000	98.95	89.8	110.2	
51	V	89	He	24.892	ppb	2.2	19396.23	25	99.57	89.8	110.2	
52	Cr	89	He	24.560	ppb	1.3	23413.76	25	98.24	89.8	110.2	
55	Mn	89	He	25.022	ppb	1.2	11369.19	25	100.09	89.8	110.2	
56	Fe	89	H2	4931.121	ppb	1.3	7245162.93	5000	98.62	89.8	110.2	
59	Co	89	He	24.797	ppb	2.6	39702.98	25	99.19	89.8	110.2	
60	Ni	89	He	24.608	ppb	2.2	10960.21	25	98.43	89.8	110.2	
63	Cu	89	He	24.862	ppb	1.0	30708.89	25	99.45	89.8	110.2	
66	Zn	89	He	24.479	ppb	1.2	4074.09	25	97.92	89.8	110.2	
75	As	89	He	24.943	ppb	1.1	3416.80	25	99.77	89.8	110.2	
78	Se	89	H2	24.857	ppb	1.0	1755.70	25	99.43	89.8	110.2	
88	Sr	89	He	23.619	ppb	1.0	16976.52	25	94.48	89.8	110.2	
95	Mo	89	He	24.865	ppb	2.4	19128.36	25	99.46	89.8	110.2	
107	Ag	89	He	25.226	ppb	1.6	66497.67	25	100.9	89.8	110.2	
111	Cd	89	He	24.777	ppb	1.8	8602.07	25	99.11	89.8	110.2	
118	Sn	159	He	23.455	ppb	1.0	18719.11	25	93.82	89.8	110.2	
121	Sb	159	No Gas	24.278	ppb	0.3	145512.83	25	97.11	89.8	110.2	
137	Ba	159	No Gas	24.243	ppb	3.5	57427.53	25	96.97	89.8	110.2	
182	W	159	No Gas	24.110	ppb	1.4	107587.32	25	96.44	89.8	110.2	
205	Tl	209	No Gas	24.755	ppb	1.3	240889.40	25	99.02	89.8	110.2	
208	Pb	209	No Gas	24.614	ppb	1.5	330429.90	25	98.46	89.8	110.2	
232	Th	209	No Gas	24.198	ppb	2.7	333925.35	25	96.79	89.8	110.2	
238	U	209	No Gas	24.670	ppb	1.7	317968.88	25	98.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1506433.84	1.1	1483357.64	101.56	29.5	120.4	
Sc	45	No Gas	3210860.09	0.9	3141192.51	102.22	29.5	120.4	
Sc	45	H2	405987.55	1.0	418309.46	97.05	29.5	120.4	
Sc	45	He	82874.79	0.8	85440.95	97	29.5	120.4	
Ge	72	No Gas	720595.58	0.5	694668.88	103.73	29.5	120.4	
Ge	72	H2	151632.22	1.3	157206.79	96.45	29.5	120.4	
Ge	72	He	63354.81	1.0	64721.85	97.89	29.5	120.4	
Y	89	H2	2580565.66	0.8	2572670.23	100.31	29.5	120.4	
Y	89	He	555403.06	0.5	574051.42	96.75	29.5	120.4	
Tb	159	No Gas	7335263.16	1.2	6821698.44	107.53	29.5	120.4	
Tb	159	He	3041214.16	0.8	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3811544.46	0.7	3547037.46	107.46	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:57:52 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.035	ppb	36.1	77.78	0.2	
11	B	6	No Gas	1.045	ppb	15.2	2220.25	4	
23	Na	45	He	27.633	ppb	7.3	11170.15	200	
24	Mg	45	He	1.243	ppb	118.7	671.18	20	
27	Al	45	He	-0.586	ppb	N/A	6.67	20	
28	Si	45	H2	2.047	ppb	121.5	563.97	100	
39	K	45	He	-1.603	ppb	N/A	10652.56	200	
40	Ca	45	H2	7.385	ppb	26.8	3872.92	20	
51	V	89	He	0.232	ppb	9.0	353.35	1	
52	Cr	89	He	-0.014	ppb	N/A	56.66	1	
55	Mn	89	He	-0.009	ppb	N/A	22.67	0.4	
56	Fe	89	H2	1.228	ppb	3.6	8311.74	20	
59	Co	89	He	0.018	ppb	95.0	51.11	0.2	
60	Ni	89	He	-0.286	ppb	N/A	211.12	0.4	Failed DoD
63	Cu	89	He	0.088	ppb	7.9	248.90	0.6	
66	Zn	89	He	0.073	ppb	87.6	75.56	2	
75	As	89	He	0.017	ppb	174.5	5.67	1	
78	Se	89	H2	0.031	ppb	58.8	2.33	1	
88	Sr	89	He	0.011	ppb	88.0	14.45	1	
95	Mo	89	He	0.073	ppb	18.6	67.78	1	
107	Ag	89	He	0.002	ppb	119.2	22.22	0.2	
111	Cd	89	He	0.004	ppb	85.9	1.85	0.2	
118	Sn	159	He	0.035	ppb	49.2	85.56	1	
121	Sb	159	No Gas	0.034	ppb	31.9	230.26	0.2	
137	Ba	159	No Gas	0.024	ppb	65.8	70.08	0.4	
182	W	159	No Gas	0.067	ppb	11.3	367.08	1	
205	Tl	209	No Gas	0.011	ppb	65.6	223.58	0.2	
208	Pb	209	No Gas	0.011	ppb	20.0	363.74	0.2	
232	Th	209	No Gas	0.144	ppb	21.4	2102.53	1	
238	U	209	No Gas	0.020	ppb	58.7	263.63	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509076.00	0.6	1483357.64	101.73	29.5	120.4	
Sc	45	No Gas	3218965.03	0.8	3141192.51	102.48	29.5	120.4	
Sc	45	H2	413103.88	0.6	418309.46	98.76	29.5	120.4	
Sc	45	He	83793.80	0.2	85440.95	98.07	29.5	120.4	
Ge	72	No Gas	717257.62	0.6	694668.88	103.25	29.5	120.4	
Ge	72	H2	155551.14	1.6	157206.79	98.95	29.5	120.4	
Ge	72	He	64244.37	0.4	64721.85	99.26	29.5	120.4	
Y	89	H2	2598508.15	0.8	2572670.23	101	29.5	120.4	
Y	89	He	565297.65	0.5	574051.42	98.48	29.5	120.4	
Tb	159	No Gas	7333279.54	0.9	6821698.44	107.5	29.5	120.4	
Tb	159	He	3052098.25	0.1	2982140.2	102.35	29.5	120.4	
Bi	209	No Gas	3838500.37	0.3	3547037.46	108.22	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:00:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	129.4	46.67	100	
11	B	6	No Gas	19.986	ppb	5.3	15590.02	1000	
23	Na	45	He	44025.706	ppb	1.0	4328422.38	200000	
24	Mg	45	He	7878.685	ppb	1.3	430738.41	200000	
27	Al	45	He	3.894	ppb	13.2	106.67	200000	
28	Si	45	H2	6955.953	ppb	5.3	299481.53	10000	
39	K	45	He	5275.188	ppb	0.9	280484.90	200000	
40	Ca	45	H2	61617.744	ppb	5.4	23515830.21	200000	
51	V	89	He	0.087	ppb	89.6	238.90	1000	
52	Cr	89	He	0.020	ppb	81.4	89.32	2000	
55	Mn	89	He	0.427	ppb	17.8	223.96	2000	
56	Fe	89	H2	6.692	ppb	7.4	16681.91	100000	
59	Co	89	He	0.064	ppb	16.8	126.68	1000	
60	Ni	89	He	6.555	ppb	2.6	3220.50	1000	
63	Cu	89	He	196.590	ppb	0.4	246352.03	2000	
66	Zn	89	He	201.262	ppb	0.4	33656.90	2000	
75	As	89	He	0.718	ppb	8.4	103.34	1000	
78	Se	89	H2	0.028	ppb	41.4	2.17	1000	
88	Sr	89	He	219.380	ppb	0.4	160537.35	2000	
95	Mo	89	He	0.058	ppb	21.9	56.67	1000	
107	Ag	89	He	0.018	ppb	4.3	64.45	100	
111	Cd	89	He	0.070	ppb	24.8	25.19	1000	
118	Sn	159	He	0.052	ppb	16.4	100.00	1000	
121	Sb	159	No Gas	0.646	ppb	5.2	3948.36	1000	
137	Ba	159	No Gas	2.707	ppb	7.9	6505.57	2000	
182	W	159	No Gas	0.040	ppb	15.6	250.29	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.914	ppb	7.7	25745.85	2000	
232	Th	209	No Gas	0.036	ppb	13.9	600.69	1000	
238	U	209	No Gas	0.348	ppb	7.1	4475.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1494212.10	2.5	1483357.64	100.73	29.5	120.4	
Sc	45	No Gas	3265133.09	3.1	3141192.51	103.95	29.5	120.4	
Sc	45	H2	418924.11	3.2	418309.46	100.15	29.5	120.4	
Sc	45	He	84350.10	0.7	85440.95	98.72	29.5	120.4	
Ge	72	No Gas	716388.35	2.0	694668.88	103.13	29.5	120.4	
Ge	72	H2	155753.11	3.4	157206.79	99.08	29.5	120.4	
Ge	72	He	64033.13	0.8	64721.85	98.94	29.5	120.4	
Y	89	H2	2647478.14	3.5	2572670.23	102.91	29.5	120.4	
Y	89	He	565667.84	0.2	574051.42	98.54	29.5	120.4	
Tb	159	No Gas	7436683.01	2.9	6821698.44	109.02	29.5	120.4	
Tb	159	He	3068851.97	0.2	2982140.2	102.91	29.5	120.4	
Bi	209	No Gas	3796119.11	2.9	3547037.46	107.02	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:03:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	58.9	74.45	100	
11	B	6	No Gas	19.627	ppb	3.6	15554.41	1000	
23	Na	45	He	42992.621	ppb	0.3	4212449.90	200000	
24	Mg	45	He	7713.451	ppb	0.3	420266.14	200000	
27	Al	45	He	3.117	ppb	33.4	88.89	200000	
28	Si	45	H2	7120.541	ppb	2.5	299557.57	10000	
39	K	45	He	5068.977	ppb	1.4	269003.28	200000	
40	Ca	45	H2	61133.407	ppb	1.9	22800816.88	200000	
51	V	89	He	0.227	ppb	17.2	348.91	1000	
52	Cr	89	He	0.022	ppb	13.9	91.32	2000	
55	Mn	89	He	0.388	ppb	12.7	205.30	2000	
56	Fe	89	H2	4.445	ppb	3.9	13020.58	100000	
59	Co	89	He	0.054	ppb	15.7	108.90	1000	
60	Ni	89	He	9.073	ppb	4.4	4317.49	1000	
63	Cu	89	He	226.667	ppb	0.8	283321.35	2000	
66	Zn	89	He	216.660	ppb	0.9	36137.67	2000	
75	As	89	He	0.600	ppb	5.3	86.68	1000	
78	Se	89	H2	0.026	ppb	47.4	2.00	1000	
88	Sr	89	He	213.065	ppb	0.7	155537.47	2000	
95	Mo	89	He	0.046	ppb	24.2	46.67	1000	
107	Ag	89	He	0.019	ppb	28.6	67.78	100	
111	Cd	89	He	0.040	ppb	0.6	14.44	1000	
118	Sn	159	He	0.133	ppb	11.1	164.45	1000	
121	Sb	159	No Gas	0.709	ppb	10.3	4388.93	1000	
137	Ba	159	No Gas	2.475	ppb	6.2	6038.19	2000	
182	W	159	No Gas	0.049	ppb	27.4	293.67	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.270	ppb	6.2	31059.67	2000	
232	Th	209	No Gas	0.015	ppb	15.9	317.03	1000	
238	U	209	No Gas	0.295	ppb	12.6	3848.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1514982.94	2.1	1483357.64	102.13	29.5	120.4	
Sc	45	No Gas	3312721.59	2.8	3141192.51	105.46	29.5	120.4	
Sc	45	H2	408979.59	1.3	418309.46	97.77	29.5	120.4	
Sc	45	He	84054.13	0.6	85440.95	98.38	29.5	120.4	
Ge	72	No Gas	727765.38	2.7	694668.88	104.76	29.5	120.4	
Ge	72	H2	153822.96	0.6	157206.79	97.85	29.5	120.4	
Ge	72	He	64046.95	0.9	64721.85	98.96	29.5	120.4	
Y	89	H2	2589094.63	1.0	2572670.23	100.64	29.5	120.4	
Y	89	He	564286.32	0.6	574051.42	98.3	29.5	120.4	
Tb	159	No Gas	7543199.61	2.5	6821698.44	110.58	29.5	120.4	
Tb	159	He	3061281.65	0.5	2982140.2	102.65	29.5	120.4	
Bi	209	No Gas	3864780.32	2.8	3547037.46	108.96	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:05:52 PM

Sample Type Sample

Total Dilution 50.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.144	ppb	11.1	110.00	100	
11	B	6	No Gas	401.155	ppb	5.3	7282.09	1000	
23	Na	45	He	3961.468	ppb	4.4	15625.83	200000	
24	Mg	45	He	38841.169	ppb	0.5	41225.86	200000	
27	Al	45	He	45436.693	ppb	0.6	19440.45	200000	
28	Si	45	H2	3341.484	ppb	6.6	3167.20	10000	
39	K	45	He	11837.262	ppb	1.7	21951.98	200000	
40	Ca	45	H2	276497.376	ppb	2.4	1993047.00	200000	
51	V	89	He	99.994	ppb	11.2	1691.27	1000	
52	Cr	89	He	487.477	ppb	0.7	9220.03	2000	
55	Mn	89	He	12465.895	ppb	0.3	111636.40	2000	
56	Fe	89	H2	398359.231	ppb	1.2	11537417.63	100000	
59	Co	89	He	60.223	ppb	5.1	1924.73	1000	
60	Ni	89	He	296.574	ppb	2.1	2857.06	1000	
63	Cu	89	He	4466.919	ppb	0.2	108627.95	2000	
66	Zn	89	He	5277.599	ppb	1.4	17144.41	2000	
75	As	89	He	67.271	ppb	11.0	185.02	1000	
78	Se	89	H2	50.748	ppb	3.5	70.83	1000	
88	Sr	89	He	1847.448	ppb	1.5	26223.50	2000	
95	Mo	89	He	143.963	ppb	2.2	2196.92	1000	
107	Ag	89	He	26.591	ppb	1.6	1400.13	100	
111	Cd	89	He	8.157	ppb	12.9	56.30	1000	
118	Sn	159	He	398.977	ppb	2.1	6337.27	1000	
121	Sb	159	No Gas	15.144	ppb	10.3	1888.91	1000	
137	Ba	159	No Gas	3412.778	ppb	5.2	165760.20	2000	
182	W	159	No Gas	25.928	ppb	1.7	2442.95	1000	
205	Tl	209	No Gas	0.188	ppb	57.2	166.85	1000	
208	Pb	209	No Gas	338.389	ppb	5.4	97728.55	2000	
232	Th	209	No Gas	0.744	ppb	13.4	337.05	1000	
238	U	209	No Gas	27.810	ppb	6.8	7704.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525927.28	3.2	1483357.64	102.87	29.5	120.4	
Sc	45	No Gas	3236322.01	4.2	3141192.51	103.03	29.5	120.4	
Sc	45	H2	395098.03	1.9	418309.46	94.45	29.5	120.4	
Sc	45	He	80829.89	0.6	85440.95	94.6	29.5	120.4	
Ge	72	No Gas	720094.77	2.9	694668.88	103.66	29.5	120.4	
Ge	72	H2	148567.80	0.5	157206.79	94.5	29.5	120.4	
Ge	72	He	61476.50	0.7	64721.85	94.99	29.5	120.4	
Y	89	H2	2544400.33	1.4	2572670.23	98.9	29.5	120.4	
Y	89	He	548497.32	0.2	574051.42	95.55	29.5	120.4	
Tb	159	No Gas	7530227.66	3.6	6821698.44	110.39	29.5	120.4	
Tb	159	He	3008203.18	0.5	2982140.2	100.87	29.5	120.4	
Bi	209	No Gas	4098294.35	3.6	3547037.46	115.54	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	046_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:08:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.058	ppb	124.7	48.89	0.5	
B	11	6	No Gas	5.375	ppb	20.9	2116.89	10	
Na	23	45	He	159.281	ppb	12.5	10989.72	500	
Mg	24	45	He	17.330	ppb	27.5	751.19	50	
Al	27	45	He	6.404	ppb	8.0	45.56	50	
Si	28	45	H2	18.712	ppb	31.2	597.34	250	
K	39	45	He	-2.848	ppb	N/A	10155.72	500	
Ca	40	45	H2	59.747	ppb	4.1	5251.16	50	PB 6020 Fails DoD
V	51	89	He	2.232	ppb	9.8	500.03	2.5	
Cr	52	89	He	0.227	ppb	44.8	109.31	2.5	
Mn	55	89	He	0.523	ppb	4.9	71.99	1	
Fe	56	89	H2	15.264	ppb	9.2	10529.03	50	
Co	59	89	He	-0.032	ppb	N/A	11.11	0.5	
Ni	60	89	He	-1.446	ppb	N/A	201.12	1	PB 6020 Fails DoD
Cu	63	89	He	1.724	ppb	2.6	546.70	1.5	PB 6020 Fails DoD
Zn	66	89	He	16.310	ppb	6.4	582.26	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.207	ppb	27.9	8.67	2.5	
Se	78	89	H2	0.135	ppb	46.3	2.00	2.5	
Sr	88	89	He	0.201	ppb	17.7	34.44	2.5	
Mo	95	89	He	0.071	ppb	78.5	21.11	2.5	
Ag	107	89	He	0.015	ppb	115.9	23.33	0.5	
Cd	111	89	He	0.000	ppb	3608.5	0.37	0.5	
Sn	118	159	He	0.993	ppb	22.4	212.23	2.5	
Sb	121	159	No Gas	0.006	ppb	199.7	36.71	0.5	
Ba	137	159	No Gas	0.285	ppb	17.8	150.17	1	
W	182	159	No Gas	-0.021	ppb	N/A	50.06	2.5	
Tl	205	209	No Gas	-0.037	ppb	N/A	46.72	0.5	
Pb	208	209	No Gas	0.068	ppb	11.9	400.45	0.5	
Th	232	209	No Gas	0.068	ppb	5.8	300.34	2.5	
U	238	209	No Gas	0.002	ppb	254.0	13.35	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1426962.21	3.0	1483357.64	96.2	29.5	120.4	
Sc	45	No Gas	3065488.24	3.0	3141192.51	97.59	29.5	120.4	
Sc	45	H2	388038.63	1.0	418309.46	92.76	29.5	120.4	
Sc	45	He	79501.46	0.6	85440.95	93.05	29.5	120.4	
Ge	72	No Gas	697357.61	2.8	694668.88	100.39	29.5	120.4	
Ge	72	H2	145972.90	0.7	157206.79	92.85	29.5	120.4	
Ge	72	He	61262.19	0.5	64721.85	94.65	29.5	120.4	
Y	89	H2	2485526.69	0.8	2572670.23	96.61	29.5	120.4	
Y	89	He	541739.07	0.3	574051.42	94.37	29.5	120.4	
Tb	159	No Gas	7399363.78	3.2	6821698.44	108.47	29.5	120.4	
Tb	159	He	2992963.74	0.7	2982140.2	100.36	29.5	120.4	
Bi	209	No Gas	3863970.22	3.5	3547037.46	108.94	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	047LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:11:12 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.660	ppb	3.6	11005.64	50	19.86	79.5	120.4	
B	11	6	No Gas	508.438	ppb	2.3	73055.03	500	20.34	79.5	120.4	
Na	23	45	He	8136.904	ppb	4.2	159946.23	7500	21.7	79.5	120.4	
Mg	24	45	He	5517.700	ppb	4.6	57859.63	5000	22.07	79.5	120.4	
Al	27	45	He	2034.151	ppb	3.6	8646.26	2000	20.34	79.5	120.4	
Si	28	45	H2	1063.235	ppb	5.2	9022.98	1000	21.26	0	200	
K	39	45	He	10630.712	ppb	3.3	113640.01	10000	21.26	79.5	120.4	
Ca	40	45	H2	2766.351	ppb	1.0	198945.22	2500	22.13	79.5	120.4	
V	51	89	He	543.740	ppb	3.7	82180.61	500	21.75	79.5	120.4	
Cr	52	89	He	220.136	ppb	2.7	40926.87	200	22.01	79.5	120.4	
Mn	55	89	He	556.612	ppb	2.5	49295.89	500	22.26	79.5	120.4	
Fe	56	89	H2	1118.155	ppb	0.5	327968.23	1000	22.36	79.5	120.4	
Co	59	89	He	567.072	ppb	2.5	177235.67	500	22.68	79.5	120.4	
Ni	60	89	He	568.833	ppb	2.6	48299.66	500	22.75	79.5	120.4	
Cu	63	89	He	278.761	ppb	2.3	67073.85	250	22.3	79.5	120.4	
Zn	66	89	He	573.152	ppb	3.9	18400.51	500	22.93	79.5	120.4	
As	75	89	He	110.211	ppb	1.6	2948.64	100	22.04	79.5	120.4	
Se	78	89	H2	106.480	ppb	3.1	1474.01	100	21.3	79.5	120.4	
Sr	88	89	He	534.206	ppb	2.5	74955.75	500	21.37	79.5	120.4	
Mo	95	89	He	114.361	ppb	3.3	17180.21	100	22.87	79.5	120.4	
Ag	107	89	He	57.431	ppb	2.2	29575.21	50	22.97	79.5	120.4	
Cd	111	89	He	273.458	ppb	3.6	18537.97	250	21.88	79.5	120.4	
Sn	118	159	He	519.176	ppb	3.2	81619.14	500	20.77	79.5	120.4	
Sb	121	159	No Gas	102.898	ppb	2.5	126155.91	100	20.58	79.5	120.4	
Ba	137	159	No Gas	2036.962	ppb	3.3	986807.18	2000	20.37	79.5	120.4	
W	182	159	No Gas	106.263	ppb	2.6	96992.80	100	21.25	79.5	120.4	
Tl	205	209	No Gas	108.399	ppb	1.8	214967.62	100	21.68	79.5	120.4	
[Pb]	206	209	No Gas	106.711	ppb	1.9	73580.46	100	21.34	79.5	120.4	
[Pb]	207	209	No Gas	108.255	ppb	2.9	65031.14	100	21.65	79.5	120.4	
Pb	208	209	No Gas	107.792	ppb	2.2	294915.96	100	21.56	79.5	120.4	
Th	232	209	No Gas	105.666	ppb	3.6	297168.86	100	21.13	79.5	120.4	
U	238	209	No Gas	106.351	ppb	3.6	279339.89	100	21.27	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486545.56	1.2	1483357.64	100.21	29.5	120.4	
Sc	45	No Gas	3127976.75	0.9	3141192.51	99.58	29.5	120.4	
Sc	45	H2	392226.88	0.9	418309.46	93.76	29.5	120.4	
Sc	45	He	80244.55	2.1	85440.95	93.92	29.5	120.4	
Ge	72	No Gas	717576.36	1.0	694668.88	103.3	29.5	120.4	
Ge	72	H2	146644.15	0.4	157206.79	93.28	29.5	120.4	
Ge	72	He	61459.16	1.9	64721.85	94.96	29.5	120.4	
Y	89	H2	2528306.92	0.8	2572670.23	98.28	29.5	120.4	
Y	89	He	542425.58	1.6	574051.42	94.49	29.5	120.4	
Tb	159	No Gas	7502076.07	0.8	6821698.44	109.97	29.5	120.4	
Tb	159	He	3003868.25	2.1	2982140.2	100.73	29.5	120.4	
Bi	209	No Gas	3883617.15	0.5	3547037.46	109.49	29.5	120.4	

Sample Report

Sample Name	SN5717-020
File Name	048SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:13:51 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	27.0	74.45	100	
11	B	6	No Gas	9.994	ppb	6.5	2915.95	1000	
23	Na	45	He	354.568	ppb	9.4	15001.14	200000	
24	Mg	45	He	32.177	ppb	8.1	928.99	200000	
27	Al	45	He	94.667	ppb	11.4	427.80	200000	
28	Si	45	H2	133.570	ppb	17.3	1531.78	10000	
39	K	45	He	96.791	ppb	38.5	11421.20	200000	
40	Ca	45	H2	131.656	ppb	16.9	10457.82	200000	
51	V	89	He	4.474	ppb	13.8	853.39	1000	
52	Cr	89	He	0.894	ppb	6.1	237.29	2000	
55	Mn	89	He	5.149	ppb	4.9	489.92	2000	
56	Fe	89	H2	127.722	ppb	2.8	43505.51	100000	
59	Co	89	He	0.136	ppb	45.8	64.45	1000	
60	Ni	89	He	-0.025	ppb	N/A	326.68	1000	
63	Cu	89	He	2.361	ppb	13.3	712.27	2000	
66	Zn	89	He	25.772	ppb	2.0	901.18	2000	
75	As	89	He	0.531	ppb	28.1	17.67	1000	
78	Se	89	H2	0.406	ppb	42.1	5.83	1000	
88	Sr	89	He	0.500	ppb	16.3	77.78	2000	
95	Mo	89	He	0.228	ppb	27.1	45.56	1000	
107	Ag	89	He	0.020	ppb	137.9	26.67	100	
111	Cd	89	He	0.054	ppb	34.2	4.07	1000	
118	Sn	159	He	1.503	ppb	9.3	297.79	1000	
121	Sb	159	No Gas	0.170	ppb	14.0	250.29	1000	
137	Ba	159	No Gas	2.760	ppb	16.1	1418.33	2000	
182	W	159	No Gas	0.188	ppb	7.9	253.62	1000	
205	Tl	209	No Gas	0.069	ppb	19.2	270.31	1000	
208	Pb	209	No Gas	3.669	ppb	5.7	10773.87	2000	
232	Th	209	No Gas	0.638	ppb	5.5	2002.40	1000	
238	U	209	No Gas	0.071	ppb	12.0	203.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517181.48	2.8	1483357.64	102.28	29.5	120.4	
Sc	45	No Gas	3320380.63	3.5	3141192.51	105.7	29.5	120.4	
Sc	45	H2	392705.09	0.7	418309.46	93.88	29.5	120.4	
Sc	45	He	81680.28	0.8	85440.95	95.6	29.5	120.4	
Ge	72	No Gas	755062.78	2.7	694668.88	108.69	29.5	120.4	
Ge	72	H2	147731.74	0.3	157206.79	93.97	29.5	120.4	
Ge	72	He	62415.42	0.7	64721.85	96.44	29.5	120.4	
Y	89	H2	2554606.37	0.9	2572670.23	99.3	29.5	120.4	
Y	89	He	551781.62	0.7	574051.42	96.12	29.5	120.4	
Tb	159	No Gas	7896363.01	3.1	6821698.44	115.75	29.5	120.4	
Tb	159	He	3050719.50	0.6	2982140.2	102.3	29.5	120.4	
Bi	209	No Gas	4088536.33	3.2	3547037.46	115.27	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:16:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	263.0	42.22	100	
11	B	6	No Gas	381.197	ppb	6.6	54054.15	1000	
23	Na	45	He	116483.088	ppb	1.5	2201145.94	200000	
24	Mg	45	He	14633.841	ppb	1.2	153878.43	200000	
27	Al	45	He	52.176	ppb	2.2	242.23	200000	
28	Si	45	H2	10570.468	ppb	1.1	85878.26	10000	
39	K	45	He	321.162	ppb	15.6	13515.38	200000	
40	Ca	45	H2	137370.084	ppb	0.5	9856997.91	200000	
51	V	89	He	4.922	ppb	4.7	913.39	1000	
52	Cr	89	He	0.496	ppb	14.5	160.64	2000	
55	Mn	89	He	324.990	ppb	1.1	29019.09	2000	
56	Fe	89	H2	17.162	ppb	9.7	11287.17	100000	
59	Co	89	He	0.589	ppb	9.6	206.68	1000	
60	Ni	89	He	1.409	ppb	41.0	445.58	1000	
63	Cu	89	He	2.581	ppb	11.7	758.94	2000	
66	Zn	89	He	27.177	ppb	6.3	937.85	2000	
75	As	89	He	0.501	ppb	36.4	16.67	1000	
78	Se	89	H2	0.337	ppb	17.1	4.83	1000	
88	Sr	89	He	1868.803	ppb	0.5	264257.24	2000	
95	Mo	89	He	0.620	ppb	8.8	104.45	1000	
107	Ag	89	He	-0.001	ppb	N/A	15.56	100	
111	Cd	89	He	0.038	ppb	24.4	2.96	1000	
118	Sn	159	He	1.327	ppb	5.6	268.90	1000	
121	Sb	159	No Gas	0.068	ppb	25.6	116.80	1000	
137	Ba	159	No Gas	33.614	ppb	8.5	16802.68	2000	
182	W	159	No Gas	0.031	ppb	115.7	100.11	1000	
205	Tl	209	No Gas	-0.018	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.364	ppb	5.3	1244.76	2000	
232	Th	209	No Gas	0.127	ppb	10.1	480.55	1000	
238	U	209	No Gas	3.798	ppb	10.0	10235.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1459962.36	3.7	1483357.64	98.42	29.5	120.4	
Sc	45	No Gas	3242420.64	4.4	3141192.51	103.22	29.5	120.4	
Sc	45	H2	393351.07	0.8	418309.46	94.03	29.5	120.4	
Sc	45	He	80931.95	2.0	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	747567.29	3.5	694668.88	107.61	29.5	120.4	
Ge	72	H2	149080.31	1.9	157206.79	94.83	29.5	120.4	
Ge	72	He	62283.45	0.4	64721.85	96.23	29.5	120.4	
Y	89	H2	2534810.53	0.8	2572670.23	98.53	29.5	120.4	
Y	89	He	546536.30	0.2	574051.42	95.21	29.5	120.4	
Tb	159	No Gas	7750824.26	3.9	6821698.44	113.62	29.5	120.4	
Tb	159	He	3041033.84	0.3	2982140.2	101.97	29.5	120.4	
Bi	209	No Gas	3992899.97	4.0	3547037.46	112.57	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:19:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	225.8	41.12	100	
11	B	6	No Gas	2065.242	ppb	6.8	279344.07	1000	
23	Na	45	He	1271367.413	ppb	1.0	24390229.58	200000	>LDR
24	Mg	45	He	270939.058	ppb	1.0	2891580.72	200000	
27	Al	45	He	16.961	ppb	21.8	93.34	200000	
28	Si	45	H2	8912.484	ppb	1.7	72295.79	10000	
39	K	45	He	8147.025	ppb	1.3	91959.96	200000	
40	Ca	45	H2	510901.575	ppb	1.1	36565021.40	200000	
51	V	89	He	6.933	ppb	13.8	1223.43	1000	
52	Cr	89	He	1.074	ppb	15.5	269.29	2000	
55	Mn	89	He	33.030	ppb	1.6	2980.45	2000	
56	Fe	89	H2	175.570	ppb	2.1	56566.33	100000	
59	Co	89	He	0.588	ppb	17.8	206.68	1000	
60	Ni	89	He	8.158	ppb	7.8	1022.30	1000	
63	Cu	89	He	3.240	ppb	7.8	921.18	2000	
66	Zn	89	He	23.973	ppb	4.7	836.72	2000	
75	As	89	He	0.436	ppb	72.8	15.00	1000	
78	Se	89	H2	1.476	ppb	3.5	20.50	1000	
88	Sr	89	He	7213.520	ppb	0.6	1022756.38	2000	
95	Mo	89	He	0.553	ppb	2.1	94.45	1000	
107	Ag	89	He	0.023	ppb	63.2	27.78	100	
111	Cd	89	He	0.233	ppb	15.8	16.30	1000	
118	Sn	159	He	1.301	ppb	13.9	263.35	1000	
121	Sb	159	No Gas	0.128	ppb	3.4	190.21	1000	
137	Ba	159	No Gas	15.089	ppb	4.5	7460.48	2000	
182	W	159	No Gas	0.028	ppb	100.2	96.78	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.896	ppb	3.7	5266.32	2000	
232	Th	209	No Gas	0.092	ppb	45.2	357.07	1000	
238	U	209	No Gas	8.028	ppb	7.6	20543.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1422444.56	2.5	1483357.64	95.89	29.5	120.4	
Sc	45	No Gas	3205186.04	2.8	3141192.51	102.04	29.5	120.4	
Sc	45	H2	392327.32	1.3	418309.46	93.79	29.5	120.4	
Sc	45	He	82430.42	1.3	85440.95	96.48	29.5	120.4	
Ge	72	No Gas	724778.97	2.5	694668.88	104.33	29.5	120.4	
Ge	72	H2	146254.81	0.9	157206.79	93.03	29.5	120.4	
Ge	72	He	62309.91	1.1	64721.85	96.27	29.5	120.4	
Y	89	H2	2516491.61	0.8	2572670.23	97.82	29.5	120.4	
Y	89	He	548030.02	1.2	574051.42	95.47	29.5	120.4	
Tb	159	No Gas	7647927.94	2.9	6821698.44	112.11	29.5	120.4	
Tb	159	He	3023742.53	0.6	2982140.2	101.4	29.5	120.4	
Bi	209	No Gas	3789236.08	3.4	3547037.46	106.83	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:21:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	130.3	50.00	100	
11	B	6	No Gas	2091.223	ppb	5.2	301676.91	1000	
23	Na	45	He	1227892.620	ppb	0.8	23725542.62	200000	>LDR
24	Mg	45	He	231843.398	ppb	1.2	2492127.20	200000	
27	Al	45	He	93.994	ppb	4.8	432.25	200000	
28	Si	45	H2	8767.843	ppb	1.9	73590.70	10000	
39	K	45	He	11114.681	ppb	0.6	122485.91	200000	
40	Ca	45	H2	570965.030	ppb	1.9	42278153.54	200000	
51	V	89	He	8.801	ppb	5.9	1517.92	1000	
52	Cr	89	He	6.448	ppb	2.2	1286.50	2000	
55	Mn	89	He	243.436	ppb	1.0	21955.01	2000	
56	Fe	89	H2	6835.378	ppb	1.8	2021165.73	100000	
59	Co	89	He	2.708	ppb	11.4	882.31	1000	
60	Ni	89	He	10.407	ppb	9.3	1222.32	1000	
63	Cu	89	He	3.693	ppb	9.9	1037.85	2000	
66	Zn	89	He	34.093	ppb	2.1	1172.31	2000	
75	As	89	He	1.096	ppb	23.8	33.00	1000	
78	Se	89	H2	0.388	ppb	20.9	5.67	1000	
88	Sr	89	He	9215.906	ppb	0.5	1315811.38	2000	
95	Mo	89	He	0.599	ppb	42.0	102.23	1000	
107	Ag	89	He	0.003	ppb	479.0	17.78	100	
111	Cd	89	He	0.102	ppb	8.8	7.41	1000	
118	Sn	159	He	1.201	ppb	20.7	248.90	1000	
121	Sb	159	No Gas	0.099	ppb	29.9	156.84	1000	
137	Ba	159	No Gas	18.278	ppb	5.6	9160.08	2000	
182	W	159	No Gas	0.044	ppb	59.1	113.46	1000	
205	Tl	209	No Gas	-0.028	ppb	N/A	63.41	1000	
208	Pb	209	No Gas	3.292	ppb	6.8	9081.47	2000	
232	Th	209	No Gas	0.075	ppb	21.3	317.03	1000	
238	U	209	No Gas	5.640	ppb	8.3	14598.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1516824.15	2.4	1483357.64	102.26	29.5	120.4	
Sc	45	No Gas	3324304.97	4.2	3141192.51	105.83	29.5	120.4	
Sc	45	H2	405969.62	0.5	418309.46	97.05	29.5	120.4	
Sc	45	He	83020.29	1.0	85440.95	97.17	29.5	120.4	
Ge	72	No Gas	745296.44	3.8	694668.88	107.29	29.5	120.4	
Ge	72	H2	149173.78	1.0	157206.79	94.89	29.5	120.4	
Ge	72	He	62739.81	0.5	64721.85	96.94	29.5	120.4	
Y	89	H2	2590649.88	0.4	2572670.23	100.7	29.5	120.4	
Y	89	He	551847.66	0.3	574051.42	96.13	29.5	120.4	
Tb	159	No Gas	7757228.91	3.8	6821698.44	113.71	29.5	120.4	
Tb	159	He	3039832.14	0.3	2982140.2	101.93	29.5	120.4	
Bi	209	No Gas	3833078.18	3.8	3547037.46	108.06	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:24:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	511.5	41.11	100	
11	B	6	No Gas	2178.741	ppb	1.3	314595.47	1000	
23	Na	45	He	1230860.405	ppb	0.6	24131607.42	200000	>LDR
24	Mg	45	He	233340.015	ppb	0.9	2545074.54	200000	
27	Al	45	He	51.950	ppb	9.9	251.12	200000	
28	Si	45	H2	8850.668	ppb	4.4	73187.72	10000	
39	K	45	He	11241.660	ppb	0.7	125581.29	200000	
40	Ca	45	H2	589038.604	ppb	3.5	42983814.64	200000	
51	V	89	He	8.544	ppb	6.5	1483.47	1000	
52	Cr	89	He	3.535	ppb	9.1	739.22	2000	
55	Mn	89	He	260.856	ppb	0.6	23609.41	2000	
56	Fe	89	H2	7533.232	ppb	3.2	2180818.01	100000	
59	Co	89	He	2.829	ppb	2.5	924.55	1000	
60	Ni	89	He	8.749	ppb	11.5	1083.42	1000	
63	Cu	89	He	2.741	ppb	9.1	807.83	2000	
66	Zn	89	He	21.987	ppb	6.8	781.16	2000	
75	As	89	He	1.019	ppb	11.4	31.00	1000	
78	Se	89	H2	0.420	ppb	25.7	6.00	1000	
88	Sr	89	He	9310.040	ppb	0.6	1334048.25	2000	
95	Mo	89	He	0.735	ppb	12.4	123.34	1000	
107	Ag	89	He	0.010	ppb	153.2	21.11	100	
111	Cd	89	He	0.011	ppb	147.1	1.11	1000	
118	Sn	159	He	0.874	ppb	12.4	197.78	1000	
121	Sb	159	No Gas	0.076	ppb	21.4	126.81	1000	
137	Ba	159	No Gas	18.475	ppb	5.0	9246.82	2000	
182	W	159	No Gas	0.023	ppb	188.2	93.44	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.805	ppb	3.9	5082.74	2000	
232	Th	209	No Gas	0.044	ppb	33.2	230.26	1000	
238	U	209	No Gas	6.125	ppb	1.6	15887.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517338.86	0.8	1483357.64	102.29	29.5	120.4	
Sc	45	No Gas	3297968.82	0.5	3141192.51	104.99	29.5	120.4	
Sc	45	H2	400460.05	4.2	418309.46	95.73	29.5	120.4	
Sc	45	He	84237.56	0.8	85440.95	98.59	29.5	120.4	
Ge	72	No Gas	743080.45	0.1	694668.88	106.97	29.5	120.4	
Ge	72	H2	147104.75	3.8	157206.79	93.57	29.5	120.4	
Ge	72	He	62925.91	0.6	64721.85	97.23	29.5	120.4	
Y	89	H2	2538539.91	2.9	2572670.23	98.67	29.5	120.4	
Y	89	He	553864.06	1.0	574051.42	96.48	29.5	120.4	
Tb	159	No Gas	7738458.77	0.3	6821698.44	113.44	29.5	120.4	
Tb	159	He	3054002.80	0.9	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3833726.25	0.3	3547037.46	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:27:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.752	ppb	7.9	27463.52	25	95.01	89.8	110.2	
11	B	6	No Gas	30.570	ppb	5.6	24047.27	25	122.28	89.8	110.2	> +/- 10%
23	Na	45	He	5288.896	ppb	1.2	513909.66	5000	105.78	89.8	110.2	
24	Mg	45	He	5000.003	ppb	1.2	266540.48	5000	100	89.8	110.2	
27	Al	45	He	466.316	ppb	2.7	10150.61	500	93.26	89.8	110.2	
28	Si	45	H2	459.907	ppb	3.6	19812.41	500	91.98	89.8	110.2	
39	K	45	He	4801.272	ppb	0.5	249665.67	5000	96.03	89.8	110.2	
40	Ca	45	H2	4903.876	ppb	1.5	1831592.72	5000	98.08	89.8	110.2	
51	V	89	He	25.307	ppb	0.5	19805.61	25	101.23	89.8	110.2	
52	Cr	89	He	24.483	ppb	0.7	23443.75	25	97.93	89.8	110.2	
55	Mn	89	He	24.347	ppb	1.3	11111.69	25	97.39	89.8	110.2	
56	Fe	89	H2	4828.457	ppb	1.1	7219509.36	5000	96.57	89.8	110.2	
59	Co	89	He	24.730	ppb	2.5	39769.95	25	98.92	89.8	110.2	
60	Ni	89	He	24.457	ppb	3.3	10942.44	25	97.83	89.8	110.2	
63	Cu	89	He	24.841	ppb	1.3	30818.08	25	99.36	89.8	110.2	
66	Zn	89	He	24.777	ppb	3.2	4140.76	25	99.11	89.8	110.2	
75	As	89	He	24.398	ppb	0.5	3356.77	25	97.59	89.8	110.2	
78	Se	89	H2	23.987	ppb	1.5	1724.03	25	95.95	89.8	110.2	
88	Sr	89	He	23.761	ppb	0.5	17153.48	25	95.04	89.8	110.2	
95	Mo	89	He	24.945	ppb	2.5	19277.45	25	99.78	89.8	110.2	
107	Ag	89	He	25.085	ppb	0.4	66421.51	25	100.34	89.8	110.2	
111	Cd	89	He	24.471	ppb	0.9	8533.87	25	97.88	89.8	110.2	
118	Sn	159	He	23.268	ppb	1.3	18942.80	25	93.07	89.8	110.2	
121	Sb	159	No Gas	22.828	ppb	8.8	149497.17	25	91.31	89.8	110.2	
137	Ba	159	No Gas	23.359	ppb	9.8	60438.14	25	93.44	89.8	110.2	
182	W	159	No Gas	23.558	ppb	7.8	114885.12	25	94.23	89.8	110.2	
205	Tl	209	No Gas	23.819	ppb	7.3	252296.05	25	95.28	89.8	110.2	
208	Pb	209	No Gas	24.137	ppb	7.7	352653.96	25	96.55	89.8	110.2	
232	Th	209	No Gas	23.433	ppb	9.6	351695.00	25	93.73	89.8	110.2	
238	U	209	No Gas	23.903	ppb	9.0	335121.49	25	95.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1558652.39	4.8	1483357.64	105.08	29.5	120.4	
Sc	45	No Gas	3422110.17	5.2	3141192.51	108.94	29.5	120.4	
Sc	45	H2	409325.11	0.9	418309.46	97.85	29.5	120.4	
Sc	45	He	82179.98	0.9	85440.95	96.18	29.5	120.4	
Ge	72	No Gas	765434.39	5.7	694668.88	110.19	29.5	120.4	
Ge	72	H2	152951.51	1.4	157206.79	97.29	29.5	120.4	
Ge	72	He	63783.03	0.3	64721.85	98.55	29.5	120.4	
Y	89	H2	2625956.65	0.4	2572670.23	102.07	29.5	120.4	
Y	89	He	557858.18	0.6	574051.42	97.18	29.5	120.4	
Tb	159	No Gas	8040580.92	5.6	6821698.44	117.87	29.5	120.4	
Tb	159	He	3102344.50	0.6	2982140.2	104.03	29.5	120.4	
Bi	209	No Gas	4160696.02	5.8	3547037.46	117.3	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:29:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	3.8	100.00	0.2	
11	B	6	No Gas	3.916	ppb	16.8	3781.74	4	Failed DoD
23	Na	45	He	97.453	ppb	4.9	17647.18	200	
24	Mg	45	He	3.305	ppb	8.7	768.97	20	
27	Al	45	He	-0.274	ppb	N/A	13.33	20	
28	Si	45	H2	0.561	ppb	444.3	493.89	100	
39	K	45	He	-3.225	ppb	N/A	10379.14	200	
40	Ca	45	H2	4.761	ppb	1.1	2841.51	20	
51	V	89	He	0.293	ppb	5.6	395.58	1	
52	Cr	89	He	-0.011	ppb	N/A	58.66	1	
55	Mn	89	He	0.006	ppb	80.4	29.33	0.4	
56	Fe	89	H2	-0.318	ppb	N/A	6041.40	20	
59	Co	89	He	-0.002	ppb	N/A	17.78	0.2	
60	Ni	89	He	-0.395	ppb	N/A	161.12	0.4	Failed DoD
63	Cu	89	He	0.051	ppb	43.1	200.01	0.6	
66	Zn	89	He	-0.029	ppb	N/A	57.78	2	
75	As	89	He	0.003	ppb	352.2	3.67	1	
78	Se	89	H2	0.035	ppb	81.3	2.67	1	
88	Sr	89	He	0.060	ppb	33.2	50.00	1	
95	Mo	89	He	0.046	ppb	31.9	46.67	1	
107	Ag	89	He	0.003	ppb	94.2	24.44	0.2	
111	Cd	89	He	0.001	ppb	169.6	0.74	0.2	
118	Sn	159	He	0.029	ppb	57.1	81.12	1	
121	Sb	159	No Gas	0.034	ppb	49.8	213.58	0.2	
137	Ba	159	No Gas	0.034	ppb	8.8	90.10	0.4	
182	W	159	No Gas	0.068	ppb	19.7	347.06	1	
205	Tl	209	No Gas	0.018	ppb	14.3	276.98	0.2	
208	Pb	209	No Gas	0.019	ppb	45.4	447.17	0.2	
232	Th	209	No Gas	0.140	ppb	13.0	1925.68	1	
238	U	209	No Gas	0.031	ppb	25.6	390.45	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1345088.78	11.6	1483357.64	90.68	29.5	120.4	
Sc	45	No Gas	2910418.83	12.2	3141192.51	92.65	29.5	120.4	
Sc	45	H2	407349.80	1.0	418309.46	97.38	29.5	120.4	
Sc	45	He	82273.95	0.9	85440.95	96.29	29.5	120.4	
Ge	72	No Gas	649818.07	12.4	694668.88	93.54	29.5	120.4	
Ge	72	H2	153809.95	1.0	157206.79	97.84	29.5	120.4	
Ge	72	He	63402.52	1.0	64721.85	97.96	29.5	120.4	
Y	89	H2	2605476.90	0.7	2572670.23	101.28	29.5	120.4	
Y	89	He	557523.34	0.3	574051.42	97.12	29.5	120.4	
Tb	159	No Gas	6907807.74	12.4	6821698.44	101.26	29.5	120.4	
Tb	159	He	3060964.68	0.5	2982140.2	102.64	29.5	120.4	
Bi	209	No Gas	3610906.90	13.2	3547037.46	101.8	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP/KC **ANALYSIS DATE**: 8/04/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
AT 8/5/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNH04A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (14:49) fails low for B (0.550 ug/L)

Closing PQL (20:05) fails high for Na (370.493 ug/L) Cd (0.243 ug/L) and failed low for B (1.525 ug/L)

ICSA (14:51) fails low for Mn (0.498 ug/L), LRS1 (14:57) fails high for Ag (113.894 ug/L), CCV (19:14) failed high for B, CCV (19:46) failed high for Na (5562.452 ug/L) and had ISTD failure for Li, Sc in No Gas mode and Sc, Ge in Helium mode for 6020/DoD limits. Samples unaffected due to the failure because they were under analysis by EPA 200.8. CCB (19:49) fails low for B, Ca (13.94 ug/L), Mg (19.571 ug/L) and fails high for Na (417.181 ug/L). CCB (20:02) fails low for Na (184.967 ug/L) Mn (0.238 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH04A	08/04/2020	14:36	KC
CalStd	1	LNH04A	08/04/2020	14:40	KC
ICV	1	LNH04A	08/04/2020	14:43	KC
ICB	1	LNH04A	08/04/2020	14:46	KC
PQL	1	LNH04A	08/04/2020	14:49	KC
ICSA	1	LNH04A	08/04/2020	14:51	KC
ICSAB	1	LNH04A	08/04/2020	14:54	KC
LRS1	1	LNH04A	08/04/2020	14:57	KC
LRS2	1	LNH04A	08/04/2020	14:59	KC
RINSE	1	LNH04A	08/04/2020	15:02	KC
RINSE	1	LNH04A	08/04/2020	15:05	KC
CCV	1	LNH04A	08/04/2020	15:08	KC
CCB	1	LNH04A	08/04/2020	15:10	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:10	KC
PBWNG23IMW2	5	LNH04A	08/04/2020	17:13	KC
SN5815-004	5	LNH04A	08/04/2020	17:15	KC
LCSONG28IMS1	5	LNH04A	08/04/2020	17:18	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:22	KC
PBSNG28IMS1	5	LNH04A	08/04/2020	17:24	KC
SN6056-001	5	LNH04A	08/04/2020	17:27	KC
SN6056-002	5	LNH04A	08/04/2020	17:30	KC
SN6056-003	5	LNH04A	08/04/2020	17:32	KC
LCSWNG29IMW2	5	LNH04A	08/04/2020	17:35	KC
CCV	1	LNH04A	08/04/2020	17:38	KC
CCB	1	LNH04A	08/04/2020	17:40	KC
PBWNG29IMW2	5	LNH04A	08/04/2020	17:43	KC
SN5717-020R	5	LNH04A	08/04/2020	17:46	KC
SN5830-002R	5	LNH04A	08/04/2020	17:48	KC
SN5832-001R	5	LNH04A	08/04/2020	17:51	KC
SN5832-002R	5	LNH04A	08/04/2020	17:54	KC
SN5832-003R	5	LNH04A	08/04/2020	17:57	KC
SN5832-004R	5	LNH04A	08/04/2020	17:59	KC
SN5897-001R	5	LNH04A	08/04/2020	18:02	KC
SN6056-004	5	LNH04A	08/04/2020	18:05	KC
SN6061-002	5	LNH04A	08/04/2020	18:07	KC
CCV	1	LNH04A	08/04/2020	18:10	KC
CCB	1	LNH04A	08/04/2020	18:13	KC
LCSWNG30IMW1	1	LNH04A	08/04/2020	18:15	KC
PBWNG30IMW1	1	LNH04A	08/04/2020	18:18	KC
SN5923-001R	1	LNH04A	08/04/2020	18:21	KC
LCSWNG30IW2	5	LNH04A	08/04/2020	18:23	KC
PBWNG30IW3	5	LNH04A	08/04/2020	18:26	KC
SN5946-001R	5	LNH04A	08/04/2020	18:29	KC
LCSWNG30IMW3	5	LNH04A	08/04/2020	18:31	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNG30IMW3	5	LNH04A	08/04/2020	18:34	KC
SN5897-002R	5	LNH04A	08/04/2020	18:37	KC
LCSONG31IMS1	5	LNH04A	08/04/2020	18:39	KC
CCV	1	LNH04A	08/04/2020	18:42	KC
CCB	1	LNH04A	08/04/2020	18:45	KC
PBSNG31IMS1	5	LNH04A	08/04/2020	18:47	KC
SN6259-001	5	LNH04A	08/04/2020	18:50	KC
SN6259-001A	5	LNH04A	08/04/2020	18:53	KC
SN6259-001L	5	LNH04A	08/04/2020	18:55	KC
SN6259-001D	5	LNH04A	08/04/2020	18:58	KC
SN6259-001S	5	LNH04A	08/04/2020	19:01	KC
SN6259-002	5	LNH04A	08/04/2020	19:03	KC
SN6259-003	5	LNH04A	08/04/2020	19:06	KC
SN6259-004	5	LNH04A	08/04/2020	19:09	KC
LCSWNG31IMW1	1	LNH04A	08/04/2020	19:11	KC
CCV	1	LNH04A	08/04/2020	19:14	KC
CCB	1	LNH04A	08/04/2020	19:17	KC
PBWNG31IMW1	1	LNH04A	08/04/2020	19:19	KC
SN6071-001R	1	LNH04A	08/04/2020	19:22	KC
SN6071-002RA	1	LNH04A	08/04/2020	19:25	KC
SN6071-003RL	1	LNH04A	08/04/2020	19:27	KC
SN6071-004RP	1	LNH04A	08/04/2020	19:30	KC
SN6071-005RS	1	LNH04A	08/04/2020	19:33	KC
SN6310-001	1	LNH04A	08/04/2020	19:35	KC
SN6310-003	1	LNH04A	08/04/2020	19:38	KC
SN6347-001	1	LNH04A	08/04/2020	19:41	KC
SN6347-002	1	LNH04A	08/04/2020	19:43	KC
CCV	1	LNH04A	08/04/2020	19:46	KC
CCB	1	LNH04A	08/04/2020	19:49	KC
SN6347-003	1	LNH04A	08/04/2020	19:52	KC
SN6347-004	1	LNH04A	08/04/2020	19:54	KC
SN6349-001	1	LNH04A	08/04/2020	19:57	KC
CCV	1	LNH04A	08/04/2020	20:00	KC
CCB	1	LNH04A	08/04/2020	20:02	KC
PQL	1	LNH04A	08/04/2020	20:05	KC
RINSE	1	LNH04A	08/04/2020	20:07	KC
RINSE	1	LNH04A	08/04/2020	20:10	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq. Date-Time	8/4/2020 1:59:45 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

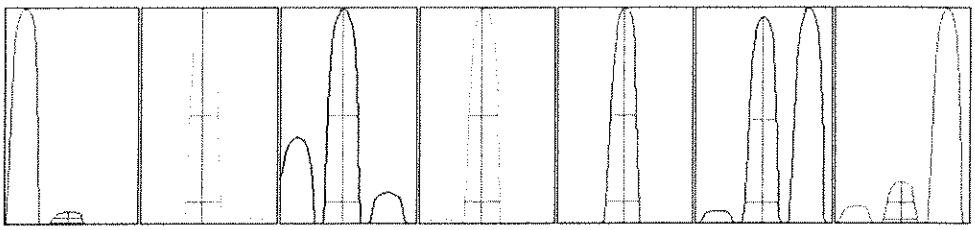
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	15287	152868.81	0.407	5.000	
9	6199	61986.07	0.517	5.000	
24	242790	2427898.98	0.188	5.000	
59	43961	439614.77	0.133	5.000	
115	469718	4697184.71	0.415	5.000	
205	25045	250446.03	0.721	5.000	
208	54819	548189.41	0.331	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	15388	15278	15219	15285	15265
9	6243	6193	6168	6218	6170
24	243427	242327	242646	242467	243082
59	43953	44021	43868	43970	43995
115	472930	468935	469961	467829	468937
205	24817	24899	25090	25177	25239
208	54777	55047	54917	54560	54794

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	24904.11	6.95	6.90 - 7.10	
9	10298.36	8.90	8.90 - 9.10	
24	385650.79	23.90	23.90 - 24.10	
59	71508.79	58.90	58.90 - 59.10	
115	829252.64	115.00	114.90 - 115.10	
205	42343.99	205.00	204.90 - 205.10	
208	92972.60	208.00	207.90 - 208.10	

Katahdin Analytical Services 4000589

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.756	0.900	
24	0.65	0.772	0.900	
59	0.64	0.768	0.900	
115	0.59	0.744	0.900	
205	0.61	0.738	0.900	
208	0.61	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	3185	31854.68	1.519	5.000	
89	315279	3152788.75	1.753	5.000	
205	26625	266246.43	0.579	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	3120	3167	3177	3246	3217
89	306780	313481	316033	319491	320609
205	26407	26612	26562	26746	26795

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	9442	94419.88	0.896	5.000	
89	66467	664670.81	1.502	5.000	
205	12117	121168.79	0.759	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9313	9400	9496	9518	9483
89	64791	66312	66953	67055	67224
205	11970	12082	12181	12179	12172

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:36:32 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	5.56	34.7
11	B	6	No Gas	1674.60	3.0
23	Na	45	He	32546.17	1.7
24	Mg	45	He	71.12	44.3
27	Al	45	He	102.23	11.5
28	Si	45	H2	820.93	16.0
39	K	45	He	25419.56	1.8
40	Ca	45	H2	4992.15	4.9
51	V	89	He	193.34	21.0
52	Cr	89	He	904.53	1.6
55	Mn	89	He	145.31	21.5
56	Fe	89	H2	2709.95	6.3
59	Co	89	He	48.89	70.0
60	Ni	89	He	307.79	2.3
63	Cu	89	He	443.36	13.3
66	Zn	89	He	354.46	16.1
75	As	89	He	11.67	35.7
78	Se	89	H2	1.83	15.7
88	Sr	89	He	30.00	19.2
95	Mo	89	He	14.44	13.4
107	Ag	89	He	36.67	41.7
111	Cd	89	He	1.48	86.6
118	Sn	159	He	417.80	5.6
121	Sb	159	No Gas	206.90	20.1
137	Ba	159	No Gas	113.46	18.4
182	W	159	No Gas	46.72	32.7
205	Tl	209	No Gas	707.49	14.9
208	Pb	209	No Gas	427.15	19.5
232	Th	209	No Gas	220.25	15.7
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	8217096.81	0.9
Sc	45	No Gas	15952466.59	0.3
Sc	45	H2	1988810.56	1.0
Sc	45	He	477124.13	1.8
Ge	72	No Gas	2777617.47	0.3
Ge	72	H2	580378.32	0.4
Ge	72	He	274469.22	1.0
Y	89	H2	10106085.94	0.5
Y	89	He	2217336.32	1.8
Tb	159	No Gas	20085725.95	0.6
Tb	159	He	7863593.35	1.3
Bi	209	No Gas	9123990.23	0.8

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:40:11 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	384461.06	2.3
11	B	6	No Gas	260953.90	1.7
23	Na	45	He	8652114.62	0.4
24	Mg	45	He	4586873.58	0.3
27	Al	45	He	171092.53	1.0
28	Si	45	H2	278231.03	0.6
39	K	45	He	3714690.06	0.5
40	Ca	45	H2	25207833.23	0.5
51	V	89	He	286108.46	0.2
52	Cr	89	He	363692.60	0.3
55	Mn	89	He	159585.18	0.2
56	Fe	89	H2	93166381.43	0.1
59	Co	89	He	596835.02	0.6
60	Ni	89	He	165099.09	0.7
63	Cu	89	He	447291.80	0.4
66	Zn	89	He	50399.73	1.5
75	As	89	He	34250.67	1.5
78	Se	89	H2	17385.37	0.6
88	Sr	89	He	176553.29	0.2
95	Mo	89	He	204935.60	0.8
107	Ag	89	He	642851.72	0.6
111	Cd	89	He	76887.16	0.6
118	Sn	159	He	158560.17	0.5
121	Sb	159	No Gas	1003993.83	1.1
137	Ba	159	No Gas	393421.76	0.8
182	W	159	No Gas	785290.52	2.2
205	Tl	209	No Gas	1439334.65	2.0
208	Pb	209	No Gas	2024853.78	1.3
232	Th	209	No Gas	1969899.48	2.6
238	U	209	No Gas	1893012.23	2.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8274033.33	1.8	8217096.81	100.69	29.5	120.4	
Sc	45	No Gas	16078081.26	0.6	15952466.59	100.79	29.5	120.4	
Sc	45	H2	2009707.68	1.1	1988810.56	101.05	29.5	120.4	
Sc	45	He	482059.92	0.3	477124.13	101.03	29.5	120.4	
Ge	72	No Gas	2766585.37	0.8	2777617.47	99.6	29.5	120.4	
Ge	72	H2	589816.30	0.6	580378.32	101.63	29.5	120.4	
Ge	72	He	277754.05	0.7	274469.22	101.2	29.5	120.4	
Y	89	H2	10192705.99	0.3	10106085.94	100.86	29.5	120.4	
Y	89	He	2234021.86	0.3	2217336.32	100.75	29.5	120.4	
Tb	159	No Gas	20223042.20	1.1	20085725.95	100.68	29.5	120.4	
Tb	159	He	7939919.26	0.5	7863593.35	100.97	29.5	120.4	
Bi	209	No Gas	8965649.71	1.5	9123990.23	98.26	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:43:38 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.374	ppb	4.6	157417.07	20	101.87	89.6	110.4	
11	B	6	No Gas	20.090	ppb	4.7	106363.25	20	100.45	89.6	110.4	
23	Na	45	He	3928.251	ppb	0.2	3425193.35	4000	98.21	89.6	110.4	
24	Mg	45	He	3933.843	ppb	0.4	1807832.25	4000	98.35	89.6	110.4	
27	Al	45	He	373.016	ppb	1.3	64004.87	400	93.25	89.6	110.4	
28	Si	45	H2	431.558	ppb	0.5	118107.88	400	107.89	89.6	110.4	
39	K	45	He	3913.140	ppb	0.5	1472029.45	4000	97.83	89.6	110.4	
40	Ca	45	H2	3927.752	ppb	0.8	9703349.30	4000	98.19	89.6	110.4	
51	V	89	He	20.009	ppb	1.0	114914.74	20	100.04	89.6	110.4	
52	Cr	89	He	20.243	ppb	0.8	148185.07	20	101.21	89.6	110.4	
55	Mn	89	He	20.309	ppb	0.6	65080.50	20	101.54	89.6	110.4	
56	Fe	89	H2	3950.736	ppb	0.4	36111755.06	4000	98.77	89.6	110.4	
59	Co	89	He	20.344	ppb	1.2	243507.81	20	101.72	89.6	110.4	
60	Ni	89	He	20.563	ppb	1.2	68263.65	20	102.81	89.6	110.4	
63	Cu	89	He	20.521	ppb	1.2	184327.03	20	102.61	89.6	110.4	
66	Zn	89	He	20.518	ppb	0.3	20948.60	20	102.59	89.6	110.4	
75	As	89	He	19.977	ppb	0.9	13727.92	20	99.88	89.6	110.4	
78	Se	89	H2	20.435	ppb	1.0	6971.76	20	102.18	89.6	110.4	
88	Sr	89	He	19.556	ppb	0.8	69260.67	20	97.78	89.6	110.4	
95	Mo	89	He	40.321	ppb	0.6	165706.21	40	100.8	89.6	110.4	
107	Ag	89	He	20.890	ppb	1.0	269315.88	20	104.45	89.6	110.4	
111	Cd	89	He	20.778	ppb	1.0	32036.75	20	103.89	89.6	110.4	
118	Sn	159	He	19.566	ppb	1.7	62774.75	20	97.83	89.6	110.4	
121	Sb	159	No Gas	20.671	ppb	4.8	417044.46	20	103.35	89.6	110.4	
137	Ba	159	No Gas	20.417	ppb	4.0	161470.30	20	102.08	89.6	110.4	
182	W	159	No Gas	19.787	ppb	5.4	312227.37	20	98.94	89.6	110.4	
205	Tl	209	No Gas	21.541	ppb	4.8	634965.67	20	107.71	89.6	110.4	
208	Pb	209	No Gas	20.519	ppb	4.2	850558.53	20	102.6	89.6	110.4	
232	Th	209	No Gas	20.376	ppb	4.7	821668.88	20	101.88	89.6	110.4	
238	U	209	No Gas	20.317	ppb	4.2	787260.91	20	101.58	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8316526.34	2.3	8217096.81	101.21	29.5	120.4	
Sc	45	No Gas	16124199.67	2.0	15952466.59	101.08	29.5	120.4	
Sc	45	H2	1968785.10	1.5	1988810.56	98.99	29.5	120.4	
Sc	45	He	482967.81	0.4	477124.13	101.22	29.5	120.4	
Ge	72	No Gas	2810822.31	2.2	2777617.47	101.2	29.5	120.4	
Ge	72	H2	578138.43	1.6	580378.32	99.61	29.5	120.4	
Ge	72	He	276977.77	0.5	274469.22	100.91	29.5	120.4	
Y	89	H2	9999162.04	1.2	10106085.94	98.94	29.5	120.4	
Y	89	He	2240076.70	0.8	2217336.32	101.03	29.5	120.4	
Tb	159	No Gas	20328726.22	2.4	20085725.95	101.21	29.5	120.4	
Tb	159	He	8000016.62	0.6	7863593.35	101.73	29.5	120.4	
Bi	209	No Gas	9177829.69	1.8	9123990.23	100.59	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:46:21 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.008	ppb	17.9	64.45	0.2	
11	B	6	No Gas	0.498	ppb	15.1	4142.97	4	
23	Na	45	He	1.985	ppb	37.2	33803.72	200	
24	Mg	45	He	0.904	ppb	51.2	473.39	20	
27	Al	45	He	0.137	ppb	162.3	123.34	20	
28	Si	45	H2	0.288	ppb	109.7	884.34	100	
39	K	45	He	0.983	ppb	252.7	25458.00	200	
40	Ca	45	H2	1.054	ppb	4.7	7490.01	20	
51	V	89	He	-0.004	ppb	N/A	168.90	1	
52	Cr	89	He	0.011	ppb	62.5	974.53	1	
55	Mn	89	He	-0.009	ppb	N/A	116.65	0.4	
56	Fe	89	H2	1.563	ppb	3.6	16955.81	20	
59	Co	89	He	0.003	ppb	64.4	88.90	0.2	
60	Ni	89	He	-0.032	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.007	ppb	76.1	502.25	0.6	
66	Zn	89	He	0.028	ppb	161.4	378.91	2	
75	As	89	He	0.005	ppb	82.1	15.00	1	
78	Se	89	H2	0.033	ppb	32.9	13.00	1	
88	Sr	89	He	0.003	ppb	109.8	41.11	1	
95	Mo	89	He	0.096	ppb	4.6	401.13	1	
107	Ag	89	He	0.008	ppb	35.5	140.00	0.2	
111	Cd	89	He	0.005	ppb	80.6	8.89	0.2	
118	Sn	159	He	0.106	ppb	0.2	752.27	1	
121	Sb	159	No Gas	0.014	ppb	18.9	470.53	0.2	
137	Ba	159	No Gas	0.005	ppb	100.4	143.49	0.4	
182	W	159	No Gas	0.071	ppb	3.4	1121.30	1	
205	Tl	209	No Gas	0.006	ppb	85.9	864.34	0.2	
208	Pb	209	No Gas	0.014	ppb	29.3	974.44	0.2	
232	Th	209	No Gas	0.049	ppb	16.7	2092.52	1	
238	U	209	No Gas	0.012	ppb	24.7	460.53	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8046753.19	4.2	8217096.81	97.93	29.5	120.4	
Sc	45	No Gas	15220932.58	7.3	15952466.59	95.41	29.5	120.4	
Sc	45	H2	1955024.14	0.9	1988810.56	98.3	29.5	120.4	
Sc	45	He	471071.78	1.6	477124.13	98.73	29.5	120.4	
Ge	72	No Gas	2675657.91	4.8	2777617.47	96.33	29.5	120.4	
Ge	72	H2	572622.34	1.4	580378.32	98.66	29.5	120.4	
Ge	72	He	270968.66	0.6	274469.22	98.72	29.5	120.4	
Y	89	H2	9992575.77	0.7	10106085.94	98.88	29.5	120.4	
Y	89	He	2199290.43	1.2	2217336.32	99.19	29.5	120.4	
Tb	159	No Gas	19466142.63	6.4	20085725.95	96.92	29.5	120.4	
Tb	159	He	7885458.91	1.4	7863593.35	100.28	29.5	120.4	
Bi	209	No Gas	8846730.59	4.8	9123990.23	96.96	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:49:00 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.207	ppb	5.2	1619.04	0.2	103.5	79.5	120.4
11	B	6	No Gas	0.550	ppb	1.7	4605.33	4	13.75	79.5	120.4
23	Na	45	He	208.685	ppb	0.3	209846.95	200	104.34	79.5	120.4
24	Mg	45	He	21.014	ppb	3.9	9577.25	20	105.07	79.5	120.4
27	Al	45	He	18.588	ppb	7.5	3237.15	20	92.94	79.5	120.4
28	Si	45	H2	95.604	ppb	3.8	26644.71	100	95.6	79.5	120.4
39	K	45	He	204.833	ppb	1.1	99870.64	200	102.42	79.5	120.4
40	Ca	45	H2	19.770	ppb	0.7	53445.02	20	98.85	79.5	120.4
51	V	89	He	1.017	ppb	0.8	5984.82	1	101.7	79.5	120.4
52	Cr	89	He	1.040	ppb	1.3	8419.67	1	104	79.5	120.4
55	Mn	89	He	0.403	ppb	1.6	1425.15	0.4	100.75	79.5	120.4
56	Fe	89	H2	21.554	ppb	1.0	199588.59	20	107.77	79.5	120.4
59	Co	89	He	0.232	ppb	10.4	2802.73	0.2	116	79.5	120.4
60	Ni	89	He	0.367	ppb	8.4	1513.48	0.4	91.75	79.5	120.4
63	Cu	89	He	0.627	ppb	0.3	6029.29	0.6	104.5	79.5	120.4
66	Zn	89	He	1.967	ppb	5.0	2315.84	2	98.35	79.5	120.4
75	As	89	He	0.998	ppb	2.3	692.09	1	99.8	79.5	120.4
78	Se	89	H2	1.019	ppb	3.0	349.16	1	101.9	79.5	120.4
88	Sr	89	He	0.978	ppb	1.5	3469.46	1	97.8	79.5	120.4
95	Mo	89	He	1.052	ppb	3.5	4308.62	1	105.2	79.5	120.4
107	Ag	89	He	0.224	ppb	4.1	2904.85	0.2	112	79.5	120.4
111	Cd	89	He	0.205	ppb	3.1	315.19	0.2	102.5	79.5	120.4
118	Sn	159	He	0.999	ppb	3.7	3597.29	1	99.9	79.5	120.4
121	Sb	159	No Gas	0.222	ppb	5.7	4732.81	0.2	111	79.5	120.4
137	Ba	159	No Gas	0.405	ppb	10.2	3344.15	0.4	101.25	79.5	120.4
182	W	159	No Gas	1.186	ppb	2.7	18941.60	1	118.6	79.5	120.4
205	Tl	209	No Gas	0.205	ppb	11.7	6889.62	0.2	102.5	79.5	120.4
208	Pb	209	No Gas	0.215	ppb	3.4	9512.03	0.2	107.5	79.5	120.4
232	Th	209	No Gas	0.212	ppb	5.3	8963.30	0.2	106	79.5	120.4
238	U	209	No Gas	0.213	ppb	0.8	8435.58	0.2	106.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8392384.90	2.1	8217096.81	102.13	29.5	120.4	
Sc	45	No Gas	16134904.13	1.1	15952466.59	101.14	29.5	120.4	
Sc	45	H2	1957353.68	0.9	1988810.56	98.42	29.5	120.4	
Sc	45	He	475465.13	0.3	477124.13	99.65	29.5	120.4	
Ge	72	No Gas	2817344.28	1.3	2777617.47	101.43	29.5	120.4	
Ge	72	H2	571352.08	1.6	580378.32	98.44	29.5	120.4	
Ge	72	He	274266.17	0.5	274469.22	99.93	29.5	120.4	
Y	89	H2	9994530.53	1.2	10106085.94	98.9	29.5	120.4	
Y	89	He	2224480.66	0.7	2217336.32	100.32	29.5	120.4	
Tb	159	No Gas	20504829.14	1.1	20085725.95	102.09	29.5	120.4	
Tb	159	He	7974274.95	0.1	7863593.35	101.41	29.5	120.4	
Bi	209	No Gas	9366033.83	2.1	9123990.23	102.65	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:51:44 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.001	ppb	21.7	14.44	0.2	-50	50	
B	11	6	No Gas	1.839	ppb	5.0	10506.39	4	-50	100	
Na	23	45	He	97712.433	ppb	0.4	83662234.29	100000	80	120	
Mg	24	45	He	95522.869	ppb	0.5	43506781.02	100000	80	120	
Al	27	45	He	90063.201	ppb	0.3	15291832.41	100000	80	120	
Si	28	45	H2	11.481	ppb	2.9	3884.92	100	-50	50	
K	39	45	He	96822.077	ppb	0.4	35492426.02	100000	80	120	
Ca	40	45	H2	99196.614	ppb	0.9	242020280.84	100000	80	120	
V	51	89	He	0.011	ppb	41.8	251.12	1	-50	100	
Cr	52	89	He	0.284	ppb	4.1	2882.45	0.78	-100	100	
Mn	55	89	He	0.498	ppb	2.9	1683.80	0.0826	100	100	DoD
Fe	56	89	H2	96110.210	ppb	0.3	862347797.42	100000	80	120	
Co	59	89	He	0.304	ppb	3.7	3567.38	0.2	-50	100	
Ni	60	89	He	0.292	ppb	9.0	1233.43	0.114	100	100	
Cu	63	89	He	0.299	ppb	4.8	3028.22	-0.043	100	100	
Zn	66	89	He	0.526	ppb	6.7	856.72	-0.7632	100	100	
As	75	89	He	0.041	ppb	28.4	38.34	1	-50	100	
Se	78	89	H2	0.063	ppb	11.4	23.00	1	-50	100	
Sr	88	89	He	0.793	ppb	1.5	2744.82	0.0578	100	100	
Mo	95	89	He	1994.739	ppb	0.3	7930697.94	2000	80	120	
Ag	107	89	He	0.019	ppb	2.6	276.68	0.2	-50	50	
Cd	111	89	He	0.363	ppb	4.0	542.98	0.268	100	100	
Sn	118	159	He	0.259	ppb	4.4	1157.88	-0.24	100	100	
Sb	121	159	No Gas	0.167	ppb	5.8	3417.60	0.089	100	100	
Ba	137	159	No Gas	0.178	ppb	15.9	1451.70	-0.0794	100	100	
W	182	159	No Gas	0.199	ppb	9.5	3037.10	0.32	-100	100	
Tl	205	209	No Gas	-0.004	ppb	N/A	520.59	0.2	-50	50	
Pb	208	209	No Gas	0.089	ppb	3.6	3624.27	0.03	100	100	
Th	232	209	No Gas	0.012	ppb	20.5	630.72	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	35.5	43.38	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7748549.32	2.4	8217096.81	94.3	29.5	120.4	
Sc	45	No Gas	16030186.92	1.3	15952466.59	100.49	29.5	120.4	
Sc	45	H2	1945402.03	1.3	1988810.56	97.82	29.5	120.4	
Sc	45	He	478682.74	0.7	477124.13	100.33	29.5	120.4	
Ge	72	No Gas	2711631.40	1.8	2777617.47	97.62	29.5	120.4	
Ge	72	H2	533819.61	0.6	580378.32	91.98	29.5	120.4	
Ge	72	He	266186.24	0.5	274469.22	96.98	29.5	120.4	
Y	89	H2	9816662.57	1.3	10106085.94	97.14	29.5	120.4	
Y	89	He	2167209.19	0.2	2217336.32	97.74	29.5	120.4	
Tb	159	No Gas	19421245.40	2.0	20085725.95	96.69	29.5	120.4	
Tb	159	He	7409865.31	0.2	7863593.35	94.23	29.5	120.4	
Bi	209	No Gas	8038552.49	2.3	9123990.23	88.1	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:54:33 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.693	ppb	3.4	145883.02	20	79.5	120.4	
11	B	6	No Gas	21.033	ppb	2.5	101543.81	20	79.5	120.4	
23	Na	45	He	100883.689	ppb	0.2	85967304.28	100000	79.5	120.4	
24	Mg	45	He	98059.540	ppb	0.7	44450161.56	100000	79.5	120.4	
27	Al	45	He	91061.634	ppb	1.1	15387737.69	100000	79.5	120.4	
28	Si	45	H2	477.315	ppb	1.5	124581.10	500	79.5	120.4	
39	K	45	He	98832.434	ppb	0.9	36056509.84	100000	79.5	120.4	
40	Ca	45	H2	102667.628	ppb	3.1	241900194.17	100000	79.5	120.4	
51	V	89	He	21.070	ppb	0.8	115633.69	20	79.5	120.4	
52	Cr	89	He	20.917	ppb	1.2	146290.42	20	79.5	120.4	
55	Mn	89	He	20.662	ppb	0.9	63272.72	20	79.5	120.4	
56	Fe	89	H2	100851.084	ppb	3.2	869428971.68	100000	79.5	120.4	
59	Co	89	He	20.647	ppb	0.7	236183.65	20	79.5	120.4	
60	Ni	89	He	19.842	ppb	0.7	62958.99	20	79.5	120.4	
63	Cu	89	He	19.538	ppb	0.6	167741.71	20	79.5	120.4	
66	Zn	89	He	19.653	ppb	2.4	19188.29	20	79.5	120.4	
75	As	89	He	21.185	ppb	1.9	13911.47	20	79.5	120.4	
78	Se	89	H2	20.679	ppb	3.2	6654.45	20	79.5	120.4	
88	Sr	89	He	20.157	ppb	0.6	68216.65	20	79.5	120.4	
95	Mo	89	He	2072.738	ppb	0.4	8139773.49	2000	79.5	120.4	
107	Ag	89	He	18.637	ppb	0.5	229620.75	20	79.5	120.4	
111	Cd	89	He	19.181	ppb	0.3	28262.87	20	79.5	120.4	
118	Sn	159	He	20.760	ppb	0.2	59288.97	20	79.5	120.4	
121	Sb	159	No Gas	20.865	ppb	2.5	392528.15	20	79.5	120.4	
137	Ba	159	No Gas	20.380	ppb	1.2	150280.33	20	79.5	120.4	
182	W	159	No Gas	19.938	ppb	2.2	293402.20	20	79.5	120.4	
205	Tl	209	No Gas	21.335	ppb	3.1	532963.92	20	79.5	120.4	
208	Pb	209	No Gas	20.984	ppb	1.7	737184.29	20	79.5	120.4	
232	Th	209	No Gas	21.795	ppb	3.1	744774.83	20	79.5	120.4	
238	U	209	No Gas	21.642	ppb	2.7	710596.88	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7586295.77	1.9	8217096.81	92.32	29.5	120.4	
Sc	45	No Gas	16103724.20	0.8	15952466.59	100.95	29.5	120.4	
Sc	45	H2	1879241.52	1.7	1988810.56	94.49	29.5	120.4	
Sc	45	He	476409.81	0.4	477124.13	99.85	29.5	120.4	
Ge	72	No Gas	2700792.99	0.6	2777617.47	97.23	29.5	120.4	
Ge	72	H2	504923.91	1.4	580378.32	87	29.5	120.4	
Ge	72	He	266074.12	0.3	274469.22	96.94	29.5	120.4	
Y	89	H2	9435047.32	1.8	10106085.94	93.36	29.5	120.4	
Y	89	He	2140670.37	0.7	2217336.32	96.54	29.5	120.4	
Tb	159	No Gas	18943390.83	0.8	20085725.95	94.31	29.5	120.4	
Tb	159	He	7123910.80	0.6	7863593.35	90.59	29.5	120.4	
Bi	209	No Gas	7775646.31	1.5	9123990.23	85.22	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:57:23 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	107.001	ppb	0.7	764161.40	100	107	89.5	110.4	
11	B	6	No Gas	477.001	ppb	1.5	2298740.92	500	95.4	89.5	110.4	
51	V	89	He	1052.031	ppb	1.4	5541589.92	1000	105.2	89.5	110.4	
52	Cr	89	He	2088.028	ppb	1.6	13955919.19	2000	104.4	89.5	110.4	
55	Mn	89	He	2002.743	ppb	1.4	5882839.65	2000	100.14	89.5	110.4	
59	Co	89	He	1070.216	ppb	1.1	11766793.02	1000	107.02	89.5	110.4	
60	Ni	89	He	1076.250	ppb	1.4	3267663.53	1000	107.62	89.5	110.4	
63	Cu	89	He	2073.581	ppb	1.5	17070438.77	2000	103.68	89.5	110.4	
66	Zn	89	He	2020.437	ppb	1.3	1862984.49	2000	101.02	89.5	110.4	
75	As	89	He	1028.228	ppb	1.2	648601.11	1000	102.82	89.5	110.4	
78	Se	89	H2	955.327	ppb	1.5	314262.66	1000	95.53	89.5	110.4	
88	Sr	89	He	1919.511	ppb	1.1	6242518.17	2000	95.98	89.5	110.4	
95	Mo	89	He	1062.621	ppb	1.6	4011523.66	1000	106.26	89.5	110.4	
107	Ag	89	He	113.894	ppb	0.9	1348861.63	100	113.89	89.5	110.4	> +/- 10%
111	Cd	89	He	1033.946	ppb	0.9	1464575.43	1000	103.39	89.5	110.4	
118	Sn	159	He	999.438	ppb	0.5	2925919.92	1000	99.94	89.5	110.4	
121	Sb	159	No Gas	1024.141	ppb	0.2	20397937.43	1000	102.41	89.5	110.4	
137	Ba	159	No Gas	1967.386	ppb	0.5	15354967.66	2000	98.37	89.5	110.4	
182	W	159	No Gas	956.108	ppb	0.4	14899921.69	1000	95.61	89.5	110.4	
205	Tl	209	No Gas	1033.242	ppb	0.5	29438057.02	1000	103.32	89.5	110.4	
208	Pb	209	No Gas	1979.943	ppb	0.2	79367669.25	2000	99	89.5	110.4	
232	Th	209	No Gas	982.535	ppb	0.4	38326584.40	1000	98.25	89.5	110.4	
238	U	209	No Gas	970.660	ppb	1.3	36390699.42	1000	97.07	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7682088.54	0.3	8217096.81	93.49	29.5	120.4	
Sc	45	No Gas	16232413.30	0.8	15952466.59	101.75	29.5	120.4	
Ge	72	No Gas	2833621.75	0.3	2777617.47	102.02	29.5	120.4	
Tb	159	No Gas	20062807.62	0.9	20085725.95	99.89	29.5	120.4	
Bi	209	No Gas	8875394.35	0.6	9123990.23	97.28	29.5	120.4	
Sc	45	H2	1864682.34	1.5	1988810.56	93.76	29.5	120.4	
Ge	72	H2	511019.54	0.7	580378.32	88.05	29.5	120.4	
Y	89	H2	9645631.96	1.9	10106085.94	95.44	29.5	120.4	
Sc	45	He	446788.56	1.4	477124.13	93.64	29.5	120.4	
Ge	72	He	260332.83	0.9	274469.22	94.85	29.5	120.4	
Y	89	He	2058045.28	1.1	2217336.32	92.82	29.5	120.4	
Tb	159	He	7348541.69	0.7	7863593.35	93.45	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 2:59:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.038	ppb	13.0	263.34	100	
11	B	6	No Gas	8.789	ppb	11.2	41635.82	1000	
23	Na	45	He	196410.615	ppb	1.0	179523648.99	200000	
24	Mg	45	He	189486.903	ppb	1.0	92148144.18	200000	
27	Al	45	He	180205.771	ppb	1.9	32672867.57	200000	
28	Si	45	H2	8650.947	ppb	0.7	2312276.05	10000	
39	K	45	He	196926.736	ppb	2.1	77059280.13	200000	
40	Ca	45	H2	198865.952	ppb	0.7	482753517.25	200000	
51	V	89	He	0.347	ppb	100.2	2174.92	1000	
52	Cr	89	He	1.708	ppb	34.9	13359.85	2000	
55	Mn	89	He	7.714	ppb	5.9	24917.95	2000	
56	Fe	89	H2	97208.454	ppb	0.5	850119736.46	100000	
59	Co	89	He	0.783	ppb	41.2	9420.90	1000	
60	Ni	89	He	2.035	ppb	14.1	7060.15	1000	
63	Cu	89	He	1.353	ppb	41.7	12578.23	2000	
66	Zn	89	He	1.821	ppb	29.0	2190.38	2000	
75	As	89	He	0.436	ppb	71.9	310.39	1000	
78	Se	89	H2	0.415	ppb	1.8	137.32	1000	
88	Sr	89	He	1.471	ppb	38.1	5241.67	2000	
95	Mo	89	He	1.710	ppb	67.8	7025.02	1000	
107	Ag	89	He	0.116	ppb	24.4	1536.87	100	
111	Cd	89	He	0.240	ppb	115.4	368.22	1000	
118	Sn	159	He	1.453	ppb	11.5	4460.05	1000	
121	Sb	159	No Gas	0.567	ppb	6.7	10666.18	1000	
137	Ba	159	No Gas	1.059	ppb	2.1	7770.94	2000	
182	W	159	No Gas	1.291	ppb	3.0	18697.78	1000	
205	Tl	209	No Gas	0.389	ppb	14.4	9911.70	1000	
208	Pb	209	No Gas	0.809	ppb	8.1	27625.95	2000	
232	Th	209	No Gas	0.846	ppb	24.2	28021.28	1000	
238	U	209	No Gas	0.491	ppb	18.4	15527.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7283254.40	1.0	8217096.81	88.64	29.5	120.4	
Sc	45	No Gas	15559883.29	0.5	15952466.59	97.54	29.5	120.4	
Sc	45	H2	1935347.66	2.9	1988810.56	97.31	29.5	120.4	
Sc	45	He	511035.34	1.9	477124.13	107.11	29.5	120.4	
Ge	72	No Gas	2581065.46	0.9	2777617.47	92.92	29.5	120.4	
Ge	72	H2	499195.84	2.4	580378.32	86.01	29.5	120.4	
Ge	72	He	276421.32	2.1	274469.22	100.71	29.5	120.4	
Y	89	H2	9567143.16	2.1	10106085.94	94.67	29.5	120.4	
Y	89	He	2251059.76	1.8	2217336.32	101.52	29.5	120.4	
Tb	159	No Gas	18605837.92	0.6	20085725.95	92.63	29.5	120.4	
Tb	159	He	7052144.20	0.8	7863593.35	89.68	29.5	120.4	
Bi	209	No Gas	7463876.95	1.9	9123990.23	81.8	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	015SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:02:51 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	18.1	40.00	100	
11	B	6	No Gas	1.450	ppb	8.0	8832.99	1000	
23	Na	45	He	84.571	ppb	43.9	109847.81	200000	
24	Mg	45	He	46.634	ppb	71.1	22314.63	200000	
27	Al	45	He	39.562	ppb	70.2	7139.67	200000	
28	Si	45	H2	2.676	ppb	33.6	1571.85	10000	
39	K	45	He	73.924	ppb	45.0	54992.14	200000	
40	Ca	45	H2	54.386	ppb	7.9	142215.63	200000	
51	V	89	He	0.050	ppb	102.0	480.05	1000	
52	Cr	89	He	0.117	ppb	85.7	1753.32	2000	
55	Mn	89	He	0.118	ppb	102.4	519.96	2000	
56	Fe	89	H2	31.260	ppb	8.1	293065.66	100000	
59	Co	89	He	0.050	ppb	120.5	649.10	1000	
60	Ni	89	He	0.040	ppb	162.7	440.04	1000	
63	Cu	89	He	0.178	ppb	59.4	2023.93	2000	
66	Zn	89	He	0.081	ppb	170.5	435.58	2000	
75	As	89	He	0.079	ppb	54.7	65.34	1000	
78	Se	89	H2	0.095	ppb	10.1	34.83	1000	
88	Sr	89	He	0.088	ppb	108.8	341.16	2000	
95	Mo	89	He	0.390	ppb	45.9	1605.91	1000	
107	Ag	89	He	0.016	ppb	44.9	242.23	100	
111	Cd	89	He	0.054	ppb	104.2	84.82	1000	
118	Sn	159	He	0.382	ppb	12.0	1533.48	1000	
121	Sb	159	No Gas	0.059	ppb	15.1	1351.58	1000	
137	Ba	159	No Gas	0.034	ppb	17.9	367.08	2000	
182	W	159	No Gas	0.169	ppb	8.3	2626.57	1000	
205	Tl	209	No Gas	0.029	ppb	23.5	1428.35	1000	
208	Pb	209	No Gas	0.069	ppb	0.6	3003.51	2000	
232	Th	209	No Gas	0.046	ppb	15.7	1898.94	1000	
238	U	209	No Gas	0.026	ppb	12.3	937.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7934126.29	1.0	8217096.81	96.56	29.5	120.4	
Sc	45	No Gas	17446507.56	0.9	15952466.59	109.37	29.5	120.4	
Sc	45	H2	2010977.22	0.7	1988810.56	101.11	29.5	120.4	
Sc	45	He	500306.12	1.0	477124.13	104.86	29.5	120.4	
Ge	72	No Gas	2973943.61	0.6	2777617.47	107.07	29.5	120.4	
Ge	72	H2	549319.68	0.7	580378.32	94.65	29.5	120.4	
Ge	72	He	283459.57	0.6	274469.22	103.28	29.5	120.4	
Y	89	H2	10164485.69	0.6	10106085.94	100.58	29.5	120.4	
Y	89	He	2218331.42	1.5	2217336.32	100.04	29.5	120.4	
Tb	159	No Gas	19599113.59	1.4	20085725.95	97.58	29.5	120.4	
Tb	159	He	7463081.00	2.1	7863593.35	94.91	29.5	120.4	
Bi	209	No Gas	8402103.89	0.6	9123990.23	92.09	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 3:05:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	124.7	18.89	100	
11	B	6	No Gas	0.813	ppb	1.9	5676.87	1000	
23	Na	45	He	23.130	ppb	14.4	53087.13	200000	
24	Mg	45	He	8.518	ppb	16.5	3996.54	200000	
27	Al	45	He	7.348	ppb	14.4	1365.68	200000	
28	Si	45	H2	0.528	ppb	113.2	947.75	10000	
39	K	45	He	19.966	ppb	11.2	33227.05	200000	
40	Ca	45	H2	23.809	ppb	45.6	63226.79	200000	
51	V	89	He	0.013	ppb	61.1	263.35	1000	
52	Cr	89	He	0.038	ppb	5.3	1164.51	2000	
55	Mn	89	He	0.043	ppb	24.2	276.62	2000	
56	Fe	89	H2	14.760	ppb	44.9	138251.85	100000	
59	Co	89	He	0.012	ppb	13.1	191.13	1000	
60	Ni	89	He	-0.011	ppb	N/A	267.79	1000	
63	Cu	89	He	0.075	ppb	11.8	1092.31	2000	
66	Zn	89	He	0.000	ppb	4266.2	350.02	2000	
75	As	89	He	0.028	ppb	14.3	30.33	1000	
78	Se	89	H2	0.079	ppb	34.3	29.00	1000	
88	Sr	89	He	0.023	ppb	36.1	110.00	2000	
95	Mo	89	He	0.156	ppb	2.9	638.93	1000	
107	Ag	89	He	0.006	ppb	14.8	110.00	100	
111	Cd	89	He	0.011	ppb	33.7	17.78	1000	
118	Sn	159	He	0.158	ppb	14.6	870.06	1000	
121	Sb	159	No Gas	0.026	ppb	7.7	724.17	1000	
137	Ba	159	No Gas	0.007	ppb	63.0	170.19	2000	
182	W	159	No Gas	0.080	ppb	5.7	1301.52	1000	
205	Tl	209	No Gas	0.002	ppb	208.7	730.84	1000	
208	Pb	209	No Gas	0.021	ppb	13.4	1251.44	2000	
232	Th	209	No Gas	0.025	ppb	11.7	1164.70	1000	
238	U	209	No Gas	0.008	ppb	0.3	310.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7959901.50	0.6	8217096.81	96.87	29.5	120.4	
Sc	45	No Gas	17115808.33	0.6	15952466.59	107.29	29.5	120.4	
Sc	45	H2	1952941.49	0.4	1988810.56	98.2	29.5	120.4	
Sc	45	He	484660.11	1.4	477124.13	101.58	29.5	120.4	
Ge	72	No Gas	2935769.03	1.0	2777617.47	105.69	29.5	120.4	
Ge	72	H2	535710.32	0.7	580378.32	92.3	29.5	120.4	
Ge	72	He	279736.56	1.3	274469.22	101.92	29.5	120.4	
Y	89	H2	10033063.23	0.7	10106085.94	99.28	29.5	120.4	
Y	89	He	2188420.54	2.2	2217336.32	98.7	29.5	120.4	
Tb	159	No Gas	20210681.64	0.8	20085725.95	100.62	29.5	120.4	
Tb	159	He	7485579.82	1.9	7863593.35	95.19	29.5	120.4	
Bi	209	No Gas	8828077.04	0.3	9123990.23	96.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:08:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.750	ppb	1.6	187887.06	25	103	89.8	110.2	
11	B	6	No Gas	25.479	ppb	1.1	126981.44	25	101.92	89.8	110.2	
23	Na	45	He	5065.866	ppb	0.7	4443620.19	5000	101.32	89.8	110.2	
24	Mg	45	He	4962.063	ppb	1.0	2298981.06	5000	99.24	89.8	110.2	
27	Al	45	He	470.797	ppb	0.6	81416.75	500	94.16	89.8	110.2	
28	Si	45	H2	436.577	ppb	0.7	117454.71	500	87.32	89.8	110.2	> +/- 10%
39	K	45	He	4903.578	ppb	0.5	1853111.25	5000	98.07	89.8	110.2	
40	Ca	45	H2	4727.911	ppb	1.1	11479930.38	5000	94.56	89.8	110.2	
51	V	89	He	25.519	ppb	0.8	143433.37	25	102.08	89.8	110.2	
52	Cr	89	He	25.602	ppb	0.9	183234.66	25	102.41	89.8	110.2	
55	Mn	89	He	24.892	ppb	0.2	78061.34	25	99.57	89.8	110.2	
56	Fe	89	H2	4823.392	ppb	0.4	43641341.47	5000	96.47	89.8	110.2	
59	Co	89	He	25.642	ppb	1.1	300468.27	25	102.57	89.8	110.2	
60	Ni	89	He	25.595	ppb	1.5	83104.62	25	102.38	89.8	110.2	
63	Cu	89	He	25.888	ppb	0.2	227548.62	25	103.55	89.8	110.2	
66	Zn	89	He	25.197	ppb	1.5	25106.65	25	100.79	89.8	110.2	
75	As	89	He	25.245	ppb	1.1	16980.85	25	100.98	89.8	110.2	
78	Se	89	H2	23.864	ppb	0.9	8058.80	25	95.46	89.8	110.2	
88	Sr	89	He	23.458	ppb	0.6	81324.03	25	93.83	89.8	110.2	
95	Mo	89	He	25.072	ppb	0.6	100877.60	25	100.29	89.8	110.2	
107	Ag	89	He	25.180	ppb	0.4	317811.89	25	100.72	89.8	110.2	
111	Cd	89	He	24.759	ppb	0.5	37372.94	25	99.04	89.8	110.2	
118	Sn	159	He	24.639	ppb	0.9	74854.98	25	98.56	89.8	110.2	
121	Sb	159	No Gas	25.995	ppb	3.1	513698.67	25	103.98	89.8	110.2	
137	Ba	159	No Gas	25.282	ppb	2.8	195827.17	25	101.13	89.8	110.2	
182	W	159	No Gas	23.952	ppb	3.0	370273.17	25	95.81	89.8	110.2	
205	Tl	209	No Gas	25.497	ppb	2.4	714734.85	25	101.99	89.8	110.2	
208	Pb	209	No Gas	25.255	ppb	2.3	995622.95	25	101.02	89.8	110.2	
232	Th	209	No Gas	24.746	ppb	2.0	949198.28	25	98.98	89.8	110.2	
238	U	209	No Gas	24.903	ppb	2.6	917736.13	25	99.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7850079.65	2.3	8217096.81	95.53	29.5	120.4	
Sc	45	No Gas	16559013.43	3.6	15952466.59	103.8	29.5	120.4	
Sc	45	H2	1935511.25	2.0	1988810.56	97.32	29.5	120.4	
Sc	45	He	486922.47	0.3	477124.13	102.05	29.5	120.4	
Ge	72	No Gas	2841535.94	2.2	2777617.47	102.3	29.5	120.4	
Ge	72	H2	529063.11	1.4	580378.32	91.16	29.5	120.4	
Ge	72	He	277665.54	0.6	274469.22	101.16	29.5	120.4	
Y	89	H2	9898776.66	1.7	10106085.94	97.95	29.5	120.4	
Y	89	He	2192999.31	0.8	2217336.32	98.9	29.5	120.4	
Tb	159	No Gas	19914913.73	4.0	20085725.95	99.15	29.5	120.4	
Tb	159	He	7585636.41	0.1	7863593.35	96.47	29.5	120.4	
Bi	209	No Gas	8729509.00	3.4	9123990.23	95.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:10:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	42.5	168.89	0.2	
11	B	6	No Gas	0.808	ppb	10.4	5683.54	4	
23	Na	45	He	7.248	ppb	10.5	38758.72	200	
24	Mg	45	He	2.691	ppb	29.6	1293.49	20	
27	Al	45	He	1.292	ppb	34.4	321.12	20	
28	Si	45	H2	0.221	ppb	27.8	844.31	100	
39	K	45	He	6.972	ppb	19.9	27991.41	200	
40	Ca	45	H2	1.445	ppb	8.6	8240.49	20	
51	V	89	He	0.005	ppb	45.3	218.90	1	
52	Cr	89	He	0.016	ppb	20.1	993.20	1	
55	Mn	89	He	0.023	ppb	17.6	212.63	0.4	
56	Fe	89	H2	2.151	ppb	9.1	21818.10	20	
59	Co	89	He	0.004	ppb	33.4	100.01	0.2	
60	Ni	89	He	-0.053	ppb	N/A	131.11	0.4	
63	Cu	89	He	0.038	ppb	11.8	763.38	0.6	
66	Zn	89	He	0.026	ppb	61.6	371.13	2	
75	As	89	He	0.015	ppb	44.3	21.67	1	
78	Se	89	H2	0.039	ppb	22.1	14.67	1	
88	Sr	89	He	0.009	ppb	10.1	60.00	1	
95	Mo	89	He	0.116	ppb	13.9	473.36	1	
107	Ag	89	He	0.008	ppb	24.6	138.89	0.2	
111	Cd	89	He	0.007	ppb	40.7	12.59	0.2	
118	Sn	159	He	0.155	ppb	15.8	874.51	1	
121	Sb	159	No Gas	0.040	ppb	20.1	1001.15	0.2	
137	Ba	159	No Gas	0.011	ppb	85.3	200.22	0.4	
182	W	159	No Gas	0.117	ppb	10.2	1852.22	1	
205	Tl	209	No Gas	0.020	ppb	52.7	1271.48	0.2	
208	Pb	209	No Gas	0.024	ppb	30.2	1378.25	0.2	
232	Th	209	No Gas	0.111	ppb	22.2	4545.89	1	
238	U	209	No Gas	0.036	ppb	34.8	1354.96	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8007969.93	2.2	8217096.81	97.45	29.5	120.4	
Sc	45	No Gas	16372813.80	2.7	15952466.59	102.63	29.5	120.4	
Sc	45	H2	1906789.03	0.7	1988810.56	95.88	29.5	120.4	
Sc	45	He	477474.61	0.9	477124.13	100.07	29.5	120.4	
Ge	72	No Gas	2838626.70	2.0	2777617.47	102.2	29.5	120.4	
Ge	72	H2	519000.04	0.1	580378.32	89.42	29.5	120.4	
Ge	72	He	273897.10	0.4	274469.22	99.79	29.5	120.4	
Y	89	H2	9769290.82	0.5	10106085.94	96.67	29.5	120.4	
Y	89	He	2164631.41	0.4	2217336.32	97.62	29.5	120.4	
Tb	159	No Gas	19963534.98	2.4	20085725.95	99.39	29.5	120.4	
Tb	159	He	7607538.50	0.7	7863593.35	96.74	29.5	120.4	
Bi	209	No Gas	8919384.17	2.6	9123990.23	97.76	29.5	120.4	

Sample Report

Sample Name LCSWNG23IMW2

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:10:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	62.107	ppb	4.2	99233.37	100	
11	B	6	No Gas	609.585	ppb	4.3	658504.74	1000	
23	Na	45	He	9632.324	ppb	0.9	1585445.47	200000	
24	Mg	45	He	6850.683	ppb	1.1	588464.03	200000	
27	Al	45	He	2448.286	ppb	1.2	78490.42	200000	
28	Si	45	H2	1322.797	ppb	0.7	67728.88	10000	
39	K	45	He	12918.140	ppb	0.1	916428.34	200000	
40	Ca	45	H2	3280.573	ppb	0.2	1513596.99	200000	
51	V	89	He	653.903	ppb	0.2	699151.11	1000	
52	Cr	89	He	266.419	ppb	0.3	362196.59	2000	
55	Mn	89	He	661.847	ppb	0.6	394646.11	2000	
56	Fe	89	H2	1323.541	ppb	0.9	2275791.46	100000	
59	Co	89	He	679.196	ppb	0.6	1515453.23	1000	
60	Ni	89	He	669.727	ppb	0.1	412898.32	1000	
63	Cu	89	He	338.034	ppb	0.2	565134.15	2000	
66	Zn	89	He	640.985	ppb	0.5	120251.65	2000	
75	As	89	He	132.271	ppb	0.6	16942.81	1000	
78	Se	89	H2	131.184	ppb	0.7	8409.99	1000	
88	Sr	89	He	635.692	ppb	0.4	419557.02	2000	
95	Mo	89	He	138.146	ppb	0.7	105851.27	1000	
107	Ag	89	He	69.390	ppb	0.4	166797.09	100	
111	Cd	89	He	336.148	ppb	0.2	96625.71	1000	
118	Sn	159	He	623.136	ppb	0.7	385180.09	1000	
121	Sb	159	No Gas	132.052	ppb	3.4	559123.28	1000	
137	Ba	159	No Gas	2527.723	ppb	3.7	4192348.87	2000	
182	W	159	No Gas	131.304	ppb	4.0	434878.68	1000	
205	Tl	209	No Gas	136.035	ppb	3.6	854381.66	1000	
208	Pb	209	No Gas	132.866	ppb	4.3	1173417.33	2000	
232	Th	209	No Gas	130.235	ppb	5.3	1118860.88	1000	
238	U	209	No Gas	128.830	ppb	5.5	1063466.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8597661.00	1.9	8217096.81	104.63	29.5	120.4	
Sc	45	No Gas	16149731.35	2.2	15952466.59	101.24	29.5	120.4	
Sc	45	H2	1833864.72	1.1	1988810.56	92.21	29.5	120.4	
Sc	45	He	451345.53	0.5	477124.13	94.6	29.5	120.4	
Ge	72	No Gas	2792317.14	2.4	2777617.47	100.53	29.5	120.4	
Ge	72	H2	517686.20	1.6	580378.32	89.2	29.5	120.4	
Ge	72	He	256873.63	0.3	274469.22	93.59	29.5	120.4	
Y	89	H2	9395661.79	1.2	10106085.94	92.97	29.5	120.4	
Y	89	He	2088039.03	0.5	2217336.32	94.17	29.5	120.4	
Tb	159	No Gas	21323516.63	1.3	20085725.95	106.16	29.5	120.4	
Tb	159	He	7750393.15	0.8	7863593.35	98.56	29.5	120.4	
Bi	209	No Gas	9779356.41	2.2	9123990.23	107.18	29.5	120.4	

Sample Report

Sample Name PBWNG23IMW2

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:13:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	21.6	54.45	100	
11	B	6	No Gas	8.555	ppb	11.8	10712.15	1000	
23	Na	45	He	315.270	ppb	1.6	82216.33	200000	
24	Mg	45	He	9.898	ppb	14.3	924.55	200000	
27	Al	45	He	6.773	ppb	5.3	315.57	200000	
28	Si	45	H2	18.388	ppb	33.0	1725.36	10000	
39	K	45	He	-8.382	ppb	N/A	23628.93	200000	
40	Ca	45	H2	13.898	ppb	18.2	11287.05	200000	
51	V	89	He	0.399	ppb	19.9	615.60	1000	
52	Cr	89	He	0.372	ppb	8.6	1373.15	2000	
55	Mn	89	He	0.614	ppb	11.3	509.26	2000	
56	Fe	89	H2	4.165	ppb	8.0	9994.72	100000	
59	Co	89	He	0.120	ppb	31.1	317.80	1000	
60	Ni	89	He	-0.143	ppb	N/A	204.46	1000	
63	Cu	89	He	5.951	ppb	2.6	10490.94	2000	
66	Zn	89	He	5.025	ppb	3.3	1290.11	2000	
75	As	89	He	0.120	ppb	44.7	26.67	1000	
78	Se	89	H2	0.149	ppb	33.5	11.50	1000	
88	Sr	89	He	0.172	ppb	23.8	143.34	2000	
95	Mo	89	He	0.239	ppb	9.3	198.90	1000	
107	Ag	89	He	0.029	ppb	28.2	105.56	100	
111	Cd	89	He	0.070	ppb	18.4	21.85	1000	
118	Sn	159	He	1.419	ppb	9.8	1296.77	1000	
121	Sb	159	No Gas	0.276	ppb	1.3	1404.98	1000	
137	Ba	159	No Gas	1.675	ppb	13.9	2940.30	2000	
182	W	159	No Gas	0.220	ppb	14.1	787.57	1000	
205	Tl	209	No Gas	0.001	ppb	2417.1	777.57	1000	
208	Pb	209	No Gas	1.096	ppb	8.0	10219.77	2000	
232	Th	209	No Gas	0.764	ppb	9.2	6869.57	1000	
238	U	209	No Gas	0.079	ppb	32.1	667.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8375975.68	3.1	8217096.81	101.93	29.5	120.4	
Sc	45	No Gas	16262014.57	3.0	15952466.59	101.94	29.5	120.4	
Sc	45	H2	1892258.31	7.5	1988810.56	95.15	29.5	120.4	
Sc	45	He	454361.64	1.6	477124.13	95.23	29.5	120.4	
Ge	72	No Gas	2808844.52	3.1	2777617.47	101.12	29.5	120.4	
Ge	72	H2	532439.90	5.6	580378.32	91.74	29.5	120.4	
Ge	72	He	259103.36	1.4	274469.22	94.4	29.5	120.4	
Y	89	H2	9735592.86	7.5	10106085.94	96.33	29.5	120.4	
Y	89	He	2114498.49	1.6	2217336.32	95.36	29.5	120.4	
Tb	159	No Gas	21585613.57	1.9	20085725.95	107.47	29.5	120.4	
Tb	159	He	7807643.22	1.4	7863593.35	99.29	29.5	120.4	
Bi	209	No Gas	9862761.48	2.1	9123990.23	108.1	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:15:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	252.557	ppb	0.7	389666.87	100	
11	B	6	No Gas	1866.338	ppb	0.8	1943449.38	1000	
23	Na	45	He	15.675	ppb	24.9	33853.96	200000	
24	Mg	45	He	9.558	ppb	7.4	902.32	200000	
27	Al	45	He	1113.266	ppb	0.6	36319.31	200000	
28	Si	45	H2	121.719	ppb	4.6	7059.65	10000	
39	K	45	He	-15.337	ppb	N/A	23365.28	200000	
40	Ca	45	H2	17.638	ppb	1.3	12970.77	200000	
51	V	89	He	396.084	ppb	0.3	433493.37	1000	
52	Cr	89	He	732.605	ppb	0.4	1017790.02	2000	
55	Mn	89	He	1768.601	ppb	0.3	1079080.80	2000	
56	Fe	89	H2	3320.970	ppb	0.6	5858477.80	100000	
59	Co	89	He	809.630	ppb	0.3	1848780.77	1000	
60	Ni	89	He	1721.245	ppb	0.8	1085557.14	1000	
63	Cu	89	He	327.425	ppb	0.5	560233.49	2000	
66	Zn	89	He	1088.850	ppb	1.3	208824.34	2000	
75	As	89	He	222.687	ppb	0.7	29184.61	1000	
78	Se	89	H2	516.969	ppb	0.6	34020.35	1000	
88	Sr	89	He	107.393	ppb	1.2	72562.10	2000	
95	Mo	89	He	374.113	ppb	0.2	293341.42	1000	
107	Ag	89	He	842.000	ppb	1.1	2070917.11	100	>LDR
111	Cd	89	He	787.656	ppb	0.1	231715.62	1000	
118	Sn	159	He	1.438	ppb	3.6	1331.23	1000	
121	Sb	159	No Gas	301.927	ppb	0.1	1281511.06	1000	
137	Ba	159	No Gas	1930.115	ppb	0.7	3209530.88	2000	
182	W	159	No Gas	0.101	ppb	22.3	383.78	1000	
205	Tl	209	No Gas	569.360	ppb	0.6	3571658.77	1000	
208	Pb	209	No Gas	1021.329	ppb	1.1	9013277.32	2000	
232	Th	209	No Gas	0.126	ppb	22.0	1314.87	1000	
238	U	209	No Gas	0.021	ppb	113.5	180.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8298264.85	0.7	8217096.81	100.99	29.5	120.4	
Sc	45	No Gas	16115140.41	1.0	15952466.59	101.02	29.5	120.4	
Sc	45	H2	1870790.79	1.6	1988810.56	94.07	29.5	120.4	
Sc	45	He	458647.43	1.3	477124.13	96.13	29.5	120.4	
Ge	72	No Gas	2806732.73	0.7	2777617.47	101.05	29.5	120.4	
Ge	72	H2	531019.40	1.0	580378.32	91.5	29.5	120.4	
Ge	72	He	262734.14	0.3	274469.22	95.72	29.5	120.4	
Y	89	H2	9646451.74	1.8	10106085.94	95.45	29.5	120.4	
Y	89	He	2136968.70	0.4	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21373760.79	1.5	20085725.95	106.41	29.5	120.4	
Tb	159	He	7938905.09	0.1	7863593.35	100.96	29.5	120.4	
Bi	209	No Gas	9769566.20	1.0	9123990.23	107.08	29.5	120.4	

Sample Report

Sample Name LCSONG28IMS1

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:18:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.171	ppb	5.0	80559.59	100	
11	B	6	No Gas	506.013	ppb	3.9	549707.62	1000	
23	Na	45	He	7652.236	ppb	1.3	1289497.89	200000	
24	Mg	45	He	5452.238	ppb	1.7	477111.50	200000	
27	Al	45	He	1942.115	ppb	1.6	63440.41	200000	
28	Si	45	H2	988.485	ppb	2.2	51007.64	10000	
39	K	45	He	10501.062	ppb	1.4	763431.16	200000	
40	Ca	45	H2	2608.050	ppb	0.6	1209080.04	200000	
51	V	89	He	522.982	ppb	1.1	572352.12	1000	
52	Cr	89	He	215.837	ppb	1.6	300493.40	2000	
55	Mn	89	He	527.406	ppb	1.6	321910.42	2000	
56	Fe	89	H2	1066.627	ppb	0.5	1874993.08	100000	
59	Co	89	He	543.429	ppb	1.0	1241030.49	1000	
60	Ni	89	He	543.157	ppb	0.8	342793.95	1000	
63	Cu	89	He	271.066	ppb	0.9	463901.40	2000	
66	Zn	89	He	515.085	ppb	1.0	98972.76	2000	
75	As	89	He	104.712	ppb	0.7	13730.26	1000	
78	Se	89	H2	103.651	ppb	0.4	6792.18	1000	
88	Sr	89	He	506.847	ppb	1.7	342383.60	2000	
95	Mo	89	He	108.232	ppb	0.6	84877.86	1000	
107	Ag	89	He	55.603	ppb	0.6	136798.49	100	
111	Cd	89	He	270.014	ppb	1.0	79439.30	1000	
118	Sn	159	He	544.698	ppb	1.2	344653.65	1000	
121	Sb	159	No Gas	103.494	ppb	4.1	449166.24	1000	
137	Ba	159	No Gas	1982.191	ppb	4.3	3369343.00	2000	
182	W	159	No Gas	102.271	ppb	3.8	347185.81	1000	
205	Tl	209	No Gas	108.762	ppb	3.7	688410.47	1000	
208	Pb	209	No Gas	106.045	ppb	4.3	943768.32	2000	
232	Th	209	No Gas	104.291	ppb	4.5	902962.59	1000	
238	U	209	No Gas	105.413	ppb	5.2	876885.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8640513.54	1.7	8217096.81	105.15	29.5	120.4	
Sc	45	No Gas	16450602.52	2.5	15952466.59	103.12	29.5	120.4	
Sc	45	H2	1841240.99	0.6	1988810.56	92.58	29.5	120.4	
Sc	45	He	459786.99	1.3	477124.13	96.37	29.5	120.4	
Ge	72	No Gas	2826343.51	1.6	2777617.47	101.75	29.5	120.4	
Ge	72	H2	522434.64	0.5	580378.32	90.02	29.5	120.4	
Ge	72	He	262833.36	0.9	274469.22	95.76	29.5	120.4	
Y	89	H2	9602929.36	0.5	10106085.94	95.02	29.5	120.4	
Y	89	He	2137077.12	0.5	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21857578.28	1.7	20085725.95	108.82	29.5	120.4	
Tb	159	He	7932188.56	0.5	7863593.35	100.87	29.5	120.4	
Bi	209	No Gas	9851646.82	1.4	9123990.23	107.98	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	023LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:22:09 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	58.855	ppb	3.6	95756.04	50	23.54	79.5	120.4	
B	11	6	No Gas	577.808	ppb	3.0	635729.37	500	23.11	79.5	120.4	
Na	23	45	He	9101.228	ppb	1.7	1515872.45	7500	24.27	79.5	120.4	6020□ DoD
Mg	24	45	He	6470.890	ppb	1.1	561860.42	5000	25.88	79.5	120.4	6020□ DoD
Al	27	45	He	2309.201	ppb	1.6	74832.91	2000	23.09	79.5	120.4	
Si	28	45	H2	1162.673	ppb	1.9	61957.22	1000	23.25	0	200	
K	39	45	He	12114.548	ppb	0.6	870245.46	10000	24.23	79.5	120.4	6020□ DoD
Ca	40	45	H2	2952.589	ppb	1.7	1416043.97	2500	23.62	79.5	120.4	DoD
V	51	89	He	618.194	ppb	0.1	672417.36	500	24.73	79.5	120.4	6020□ DoD
Cr	52	89	He	253.641	ppb	0.2	350835.94	200	25.36	79.5	120.4	6020□ DoD
Mn	55	89	He	619.592	ppb	0.7	375860.75	500	24.78	79.5	120.4	6020□ DoD
Fe	56	89	H2	1182.697	ppb	1.6	2146576.45	1000	23.65	79.5	120.4	DoD
Co	59	89	He	645.688	ppb	0.9	1465576.66	500	25.83	79.5	120.4	6020□ DoD
Ni	60	89	He	642.008	ppb	0.6	402666.57	500	25.68	79.5	120.4	6020□ DoD
Cu	63	89	He	319.962	ppb	0.2	544198.01	250	25.6	79.5	120.4	6020□ DoD
Zn	66	89	He	608.988	ppb	0.7	116245.35	500	24.36	79.5	120.4	6020□ DoD
As	75	89	He	125.367	ppb	1.3	16337.02	100	25.07	79.5	120.4	6020□ DoD
Se	78	89	H2	118.758	ppb	1.4	8035.79	100	23.75	79.5	120.4	
Sr	88	89	He	599.982	ppb	0.7	402844.46	500	24	79.5	120.4	DoD
Mo	95	89	He	129.705	ppb	1.1	101102.67	100	25.94	79.5	120.4	6020□ DoD
Ag	107	89	He	65.889	ppb	0.4	161121.93	50	26.36	79.5	120.4	6020□ DoD
Cd	111	89	He	319.679	ppb	0.9	93482.99	250	25.57	79.5	120.4	6020□ DoD
Sn	118	159	He	590.381	ppb	0.5	371982.62	500	23.62	79.5	120.4	DoD
Sb	121	159	No Gas	124.479	ppb	3.4	532713.45	100	24.9	79.5	120.4	6020□ DoD
Ba	137	159	No Gas	2365.631	ppb	2.7	3965733.72	2000	23.66	79.5	120.4	DoD
W	182	159	No Gas	122.871	ppb	3.7	411315.12	100	24.57	79.5	120.4	6020□ DoD
Tl	205	209	No Gas	130.529	ppb	2.6	817821.95	100	26.11	79.5	120.4	6020□ DoD
[Pb]	206	209	No Gas	125.268	ppb	3.1	280798.48	100	25.05	79.5	120.4	6020□ DoD
[Pb]	207	209	No Gas	124.465	ppb	3.2	243257.24	100	24.89	79.5	120.4	6020□ DoD
Pb	208	209	No Gas	126.117	ppb	3.4	1111151.24	100	25.22	79.5	120.4	6020□ DoD
Th	232	209	No Gas	123.476	ppb	4.1	1058308.67	100	24.7	79.5	120.4	6020□ DoD
U	238	209	No Gas	122.524	ppb	4.1	1009069.44	100	24.5	79.5	120.4	6020□ DoD

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8753136.47	1.5	8217096.81	106.52	29.5	120.4	
Sc	45	No Gas	16328359.24	1.2	15952466.59	102.36	29.5	120.4	
Sc	45	H2	1905725.19	0.6	1988810.56	95.82	29.5	120.4	
Sc	45	He	456257.06	1.2	477124.13	95.63	29.5	120.4	
Ge	72	No Gas	2818020.31	1.9	2777617.47	101.45	29.5	120.4	
Ge	72	H2	536615.25	1.8	580378.32	92.46	29.5	120.4	
Ge	72	He	261561.88	0.8	274469.22	95.3	29.5	120.4	
Y	89	H2	9916963.59	0.8	10106085.94	98.13	29.5	120.4	
Y	89	He	2124154.27	0.4	2217336.32	95.8	29.5	120.4	
Tb	159	No Gas	21550305.79	1.0	20085725.95	107.29	29.5	120.4	
Tb	159	He	7899893.29	0.6	7863593.35	100.46	29.5	120.4	
Bi	209	No Gas	9753033.11	1.6	9123990.23	106.89	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG28IMS1
File Name	024_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:24:49 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.047	ppb	19.4	81.11	0.5	
B	11	6	No Gas	11.117	ppb	9.0	13695.86	10	PB 6020 Fails DoD
Na	23	45	He	-17.046	ppb	N/A	28018.19	500	
Mg	24	45	He	15.173	ppb	6.9	1369.06	50	
Al	27	45	He	13.795	ppb	5.6	537.81	50	
Si	28	45	H2	7.648	ppb	9.5	1174.69	250	
K	39	45	He	20.443	ppb	7.7	25444.61	500	
Ca	40	45	H2	25.365	ppb	2.7	16713.70	50	
V	51	89	He	0.326	ppb	25.7	533.37	2.5	
Cr	52	89	He	0.978	ppb	5.2	2189.11	2.5	
Mn	55	89	He	0.764	ppb	4.4	595.24	1	
Fe	56	89	H2	25.699	ppb	1.2	48849.10	50	
Co	59	89	He	0.144	ppb	26.6	368.92	0.5	
Ni	60	89	He	0.397	ppb	17.2	537.81	1	
Cu	63	89	He	0.497	ppb	10.1	1254.54	1.5	
Zn	66	89	He	3.047	ppb	26.9	907.84	5	
As	75	89	He	0.118	ppb	30.8	26.33	2.5	
Se	78	89	H2	0.152	ppb	10.6	12.00	2.5	
Sr	88	89	He	0.138	ppb	2.3	120.00	2.5	
Mo	95	89	He	0.240	ppb	4.7	198.90	2.5	
Ag	107	89	He	0.051	ppb	15.6	157.78	0.5	
Cd	111	89	He	0.067	ppb	26.7	20.74	0.5	
Sn	118	159	He	45.688	ppb	1.1	28908.52	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	23.2	824.28	0.5	
Ba	137	159	No Gas	1.432	ppb	33.3	2526.42	1	PB 6020 Fails DoD
W	182	159	No Gas	0.244	ppb	10.5	867.68	2.5	
Tl	205	209	No Gas	0.023	ppb	161.7	907.72	0.5	
Pb	208	209	No Gas	0.267	ppb	16.5	2829.96	0.5	
Th	232	209	No Gas	0.757	ppb	22.9	6776.23	2.5	
U	238	209	No Gas	0.110	ppb	44.2	914.40	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8567256.54	1.2	8217096.81	104.26	29.5	120.4	
Sc	45	No Gas	16074387.57	0.3	15952466.59	100.76	29.5	120.4	
Sc	45	H2	1883905.73	0.2	1988810.56	94.73	29.5	120.4	
Sc	45	He	450954.98	0.5	477124.13	94.52	29.5	120.4	
Ge	72	No Gas	2794993.49	1.0	2777617.47	100.63	29.5	120.4	
Ge	72	H2	531362.27	0.2	580378.32	91.55	29.5	120.4	
Ge	72	He	258235.86	0.8	274469.22	94.09	29.5	120.4	
Y	89	H2	9836562.26	0.7	10106085.94	97.33	29.5	120.4	
Y	89	He	2099307.31	1.4	2217336.32	94.68	29.5	120.4	
Tb	159	No Gas	21575522.73	0.4	20085725.95	107.42	29.5	120.4	
Tb	159	He	7827591.34	0.9	7863593.35	99.54	29.5	120.4	
Bi	209	No Gas	9820566.78	0.3	9123990.23	107.63	29.5	120.4	

Sample Report

Sample Name SN6056-001

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:27:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.547	ppb	5.4	8678.48	100	
11	B	6	No Gas	60.513	ppb	3.5	65529.63	1000	
23	Na	45	He	376.665	ppb	1.5	93873.15	200000	
24	Mg	45	He	30544.015	ppb	1.4	2689019.81	200000	
27	Al	45	He	112740.493	ppb	2.2	3699901.13	200000	
28	Si	45	H2	2768.574	ppb	1.5	145532.95	10000	
39	K	45	He	12355.430	ppb	1.7	899456.00	200000	
40	Ca	45	H2	27808.970	ppb	0.7	13214997.03	200000	
51	V	89	He	195.271	ppb	2.1	231184.67	1000	
52	Cr	89	He	145.435	ppb	1.3	219241.84	2000	
55	Mn	89	He	4430.226	ppb	2.3	2922458.68	2000	
56	Fe	89	H2	183450.083	ppb	0.7	349812450.13	100000	
59	Co	89	He	70.725	ppb	1.4	174683.68	1000	
60	Ni	89	He	193.185	ppb	1.3	132036.56	1000	
63	Cu	89	He	180.846	ppb	2.1	334793.49	2000	
66	Zn	89	He	838.810	ppb	1.9	174032.56	2000	
75	As	89	He	68.170	ppb	1.8	9669.09	1000	
78	Se	89	H2	3.762	ppb	5.0	269.49	1000	
88	Sr	89	He	76.897	ppb	2.9	56189.14	2000	
95	Mo	89	He	16.706	ppb	3.7	14178.92	1000	
107	Ag	89	He	0.595	ppb	4.0	1621.27	100	
111	Cd	89	He	3.146	ppb	3.2	1002.27	1000	
118	Sn	159	He	51.298	ppb	3.2	32770.61	1000	
121	Sb	159	No Gas	1.318	ppb	2.9	5794.39	1000	
137	Ba	159	No Gas	619.601	ppb	3.2	1027188.94	2000	
182	W	159	No Gas	0.520	ppb	7.8	1772.11	1000	
205	Tl	209	No Gas	2.762	ppb	7.7	17488.16	1000	
208	Pb	209	No Gas	313.047	ppb	2.8	2673118.28	2000	
232	Th	209	No Gas	26.976	ppb	2.6	224357.27	1000	
238	U	209	No Gas	8.040	ppb	5.3	64186.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414272.10	1.8	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	16382276.28	1.9	15952466.59	102.69	29.5	120.4	
Sc	45	H2	1893826.64	1.9	1988810.56	95.22	29.5	120.4	
Sc	45	He	462644.90	0.8	477124.13	96.97	29.5	120.4	
Ge	72	No Gas	2767794.29	1.7	2777617.47	99.65	29.5	120.4	
Ge	72	H2	515788.14	1.7	580378.32	88.87	29.5	120.4	
Ge	72	He	259776.88	0.6	274469.22	94.65	29.5	120.4	
Y	89	H2	10430929.52	1.7	10106085.94	103.21	29.5	120.4	
Y	89	He	2311003.27	1.1	2217336.32	104.22	29.5	120.4	
Tb	159	No Gas	21313525.93	1.6	20085725.95	106.11	29.5	120.4	
Tb	159	He	7918335.78	1.7	7863593.35	100.7	29.5	120.4	
Bi	209	No Gas	9454199.07	1.5	9123990.23	103.62	29.5	120.4	

Sample Report

Sample Name SN6056-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:30:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.839	ppb	5.1	9108.71	100	
11	B	6	No Gas	63.371	ppb	2.4	68352.58	1000	
23	Na	45	He	395.050	ppb	2.3	96432.89	200000	
24	Mg	45	He	32267.566	ppb	1.0	2826741.31	200000	
27	Al	45	He	118713.786	ppb	1.4	3876790.12	200000	
28	Si	45	H2	2356.790	ppb	1.4	123802.46	10000	
39	K	45	He	11727.522	ppb	1.8	850753.01	200000	
40	Ca	45	H2	32790.132	ppb	0.2	15554122.96	200000	
51	V	89	He	202.695	ppb	0.7	239804.35	1000	
52	Cr	89	He	147.020	ppb	1.0	221455.22	2000	
55	Mn	89	He	5184.177	ppb	0.9	3417477.23	2000	
56	Fe	89	H2	191409.471	ppb	0.5	368571248.27	100000	
59	Co	89	He	76.302	ppb	1.3	188314.34	1000	
60	Ni	89	He	184.529	ppb	0.4	126043.65	1000	
63	Cu	89	He	216.206	ppb	0.3	399898.64	2000	
66	Zn	89	He	993.500	ppb	1.6	205909.80	2000	
75	As	89	He	70.853	ppb	0.5	10042.05	1000	
78	Se	89	H2	4.319	ppb	4.7	312.32	1000	
88	Sr	89	He	83.602	ppb	1.8	61044.01	2000	
95	Mo	89	He	17.547	ppb	2.0	14880.84	1000	
107	Ag	89	He	0.631	ppb	3.5	1715.73	100	
111	Cd	89	He	3.900	ppb	0.8	1241.18	1000	
118	Sn	159	He	50.411	ppb	1.6	32045.57	1000	
121	Sb	159	No Gas	1.363	ppb	3.4	5961.33	1000	
137	Ba	159	No Gas	614.680	ppb	2.3	1014612.47	2000	
182	W	159	No Gas	0.533	ppb	9.5	1805.48	1000	
205	Tl	209	No Gas	2.837	ppb	5.5	18019.55	1000	
208	Pb	209	No Gas	253.150	ppb	3.4	2170958.91	2000	
232	Th	209	No Gas	26.828	ppb	4.3	224038.99	1000	
238	U	209	No Gas	8.700	ppb	4.3	69759.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8389790.95	1.6	8217096.81	102.1	29.5	120.4	
Sc	45	No Gas	16252937.99	0.9	15952466.59	101.88	29.5	120.4	
Sc	45	H2	1890615.16	1.0	1988810.56	95.06	29.5	120.4	
Sc	45	He	460355.02	0.8	477124.13	96.49	29.5	120.4	
Ge	72	No Gas	2767349.65	2.4	2777617.47	99.63	29.5	120.4	
Ge	72	H2	514796.66	1.0	580378.32	88.7	29.5	120.4	
Ge	72	He	259144.31	0.3	274469.22	94.42	29.5	120.4	
Y	89	H2	10533677.58	1.1	10106085.94	104.23	29.5	120.4	
Y	89	He	2309134.46	0.5	2217336.32	104.14	29.5	120.4	
Tb	159	No Gas	21215283.57	0.5	20085725.95	105.62	29.5	120.4	
Tb	159	He	7875383.98	0.5	7863593.35	100.15	29.5	120.4	
Bi	209	No Gas	9495985.13	1.9	9123990.23	104.08	29.5	120.4	

Sample Report

Sample Name SN6056-003

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:32:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.835	ppb	2.0	8953.06	100	
11	B	6	No Gas	61.934	ppb	2.5	65719.33	1000	
23	Na	45	He	403.730	ppb	1.4	97101.64	200000	
24	Mg	45	He	32785.013	ppb	0.9	2849632.29	200000	
27	Al	45	He	123748.440	ppb	1.1	4009670.46	200000	
28	Si	45	H2	2585.575	ppb	1.0	135181.04	10000	
39	K	45	He	12791.196	ppb	0.6	918495.98	200000	
40	Ca	45	H2	32343.356	ppb	0.3	15278967.83	200000	
51	V	89	He	213.740	ppb	1.0	251011.65	1000	
52	Cr	89	He	153.958	ppb	0.3	230173.43	2000	
55	Mn	89	He	4695.812	ppb	0.5	3072982.62	2000	
56	Fe	89	H2	194980.460	ppb	0.5	372888175.04	100000	
59	Co	89	He	77.564	ppb	0.8	190031.17	1000	
60	Ni	89	He	187.346	ppb	0.9	127025.58	1000	
63	Cu	89	He	183.233	ppb	0.7	336501.87	2000	
66	Zn	89	He	855.148	ppb	0.4	176000.86	2000	
75	As	89	He	71.782	ppb	1.4	10099.10	1000	
78	Se	89	H2	4.347	ppb	1.3	312.16	1000	
88	Sr	89	He	86.548	ppb	0.2	62735.34	2000	
95	Mo	89	He	17.499	ppb	1.9	14731.78	1000	
107	Ag	89	He	0.610	ppb	6.0	1646.83	100	
111	Cd	89	He	3.411	ppb	1.7	1077.83	1000	
118	Sn	159	He	54.805	ppb	0.6	34564.10	1000	
121	Sb	159	No Gas	1.278	ppb	3.1	5574.02	1000	
137	Ba	159	No Gas	613.893	ppb	1.5	1008093.76	2000	
182	W	159	No Gas	0.502	ppb	3.9	1695.35	1000	
205	Tl	209	No Gas	3.020	ppb	3.9	18975.82	1000	
208	Pb	209	No Gas	250.436	ppb	2.3	2129323.67	2000	
232	Th	209	No Gas	28.109	ppb	2.9	232747.78	1000	
238	U	209	No Gas	8.540	ppb	2.7	67897.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8247562.69	0.7	8217096.81	100.37	29.5	120.4	
Sc	45	No Gas	15985430.70	0.1	15952466.59	100.21	29.5	120.4	
Sc	45	H2	1882830.00	1.1	1988810.56	94.67	29.5	120.4	
Sc	45	He	456740.13	0.3	477124.13	95.73	29.5	120.4	
Ge	72	No Gas	2723166.38	0.3	2777617.47	98.04	29.5	120.4	
Ge	72	H2	504360.18	0.9	580378.32	86.9	29.5	120.4	
Ge	72	He	257722.23	0.6	274469.22	93.9	29.5	120.4	
Y	89	H2	10461881.72	1.2	10106085.94	103.52	29.5	120.4	
Y	89	He	2292266.04	0.4	2217336.32	103.38	29.5	120.4	
Tb	159	No Gas	21103607.60	0.6	20085725.95	105.07	29.5	120.4	
Tb	159	He	7820851.55	0.4	7863593.35	99.46	29.5	120.4	
Bi	209	No Gas	9411037.27	0.4	9123990.23	103.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:35:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.039	ppb	2.1	79850.60	50	20.42	79.5	120.4	
B	11	6	No Gas	498.979	ppb	2.5	528103.56	500	19.96	79.5	120.4	
Na	23	45	He	8243.336	ppb	0.7	1351631.51	7500	21.98	79.5	120.4	
Mg	24	45	He	5489.615	ppb	0.9	468241.44	5000	21.96	79.5	120.4	
Al	27	45	He	2022.728	ppb	0.6	64403.47	2000	20.23	79.5	120.4	
Si	28	45	H2	1004.144	ppb	1.0	51044.76	1000	20.08	0	200	
K	39	45	He	10729.725	ppb	0.8	759845.70	10000	21.46	79.5	120.4	
Ca	40	45	H2	2630.997	ppb	0.9	1201791.68	2500	21.05	79.5	120.4	
V	51	89	He	534.419	ppb	0.7	574488.01	500	21.38	79.5	120.4	
Cr	52	89	He	218.028	ppb	0.5	298150.87	200	21.8	79.5	120.4	
Mn	55	89	He	532.240	ppb	1.0	319093.83	500	21.29	79.5	120.4	
Fe	56	89	H2	1106.255	ppb	0.3	1934088.11	1000	22.13	79.5	120.4	
Co	59	89	He	555.547	ppb	0.9	1246176.69	500	22.22	79.5	120.4	
Ni	60	89	He	555.589	ppb	1.2	344396.23	500	22.22	79.5	120.4	
Cu	63	89	He	276.482	ppb	0.6	464793.13	250	22.12	79.5	120.4	
Zn	66	89	He	525.614	ppb	1.0	99193.92	500	21.02	79.5	120.4	
As	75	89	He	107.898	ppb	1.0	13897.46	100	21.58	79.5	120.4	
Se	78	89	H2	104.315	ppb	0.6	6798.85	100	20.86	79.5	120.4	
Sr	88	89	He	519.043	ppb	0.5	344404.49	500	20.76	79.5	120.4	
Mo	95	89	He	112.674	ppb	1.0	86792.95	100	22.54	79.5	120.4	
Ag	107	89	He	57.228	ppb	0.3	138304.92	50	22.89	79.5	120.4	
Cd	111	89	He	278.198	ppb	1.4	80394.00	250	22.26	79.5	120.4	
Sn	118	159	He	507.573	ppb	0.7	320872.62	500	20.3	79.5	120.4	
Sb	121	159	No Gas	107.088	ppb	0.7	456357.25	100	21.42	79.5	120.4	
Ba	137	159	No Gas	2052.508	ppb	0.9	3425922.00	2000	20.53	79.5	120.4	
W	182	159	No Gas	104.342	ppb	3.5	347809.61	100	20.87	79.5	120.4	
Tl	205	209	No Gas	111.730	ppb	3.5	695740.63	100	22.35	79.5	120.4	
[Pb]	206	209	No Gas	108.308	ppb	3.6	241284.90	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	107.050	ppb	3.2	207938.21	100	21.41	79.5	120.4	
Pb	208	209	No Gas	109.521	ppb	2.9	959030.38	100	21.9	79.5	120.4	
Th	232	209	No Gas	108.692	ppb	3.7	925898.07	100	21.74	79.5	120.4	
U	238	209	No Gas	109.969	ppb	3.5	900102.97	100	21.99	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414203.28	0.3	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	15977792.23	1.1	15952466.59	100.16	29.5	120.4	
Sc	45	H2	1814197.17	0.2	1988810.56	91.22	29.5	120.4	
Sc	45	He	448141.29	0.7	477124.13	93.93	29.5	120.4	
Ge	72	No Gas	2783970.90	0.6	2777617.47	100.23	29.5	120.4	
Ge	72	H2	513579.99	0.7	580378.32	88.49	29.5	120.4	
Ge	72	He	259076.02	1.2	274469.22	94.39	29.5	120.4	
Y	89	H2	9551147.48	0.5	10106085.94	94.51	29.5	120.4	
Y	89	He	2099230.89	0.8	2217336.32	94.67	29.5	120.4	
Tb	159	No Gas	21453039.96	0.3	20085725.95	106.81	29.5	120.4	
Tb	159	He	7924243.91	1.0	7863593.35	100.77	29.5	120.4	
Bi	209	No Gas	9691154.98	1.0	9123990.23	106.22	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:38:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.307	ppb	2.3	186364.53	25	97.23	89.8	110.2	
11	B	6	No Gas	24.783	ppb	2.4	129810.02	25	99.13	89.8	110.2	
23	Na	45	He	4936.336	ppb	0.4	4056498.54	5000	98.73	89.8	110.2	
24	Mg	45	He	4919.331	ppb	0.4	2134834.12	5000	98.39	89.8	110.2	
27	Al	45	He	472.805	ppb	1.1	76586.68	500	94.56	89.8	110.2	
28	Si	45	H2	462.569	ppb	0.6	120450.47	500	92.51	89.8	110.2	
39	K	45	He	4781.172	ppb	0.4	1692994.11	5000	95.62	89.8	110.2	
40	Ca	45	H2	4777.773	ppb	0.6	11234613.45	5000	95.56	89.8	110.2	
51	V	89	He	24.416	ppb	0.5	134610.44	25	97.66	89.8	110.2	
52	Cr	89	He	24.654	ppb	0.8	173094.86	25	98.62	89.8	110.2	
55	Mn	89	He	24.278	ppb	0.7	74675.88	25	97.11	89.8	110.2	
56	Fe	89	H2	4810.929	ppb	0.4	43014883.79	5000	96.22	89.8	110.2	
59	Co	89	He	24.770	ppb	0.4	284694.68	25	99.08	89.8	110.2	
60	Ni	89	He	24.880	ppb	0.9	79241.46	25	99.52	89.8	110.2	
63	Cu	89	He	25.311	ppb	0.6	218208.61	25	101.24	89.8	110.2	
66	Zn	89	He	24.445	ppb	0.8	23897.82	25	97.78	89.8	110.2	
75	As	89	He	24.331	ppb	0.5	16052.98	25	97.32	89.8	110.2	
78	Se	89	H2	24.536	ppb	0.5	8188.03	25	98.14	89.8	110.2	
88	Sr	89	He	23.538	ppb	0.2	80036.55	25	94.15	89.8	110.2	
95	Mo	89	He	24.932	ppb	0.5	98389.91	25	99.73	89.8	110.2	
107	Ag	89	He	25.531	ppb	0.3	316052.43	25	102.12	89.8	110.2	
111	Cd	89	He	25.390	ppb	0.7	37589.53	25	101.56	89.8	110.2	
118	Sn	159	He	23.290	ppb	0.2	75049.23	25	93.16	89.8	110.2	
121	Sb	159	No Gas	24.954	ppb	2.3	531308.95	25	99.82	89.8	110.2	
137	Ba	159	No Gas	24.650	ppb	2.7	205683.89	25	98.6	89.8	110.2	
182	W	159	No Gas	24.112	ppb	2.3	401583.83	25	96.45	89.8	110.2	
205	Tl	209	No Gas	25.279	ppb	2.7	790102.97	25	101.12	89.8	110.2	
208	Pb	209	No Gas	24.960	ppb	2.7	1097068.96	25	99.84	89.8	110.2	
232	Th	209	No Gas	24.443	ppb	2.5	1045307.58	25	97.77	89.8	110.2	
238	U	209	No Gas	24.488	ppb	3.1	1006170.52	25	97.95	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8249750.82	2.0	8217096.81	100.4	29.5	120.4	
Sc	45	No Gas	15955520.89	2.0	15952466.59	100.02	29.5	120.4	
Sc	45	H2	1874122.13	0.7	1988810.56	94.23	29.5	120.4	
Sc	45	He	456076.55	0.7	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2815387.61	2.3	2777617.47	101.36	29.5	120.4	
Ge	72	H2	546262.17	1.0	580378.32	94.12	29.5	120.4	
Ge	72	He	265997.74	1.0	274469.22	96.91	29.5	120.4	
Y	89	H2	9781356.95	0.6	10106085.94	96.79	29.5	120.4	
Y	89	He	2150865.44	0.8	2217336.32	97	29.5	120.4	
Tb	159	No Gas	21444543.57	1.8	20085725.95	106.77	29.5	120.4	
Tb	159	He	8043335.92	0.7	7863593.35	102.29	29.5	120.4	
Bi	209	No Gas	9730939.35	2.0	9123990.23	106.65	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:40:53 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.031	ppb	34.1	243.35	0.2	
11	B	6	No Gas	0.953	ppb	6.8	6555.06	4	
23	Na	45	He	-11.487	ppb	N/A	21409.69	200	
24	Mg	45	He	0.807	ppb	10.3	411.15	20	
27	Al	45	He	0.897	ppb	24.7	238.90	20	
28	Si	45	H2	-0.153	ppb	N/A	724.17	100	
39	K	45	He	-5.547	ppb	N/A	22023.58	200	
40	Ca	45	H2	0.845	ppb	14.5	6609.58	20	
51	V	89	He	0.002	ppb	73.4	195.57	1	
52	Cr	89	He	-0.007	ppb	N/A	823.88	1	
55	Mn	89	He	0.047	ppb	13.7	284.62	0.4	
56	Fe	89	H2	3.363	ppb	4.4	32888.30	20	
59	Co	89	He	0.006	ppb	27.4	120.01	0.2	
60	Ni	89	He	-0.046	ppb	N/A	153.34	0.4	
63	Cu	89	He	-0.007	ppb	N/A	370.02	0.6	
66	Zn	89	He	0.004	ppb	366.8	346.68	2	
75	As	89	He	0.012	ppb	1.9	19.00	1	
78	Se	89	H2	0.020	ppb	10.7	8.67	1	
88	Sr	89	He	0.006	ppb	83.7	48.89	1	
95	Mo	89	He	0.050	ppb	14.4	212.24	1	
107	Ag	89	He	0.006	ppb	18.7	113.34	0.2	
111	Cd	89	He	0.006	ppb	47.7	10.74	0.2	
118	Sn	159	He	0.119	ppb	29.5	805.61	1	
121	Sb	159	No Gas	0.039	ppb	17.4	1031.20	0.2	
137	Ba	159	No Gas	0.044	ppb	31.3	480.56	0.4	
182	W	159	No Gas	0.109	ppb	10.7	1852.20	1	
205	Tl	209	No Gas	0.016	ppb	85.8	1231.46	0.2	
208	Pb	209	No Gas	0.035	ppb	24.1	1988.97	0.2	
232	Th	209	No Gas	0.142	ppb	23.7	6268.63	1	
238	U	209	No Gas	0.044	ppb	52.6	1812.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8182758.83	0.4	8217096.81	99.58	29.5	120.4	
Sc	45	No Gas	15666200.75	0.7	15952466.59	98.21	29.5	120.4	
Sc	45	H2	1852246.57	1.1	1988810.56	93.13	29.5	120.4	
Sc	45	He	448993.70	0.5	477124.13	94.1	29.5	120.4	
Ge	72	No Gas	2757896.34	0.6	2777617.47	99.29	29.5	120.4	
Ge	72	H2	545237.82	1.7	580378.32	93.95	29.5	120.4	
Ge	72	He	263284.53	0.2	274469.22	95.92	29.5	120.4	
Y	89	H2	9844348.27	1.7	10106085.94	97.41	29.5	120.4	
Y	89	He	2143499.60	0.8	2217336.32	96.67	29.5	120.4	
Tb	159	No Gas	21225946.91	0.4	20085725.95	105.68	29.5	120.4	
Tb	159	He	8006611.20	0.8	7863593.35	101.82	29.5	120.4	
Bi	209	No Gas	9664263.82	0.5	9123990.23	105.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	031_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:43:35 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.021	ppb	16.7	37.78	0.5	
B	11	6	No Gas	3.532	ppb	5.2	5305.60	10	
Na	23	45	He	-47.697	ppb	N/A	23090.57	500	
Mg	24	45	He	9.416	ppb	10.5	875.65	50	
Al	27	45	He	6.763	ppb	12.0	313.35	50	
Si	28	45	H2	19.804	ppb	16.3	1742.03	250	
K	39	45	He	-21.531	ppb	N/A	22550.91	500	
Ca	40	45	H2	17.596	ppb	9.5	12581.53	50	
V	51	89	He	0.205	ppb	5.0	411.13	2.5	
Cr	52	89	He	0.400	ppb	6.4	1427.82	2.5	
Mn	55	89	He	1.690	ppb	5.4	1170.51	1	PB 6020 Fails DoD
Fe	56	89	H2	346.359	ppb	5.7	611629.96	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Co	59	89	He	0.044	ppb	26.7	146.68	0.5	
Ni	60	89	He	-0.119	ppb	N/A	222.23	1	
Cu	63	89	He	0.859	ppb	10.8	1896.86	1.5	
Zn	66	89	He	0.789	ppb	45.0	493.36	5	
As	75	89	He	0.108	ppb	47.2	25.33	2.5	
Se	78	89	H2	0.080	ppb	39.4	7.00	2.5	
Sr	88	89	He	0.039	ppb	11.9	55.56	2.5	
Mo	95	89	He	0.128	ppb	20.8	114.45	2.5	
Ag	107	89	He	0.023	ppb	51.1	92.23	0.5	
Cd	111	89	He	0.012	ppb	53.3	4.81	0.5	
Sn	118	159	He	0.765	ppb	16.2	916.73	2.5	
Sb	121	159	No Gas	0.065	ppb	3.4	490.56	0.5	
Ba	137	159	No Gas	0.245	ppb	28.2	523.93	1	
W	182	159	No Gas	0.115	ppb	16.9	427.16	2.5	
Tl	205	209	No Gas	-0.077	ppb	N/A	276.98	0.5	
Pb	208	209	No Gas	0.148	ppb	23.1	1752.00	0.5	
Th	232	209	No Gas	0.217	ppb	6.7	2092.52	2.5	
U	238	209	No Gas	0.030	ppb	46.5	253.62	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8205519.19	0.7	8217096.81	99.86	29.5	120.4	
Sc	45	No Gas	15720223.94	0.5	15952466.59	98.54	29.5	120.4	
Sc	45	H2	1818751.29	3.2	1988810.56	91.45	29.5	120.4	
Sc	45	He	451389.83	2.8	477124.13	94.61	29.5	120.4	
Ge	72	No Gas	2748144.90	0.6	2777617.47	98.94	29.5	120.4	
Ge	72	H2	522688.66	0.7	580378.32	90.06	29.5	120.4	
Ge	72	He	259385.03	1.8	274469.22	94.5	29.5	120.4	
Y	89	H2	9625871.99	2.1	10106085.94	95.25	29.5	120.4	
Y	89	He	2138229.53	2.0	2217336.32	96.43	29.5	120.4	
Tb	159	No Gas	21223388.85	0.7	20085725.95	105.66	29.5	120.4	
Tb	159	He	8032972.59	1.5	7863593.35	102.15	29.5	120.4	
Bi	209	No Gas	9725049.92	0.2	9123990.23	106.59	29.5	120.4	

Sample Report

Sample Name SN5717-020R

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:46:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	82.2	22.22	100	
11	B	6	No Gas	3.071	ppb	0.7	4924.33	1000	
23	Na	45	He	180.327	ppb	2.8	59140.22	200000	
24	Mg	45	He	45.514	ppb	5.4	3925.26	200000	
27	Al	45	He	117.365	ppb	2.9	3806.20	200000	
28	Si	45	H2	149.326	ppb	11.1	8429.19	10000	
39	K	45	He	108.791	ppb	8.7	31166.44	200000	
40	Ca	45	H2	73.314	ppb	1.0	38819.56	200000	
51	V	89	He	0.391	ppb	12.9	606.70	1000	
52	Cr	89	He	0.816	ppb	5.7	1979.78	2000	
55	Mn	89	He	4.261	ppb	3.7	2705.11	2000	
56	Fe	89	H2	145.103	ppb	1.1	260820.10	100000	
59	Co	89	He	0.096	ppb	5.9	264.47	1000	
60	Ni	89	He	0.741	ppb	8.6	754.50	1000	
63	Cu	89	He	0.772	ppb	5.1	1726.84	2000	
66	Zn	89	He	6.673	ppb	0.9	1599.04	2000	
75	As	89	He	0.099	ppb	33.5	24.00	1000	
78	Se	89	H2	0.056	ppb	24.1	5.50	1000	
88	Sr	89	He	0.354	ppb	9.2	264.46	2000	
95	Mo	89	He	0.147	ppb	18.9	127.78	1000	
107	Ag	89	He	0.022	ppb	53.0	87.78	100	
111	Cd	89	He	0.008	ppb	73.9	3.70	1000	
118	Sn	159	He	0.594	ppb	3.0	793.39	1000	
121	Sb	159	No Gas	0.072	ppb	15.1	530.61	1000	
137	Ba	159	No Gas	0.850	ppb	8.2	1545.16	2000	
182	W	159	No Gas	0.071	ppb	18.5	286.99	1000	
205	Tl	209	No Gas	-0.090	ppb	N/A	200.23	1000	
208	Pb	209	No Gas	3.744	ppb	3.8	33942.61	2000	
232	Th	209	No Gas	0.096	ppb	8.7	1077.94	1000	
238	U	209	No Gas	0.013	ppb	89.2	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8362222.45	1.4	8217096.81	101.77	29.5	120.4	
Sc	45	No Gas	16019545.75	0.8	15952466.59	100.42	29.5	120.4	
Sc	45	H2	1857469.68	1.1	1988810.56	93.4	29.5	120.4	
Sc	45	He	445623.85	0.8	477124.13	93.4	29.5	120.4	
Ge	72	No Gas	2791974.87	2.0	2777617.47	100.52	29.5	120.4	
Ge	72	H2	532047.83	1.7	580378.32	91.67	29.5	120.4	
Ge	72	He	257973.83	0.3	274469.22	93.99	29.5	120.4	
Y	89	H2	9734151.83	1.1	10106085.94	96.32	29.5	120.4	
Y	89	He	2110465.98	0.6	2217336.32	95.18	29.5	120.4	
Tb	159	No Gas	21525932.73	1.0	20085725.95	107.17	29.5	120.4	
Tb	159	He	7892781.06	0.7	7863593.35	100.37	29.5	120.4	
Bi	209	No Gas	9901607.82	1.5	9123990.23	108.52	29.5	120.4	

Sample Report

Sample Name SN5830-002R

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:48:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	41.2	31.11	100	
11	B	6	No Gas	436.909	ppb	4.9	449051.32	1000	
23	Na	45	He	140029.420	ppb	0.4	22669087.66	200000	
24	Mg	45	He	17637.762	ppb	0.7	1517493.12	200000	
27	Al	45	He	744.938	ppb	2.1	23990.89	200000	
28	Si	45	H2	12150.986	ppb	1.9	618471.51	10000	
39	K	45	He	425.831	ppb	2.0	53555.64	200000	
40	Ca	45	H2	156688.676	ppb	0.5	72371959.48	200000	
51	V	89	He	0.861	ppb	8.5	1110.09	1000	
52	Cr	89	He	0.448	ppb	15.8	1469.15	2000	
55	Mn	89	He	367.301	ppb	0.4	220666.42	2000	
56	Fe	89	H2	39.476	ppb	61.9	71331.02	100000	
59	Co	89	He	0.606	ppb	9.5	1409.06	1000	
60	Ni	89	He	2.466	ppb	8.0	1822.41	1000	
63	Cu	89	He	0.859	ppb	2.5	1866.86	2000	
66	Zn	89	He	3.426	ppb	13.1	981.18	2000	
75	As	89	He	0.172	ppb	8.0	33.33	1000	
78	Se	89	H2	0.094	ppb	21.2	7.83	1000	
88	Sr	89	He	2196.651	ppb	1.1	1460254.13	2000	
95	Mo	89	He	0.845	ppb	4.9	665.60	1000	
107	Ag	89	He	0.108	ppb	8.5	296.68	100	
111	Cd	89	He	0.090	ppb	13.2	27.41	1000	
118	Sn	159	He	0.618	ppb	2.8	798.95	1000	
121	Sb	159	No Gas	0.085	ppb	20.0	580.66	1000	
137	Ba	159	No Gas	42.075	ppb	4.5	70031.83	2000	
182	W	159	No Gas	0.042	ppb	23.5	190.21	1000	
205	Tl	209	No Gas	-0.103	ppb	N/A	110.13	1000	
208	Pb	209	No Gas	0.067	ppb	12.7	1014.49	2000	
232	Th	209	No Gas	0.070	ppb	8.8	807.60	1000	
238	U	209	No Gas	4.914	ppb	7.6	39175.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8172631.82	2.1	8217096.81	99.46	29.5	120.4	
Sc	45	No Gas	15903221.41	1.2	15952466.59	99.69	29.5	120.4	
Sc	45	H2	1841362.12	0.4	1988810.56	92.59	29.5	120.4	
Sc	45	He	452103.23	1.1	477124.13	94.76	29.5	120.4	
Ge	72	No Gas	2767608.11	2.3	2777617.47	99.64	29.5	120.4	
Ge	72	H2	515857.03	0.4	580378.32	88.88	29.5	120.4	
Ge	72	He	258068.93	0.8	274469.22	94.02	29.5	120.4	
Y	89	H2	9514198.97	0.5	10106085.94	94.14	29.5	120.4	
Y	89	He	2103217.38	1.1	2217336.32	94.85	29.5	120.4	
Tb	159	No Gas	21366988.01	1.7	20085725.95	106.38	29.5	120.4	
Tb	159	He	7804933.77	1.0	7863593.35	99.25	29.5	120.4	
Bi	209	No Gas	9450441.67	2.9	9123990.23	103.58	29.5	120.4	

Sample Report

Sample Name SN5832-001R

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:51:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	2.3	16.67	100	
11	B	6	No Gas	2411.085	ppb	0.9	2497542.25	1000	
23	Na	45	He	1594597.490	ppb	0.6	259561485.67	200000	>LDR
24	Mg	45	He	321717.918	ppb	0.2	27863434.86	200000	
27	Al	45	He	25.551	ppb	32.1	921.18	200000	
28	Si	45	H2	10702.565	ppb	1.2	544874.42	10000	
39	K	45	He	10199.854	ppb	1.1	734781.35	200000	
40	Ca	45	H2	612963.488	ppb	0.9	283096653.56	200000	
51	V	89	He	1.466	ppb	4.2	1743.51	1000	
52	Cr	89	He	1.082	ppb	2.4	2311.78	2000	
55	Mn	89	He	35.477	ppb	2.4	21210.14	2000	
56	Fe	89	H2	222.425	ppb	0.4	382849.08	100000	
59	Co	89	He	0.798	ppb	5.2	1820.26	1000	
60	Ni	89	He	10.672	ppb	5.3	6838.58	1000	
63	Cu	89	He	1.554	ppb	0.5	3003.76	2000	
66	Zn	89	He	8.026	ppb	0.8	1829.08	2000	
75	As	89	He	0.426	ppb	8.1	65.34	1000	
78	Se	89	H2	1.334	ppb	8.7	86.83	1000	
88	Sr	89	He	8630.799	ppb	0.2	5676904.64	2000	
95	Mo	89	He	0.527	ppb	5.8	415.58	1000	
107	Ag	89	He	0.073	ppb	11.9	210.01	100	
111	Cd	89	He	0.168	ppb	22.8	49.63	1000	
118	Sn	159	He	0.674	ppb	12.4	793.39	1000	
121	Sb	159	No Gas	0.198	ppb	18.1	977.79	1000	
137	Ba	159	No Gas	20.020	ppb	0.6	30719.67	2000	
182	W	159	No Gas	0.036	ppb	40.0	156.84	1000	
205	Tl	209	No Gas	-0.059	ppb	N/A	327.04	1000	
208	Pb	209	No Gas	2.660	ppb	0.5	20319.04	2000	
232	Th	209	No Gas	0.061	ppb	16.6	647.41	1000	
238	U	209	No Gas	10.715	ppb	1.6	75085.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8255559.02	1.5	8217096.81	100.47	29.5	120.4	
Sc	45	No Gas	15633162.51	1.3	15952466.59	98	29.5	120.4	
Sc	45	H2	1841301.78	1.1	1988810.56	92.58	29.5	120.4	
Sc	45	He	455118.09	0.8	477124.13	95.39	29.5	120.4	
Ge	72	No Gas	2625706.89	0.6	2777617.47	94.53	29.5	120.4	
Ge	72	H2	500441.04	0.7	580378.32	86.23	29.5	120.4	
Ge	72	He	254160.80	0.7	274469.22	92.6	29.5	120.4	
Y	89	H2	9353821.09	0.9	10106085.94	92.56	29.5	120.4	
Y	89	He	2081029.55	1.3	2217336.32	93.85	29.5	120.4	
Tb	159	No Gas	19652305.82	1.3	20085725.95	97.84	29.5	120.4	
Tb	159	He	7420953.01	1.1	7863593.35	94.37	29.5	120.4	
Bi	209	No Gas	8294041.56	1.0	9123990.23	90.9	29.5	120.4	

Sample Report

Sample Name SN5832-002R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:54:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	51.8	41.11	100	
11	B	6	No Gas	2109.277	ppb	1.2	2236314.65	1000	
23	Na	45	He	1337828.489	ppb	0.7	218222671.65	200000	>LDR
24	Mg	45	He	237113.779	ppb	0.3	20580308.86	200000	
27	Al	45	He	80.034	ppb	5.6	2685.90	200000	
28	Si	45	H2	8624.631	ppb	0.7	446687.59	10000	
39	K	45	He	11813.818	ppb	1.2	848900.45	200000	
40	Ca	45	H2	584903.802	ppb	0.3	274738024.80	200000	
51	V	89	He	1.408	ppb	3.2	1681.27	1000	
52	Cr	89	He	4.990	ppb	0.3	7590.68	2000	
55	Mn	89	He	253.494	ppb	0.7	150648.58	2000	
56	Fe	89	H2	6675.977	ppb	0.4	11645832.92	100000	
59	Co	89	He	2.852	ppb	4.1	6384.15	1000	
60	Ni	89	He	11.335	ppb	1.0	7244.36	1000	
63	Cu	89	He	1.309	ppb	3.4	2594.78	2000	
66	Zn	89	He	8.610	ppb	4.1	1936.87	2000	
75	As	89	He	0.722	ppb	2.3	103.01	1000	
78	Se	89	H2	0.183	ppb	10.4	13.67	1000	
88	Sr	89	He	9438.274	ppb	0.5	6204585.05	2000	
95	Mo	89	He	0.735	ppb	7.5	574.48	1000	
107	Ag	89	He	0.036	ppb	41.1	121.12	100	
111	Cd	89	He	0.073	ppb	27.5	22.22	1000	
118	Sn	159	He	0.557	ppb	21.2	725.61	1000	
121	Sb	159	No Gas	0.097	ppb	15.7	594.01	1000	
137	Ba	159	No Gas	19.895	ppb	1.2	31285.06	2000	
182	W	159	No Gas	0.055	ppb	54.2	220.25	1000	
205	Tl	209	No Gas	-0.086	ppb	N/A	186.87	1000	
208	Pb	209	No Gas	2.455	ppb	1.0	19147.11	2000	
232	Th	209	No Gas	0.034	ppb	18.1	460.53	1000	
238	U	209	No Gas	6.544	ppb	0.8	46756.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8450046.00	1.0	8217096.81	102.83	29.5	120.4	
Sc	45	No Gas	15918589.80	1.5	15952466.59	99.79	29.5	120.4	
Sc	45	H2	1872639.63	1.1	1988810.56	94.16	29.5	120.4	
Sc	45	He	456104.89	1.5	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2675418.50	1.1	2777617.47	96.32	29.5	120.4	
Ge	72	H2	501196.32	1.2	580378.32	86.36	29.5	120.4	
Ge	72	He	258000.60	0.9	274469.22	94	29.5	120.4	
Y	89	H2	9540578.16	1.2	10106085.94	94.4	29.5	120.4	
Y	89	He	2079991.65	1.4	2217336.32	93.81	29.5	120.4	
Tb	159	No Gas	20138855.53	1.2	20085725.95	100.26	29.5	120.4	
Tb	159	He	7438550.38	0.5	7863593.35	94.59	29.5	120.4	
Bi	209	No Gas	8456983.04	0.6	9123990.23	92.69	29.5	120.4	

Sample Report

Sample Name SN5832-003R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:57:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	57.6	37.78	100	
11	B	6	No Gas	2224.715	ppb	2.7	2343474.76	1000	
23	Na	45	He	1401878.749	ppb	0.6	231954916.75	200000	>LDR
24	Mg	45	He	249499.248	ppb	0.4	21965833.56	200000	
27	Al	45	He	78.492	ppb	7.3	2674.80	200000	
28	Si	45	H2	8963.491	ppb	6.7	462361.06	10000	
39	K	45	He	12347.637	ppb	1.2	899007.00	200000	
40	Ca	45	H2	614762.346	ppb	6.8	287608804.60	200000	
51	V	89	He	1.146	ppb	5.1	1411.24	1000	
52	Cr	89	He	4.043	ppb	1.7	6354.95	2000	
55	Mn	89	He	277.431	ppb	0.5	166022.38	2000	
56	Fe	89	H2	7737.380	ppb	6.2	13446952.42	100000	
59	Co	89	He	3.088	ppb	4.3	6957.81	1000	
60	Ni	89	He	11.199	ppb	2.3	7212.10	1000	
63	Cu	89	He	1.788	ppb	1.5	3416.09	2000	
66	Zn	89	He	7.809	ppb	2.4	1800.19	2000	
75	As	89	He	0.740	ppb	4.0	106.01	1000	
78	Se	89	H2	0.144	ppb	31.5	11.17	1000	
88	Sr	89	He	9794.834	ppb	0.5	6484057.34	2000	
95	Mo	89	He	0.749	ppb	6.6	588.92	1000	
107	Ag	89	He	0.014	ppb	26.2	68.89	100	
111	Cd	89	He	0.071	ppb	30.3	21.85	1000	
118	Sn	159	He	0.764	ppb	6.0	840.06	1000	
121	Sb	159	No Gas	0.117	ppb	7.1	687.46	1000	
137	Ba	159	No Gas	20.395	ppb	3.4	32623.14	2000	
182	W	159	No Gas	0.034	ppb	24.9	156.84	1000	
205	Tl	209	No Gas	-0.087	ppb	N/A	183.54	1000	
208	Pb	209	No Gas	1.915	ppb	6.9	15100.56	2000	
232	Th	209	No Gas	0.027	ppb	23.0	407.13	1000	
238	U	209	No Gas	6.561	ppb	4.7	47125.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8397634.21	1.5	8217096.81	102.2	29.5	120.4	
Sc	45	No Gas	16250971.02	1.8	15952466.59	101.87	29.5	120.4	
Sc	45	H2	1869561.61	5.4	1988810.56	94	29.5	120.4	
Sc	45	He	462640.72	0.6	477124.13	96.96	29.5	120.4	
Ge	72	No Gas	2708804.99	2.6	2777617.47	97.52	29.5	120.4	
Ge	72	H2	496121.02	4.0	580378.32	85.48	29.5	120.4	
Ge	72	He	260990.72	0.5	274469.22	95.09	29.5	120.4	
Y	89	H2	9522742.41	4.6	10106085.94	94.23	29.5	120.4	
Y	89	He	2094490.54	0.9	2217336.32	94.46	29.5	120.4	
Tb	159	No Gas	20493462.20	2.1	20085725.95	102.03	29.5	120.4	
Tb	159	He	7365005.93	0.4	7863593.35	93.66	29.5	120.4	
Bi	209	No Gas	8506718.92	2.1	9123990.23	93.23	29.5	120.4	

Sample Report

Sample Name SN5832-004R

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:59:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	33.3	21.11	100	
11	B	6	No Gas	654.378	ppb	3.5	712802.07	1000	
23	Na	45	He	372170.706	ppb	1.9	62882552.00	200000	
24	Mg	45	He	47543.606	ppb	1.9	4272725.80	200000	
27	Al	45	He	33.600	ppb	2.9	1226.77	200000	
28	Si	45	H2	7197.238	ppb	0.8	379953.20	10000	
39	K	45	He	3531.287	ppb	1.3	280422.07	200000	
40	Ca	45	H2	160505.919	ppb	0.4	76828444.41	200000	
51	V	89	He	1.107	ppb	7.9	1403.46	1000	
52	Cr	89	He	0.734	ppb	4.7	1899.79	2000	
55	Mn	89	He	64.865	ppb	0.4	39898.26	2000	
56	Fe	89	H2	206.410	ppb	0.5	370279.82	100000	
59	Co	89	He	0.536	ppb	10.8	1277.93	1000	
60	Ni	89	He	0.723	ppb	14.4	755.60	1000	
63	Cu	89	He	0.752	ppb	2.9	1722.40	2000	
66	Zn	89	He	30.959	ppb	1.7	6299.42	2000	
75	As	89	He	0.573	ppb	15.1	86.68	1000	
78	Se	89	H2	0.404	ppb	30.9	28.67	1000	
88	Sr	89	He	1756.580	ppb	1.0	1192014.60	2000	
95	Mo	89	He	0.720	ppb	3.0	581.15	1000	
107	Ag	89	He	0.015	ppb	60.2	72.23	100	
111	Cd	89	He	0.036	ppb	27.5	12.22	1000	
118	Sn	159	He	2.023	ppb	7.4	1644.61	1000	
121	Sb	159	No Gas	0.245	ppb	13.8	1284.84	1000	
137	Ba	159	No Gas	52.071	ppb	3.1	88321.28	2000	
182	W	159	No Gas	0.024	ppb	2.1	130.15	1000	
205	Tl	209	No Gas	-0.101	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	0.124	ppb	4.2	1485.03	2000	
232	Th	209	No Gas	0.011	ppb	19.9	313.69	1000	
238	U	209	No Gas	3.589	ppb	6.2	28404.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8670263.50	1.9	8217096.81	105.51	29.5	120.4	
Sc	45	No Gas	16851453.78	1.8	15952466.59	105.64	29.5	120.4	
Sc	45	H2	1908251.96	1.5	1988810.56	95.95	29.5	120.4	
Sc	45	He	472340.46	1.7	477124.13	99	29.5	120.4	
Ge	72	No Gas	2868652.83	1.9	2777617.47	103.28	29.5	120.4	
Ge	72	H2	514262.34	1.3	580378.32	88.61	29.5	120.4	
Ge	72	He	271909.71	1.3	274469.22	99.07	29.5	120.4	
Y	89	H2	9744303.44	1.5	10106085.94	96.42	29.5	120.4	
Y	89	He	2147092.50	0.9	2217336.32	96.83	29.5	120.4	
Tb	159	No Gas	21776692.45	1.3	20085725.95	108.42	29.5	120.4	
Tb	159	He	7671658.64	1.0	7863593.35	97.56	29.5	120.4	
Bi	209	No Gas	9374587.59	1.9	9123990.23	102.75	29.5	120.4	

Sample Report

Sample Name SN5897-001R

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:02:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	184.6	8.89	100	
11	B	6	No Gas	15.769	ppb	3.3	19680.76	1000	
23	Na	45	He	358.469	ppb	14.8	94181.37	200000	
24	Mg	45	He	32.683	ppb	30.4	3053.90	200000	
27	Al	45	He	6.644	ppb	9.3	328.91	200000	
28	Si	45	H2	21.056	ppb	33.2	1795.45	10000	
39	K	45	He	3.693	ppb	217.5	25825.05	200000	
40	Ca	45	H2	107.926	ppb	15.3	53637.11	200000	
51	V	89	He	0.277	ppb	10.0	503.36	1000	
52	Cr	89	He	0.296	ppb	17.1	1317.83	2000	
55	Mn	89	He	0.577	ppb	1.5	505.92	2000	
56	Fe	89	H2	3.611	ppb	17.8	8689.12	100000	
59	Co	89	He	0.001	ppb	593.0	51.11	1000	
60	Ni	89	He	-0.257	ppb	N/A	137.78	1000	
63	Cu	89	He	0.172	ppb	13.4	742.27	2000	
66	Zn	89	He	1.631	ppb	10.0	672.26	2000	
75	As	89	He	0.060	ppb	54.2	19.67	1000	
78	Se	89	H2	0.039	ppb	47.7	4.17	1000	
88	Sr	89	He	0.965	ppb	25.7	701.15	2000	
95	Mo	89	He	0.043	ppb	50.6	48.89	1000	
107	Ag	89	He	0.025	ppb	35.1	100.00	100	
111	Cd	89	He	0.002	ppb	145.8	2.22	1000	
118	Sn	159	He	2.432	ppb	3.3	1970.22	1000	
121	Sb	159	No Gas	0.032	ppb	16.1	370.42	1000	
137	Ba	159	No Gas	0.056	ppb	100.8	223.59	2000	
182	W	159	No Gas	0.007	ppb	85.4	76.75	1000	
205	Tl	209	No Gas	-0.108	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	0.007	ppb	104.1	530.60	2000	
232	Th	209	No Gas	0.014	ppb	55.1	367.08	1000	
238	U	209	No Gas	0.003	ppb	51.1	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9020287.78	3.0	8217096.81	109.77	29.5	120.4	
Sc	45	No Gas	17194237.59	2.1	15952466.59	107.78	29.5	120.4	
Sc	45	H2	1830423.72	10.7	1988810.56	92.04	29.5	120.4	
Sc	45	He	479648.39	2.7	477124.13	100.53	29.5	120.4	
Ge	72	No Gas	2955179.55	1.9	2777617.47	106.39	29.5	120.4	
Ge	72	H2	498849.91	7.8	580378.32	85.95	29.5	120.4	
Ge	72	He	276220.02	1.7	274469.22	100.64	29.5	120.4	
Y	89	H2	9436082.73	9.8	10106085.94	93.37	29.5	120.4	
Y	89	He	2197385.02	2.3	2217336.32	99.1	29.5	120.4	
Tb	159	No Gas	22209471.06	1.6	20085725.95	110.57	29.5	120.4	
Tb	159	He	7981030.37	2.1	7863593.35	101.49	29.5	120.4	
Bi	209	No Gas	9975353.54	1.1	9123990.23	109.33	29.5	120.4	

Sample Report

Sample Name SN6056-004

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:05:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	4.44	100	
11	B	6	No Gas	7.484	ppb	1.4	10064.96	1000	
23	Na	45	He	236.034	ppb	4.4	70933.11	200000	
24	Mg	45	He	21.351	ppb	11.7	1955.85	200000	
27	Al	45	He	203.436	ppb	2.6	6809.62	200000	
28	Si	45	H2	35.360	ppb	9.5	2656.54	10000	
39	K	45	He	53.703	ppb	22.1	28587.29	200000	
40	Ca	45	H2	84.856	ppb	5.3	45519.75	200000	
51	V	89	He	0.374	ppb	14.4	600.04	1000	
52	Cr	89	He	0.787	ppb	6.4	1980.45	2000	
55	Mn	89	He	0.825	ppb	17.4	647.90	2000	
56	Fe	89	H2	40.005	ppb	0.5	74842.27	100000	
59	Co	89	He	0.026	ppb	32.5	108.90	1000	
60	Ni	89	He	0.196	ppb	44.1	423.36	1000	
63	Cu	89	He	0.566	ppb	10.0	1406.80	2000	
66	Zn	89	He	3.463	ppb	9.1	1012.30	2000	
75	As	89	He	0.070	ppb	38.3	20.67	1000	
78	Se	89	H2	0.018	ppb	179.0	3.00	1000	
88	Sr	89	He	0.362	ppb	5.2	275.57	2000	
95	Mo	89	He	0.071	ppb	29.4	70.00	1000	
107	Ag	89	He	0.017	ppb	65.1	76.67	100	
111	Cd	89	He	0.000	ppb	2273.4	1.48	1000	
118	Sn	159	He	0.434	ppb	31.2	700.05	1000	
121	Sb	159	No Gas	0.043	ppb	49.6	413.81	1000	
137	Ba	159	No Gas	0.828	ppb	10.0	1541.80	2000	
182	W	159	No Gas	0.021	ppb	34.3	123.47	1000	
205	Tl	209	No Gas	-0.106	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	0.334	ppb	6.8	3480.75	2000	
232	Th	209	No Gas	0.016	ppb	50.4	383.77	1000	
238	U	209	No Gas	0.001	ppb	60.5	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8812202.31	0.7	8217096.81	107.24	29.5	120.4	
Sc	45	No Gas	16646006.04	0.5	15952466.59	104.35	29.5	120.4	
Sc	45	H2	1913082.78	0.1	1988810.56	96.19	29.5	120.4	
Sc	45	He	464849.96	1.3	477124.13	97.43	29.5	120.4	
Ge	72	No Gas	2903040.99	0.4	2777617.47	104.52	29.5	120.4	
Ge	72	H2	525551.48	0.5	580378.32	90.55	29.5	120.4	
Ge	72	He	270359.12	0.4	274469.22	98.5	29.5	120.4	
Y	89	H2	9872263.79	1.0	10106085.94	97.69	29.5	120.4	
Y	89	He	2154473.16	1.1	2217336.32	97.16	29.5	120.4	
Tb	159	No Gas	21989019.67	0.7	20085725.95	109.48	29.5	120.4	
Tb	159	He	7978729.40	0.7	7863593.35	101.46	29.5	120.4	
Bi	209	No Gas	9997267.54	1.0	9123990.23	109.57	29.5	120.4	

Sample Report

Sample Name SN6061-002

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:07:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	3.33	100	
11	B	6	No Gas	6.858	ppb	8.5	9207.78	1000	
23	Na	45	He	133.206	ppb	5.3	52721.72	200000	
24	Mg	45	He	12.223	ppb	1.9	1126.79	200000	
27	Al	45	He	8.387	ppb	15.2	368.91	200000	
28	Si	45	H2	15.081	ppb	5.5	1555.16	10000	
39	K	45	He	10.800	ppb	79.1	25004.05	200000	
40	Ca	45	H2	38.234	ppb	9.9	22703.40	200000	
51	V	89	He	0.286	ppb	6.6	491.14	1000	
52	Cr	89	He	0.429	ppb	6.9	1444.49	2000	
55	Mn	89	He	0.724	ppb	9.0	571.91	2000	
56	Fe	89	H2	4.808	ppb	1.3	11213.57	100000	
59	Co	89	He	0.005	ppb	25.5	57.78	1000	
60	Ni	89	He	-0.171	ppb	N/A	185.56	1000	
63	Cu	89	He	0.348	ppb	13.7	1006.74	2000	
66	Zn	89	He	2.188	ppb	11.0	748.94	2000	
75	As	89	He	0.087	ppb	40.6	22.33	1000	
78	Se	89	H2	0.013	ppb	85.9	2.67	1000	
88	Sr	89	He	0.206	ppb	9.5	165.56	2000	
95	Mo	89	He	0.038	ppb	27.3	43.33	1000	
107	Ag	89	He	0.011	ppb	23.0	62.22	100	
111	Cd	89	He	0.003	ppb	135.5	2.22	1000	
118	Sn	159	He	1.937	ppb	3.2	1623.49	1000	
121	Sb	159	No Gas	0.053	ppb	32.0	453.85	1000	
137	Ba	159	No Gas	0.815	ppb	4.6	1508.44	2000	
182	W	159	No Gas	0.016	ppb	53.9	106.79	1000	
205	Tl	209	No Gas	-0.109	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.074	ppb	13.9	1117.93	2000	
232	Th	209	No Gas	0.009	ppb	100.5	320.36	1000	
238	U	209	No Gas	0.004	ppb	121.1	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8654673.64	0.8	8217096.81	105.33	29.5	120.4	
Sc	45	No Gas	16208664.76	0.7	15952466.59	101.61	29.5	120.4	
Sc	45	H2	1876725.83	0.6	1988810.56	94.36	29.5	120.4	
Sc	45	He	455221.73	2.4	477124.13	95.41	29.5	120.4	
Ge	72	No Gas	2822330.17	0.8	2777617.47	101.61	29.5	120.4	
Ge	72	H2	519355.05	0.8	580378.32	89.49	29.5	120.4	
Ge	72	He	265107.40	1.7	274469.22	96.59	29.5	120.4	
Y	89	H2	9775265.54	0.3	10106085.94	96.73	29.5	120.4	
Y	89	He	2103333.39	1.9	2217336.32	94.86	29.5	120.4	
Tb	159	No Gas	21854113.01	1.3	20085725.95	108.8	29.5	120.4	
Tb	159	He	7825092.94	1.8	7863593.35	99.51	29.5	120.4	
Bi	209	No Gas	9861449.12	2.4	9123990.23	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:10:26 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.778	ppb	4.1	196135.46	25	95.11	89.8	110.2	
11	B	6	No Gas	23.912	ppb	4.4	134806.95	25	95.65	89.8	110.2	
23	Na	45	He	5122.394	ppb	0.7	4277442.14	5000	102.45	89.8	110.2	
24	Mg	45	He	5027.147	ppb	0.7	2217426.34	5000	100.54	89.8	110.2	
27	Al	45	He	480.844	ppb	0.7	79169.71	500	96.17	89.8	110.2	
28	Si	45	H2	468.393	ppb	1.5	124498.18	500	93.68	89.8	110.2	
39	K	45	He	4857.495	ppb	0.4	1747965.21	5000	97.15	89.8	110.2	
40	Ca	45	H2	4831.785	ppb	1.0	11598583.99	5000	96.64	89.8	110.2	
51	V	89	He	24.721	ppb	0.8	137042.10	25	98.88	89.8	110.2	
52	Cr	89	He	25.025	ppb	0.6	176657.49	25	100.1	89.8	110.2	
55	Mn	89	He	24.320	ppb	0.7	75222.06	25	97.28	89.8	110.2	
56	Fe	89	H2	4866.365	ppb	0.5	43807343.72	5000	97.33	89.8	110.2	
59	Co	89	He	25.185	ppb	1.2	291051.91	25	100.74	89.8	110.2	
60	Ni	89	He	24.759	ppb	0.9	79294.07	25	99.04	89.8	110.2	
63	Cu	89	He	25.203	ppb	0.3	218488.14	25	100.81	89.8	110.2	
66	Zn	89	He	25.153	ppb	2.1	24714.85	25	100.61	89.8	110.2	
75	As	89	He	24.315	ppb	0.6	16130.42	25	97.26	89.8	110.2	
78	Se	89	H2	24.701	ppb	2.5	8299.59	25	98.8	89.8	110.2	
88	Sr	89	He	23.378	ppb	0.3	79933.02	25	93.51	89.8	110.2	
95	Mo	89	He	25.092	ppb	1.1	99563.44	25	100.37	89.8	110.2	
107	Ag	89	He	25.702	ppb	1.2	319906.46	25	102.81	89.8	110.2	
111	Cd	89	He	25.552	ppb	0.6	38039.99	25	102.21	89.8	110.2	
118	Sn	159	He	23.685	ppb	1.3	75783.72	25	94.74	89.8	110.2	
121	Sb	159	No Gas	24.777	ppb	3.8	540025.74	25	99.11	89.8	110.2	
137	Ba	159	No Gas	24.089	ppb	4.2	205762.98	25	96.36	89.8	110.2	
182	W	159	No Gas	23.993	ppb	2.7	409109.56	25	95.97	89.8	110.2	
205	Tl	209	No Gas	24.943	ppb	4.5	801630.70	25	99.77	89.8	110.2	
208	Pb	209	No Gas	24.696	ppb	3.7	1116221.67	25	98.78	89.8	110.2	
232	Th	209	No Gas	23.708	ppb	4.1	1042473.12	25	94.83	89.8	110.2	
238	U	209	No Gas	24.146	ppb	3.4	1020267.67	25	96.58	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8877116.18	1.9	8217096.81	108.03	29.5	120.4	
Sc	45	No Gas	16334820.08	1.5	15952466.59	102.4	29.5	120.4	
Sc	45	H2	1913286.36	1.1	1988810.56	96.2	29.5	120.4	
Sc	45	He	463576.82	1.1	477124.13	97.16	29.5	120.4	
Ge	72	No Gas	2867065.97	1.5	2777617.47	103.22	29.5	120.4	
Ge	72	H2	542141.90	1.4	580378.32	93.41	29.5	120.4	
Ge	72	He	272390.10	0.7	274469.22	99.24	29.5	120.4	
Y	89	H2	9848130.49	0.2	10106085.94	97.45	29.5	120.4	
Y	89	He	2162817.10	1.3	2217336.32	97.54	29.5	120.4	
Tb	159	No Gas	21955468.28	1.7	20085725.95	109.31	29.5	120.4	
Tb	159	He	7987880.09	0.9	7863593.35	101.58	29.5	120.4	
Bi	209	No Gas	10007463.36	1.7	9123990.23	109.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:13:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	58.4	185.57	0.2	
11	B	6	No Gas	0.954	ppb	0.7	7003.03	4	
23	Na	45	He	11.016	ppb	7.7	40816.51	200	
24	Mg	45	He	0.883	ppb	37.1	457.82	20	
27	Al	45	He	-0.118	ppb	N/A	80.00	20	
28	Si	45	H2	-0.204	ppb	N/A	724.15	100	
39	K	45	He	1.680	ppb	150.9	25335.99	200	
40	Ca	45	H2	1.262	ppb	3.9	7713.48	20	
51	V	89	He	-0.007	ppb	N/A	148.89	1	
52	Cr	89	He	-0.002	ppb	N/A	865.21	1	
55	Mn	89	He	-0.007	ppb	N/A	119.31	0.4	
56	Fe	89	H2	1.438	ppb	10.8	15342.18	20	
59	Co	89	He	-0.002	ppb	N/A	28.89	0.2	
60	Ni	89	He	-0.067	ppb	N/A	85.56	0.4	
63	Cu	89	He	-0.015	ppb	N/A	302.24	0.6	
66	Zn	89	He	-0.029	ppb	N/A	316.68	2	
75	As	89	He	0.009	ppb	31.4	17.00	1	
78	Se	89	H2	0.021	ppb	21.5	8.83	1	
88	Sr	89	He	0.019	ppb	22.9	93.33	1	
95	Mo	89	He	0.055	ppb	14.0	232.23	1	
107	Ag	89	He	0.003	ppb	20.6	78.89	0.2	
111	Cd	89	He	0.002	ppb	97.9	4.08	0.2	
118	Sn	159	He	0.090	ppb	23.8	703.39	1	
121	Sb	159	No Gas	0.026	ppb	27.4	777.56	0.2	
137	Ba	159	No Gas	0.010	ppb	60.4	206.90	0.4	
182	W	159	No Gas	0.099	ppb	13.3	1708.72	1	
205	Tl	209	No Gas	0.005	ppb	269.0	924.40	0.2	
208	Pb	209	No Gas	0.014	ppb	38.9	1061.21	0.2	
232	Th	209	No Gas	0.093	ppb	24.8	4258.91	1	
238	U	209	No Gas	0.030	ppb	32.2	1254.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8734389.50	1.9	8217096.81	106.3	29.5	120.4	
Sc	45	No Gas	16195081.59	0.8	15952466.59	101.52	29.5	120.4	
Sc	45	H2	1884643.17	0.0	1988810.56	94.76	29.5	120.4	
Sc	45	He	464322.02	1.2	477124.13	97.32	29.5	120.4	
Ge	72	No Gas	2828200.29	0.8	2777617.47	101.82	29.5	120.4	
Ge	72	H2	531339.85	0.4	580378.32	91.55	29.5	120.4	
Ge	72	He	270842.54	0.8	274469.22	98.68	29.5	120.4	
Y	89	H2	9697175.90	0.3	10106085.94	95.95	29.5	120.4	
Y	89	He	2157670.11	1.1	2217336.32	97.31	29.5	120.4	
Tb	159	No Gas	21671276.34	0.8	20085725.95	107.89	29.5	120.4	
Tb	159	He	7890398.15	0.3	7863593.35	100.34	29.5	120.4	
Bi	209	No Gas	9829702.07	1.1	9123990.23	107.73	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: KC **ANALYSIS DATE**: 8/05/2020

REVIEWED

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH05A

8/6/20

KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

ICV (16.06) fails high for Tl (22.150 ug/L)

Opening PQL (16:12) fails low for B (0.589 ug/L) Mn (0.289 ug/L) and high for Sb (0.246 ug/L) W (1.234 ug/L)

Closing PQL (20:05) fails high for Na (346.124 ug/L) W (1.249 ug/L) Th (0.248 ug/L) and failed low for B (1.002 ug/L)

LRS1 (16:20) fails high for Ag (114.399 ug/L).

CCB (18:13) fails for Na (132.745 ug/L).

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH05A	08/05/2020	15:59	KC
CalStd	1	LNH05A	08/05/2020	16:03	KC
ICV	1	LNH05A	08/05/2020	16:06	KC
ICB	1	LNH05A	08/05/2020	16:09	KC
PQL	1	LNH05A	08/05/2020	16:12	KC
ICSA	1	LNH05A	08/05/2020	16:14	KC
ICSAB	1	LNH05A	08/05/2020	16:17	KC
LRS1	1	LNH05A	08/05/2020	16:20	KC
LRS2	1	LNH05A	08/05/2020	16:22	KC
RINSE	1	LNH05A	08/05/2020	16:25	KC
RINSE	1	LNH05A	08/05/2020	16:28	KC
CCV	1	LNH05A	08/05/2020	16:30	KC
CCB	1	LNH05A	08/05/2020	16:33	KC
PBWNG13IMW2	5	LNH05A	08/05/2020	16:42	KC
LCSWNG13IMW2	5	LNH05A	08/05/2020	16:44	KC
SN5646-004	5	LNH05A	08/05/2020	16:47	KC
SN5646-005	5	LNH05A	08/05/2020	16:49	KC
PBSNH04IMS1	5	LNH05A	08/05/2020	16:52	KC
LCSONH04IMS1	5	LNH05A	08/05/2020	16:55	KC
SN5717-004	5	LNH05A	08/05/2020	16:57	KC
SN5717-010	5	LNH05A	08/05/2020	17:00	KC
SN5717-010L	25	LNH05A	08/05/2020	17:03	KC
SN5717-010A	5	LNH05A	08/05/2020	17:05	KC
CCV	1	LNH05A	08/05/2020	17:08	KC
CCB	1	LNH05A	08/05/2020	17:11	KC
SN5717-010S	5	LNH05A	08/05/2020	17:14	KC
SN5717-010P	5	LNH05A	08/05/2020	17:16	KC
SN5717-013	5	LNH05A	08/05/2020	17:19	KC
SN5717-017	5	LNH05A	08/05/2020	17:22	KC
PBWNG31IMW1	1	LNH05A	08/05/2020	17:25	KC
LCSWNG31IMW1	1	LNH05A	08/05/2020	17:27	KC
SN6310-003	5	LNH05A	08/05/2020	17:30	KC
RINSE	1	LNH05A	08/05/2020	17:33	KC
RINSE	1	LNH05A	08/05/2020	17:35	KC
RINSE	1	LNH05A	08/05/2020	17:38	KC
CCV	1	LNH05A	08/05/2020	17:41	KC
CCB	1	LNH05A	08/05/2020	17:43	KC
SN6032-001R	5	LNH05A	08/05/2020	17:46	KC
RINSE	1	LNH05A	08/05/2020	17:49	KC
RINSE	1	LNH05A	08/05/2020	17:51	KC
RINSE	1	LNH05A	08/05/2020	17:54	KC
SN6347-001	1	LNH05A	08/05/2020	17:57	KC
SN6347-002	1	LNH05A	08/05/2020	17:59	KC
SN6347-003	1	LNH05A	08/05/2020	18:02	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6347-004	1	LNH05A	08/05/2020	18:05	KC
SN6349-001	1	LNH05A	08/05/2020	18:08	KC
CCV	1	LNH05A	08/05/2020	18:10	KC
CCB	1	LNH05A	08/05/2020	18:13	KC
PQL	1	LNH05A	08/05/2020	18:16	KC
RINSE	1	LNH05A	08/05/2020	18:18	KC
RINSE	1	LNH05A	08/05/2020	18:21	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq. Date-Time	8/5/2020 3:08:17 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

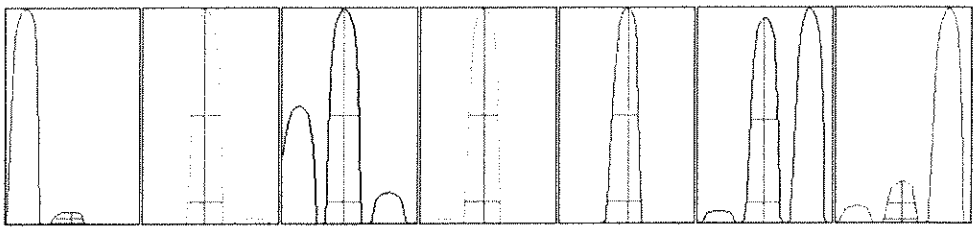
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	15542	155415.62	0.338	5.000	
9	5802	58021.74	0.460	5.000	
24	226601	2266009.72	1.011	5.000	
59	41569	415690.52	0.633	5.000	
115	474855	4748554.05	0.634	5.000	
205	26901	269014.58	0.391	5.000	
208	58658	586577.65	0.329	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	15611	15564	15556	15489	15489
9	5756	5808	5823	5811	5813
24	224289	224701	225991	229131	228892
59	41181	41421	41706	41713	41824
115	470653	474376	474222	476123	478903
205	26768	26997	26988	26811	26943
208	58399	58751	58915	58652	58572

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	25093.63	7.00	6.90 - 7.10	
9	9624.67	8.90	8.90 - 9.10	
24	358226.36	23.90	23.90 - 24.10	
59	67186.15	58.95	58.90 - 59.10	
115	837175.16	115.05	114.90 - 115.10	
205	45249.94	205.00	204.90 - 205.10	
208	99439.88	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.65	0.731	0.900	
9	0.64	0.759	0.900	
24	0.66	0.771	0.900	
59	0.64	0.770	0.900	
115	0.59	0.745	0.900	
205	0.62	0.739	0.900	
208	0.61	0.737	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	12.4 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2844	28435.16	1.792	5.000	
89	302990	3029901.25	2.022	5.000	
205	26536	265356.18	0.432	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2776	2821	2856	2849	2915
89	294020	300232	305716	304828	310154
205	26452	26385	26594	26579	26668

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	1.6 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	8841	88405.05	1.185	5.000	
89	63242	632415.77	1.678	5.000	
205	12503	125029.31	0.694	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8666	8831	8878	8939	8888
89	61676	62720	63548	64357	63907
205	12362	12543	12507	12595	12508

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.6 V	Deflect	1.2 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

Sample Report

Sample Name CalBlank

File Name 006CALB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 3:59:51 PM

Sample Type CalBlk

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	17.78	1000	
11	B	6	No Gas	0.000	ppb	N/A	932.28	1000	
23	Na	45	He	0.000	ppb	N/A	37794.67	1000	
24	Mg	45	He	0.000	ppb	N/A	122.23	1000	
27	Al	45	He	0.000	ppb	N/A	429.67	1000	
28	Si	45	H2	0.000	ppb	N/A	533.94	1000	
39	K	45	He	0.000	ppb	N/A	21384.70	1000	
40	Ca	45	H2	0.000	ppb	N/A	15276.55	1000	
51	V	89	He	0.000	ppb	N/A	181.12	1000	
52	Cr	89	He	0.000	ppb	N/A	814.55	1000	
55	Mn	89	He	0.000	ppb	N/A	499.92	1000	
56	Fe	89	H2	0.000	ppb	N/A	6248.39	1000	
59	Co	89	He	0.000	ppb	N/A	60.00	1000	
60	Ni	89	He	0.000	ppb	N/A	301.12	1000	
63	Cu	89	He	0.000	ppb	N/A	415.58	1000	
66	Zn	89	He	0.000	ppb	N/A	787.83	1000	
75	As	89	He	0.000	ppb	N/A	11.33	1000	
78	Se	89	H2	0.000	ppb	N/A	0.83	1000	
88	Sr	89	He	0.000	ppb	N/A	38.89	1000	
95	Mo	89	He	0.000	ppb	N/A	16.67	1000	
107	Ag	89	He	0.000	ppb	N/A	26.67	1000	
111	Cd	89	He	0.000	ppb	N/A	1.48	1000	
118	Sn	159	He	0.000	ppb	N/A	373.35	1000	
121	Sb	159	No Gas	0.000	ppb	N/A	176.86	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	66.74	1000	
182	W	159	No Gas	0.000	ppb	N/A	63.40	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	724.17	1000	
208	Pb	209	No Gas	0.000	ppb	N/A	714.14	1000	
232	Th	209	No Gas	0.000	ppb	N/A	233.60	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8075153.20	0.2	8075153.2	100	29.5	120.4	
Sc	45	No Gas	15284588.74	0.4	15284588.74	100	29.5	120.4	
Sc	45	H2	1817402.03	1.2	1817402.03	100	29.5	120.4	
Sc	45	He	431380.74	2.5	431380.74	100	29.5	120.4	
Ge	72	No Gas	2712289.77	0.3	2712289.77	100	29.5	120.4	
Ge	72	H2	540643.15	0.9	540643.15	100	29.5	120.4	
Ge	72	He	259264.63	1.3	259264.63	100	29.5	120.4	
Y	89	H2	9628329.76	0.6	9628329.76	100	29.5	120.4	
Y	89	He	2093497.43	2.4	2093497.43	100	29.5	120.4	
Tb	159	No Gas	21312636.35	0.5	21312636.35	100	29.5	120.4	
Tb	159	He	7937819.95	2.1	7937819.95	100	29.5	120.4	
Bi	209	No Gas	9931051.85	0.3	9931051.85	100	29.5	120.4	

Sample Report

Sample Name CalStd

File Name 007CALS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:03:15 PM

Sample Type CalStd

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.000	ppb	2.9	335830.77	1000	
11	B	6	No Gas	50.000	ppb	3.3	227076.27	1000	
23	Na	45	He	10000.000	ppb	0.4	7600630.36	1000	
24	Mg	45	He	10000.000	ppb	0.7	4031515.98	1000	
27	Al	45	He	1000.000	ppb	0.3	149610.98	1000	
28	Si	45	H2	1000.000	ppb	4.9	241647.66	1000	
39	K	45	He	10000.000	ppb	0.6	3200118.23	1000	
40	Ca	45	H2	10000.000	ppb	4.6	22376865.78	1000	
51	V	89	He	50.000	ppb	0.3	255762.82	1000	
52	Cr	89	He	50.000	ppb	0.9	326527.65	1000	
55	Mn	89	He	50.000	ppb	0.8	141626.67	1000	
56	Fe	89	H2	10000.000	ppb	7.0	86440588.38	1000	
59	Co	89	He	50.000	ppb	0.3	538698.05	1000	
60	Ni	89	He	50.000	ppb	0.9	148687.50	1000	
63	Cu	89	He	50.000	ppb	0.4	406632.35	1000	
66	Zn	89	He	50.000	ppb	0.6	45337.94	1000	
75	As	89	He	50.000	ppb	0.4	31032.47	1000	
78	Se	89	H2	50.000	ppb	6.6	15852.12	1000	
88	Sr	89	He	50.000	ppb	0.8	160523.89	1000	
95	Mo	89	He	50.000	ppb	0.3	194511.80	1000	
107	Ag	89	He	50.000	ppb	0.3	618208.73	1000	
111	Cd	89	He	50.000	ppb	0.3	73788.59	1000	
118	Sn	159	He	50.000	ppb	0.6	151956.25	1000	
121	Sb	159	No Gas	50.000	ppb	2.1	975979.50	1000	
137	Ba	159	No Gas	50.000	ppb	3.4	380698.20	1000	
182	W	159	No Gas	50.000	ppb	3.8	791507.41	1000	
205	Tl	209	No Gas	50.000	ppb	3.1	1474589.64	1000	
208	Pb	209	No Gas	50.000	ppb	2.7	2073027.12	1000	
232	Th	209	No Gas	50.000	ppb	3.7	1999502.11	1000	
238	U	209	No Gas	50.000	ppb	3.0	1934113.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8166327.39	0.4	8075153.2	101.13	29.5	120.4	
Sc	45	No Gas	15707687.87	0.5	15284588.74	102.77	29.5	120.4	
Sc	45	H2	1938563.48	4.3	1817402.03	106.67	29.5	120.4	
Sc	45	He	441874.36	0.3	431380.74	102.43	29.5	120.4	
Ge	72	No Gas	2766696.13	0.2	2712289.77	102.01	29.5	120.4	
Ge	72	H2	568022.97	2.8	540643.15	105.06	29.5	120.4	
Ge	72	He	263597.65	0.3	259264.63	101.67	29.5	120.4	
Y	89	H2	10161642.22	5.4	9628329.76	105.54	29.5	120.4	
Y	89	He	2141142.73	0.5	2093497.43	102.28	29.5	120.4	
Tb	159	No Gas	21765448.28	0.3	21312636.35	102.12	29.5	120.4	
Tb	159	He	8128412.65	1.0	7937819.95	102.4	29.5	120.4	
Bi	209	No Gas	9963916.69	0.3	9931051.85	100.33	29.5	120.4	

Sample Report

Sample Name ICV

File Name 008_ICV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:06:51 PM

Sample Type ICV

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	19.826	ppb	7.4	132049.52	20	
11	B	6	No Gas	20.325	ppb	7.3	92083.78	20	
23	Na	45	He	3977.037	ppb	0.2	3011255.92	4000	
24	Mg	45	He	3965.117	ppb	0.2	1580317.95	4000	
27	Al	45	He	368.018	ppb	1.8	54708.91	400	
28	Si	45	H2	426.420	ppb	1.4	96663.26	400	
39	K	45	He	3933.992	ppb	0.2	1257660.98	4000	
40	Ca	45	H2	4087.967	ppb	0.1	8563446.33	4000	
51	V	89	He	19.798	ppb	1.1	100810.87	20	
52	Cr	89	He	20.100	ppb	0.2	131023.73	20	
55	Mn	89	He	20.187	ppb	1.3	57159.39	20	
56	Fe	89	H2	4111.522	ppb	0.8	33732988.47	4000	
59	Co	89	He	20.326	ppb	1.8	217792.76	20	
60	Ni	89	He	20.484	ppb	0.9	60752.58	20	
63	Cu	89	He	20.370	ppb	1.1	164979.29	20	
66	Zn	89	He	19.860	ppb	3.5	18387.17	20	
75	As	89	He	19.743	ppb	1.5	12190.67	20	
78	Se	89	H2	20.494	ppb	0.4	6165.92	20	
88	Sr	89	He	19.360	ppb	0.7	61832.30	20	
95	Mo	89	He	40.440	ppb	0.5	156442.05	40	
107	Ag	89	He	20.097	ppb	0.8	247096.38	20	
111	Cd	89	He	20.146	ppb	0.7	29564.55	20	
118	Sn	159	He	19.987	ppb	0.5	61171.87	20	
121	Sb	159	No Gas	20.537	ppb	7.5	402011.36	20	
137	Ba	159	No Gas	20.084	ppb	7.4	153346.71	20	
182	W	159	No Gas	20.427	ppb	8.6	324147.42	20	
205	Tl	209	No Gas	22.150	ppb	6.5	662130.05	20	> +/- 10%
208	Pb	209	No Gas	20.241	ppb	7.3	850383.78	20	
232	Th	209	No Gas	20.828	ppb	8.3	843571.11	20	
238	U	209	No Gas	20.561	ppb	7.9	805430.62	20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8109260.80	2.9	8075153.2	100.42	29.5	120.4	
Sc	45	No Gas	15610781.90	2.5	15284588.74	102.13	29.5	120.4	
Sc	45	H2	1810486.26	1.3	1817402.03	99.62	29.5	120.4	
Sc	45	He	436820.70	0.2	431380.74	101.26	29.5	120.4	
Ge	72	No Gas	2771599.29	3.1	2712289.77	102.19	29.5	120.4	
Ge	72	H2	539161.15	0.9	540643.15	99.73	29.5	120.4	
Ge	72	He	261113.22	0.3	259264.63	100.71	29.5	120.4	
Y	89	H2	9619366.01	0.3	9628329.76	99.91	29.5	120.4	
Y	89	He	2129132.00	0.6	2093497.43	101.7	29.5	120.4	
Tb	159	No Gas	21853042.73	3.0	21312636.35	102.54	29.5	120.4	
Tb	159	He	8154936.75	0.3	7937819.95	102.74	29.5	120.4	
Bi	209	No Gas	10105957.89	2.8	9931051.85	101.76	29.5	120.4	

Sample Report

Sample Name ICB

File Name 009_ICB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:09:30 PM

Sample Type ICB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.014	ppb	38.3	112.23	0.2	
11	B	6	No Gas	0.384	ppb	6.0	2642.55	4	
23	Na	45	He	1.334	ppb	215.1	38803.41	200	
24	Mg	45	He	1.828	ppb	120.5	840.32	20	
27	Al	45	He	-1.378	ppb	N/A	235.57	20	
28	Si	45	H2	0.255	ppb	212.0	573.98	100	
39	K	45	He	0.461	ppb	349.1	21560.17	200	
40	Ca	45	H2	4.084	ppb	14.5	23150.74	20	
51	V	89	He	0.006	ppb	149.1	211.12	1	
52	Cr	89	He	0.008	ppb	122.6	870.54	1	
55	Mn	89	He	0.063	ppb	36.1	681.23	0.4	
56	Fe	89	H2	1.180	ppb	21.2	15465.94	20	
59	Co	89	He	0.006	ppb	149.5	126.68	0.2	
60	Ni	89	He	0.043	ppb	96.8	431.14	0.4	
63	Cu	89	He	0.031	ppb	36.9	668.93	0.6	
66	Zn	89	He	0.220	ppb	46.8	987.85	2	
75	As	89	He	0.009	ppb	58.9	16.67	1	
78	Se	89	H2	0.024	ppb	41.3	7.67	1	
88	Sr	89	He	0.010	ppb	126.3	71.11	1	
95	Mo	89	He	0.068	ppb	27.8	276.68	1	
107	Ag	89	He	0.013	ppb	84.5	182.23	0.2	
111	Cd	89	He	0.009	ppb	119.2	14.44	0.2	
118	Sn	159	He	0.070	ppb	25.9	595.59	1	
121	Sb	159	No Gas	0.008	ppb	29.0	333.71	0.2	
137	Ba	159	No Gas	0.017	ppb	90.1	193.55	0.4	
182	W	159	No Gas	0.053	ppb	9.2	897.69	1	
205	Tl	209	No Gas	0.006	ppb	121.0	911.05	0.2	
208	Pb	209	No Gas	0.019	ppb	19.4	1518.40	0.2	
232	Th	209	No Gas	0.047	ppb	18.3	2135.91	1	
238	U	209	No Gas	0.018	ppb	53.5	704.16	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8054237.70	0.7	8075153.2	99.74	29.5	120.4	
Sc	45	No Gas	15419374.88	1.4	15284588.74	100.88	29.5	120.4	
Sc	45	H2	1765922.47	3.0	1817402.03	97.17	29.5	120.4	
Sc	45	He	431702.65	0.8	431380.74	100.07	29.5	120.4	
Ge	72	No Gas	2740815.57	0.9	2712289.77	101.05	29.5	120.4	
Ge	72	H2	527360.72	1.5	540643.15	97.54	29.5	120.4	
Ge	72	He	260214.54	1.0	259264.63	100.37	29.5	120.4	
Y	89	H2	9377079.98	4.3	9628329.76	97.39	29.5	120.4	
Y	89	He	2112947.33	0.7	2093497.43	100.93	29.5	120.4	
Tb	159	No Gas	21517214.96	1.4	21312636.35	100.96	29.5	120.4	
Tb	159	He	8149155.30	0.3	7937819.95	102.66	29.5	120.4	
Bi	209	No Gas	9993289.92	0.6	9931051.85	100.63	29.5	120.4	

Sample Report

Sample Name PQL

File Name 010LICV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:12:05 PM

Sample Type LLICV

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.211	ppb	12.5	1404.56	0.2	
11	B	6	No Gas	0.589	ppb	6.5	3533.89	4	Failed DoD □ Failed 6020/EPA
23	Na	45	He	208.905	ppb	1.3	193029.68	200	
24	Mg	45	He	22.839	ppb	1.7	9159.13	20	
27	Al	45	He	17.334	ppb	2.6	2975.98	20	
28	Si	45	H2	101.736	ppb	3.0	23388.80	100	
39	K	45	He	205.396	ppb	0.5	85578.91	200	
40	Ca	45	H2	16.653	ppb	1.2	49872.02	20	
51	V	89	He	1.031	ppb	1.5	5416.80	1	
52	Cr	89	He	1.044	ppb	2.1	7580.03	1	
55	Mn	89	He	0.289	ppb	4.9	1319.83	0.4	Failed DoD
56	Fe	89	H2	22.167	ppb	1.6	187820.82	20	
59	Co	89	He	0.204	ppb	2.0	2247.01	0.2	
60	Ni	89	He	0.354	ppb	2.3	1347.90	0.4	
63	Cu	89	He	0.602	ppb	1.6	5276.74	0.6	
66	Zn	89	He	1.622	ppb	7.8	2234.70	2	
75	As	89	He	0.971	ppb	6.0	609.75	1	
78	Se	89	H2	1.066	ppb	1.8	321.16	1	
88	Sr	89	He	1.017	ppb	2.0	3280.52	1	
95	Mo	89	He	1.034	ppb	4.0	4011.85	1	
107	Ag	89	He	0.234	ppb	1.7	2895.97	0.2	
111	Cd	89	He	0.219	ppb	3.9	321.86	0.2	
118	Sn	159	He	1.023	ppb	0.8	3485.04	1	
121	Sb	159	No Gas	0.246	ppb	6.3	4926.38	0.2	Failed DoD
137	Ba	159	No Gas	0.430	ppb	5.6	3307.47	0.4	
182	W	159	No Gas	1.234	ppb	3.6	19396.20	1	Failed DoD
205	Tl	209	No Gas	0.223	ppb	4.9	7363.68	0.2	
208	Pb	209	No Gas	0.228	ppb	11.2	10236.42	0.2	
232	Th	209	No Gas	0.234	ppb	11.0	9657.83	0.2	
238	U	209	No Gas	0.221	ppb	11.0	8616.02	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8006029.71	1.6	8075153.2	99.14	29.5	120.4	
Sc	45	No Gas	15407427.93	1.8	15284588.74	100.8	29.5	120.4	
Sc	45	H2	1804361.07	0.4	1817402.03	99.28	29.5	120.4	
Sc	45	He	433658.64	0.3	431380.74	100.53	29.5	120.4	
Ge	72	No Gas	2751826.29	2.2	2712289.77	101.46	29.5	120.4	
Ge	72	H2	536566.28	0.8	540643.15	99.25	29.5	120.4	
Ge	72	He	260037.89	0.6	259264.63	100.3	29.5	120.4	
Y	89	H2	9606508.77	0.4	9628329.76	99.77	29.5	120.4	
Y	89	He	2126518.75	0.5	2093497.43	101.58	29.5	120.4	
Tb	159	No Gas	21551780.24	1.6	21312636.35	101.12	29.5	120.4	
Tb	159	He	8129259.60	0.9	7937819.95	102.41	29.5	120.4	
Bi	209	No Gas	10056373.52	2.4	9931051.85	101.26	29.5	120.4	

Sample Report

Sample Name ICSA

File Name 011ICSA.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:14:44 PM

Sample Type ICSA

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	36.7	81.11	0.2	
11	B	6	No Gas	1.836	ppb	7.0	8553.93	2.59	
23	Na	45	He	98931.476	ppb	0.4	72695301.91	100000	
24	Mg	45	He	96178.733	ppb	0.3	37657389.44	100000	
27	Al	45	He	90636.380	ppb	0.5	13131093.00	100000	
28	Si	45	H2	12.112	ppb	11.8	3233.96	100	
39	K	45	He	97696.072	ppb	0.4	30177592.96	100000	
40	Ca	45	H2	102559.249	ppb	0.6	212534034.61	100000	
51	V	89	He	0.012	ppb	46.7	238.90	0.84	
52	Cr	89	He	0.271	ppb	8.7	2501.11	0.72	
55	Mn	89	He	0.351	ppb	6.5	1446.48	0.4826	
56	Fe	89	H2	99704.631	ppb	0.6	794381560.24	100000	
59	Co	89	He	0.286	ppb	9.9	3029.44	0.8	
60	Ni	89	He	0.275	ppb	8.7	1082.31	0.514	
63	Cu	89	He	0.265	ppb	9.7	2485.87	0.557	
66	Zn	89	He	-0.101	ppb	N/A	688.93	1.2368	
75	As	89	He	0.048	ppb	6.4	40.00	3.5	
78	Se	89	H2	0.082	ppb	23.0	24.83	0.8	
88	Sr	89	He	0.782	ppb	2.4	2458.09	1.0578	
95	Mo	89	He	2009.471	ppb	1.4	7532526.55	2000	
107	Ag	89	He	0.016	ppb	7.8	214.45	0.2	
111	Cd	89	He	0.390	ppb	3.1	556.69	0.468	
118	Sn	159	He	0.252	ppb	8.9	1077.86	0.76	
121	Sb	159	No Gas	0.175	ppb	8.8	3430.94	0.289	
137	Ba	159	No Gas	0.179	ppb	12.7	1368.26	0.3206	
182	W	159	No Gas	0.197	ppb	4.4	3037.10	0.68	
205	Tl	209	No Gas	0.004	ppb	128.5	754.21	0.2	
208	Pb	209	No Gas	0.098	ppb	13.9	4281.76	0.23	
232	Th	209	No Gas	0.020	ppb	9.8	931.09	0.2	
238	U	209	No Gas	0.010	ppb	29.7	340.39	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7562326.38	2.4	8075153.2	93.65	29.5	120.4	
Sc	45	No Gas	15382916.75	2.1	15284588.74	100.64	29.5	120.4	
Sc	45	H2	1794141.55	1.3	1817402.03	98.72	29.5	120.4	
Sc	45	He	429164.39	0.7	431380.74	99.49	29.5	120.4	
Ge	72	No Gas	2669943.21	2.2	2712289.77	98.44	29.5	120.4	
Ge	72	H2	498566.52	1.1	540643.15	92.22	29.5	120.4	
Ge	72	He	250311.81	0.1	259264.63	96.55	29.5	120.4	
Y	89	H2	9343286.08	1.3	9628329.76	97.04	29.5	120.4	
Y	89	He	2063416.48	0.6	2093497.43	98.56	29.5	120.4	
Tb	159	No Gas	20812025.11	2.6	21312636.35	97.65	29.5	120.4	
Tb	159	He	7644001.07	1.0	7937819.95	96.3	29.5	120.4	
Bi	209	No Gas	8916850.81	2.6	9931051.85	89.79	29.5	120.4	

Sample Report

Sample Name ICSAB

File Name 012ICSB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:17:27 PM

Sample Type ICSB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	21.211	ppb	7.2	125027.48	20	
11	B	6	No Gas	21.765	ppb	7.3	87207.23	20	
23	Na	45	He	101614.741	ppb	0.3	75085094.12	100000	
24	Mg	45	He	98641.705	ppb	0.2	38838944.14	100000	
27	Al	45	He	90998.962	ppb	0.4	13257535.08	100000	
28	Si	45	H2	480.258	ppb	1.5	106339.41	500	
39	K	45	He	99259.274	ppb	0.5	30832247.12	100000	
40	Ca	45	H2	104747.883	ppb	0.6	214068803.47	100000	
51	V	89	He	21.285	ppb	1.1	103385.91	20	
52	Cr	89	He	21.036	ppb	1.1	130780.11	20	
55	Mn	89	He	20.796	ppb	0.8	56162.19	20	
56	Fe	89	H2	101823.466	ppb	1.0	795798003.30	100000	
59	Co	89	He	20.823	ppb	1.8	212846.34	20	
60	Ni	89	He	20.325	ppb	1.9	57507.81	20	
63	Cu	89	He	19.799	ppb	1.2	152985.77	20	
66	Zn	89	He	19.321	ppb	0.9	17089.89	20	
75	As	89	He	21.234	ppb	1.8	12507.32	20	
78	Se	89	H2	21.108	ppb	1.1	6050.38	20	
88	Sr	89	He	20.446	ppb	0.9	62292.09	20	
95	Mo	89	He	2102.534	ppb	1.0	7758424.19	2000	
107	Ag	89	He	19.094	ppb	1.3	223963.24	20	
111	Cd	89	He	19.463	ppb	0.8	27248.23	20	
118	Sn	159	He	20.557	ppb	1.3	57191.01	20	
121	Sb	159	No Gas	20.808	ppb	7.4	386673.87	20	
137	Ba	159	No Gas	20.654	ppb	7.8	149699.24	20	
182	W	159	No Gas	20.504	ppb	7.7	308942.07	20	
205	Tl	209	No Gas	21.779	ppb	7.8	565718.15	20	
208	Pb	209	No Gas	21.500	ppb	6.5	785181.15	20	
232	Th	209	No Gas	22.836	ppb	8.7	803759.89	20	
238	U	209	No Gas	22.552	ppb	7.9	767869.44	20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7176731.74	2.9	8075153.2	88.87	29.5	120.4	
Sc	45	No Gas	15470408.82	3.1	15284588.74	101.22	29.5	120.4	
Sc	45	H2	1769234.27	1.2	1817402.03	97.35	29.5	120.4	
Sc	45	He	431571.86	0.8	431380.74	100.04	29.5	120.4	
Ge	72	No Gas	2672289.38	2.9	2712289.77	98.53	29.5	120.4	
Ge	72	H2	476615.50	1.1	540643.15	88.16	29.5	120.4	
Ge	72	He	250955.48	0.6	259264.63	96.8	29.5	120.4	
Y	89	H2	9165010.94	1.4	9628329.76	95.19	29.5	120.4	
Y	89	He	2031265.67	1.2	2093497.43	97.03	29.5	120.4	
Tb	159	No Gas	20748317.89	3.3	21312636.35	97.35	29.5	120.4	
Tb	159	He	7414432.74	0.6	7937819.95	93.41	29.5	120.4	
Bi	209	No Gas	8785374.02	3.2	9931051.85	88.46	29.5	120.4	

Sample Report

Sample Name LRS1

File Name 013_LRS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:20:13 PM

Sample Type LRS

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	107.961	ppb	7.8	633815.74	100	
11	B	6	No Gas	497.014	ppb	7.4	1965657.26	500	
51	V	89	He	1070.283	ppb	0.5	5128004.09	1000	
52	Cr	89	He	2118.388	ppb	0.5	12934913.92	2000	
55	Mn	89	He	2067.293	ppb	0.4	5469045.64	2000	
59	Co	89	He	1081.030	ppb	0.5	10915630.67	1000	
60	Ni	89	He	1093.503	ppb	0.8	3041985.44	1000	
63	Cu	89	He	2105.925	ppb	0.6	16036611.71	2000	
66	Zn	89	He	2106.664	ppb	0.3	1759430.48	2000	
75	As	89	He	1041.108	ppb	0.4	605429.68	1000	
78	Se	89	H2	1032.913	ppb	0.1	292676.54	1000	
88	Sr	89	He	1954.080	ppb	0.3	5878807.76	2000	
95	Mo	89	He	1067.138	ppb	0.6	3890833.38	1000	
107	Ag	89	He	114.399	ppb	0.2	1325720.76	100	> +/- 10%
111	Cd	89	He	1037.358	ppb	0.5	1434905.20	1000	
118	Sn	159	He	1007.619	ppb	1.3	2871949.05	1000	
121	Sb	159	No Gas	1036.272	ppb	6.4	20255975.68	1000	
137	Ba	159	No Gas	1989.147	ppb	6.8	15166201.50	2000	
182	W	159	No Gas	986.357	ppb	7.0	15637101.66	1000	
205	Tl	209	No Gas	1047.823	ppb	6.2	31123320.35	1000	
208	Pb	209	No Gas	2022.628	ppb	6.4	84470545.90	2000	
232	Th	209	No Gas	1011.729	ppb	7.4	40758693.09	1000	
238	U	209	No Gas	993.523	ppb	7.8	38718792.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7144762.27	1.8	8075153.2	88.48	29.5	120.4	
Sc	45	No Gas	15792410.60	2.1	15284588.74	103.32	29.5	120.4	
Sc	45	H2	1710607.77	0.4	1817402.03	94.12	29.5	120.4	
Sc	45	He	421625.81	1.3	431380.74	97.74	29.5	120.4	
Ge	72	No Gas	2804633.49	2.2	2712289.77	103.4	29.5	120.4	
Ge	72	H2	470851.40	0.6	540643.15	87.09	29.5	120.4	
Ge	72	He	254437.04	0.5	259264.63	98.14	29.5	120.4	
Y	89	H2	9060538.55	1.0	9628329.76	94.1	29.5	120.4	
Y	89	He	2006894.36	0.1	2093497.43	95.86	29.5	120.4	
Tb	159	No Gas	21811895.23	1.4	21312636.35	102.34	29.5	120.4	
Tb	159	He	7642121.00	0.9	7937819.95	96.27	29.5	120.4	
Bi	209	No Gas	10047379.63	1.7	9931051.85	101.17	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:22:44 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.071	ppb	25.1	406.69	100	
11	B	6	No Gas	9.032	ppb	9.7	34249.66	1000	
23	Na	45	He	202358.422	ppb	0.6	159036360.76	200000	>LDR
24	Mg	45	He	195034.369	ppb	0.2	81704058.78	200000	
27	Al	45	He	186055.363	ppb	0.1	28838979.01	200000	
28	Si	45	H2	9172.243	ppb	0.6	2047238.23	10000	
39	K	45	He	202348.938	ppb	0.5	66844910.96	200000	>LDR
40	Ca	45	H2	211187.000	ppb	0.6	437074024.60	200000	>LDR
51	V	89	He	0.176	ppb	9.9	1078.98	1000	
52	Cr	89	He	1.462	ppb	2.3	10306.58	2000	
55	Mn	89	He	7.572	ppb	1.3	21782.17	2000	
56	Fe	89	H2	102283.000	ppb	0.6	795228847.50	100000	>LDR
59	Co	89	He	0.594	ppb	2.0	6428.66	1000	
60	Ni	89	He	1.889	ppb	3.0	5883.68	1000	
63	Cu	89	He	1.099	ppb	1.1	9311.24	2000	
66	Zn	89	He	1.037	ppb	0.3	1720.17	2000	
75	As	89	He	0.269	ppb	2.5	177.69	1000	
78	Se	89	H2	0.544	ppb	27.8	155.49	1000	
88	Sr	89	He	1.105	ppb	3.1	3569.49	2000	
95	Mo	89	He	1.099	ppb	4.6	4274.17	1000	
107	Ag	89	He	0.099	ppb	1.8	1243.44	100	
111	Cd	89	He	0.110	ppb	4.6	162.97	1000	
118	Sn	159	He	1.227	ppb	6.4	3688.43	1000	
121	Sb	159	No Gas	0.783	ppb	14.5	14347.41	1000	
137	Ba	159	No Gas	1.615	ppb	15.5	11474.70	2000	
182	W	159	No Gas	1.642	ppb	6.1	24149.74	1000	
205	Tl	209	No Gas	0.694	ppb	15.1	17602.23	1000	
208	Pb	209	No Gas	1.333	ppb	17.3	46549.95	2000	
232	Th	209	No Gas	1.313	ppb	31.6	44018.55	1000	
238	U	209	No Gas	0.875	ppb	33.0	28250.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6689803.63	2.2	8075153.2	82.84	29.5	120.4	
Sc	45	No Gas	15225325.10	3.0	15284588.74	99.61	29.5	120.4	
Sc	45	H2	1791683.85	2.3	1817402.03	98.58	29.5	120.4	
Sc	45	He	459163.42	2.1	431380.74	106.44	29.5	120.4	
Ge	72	No Gas	2551964.06	3.1	2712289.77	94.09	29.5	120.4	
Ge	72	H2	467429.31	2.0	540643.15	86.46	29.5	120.4	
Ge	72	He	260520.63	1.6	259264.63	100.48	29.5	120.4	
Y	89	H2	9116874.37	1.6	9628329.76	94.69	29.5	120.4	
Y	89	He	2131085.94	1.2	2093497.43	101.8	29.5	120.4	
Tb	159	No Gas	20142575.81	3.6	21312636.35	94.51	29.5	120.4	
Tb	159	He	7309758.36	0.2	7937819.95	92.09	29.5	120.4	
Bi	209	No Gas	8258733.65	3.9	9931051.85	83.16	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:25:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	21.0	61.11	100	
11	B	6	No Gas	1.084	ppb	1.7	5555.71	1000	
23	Na	45	He	59.245	ppb	5.7	85441.83	200000	
24	Mg	45	He	27.386	ppb	13.1	11407.71	200000	
27	Al	45	He	20.189	ppb	18.5	3531.70	200000	
28	Si	45	H2	1.808	ppb	9.4	967.78	10000	
39	K	45	He	50.451	ppb	5.7	38833.47	200000	
40	Ca	45	H2	32.104	ppb	5.6	84788.72	200000	
51	V	89	He	0.042	ppb	18.1	400.02	1000	
52	Cr	89	He	0.068	ppb	30.7	1271.17	2000	
55	Mn	89	He	-0.055	ppb	N/A	357.28	2000	
56	Fe	89	H2	22.712	ppb	9.2	196681.07	100000	
59	Co	89	He	0.032	ppb	46.3	402.26	1000	
60	Ni	89	He	-0.046	ppb	N/A	170.01	1000	
63	Cu	89	He	0.119	ppb	18.5	1386.79	2000	
66	Zn	89	He	-0.480	ppb	N/A	376.69	2000	
75	As	89	He	0.062	ppb	23.9	50.01	1000	
78	Se	89	H2	0.097	ppb	10.4	30.67	1000	
88	Sr	89	He	0.058	ppb	15.7	224.45	2000	
95	Mo	89	He	0.299	ppb	21.9	1178.99	1000	
107	Ag	89	He	0.008	ppb	26.9	124.45	100	
111	Cd	89	He	0.039	ppb	23.9	59.26	1000	
118	Sn	159	He	0.282	ppb	19.2	1195.65	1000	
121	Sb	159	No Gas	0.067	ppb	14.6	1478.41	1000	
137	Ba	159	No Gas	0.078	ppb	4.6	654.08	2000	
182	W	159	No Gas	0.186	ppb	12.4	2980.37	1000	
205	Tl	209	No Gas	0.056	ppb	15.4	2316.13	1000	
208	Pb	209	No Gas	0.108	ppb	3.9	5076.09	2000	
232	Th	209	No Gas	0.062	ppb	17.7	2659.99	1000	
238	U	209	No Gas	0.048	ppb	5.2	1822.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7760980.39	2.2	8075153.2	96.11	29.5	120.4	
Sc	45	No Gas	16522765.10	1.6	15284588.74	108.1	29.5	120.4	
Sc	45	H2	1864461.61	0.8	1817402.03	102.59	29.5	120.4	
Sc	45	He	452220.01	1.9	431380.74	104.83	29.5	120.4	
Ge	72	No Gas	2889062.06	2.2	2712289.77	106.52	29.5	120.4	
Ge	72	H2	519319.69	0.8	540643.15	96.06	29.5	120.4	
Ge	72	He	269554.34	0.7	259264.63	103.97	29.5	120.4	
Y	89	H2	9830162.11	1.0	9628329.76	102.1	29.5	120.4	
Y	89	He	2139216.36	0.9	2093497.43	102.18	29.5	120.4	
Tb	159	No Gas	21571091.34	0.5	21312636.35	101.21	29.5	120.4	
Tb	159	He	7865611.55	1.8	7937819.95	99.09	29.5	120.4	
Bi	209	No Gas	9726013.06	0.8	9931051.85	97.94	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq Time	8/5/2020 4:28:11 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	5.9	81.11	100	
11	B	6	No Gas	0.793	ppb	4.1	4167.43	1000	
23	Na	45	He	19.689	ppb	4.7	54908.30	200000	
24	Mg	45	He	6.482	ppb	10.1	2804.93	200000	
27	Al	45	He	3.172	ppb	21.9	942.29	200000	
28	Si	45	H2	0.239	ppb	116.9	594.10	10000	
39	K	45	He	14.049	ppb	6.2	27028.27	200000	
40	Ca	45	H2	2.514	ppb	61.7	20751.12	200000	
51	V	89	He	0.015	ppb	79.7	261.12	1000	
52	Cr	89	He	0.036	ppb	24.7	1069.19	2000	
55	Mn	89	He	-0.101	ppb	N/A	227.96	2000	
56	Fe	89	H2	4.939	ppb	22.8	46809.23	100000	
59	Co	89	He	0.017	ppb	16.2	240.02	1000	
60	Ni	89	He	-0.081	ppb	N/A	68.89	1000	
63	Cu	89	He	0.048	ppb	20.0	816.72	2000	
66	Zn	89	He	-0.536	ppb	N/A	327.80	2000	
75	As	89	He	0.025	ppb	5.8	27.33	1000	
78	Se	89	H2	0.046	ppb	11.3	14.83	1000	
88	Sr	89	He	0.023	ppb	32.4	112.22	2000	
95	Mo	89	He	0.161	ppb	7.5	642.26	1000	
107	Ag	89	He	0.003	ppb	53.0	65.56	100	
111	Cd	89	He	0.017	ppb	16.7	27.04	1000	
118	Sn	159	He	0.123	ppb	11.7	734.50	1000	
121	Sb	159	No Gas	0.114	ppb	2.5	2412.91	1000	
137	Ba	159	No Gas	0.211	ppb	11.5	1675.32	2000	
182	W	159	No Gas	0.163	ppb	6.0	2646.59	1000	
205	Tl	209	No Gas	0.100	ppb	4.9	3641.32	1000	
208	Pb	209	No Gas	0.206	ppb	6.1	9191.65	2000	
232	Th	209	No Gas	0.108	ppb	2.1	4529.24	1000	
238	U	209	No Gas	0.104	ppb	9.7	3988.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7517203.60	2.0	8075153.2	93.09	29.5	120.4	
Sc	45	No Gas	16442459.38	3.0	15284588.74	107.58	29.5	120.4	
Sc	45	H2	1835742.44	0.6	1817402.03	101.01	29.5	120.4	
Sc	45	He	452631.39	0.6	431380.74	104.93	29.5	120.4	
Ge	72	No Gas	2896900.89	2.7	2712289.77	106.81	29.5	120.4	
Ge	72	H2	507045.19	0.9	540643.15	93.79	29.5	120.4	
Ge	72	He	270177.11	1.0	259264.63	104.21	29.5	120.4	
Y	89	H2	9630456.16	0.3	9628329.76	100.02	29.5	120.4	
Y	89	He	2141052.17	0.9	2093497.43	102.27	29.5	120.4	
Tb	159	No Gas	21842809.12	1.8	21312636.35	102.49	29.5	120.4	
Tb	159	He	7903748.15	1.1	7937819.95	99.57	29.5	120.4	
Bi	209	No Gas	9882996.81	1.9	9931051.85	99.52	29.5	120.4	

Sample Report

Sample Name CCV

File Name 017_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:30:49 PM

Sample Type CCV

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.696	ppb	6.7	158316.39	25	
11	B	6	No Gas	25.740	ppb	7.3	107641.85	25	
23	Na	45	He	5165.666	ppb	2.6	3994573.10	5000	
24	Mg	45	He	5073.261	ppb	3.7	2070662.83	5000	
27	Al	45	He	480.761	ppb	3.9	73049.35	500	
28	Si	45	H2	470.885	ppb	0.5	107983.68	500	
39	K	45	He	5044.241	ppb	2.9	1645432.85	5000	
40	Ca	45	H2	5049.245	ppb	0.1	10700415.67	5000	
51	V	89	He	25.942	ppb	3.5	131648.96	25	
52	Cr	89	He	25.983	ppb	3.8	168616.21	25	
55	Mn	89	He	25.509	ppb	3.3	71882.09	25	
56	Fe	89	H2	5122.913	ppb	1.0	42070348.45	5000	
59	Co	89	He	26.233	ppb	3.3	280234.85	25	
60	Ni	89	He	26.145	ppb	3.4	77228.14	25	
63	Cu	89	He	26.219	ppb	3.2	211607.44	25	
66	Zn	89	He	25.908	ppb	2.7	23678.63	25	
75	As	89	He	25.350	ppb	4.7	15599.76	25	
78	Se	89	H2	25.420	ppb	1.1	7655.09	25	
88	Sr	89	He	23.835	ppb	2.7	75897.85	25	
95	Mo	89	He	25.320	ppb	3.3	97665.41	25	
107	Ag	89	He	25.374	ppb	2.8	311069.97	25	
111	Cd	89	He	24.850	ppb	2.8	36362.49	25	
118	Sn	159	He	24.909	ppb	3.3	72983.54	25	
121	Sb	159	No Gas	25.813	ppb	6.5	499200.08	25	
137	Ba	159	No Gas	25.345	ppb	6.3	191201.37	25	
182	W	159	No Gas	23.991	ppb	6.9	376250.81	25	
205	Tl	209	No Gas	25.569	ppb	8.1	738450.08	25	
208	Pb	209	No Gas	25.335	ppb	7.2	1028536.97	25	
232	Th	209	No Gas	24.918	ppb	5.7	975702.83	25	
238	U	209	No Gas	25.076	ppb	5.5	949658.77	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7495873.32	1.4	8075153.2	92.83	29.5	120.4	
Sc	45	No Gas	16314422.60	1.7	15284588.74	106.74	29.5	120.4	
Sc	45	H2	1832191.41	1.3	1817402.03	100.81	29.5	120.4	
Sc	45	He	447638.59	2.7	431380.74	103.77	29.5	120.4	
Ge	72	No Gas	2882722.72	2.7	2712289.77	106.28	29.5	120.4	
Ge	72	H2	515029.95	1.3	540643.15	95.26	29.5	120.4	
Ge	72	He	268251.73	1.3	259264.63	103.47	29.5	120.4	
Y	89	H2	9629259.86	1.3	9628329.76	100.01	29.5	120.4	
Y	89	He	2124094.39	2.8	2093497.43	101.46	29.5	120.4	
Tb	159	No Gas	21574698.57	1.7	21312636.35	101.23	29.5	120.4	
Tb	159	He	7821654.53	2.8	7937819.95	98.54	29.5	120.4	
Bi	209	No Gas	9762224.80	2.1	9931051.85	98.3	29.5	120.4	

Sample Report

Sample Name CCB

File Name 018_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:33:22 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	58.8	212.23	0.2	
11	B	6	No Gas	0.717	ppb	4.6	3899.57	4	
23	Na	45	He	4.572	ppb	25.1	42999.06	200	
24	Mg	45	He	3.089	ppb	22.6	1397.95	20	
27	Al	45	He	-0.417	ppb	N/A	392.24	20	
28	Si	45	H2	-0.127	ppb	N/A	507.24	100	
39	K	45	He	6.426	ppb	23.2	24433.27	200	
40	Ca	45	H2	-2.290	ppb	N/A	10517.63	20	
51	V	89	He	0.009	ppb	23.0	231.12	1	
52	Cr	89	He	0.016	ppb	19.0	935.87	1	
55	Mn	89	He	-0.111	ppb	N/A	197.97	0.4	
56	Fe	89	H2	2.805	ppb	5.1	29339.93	20	
59	Co	89	He	0.009	ppb	18.3	155.57	0.2	
60	Ni	89	He	-0.080	ppb	N/A	70.00	0.4	
63	Cu	89	He	0.016	ppb	35.2	560.03	0.6	
66	Zn	89	He	-0.547	ppb	N/A	317.79	2	
75	As	89	He	0.015	ppb	48.8	21.00	1	
78	Se	89	H2	0.049	ppb	11.9	15.50	1	
88	Sr	89	He	0.013	ppb	48.1	82.23	1	
95	Mo	89	He	0.127	ppb	15.7	510.03	1	
107	Ag	89	He	0.009	ppb	8.9	133.34	0.2	
111	Cd	89	He	0.009	ppb	10.7	14.07	0.2	
118	Sn	159	He	0.160	ppb	11.6	851.17	1	
121	Sb	159	No Gas	0.044	ppb	32.1	1061.23	0.2	
137	Ba	159	No Gas	0.030	ppb	58.2	297.00	0.4	
182	W	159	No Gas	0.129	ppb	5.7	2122.54	1	
205	Tl	209	No Gas	0.037	ppb	42.9	1832.19	0.2	
208	Pb	209	No Gas	0.033	ppb	26.2	2129.12	0.2	
232	Th	209	No Gas	0.122	ppb	31.1	5203.66	1	
238	U	209	No Gas	0.051	ppb	47.3	2009.12	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7609910.53	1.9	8075153.2	94.24	29.5	120.4	
Sc	45	No Gas	16354285.38	1.7	15284588.74	107	29.5	120.4	
Sc	45	H2	1825411.98	1.4	1817402.03	100.44	29.5	120.4	
Sc	45	He	450556.91	0.8	431380.74	104.45	29.5	120.4	
Ge	72	No Gas	2883488.15	1.9	2712289.77	106.31	29.5	120.4	
Ge	72	H2	512155.67	0.8	540643.15	94.73	29.5	120.4	
Ge	72	He	268916.78	0.8	259264.63	103.72	29.5	120.4	
Y	89	H2	9650195.59	1.6	9628329.76	100.23	29.5	120.4	
Y	89	He	2141957.43	0.5	2093497.43	102.31	29.5	120.4	
Tb	159	No Gas	21987752.45	1.2	21312636.35	103.17	29.5	120.4	
Tb	159	He	7986584.81	0.7	7937819.95	100.61	29.5	120.4	
Bi	209	No Gas	10099276.84	1.8	9931051.85	101.69	29.5	120.4	

Sample Report

Sample Name PBWNG13IMW2

File Name 019_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:42:00 PM

Sample Type PB

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	671.2	17.78	0.2	
11	B	6	No Gas	4.355	ppb	3.1	4403.04	4	
23	Na	45	He	17.693	ppb	48.8	41468.99	200	
24	Mg	45	He	15.984	ppb	18.6	1415.74	20	
27	Al	45	He	0.076	ppb	2930.9	450.03	20	
28	Si	45	H2	23.767	ppb	14.8	1558.49	100	
39	K	45	He	21.167	ppb	47.8	23310.27	200	
40	Ca	45	H2	-5.290	ppb	N/A	12643.86	20	
51	V	89	He	0.289	ppb	12.8	472.25	1	
52	Cr	89	He	0.380	ppb	5.6	1303.83	1	
55	Mn	89	He	-0.378	ppb	N/A	293.28	0.4	
56	Fe	89	H2	7.197	ppb	14.5	17597.45	20	
59	Co	89	He	0.012	ppb	54.8	86.67	0.2	
60	Ni	89	He	-0.347	ppb	N/A	100.00	0.4	
63	Cu	89	He	0.248	ppb	2.4	813.39	0.6	
66	Zn	89	He	-1.783	ppb	N/A	478.92	2	
75	As	89	He	0.134	ppb	35.5	27.67	1	
78	Se	89	H2	0.165	ppb	49.0	10.50	1	
88	Sr	89	He	0.021	ppb	187.8	52.22	1	
95	Mo	89	He	0.649	ppb	10.7	512.25	1	
107	Ag	89	He	0.017	ppb	46.5	67.78	0.2	
111	Cd	89	He	0.019	ppb	92.5	7.04	0.2	
118	Sn	159	He	1.153	ppb	18.3	1053.42	1	
121	Sb	159	No Gas	0.129	ppb	12.7	684.11	0.2	
137	Ba	159	No Gas	0.063	ppb	32.5	163.52	0.4	
182	W	159	No Gas	0.478	ppb	11.8	1575.18	1	
205	Tl	209	No Gas	-0.028	ppb	N/A	563.98	0.2	
208	Pb	209	No Gas	0.028	ppb	49.1	951.09	0.2	
232	Th	209	No Gas	0.245	ppb	13.0	2196.00	1	
238	U	209	No Gas	0.017	ppb	26.1	140.16	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7366112.94	0.8	8075153.2	91.22	29.5	120.4	
Sc	45	No Gas	15747690.68	0.7	15284588.74	103.03	29.5	120.4	
Sc	45	H2	1759141.36	1.0	1817402.03	96.79	29.5	120.4	
Sc	45	He	442807.84	1.5	431380.74	102.65	29.5	120.4	
Ge	72	No Gas	2776603.56	1.4	2712289.77	102.37	29.5	120.4	
Ge	72	H2	489702.18	1.0	540643.15	90.58	29.5	120.4	
Ge	72	He	261463.29	1.9	259264.63	100.85	29.5	120.4	
Y	89	H2	9377759.20	0.5	9628329.76	97.4	29.5	120.4	
Y	89	He	2102456.95	1.5	2093497.43	100.43	29.5	120.4	
Tb	159	No Gas	21732276.06	0.7	21312636.35	101.97	29.5	120.4	
Tb	159	He	7926645.71	1.6	7937819.95	99.86	29.5	120.4	
Bi	209	No Gas	9994749.19	0.8	9931051.85	100.64	29.5	120.4	

Sample Report

Sample Name LCSWNG13IMW2

File Name 020LCSW.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:44:31 PM

Sample Type LCSW

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	61.057	ppb	7.7	76915.99	50	6020□ DoD
11	B	6	No Gas	595.667	ppb	6.7	506159.65	500	
23	Na	45	He	8987.764	ppb	0.2	1394776.43	7500	DoD
24	Mg	45	He	6250.497	ppb	0.7	502917.73	5000	6020□ DoD
27	Al	45	He	2174.517	ppb	0.7	65167.12	2000	
28	Si	45	H2	1156.132	ppb	2.6	51724.46	1000	
39	K	45	He	12147.326	ppb	1.2	792213.63	10000	6020□ DoD
40	Ca	45	H2	3007.023	ppb	1.2	1250192.11	2500	DoD
51	V	89	He	619.507	ppb	0.4	617392.33	500	6020□ DoD
52	Cr	89	He	251.751	ppb	0.6	320434.17	200	6020□ DoD
55	Mn	89	He	618.185	ppb	0.2	340546.12	500	6020□ DoD
56	Fe	89	H2	1256.078	ppb	0.3	2018304.60	1000	6020□ DoD
59	Co	89	He	631.506	ppb	0.9	1325981.16	500	6020□ DoD
60	Ni	89	He	633.456	ppb	0.3	366706.47	500	6020□ DoD
63	Cu	89	He	314.951	ppb	0.7	499113.64	250	6020□ DoD
66	Zn	89	He	606.988	ppb	0.5	106155.26	500	6020□ DoD
75	As	89	He	124.011	ppb	0.5	15007.40	100	6020□ DoD
78	Se	89	H2	120.120	ppb	0.9	7057.97	100	DoD
88	Sr	89	He	581.653	ppb	0.3	363915.23	500	
95	Mo	89	He	125.605	ppb	0.7	95248.99	100	6020□ DoD
107	Ag	89	He	63.082	ppb	1.2	152028.32	50	6020□ DoD
111	Cd	89	He	303.758	ppb	0.3	87373.81	250	6020□ DoD
118	Sn	159	He	584.078	ppb	0.8	348068.96	500	DoD
121	Sb	159	No Gas	125.637	ppb	7.5	501839.42	100	6020□ DoD
137	Ba	159	No Gas	2382.730	ppb	6.8	3711556.35	2000	DoD
182	W	159	No Gas	119.961	ppb	8.2	388573.71	100	
205	Tl	209	No Gas	128.497	ppb	7.0	771494.87	100	6020□ DoD
206	[Pb]	209	No Gas	123.917	ppb	8.1	266886.18	100	6020□ DoD
207	[Pb]	209	No Gas	121.994	ppb	7.8	229343.76	100	6020□ DoD
208	Pb	209	No Gas	124.527	ppb	7.6	1050847.54	100	6020□ DoD
232	Th	209	No Gas	123.384	ppb	7.3	1004110.55	100	6020□ DoD
238	U	209	No Gas	122.221	ppb	7.6	961942.53	100	6020□ DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7666729.01	2.4	8075153.2	94.94	29.5	120.4	
Sc	45	No Gas	16085271.37	1.9	15284588.74	105.24	29.5	120.4	
Sc	45	H2	1778540.43	1.5	1817402.03	97.86	29.5	120.4	
Sc	45	He	440852.71	0.6	431380.74	102.2	29.5	120.4	
Ge	72	No Gas	2859137.97	2.4	2712289.77	105.41	29.5	120.4	
Ge	72	H2	486755.53	0.4	540643.15	90.03	29.5	120.4	
Ge	72	He	260997.14	0.5	259264.63	100.67	29.5	120.4	
Y	89	H2	9393173.05	1.2	9628329.76	97.56	29.5	120.4	
Y	89	He	2086618.60	0.8	2093497.43	99.67	29.5	120.4	
Tb	159	No Gas	22289028.84	2.2	21312636.35	104.58	29.5	120.4	
Tb	159	He	7981130.78	0.8	7937819.95	100.55	29.5	120.4	
Bi	209	No Gas	10150923.79	2.7	9931051.85	102.21	29.5	120.4	

Sample Report

Sample Name SN5646-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:47:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.053	ppb	59.6	81.12	100	
11	B	6	No Gas	38.284	ppb	3.8	32211.26	1000	
23	Na	45	He	77314.442	ppb	0.8	11693266.50	200000	
24	Mg	45	He	24136.185	ppb	1.1	1939785.22	200000	
27	Al	45	He	-0.805	ppb	N/A	421.13	200000	
28	Si	45	H2	2494.073	ppb	1.4	110741.79	10000	
39	K	45	He	2166.028	ppb	1.7	159079.31	200000	
40	Ca	45	H2	37170.888	ppb	1.2	15251095.19	200000	
51	V	89	He	0.415	ppb	19.5	591.14	1000	
52	Cr	89	He	0.409	ppb	19.5	1326.50	2000	
55	Mn	89	He	-0.036	ppb	N/A	477.26	2000	
56	Fe	89	H2	9.832	ppb	4.6	21818.20	100000	
59	Co	89	He	0.353	ppb	17.3	797.87	1000	
60	Ni	89	He	6.459	ppb	2.2	4021.83	1000	
63	Cu	89	He	1.511	ppb	3.4	2798.17	2000	
66	Zn	89	He	2.040	ppb	44.3	1133.43	2000	
75	As	89	He	1.364	ppb	3.8	175.69	1000	
78	Se	89	H2	0.802	ppb	12.6	47.83	1000	
88	Sr	89	He	177.780	ppb	0.8	110868.33	2000	
95	Mo	89	He	0.306	ppb	5.1	247.79	1000	
107	Ag	89	He	0.031	ppb	35.5	101.12	100	
111	Cd	89	He	0.107	ppb	20.4	32.22	1000	
118	Sn	159	He	1.026	ppb	4.4	974.52	1000	
121	Sb	159	No Gas	0.233	ppb	1.6	1114.62	1000	
137	Ba	159	No Gas	4.883	ppb	3.8	7674.17	2000	
182	W	159	No Gas	5.214	ppb	6.2	16923.33	1000	
205	Tl	209	No Gas	0.064	ppb	85.9	1111.30	1000	
208	Pb	209	No Gas	0.091	ppb	26.9	1481.71	2000	
232	Th	209	No Gas	0.700	ppb	19.2	5864.69	1000	
238	U	209	No Gas	0.128	ppb	30.7	1001.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7398939.67	2.1	8075153.2	91.63	29.5	120.4	
Sc	45	No Gas	16171594.04	2.5	15284588.74	105.8	29.5	120.4	
Sc	45	H2	1774564.24	1.4	1817402.03	97.64	29.5	120.4	
Sc	45	He	440442.14	0.6	431380.74	102.1	29.5	120.4	
Ge	72	No Gas	2847245.24	2.7	2712289.77	104.98	29.5	120.4	
Ge	72	H2	494015.89	1.6	540643.15	91.38	29.5	120.4	
Ge	72	He	261457.01	0.8	259264.63	100.85	29.5	120.4	
Y	89	H2	9382017.10	1.0	9628329.76	97.44	29.5	120.4	
Y	89	He	2079484.41	1.3	2093497.43	99.33	29.5	120.4	
Tb	159	No Gas	22250948.84	2.5	21312636.35	104.4	29.5	120.4	
Tb	159	He	7886022.31	0.5	7937819.95	99.35	29.5	120.4	
Bi	209	No Gas	9997688.27	2.5	9931051.85	100.67	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:49:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	18.7	51.11	100	
11	B	6	No Gas	28.741	ppb	7.0	24053.07	1000	
23	Na	45	He	12119.803	ppb	0.5	1857405.38	200000	
24	Mg	45	He	3157.758	ppb	0.6	252773.39	200000	
27	Al	45	He	17.668	ppb	12.7	966.73	200000	
28	Si	45	H2	3866.923	ppb	0.4	172051.25	10000	
39	K	45	He	356.155	ppb	2.7	44216.50	200000	
40	Ca	45	H2	5545.085	ppb	0.2	2296205.64	200000	
51	V	89	He	0.306	ppb	28.8	485.58	1000	
52	Cr	89	He	0.423	ppb	10.7	1349.16	2000	
55	Mn	89	He	6.362	ppb	3.9	3999.86	2000	
56	Fe	89	H2	12.490	ppb	4.4	26337.34	100000	
59	Co	89	He	0.345	ppb	9.3	784.52	1000	
60	Ni	89	He	2.860	ppb	0.6	1955.77	1000	
63	Cu	89	He	0.363	ppb	6.5	990.07	2000	
66	Zn	89	He	1.921	ppb	15.7	1118.98	2000	
75	As	89	He	1.257	ppb	4.8	163.35	1000	
78	Se	89	H2	0.180	ppb	16.7	11.50	1000	
88	Sr	89	He	38.276	ppb	0.5	23997.27	2000	
95	Mo	89	He	0.152	ppb	21.0	132.23	1000	
107	Ag	89	He	0.013	ppb	67.9	58.89	100	
111	Cd	89	He	0.037	ppb	51.5	12.22	1000	
118	Sn	159	He	1.158	ppb	2.4	1057.86	1000	
121	Sb	159	No Gas	0.061	ppb	35.9	423.81	1000	
137	Ba	159	No Gas	7.655	ppb	4.9	11882.00	2000	
182	W	159	No Gas	0.109	ppb	14.5	417.14	1000	
205	Tl	209	No Gas	-0.042	ppb	N/A	483.89	1000	
208	Pb	209	No Gas	0.012	ppb	53.7	824.28	2000	
232	Th	209	No Gas	0.093	ppb	6.8	981.14	1000	
238	U	209	No Gas	0.033	ppb	29.3	266.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7299050.46	2.8	8075153.2	90.39	29.5	120.4	
Sc	45	No Gas	15914980.05	0.8	15284588.74	104.12	29.5	120.4	
Sc	45	H2	1780971.01	0.2	1817402.03	98	29.5	120.4	
Sc	45	He	438505.86	1.1	431380.74	101.65	29.5	120.4	
Ge	72	No Gas	2832632.98	1.7	2712289.77	104.44	29.5	120.4	
Ge	72	H2	496589.48	1.2	540643.15	91.85	29.5	120.4	
Ge	72	He	262182.97	0.7	259264.63	101.13	29.5	120.4	
Y	89	H2	9478361.46	0.8	9628329.76	98.44	29.5	120.4	
Y	89	He	2087819.92	0.8	2093497.43	99.73	29.5	120.4	
Tb	159	No Gas	22064197.45	0.5	21312636.35	103.53	29.5	120.4	
Tb	159	He	7932558.08	0.5	7937819.95	99.93	29.5	120.4	
Bi	209	No Gas	10034133.68	0.7	9931051.85	101.04	29.5	120.4	

Sample Report

Sample Name PBSNH04IMS1

File Name 023_PB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:52:27 PM

Sample Type PB

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	212.2	17.78	0.2	
11	B	6	No Gas	8.032	ppb	3.4	7247.63	4	
23	Na	45	He	42.727	ppb	14.8	44364.10	200	
24	Mg	45	He	22.959	ppb	10.6	1940.27	20	
27	Al	45	He	1.191	ppb	113.3	473.37	20	
28	Si	45	H2	25.151	ppb	4.1	1631.92	100	
39	K	45	He	40.550	ppb	22.6	24054.27	200	
40	Ca	45	H2	27.838	ppb	2.5	26306.41	20	
51	V	89	He	0.300	ppb	8.0	476.69	1	
52	Cr	89	He	0.937	ppb	2.1	1990.45	1	
55	Mn	89	He	0.508	ppb	6.8	773.88	0.4	
56	Fe	89	H2	17.537	ppb	2.7	34076.29	20	
59	Co	89	He	0.040	ppb	35.9	144.45	0.2	
60	Ni	89	He	0.256	ppb	30.3	445.58	0.4	
63	Cu	89	He	0.317	ppb	8.2	912.29	0.6	
66	Zn	89	He	1.349	ppb	63.0	1012.30	2	
75	As	89	He	0.075	ppb	69.1	20.33	1	
78	Se	89	H2	0.060	ppb	9.0	4.33	1	
88	Sr	89	He	0.165	ppb	28.1	141.12	1	
95	Mo	89	He	0.193	ppb	6.4	162.23	1	
107	Ag	89	He	0.014	ppb	18.3	60.00	0.2	
111	Cd	89	He	0.013	ppb	34.2	5.18	0.2	
118	Sn	159	He	47.261	ppb	2.7	28327.37	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
121	Sb	159	No Gas	0.044	ppb	33.4	353.73	0.2	
137	Ba	159	No Gas	0.431	ppb	9.6	724.17	0.4	
182	W	159	No Gas	0.092	ppb	17.0	357.07	1	
205	Tl	209	No Gas	-0.045	ppb	N/A	460.53	0.2	
208	Pb	209	No Gas	0.235	ppb	2.1	2669.79	0.2	
232	Th	209	No Gas	0.073	ppb	7.0	817.61	1	
238	U	209	No Gas	0.016	ppb	27.2	130.15	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7212521.74	1.5	8075153.2	89.32	29.5	120.4	
Sc	45	No Gas	15501535.47	0.7	15284588.74	101.42	29.5	120.4	
Sc	45	H2	1773115.18	1.0	1817402.03	97.56	29.5	120.4	
Sc	45	He	433886.58	0.6	431380.74	100.58	29.5	120.4	
Ge	72	No Gas	2754583.08	0.6	2712289.77	101.56	29.5	120.4	
Ge	72	H2	492391.42	1.1	540643.15	91.08	29.5	120.4	
Ge	72	He	259317.82	0.6	259264.63	100.02	29.5	120.4	
Y	89	H2	9362961.49	0.9	9628329.76	97.24	29.5	120.4	
Y	89	He	2074969.07	1.0	2093497.43	99.11	29.5	120.4	
Tb	159	No Gas	21768548.56	1.3	21312636.35	102.14	29.5	120.4	
Tb	159	He	7929298.49	1.0	7937819.95	99.89	29.5	120.4	
Bi	209	No Gas	9979502.90	1.3	9931051.85	100.49	29.5	120.4	

Sample Report

Sample Name LCSONH04IMS1

File Name 024LCSO.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:55:05 PM

Sample Type LCSO

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	64.072	ppb	1.4	79669.25	50	6020□ DoD
11	B	6	No Gas	642.998	ppb	3.2	538961.57	500	6020□ DoD
23	Na	45	He	9823.770	ppb	0.2	1500826.95	7500	6020□ DoD
24	Mg	45	He	6385.052	ppb	0.6	506945.19	5000	6020□ DoD
27	Al	45	He	2175.522	ppb	0.1	64336.84	2000	
28	Si	45	H2	1091.483	ppb	0.9	48449.61	1000	
39	K	45	He	12611.468	ppb	1.4	810837.96	10000	6020□ DoD
40	Ca	45	H2	3243.523	ppb	0.2	1335808.88	2500	6020□ DoD
51	V	89	He	611.038	ppb	0.6	605092.71	500	6020□ DoD
52	Cr	89	He	249.638	ppb	0.4	315754.09	200	6020□ DoD
55	Mn	89	He	610.134	ppb	0.4	333999.69	500	6020□ DoD
56	Fe	89	H2	1265.127	ppb	0.8	2014593.48	1000	6020□ DoD
59	Co	89	He	626.548	ppb	0.1	1307314.70	500	6020□ DoD
60	Ni	89	He	630.666	ppb	0.2	362786.10	500	6020□ DoD
63	Cu	89	He	310.578	ppb	0.5	489101.47	250	6020□ DoD
66	Zn	89	He	607.095	ppb	1.2	105505.80	500	6020□ DoD
75	As	89	He	124.960	ppb	1.0	15026.08	100	6020□ DoD
78	Se	89	H2	125.081	ppb	0.9	7283.58	100	6020□ DoD
88	Sr	89	He	596.231	ppb	0.9	370681.83	500	
95	Mo	89	He	128.557	ppb	0.5	96867.87	100	6020□ DoD
107	Ag	89	He	62.909	ppb	0.5	150663.42	50	6020□ DoD
111	Cd	89	He	314.230	ppb	0.5	89812.82	250	6020□ DoD
118	Sn	159	He	655.147	ppb	0.4	387803.85	500	6020□ DoD
121	Sb	159	No Gas	131.865	ppb	2.7	533469.29	100	6020□ DoD
137	Ba	159	No Gas	2452.391	ppb	2.9	3868557.38	2000	6020□ DoD
182	W	159	No Gas	127.320	ppb	2.6	417689.79	100	6020□ DoD
205	Tl	209	No Gas	135.152	ppb	2.2	821962.15	100	6020□ DoD
206	[Pb]	209	No Gas	130.462	ppb	3.0	284639.48	100	6020□ DoD
207	[Pb]	209	No Gas	130.379	ppb	3.6	248252.60	100	6020□ DoD
208	Pb	209	No Gas	132.626	ppb	3.0	1133656.27	100	6020□ DoD
232	Th	209	No Gas	133.185	ppb	4.0	1097634.58	100	6020□ DoD
238	U	209	No Gas	132.514	ppb	3.0	1056481.56	100	6020□ DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7560542.05	3.0	8075153.2	93.63	29.5	120.4	
Sc	45	No Gas	15952193.30	2.6	15284588.74	104.37	29.5	120.4	
Sc	45	H2	1763091.33	0.9	1817402.03	97.01	29.5	120.4	
Sc	45	He	435031.56	0.6	431380.74	100.85	29.5	120.4	
Ge	72	No Gas	2834967.68	3.1	2712289.77	104.52	29.5	120.4	
Ge	72	H2	487274.04	1.2	540643.15	90.13	29.5	120.4	
Ge	72	He	258805.53	0.7	259264.63	99.82	29.5	120.4	
Y	89	H2	9309671.11	1.6	9628329.76	96.69	29.5	120.4	
Y	89	He	2073454.59	0.7	2093497.43	99.04	29.5	120.4	
Tb	159	No Gas	22559643.83	2.3	21312636.35	105.85	29.5	120.4	
Tb	159	He	7928276.06	0.9	7937819.95	99.88	29.5	120.4	
Bi	209	No Gas	10274316.25	2.9	9931051.85	103.46	29.5	120.4	

Sample Report

Sample Name SN5717-004

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 4:57:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.179	ppb	6.2	7518.91	100	
11	B	6	No Gas	82.737	ppb	2.3	68535.36	1000	
23	Na	45	He	673.215	ppb	0.6	144193.25	200000	
24	Mg	45	He	37580.459	ppb	0.5	3109029.68	200000	
27	Al	45	He	110933.702	ppb	0.7	3396113.63	200000	
28	Si	45	H2	2755.087	ppb	1.1	128241.43	10000	
39	K	45	He	13735.856	ppb	0.8	918348.14	200000	
40	Ca	45	H2	30869.740	ppb	0.9	13282754.25	200000	
51	V	89	He	199.664	ppb	0.2	222624.19	1000	
52	Cr	89	He	142.555	ppb	0.1	203280.10	2000	
55	Mn	89	He	5392.554	ppb	0.7	3317330.67	2000	
56	Fe	89	H2	220979.378	ppb	1.0	398277643.61	100000	
59	Co	89	He	90.581	ppb	1.5	212743.58	1000	
60	Ni	89	He	215.172	ppb	0.4	139499.82	1000	
63	Cu	89	He	245.222	ppb	0.7	434620.70	2000	
66	Zn	89	He	865.771	ppb	0.7	168930.43	2000	
75	As	89	He	85.468	ppb	1.3	11569.09	1000	
78	Se	89	H2	2.780	ppb	4.8	184.66	1000	
88	Sr	89	He	84.469	ppb	1.1	59132.77	2000	
95	Mo	89	He	19.533	ppb	3.2	16573.91	1000	
107	Ag	89	He	0.401	ppb	3.8	1108.98	100	
111	Cd	89	He	2.669	ppb	2.7	860.04	1000	
118	Sn	159	He	47.684	ppb	1.4	28633.49	1000	
121	Sb	159	No Gas	2.120	ppb	7.5	8642.47	1000	
137	Ba	159	No Gas	553.380	ppb	3.4	861801.60	2000	
182	W	159	No Gas	0.487	ppb	10.9	1645.27	1000	
205	Tl	209	No Gas	3.894	ppb	2.6	23678.44	1000	
208	Pb	209	No Gas	357.604	ppb	3.4	2963931.71	2000	
232	Th	209	No Gas	43.793	ppb	4.7	350245.69	1000	
238	U	209	No Gas	7.889	ppb	5.8	60994.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7388214.36	2.0	8075153.2	91.49	29.5	120.4	
Sc	45	No Gas	16552464.59	1.3	15284588.74	108.3	29.5	120.4	
Sc	45	H2	1860723.81	1.7	1817402.03	102.38	29.5	120.4	
Sc	45	He	453379.69	0.8	431380.74	105.1	29.5	120.4	
Ge	72	No Gas	2843612.31	1.8	2712289.77	104.84	29.5	120.4	
Ge	72	H2	495082.00	0.4	540643.15	91.57	29.5	120.4	
Ge	72	He	263881.11	1.0	259264.63	101.78	29.5	120.4	
Y	89	H2	10568170.40	1.1	9628329.76	109.76	29.5	120.4	
Y	89	He	2333103.65	0.9	2093497.43	111.45	29.5	120.4	
Tb	159	No Gas	22269304.39	1.7	21312636.35	104.49	29.5	120.4	
Tb	159	He	7945305.50	0.4	7937819.95	100.09	29.5	120.4	
Bi	209	No Gas	9965922.45	2.3	9931051.85	100.35	29.5	120.4	

Sample Report

Sample Name SN5717-010

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:00:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.585	ppb	1.8	6553.92	100	
11	B	6	No Gas	93.552	ppb	3.7	74553.53	1000	
23	Na	45	He	1050.509	ppb	0.5	198537.72	200000	
24	Mg	45	He	103736.807	ppb	0.6	8404056.68	200000	
27	Al	45	He	95060.464	ppb	1.5	2849881.80	200000	
28	Si	45	H2	2410.741	ppb	4.8	108135.02	10000	
39	K	45	He	16210.311	ppb	0.5	1057333.90	200000	
40	Ca	45	H2	308560.578	ppb	0.7	127790390.32	200000	
51	V	89	He	181.809	ppb	0.7	193904.79	1000	
52	Cr	89	He	148.741	ppb	0.8	202828.90	2000	
55	Mn	89	He	3932.090	ppb	0.2	2313661.48	2000	
56	Fe	89	H2	219473.544	ppb	0.7	377885512.20	100000	
59	Co	89	He	94.014	ppb	0.2	211173.14	1000	
60	Ni	89	He	236.485	ppb	0.5	146607.34	1000	
63	Cu	89	He	224.327	ppb	0.4	380322.23	2000	
66	Zn	89	He	616.094	ppb	0.4	115217.07	2000	
75	As	89	He	79.050	ppb	1.0	10234.86	1000	
78	Se	89	H2	1.700	ppb	6.1	108.17	1000	
88	Sr	89	He	390.302	ppb	0.3	261168.10	2000	
95	Mo	89	He	16.026	ppb	0.4	13012.20	1000	
107	Ag	89	He	0.452	ppb	6.3	1194.54	100	
111	Cd	89	He	1.253	ppb	5.3	387.05	1000	
118	Sn	159	He	45.388	ppb	1.0	26658.22	1000	
121	Sb	159	No Gas	1.087	ppb	7.1	4489.10	1000	
137	Ba	159	No Gas	566.182	ppb	4.0	875238.93	2000	
182	W	159	No Gas	0.270	ppb	7.2	934.42	1000	
205	Tl	209	No Gas	3.380	ppb	3.3	20051.57	1000	
208	Pb	209	No Gas	178.974	ppb	3.6	1440809.83	2000	
232	Th	209	No Gas	46.688	ppb	3.7	362636.31	1000	
238	U	209	No Gas	7.299	ppb	4.0	54817.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7118491.32	1.4	8075153.2	88.15	29.5	120.4	
Sc	45	No Gas	16328643.69	2.4	15284588.74	106.83	29.5	120.4	
Sc	45	H2	1792593.82	1.1	1817402.03	98.63	29.5	120.4	
Sc	45	He	443984.88	0.3	431380.74	102.92	29.5	120.4	
Ge	72	No Gas	2799274.85	2.3	2712289.77	103.21	29.5	120.4	
Ge	72	H2	482170.41	1.5	540643.15	89.18	29.5	120.4	
Ge	72	He	258333.14	0.4	259264.63	99.64	29.5	120.4	
Y	89	H2	10095136.24	0.9	9628329.76	104.85	29.5	120.4	
Y	89	He	2231515.77	0.0	2093497.43	106.59	29.5	120.4	
Tb	159	No Gas	22110098.28	2.3	21312636.35	103.74	29.5	120.4	
Tb	159	He	7766577.80	0.4	7937819.95	97.84	29.5	120.4	
Bi	209	No Gas	9677082.99	2.1	9931051.85	97.44	29.5	120.4	

Sample Report

Sample Name SN5717-010L

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:03:18 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.936	ppb	2.2	1450.12	100	
11	B	6	No Gas	107.460	ppb	1.8	18327.75	1000	
23	Na	45	He	987.341	ppb	2.2	69216.83	200000	
24	Mg	45	He	115453.903	ppb	0.6	1879056.01	200000	
27	Al	45	He	103295.040	ppb	0.4	622464.04	200000	
28	Si	45	H2	2593.485	ppb	4.7	23926.12	10000	
39	K	45	He	18185.926	ppb	0.1	255457.38	200000	
40	Ca	45	H2	337532.459	ppb	0.7	28250864.58	200000	
51	V	89	He	210.225	ppb	1.0	43338.79	1000	
52	Cr	89	He	170.605	ppb	1.2	45465.21	2000	
55	Mn	89	He	4625.240	ppb	0.0	524697.79	2000	
56	Fe	89	H2	255146.352	ppb	0.3	84170578.45	100000	
59	Co	89	He	108.979	ppb	1.6	47208.81	1000	
60	Ni	89	He	276.968	ppb	0.8	33317.14	1000	
63	Cu	89	He	264.573	ppb	0.7	86739.12	2000	
66	Zn	89	He	714.193	ppb	0.5	26352.33	2000	
75	As	89	He	93.019	ppb	1.7	2329.12	1000	
78	Se	89	H2	2.300	ppb	11.2	28.67	1000	
88	Sr	89	He	450.360	ppb	0.4	58086.94	2000	
95	Mo	89	He	18.934	ppb	3.4	2974.88	1000	
107	Ag	89	He	0.565	ppb	4.8	307.79	100	
111	Cd	89	He	1.724	ppb	6.8	103.70	1000	
118	Sn	159	He	50.283	ppb	2.3	6307.28	1000	
121	Sb	159	No Gas	1.287	ppb	17.3	1188.05	1000	
137	Ba	159	No Gas	633.167	ppb	3.0	193531.33	2000	
182	W	159	No Gas	0.407	ppb	22.8	323.70	1000	
205	Tl	209	No Gas	3.417	ppb	5.8	4736.24	1000	
208	Pb	209	No Gas	194.588	ppb	2.0	321957.55	2000	
232	Th	209	No Gas	48.511	ppb	1.3	77495.42	1000	
238	U	209	No Gas	7.862	ppb	4.5	12119.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7344222.82	1.5	8075153.2	90.95	29.5	120.4	
Sc	45	No Gas	15939489.76	0.4	15284588.74	104.28	29.5	120.4	
Sc	45	H2	1810649.30	0.9	1817402.03	99.63	29.5	120.4	
Sc	45	He	445967.73	0.9	431380.74	103.38	29.5	120.4	
Ge	72	No Gas	2816481.90	1.4	2712289.77	103.84	29.5	120.4	
Ge	72	H2	503003.20	2.4	540643.15	93.04	29.5	120.4	
Ge	72	He	264463.25	0.7	259264.63	102.01	29.5	120.4	
Y	89	H2	9670493.69	1.4	9628329.76	100.44	29.5	120.4	
Y	89	He	2149527.70	0.6	2093497.43	102.68	29.5	120.4	
Tb	159	No Gas	21842932.18	1.2	21312636.35	102.49	29.5	120.4	
Tb	159	He	7911774.68	0.6	7937819.95	99.67	29.5	120.4	
Bi	209	No Gas	9922695.16	0.4	9931051.85	99.92	29.5	120.4	

Sample Report

Sample Name SN5717-010A

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:05:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	17.953	ppb	5.1	21196.25	100	
11	B	6	No Gas	321.786	ppb	3.9	256520.54	1000	
23	Na	45	He	12190.078	ppb	0.5	1860903.11	200000	
24	Mg	45	He	103055.906	ppb	0.3	8214810.57	200000	
27	Al	45	He	94548.051	ppb	0.7	2788994.23	200000	
28	Si	45	H2	7341.327	ppb	0.8	322900.28	10000	
39	K	45	He	26512.260	ppb	0.4	1687731.22	200000	
40	Ca	45	H2	308041.733	ppb	1.6	125482803.68	200000	
51	V	89	He	230.872	ppb	1.1	241522.31	1000	
52	Cr	89	He	199.319	ppb	0.8	266374.40	2000	
55	Mn	89	He	3885.181	ppb	0.7	2242835.34	2000	
56	Fe	89	H2	216040.033	ppb	0.4	367606233.29	100000	
59	Co	89	He	102.688	ppb	0.5	226295.92	1000	
60	Ni	89	He	254.559	ppb	0.1	154807.12	1000	
63	Cu	89	He	251.372	ppb	0.7	418063.15	2000	
66	Zn	89	He	705.914	ppb	0.5	129401.14	2000	
75	As	89	He	130.121	ppb	1.4	16520.60	1000	
78	Se	89	H2	52.977	ppb	1.5	3306.58	1000	
88	Sr	89	He	433.876	ppb	0.6	284838.85	2000	
95	Mo	89	He	68.801	ppb	0.8	54748.26	1000	
107	Ag	89	He	11.267	ppb	0.3	28513.99	100	
111	Cd	89	He	11.795	ppb	1.7	3561.25	1000	
118	Sn	159	He	96.921	ppb	1.6	55920.52	1000	
121	Sb	159	No Gas	13.421	ppb	5.5	52316.26	1000	
137	Ba	159	No Gas	576.174	ppb	5.4	873133.21	2000	
182	W	159	No Gas	57.226	ppb	5.4	180373.04	1000	
205	Tl	209	No Gas	15.742	ppb	6.1	90351.62	1000	
208	Pb	209	No Gas	185.553	ppb	4.9	1486822.92	2000	
232	Th	209	No Gas	57.870	ppb	5.2	447359.86	1000	
238	U	209	No Gas	19.724	ppb	7.9	147330.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7178625.66	2.4	8075153.2	88.9	29.5	120.4	
Sc	45	No Gas	16022427.17	2.4	15284588.74	104.83	29.5	120.4	
Sc	45	H2	1763180.23	0.6	1817402.03	97.02	29.5	120.4	
Sc	45	He	436852.47	0.3	431380.74	101.27	29.5	120.4	
Ge	72	No Gas	2761916.61	2.8	2712289.77	101.83	29.5	120.4	
Ge	72	H2	479385.09	0.5	540643.15	88.67	29.5	120.4	
Ge	72	He	253850.16	0.2	259264.63	97.91	29.5	120.4	
Y	89	H2	9977027.61	0.8	9628329.76	103.62	29.5	120.4	
Y	89	He	2189355.30	0.4	2093497.43	104.58	29.5	120.4	
Tb	159	No Gas	21684152.18	2.9	21312636.35	101.74	29.5	120.4	
Tb	159	He	7686019.54	0.8	7937819.95	96.83	29.5	120.4	
Bi	209	No Gas	9639206.68	3.7	9931051.85	97.06	29.5	120.4	

Sample Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b
Acq Time	8/5/2020 5:08:41 PM
Sample Type	CCV
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	26.696	ppb	3.6	165913.24	25	
11	B	6	No Gas	27.144	ppb	4.2	114454.20	25	
23	Na	45	He	5135.786	ppb	0.8	3878209.32	5000	
24	Mg	45	He	5035.269	ppb	0.8	2007159.28	5000	
27	Al	45	He	476.180	ppb	1.3	70670.84	500	
28	Si	45	H2	477.640	ppb	0.7	107475.96	500	
39	K	45	He	4962.714	ppb	0.1	1581226.38	5000	
40	Ca	45	H2	5053.257	ppb	0.1	10508429.15	5000	
51	V	89	He	25.333	ppb	0.6	126735.54	25	
52	Cr	89	He	25.349	ppb	0.8	162194.45	25	
55	Mn	89	He	25.245	ppb	1.5	70129.66	25	
56	Fe	89	H2	5114.939	ppb	0.6	41293053.27	5000	
59	Co	89	He	25.617	ppb	0.8	269761.98	25	
60	Ni	89	He	25.476	ppb	0.4	74192.79	25	
63	Cu	89	He	25.791	ppb	0.9	205191.53	25	
66	Zn	89	He	25.392	ppb	1.3	22889.42	25	
75	As	89	He	25.043	ppb	0.1	15196.27	25	
78	Se	89	H2	25.421	ppb	1.3	7525.86	25	
88	Sr	89	He	23.562	ppb	0.5	73952.71	25	
95	Mo	89	He	24.948	ppb	1.1	94860.56	25	
107	Ag	89	He	25.286	ppb	1.2	305559.98	25	
111	Cd	89	He	24.820	ppb	0.6	35800.17	25	
118	Sn	159	He	24.269	ppb	0.6	72065.68	25	
121	Sb	159	No Gas	26.526	ppb	3.1	519614.03	25	
137	Ba	159	No Gas	26.183	ppb	3.6	200054.46	25	
182	W	159	No Gas	25.255	ppb	3.1	401174.86	25	
205	Tl	209	No Gas	26.158	ppb	3.0	778794.87	25	
208	Pb	209	No Gas	26.150	ppb	3.4	1094327.17	25	
232	Th	209	No Gas	25.658	ppb	3.8	1035355.89	25	
238	U	209	No Gas	25.562	ppb	3.4	997702.97	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7560298.16	2.0	8075153.2	93.62	29.5	120.4	
Sc	45	No Gas	16019916.43	2.2	15284588.74	104.81	29.5	120.4	
Sc	45	H2	1797919.97	1.7	1817402.03	98.93	29.5	120.4	
Sc	45	He	436920.42	0.9	431380.74	101.28	29.5	120.4	
Ge	72	No Gas	2831241.66	2.2	2712289.77	104.39	29.5	120.4	
Ge	72	H2	509780.17	1.2	540643.15	94.29	29.5	120.4	
Ge	72	He	262702.14	0.6	259264.63	101.33	29.5	120.4	
Y	89	H2	9465800.26	1.1	9628329.76	98.31	29.5	120.4	
Y	89	He	2092641.90	0.8	2093497.43	99.96	29.5	120.4	
Tb	159	No Gas	21845596.90	1.6	21312636.35	102.5	29.5	120.4	
Tb	159	He	7921309.67	0.9	7937819.95	99.79	29.5	120.4	
Bi	209	No Gas	10058371.56	1.8	9931051.85	101.28	29.5	120.4	

Sample Report

Sample Name CCB

File Name 030_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:11:18 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.026	ppb	58.9	181.12	0.2	
11	B	6	No Gas	0.684	ppb	1.8	3803.97	4	
23	Na	45	He	-8.492	ppb	N/A	31726.96	200	
24	Mg	45	He	2.764	ppb	45.1	1220.30	20	
27	Al	45	He	-0.735	ppb	N/A	332.25	20	
28	Si	45	H2	0.099	ppb	171.7	537.28	100	
39	K	45	He	2.526	ppb	105.6	22317.50	200	
40	Ca	45	H2	-2.316	ppb	N/A	10059.46	20	
51	V	89	He	0.002	ppb	556.2	187.79	1	
52	Cr	89	He	0.004	ppb	126.0	834.54	1	
55	Mn	89	He	-0.052	ppb	N/A	355.29	0.4	
56	Fe	89	H2	2.768	ppb	7.4	28243.60	20	
59	Co	89	He	0.001	ppb	135.0	73.34	0.2	
60	Ni	89	He	-0.079	ppb	N/A	71.11	0.4	
63	Cu	89	He	-0.011	ppb	N/A	330.02	0.6	
66	Zn	89	He	-0.544	ppb	N/A	311.12	2	
75	As	89	He	0.006	ppb	103.4	14.67	1	
78	Se	89	H2	0.022	ppb	28.6	7.33	1	
88	Sr	89	He	0.008	ppb	72.4	63.34	1	
95	Mo	89	He	0.054	ppb	6.4	220.01	1	
107	Ag	89	He	0.008	ppb	39.4	123.34	0.2	
111	Cd	89	He	0.005	ppb	61.4	8.89	0.2	
118	Sn	159	He	0.108	ppb	21.8	691.15	1	
121	Sb	159	No Gas	0.033	ppb	26.9	827.63	0.2	
137	Ba	159	No Gas	0.017	ppb	72.3	200.22	0.4	
182	W	159	No Gas	0.096	ppb	6.4	1588.56	1	
205	Tl	209	No Gas	0.011	ppb	106.6	1061.25	0.2	
208	Pb	209	No Gas	0.013	ppb	51.7	1271.46	0.2	
232	Th	209	No Gas	0.110	ppb	27.0	4676.19	1	
238	U	209	No Gas	0.033	ppb	41.3	1281.52	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7697073.94	1.9	8075153.2	95.32	29.5	120.4	
Sc	45	No Gas	15796403.66	1.6	15284588.74	103.35	29.5	120.4	
Sc	45	H2	1754910.68	1.2	1817402.03	96.56	29.5	120.4	
Sc	45	He	434061.48	1.0	431380.74	100.62	29.5	120.4	
Ge	72	No Gas	2789518.48	1.8	2712289.77	102.85	29.5	120.4	
Ge	72	H2	501686.95	1.3	540643.15	92.79	29.5	120.4	
Ge	72	He	259616.71	0.8	259264.63	100.14	29.5	120.4	
Y	89	H2	9392224.40	1.7	9628329.76	97.55	29.5	120.4	
Y	89	He	2079719.08	1.4	2093497.43	99.34	29.5	120.4	
Tb	159	No Gas	21754250.79	1.1	21312636.35	102.07	29.5	120.4	
Tb	159	He	7895177.31	1.0	7937819.95	99.46	29.5	120.4	
Bi	209	No Gas	10007608.19	2.4	9931051.85	100.77	29.5	120.4	

Sample Report

Sample Name SN5717-010S

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:14:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	63.823	ppb	3.9	78676.93	100	
11	B	6	No Gas	637.757	ppb	5.3	530034.33	1000	
23	Na	45	He	9325.125	ppb	1.0	1434048.11	200000	
24	Mg	45	He	109848.146	ppb	0.7	8765583.62	200000	
27	Al	45	He	117439.454	ppb	1.2	3467664.04	200000	
28	Si	45	H2	3721.230	ppb	4.1	163885.27	10000	
39	K	45	He	31279.626	ppb	0.8	1989390.85	200000	
40	Ca	45	H2	292412.656	ppb	0.2	119050201.56	200000	
51	V	89	He	726.475	ppb	0.7	766704.99	1000	
52	Cr	89	He	375.228	ppb	0.5	505393.96	2000	
55	Mn	89	He	4609.177	ppb	0.6	2685616.97	2000	
56	Fe	89	H2	235011.881	ppb	0.7	400680459.68	100000	
59	Co	89	He	607.146	ppb	0.3	1350165.17	1000	
60	Ni	89	He	759.679	ppb	0.5	465679.72	1000	
63	Cu	89	He	483.872	ppb	0.2	811876.56	2000	
66	Zn	89	He	1124.195	ppb	0.8	207509.76	2000	
75	As	89	He	183.365	ppb	0.3	23494.30	1000	
78	Se	89	H2	97.316	ppb	1.3	6084.89	1000	
88	Sr	89	He	858.916	ppb	0.4	569104.06	2000	
95	Mo	89	He	114.565	ppb	0.2	92006.57	1000	
107	Ag	89	He	50.546	ppb	0.9	129022.14	100	
111	Cd	89	He	240.471	ppb	0.6	73253.52	1000	
118	Sn	159	He	544.918	ppb	1.2	315460.89	1000	
121	Sb	159	No Gas	28.778	ppb	3.5	111897.12	1000	
137	Ba	159	No Gas	2814.357	ppb	3.7	4261625.90	2000	
182	W	159	No Gas	59.889	ppb	3.1	188639.23	1000	
205	Tl	209	No Gas	119.208	ppb	3.9	681318.94	1000	
208	Pb	209	No Gas	311.702	ppb	4.0	2503068.09	2000	
232	Th	209	No Gas	166.635	ppb	4.5	1290635.00	1000	
238	U	209	No Gas	124.869	ppb	4.0	935591.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7498835.50	2.8	8075153.2	92.86	29.5	120.4	
Sc	45	No Gas	15924752.94	1.7	15284588.74	104.19	29.5	120.4	
Sc	45	H2	1762326.13	1.7	1817402.03	96.97	29.5	120.4	
Sc	45	He	437326.88	1.0	431380.74	101.38	29.5	120.4	
Ge	72	No Gas	2719210.18	2.2	2712289.77	100.26	29.5	120.4	
Ge	72	H2	475722.53	0.9	540643.15	87.99	29.5	120.4	
Ge	72	He	252227.67	0.5	259264.63	97.29	29.5	120.4	
Y	89	H2	9996281.14	0.9	9628329.76	103.82	29.5	120.4	
Y	89	He	2209837.33	0.1	2093497.43	105.56	29.5	120.4	
Tb	159	No Gas	21652895.79	1.3	21312636.35	101.6	29.5	120.4	
Tb	159	He	7752739.19	0.6	7937819.95	97.67	29.5	120.4	
Bi	209	No Gas	9657669.73	3.0	9931051.85	97.25	29.5	120.4	

Sample Report

Sample Name SN5717-010P

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:16:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	60.229	ppb	5.2	73211.96	100	
11	B	6	No Gas	597.937	ppb	3.8	490237.71	1000	
23	Na	45	He	8912.282	ppb	0.3	1358544.66	200000	
24	Mg	45	He	104469.466	ppb	0.3	8252779.18	200000	
27	Al	45	He	106821.329	ppb	1.3	3122793.01	200000	
28	Si	45	H2	3219.249	ppb	2.8	141385.50	10000	
39	K	45	He	27085.658	ppb	0.7	1708322.71	200000	
40	Ca	45	H2	276542.048	ppb	0.8	112247742.77	200000	
51	V	89	He	665.958	ppb	0.4	696935.27	1000	
52	Cr	89	He	346.926	ppb	0.2	463408.64	2000	
55	Mn	89	He	4455.214	ppb	0.2	2574110.11	2000	
56	Fe	89	H2	221143.460	ppb	0.8	375109135.92	100000	
59	Co	89	He	567.015	ppb	0.6	1250301.84	1000	
60	Ni	89	He	709.426	ppb	0.3	431242.17	1000	
63	Cu	89	He	461.153	ppb	0.4	767264.08	2000	
66	Zn	89	He	1069.386	ppb	0.7	195772.74	2000	
75	As	89	He	174.336	ppb	0.3	22149.96	1000	
78	Se	89	H2	93.796	ppb	1.5	5835.63	1000	
88	Sr	89	He	807.039	ppb	0.5	530243.82	2000	
95	Mo	89	He	109.038	ppb	0.9	86831.95	1000	
107	Ag	89	He	47.405	ppb	0.6	119991.16	100	
111	Cd	89	He	232.299	ppb	0.2	70169.94	1000	
118	Sn	159	He	526.206	ppb	0.9	303276.35	1000	
121	Sb	159	No Gas	28.025	ppb	4.5	109088.58	1000	
137	Ba	159	No Gas	2641.160	ppb	4.9	4003444.69	2000	
182	W	159	No Gas	59.047	ppb	5.1	186156.83	1000	
205	Tl	209	No Gas	117.755	ppb	4.1	667480.95	1000	
208	Pb	209	No Gas	283.160	ppb	4.1	2255084.78	2000	
232	Th	209	No Gas	160.064	ppb	5.4	1229451.07	1000	
238	U	209	No Gas	120.660	ppb	4.6	896529.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7394073.86	2.4	8075153.2	91.57	29.5	120.4	
Sc	45	No Gas	15759555.98	1.9	15284588.74	103.11	29.5	120.4	
Sc	45	H2	1756921.22	1.0	1817402.03	96.67	29.5	120.4	
Sc	45	He	432938.45	0.5	431380.74	100.36	29.5	120.4	
Ge	72	No Gas	2704226.24	1.5	2712289.77	99.7	29.5	120.4	
Ge	72	H2	475597.79	1.1	540643.15	87.97	29.5	120.4	
Ge	72	He	251915.22	0.4	259264.63	97.17	29.5	120.4	
Y	89	H2	9945421.01	0.3	9628329.76	103.29	29.5	120.4	
Y	89	He	2191250.68	0.5	2093497.43	104.67	29.5	120.4	
Tb	159	No Gas	21684280.79	2.3	21312636.35	101.74	29.5	120.4	
Tb	159	He	7717888.01	0.9	7937819.95	97.23	29.5	120.4	
Bi	209	No Gas	9575032.09	1.7	9931051.85	96.42	29.5	120.4	

Sample Report

Sample Name SN5717-013

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:19:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.950	ppb	7.3	5920.32	100	
11	B	6	No Gas	74.723	ppb	3.8	60889.66	1000	
23	Na	45	He	656.940	ppb	1.1	136925.19	200000	
24	Mg	45	He	47700.720	ppb	0.2	3814271.26	200000	
27	Al	45	He	84150.328	ppb	0.5	2490088.77	200000	
28	Si	45	H2	2894.803	ppb	2.9	129296.29	10000	
39	K	45	He	12444.647	ppb	0.4	806246.37	200000	
40	Ca	45	H2	76893.956	ppb	1.4	31738633.97	200000	
51	V	89	He	158.052	ppb	1.2	167414.28	1000	
52	Cr	89	He	118.237	ppb	0.5	160275.68	2000	
55	Mn	89	He	3914.245	ppb	0.4	2287021.00	2000	
56	Fe	89	H2	177063.624	ppb	0.4	303426232.21	100000	
59	Co	89	He	78.023	ppb	0.9	174035.06	1000	
60	Ni	89	He	196.257	ppb	0.9	120864.45	1000	
63	Cu	89	He	715.984	ppb	0.4	1204386.92	2000	
66	Zn	89	He	903.335	ppb	0.5	167367.74	2000	
75	As	89	He	73.813	ppb	0.3	9490.61	1000	
78	Se	89	H2	7.704	ppb	1.7	484.99	1000	
88	Sr	89	He	121.615	ppb	0.9	80836.80	2000	
95	Mo	89	He	13.997	ppb	3.0	11285.03	1000	
107	Ag	89	He	0.615	ppb	3.2	1602.38	100	
111	Cd	89	He	2.465	ppb	1.9	754.48	1000	
118	Sn	159	He	49.008	ppb	1.0	28842.78	1000	
121	Sb	159	No Gas	8.803	ppb	4.1	34696.87	1000	
137	Ba	159	No Gas	432.977	ppb	4.3	662271.19	2000	
182	W	159	No Gas	0.378	ppb	7.3	1268.15	1000	
205	Tl	209	No Gas	3.148	ppb	5.5	19038.94	1000	
208	Pb	209	No Gas	3242.498	ppb	3.4	26534657.11	2000	
232	Th	209	No Gas	35.063	ppb	5.0	277025.85	1000	
238	U	209	No Gas	6.287	ppb	3.6	48022.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7260743.56	2.6	8075153.2	89.91	29.5	120.4	
Sc	45	No Gas	15892582.86	1.8	15284588.74	103.98	29.5	120.4	
Sc	45	H2	1785959.24	0.6	1817402.03	98.27	29.5	120.4	
Sc	45	He	438226.16	1.1	431380.74	101.59	29.5	120.4	
Ge	72	No Gas	2755062.99	2.0	2712289.77	101.58	29.5	120.4	
Ge	72	H2	478017.12	0.4	540643.15	88.42	29.5	120.4	
Ge	72	He	256213.35	1.1	259264.63	98.82	29.5	120.4	
Y	89	H2	10047636.76	0.5	9628329.76	104.35	29.5	120.4	
Y	89	He	2215885.71	0.9	2093497.43	105.85	29.5	120.4	
Tb	159	No Gas	21874978.01	1.9	21312636.35	102.64	29.5	120.4	
Tb	159	He	7790083.70	0.2	7937819.95	98.14	29.5	120.4	
Bi	209	No Gas	9838521.30	0.8	9931051.85	99.07	29.5	120.4	

Sample Report

Sample Name SN5717-017

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:22:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	6.893	ppb	1.6	8340.49	100	
11	B	6	No Gas	60.025	ppb	1.8	49654.37	1000	
23	Na	45	He	344.507	ppb	1.9	90743.70	200000	
24	Mg	45	He	32643.009	ppb	1.3	2629794.79	200000	
27	Al	45	He	120492.706	ppb	1.0	3592115.88	200000	
28	Si	45	H2	2637.660	ppb	4.9	118490.46	10000	
39	K	45	He	12412.653	ppb	0.4	810276.30	200000	
40	Ca	45	H2	4803.215	ppb	0.6	2007392.59	200000	
51	V	89	He	197.035	ppb	0.6	211818.27	1000	
52	Cr	89	He	143.948	ppb	0.8	197900.57	2000	
55	Mn	89	He	3898.818	ppb	0.6	2312542.81	2000	
56	Fe	89	H2	222266.780	ppb	0.7	389326893.18	100000	
59	Co	89	He	94.196	ppb	0.3	213284.83	1000	
60	Ni	89	He	227.729	ppb	0.4	142326.93	1000	
63	Cu	89	He	256.388	ppb	0.3	438113.09	2000	
66	Zn	89	He	737.311	ppb	0.6	138828.74	2000	
75	As	89	He	86.872	ppb	1.1	11336.86	1000	
78	Se	89	H2	1.621	ppb	4.0	105.00	1000	
88	Sr	89	He	54.844	ppb	0.9	37029.76	2000	
95	Mo	89	He	15.776	ppb	2.3	12912.11	1000	
107	Ag	89	He	0.194	ppb	8.4	532.25	100	
111	Cd	89	He	1.738	ppb	3.2	540.39	1000	
118	Sn	159	He	49.304	ppb	0.9	28941.87	1000	
121	Sb	159	No Gas	0.962	ppb	6.4	4041.83	1000	
137	Ba	159	No Gas	494.164	ppb	2.4	772669.39	2000	
182	W	159	No Gas	0.324	ppb	25.8	1117.96	1000	
205	Tl	209	No Gas	3.767	ppb	7.8	22923.15	1000	
208	Pb	209	No Gas	152.798	ppb	2.5	1267386.31	2000	
232	Th	209	No Gas	51.299	ppb	5.0	410398.98	1000	
238	U	209	No Gas	6.019	ppb	3.8	46572.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7342050.75	1.1	8075153.2	90.92	29.5	120.4	
Sc	45	No Gas	16427505.68	1.9	15284588.74	107.48	29.5	120.4	
Sc	45	H2	1795605.86	1.8	1817402.03	98.8	29.5	120.4	
Sc	45	He	441531.06	0.8	431380.74	102.35	29.5	120.4	
Ge	72	No Gas	2806797.22	1.6	2712289.77	103.48	29.5	120.4	
Ge	72	H2	480063.54	1.6	540643.15	88.79	29.5	120.4	
Ge	72	He	256168.71	0.9	259264.63	98.81	29.5	120.4	
Y	89	H2	10269800.17	1.4	9628329.76	106.66	29.5	120.4	
Y	89	He	2249476.36	0.1	2093497.43	107.45	29.5	120.4	
Tb	159	No Gas	22356013.28	1.9	21312636.35	104.9	29.5	120.4	
Tb	159	He	7770436.62	0.4	7937819.95	97.89	29.5	120.4	
Bi	209	No Gas	9967760.74	1.6	9931051.85	100.37	29.5	120.4	

Sample Report

Sample Name PBWNG31IMW1

File Name 035_PBE.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:25:01 PM

Sample Type PB200.8

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	153.1	22.22	0.2	
11	B	6	No Gas	1.006	ppb	3.4	5055.50	4	
23	Na	45	He	-4.143	ppb	N/A	34957.73	200	
24	Mg	45	He	8.728	ppb	38.4	3574.54	20	
27	Al	45	He	7.983	ppb	88.8	1604.95	20	
28	Si	45	H2	10.057	ppb	3.1	2753.35	100	
39	K	45	He	-0.458	ppb	N/A	21388.05	200	
40	Ca	45	H2	-1.569	ppb	N/A	11750.88	20	
51	V	89	He	0.014	ppb	148.7	247.79	1	
52	Cr	89	He	0.022	ppb	68.0	946.53	1	
55	Mn	89	He	0.209	ppb	138.2	1068.70	0.4	200.8 PB Fails DoD
56	Fe	89	H2	12.761	ppb	0.8	108758.96	20	200.8 PB Fails DoD
59	Co	89	He	0.009	ppb	118.5	153.35	0.2	
60	Ni	89	He	-0.046	ppb	N/A	166.68	0.4	
63	Cu	89	He	0.030	ppb	104.6	648.95	0.6	
66	Zn	89	He	-0.319	ppb	N/A	505.59	2	
75	As	89	He	0.015	ppb	87.2	20.00	1	
78	Se	89	H2	0.006	ppb	134.8	2.67	1	
88	Sr	89	He	0.021	ppb	83.9	104.45	1	
95	Mo	89	He	0.011	ppb	46.5	56.67	1	
107	Ag	89	He	0.001	ppb	187.1	35.56	0.2	
111	Cd	89	He	0.005	ppb	114.7	8.52	0.2	
118	Sn	159	He	0.000	ppb	3869.6	370.02	1	
121	Sb	159	No Gas	-0.001	ppb	N/A	170.19	0.2	
137	Ba	159	No Gas	0.050	ppb	29.7	447.17	0.4	
182	W	159	No Gas	0.005	ppb	43.6	143.50	1	
205	Tl	209	No Gas	-0.017	ppb	N/A	236.93	0.2	
206	[Pb]	209	No Gas	0.058	ppb	6.9	814.28	0.2	
207	[Pb]	209	No Gas	0.068	ppb	10.8	767.55	0.2	
208	Pb	209	No Gas	0.062	ppb	1.9	3290.51	0.2	
232	Th	209	No Gas	0.015	ppb	24.2	834.30	1	
238	U	209	No Gas	0.002	ppb	71.4	80.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7519159.62	2.3	8075153.2	93.11	29.5	120.4	
Sc	45	No Gas	15826257.78	2.6	15284588.74	103.54	29.5	120.4	
Sc	45	H2	1780941.39	1.5	1817402.03	97.99	29.5	120.4	
Sc	45	He	434083.23	0.6	431380.74	100.63	29.5	120.4	
Ge	72	No Gas	2798182.54	2.4	2712289.77	103.17	29.5	120.4	
Ge	72	H2	510894.15	1.1	540643.15	94.5	29.5	120.4	
Ge	72	He	259460.88	0.4	259264.63	100.08	29.5	120.4	
Y	89	H2	9431960.90	1.5	9628329.76	97.96	29.5	120.4	
Y	89	He	2079148.30	0.5	2093497.43	99.31	29.5	120.4	
Tb	159	No Gas	21774569.96	2.2	21312636.35	102.17	29.5	120.4	
Tb	159	He	7855504.47	0.7	7937819.95	98.96	29.5	120.4	
Bi	209	No Gas	9998075.74	1.8	9931051.85	100.67	29.5	120.4	

Sample Report

Sample Name LCSWNG31IMW1

File Name 036_LCS.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:27:39 PM

Sample Type LCS

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.409	ppb	3.0	337153.83	50	
11	B	6	No Gas	466.978	ppb	3.0	2190967.62	500	
23	Na	45	He	7762.509	ppb	0.4	5803528.64	7500	
24	Mg	45	He	5090.262	ppb	0.3	2015659.94	5000	
27	Al	45	He	1830.406	ppb	1.0	268607.62	2000	
28	Si	45	H2	974.019	ppb	0.5	217882.45	1000	
39	K	45	He	10090.120	ppb	0.9	3171251.07	10000	
40	Ca	45	H2	2552.692	ppb	0.1	5298329.50	2500	
51	V	89	He	512.193	ppb	0.7	2551109.42	500	
52	Cr	89	He	201.489	ppb	0.7	1279627.91	200	
55	Mn	89	He	494.710	ppb	0.9	1360820.30	500	
56	Fe	89	H2	1023.534	ppb	0.3	8313116.88	1000	
59	Co	89	He	509.924	ppb	0.3	5352505.55	500	
60	Ni	89	He	508.264	ppb	0.7	1469937.34	500	
63	Cu	89	He	248.916	ppb	0.7	1970755.07	250	
66	Zn	89	He	505.245	ppb	0.8	439229.66	500	
75	As	89	He	104.302	ppb	0.6	63060.76	100	
78	Se	89	H2	103.200	ppb	0.6	30716.19	100	
88	Sr	89	He	493.728	ppb	0.4	1544129.70	500	
95	Mo	89	He	103.086	ppb	0.7	390715.25	100	
107	Ag	89	He	50.887	ppb	0.9	613000.67	50	
111	Cd	89	He	255.551	ppb	0.4	367455.59	250	
118	Sn	159	He	501.583	ppb	0.6	1487011.68	500	
121	Sb	159	No Gas	107.744	ppb	3.0	2095012.44	100	
137	Ba	159	No Gas	2073.279	ppb	3.3	15723855.07	2000	
182	W	159	No Gas	102.912	ppb	2.3	1622973.25	100	
205	Tl	209	No Gas	110.496	ppb	2.6	3190344.19	100	
208	Pb	209	No Gas	107.666	ppb	2.3	4370782.28	100	
232	Th	209	No Gas	109.523	ppb	3.4	4288392.62	100	
238	U	209	No Gas	108.864	ppb	3.2	4123618.53	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8469869.57	1.0	8075153.2	104.89	29.5	120.4	
Sc	45	No Gas	15782980.03	1.0	15284588.74	103.26	29.5	120.4	
Sc	45	H2	1791956.97	1.1	1817402.03	98.6	29.5	120.4	
Sc	45	He	434012.63	0.3	431380.74	100.61	29.5	120.4	
Ge	72	No Gas	2773395.80	1.5	2712289.77	102.25	29.5	120.4	
Ge	72	H2	509567.00	1.2	540643.15	94.25	29.5	120.4	
Ge	72	He	259422.99	1.1	259264.63	100.06	29.5	120.4	
Y	89	H2	9517299.57	0.8	9628329.76	98.85	29.5	120.4	
Y	89	He	2086278.89	1.2	2093497.43	99.66	29.5	120.4	
Tb	159	No Gas	21686209.12	0.9	21312636.35	101.75	29.5	120.4	
Tb	159	He	7947426.34	0.5	7937819.95	100.12	29.5	120.4	
Bi	209	No Gas	9760701.40	1.6	9931051.85	98.28	29.5	120.4	

Sample Report

Sample Name SN6310-003

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:30:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.127	ppb	15.6	154.45	100	
11	B	6	No Gas	2729.031	ppb	3.3	2017482.64	1000	
23	Na	45	He	6086521.132	ppb	0.5	918636490.80	200000	>LDR
24	Mg	45	He	707459.513	ppb	0.3	56922182.49	200000	
27	Al	45	He	36.458	ppb	0.2	1531.30	200000	
28	Si	45	H2	1261.023	ppb	2.7	55469.62	10000	
39	K	45	He	221692.642	ppb	0.6	14083689.50	200000	
40	Ca	45	H2	242622.565	ppb	1.3	98077238.54	200000	
51	V	89	He	1.443	ppb	5.0	1579.04	1000	
52	Cr	89	He	0.397	ppb	6.7	1282.50	2000	
55	Mn	89	He	21.860	ppb	1.2	12216.42	2000	
56	Fe	89	H2	193.914	ppb	7.8	288456.76	100000	
59	Co	89	He	0.320	ppb	11.2	713.41	1000	
60	Ni	89	He	0.133	ppb	38.1	367.79	1000	
63	Cu	89	He	1.220	ppb	7.6	2288.05	2000	
66	Zn	89	He	0.199	ppb	368.4	797.83	2000	
75	As	89	He	1.522	ppb	15.1	190.36	1000	
78	Se	89	H2	0.581	ppb	8.6	31.83	1000	
88	Sr	89	He	4246.125	ppb	0.8	2591557.79	2000	
95	Mo	89	He	6.452	ppb	3.4	4788.80	1000	
107	Ag	89	He	0.041	ppb	31.7	121.11	100	
111	Cd	89	He	0.177	ppb	19.7	51.11	1000	
118	Sn	159	He	4.433	ppb	5.6	2651.47	1000	
121	Sb	159	No Gas	0.410	ppb	16.4	1525.12	1000	
137	Ba	159	No Gas	11.912	ppb	6.0	15603.29	2000	
182	W	159	No Gas	0.781	ppb	12.8	2172.62	1000	
205	Tl	209	No Gas	0.183	ppb	18.6	1398.34	1000	
208	Pb	209	No Gas	0.546	ppb	1.3	4054.78	2000	
232	Th	209	No Gas	0.859	ppb	5.4	5497.37	1000	
238	U	209	No Gas	2.409	ppb	3.5	14407.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6674198.86	1.9	8075153.2	82.65	29.5	120.4	
Sc	45	No Gas	14336221.97	3.0	15284588.74	93.8	29.5	120.4	
Sc	45	H2	1749610.40	0.8	1817402.03	96.27	29.5	120.4	
Sc	45	He	440985.40	2.8	431380.74	102.23	29.5	120.4	
Ge	72	No Gas	2385557.17	2.8	2712289.77	87.95	29.5	120.4	
Ge	72	H2	464976.24	1.5	540643.15	86	29.5	120.4	
Ge	72	He	248756.67	2.2	259264.63	95.95	29.5	120.4	
Y	89	H2	8551163.88	0.9	9628329.76	88.81	29.5	120.4	
Y	89	He	2035505.49	1.8	2093497.43	97.23	29.5	120.4	
Tb	159	No Gas	18676686.11	3.2	21312636.35	87.63	29.5	120.4	
Tb	159	He	7018683.79	0.9	7937819.95	88.42	29.5	120.4	
Bi	209	No Gas	7706415.46	2.6	9931051.85	77.6	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:33:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	41.4	34.45	100	
11	B	6	No Gas	4.996	ppb	6.1	25008.06	1000	
23	Na	45	He	315.100	ppb	9.7	282144.64	200000	
24	Mg	45	He	21.868	ppb	11.7	9108.02	200000	
27	Al	45	He	-2.037	ppb	N/A	145.56	200000	
28	Si	45	H2	-0.124	ppb	N/A	540.61	10000	
39	K	45	He	18.223	ppb	16.6	28220.11	200000	
40	Ca	45	H2	4.909	ppb	12.4	27284.85	200000	
51	V	89	He	0.016	ppb	55.7	272.23	1000	
52	Cr	89	He	-0.007	ppb	N/A	802.55	2000	
55	Mn	89	He	-0.114	ppb	N/A	193.30	2000	
56	Fe	89	H2	0.783	ppb	11.5	13258.16	100000	
59	Co	89	He	0.014	ppb	34.5	213.35	1000	
60	Ni	89	He	-0.074	ppb	N/A	90.00	1000	
63	Cu	89	He	-0.003	ppb	N/A	405.57	2000	
66	Zn	89	He	-0.538	ppb	N/A	331.13	2000	
75	As	89	He	-0.001	ppb	N/A	11.00	1000	
78	Se	89	H2	0.023	ppb	25.7	8.00	1000	
88	Sr	89	He	0.144	ppb	6.5	508.92	2000	
95	Mo	89	He	0.034	ppb	8.4	153.34	1000	
107	Ag	89	He	0.006	ppb	8.2	106.67	100	
111	Cd	89	He	0.009	ppb	12.8	14.81	1000	
118	Sn	159	He	0.154	ppb	17.8	857.84	1000	
121	Sb	159	No Gas	0.010	ppb	52.8	363.75	1000	
137	Ba	159	No Gas	0.085	ppb	13.0	710.82	2000	
182	W	159	No Gas	0.023	ppb	20.0	430.49	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	363.75	1000	
208	Pb	209	No Gas	0.009	ppb	6.2	1061.21	2000	
232	Th	209	No Gas	0.013	ppb	8.3	734.18	1000	
238	U	209	No Gas	0.006	ppb	33.3	220.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8668566.08	2.5	8075153.2	107.35	29.5	120.4	
Sc	45	No Gas	17168917.27	2.3	15284588.74	112.33	29.5	120.4	
Sc	45	H2	1939387.54	1.6	1817402.03	106.71	29.5	120.4	
Sc	45	He	449936.38	0.8	431380.74	104.3	29.5	120.4	
Ge	72	No Gas	2954699.44	2.5	2712289.77	108.94	29.5	120.4	
Ge	72	H2	559118.56	1.5	540643.15	103.42	29.5	120.4	
Ge	72	He	268029.23	0.3	259264.63	103.38	29.5	120.4	
Y	89	H2	10072542.08	1.4	9628329.76	104.61	29.5	120.4	
Y	89	He	2176299.88	0.3	2093497.43	103.96	29.5	120.4	
Tb	159	No Gas	21657653.84	2.0	21312636.35	101.62	29.5	120.4	
Tb	159	He	8216248.84	0.7	7937819.95	103.51	29.5	120.4	
Bi	209	No Gas	9825892.21	2.4	9931051.85	98.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:35:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	185.6	23.33	100	
11	B	6	No Gas	1.671	ppb	3.4	8543.92	1000	
23	Na	45	He	101.293	ppb	2.7	111483.84	200000	
24	Mg	45	He	6.140	ppb	4.0	2513.74	200000	
27	Al	45	He	-2.086	ppb	N/A	131.12	200000	
28	Si	45	H2	0.290	ppb	63.9	587.54	10000	
39	K	45	He	3.307	ppb	71.0	22208.84	200000	
40	Ca	45	H2	-3.357	ppb	N/A	8060.35	200000	
51	V	89	He	0.003	ppb	170.5	196.68	1000	
52	Cr	89	He	-0.012	ppb	N/A	737.89	2000	
55	Mn	89	He	-0.129	ppb	N/A	143.98	2000	
56	Fe	89	H2	0.286	ppb	5.0	8488.69	100000	
59	Co	89	He	0.001	ppb	175.6	73.34	1000	
60	Ni	89	He	-0.080	ppb	N/A	68.89	1000	
63	Cu	89	He	-0.010	ppb	N/A	336.68	2000	
66	Zn	89	He	-0.574	ppb	N/A	286.68	2000	
75	As	89	He	-0.002	ppb	N/A	10.33	1000	
78	Se	89	H2	0.013	ppb	19.7	4.83	1000	
88	Sr	89	He	0.031	ppb	14.8	136.67	2000	
95	Mo	89	He	0.015	ppb	46.8	72.22	1000	
107	Ag	89	He	0.003	ppb	26.2	68.89	100	
111	Cd	89	He	0.004	ppb	64.3	7.78	1000	
118	Sn	159	He	0.082	ppb	15.5	633.37	1000	
121	Sb	159	No Gas	0.004	ppb	89.7	256.95	1000	
137	Ba	159	No Gas	0.039	ppb	40.8	377.09	2000	
182	W	159	No Gas	0.012	ppb	32.9	253.62	1000	
205	Tl	209	No Gas	-0.015	ppb	N/A	290.33	1000	
208	Pb	209	No Gas	0.003	ppb	112.7	864.32	2000	
232	Th	209	No Gas	0.008	ppb	6.6	580.66	1000	
238	U	209	No Gas	0.002	ppb	47.5	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8212275.94	2.6	8075153.2	101.7	29.5	120.4	
Sc	45	No Gas	15598752.48	1.7	15284588.74	102.06	29.5	120.4	
Sc	45	H2	1779936.54	0.8	1817402.03	97.94	29.5	120.4	
Sc	45	He	427239.88	0.8	431380.74	99.04	29.5	120.4	
Ge	72	No Gas	2765332.68	1.8	2712289.77	101.96	29.5	120.4	
Ge	72	H2	524771.54	1.2	540643.15	97.06	29.5	120.4	
Ge	72	He	256479.48	0.6	259264.63	98.93	29.5	120.4	
Y	89	H2	9510675.03	0.8	9628329.76	98.78	29.5	120.4	
Y	89	He	2092603.47	1.1	2093497.43	99.96	29.5	120.4	
Tb	159	No Gas	22197285.78	1.8	21312636.35	104.15	29.5	120.4	
Tb	159	He	8143614.88	0.9	7937819.95	102.59	29.5	120.4	
Bi	209	No Gas	10231618.65	0.7	9931051.85	103.03	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:38:24 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	212.4	21.11	100	
11	B	6	No Gas	1.157	ppb	6.2	6113.73	1000	
23	Na	45	He	54.282	ppb	1.1	76033.86	200000	
24	Mg	45	He	1.685	ppb	3.2	766.75	200000	
27	Al	45	He	-2.331	ppb	N/A	94.45	200000	
28	Si	45	H2	0.010	ppb	1189.6	517.25	10000	
39	K	45	He	2.126	ppb	84.8	21538.26	200000	
40	Ca	45	H2	-4.683	ppb	N/A	5256.71	200000	
51	V	89	He	0.000	ppb	N/A	178.89	1000	
52	Cr	89	He	-0.013	ppb	N/A	728.55	2000	
55	Mn	89	He	-0.145	ppb	N/A	99.98	2000	
56	Fe	89	H2	-0.125	ppb	N/A	5140.34	100000	
59	Co	89	He	-0.001	ppb	N/A	53.34	1000	
60	Ni	89	He	-0.088	ppb	N/A	45.56	1000	
63	Cu	89	He	-0.018	ppb	N/A	271.12	2000	
66	Zn	89	He	-0.574	ppb	N/A	285.57	2000	
75	As	89	He	-0.003	ppb	N/A	9.33	1000	
78	Se	89	H2	0.008	ppb	39.6	3.33	1000	
88	Sr	89	He	0.003	ppb	157.0	48.89	2000	
95	Mo	89	He	0.010	ppb	77.2	53.34	1000	
107	Ag	89	He	0.002	ppb	71.5	45.56	100	
111	Cd	89	He	0.002	ppb	39.4	4.82	1000	
118	Sn	159	He	0.051	ppb	20.9	534.48	1000	
121	Sb	159	No Gas	0.000	ppb	1899.1	186.88	1000	
137	Ba	159	No Gas	0.009	ppb	56.9	140.16	2000	
182	W	159	No Gas	0.005	ppb	12.6	150.17	1000	
205	Tl	209	No Gas	-0.018	ppb	N/A	203.56	1000	
208	Pb	209	No Gas	-0.003	ppb	N/A	614.03	2000	
232	Th	209	No Gas	0.004	ppb	71.7	390.44	1000	
238	U	209	No Gas	0.001	ppb	59.2	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8090306.38	2.8	8075153.2	100.19	29.5	120.4	
Sc	45	No Gas	15407330.64	2.1	15284588.74	100.8	29.5	120.4	
Sc	45	H2	1753078.85	1.0	1817402.03	96.46	29.5	120.4	
Sc	45	He	421201.93	0.6	431380.74	97.64	29.5	120.4	
Ge	72	No Gas	2746265.86	2.6	2712289.77	101.25	29.5	120.4	
Ge	72	H2	517853.18	1.1	540643.15	95.78	29.5	120.4	
Ge	72	He	254454.78	0.7	259264.63	98.14	29.5	120.4	
Y	89	H2	9487300.19	1.3	9628329.76	98.54	29.5	120.4	
Y	89	He	2081281.83	1.0	2093497.43	99.42	29.5	120.4	
Tb	159	No Gas	22142719.67	2.2	21312636.35	103.89	29.5	120.4	
Tb	159	He	8107092.59	1.2	7937819.95	102.13	29.5	120.4	
Bi	209	No Gas	10309317.91	2.7	9931051.85	103.81	29.5	120.4	

Sample Report

Sample Name CCV

File Name 041_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:41:08 PM

Sample Type CCV

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	25.519	ppb	5.4	167047.80	25	
11	B	6	No Gas	26.114	ppb	5.1	116022.88	25	
23	Na	45	He	5094.290	ppb	0.7	3754927.04	5000	
24	Mg	45	He	5031.826	ppb	1.2	1957660.09	5000	
27	Al	45	He	484.062	ppb	0.3	70112.69	500	
28	Si	45	H2	493.351	ppb	1.4	109119.35	500	
39	K	45	He	4970.061	ppb	0.9	1545545.69	5000	
40	Ca	45	H2	5058.800	ppb	1.9	10343557.07	5000	
51	V	89	He	25.069	ppb	0.8	124656.21	25	
52	Cr	89	He	25.129	ppb	1.0	159825.77	25	
55	Mn	89	He	24.872	ppb	1.6	68680.21	25	
56	Fe	89	H2	5060.840	ppb	1.1	40787632.45	5000	
59	Co	89	He	25.555	ppb	1.7	267470.82	25	
60	Ni	89	He	25.564	ppb	2.5	73989.45	25	
63	Cu	89	He	25.542	ppb	1.0	201988.07	25	
66	Zn	89	He	25.192	ppb	1.1	22577.86	25	
75	As	89	He	25.039	ppb	1.7	15100.82	25	
78	Se	89	H2	25.505	ppb	1.2	7538.20	25	
88	Sr	89	He	24.118	ppb	1.8	75231.99	25	
95	Mo	89	He	25.075	ppb	0.7	94768.85	25	
107	Ag	89	He	25.752	ppb	1.1	309308.82	25	
111	Cd	89	He	25.515	ppb	1.5	36577.04	25	
118	Sn	159	He	24.252	ppb	1.6	73393.62	25	
121	Sb	159	No Gas	25.890	ppb	3.5	510624.12	25	
137	Ba	159	No Gas	25.736	ppb	3.7	197990.21	25	
182	W	159	No Gas	24.847	ppb	4.1	397364.81	25	
205	Tl	209	No Gas	26.180	ppb	5.2	788344.65	25	
208	Pb	209	No Gas	25.886	ppb	4.2	1095836.28	25	
232	Th	209	No Gas	25.616	ppb	5.4	1045539.14	25	
238	U	209	No Gas	25.871	ppb	4.0	1021494.72	25	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7964887.89	2.2	8075153.2	98.63	29.5	120.4	
Sc	45	No Gas	15389381.97	1.4	15284588.74	100.69	29.5	120.4	
Sc	45	H2	1767526.10	1.4	1817402.03	97.26	29.5	120.4	
Sc	45	He	426439.23	0.8	431380.74	98.85	29.5	120.4	
Ge	72	No Gas	2758854.83	1.8	2712289.77	101.72	29.5	120.4	
Ge	72	H2	519952.34	1.3	540643.15	96.17	29.5	120.4	
Ge	72	He	257601.33	0.4	259264.63	99.36	29.5	120.4	
Y	89	H2	9449259.76	0.9	9628329.76	98.14	29.5	120.4	
Y	89	He	2080020.46	1.0	2093497.43	99.36	29.5	120.4	
Tb	159	No Gas	21994863.28	1.5	21312636.35	103.2	29.5	120.4	
Tb	159	He	8073167.31	0.6	7937819.95	101.71	29.5	120.4	
Bi	209	No Gas	10176147.14	1.8	9931051.85	102.47	29.5	120.4	

Sample Report

Sample Name CCB

File Name 042_CCB.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH05A.b

Acq Time 8/5/2020 5:43:47 PM

Sample Type CCB

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	46.9	113.34	0.2	
11	B	6	No Gas	1.204	ppb	0.9	6241.58	4	
23	Na	45	He	32.863	ppb	3.6	61141.22	200	
24	Mg	45	He	1.220	ppb	28.2	593.39	20	
27	Al	45	He	-2.306	ppb	N/A	98.89	20	
28	Si	45	H2	2.136	ppb	175.8	986.84	100	
39	K	45	He	2.598	ppb	66.1	21878.57	200	
40	Ca	45	H2	-4.253	ppb	N/A	6159.34	20	
51	V	89	He	0.005	ppb	73.1	202.23	1	
52	Cr	89	He	-0.007	ppb	N/A	762.55	1	
55	Mn	89	He	-0.137	ppb	N/A	119.98	0.4	
56	Fe	89	H2	1.173	ppb	7.3	15569.34	20	
59	Co	89	He	0.000	ppb	280.7	64.45	0.2	
60	Ni	89	He	-0.084	ppb	N/A	55.56	0.4	
63	Cu	89	He	-0.016	ppb	N/A	282.23	0.6	
66	Zn	89	He	-0.567	ppb	N/A	290.01	2	
75	As	89	He	0.006	ppb	138.8	15.00	1	
78	Se	89	H2	0.041	ppb	10.8	13.00	1	
88	Sr	89	He	-0.001	ppb	N/A	35.56	1	
95	Mo	89	He	0.056	ppb	12.3	227.79	1	
107	Ag	89	He	0.007	ppb	17.8	108.89	0.2	
111	Cd	89	He	0.006	ppb	51.9	9.63	0.2	
118	Sn	159	He	0.129	ppb	4.9	766.72	1	
121	Sb	159	No Gas	0.021	ppb	29.1	594.01	0.2	
137	Ba	159	No Gas	0.013	ppb	48.8	173.53	0.4	
182	W	159	No Gas	0.082	ppb	6.1	1384.97	1	
205	Tl	209	No Gas	0.000	ppb	1253.2	764.22	0.2	
208	Pb	209	No Gas	0.009	ppb	45.6	1111.27	0.2	
232	Th	209	No Gas	0.081	ppb	18.7	3567.83	1	
238	U	209	No Gas	0.019	ppb	34.8	760.89	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7978746.64	2.0	8075153.2	98.81	29.5	120.4	
Sc	45	No Gas	15471809.18	2.1	15284588.74	101.22	29.5	120.4	
Sc	45	H2	1762402.76	0.2	1817402.03	96.97	29.5	120.4	
Sc	45	He	425016.09	0.4	431380.74	98.52	29.5	120.4	
Ge	72	No Gas	2766395.62	2.2	2712289.77	101.99	29.5	120.4	
Ge	72	H2	520033.60	0.9	540643.15	96.19	29.5	120.4	
Ge	72	He	256097.67	0.4	259264.63	98.78	29.5	120.4	
Y	89	H2	9438927.24	0.2	9628329.76	98.03	29.5	120.4	
Y	89	He	2067472.00	0.5	2093497.43	98.76	29.5	120.4	
Tb	159	No Gas	22108959.11	2.6	21312636.35	103.74	29.5	120.4	
Tb	159	He	8044000.43	0.3	7937819.95	101.34	29.5	120.4	
Bi	209	No Gas	10261060.59	2.3	9931051.85	103.32	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP/KC **ANALYSIS DATE**: 8/07/2020

METHOD: **ICP-MS**
☑ 200.8
☑ 6020
☑ DOD

FILE NAME: LNH06A

REVIEWED
MC 8/10/20
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19535	08/05/20	10/15/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (15:36) fails low for B (0.537 ug/L)

Closing PQL (18:33) fails high for W (1.221 ug/L) and failed low for B (1.060 ug/L)

ICSA (15:39) fails high for Mn (0.555 ug/L). LRS1(15:45) fails high for B and W. LRS2 (15:47) fails high for Ca.

CCB (15:58) fails for Sb (0.105 ug/L) Tl (0.105 ug/L) Pb (0.165 ug/L) U (0.105 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH06A	08/06/2020	15:24	KC
CalStd	1	LNH06A	08/06/2020	15:28	KC
ICV	1	LNH06A	08/06/2020	15:31	KC
ICB	1	LNH06A	08/06/2020	15:34	KC
PQL	1	LNH06A	08/06/2020	15:36	KC
ICSA	1	LNH06A	08/06/2020	15:39	KC
ICSAB	1	LNH06A	08/06/2020	15:42	KC
LRS1	1	LNH06A	08/06/2020	15:45	KC
LRS2	1	LNH06A	08/06/2020	15:47	KC
RINSE	1	LNH06A	08/06/2020	15:50	KC
RINSE	1	LNH06A	08/06/2020	15:53	KC
CCV	1	LNH06A	08/06/2020	15:56	KC
CCB	1	LNH06A	08/06/2020	15:58	KC
PBSNG29IMS2	5	LNH06A	08/06/2020	16:01	KC
LCSONG29IMS2	5	LNH06A	08/06/2020	16:04	KC
SN5107-028R	5	LNH06A	08/06/2020	16:06	KC
SN5107-029R	5	LNH06A	08/06/2020	16:09	KC
PBSNG07IMS1	5	LNH06A	08/06/2020	16:12	KC
LCSONG07IMS1	5	LNH06A	08/06/2020	16:14	KC
SN5107-028	5	LNH06A	08/06/2020	16:17	KC
SN5107-029	5	LNH06A	08/06/2020	16:20	KC
PBWNG16IMW2	5	LNH06A	08/06/2020	16:22	KC
LCSWNG16IMW2	5	LNH06A	08/06/2020	16:25	KC
CCV	1	LNH06A	08/06/2020	16:28	KC
CCB	1	LNH06A	08/06/2020	16:30	KC
SN5734-002	5	LNH06A	08/06/2020	16:33	KC
PBWNG14IMW2	5	LNH06A	08/06/2020	16:35	KC
LCSWNG14IMW2	5	LNH06A	08/06/2020	16:38	KC
SN5646-004R	5	LNH06A	08/06/2020	16:41	KC
SN5646-005R	5	LNH06A	08/06/2020	16:43	KC
SN5646-005RA	5	LNH06A	08/06/2020	16:46	KC
SN5646-005RL	25	LNH06A	08/06/2020	16:49	KC
SN5646-005RP	5	LNH06A	08/06/2020	16:51	KC
SN5646-005RS	5	LNH06A	08/06/2020	16:54	KC
PBWNG13IMW2	5	LNH06A	08/06/2020	16:57	KC
CCV	1	LNH06A	08/06/2020	16:59	KC
CCB	1	LNH06A	08/06/2020	17:02	KC
LCSWNG13IMW2	5	LNH06A	08/06/2020	17:05	KC
SN5646-004	5	LNH06A	08/06/2020	17:07	KC
SN5646-005	5	LNH06A	08/06/2020	17:10	KC
SN5646-005A	5	LNH06A	08/06/2020	17:13	KC
SN5646-005L	25	LNH06A	08/06/2020	17:15	KC
SN5646-005P	5	LNH06A	08/06/2020	17:18	KC
SN5646-005S	5	LNH06A	08/06/2020	17:21	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBSNH04IMS1	5	LNH06A	08/06/2020	17:23	KC
LCSONH04IMS1	5	LNH06A	08/06/2020	17:26	KC
SN5717-004	5	LNH06A	08/06/2020	17:29	KC
CCV	1	LNH06A	08/06/2020	17:31	KC
CCB	1	LNH06A	08/06/2020	17:34	KC
SN5717-010	5	LNH06A	08/06/2020	17:37	KC
SN5717-010A	5	LNH06A	08/06/2020	17:39	KC
SN5717-010L	25	LNH06A	08/06/2020	17:42	KC
SN5717-010P	5	LNH06A	08/06/2020	17:45	KC
SN5717-010S	5	LNH06A	08/06/2020	17:48	KC
SN5717-013	5	LNH06A	08/06/2020	17:50	KC
SN5717-017	5	LNH06A	08/06/2020	17:53	KC
PBWNG31IMW1	1	LNH06A	08/06/2020	17:56	KC
LCSWNG31IMW1	1	LNH06A	08/06/2020	17:59	KC
SN6347-001	1	LNH06A	08/06/2020	18:01	KC
CCV	1	LNH06A	08/06/2020	18:04	KC
CCB	1	LNH06A	08/06/2020	18:07	KC
PBWNH05IMW1	1	LNH06A	08/06/2020	18:09	KC
LCSWNH05IMW1	1	LNH06A	08/06/2020	18:12	KC
SN6445-001	1	LNH06A	08/06/2020	18:14	KC
PBWNH06IMW2	5	LNH06A	08/06/2020	18:17	KC
LCSWNH06IMW2	5	LNH06A	08/06/2020	18:20	KC
SN5589-006R	5	LNH06A	08/06/2020	18:22	KC
SN6300-001	1	LNH06A	08/06/2020	18:25	KC
CCV	1	LNH06A	08/06/2020	18:27	KC
CCB	1	LNH06A	08/06/2020	18:30	KC
PQL	1	LNH06A	08/06/2020	18:33	KC
RINSE	1	LNH06A	08/06/2020	18:36	KC
RINSE	1	LNH06A	08/06/2020	18:38	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq. Date-Time	8/6/2020 12:19:30 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

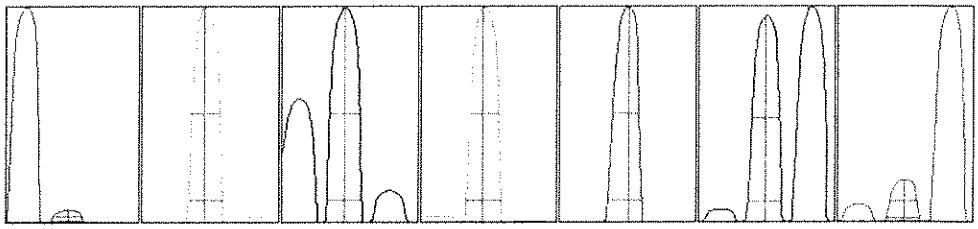
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	17271	172710.45	0.298	5.000	
9	6791	67911.65	0.302	5.000	
24	261423	2614230.14	0.077	5.000	
59	43844	438443.18	0.305	5.000	
115	456382	4563819.20	0.231	5.000	
205	23156	231561.07	0.418	5.000	
208	50795	507947.01	0.458	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	17314	17260	17332	17240	17208
9	6801	6762	6815	6798	6780
24	261321	261549	261193	261348	261704
59	43654	43889	43934	43763	43981
115	454999	455531	457131	456852	457397
205	23027	23152	23141	23161	23300
208	50809	50478	50663	50969	51055

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	28198.17	6.95	6.90 - 7.10	
9	11252.92	8.90	8.90 - 9.10	
24	415110.34	23.90	23.90 - 24.10	
59	71734.73	58.90	58.90 - 59.10	
115	808573.67	115.05	114.90 - 115.10	
205	39209.87	205.00	204.90 - 205.10	
208	86007.42	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.757	0.900	
24	0.66	0.771	0.900	
59	0.64	0.768	0.900	
115	0.58	0.743	0.900	
205	0.61	0.737	0.900	
208	0.61	0.735	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2954	29535.68	1.353	5.000	
89	315255	3152548.86	1.820	5.000	
205	26391	263913.50	1.102	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2902	2928	2968	2964	3006
89	306298	313885	317147	317187	321757
205	25983	26229	26429	26631	26685

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	9434	94338.15	1.347	5.000	
89	65014	650140.55	1.683	5.000	
205	11263	112630.60	1.066	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9242	9377	9467	9555	9528
89	63243	64670	65561	65844	65752
205	11072	11223	11371	11315	11335

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2433 V	Pulse HV	1190 V

RUN ID: LNH06A

RUN NOTES: Concentrations in ppb noted by bracketing ( ) . Concentrations in ppm noted by bracketing [ ]

Circled analytes: Fail DoD limits. Analytes with no circle: Fail all limits

ANALYST: AP/KC

Circled analytes (LCS ONLY) : Fail EPA limits. Analytes with no circle: Fail all limits

Type	Sample	Time	D.F.	Vial	Comments	No Gas				Helium				Hydrogen		
						Li	Sc	Tb	Bi	Sc	Ge	Y	Tb	Sc	Ge	Y
CalBlk	CalBlank	8/6/2020 3:24:44 PM	1	1203												
CalStd	CalStd	8/6/2020 3:28:18 PM	1	1101												
ICV	ICV	8/6/2020 3:31:34 PM	1	1202												
ICB	ICB	8/6/2020 3:34:14 PM	1	1203												
LLICV	PQL	8/6/2020 3:36:53 PM	1	1302	B↑ (0.537)											
ICSA	ICSA	8/6/2020 3:39:37 PM	1	1104	Mn↑ (0.555)											
ICSB	ICSAB	8/6/2020 3:42:26 PM	1	1105												
LRS	LRS1	8/6/2020 3:45:16 PM	1	4511	B↑ W↑											
Sample	LRS2	8/6/2020 3:47:51 PM	1	4512	Ca↑											
Sample	RINSE	8/6/2020 3:50:47 PM	1	1303												
Sample	RINSE	8/6/2020 3:53:25 PM	1	1303												
CCV	CCV	8/6/2020 3:56:08 PM	1	1206												
CCB	CCB	8/6/2020 3:58:47 PM	1	1207	Sb↑ (.105) Tl↑ (.105) Pb↑ (.105) U↑ (.105)											
PB	PBSNG29IMS2	8/6/2020 4:01:31 PM	5	2101	Mg↑ Sn↑											
LCSO	LCSONG29IMS2	8/6/2020 4:04:10 PM	5	2102												
Sample	SN5107-028R	8/6/2020 4:06:53 PM	5	2103												
Sample	SN5107-029R	8/6/2020 4:09:28 PM	5	2104												
PB	PBSNG07IMS1	8/6/2020 4:12:12 PM	5	2105	Mn↑ Zn↑ Sn↑ Pb↑											
LCSO	LCSONG07IMS1	8/6/2020 4:14:49 PM	5	2106												
Sample	SN5107-028	8/6/2020 4:17:31 PM	5	2107												
Sample	SN5107-029	8/6/2020 4:20:06 PM	5	2108												
PB	PBWNG16IMW2	8/6/2020 4:22:47 PM	5	2109	Cu↑ Zn↑ (71.199)											
LCSW	LCSWNG16IMW2	8/6/2020 4:25:23 PM	5	2110												
CCV	CCV	8/6/2020 4:28:04 PM	1	1206												
CCB	CCB	8/6/2020 4:30:41 PM	1	1207												
Sample	SN5734-002	8/6/2020 4:33:24 PM	5	2111												
PB	PBWNG14IMW2	8/6/2020 4:35:59 PM	5	2112	Cu↑ Zn↑											
LCSW	LCSWNG14IMW2	8/6/2020 4:38:40 PM	5	2201	Cr↑ Mn↑ Co↑ Zn↑ Mo↑ Ag↑											
Sample	SN5646-004R	8/6/2020 4:41:14 PM	5	2202												
Sample	SN5646-005R	8/6/2020 4:43:52 PM	5	2203												
Sample	SN5646-005RA	8/6/2020 4:46:33 PM	5	2204												
Sample	SN5646-005RL	8/6/2020 4:49:16 PM	25	2205												
Sample	SN5646-005RP	8/6/2020 4:51:51 PM	5	2206												
Sample	SN5646-005RS	8/6/2020 4:54:36 PM	5	2207												
PB	PBWNG13IMW2	8/6/2020 4:57:13 PM	5	2208	Cu↑ Zn↑ Be↑											
CCV	CCV	8/6/2020 4:59:56 PM	1	1206												
CCB	CCB	8/6/2020 5:02:33 PM	1	1207												
LCSW	LCSWNG13IMW2	8/6/2020 5:05:16 PM	5	2209	Tl↑											
Sample	SN5646-004	8/6/2020 5:07:52 PM	5	2210												
Sample	SN5646-005	8/6/2020 5:10:32 PM	5	2211												
Sample	SN5646-005A	8/6/2020 5:13:07 PM	5	2212												
Sample	SN5646-005L	8/6/2020 5:15:47 PM	25	2301												
Sample	SN5646-005P	8/6/2020 5:18:24 PM	5	2302												
Sample	SN5646-005S	8/6/2020 5:21:08 PM	5	2303												
PB	PBSNH04IMS1	8/6/2020 5:23:43 PM	5	2304	B↑ Co↑ Mn↑ Cu↑ Zn↑ Sn↑ Ba↑											
LCSO	LCSONH04IMS1	8/6/2020 5:26:29 PM	5	2305	Zn↑											
Sample	SN5717-004	8/6/2020 5:29:03 PM	5	2306												
CCV	CCV	8/6/2020 5:31:50 PM	1	1206												
CCB	CCB	8/6/2020 5:34:25 PM	1	1207												
Sample	SN5717-010	8/6/2020 5:37:07 PM	5	2307												
Sample	SN5717-010A	8/6/2020 5:39:54 PM	5	2308												
Sample	SN5717-010L	8/6/2020 5:42:43 PM	25	2309												
Sample	SN5717-010P	8/6/2020 5:45:21 PM	5	2310												
Sample	SN5717-010S	8/6/2020 5:48:10 PM	5	2311												
Sample	SN5717-013	8/6/2020 5:50:56 PM	5	2312												
Sample	SN5717-017	8/6/2020 5:53:43 PM	5	2401												

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:24:44 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	3.33	100.1
11	B	6	No Gas	897.84	6.7
23	Na	45	He	38306.62	0.7
24	Mg	45	He	75.56	53.9
27	Al	45	He	106.67	32.9
28	Si	45	H2	533.94	21.1
39	K	45	He	21921.91	1.5
40	Ca	45	H2	4929.92	3.9
51	V	89	He	200.01	20.9
52	Cr	89	He	670.56	4.8
55	Mn	89	He	181.97	8.6
56	Fe	89	H2	4332.22	1.3
59	Co	89	He	35.56	84.5
60	Ni	89	He	122.23	10.3
63	Cu	89	He	505.58	8.4
66	Zn	89	He	315.57	7.0
75	As	89	He	12.67	4.6
78	Se	89	H2	1.50	0.0
88	Sr	89	He	22.22	60.6
95	Mo	89	He	7.78	65.5
107	Ag	89	He	35.56	21.6
111	Cd	89	He	0.74	86.6
118	Sn	159	He	354.46	6.3
121	Sb	159	No Gas	133.49	4.3
137	Ba	159	No Gas	70.08	24.7
182	W	159	No Gas	26.69	57.3
205	Tl	209	No Gas	183.54	30.0
208	Pb	209	No Gas	337.05	18.1
232	Th	209	No Gas	220.25	37.2
238	U	209	No Gas	6.67	86.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	9181465.10	1.3
Sc	45	No Gas	16426983.07	0.6
Sc	45	H2	1932518.05	1.3
Sc	45	He	478214.17	0.6
Ge	72	No Gas	2769440.33	0.2
Ge	72	H2	546905.92	0.5
Ge	72	He	272551.69	0.5
Y	89	H2	9834260.27	0.6
Y	89	He	2139239.05	0.7
Tb	159	No Gas	19495400.26	0.5
Tb	159	He	7485871.83	0.3
Bi	209	No Gas	8594079.30	1.5

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:28:18 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	402304.39	2.1
11	B	6	No Gas	269163.42	1.3
23	Na	45	He	8798999.21	0.7
24	Mg	45	He	4548830.42	1.0
27	Al	45	He	165303.11	0.9
28	Si	45	H2	255142.16	2.1
39	K	45	He	3600031.05	0.5
40	Ca	45	H2	24051182.98	1.6
51	V	89	He	276353.67	0.5
52	Cr	89	He	350594.34	0.3
55	Mn	89	He	150295.42	1.1
56	Fe	89	H2	88695455.66	0.1
59	Co	89	He	571800.01	0.6
60	Ni	89	He	156115.53	0.1
63	Cu	89	He	424216.46	0.8
66	Zn	89	He	47433.76	0.4
75	As	89	He	31989.11	0.6
78	Se	89	H2	16155.12	1.8
88	Sr	89	He	162557.49	1.0
95	Mo	89	He	193512.94	0.2
107	Ag	89	He	599372.86	0.6
111	Cd	89	He	71477.06	0.9
118	Sn	159	He	148461.65	0.8
121	Sb	159	No Gas	964276.06	0.3
137	Ba	159	No Gas	373247.65	0.6
182	W	159	No Gas	727073.90	1.1
205	Tl	209	No Gas	1319508.88	2.0
208	Pb	209	No Gas	1883688.02	0.9
232	Th	209	No Gas	1802585.82	2.0
238	U	209	No Gas	1738183.49	1.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9158925.06	0.5	9181465.1	99.75	29.5	120.4	
Sc	45	No Gas	16555301.80	0.5	16426983.07	100.78	29.5	120.4	
Sc	45	H2	1975140.89	1.3	1932518.05	102.21	29.5	120.4	
Sc	45	He	481831.37	0.8	478214.17	100.76	29.5	120.4	
Ge	72	No Gas	2790644.14	0.2	2769440.33	100.77	29.5	120.4	
Ge	72	H2	552805.34	1.0	546905.92	101.08	29.5	120.4	
Ge	72	He	274963.78	0.8	272551.69	100.89	29.5	120.4	
Y	89	H2	9900606.72	1.2	9834260.27	100.67	29.5	120.4	
Y	89	He	2161898.23	1.2	2139239.05	101.06	29.5	120.4	
Tb	159	No Gas	19523319.15	0.4	19495400.26	100.14	29.5	120.4	
Tb	159	He	7476374.06	0.7	7485871.83	99.87	29.5	120.4	
Bi	209	No Gas	8499431.63	0.2	8594079.3	98.9	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:31:34 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	19.951	ppb	2.4	163902.99	20	99.76	89.6	110.4	
11	B	6	No Gas	20.192	ppb	3.4	111514.51	20	100.96	89.6	110.4	
23	Na	45	He	3968.719	ppb	0.3	3479773.16	4000	99.22	89.6	110.4	
24	Mg	45	He	3982.004	ppb	0.1	1793004.21	4000	99.55	89.6	110.4	
27	Al	45	He	376.887	ppb	0.4	61735.25	400	94.22	89.6	110.4	
28	Si	45	H2	408.858	ppb	1.7	102866.92	400	102.21	89.6	110.4	
39	K	45	He	3973.610	ppb	0.8	1429193.03	4000	99.34	89.6	110.4	
40	Ca	45	H2	3937.522	ppb	1.1	9313382.64	4000	98.44	89.6	110.4	
51	V	89	He	20.026	ppb	0.7	109755.06	20	100.13	89.6	110.4	
52	Cr	89	He	20.257	ppb	0.2	141101.75	20	101.28	89.6	110.4	
55	Mn	89	He	20.361	ppb	0.2	60730.26	20	101.8	89.6	110.4	
56	Fe	89	H2	3895.497	ppb	0.8	34493390.51	4000	97.39	89.6	110.4	
59	Co	89	He	20.472	ppb	0.8	231915.50	20	102.36	89.6	110.4	
60	Ni	89	He	20.512	ppb	0.7	63512.60	20	102.56	89.6	110.4	
63	Cu	89	He	20.441	ppb	1.0	172093.48	20	102.2	89.6	110.4	
66	Zn	89	He	19.817	ppb	0.3	18813.27	20	99.08	89.6	110.4	
75	As	89	He	19.970	ppb	0.5	12663.48	20	99.85	89.6	110.4	
78	Se	89	H2	19.783	ppb	0.6	6381.68	20	98.92	89.6	110.4	
88	Sr	89	He	19.554	ppb	0.8	62983.10	20	97.77	89.6	110.4	
95	Mo	89	He	40.363	ppb	0.8	154741.40	40	100.91	89.6	110.4	
107	Ag	89	He	20.253	ppb	1.1	240502.79	20	101.26	89.6	110.4	
111	Cd	89	He	20.224	ppb	1.1	28639.21	20	101.12	89.6	110.4	
118	Sn	159	He	19.527	ppb	0.2	58254.53	20	97.64	89.6	110.4	
121	Sb	159	No Gas	20.205	ppb	3.1	396578.12	20	101.02	89.6	110.4	
137	Ba	159	No Gas	20.045	ppb	3.2	152295.93	20	100.22	89.6	110.4	
182	W	159	No Gas	20.096	ppb	3.7	297337.64	20	100.48	89.6	110.4	
205	Tl	209	No Gas	21.388	ppb	3.6	576631.36	20	106.94	89.6	110.4	
208	Pb	209	No Gas	20.067	ppb	3.5	772380.94	20	100.34	89.6	110.4	
232	Th	209	No Gas	20.726	ppb	3.4	763330.89	20	103.63	89.6	110.4	
238	U	209	No Gas	20.372	ppb	3.5	723381.62	20	101.86	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9353797.64	1.6	9181465.1	101.88	29.5	120.4	
Sc	45	No Gas	16909392.34	1.9	16426983.07	102.94	29.5	120.4	
Sc	45	H2	1941709.11	0.9	1932518.05	100.48	29.5	120.4	
Sc	45	He	476945.51	0.4	478214.17	99.73	29.5	120.4	
Ge	72	No Gas	2844106.14	2.4	2769440.33	102.7	29.5	120.4	
Ge	72	H2	543408.03	2.1	546905.92	99.36	29.5	120.4	
Ge	72	He	272731.07	0.2	272551.69	100.07	29.5	120.4	
Y	89	H2	9882665.23	1.6	9834260.27	100.49	29.5	120.4	
Y	89	He	2141346.30	0.6	2139239.05	100.1	29.5	120.4	
Tb	159	No Gas	19873841.09	2.1	19495400.26	101.94	29.5	120.4	
Tb	159	He	7483736.76	0.4	7485871.83	99.97	29.5	120.4	
Bi	209	No Gas	8685541.49	2.2	8594079.3	101.06	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:34:14 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.011	ppb	7.7	97.78	0.2	
11	B	6	No Gas	0.369	ppb	6.0	2937.07	4	
23	Na	45	He	3.657	ppb	95.5	41835.65	200	
24	Mg	45	He	2.632	ppb	90.9	1271.59	20	
27	Al	45	He	0.519	ppb	28.5	193.36	20	
28	Si	45	H2	0.110	ppb	218.2	563.97	100	
39	K	45	He	3.356	ppb	81.0	23308.58	200	
40	Ca	45	H2	0.947	ppb	2.0	7189.85	20	
51	V	89	He	0.001	ppb	1783.4	205.57	1	
52	Cr	89	He	0.013	ppb	62.5	766.55	1	
55	Mn	89	He	0.013	ppb	85.9	221.97	0.4	
56	Fe	89	H2	1.160	ppb	7.9	14710.72	20	
59	Co	89	He	0.014	ppb	115.3	193.36	0.2	
60	Ni	89	He	0.009	ppb	186.9	151.12	0.4	
63	Cu	89	He	0.027	ppb	62.1	741.16	0.6	
66	Zn	89	He	-0.009	ppb	N/A	311.12	2	
75	As	89	He	0.009	ppb	213.2	18.67	1	
78	Se	89	H2	0.017	ppb	9.6	7.00	1	
88	Sr	89	He	0.014	ppb	117.5	66.67	1	
95	Mo	89	He	0.079	ppb	15.5	313.35	1	
107	Ag	89	He	0.017	ppb	81.6	238.91	0.2	
111	Cd	89	He	0.011	ppb	109.4	16.30	0.2	
118	Sn	159	He	0.058	ppb	27.2	527.81	1	
121	Sb	159	No Gas	0.015	ppb	18.4	420.48	0.2	
137	Ba	159	No Gas	0.008	ppb	29.1	130.15	0.4	
182	W	159	No Gas	0.054	ppb	8.9	814.27	1	
205	Tl	209	No Gas	0.018	ppb	17.5	664.09	0.2	
208	Pb	209	No Gas	0.013	ppb	15.5	830.94	0.2	
232	Th	209	No Gas	0.026	ppb	5.4	1184.72	1	
238	U	209	No Gas	0.013	ppb	13.3	467.20	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9355723.94	2.9	9181465.1	101.9	29.5	120.4	
Sc	45	No Gas	16769680.76	1.6	16426983.07	102.09	29.5	120.4	
Sc	45	H2	1941452.06	0.9	1932518.05	100.46	29.5	120.4	
Sc	45	He	482336.27	0.6	478214.17	100.86	29.5	120.4	
Ge	72	No Gas	2836413.84	1.6	2769440.33	102.42	29.5	120.4	
Ge	72	H2	542007.94	0.8	546905.92	99.1	29.5	120.4	
Ge	72	He	274053.80	0.5	272551.69	100.55	29.5	120.4	
Y	89	H2	9938110.99	0.4	9834260.27	101.06	29.5	120.4	
Y	89	He	2163201.22	0.3	2139239.05	101.12	29.5	120.4	
Tb	159	No Gas	19526371.38	2.3	19495400.26	100.16	29.5	120.4	
Tb	159	He	7494834.75	0.8	7485871.83	100.12	29.5	120.4	
Bi	209	No Gas	8683781.70	2.7	8594079.3	101.04	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:36:53 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.216	ppb	7.2	1784.62	0.2	108	79.5	120.4
11	B	6	No Gas	0.537	ppb	3.1	3862.88	4	13.42	79.5	120.4
23	Na	45	He	209.926	ppb	0.6	222679.28	200	104.96	79.5	120.4
24	Mg	45	He	23.532	ppb	8.4	10787.40	20	117.66	79.5	120.4
27	Al	45	He	20.018	ppb	2.5	3417.20	20	100.09	79.5	120.4
28	Si	45	H2	96.523	ppb	1.7	24515.07	100	96.52	79.5	120.4
39	K	45	He	208.784	ppb	0.9	96866.69	200	104.39	79.5	120.4
40	Ca	45	H2	21.073	ppb	0.6	54370.84	20	105.36	79.5	120.4
51	V	89	He	1.004	ppb	3.3	5789.19	1	100.4	79.5	120.4
52	Cr	89	He	1.068	ppb	1.1	8207.58	1	106.8	79.5	120.4
55	Mn	89	He	0.424	ppb	0.4	1466.48	0.4	106	79.5	120.4
56	Fe	89	H2	21.682	ppb	1.7	195537.76	20	108.41	79.5	120.4
59	Co	89	He	0.222	ppb	3.2	2587.09	0.2	111	79.5	120.4
60	Ni	89	He	0.429	ppb	2.5	1473.47	0.4	107.25	79.5	120.4
63	Cu	89	He	0.676	ppb	1.3	6281.65	0.6	112.67	79.5	120.4
66	Zn	89	He	2.035	ppb	7.0	2251.38	2	101.75	79.5	120.4
75	As	89	He	1.022	ppb	0.6	670.76	1	102.2	79.5	120.4
78	Se	89	H2	1.023	ppb	4.7	330.32	1	102.3	79.5	120.4
88	Sr	89	He	1.009	ppb	2.3	3324.97	1	100.9	79.5	120.4
95	Mo	89	He	1.034	ppb	0.8	4036.30	1	103.4	79.5	120.4
107	Ag	89	He	0.224	ppb	6.9	2737.05	0.2	112	79.5	120.4
111	Cd	89	He	0.216	ppb	9.9	311.12	0.2	108	79.5	120.4
118	Sn	159	He	1.024	ppb	2.6	3415.00	1	102.4	79.5	120.4
121	Sb	159	No Gas	0.226	ppb	7.5	4515.80	0.2	113	79.5	120.4
137	Ba	159	No Gas	0.418	ppb	1.7	3210.67	0.4	104.5	79.5	120.4
182	W	159	No Gas	1.179	ppb	0.7	17274.18	1	117.9	79.5	120.4
205	Tl	209	No Gas	0.234	ppb	2.9	6472.23	0.2	117	79.5	120.4
208	Pb	209	No Gas	0.219	ppb	4.4	8734.33	0.2	109.5	79.5	120.4
232	Th	209	No Gas	0.227	ppb	4.4	8542.57	0.2	113.5	79.5	120.4
238	U	209	No Gas	0.219	ppb	4.9	7741.05	0.2	109.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9372468.39	1.3	9181465.1	102.08	29.5	120.4	
Sc	45	No Gas	16665259.25	0.5	16426983.07	101.45	29.5	120.4	
Sc	45	H2	1927606.56	0.4	1932518.05	99.75	29.5	120.4	
Sc	45	He	482209.73	0.3	478214.17	100.84	29.5	120.4	
Ge	72	No Gas	2827143.19	0.9	2769440.33	102.08	29.5	120.4	
Ge	72	H2	542060.47	1.4	546905.92	99.11	29.5	120.4	
Ge	72	He	274270.64	0.7	272551.69	100.63	29.5	120.4	
Y	89	H2	9844074.35	1.1	9834260.27	100.1	29.5	120.4	
Y	89	He	2176773.30	0.6	2139239.05	101.75	29.5	120.4	
Tb	159	No Gas	19631719.29	1.0	19495400.26	100.7	29.5	120.4	
Tb	159	He	7538940.72	0.1	7485871.83	100.71	29.5	120.4	
Bi	209	No Gas	8651635.60	1.4	8594079.3	100.67	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:39:37 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.001	ppb	69.2	14.44	0.2	-50	50	
B	11	6	No Gas	1.748	ppb	3.4	9835.91	4	-50	100	
Na	23	45	He	99696.996	ppb	3.0	86268983.44	100000	80	120	
Mg	24	45	He	98153.883	ppb	3.0	44080929.34	100000	80	120	
Al	27	45	He	92824.047	ppb	2.3	15141631.30	100000	80	120	
Si	28	45	H2	11.317	ppb	7.6	3400.91	100	-50	50	
K	39	45	He	99332.192	ppb	2.2	35117868.28	100000	80	120	
Ca	40	45	H2	98143.414	ppb	1.0	234251398.73	100000	80	120	
V	51	89	He	0.012	ppb	36.2	256.68	1	-50	100	
Cr	52	89	He	0.291	ppb	3.9	2617.77	0.78	-100	100	
Mn	55	89	He	0.555	ppb	2.8	1781.80	0.0826	100	100	DoD
Fe	56	89	H2	93801.675	ppb	1.0	823768412.73	100000	80	120	
Co	59	89	He	0.293	ppb	2.5	3267.28	0.2	-50	100	
Ni	60	89	He	0.319	ppb	8.0	1075.64	0.114	100	100	
Cu	63	89	He	0.280	ppb	2.7	2782.60	-0.043	100	100	
Zn	66	89	He	0.602	ppb	10.2	853.39	-0.7632	100	100	
As	75	89	He	0.042	ppb	24.8	38.34	1	-50	100	
Se	78	89	H2	0.065	ppb	6.8	22.17	1	-50	100	
Sr	88	89	He	0.795	ppb	1.4	2510.33	0.0578	100	100	
Mo	95	89	He	2025.438	ppb	2.5	7551778.29	2000	80	120	
Ag	107	89	He	0.018	ppb	14.2	240.01	0.2	-50	50	
Cd	111	89	He	0.386	ppb	7.5	532.98	0.268	100	100	
Sn	118	159	He	0.252	ppb	8.0	1004.52	-0.24	100	100	
Sb	121	159	No Gas	0.153	ppb	4.9	2880.21	0.089	100	100	
Ba	137	159	No Gas	0.184	ppb	12.8	1341.58	-0.0794	100	100	
W	182	159	No Gas	0.188	ppb	5.2	2569.81	0.32	-100	100	
Tl	205	209	No Gas	0.006	ppb	66.2	297.01	0.2	-50	50	
Pb	208	209	No Gas	0.088	ppb	3.9	3120.30	0.03	100	100	
Th	232	209	No Gas	0.016	ppb	4.7	687.46	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	58.4	40.04	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8769271.05	1.1	9181465.1	95.51	29.5	120.4	
Sc	45	No Gas	16543780.49	0.9	16426983.07	100.71	29.5	120.4	
Sc	45	H2	1960376.69	0.8	1932518.05	101.44	29.5	120.4	
Sc	45	He	476000.19	3.0	478214.17	99.54	29.5	120.4	
Ge	72	No Gas	2704105.39	1.4	2769440.33	97.64	29.5	120.4	
Ge	72	H2	510049.48	1.9	546905.92	93.26	29.5	120.4	
Ge	72	He	262280.81	1.8	272551.69	96.23	29.5	120.4	
Y	89	H2	9803413.17	2.0	9834260.27	99.69	29.5	120.4	
Y	89	He	2083569.47	2.8	2139239.05	97.4	29.5	120.4	
Tb	159	No Gas	18192999.03	0.7	19495400.26	93.32	29.5	120.4	
Tb	159	He	6829110.80	2.7	7485871.83	91.23	29.5	120.4	
Bi	209	No Gas	7285093.64	1.2	8594079.3	84.77	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:42:26 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.457	ppb	4.9	157627.02	20	79.5	120.4	
11	B	6	No Gas	21.112	ppb	4.8	109335.66	20	79.5	120.4	
23	Na	45	He	102720.050	ppb	3.4	87224458.88	100000	79.5	120.4	
24	Mg	45	He	99944.418	ppb	4.2	44040521.57	100000	79.5	120.4	
27	Al	45	He	93532.228	ppb	4.4	14967307.28	100000	79.5	120.4	
28	Si	45	H2	491.610	ppb	1.1	121226.14	500	79.5	120.4	
39	K	45	He	101945.595	ppb	3.3	35362570.11	100000	79.5	120.4	
40	Ca	45	H2	102082.508	ppb	0.4	236756316.47	100000	79.5	120.4	
51	V	89	He	21.068	ppb	4.1	110925.66	20	79.5	120.4	
52	Cr	89	He	20.950	ppb	4.2	140165.68	20	79.5	120.4	
55	Mn	89	He	21.206	ppb	5.0	60746.70	20	79.5	120.4	
56	Fe	89	H2	98446.727	ppb	0.6	833942359.65	100000	79.5	120.4	
59	Co	89	He	20.647	ppb	3.9	224715.99	20	79.5	120.4	
60	Ni	89	He	19.823	ppb	3.3	58986.81	20	79.5	120.4	
63	Cu	89	He	19.442	ppb	3.7	157289.68	20	79.5	120.4	
66	Zn	89	He	19.496	ppb	2.7	17790.86	20	79.5	120.4	
75	As	89	He	21.056	ppb	4.8	12824.66	20	79.5	120.4	
78	Se	89	H2	20.512	ppb	1.0	6330.65	20	79.5	120.4	
88	Sr	89	He	20.798	ppb	3.7	64363.01	20	79.5	120.4	
95	Mo	89	He	2052.304	ppb	4.2	7558405.16	2000	79.5	120.4	
107	Ag	89	He	18.704	ppb	3.7	213396.85	20	79.5	120.4	
111	Cd	89	He	18.957	ppb	4.7	25787.31	20	79.5	120.4	
118	Sn	159	He	20.808	ppb	5.6	55325.15	20	79.5	120.4	
121	Sb	159	No Gas	20.750	ppb	4.3	367487.16	20	79.5	120.4	
137	Ba	159	No Gas	20.359	ppb	3.6	139583.38	20	79.5	120.4	
182	W	159	No Gas	19.990	ppb	4.7	266899.18	20	79.5	120.4	
205	Tl	209	No Gas	21.991	ppb	3.0	480577.31	20	79.5	120.4	
208	Pb	209	No Gas	21.238	ppb	2.7	662647.67	20	79.5	120.4	
232	Th	209	No Gas	21.971	ppb	4.2	655866.62	20	79.5	120.4	
238	U	209	No Gas	21.827	ppb	3.1	628248.75	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8777882.26	2.4	9181465.1	95.6	29.5	120.4	
Sc	45	No Gas	16640448.61	1.5	16426983.07	101.3	29.5	120.4	
Sc	45	H2	1905073.61	1.8	1932518.05	98.58	29.5	120.4	
Sc	45	He	467163.76	3.3	478214.17	97.69	29.5	120.4	
Ge	72	No Gas	2689654.85	2.1	2769440.33	97.12	29.5	120.4	
Ge	72	H2	486743.56	1.6	546905.92	89	29.5	120.4	
Ge	72	He	258915.00	1.4	272551.69	95	29.5	120.4	
Y	89	H2	9456026.53	1.8	9834260.27	96.15	29.5	120.4	
Y	89	He	2058755.64	2.9	2139239.05	96.24	29.5	120.4	
Tb	159	No Gas	17933413.90	1.8	19495400.26	91.99	29.5	120.4	
Tb	159	He	6681026.85	3.5	7485871.83	89.25	29.5	120.4	
Bi	209	No Gas	7038568.69	1.2	8594079.3	81.9	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:45:16 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	97.483	ppb	11.1	801293.64	100	97.48	89.5	110.4	
11	B	6	No Gas	442.165	ppb	11.6	2424100.90	500	88.43	89.5	110.4	> +/- 10%
51	V	89	He	1032.664	ppb	1.4	5462282.14	1000	103.27	89.5	110.4	
52	Cr	89	He	2040.402	ppb	1.1	13676419.93	2000	102.02	89.5	110.4	
55	Mn	89	He	2020.636	ppb	0.8	5809802.18	2000	101.03	89.5	110.4	
59	Co	89	He	1046.304	ppb	1.3	11458430.80	1000	104.63	89.5	110.4	
60	Ni	89	He	1051.936	ppb	1.6	3143196.48	1000	105.19	89.5	110.4	
63	Cu	89	He	2016.400	ppb	0.9	16366038.92	2000	100.82	89.5	110.4	
66	Zn	89	He	1979.746	ppb	0.9	1786957.98	2000	98.99	89.5	110.4	
75	As	89	He	1016.710	ppb	1.1	622723.47	1000	101.67	89.5	110.4	
78	Se	89	H2	987.247	ppb	0.9	303924.37	1000	98.72	89.5	110.4	
88	Sr	89	He	1928.652	ppb	1.2	6004029.57	2000	96.43	89.5	110.4	
95	Mo	89	He	1024.229	ppb	1.0	3796328.31	1000	102.42	89.5	110.4	
107	Ag	89	He	109.198	ppb	1.5	1253586.83	100	109.2	89.5	110.4	
111	Cd	89	He	1001.694	ppb	1.5	1371401.89	1000	100.17	89.5	110.4	
118	Sn	159	He	988.433	ppb	0.7	2773370.10	1000	98.84	89.5	110.4	
121	Sb	159	No Gas	947.890	ppb	13.2	18347783.18	1000	94.79	89.5	110.4	
137	Ba	159	No Gas	1827.485	ppb	13.0	13693419.71	2000	91.37	89.5	110.4	
182	W	159	No Gas	886.928	ppb	13.8	12942028.14	1000	88.69	89.5	110.4	> +/- 10%
205	Tl	209	No Gas	967.256	ppb	12.2	25335776.34	1000	96.73	89.5	110.4	
208	Pb	209	No Gas	1840.186	ppb	11.7	68824641.18	2000	92.01	89.5	110.4	
232	Th	209	No Gas	919.156	ppb	11.2	32907672.97	1000	91.92	89.5	110.4	
238	U	209	No Gas	895.892	ppb	11.3	30930641.43	1000	89.59	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9402622.39	6.6	9181465.1	102.41	29.5	120.4	
Sc	45	No Gas	17442290.22	7.9	16426983.07	106.18	29.5	120.4	
Ge	72	No Gas	2873012.60	7.0	2769440.33	103.74	29.5	120.4	
Tb	159	No Gas	19751359.15	8.9	19495400.26	101.31	29.5	120.4	
Bi	209	No Gas	8487174.48	7.3	8594079.3	98.76	29.5	120.4	
Sc	45	H2	1855270.61	1.2	1932518.05	96	29.5	120.4	
Ge	72	H2	494049.35	1.3	546905.92	90.34	29.5	120.4	
Y	89	H2	9435035.02	1.6	9834260.27	95.94	29.5	120.4	
Sc	45	He	469683.09	0.9	478214.17	98.22	29.5	120.4	
Ge	72	He	267476.21	1.1	272551.69	98.14	29.5	120.4	
Y	89	He	2070482.78	1.0	2139239.05	96.79	29.5	120.4	
Tb	159	He	7081358.02	1.3	7485871.83	94.6	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 3:47:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.271	ppb	33.4	2006.94	100	
11	B	6	No Gas	8.224	ppb	8.9	41146.23	1000	
23	Na	45	He	196200.325	ppb	0.6	176532214.33	200000	
24	Mg	45	He	191009.434	ppb	1.0	89212377.56	200000	
27	Al	45	He	184957.778	ppb	0.6	31373724.81	200000	
28	Si	45	H2	8930.241	ppb	1.1	2199320.54	10000	
39	K	45	He	198965.172	ppb	0.8	73129173.32	200000	
40	Ca	45	H2	201603.389	ppb	1.1	468843828.57	200000	>LDR
51	V	89	He	0.179	ppb	33.7	1172.33	1000	
52	Cr	89	He	1.470	ppb	8.5	10817.56	2000	
55	Mn	89	He	7.694	ppb	2.7	22987.23	2000	
56	Fe	89	H2	95803.486	ppb	0.2	805535627.25	100000	
59	Co	89	He	0.612	ppb	13.2	6935.61	1000	
60	Ni	89	He	1.982	ppb	4.1	6226.06	1000	
63	Cu	89	He	1.115	ppb	9.2	9822.67	2000	
66	Zn	89	He	1.739	ppb	9.5	1931.32	2000	
75	As	89	He	0.292	ppb	19.2	196.69	1000	
78	Se	89	H2	0.436	ppb	5.7	134.82	1000	
88	Sr	89	He	1.173	ppb	11.7	3782.88	2000	
95	Mo	89	He	1.178	ppb	16.0	4500.94	1000	
107	Ag	89	He	0.111	ppb	16.0	1343.46	100	
111	Cd	89	He	0.129	ppb	44.2	182.23	1000	
118	Sn	159	He	1.228	ppb	2.5	3557.29	1000	
121	Sb	159	No Gas	2.204	ppb	23.7	37731.52	1000	
137	Ba	159	No Gas	3.972	ppb	21.9	26279.74	2000	
182	W	159	No Gas	3.259	ppb	19.2	42133.70	1000	
205	Tl	209	No Gas	1.942	ppb	18.8	40500.69	1000	
208	Pb	209	No Gas	3.622	ppb	20.2	107869.77	2000	
232	Th	209	No Gas	4.384	ppb	39.2	127287.83	1000	
238	U	209	No Gas	3.251	ppb	36.7	90580.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8376274.47	5.1	9181465.1	91.23	29.5	120.4	
Sc	45	No Gas	15851674.76	8.5	16426983.07	96.5	29.5	120.4	
Sc	45	H2	1910515.12	2.9	1932518.05	98.86	29.5	120.4	
Sc	45	He	494797.36	2.0	478214.17	103.47	29.5	120.4	
Ge	72	No Gas	2504828.15	5.3	2769440.33	90.45	29.5	120.4	
Ge	72	H2	479788.73	1.8	546905.92	87.73	29.5	120.4	
Ge	72	He	265555.33	1.5	272551.69	97.43	29.5	120.4	
Y	89	H2	9384961.61	2.4	9834260.27	95.43	29.5	120.4	
Y	89	He	2134610.44	1.7	2139239.05	99.78	29.5	120.4	
Tb	159	No Gas	17361785.02	9.0	19495400.26	89.06	29.5	120.4	
Tb	159	He	6664527.89	0.6	7485871.83	89.03	29.5	120.4	
Bi	209	No Gas	6740331.65	7.9	8594079.3	78.43	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 3:50:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	12.2	82.22	100	
11	B	6	No Gas	0.964	ppb	1.7	6431.65	1000	
23	Na	45	He	69.489	ppb	11.1	104123.24	200000	
24	Mg	45	He	32.895	ppb	12.6	15738.75	200000	
27	Al	45	He	28.990	ppb	12.3	5124.45	200000	
28	Si	45	H2	1.827	ppb	10.3	1021.17	10000	
39	K	45	He	62.521	ppb	13.7	46534.76	200000	
40	Ca	45	H2	39.447	ppb	5.2	100986.02	200000	
51	V	89	He	0.030	ppb	7.8	370.02	1000	
52	Cr	89	He	0.073	ppb	11.5	1199.17	2000	
55	Mn	89	He	0.117	ppb	7.5	539.25	2000	
56	Fe	89	H2	23.397	ppb	3.9	214450.92	100000	
59	Co	89	He	0.035	ppb	5.6	435.59	1000	
60	Ni	89	He	0.013	ppb	73.3	165.56	1000	
63	Cu	89	He	0.169	ppb	5.9	1962.43	2000	
66	Zn	89	He	0.073	ppb	42.8	392.24	2000	
75	As	89	He	0.049	ppb	21.8	44.34	1000	
78	Se	89	H2	0.086	ppb	17.3	29.50	1000	
88	Sr	89	He	0.064	ppb	27.6	233.34	2000	
95	Mo	89	He	0.296	ppb	7.9	1166.76	1000	
107	Ag	89	He	0.007	ppb	22.4	116.67	100	
111	Cd	89	He	0.040	ppb	16.5	58.52	1000	
118	Sn	159	He	0.318	ppb	14.2	1240.10	1000	
121	Sb	159	No Gas	0.070	ppb	5.4	1431.67	1000	
137	Ba	159	No Gas	0.088	ppb	9.5	700.80	2000	
182	W	159	No Gas	0.180	ppb	9.9	2549.77	1000	
205	Tl	209	No Gas	0.066	ppb	13.0	1795.47	1000	
208	Pb	209	No Gas	0.111	ppb	7.9	4238.38	2000	
232	Th	209	No Gas	0.068	ppb	10.2	2503.07	1000	
238	U	209	No Gas	0.052	ppb	5.7	1715.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9710305.07	2.5	9181465.1	105.76	29.5	120.4	
Sc	45	No Gas	17789772.69	1.6	16426983.07	108.3	29.5	120.4	
Sc	45	H2	1996515.18	1.5	1932518.05	103.31	29.5	120.4	
Sc	45	He	504571.55	1.0	478214.17	105.51	29.5	120.4	
Ge	72	No Gas	2926374.01	2.8	2769440.33	105.67	29.5	120.4	
Ge	72	H2	532661.74	0.2	546905.92	97.4	29.5	120.4	
Ge	72	He	283586.29	0.3	272551.69	104.05	29.5	120.4	
Y	89	H2	10021077.18	0.3	9834260.27	101.9	29.5	120.4	
Y	89	He	2184463.89	0.4	2139239.05	102.11	29.5	120.4	
Tb	159	No Gas	18875651.94	2.0	19495400.26	96.82	29.5	120.4	
Tb	159	He	7157781.01	0.6	7485871.83	95.62	29.5	120.4	
Bi	209	No Gas	7991813.98	2.8	8594079.3	92.99	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 3:53:25 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.006	ppb	13.9	53.34	100	
11	B	6	No Gas	0.528	ppb	3.4	3998.47	1000	
23	Na	45	He	40.932	ppb	71.8	78576.10	200000	
24	Mg	45	He	27.084	ppb	113.1	13070.23	200000	
27	Al	45	He	23.574	ppb	113.5	4219.61	200000	
28	Si	45	H2	0.411	ppb	19.5	660.75	10000	
39	K	45	He	35.900	ppb	84.7	36862.45	200000	
40	Ca	45	H2	18.388	ppb	25.5	49986.17	200000	
51	V	89	He	0.066	ppb	135.3	578.99	1000	
52	Cr	89	He	0.124	ppb	136.8	1572.23	2000	
55	Mn	89	He	0.165	ppb	111.5	691.31	2000	
56	Fe	89	H2	11.084	ppb	26.3	103805.43	100000	
59	Co	89	He	0.068	ppb	129.0	829.30	1000	
60	Ni	89	He	0.046	ppb	208.1	272.27	1000	
63	Cu	89	He	0.194	ppb	95.2	2197.60	2000	
66	Zn	89	He	0.129	ppb	130.2	448.92	2000	
75	As	89	He	0.075	ppb	130.9	61.67	1000	
78	Se	89	H2	0.055	ppb	11.3	19.50	1000	
88	Sr	89	He	0.129	ppb	130.3	450.12	2000	
95	Mo	89	He	0.310	ppb	81.9	1230.44	1000	
107	Ag	89	He	0.008	ppb	112.3	133.34	100	
111	Cd	89	He	0.064	ppb	140.9	94.08	1000	
118	Sn	159	He	0.206	ppb	32.9	935.67	1000	
121	Sb	159	No Gas	0.034	ppb	1.1	794.24	1000	
137	Ba	159	No Gas	0.036	ppb	14.3	337.05	2000	
182	W	159	No Gas	0.084	ppb	15.3	1244.79	1000	
205	Tl	209	No Gas	0.027	ppb	5.3	857.67	1000	
208	Pb	209	No Gas	0.048	ppb	4.4	2092.42	2000	
232	Th	209	No Gas	0.029	ppb	11.6	1221.44	1000	
238	U	209	No Gas	0.020	ppb	25.6	680.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9831009.72	2.4	9181465.1	107.07	29.5	120.4	
Sc	45	No Gas	17931291.29	3.4	16426983.07	109.16	29.5	120.4	
Sc	45	H2	2007300.77	0.9	1932518.05	103.87	29.5	120.4	
Sc	45	He	508719.98	1.1	478214.17	106.38	29.5	120.4	
Ge	72	No Gas	2950262.45	4.1	2769440.33	106.53	29.5	120.4	
Ge	72	H2	537723.49	1.6	546905.92	98.32	29.5	120.4	
Ge	72	He	284994.54	0.9	272551.69	104.57	29.5	120.4	
Y	89	H2	10033344.55	1.4	9834260.27	102.02	29.5	120.4	
Y	89	He	2204337.81	0.8	2139239.05	103.04	29.5	120.4	
Tb	159	No Gas	19416895.27	3.0	19495400.26	99.6	29.5	120.4	
Tb	159	He	7242136.91	1.1	7485871.83	96.74	29.5	120.4	
Bi	209	No Gas	8243367.30	3.6	8594079.3	95.92	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:56:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.639	ppb	5.4	208045.46	25	98.56	89.8	110.2	
11	B	6	No Gas	24.956	ppb	6.1	141441.41	25	99.82	89.8	110.2	
23	Na	45	He	5144.622	ppb	1.1	4741875.46	5000	102.89	89.8	110.2	
24	Mg	45	He	5074.426	ppb	1.0	2408021.79	5000	101.49	89.8	110.2	
27	Al	45	He	499.942	ppb	1.4	86265.08	500	99.99	89.8	110.2	
28	Si	45	H2	483.128	ppb	1.2	123423.56	500	96.63	89.8	110.2	
39	K	45	He	5051.177	ppb	1.1	1908412.78	5000	101.02	89.8	110.2	
40	Ca	45	H2	5008.508	ppb	0.4	12038017.18	5000	100.17	89.8	110.2	
51	V	89	He	25.644	ppb	0.5	143753.94	25	102.58	89.8	110.2	
52	Cr	89	He	25.869	ppb	0.4	184178.68	25	103.48	89.8	110.2	
55	Mn	89	He	25.713	ppb	1.0	78420.84	25	102.85	89.8	110.2	
56	Fe	89	H2	5023.164	ppb	1.7	44610619.05	5000	100.46	89.8	110.2	
59	Co	89	He	25.679	ppb	0.9	297648.57	25	102.72	89.8	110.2	
60	Ni	89	He	25.915	ppb	1.3	82071.37	25	103.66	89.8	110.2	
63	Cu	89	He	25.946	ppb	0.7	223369.75	25	103.78	89.8	110.2	
66	Zn	89	He	25.391	ppb	1.6	24573.42	25	101.56	89.8	110.2	
75	As	89	He	25.619	ppb	1.6	16618.06	25	102.48	89.8	110.2	
78	Se	89	H2	25.134	ppb	1.6	8131.17	25	100.54	89.8	110.2	
88	Sr	89	He	24.354	ppb	1.5	80259.42	25	97.42	89.8	110.2	
95	Mo	89	He	25.175	ppb	1.1	98757.50	25	100.7	89.8	110.2	
107	Ag	89	He	25.211	ppb	0.6	306322.49	25	100.84	89.8	110.2	
111	Cd	89	He	24.832	ppb	1.7	35979.59	25	99.33	89.8	110.2	
118	Sn	159	He	25.379	ppb	2.0	73431.38	25	101.52	89.8	110.2	
121	Sb	159	No Gas	25.834	ppb	6.2	486202.21	25	103.34	89.8	110.2	
137	Ba	159	No Gas	25.291	ppb	6.0	184249.24	25	101.16	89.8	110.2	
182	W	159	No Gas	23.623	ppb	4.9	335287.78	25	94.49	89.8	110.2	
205	Tl	209	No Gas	25.860	ppb	4.5	650738.17	25	103.44	89.8	110.2	
208	Pb	209	No Gas	25.178	ppb	4.4	904556.17	25	100.71	89.8	110.2	
232	Th	209	No Gas	24.999	ppb	4.9	859294.92	25	100	89.8	110.2	
238	U	209	No Gas	24.825	ppb	4.8	822758.22	25	99.3	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9620628.21	2.6	9181465.1	104.78	29.5	120.4	
Sc	45	No Gas	17595530.95	2.9	16426983.07	107.11	29.5	120.4	
Sc	45	H2	1973441.84	1.2	1932518.05	102.12	29.5	120.4	
Sc	45	He	502669.53	0.8	478214.17	105.11	29.5	120.4	
Ge	72	No Gas	2907072.75	2.7	2769440.33	104.97	29.5	120.4	
Ge	72	H2	531235.63	0.5	546905.92	97.13	29.5	120.4	
Ge	72	He	282963.92	0.4	272551.69	103.82	29.5	120.4	
Y	89	H2	9912556.06	0.7	9834260.27	100.8	29.5	120.4	
Y	89	He	2191040.70	0.5	2139239.05	102.42	29.5	120.4	
Tb	159	No Gas	19073274.30	3.1	19495400.26	97.83	29.5	120.4	
Tb	159	He	7269509.62	0.9	7485871.83	97.11	29.5	120.4	
Bi	209	No Gas	8108997.78	2.5	8594079.3	94.36	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 3:58:47 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.041	ppb	36.2	347.79	0.2	
11	B	6	No Gas	0.601	ppb	8.4	4323.01	4	
23	Na	45	He	12.196	ppb	18.5	51177.50	200	
24	Mg	45	He	2.834	ppb	11.7	1417.96	20	
27	Al	45	He	1.985	ppb	20.6	452.24	20	
28	Si	45	H2	0.136	ppb	461.1	584.00	100	
39	K	45	He	9.083	ppb	27.6	26312.40	200	
40	Ca	45	H2	2.871	ppb	9.7	12053.30	20	
51	V	89	He	0.003	ppb	55.8	222.23	1	
52	Cr	89	He	0.023	ppb	10.7	848.54	1	
55	Mn	89	He	0.037	ppb	47.3	297.28	0.4	
56	Fe	89	H2	2.853	ppb	7.7	29845.15	20	
59	Co	89	He	0.008	ppb	11.7	124.45	0.2	
60	Ni	89	He	-0.011	ppb	N/A	91.12	0.4	
63	Cu	89	He	0.055	ppb	14.1	984.52	0.6	
66	Zn	89	He	-0.041	ppb	N/A	283.35	2	
75	As	89	He	0.013	ppb	69.9	21.33	1	
78	Se	89	H2	0.036	ppb	2.2	13.17	1	
88	Sr	89	He	0.008	ppb	51.5	48.89	1	
95	Mo	89	He	0.129	ppb	3.3	512.25	1	
107	Ag	89	He	0.006	ppb	55.6	114.45	0.2	
111	Cd	89	He	0.007	ppb	42.2	10.74	0.2	
118	Sn	159	He	0.141	ppb	16.2	747.83	1	
121	Sb	159	No Gas	0.105	ppb	29.6	2092.51	0.2	Failed DoD
137	Ba	159	No Gas	0.154	ppb	32.4	1181.38	0.4	
182	W	159	No Gas	0.168	ppb	22.2	2392.93	1	
205	Tl	209	No Gas	0.105	ppb	30.6	2840.20	0.2	Failed DoD
208	Pb	209	No Gas	0.165	ppb	31.9	6327.76	0.2	Failed DoD
232	Th	209	No Gas	0.146	ppb	31.8	5273.76	1	
238	U	209	No Gas	0.105	ppb	31.1	3544.56	0.2	Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9617411.55	1.0	9181465.1	104.75	29.5	120.4	
Sc	45	No Gas	17110671.95	2.0	16426983.07	104.16	29.5	120.4	
Sc	45	H2	1994251.08	1.5	1932518.05	103.19	29.5	120.4	
Sc	45	He	500412.44	0.6	478214.17	104.64	29.5	120.4	
Ge	72	No Gas	2844715.97	0.6	2769440.33	102.72	29.5	120.4	
Ge	72	H2	529099.49	0.8	546905.92	96.74	29.5	120.4	
Ge	72	He	282253.65	0.6	272551.69	103.56	29.5	120.4	
Y	89	H2	9961109.51	0.3	9834260.27	101.29	29.5	120.4	
Y	89	He	2182837.12	0.1	2139239.05	102.04	29.5	120.4	
Tb	159	No Gas	18986558.47	1.6	19495400.26	97.39	29.5	120.4	
Tb	159	He	7240455.24	0.8	7485871.83	96.72	29.5	120.4	
Bi	209	No Gas	8200367.89	1.1	8594079.3	95.42	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG29IMS2
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:01:31 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.028	ppb	48.3	50.00	0.5	
B	11	6	No Gas	3.652	ppb	5.0	5026.60	10	
Na	23	45	He	114.838	ppb	53.5	60146.95	500	
Mg	24	45	He	52.106	ppb	117.2	4930.03	50	PB 6020 Fails DoD
Al	27	45	He	44.514	ppb	110.2	1615.58	50	
Si	28	45	H2	12.798	ppb	7.0	1174.69	250	
K	39	45	He	103.084	ppb	66.4	30182.94	500	
Ca	40	45	H2	33.561	ppb	1.8	20780.28	50	
V	51	89	He	0.264	ppb	27.0	488.92	2.5	
Cr	52	89	He	0.845	ppb	10.0	1844.47	2.5	
Mn	55	89	He	0.651	ppb	23.9	569.91	1	
Fe	56	89	H2	16.633	ppb	3.7	33286.81	50	
Co	59	89	He	0.054	ppb	125.3	157.80	0.5	
Ni	60	89	He	0.431	ppb	16.5	388.91	1	
Cu	63	89	He	0.945	ppb	14.1	2094.70	1.5	
Zn	66	89	He	1.845	ppb	13.8	661.15	5	
As	75	89	He	0.121	ppb	88.3	28.00	2.5	
Se	78	89	H2	0.131	ppb	34.9	9.83	2.5	
Sr	88	89	He	0.123	ppb	112.7	101.12	2.5	
Mo	95	89	He	0.490	ppb	29.0	383.36	2.5	
Ag	107	89	He	0.039	ppb	72.9	128.90	0.5	
Cd	111	89	He	0.043	ppb	139.4	12.96	0.5	
Sn	118	159	He	41.698	ppb	1.4	24150.11	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.082	ppb	10.6	443.84	0.5	
Ba	137	159	No Gas	0.154	ppb	21.2	297.00	1	
W	182	159	No Gas	0.255	ppb	16.0	757.54	2.5	
Tl	205	209	No Gas	0.057	ppb	45.1	473.87	0.5	
Pb	208	209	No Gas	0.153	ppb	5.8	1448.32	0.5	
Th	232	209	No Gas	0.214	ppb	9.0	1718.73	2.5	
U	238	209	No Gas	0.027	ppb	40.9	190.22	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9567896.31	2.0	9181465.1	104.21	29.5	120.4	
Sc	45	No Gas	17274069.92	1.4	16426983.07	105.16	29.5	120.4	
Sc	45	H2	1937981.27	0.5	1932518.05	100.28	29.5	120.4	
Sc	45	He	493648.46	0.7	478214.17	103.23	29.5	120.4	
Ge	72	No Gas	2832868.18	1.3	2769440.33	102.29	29.5	120.4	
Ge	72	H2	513053.61	0.9	546905.92	93.81	29.5	120.4	
Ge	72	He	276499.30	0.4	272551.69	101.45	29.5	120.4	
Y	89	H2	9732464.52	1.0	9834260.27	98.96	29.5	120.4	
Y	89	He	2143933.61	0.4	2139239.05	100.22	29.5	120.4	
Tb	159	No Gas	19301290.27	2.3	19495400.26	99	29.5	120.4	
Tb	159	He	7205492.95	0.4	7485871.83	96.25	29.5	120.4	
Bi	209	No Gas	8299367.20	2.1	8594079.3	96.57	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG29IMS2
File Name	020LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:04:10 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.433	ppb	2.4	87219.67	50	20.57	79.5	120.4	
B	11	6	No Gas	503.423	ppb	3.1	570161.01	500	20.14	79.5	120.4	
Na	23	45	He	8130.470	ppb	0.5	1503505.22	7500	21.68	79.5	120.4	
Mg	24	45	He	5370.564	ppb	0.7	502134.65	5000	21.48	79.5	120.4	
Al	27	45	He	1917.147	ppb	2.8	65193.86	2000	19.17	79.5	120.4	
Si	28	45	H2	962.791	ppb	0.5	48947.77	1000	19.26	79.5	120.4	
K	39	45	He	10782.457	ppb	0.5	815600.35	10000	21.56	79.5	120.4	
Ca	40	45	H2	2576.547	ppb	0.5	1228603.71	2500	20.61	79.5	120.4	
V	51	89	He	528.785	ppb	0.8	584740.41	500	21.15	79.5	120.4	
Cr	52	89	He	215.107	ppb	1.7	301962.33	200	21.51	79.5	120.4	
Mn	55	89	He	531.973	ppb	0.8	319834.44	500	21.28	79.5	120.4	
Fe	56	89	H2	1049.983	ppb	0.4	1846396.71	1000	21	79.5	120.4	
Co	59	89	He	538.009	ppb	0.8	1231397.33	500	21.52	79.5	120.4	
Ni	60	89	He	537.615	ppb	1.1	335831.71	500	21.5	79.5	120.4	
Cu	63	89	He	266.446	ppb	1.6	452420.66	250	21.32	79.5	120.4	
Zn	66	89	He	509.164	ppb	1.6	96344.66	500	20.37	79.5	120.4	
As	75	89	He	106.566	ppb	1.3	13653.52	100	21.31	79.5	120.4	
Se	78	89	H2	100.664	ppb	0.5	6433.69	100	20.13	79.5	120.4	
Sr	88	89	He	505.868	ppb	0.2	329162.17	500	20.23	79.5	120.4	
Mo	95	89	He	106.548	ppb	0.6	82543.38	100	21.31	79.5	120.4	
Ag	107	89	He	53.058	ppb	1.6	127322.45	50	21.22	79.5	120.4	
Cd	111	89	He	259.400	ppb	0.6	74224.47	250	20.75	79.5	120.4	
Sn	118	159	He	558.110	ppb	0.1	322963.57	500	22.32	79.5	120.4	
Sb	121	159	No Gas	108.602	ppb	2.0	416119.77	100	21.72	79.5	120.4	
Ba	137	159	No Gas	2088.637	ppb	2.4	3096630.64	2000	20.89	79.5	120.4	
W	182	159	No Gas	103.242	ppb	2.7	298228.43	100	20.65	79.5	120.4	
Tl	205	209	No Gas	112.581	ppb	3.6	576244.17	100	22.52	79.5	120.4	
[Pb]	206	209	No Gas	109.817	ppb	2.8	202398.70	100	21.96	79.5	120.4	
[Pb]	207	209	No Gas	110.004	ppb	3.4	174886.17	100	22	79.5	120.4	
Pb	208	209	No Gas	108.848	ppb	3.3	795465.52	100	21.77	79.5	120.4	
Th	232	209	No Gas	109.166	ppb	2.3	763464.96	100	21.83	79.5	120.4	
U	238	209	No Gas	109.616	ppb	2.1	739149.55	100	21.92	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9654257.98	1.7	9181465.1	105.15	29.5	120.4	
Sc	45	No Gas	17249278.88	1.8	16426983.07	105.01	29.5	120.4	
Sc	45	H2	1950434.57	0.3	1932518.05	100.93	29.5	120.4	
Sc	45	He	495142.09	1.1	478214.17	103.54	29.5	120.4	
Ge	72	No Gas	2846271.72	2.3	2769440.33	102.77	29.5	120.4	
Ge	72	H2	510966.08	0.8	546905.92	93.43	29.5	120.4	
Ge	72	He	277505.85	1.1	272551.69	101.82	29.5	120.4	
Y	89	H2	9791087.62	0.7	9834260.27	99.56	29.5	120.4	
Y	89	He	2163554.00	1.5	2139239.05	101.14	29.5	120.4	
Tb	159	No Gas	19394163.32	1.5	19495400.26	99.48	29.5	120.4	
Tb	159	He	7294945.10	0.4	7485871.83	97.45	29.5	120.4	
Bi	209	No Gas	8245195.42	2.2	8594079.3	95.94	29.5	120.4	

Sample Report

Sample Name SN5107-028R

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:06:53 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.084	ppb	20.5	141.12	100	
11	B	6	No Gas	13.797	ppb	3.3	15948.22	1000	
23	Na	45	He	95.868	ppb	7.7	56185.35	200000	
24	Mg	45	He	83.589	ppb	1.9	7789.31	200000	
27	Al	45	He	896.527	ppb	1.0	30153.72	200000	
28	Si	45	H2	748.456	ppb	2.5	37779.36	10000	
39	K	45	He	102.059	ppb	9.6	29809.33	200000	
40	Ca	45	H2	300.361	ppb	0.7	146101.46	200000	
51	V	89	He	1.497	ppb	1.0	1842.41	1000	
52	Cr	89	He	3.047	ppb	3.9	4909.32	2000	
55	Mn	89	He	3.928	ppb	2.8	2524.44	2000	
56	Fe	89	H2	330.413	ppb	1.7	577155.05	100000	
59	Co	89	He	0.228	ppb	50.4	553.41	1000	
60	Ni	89	He	0.860	ppb	16.9	655.60	1000	
63	Cu	89	He	1.275	ppb	4.1	2653.68	2000	
66	Zn	89	He	2.440	ppb	3.8	773.38	2000	
75	As	89	He	0.310	ppb	24.7	52.01	1000	
78	Se	89	H2	0.185	ppb	12.3	13.17	1000	
88	Sr	89	He	31.076	ppb	2.0	20086.36	2000	
95	Mo	89	He	0.649	ppb	16.2	506.70	1000	
107	Ag	89	He	0.033	ppb	17.5	114.45	100	
111	Cd	89	He	0.102	ppb	34.4	29.63	1000	
118	Sn	159	He	52.293	ppb	1.1	30312.75	1000	
121	Sb	159	No Gas	0.153	ppb	9.2	700.81	1000	
137	Ba	159	No Gas	11.836	ppb	3.0	17183.73	2000	
182	W	159	No Gas	0.266	ppb	8.3	774.23	1000	
205	Tl	209	No Gas	0.082	ppb	24.1	584.00	1000	
208	Pb	209	No Gas	5.402	ppb	2.7	39100.98	2000	
232	Th	209	No Gas	1.035	ppb	4.4	7320.35	1000	
238	U	209	No Gas	0.332	ppb	9.6	2202.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9305851.25	1.3	9181465.1	101.35	29.5	120.4	
Sc	45	No Gas	16801888.59	2.0	16426983.07	102.28	29.5	120.4	
Sc	45	H2	1930371.80	0.5	1932518.05	99.89	29.5	120.4	
Sc	45	He	488706.43	0.9	478214.17	102.19	29.5	120.4	
Ge	72	No Gas	2781383.32	1.8	2769440.33	100.43	29.5	120.4	
Ge	72	H2	510420.87	1.2	546905.92	93.33	29.5	120.4	
Ge	72	He	275364.76	0.7	272551.69	101.03	29.5	120.4	
Y	89	H2	9678234.56	1.5	9834260.27	98.41	29.5	120.4	
Y	89	He	2146853.77	0.3	2139239.05	100.36	29.5	120.4	
Tb	159	No Gas	18915102.91	1.3	19495400.26	97.02	29.5	120.4	
Tb	159	He	7232918.58	0.4	7485871.83	96.62	29.5	120.4	
Bi	209	No Gas	8099179.52	0.6	8594079.3	94.24	29.5	120.4	

Sample Report

Sample Name SN5107-029R

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:09:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.049	ppb	10.4	85.56	100	
11	B	6	No Gas	6.508	ppb	2.6	8251.51	1000	
23	Na	45	He	77.006	ppb	5.1	52838.59	200000	
24	Mg	45	He	81.799	ppb	1.1	7627.01	200000	
27	Al	45	He	940.776	ppb	1.1	31638.16	200000	
28	Si	45	H2	739.148	ppb	1.2	37223.50	10000	
39	K	45	He	80.973	ppb	6.7	28281.77	200000	
40	Ca	45	H2	209.501	ppb	0.3	103138.94	200000	
51	V	89	He	1.245	ppb	3.7	1564.59	1000	
52	Cr	89	He	2.482	ppb	2.3	4118.54	2000	
55	Mn	89	He	2.868	ppb	1.8	1890.45	2000	
56	Fe	89	H2	317.987	ppb	1.3	561060.32	100000	
59	Co	89	He	0.104	ppb	24.1	271.13	1000	
60	Ni	89	He	0.750	ppb	7.3	586.70	1000	
63	Cu	89	He	1.032	ppb	6.1	2241.37	2000	
66	Zn	89	He	2.634	ppb	3.1	808.94	2000	
75	As	89	He	0.246	ppb	23.1	44.00	1000	
78	Se	89	H2	0.141	ppb	28.5	10.50	1000	
88	Sr	89	He	24.335	ppb	1.6	15717.23	2000	
95	Mo	89	He	0.418	ppb	7.2	328.90	1000	
107	Ag	89	He	0.011	ppb	31.2	61.11	100	
111	Cd	89	He	0.027	ppb	65.5	8.52	1000	
118	Sn	159	He	41.902	ppb	1.0	24352.83	1000	
121	Sb	159	No Gas	0.059	ppb	17.7	363.75	1000	
137	Ba	159	No Gas	9.123	ppb	3.5	13775.89	2000	
182	W	159	No Gas	0.128	ppb	19.6	400.45	1000	
205	Tl	209	No Gas	0.023	ppb	68.2	300.34	1000	
208	Pb	209	No Gas	4.451	ppb	6.2	33645.26	2000	
232	Th	209	No Gas	0.704	ppb	5.6	5260.42	1000	
238	U	209	No Gas	0.222	ppb	8.4	1538.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9594716.25	3.1	9181465.1	104.5	29.5	120.4	
Sc	45	No Gas	17275743.05	3.5	16426983.07	105.17	29.5	120.4	
Sc	45	H2	1925627.89	0.7	1932518.05	99.64	29.5	120.4	
Sc	45	He	488794.28	1.0	478214.17	102.21	29.5	120.4	
Ge	72	No Gas	2880219.86	4.0	2769440.33	104	29.5	120.4	
Ge	72	H2	514497.70	0.8	546905.92	94.07	29.5	120.4	
Ge	72	He	275769.61	0.9	272551.69	101.18	29.5	120.4	
Y	89	H2	9772380.06	1.0	9834260.27	99.37	29.5	120.4	
Y	89	He	2144457.10	0.9	2139239.05	100.24	29.5	120.4	
Tb	159	No Gas	19661908.18	3.2	19495400.26	100.85	29.5	120.4	
Tb	159	He	7231081.49	0.4	7485871.83	96.6	29.5	120.4	
Bi	209	No Gas	8455573.82	3.5	8594079.3	98.39	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	023_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:12:12 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	33.3	28.89	0.5	
B	11	6	No Gas	5.957	ppb	4.4	7496.65	10	
Na	23	45	He	73.711	ppb	7.6	51539.76	500	
Mg	24	45	He	17.268	ppb	10.1	1649.10	50	
Al	27	45	He	9.037	ppb	11.9	406.69	50	
Si	28	45	H2	21.960	ppb	8.0	1595.20	250	
K	39	45	He	74.008	ppb	18.9	27392.12	500	
Ca	40	45	H2	40.282	ppb	3.8	23415.62	50	
V	51	89	He	0.271	ppb	2.0	492.25	2.5	
Cr	52	89	He	0.807	ppb	10.6	1773.13	2.5	
Mn	55	89	He	1.703	ppb	3.5	1183.17	1	PB 6020 Fails DoD
Fe	56	89	H2	15.288	ppb	3.0	30794.65	50	
Co	59	89	He	0.052	ppb	47.7	153.35	0.5	
Ni	60	89	He	0.998	ppb	11.7	732.27	1	
Cu	63	89	He	1.072	ppb	9.0	2283.60	1.5	
Zn	66	89	He	8.310	ppb	5.3	1849.08	5	PB 6020 Fails DoD
As	75	89	He	0.065	ppb	57.1	20.67	2.5	
Se	78	89	H2	0.077	ppb	33.2	6.33	2.5	
Sr	88	89	He	0.206	ppb	6.2	153.34	2.5	
Mo	95	89	He	0.189	ppb	25.3	151.12	2.5	
Ag	107	89	He	0.026	ppb	11.6	96.67	0.5	
Cd	111	89	He	0.028	ppb	81.6	8.52	0.5	
Sn	118	159	He	47.463	ppb	1.6	27569.07	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.045	ppb	34.0	307.01	0.5	
Ba	137	159	No Gas	0.230	ppb	29.1	410.47	1	
W	182	159	No Gas	0.086	ppb	3.8	276.98	2.5	
Tl	205	209	No Gas	0.009	ppb	80.0	230.26	0.5	
Pb	208	209	No Gas	0.582	ppb	10.4	4712.35	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.036	ppb	31.1	477.21	2.5	
U	238	209	No Gas	0.005	ppb	84.3	43.38	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9428463.55	2.8	9181465.1	102.69	29.5	120.4	
Sc	45	No Gas	17084970.62	2.1	16426983.07	104.01	29.5	120.4	
Sc	45	H2	1895112.27	1.6	1932518.05	98.06	29.5	120.4	
Sc	45	He	482146.66	1.3	478214.17	100.82	29.5	120.4	
Ge	72	No Gas	2837044.94	2.4	2769440.33	102.44	29.5	120.4	
Ge	72	H2	510189.07	1.5	546905.92	93.29	29.5	120.4	
Ge	72	He	272687.09	0.4	272551.69	100.05	29.5	120.4	
Y	89	H2	9685136.36	1.5	9834260.27	98.48	29.5	120.4	
Y	89	He	2120624.98	0.5	2139239.05	99.13	29.5	120.4	
Tb	159	No Gas	19448764.99	1.4	19495400.26	99.76	29.5	120.4	
Tb	159	He	7238989.41	0.1	7485871.83	96.7	29.5	120.4	
Bi	209	No Gas	8497408.05	2.4	8594079.3	98.88	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG07IMS1
File Name	024LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:14:49 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.997	ppb	7.1	87064.57	50	20.4	79.5	120.4	
B	11	6	No Gas	494.220	ppb	6.4	563710.92	500	19.77	79.5	120.4	
Na	23	45	He	7793.495	ppb	2.5	1417180.33	7500	20.78	79.5	120.4	
Mg	24	45	He	5534.496	ppb	2.8	508249.71	5000	22.14	79.5	120.4	
Al	27	45	He	2023.311	ppb	2.6	67578.41	2000	20.23	79.5	120.4	
Si	28	45	H2	956.517	ppb	1.4	47397.77	1000	19.13	79.5	120.4	
K	39	45	He	10854.427	ppb	1.9	806310.63	10000	21.71	79.5	120.4	
Ca	40	45	H2	2636.142	ppb	0.6	1225030.85	2500	21.09	79.5	120.4	
V	51	89	He	547.118	ppb	1.8	596189.58	500	21.88	79.5	120.4	
Cr	52	89	He	222.429	ppb	2.2	307689.41	200	22.24	79.5	120.4	
Mn	55	89	He	550.325	ppb	2.1	326029.14	500	22.01	79.5	120.4	
Fe	56	89	H2	1076.386	ppb	0.7	1872706.61	1000	21.53	79.5	120.4	
Co	59	89	He	553.656	ppb	2.0	1248747.98	500	22.15	79.5	120.4	
Ni	60	89	He	556.091	ppb	2.2	342312.11	500	22.24	79.5	120.4	
Cu	63	89	He	276.701	ppb	2.0	463002.93	250	22.14	79.5	120.4	
Zn	66	89	He	536.786	ppb	2.1	100079.30	500	21.47	79.5	120.4	
As	75	89	He	109.315	ppb	2.5	13800.67	100	21.86	79.5	120.4	
Se	78	89	H2	103.419	ppb	1.7	6539.74	100	20.68	79.5	120.4	
Sr	88	89	He	522.035	ppb	2.5	334698.30	500	20.88	79.5	120.4	
Mo	95	89	He	109.022	ppb	1.0	83232.28	100	21.8	79.5	120.4	
Ag	107	89	He	55.772	ppb	1.0	131899.10	50	22.31	79.5	120.4	
Cd	111	89	He	266.649	ppb	2.4	75183.31	250	21.33	79.5	120.4	
Sn	118	159	He	567.258	ppb	3.4	327769.66	500	22.69	79.5	120.4	
Sb	121	159	No Gas	107.857	ppb	4.4	418708.22	100	21.57	79.5	120.4	
Ba	137	159	No Gas	2072.377	ppb	4.6	3112825.79	2000	20.72	79.5	120.4	
W	182	159	No Gas	103.946	ppb	6.0	304141.88	100	20.79	79.5	120.4	
Tl	205	209	No Gas	110.897	ppb	4.4	582943.72	100	22.18	79.5	120.4	
[Pb]	206	209	No Gas	106.639	ppb	4.3	201813.88	100	21.33	79.5	120.4	
[Pb]	207	209	No Gas	107.573	ppb	4.9	175617.65	100	21.52	79.5	120.4	
Pb	208	209	No Gas	107.321	ppb	5.0	805291.83	100	21.46	79.5	120.4	
Th	232	209	No Gas	105.620	ppb	7.0	758121.34	100	21.12	79.5	120.4	
U	238	209	No Gas	105.926	ppb	5.8	733165.98	100	21.18	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9734352.34	3.8	9181465.1	106.02	29.5	120.4	
Sc	45	No Gas	17208203.22	3.4	16426983.07	104.76	29.5	120.4	
Sc	45	H2	1901019.36	0.5	1932518.05	98.37	29.5	120.4	
Sc	45	He	486415.03	1.2	478214.17	101.71	29.5	120.4	
Ge	72	No Gas	2867292.53	3.4	2769440.33	103.53	29.5	120.4	
Ge	72	H2	503657.67	0.5	546905.92	92.09	29.5	120.4	
Ge	72	He	273411.00	0.4	272551.69	100.32	29.5	120.4	
Y	89	H2	9687860.33	0.6	9834260.27	98.51	29.5	120.4	
Y	89	He	2132128.34	1.0	2139239.05	99.67	29.5	120.4	
Tb	159	No Gas	19660197.21	2.6	19495400.26	100.85	29.5	120.4	
Tb	159	He	7287502.74	2.0	7485871.83	97.35	29.5	120.4	
Bi	209	No Gas	8469574.59	2.6	8594079.3	98.55	29.5	120.4	

Sample Report

Sample Name SN5107-028

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:17:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.121	ppb	43.5	204.46	100	
11	B	6	No Gas	15.022	ppb	3.1	17621.31	1000	
23	Na	45	He	79.256	ppb	12.9	51814.05	200000	
24	Mg	45	He	93.289	ppb	3.2	8454.22	200000	
27	Al	45	He	1029.086	ppb	2.5	33676.19	200000	
28	Si	45	H2	711.491	ppb	1.1	35979.03	10000	
39	K	45	He	96.551	ppb	20.0	28624.09	200000	
40	Ca	45	H2	244.253	ppb	1.4	119840.40	200000	
51	V	89	He	2.496	ppb	4.5	2880.40	1000	
52	Cr	89	He	5.867	ppb	4.5	8654.41	2000	
55	Mn	89	He	9.066	ppb	3.5	5480.77	2000	
56	Fe	89	H2	549.884	ppb	0.6	971285.67	100000	
59	Co	89	He	0.218	ppb	20.3	520.05	1000	
60	Ni	89	He	0.890	ppb	2.4	661.15	1000	
63	Cu	89	He	1.669	ppb	5.1	3250.50	2000	
66	Zn	89	He	10.738	ppb	3.6	2281.38	2000	
75	As	89	He	0.567	ppb	14.7	83.01	1000	
78	Se	89	H2	0.239	ppb	16.5	16.83	1000	
88	Sr	89	He	29.345	ppb	2.5	18596.49	2000	
95	Mo	89	He	0.830	ppb	4.5	633.38	1000	
107	Ag	89	He	0.027	ppb	27.3	98.89	100	
111	Cd	89	He	0.061	ppb	21.5	17.78	1000	
118	Sn	159	He	43.127	ppb	2.3	24882.66	1000	
121	Sb	159	No Gas	0.227	ppb	39.3	1004.51	1000	
137	Ba	159	No Gas	15.555	ppb	12.9	23220.54	2000	
182	W	159	No Gas	0.302	ppb	32.9	901.06	1000	
205	Tl	209	No Gas	0.148	ppb	52.2	954.45	1000	
208	Pb	209	No Gas	11.129	ppb	2.5	83364.78	2000	
232	Th	209	No Gas	5.505	ppb	2.1	39526.47	1000	
238	U	209	No Gas	1.197	ppb	7.3	8245.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9484294.17	1.5	9181465.1	103.3	29.5	120.4	
Sc	45	No Gas	16884875.32	0.4	16426983.07	102.79	29.5	120.4	
Sc	45	H2	1932405.62	1.3	1932518.05	99.99	29.5	120.4	
Sc	45	He	475899.24	2.1	478214.17	99.52	29.5	120.4	
Ge	72	No Gas	2823933.50	1.0	2769440.33	101.97	29.5	120.4	
Ge	72	H2	510184.25	0.4	546905.92	93.29	29.5	120.4	
Ge	72	He	269899.23	1.9	272551.69	99.03	29.5	120.4	
Y	89	H2	9813832.45	0.6	9834260.27	99.79	29.5	120.4	
Y	89	He	2105496.03	2.0	2139239.05	98.42	29.5	120.4	
Tb	159	No Gas	19474851.65	0.6	19495400.26	99.89	29.5	120.4	
Tb	159	He	7183478.71	1.7	7485871.83	95.96	29.5	120.4	
Bi	209	No Gas	8418413.64	0.6	8594079.3	97.96	29.5	120.4	

Sample Report

Sample Name SN5107-029

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:20:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	30.0	102.23	100	
11	B	6	No Gas	10.791	ppb	3.5	12968.47	1000	
23	Na	45	He	134.285	ppb	3.4	63057.75	200000	
24	Mg	45	He	95.272	ppb	1.5	8874.58	200000	
27	Al	45	He	962.757	ppb	1.6	32394.34	200000	
28	Si	45	H2	774.647	ppb	1.3	38565.28	10000	
39	K	45	He	79.370	ppb	14.0	28180.02	200000	
40	Ca	45	H2	272.982	ppb	0.5	131488.76	200000	
51	V	89	He	2.016	ppb	4.1	2419.19	1000	
52	Cr	89	He	3.969	ppb	1.5	6209.59	2000	
55	Mn	89	He	8.571	ppb	1.0	5310.05	2000	
56	Fe	89	H2	431.284	ppb	1.0	752355.47	100000	
59	Co	89	He	0.206	ppb	10.6	504.49	1000	
60	Ni	89	He	1.027	ppb	14.2	761.16	1000	
63	Cu	89	He	3.644	ppb	0.8	6661.84	2000	
66	Zn	89	He	7.984	ppb	2.3	1816.85	2000	
75	As	89	He	0.253	ppb	10.0	45.01	1000	
78	Se	89	H2	0.143	ppb	11.4	10.50	1000	
88	Sr	89	He	23.739	ppb	0.9	15395.77	2000	
95	Mo	89	He	0.703	ppb	2.9	550.03	1000	
107	Ag	89	He	0.017	ppb	37.1	75.56	100	
111	Cd	89	He	0.043	ppb	5.3	12.96	1000	
118	Sn	159	He	43.395	ppb	1.4	25727.48	1000	
121	Sb	159	No Gas	0.077	ppb	35.0	433.82	1000	
137	Ba	159	No Gas	11.916	ppb	6.1	17995.58	2000	
182	W	159	No Gas	0.122	ppb	8.6	383.77	1000	
205	Tl	209	No Gas	0.023	ppb	46.6	303.68	1000	
208	Pb	209	No Gas	9.435	ppb	5.5	71442.52	2000	
232	Th	209	No Gas	1.485	ppb	7.7	10927.02	1000	
238	U	209	No Gas	0.338	ppb	10.5	2356.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9528809.73	3.6	9181465.1	103.78	29.5	120.4	
Sc	45	No Gas	17027267.71	1.9	16426983.07	103.65	29.5	120.4	
Sc	45	H2	1905081.98	1.3	1932518.05	98.58	29.5	120.4	
Sc	45	He	489104.95	1.2	478214.17	102.28	29.5	120.4	
Ge	72	No Gas	2832393.57	2.0	2769440.33	102.27	29.5	120.4	
Ge	72	H2	508942.04	2.8	546905.92	93.06	29.5	120.4	
Ge	72	He	274611.32	0.9	272551.69	100.76	29.5	120.4	
Y	89	H2	9681017.24	1.6	9834260.27	98.44	29.5	120.4	
Y	89	He	2153545.50	0.9	2139239.05	100.67	29.5	120.4	
Tb	159	No Gas	19692810.82	2.9	19495400.26	101.01	29.5	120.4	
Tb	159	He	7380731.07	1.1	7485871.83	98.6	29.5	120.4	
Bi	209	No Gas	8512774.45	3.2	8594079.3	99.05	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW2
File Name	027_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:22:47 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	38.6	27.78	0.5	
B	11	6	No Gas	4.129	ppb	0.5	5368.97	10	
Na	23	45	He	45.759	ppb	64.4	46497.53	500	
Mg	24	45	He	34.292	ppb	91.6	3198.57	50	
Al	27	45	He	27.128	ppb	94.2	1004.54	50	
Si	28	45	H2	23.707	ppb	9.0	1668.63	250	
K	39	45	He	45.542	ppb	56.1	25277.62	500	
Ca	40	45	H2	15.629	ppb	1.4	11954.40	50	
V	51	89	He	0.287	ppb	30.9	507.81	2.5	
Cr	52	89	He	0.318	ppb	53.4	1099.18	2.5	
Mn	55	89	He	0.577	ppb	27.6	518.58	1	
Fe	56	89	H2	5.138	ppb	2.6	13053.95	50	
Co	59	89	He	0.137	ppb	88.4	342.26	0.5	
Ni	60	89	He	0.187	ppb	71.6	235.57	1	
Cu	63	89	He	8.006	ppb	4.0	13760.59	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	71.199	ppb	0.6	13426.90	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.078	ppb	93.7	22.33	2.5	
Se	78	89	H2	0.056	ppb	64.5	5.00	2.5	
Sr	88	89	He	0.202	ppb	117.3	151.12	2.5	
Mo	95	89	He	0.267	ppb	80.7	210.01	2.5	
Ag	107	89	He	0.034	ppb	27.5	114.45	0.5	
Cd	111	89	He	0.090	ppb	115.0	25.92	0.5	
Sn	118	159	He	0.826	ppb	24.8	818.94	2.5	
Sb	121	159	No Gas	0.036	ppb	10.6	263.63	0.5	
Ba	137	159	No Gas	0.089	ppb	32.6	196.89	1	
W	182	159	No Gas	0.046	ppb	37.5	156.84	2.5	
Tl	205	209	No Gas	0.000	ppb	N/A	173.53	0.5	
Pb	208	209	No Gas	0.031	ppb	37.3	547.28	0.5	
Th	232	209	No Gas	0.069	ppb	3.7	694.13	2.5	
U	238	209	No Gas	0.005	ppb	40.4	43.38	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9233881.89	1.1	9181465.1	100.57	29.5	120.4	
Sc	45	No Gas	16433559.02	1.9	16426983.07	100.04	29.5	120.4	
Sc	45	H2	1880815.80	0.5	1932518.05	97.32	29.5	120.4	
Sc	45	He	480380.52	0.7	478214.17	100.45	29.5	120.4	
Ge	72	No Gas	2733857.49	1.7	2769440.33	98.72	29.5	120.4	
Ge	72	H2	507511.63	0.3	546905.92	92.8	29.5	120.4	
Ge	72	He	270562.65	0.9	272551.69	99.27	29.5	120.4	
Y	89	H2	9589959.52	0.3	9834260.27	97.52	29.5	120.4	
Y	89	He	2112838.88	1.2	2139239.05	98.77	29.5	120.4	
Tb	159	No Gas	18946015.13	1.7	19495400.26	97.18	29.5	120.4	
Tb	159	He	7251387.67	1.3	7485871.83	96.87	29.5	120.4	
Bi	209	No Gas	8226780.45	1.7	8594079.3	95.73	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:25:23 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.072	ppb	4.9	87762.85	50	20.43	79.5	120.4	
B	11	6	No Gas	500.778	ppb	5.0	574767.36	500	20.03	79.5	120.4	
Na	23	45	He	7893.989	ppb	0.2	1424597.99	7500	21.05	79.5	120.4	
Mg	24	45	He	5635.200	ppb	0.2	513778.41	5000	22.54	79.5	120.4	
Al	27	45	He	1987.414	ppb	0.9	65903.75	2000	19.87	79.5	120.4	
Si	28	45	H2	1034.333	ppb	2.0	51924.93	1000	20.69	0	200	
K	39	45	He	10882.784	ppb	0.7	802494.82	10000	21.77	79.5	120.4	
Ca	40	45	H2	2736.450	ppb	0.2	1289192.87	2500	21.89	79.5	120.4	
V	51	89	He	546.853	ppb	0.5	592558.59	500	21.87	79.5	120.4	
Cr	52	89	He	222.042	ppb	0.7	305432.12	200	22.2	79.5	120.4	
Mn	55	89	He	551.897	ppb	1.0	325134.54	500	22.08	79.5	120.4	
Fe	56	89	H2	1071.717	ppb	0.5	1870486.58	1000	21.43	79.5	120.4	
Co	59	89	He	558.948	ppb	0.6	1253600.96	500	22.36	79.5	120.4	
Ni	60	89	He	558.856	ppb	0.7	342106.34	500	22.35	79.5	120.4	
Cu	63	89	He	293.858	ppb	0.9	488917.59	250	23.51	79.5	120.4	
Zn	66	89	He	582.943	ppb	0.7	108048.09	500	23.32	79.5	120.4	
As	75	89	He	111.685	ppb	1.3	14020.59	100	22.34	79.5	120.4	
Se	78	89	H2	105.641	ppb	0.4	6701.47	100	21.13	79.5	120.4	
Sr	88	89	He	523.622	ppb	0.8	333838.97	500	20.94	79.5	120.4	
Mo	95	89	He	109.173	ppb	0.4	82875.52	100	21.84	79.5	120.4	
Ag	107	89	He	55.375	ppb	0.6	130217.94	50	22.15	79.5	120.4	
Cd	111	89	He	271.903	ppb	1.2	76235.22	250	21.75	79.5	120.4	
Sn	118	159	He	524.526	ppb	1.4	303106.04	500	20.98	79.5	120.4	
Sb	121	159	No Gas	109.654	ppb	4.9	428976.08	100	21.93	79.5	120.4	
Ba	137	159	No Gas	2069.318	ppb	4.9	3132395.51	2000	20.69	79.5	120.4	
W	182	159	No Gas	104.072	ppb	5.4	306921.76	100	20.81	79.5	120.4	
Tl	205	209	No Gas	114.309	ppb	6.2	604154.62	100	22.86	79.5	120.4	
[Pb]	206	209	No Gas	109.742	ppb	5.2	208867.08	100	21.95	79.5	120.4	
[Pb]	207	209	No Gas	110.348	ppb	5.6	181172.67	100	22.07	79.5	120.4	
Pb	208	209	No Gas	109.630	ppb	5.3	827387.88	100	21.93	79.5	120.4	
Th	232	209	No Gas	108.898	ppb	5.8	786345.78	100	21.78	79.5	120.4	
U	238	209	No Gas	107.618	ppb	5.9	749225.70	100	21.52	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9788235.49	2.5	9181465.1	106.61	29.5	120.4	
Sc	45	No Gas	17139176.07	2.1	16426983.07	104.34	29.5	120.4	
Sc	45	H2	1927459.85	1.5	1932518.05	99.74	29.5	120.4	
Sc	45	He	482814.36	0.4	478214.17	100.96	29.5	120.4	
Ge	72	No Gas	2859964.34	2.4	2769440.33	103.27	29.5	120.4	
Ge	72	H2	515481.62	0.8	546905.92	94.25	29.5	120.4	
Ge	72	He	272702.28	0.2	272551.69	100.06	29.5	120.4	
Y	89	H2	9718319.33	0.8	9834260.27	98.82	29.5	120.4	
Y	89	He	2119956.20	0.9	2139239.05	99.1	29.5	120.4	
Tb	159	No Gas	19814148.32	2.6	19495400.26	101.63	29.5	120.4	
Tb	159	He	7284672.39	0.8	7485871.83	97.31	29.5	120.4	
Bi	209	No Gas	8521091.00	3.3	8594079.3	99.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:28:04 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.499	ppb	4.4	203829.68	25	98	89.8	110.2	
11	B	6	No Gas	24.725	ppb	3.4	138125.02	25	98.9	89.8	110.2	
23	Na	45	He	4985.762	ppb	0.7	4437691.96	5000	99.72	89.8	110.2	
24	Mg	45	He	4943.123	ppb	0.6	2264545.38	5000	98.86	89.8	110.2	
27	Al	45	He	490.858	ppb	1.1	81775.19	500	98.17	89.8	110.2	
28	Si	45	H2	475.774	ppb	1.1	119086.33	500	95.15	89.8	110.2	
39	K	45	He	4922.091	ppb	0.2	1795952.20	5000	98.44	89.8	110.2	
40	Ca	45	H2	4821.787	ppb	0.5	11354050.80	5000	96.44	89.8	110.2	
51	V	89	He	24.969	ppb	0.8	137006.86	25	99.88	89.8	110.2	
52	Cr	89	He	25.020	ppb	0.9	174382.12	25	100.08	89.8	110.2	
55	Mn	89	He	24.951	ppb	0.4	74492.96	25	99.8	89.8	110.2	
56	Fe	89	H2	4831.505	ppb	0.7	42288549.98	5000	96.63	89.8	110.2	
59	Co	89	He	25.110	ppb	0.7	284891.18	25	100.44	89.8	110.2	
60	Ni	89	He	25.062	ppb	0.4	77696.08	25	100.25	89.8	110.2	
63	Cu	89	He	25.149	ppb	0.3	211943.86	25	100.6	89.8	110.2	
66	Zn	89	He	25.158	ppb	1.4	23833.32	25	100.63	89.8	110.2	
75	As	89	He	24.757	ppb	0.6	15720.24	25	99.03	89.8	110.2	
78	Se	89	H2	24.102	ppb	0.7	7684.44	25	96.41	89.8	110.2	
88	Sr	89	He	24.203	ppb	0.8	78069.96	25	96.81	89.8	110.2	
95	Mo	89	He	24.804	ppb	0.6	95245.68	25	99.22	89.8	110.2	
107	Ag	89	He	25.117	ppb	0.7	298718.06	25	100.47	89.8	110.2	
111	Cd	89	He	24.434	ppb	0.7	34654.29	25	97.74	89.8	110.2	
118	Sn	159	He	24.650	ppb	0.7	71970.81	25	98.6	89.8	110.2	
121	Sb	159	No Gas	25.043	ppb	3.2	487369.88	25	100.17	89.8	110.2	
137	Ba	159	No Gas	24.806	ppb	3.7	186873.22	25	99.22	89.8	110.2	
182	W	159	No Gas	24.221	ppb	3.3	355405.37	25	96.88	89.8	110.2	
205	Tl	209	No Gas	25.485	ppb	3.7	675178.30	25	101.94	89.8	110.2	
208	Pb	209	No Gas	24.838	ppb	3.6	939401.11	25	99.35	89.8	110.2	
232	Th	209	No Gas	24.924	ppb	4.3	901948.22	25	99.7	89.8	110.2	
238	U	209	No Gas	24.859	ppb	3.4	867473.13	25	99.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9478621.31	2.8	9181465.1	103.24	29.5	120.4	
Sc	45	No Gas	16951898.80	2.2	16426983.07	103.2	29.5	120.4	
Sc	45	H2	1933264.94	1.1	1932518.05	100.04	29.5	120.4	
Sc	45	He	485268.65	0.6	478214.17	101.48	29.5	120.4	
Ge	72	No Gas	2824875.97	2.6	2769440.33	102	29.5	120.4	
Ge	72	H2	521110.84	0.5	546905.92	95.28	29.5	120.4	
Ge	72	He	275487.16	0.6	272551.69	101.08	29.5	120.4	
Y	89	H2	9768541.22	0.4	9834260.27	99.33	29.5	120.4	
Y	89	He	2144671.27	0.9	2139239.05	100.25	29.5	120.4	
Tb	159	No Gas	19707372.76	2.1	19495400.26	101.09	29.5	120.4	
Tb	159	He	7333476.21	0.3	7485871.83	97.96	29.5	120.4	
Bi	209	No Gas	8535744.61	2.2	8594079.3	99.32	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:30:41 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.013	ppb	44.3	114.45	0.2	
11	B	6	No Gas	0.561	ppb	5.8	4072.95	4	
23	Na	45	He	0.971	ppb	191.7	39404.56	200	
24	Mg	45	He	1.505	ppb	26.0	760.09	20	
27	Al	45	He	0.460	ppb	31.2	183.34	20	
28	Si	45	H2	0.016	ppb	711.4	537.27	100	
39	K	45	He	6.070	ppb	27.6	24234.61	200	
40	Ca	45	H2	0.902	ppb	1.2	7044.23	20	
51	V	89	He	0.004	ppb	91.1	220.01	1	
52	Cr	89	He	0.014	ppb	23.0	767.22	1	
55	Mn	89	He	0.016	ppb	42.3	228.63	0.4	
56	Fe	89	H2	1.203	ppb	4.0	14824.28	20	
59	Co	89	He	0.013	ppb	72.9	186.68	0.2	
60	Ni	89	He	-0.012	ppb	N/A	86.67	0.4	
63	Cu	89	He	0.016	ppb	59.0	642.26	0.6	
66	Zn	89	He	0.019	ppb	360.1	334.46	2	
75	As	89	He	0.007	ppb	121.3	17.33	1	
78	Se	89	H2	0.023	ppb	22.2	8.67	1	
88	Sr	89	He	0.009	ppb	60.9	52.22	1	
95	Mo	89	He	0.052	ppb	11.9	208.90	1	
107	Ag	89	He	0.009	ppb	42.8	147.78	0.2	
111	Cd	89	He	0.007	ppb	34.1	10.74	0.2	
118	Sn	159	He	0.082	ppb	7.5	590.04	1	
121	Sb	159	No Gas	0.019	ppb	20.8	503.91	0.2	
137	Ba	159	No Gas	0.024	ppb	14.7	253.62	0.4	
182	W	159	No Gas	0.059	ppb	14.5	894.37	1	
205	Tl	209	No Gas	0.021	ppb	20.3	747.53	0.2	
208	Pb	209	No Gas	0.014	ppb	37.9	884.34	0.2	
232	Th	209	No Gas	0.061	ppb	16.1	2476.41	1	
238	U	209	No Gas	0.021	ppb	45.3	744.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9545316.64	2.7	9181465.1	103.96	29.5	120.4	
Sc	45	No Gas	16885821.27	2.5	16426983.07	102.79	29.5	120.4	
Sc	45	H2	1930369.29	0.6	1932518.05	99.89	29.5	120.4	
Sc	45	He	481407.82	0.9	478214.17	100.67	29.5	120.4	
Ge	72	No Gas	2853641.80	2.5	2769440.33	103.04	29.5	120.4	
Ge	72	H2	527148.81	1.4	546905.92	96.39	29.5	120.4	
Ge	72	He	274684.12	0.6	272551.69	100.78	29.5	120.4	
Y	89	H2	9760769.80	1.1	9834260.27	99.25	29.5	120.4	
Y	89	He	2142828.42	1.4	2139239.05	100.17	29.5	120.4	
Tb	159	No Gas	19713176.23	2.6	19495400.26	101.12	29.5	120.4	
Tb	159	He	7375909.96	0.5	7485871.83	98.53	29.5	120.4	
Bi	209	No Gas	8664097.02	3.0	8594079.3	100.81	29.5	120.4	

Sample Report

Sample Name	SN5734-002
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:33:24 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	34.3	35.55	100	
11	B	6	No Gas	20.038	ppb	3.9	23081.36	1000	
23	Na	45	He	21378.925	ppb	1.0	3752514.23	200000	
24	Mg	45	He	8870.616	ppb	1.0	800269.99	200000	
27	Al	45	He	71.052	ppb	1.3	2434.74	200000	
28	Si	45	H2	4233.215	ppb	0.9	210836.82	10000	
39	K	45	He	843.708	ppb	1.0	81770.31	200000	
40	Ca	45	H2	13082.305	ppb	0.8	6143820.60	200000	
51	V	89	He	0.220	ppb	2.8	434.47	1000	
52	Cr	89	He	0.390	ppb	6.3	1195.84	2000	
55	Mn	89	He	1212.417	ppb	0.6	711361.87	2000	
56	Fe	89	H2	520.361	ppb	0.9	907389.88	100000	
59	Co	89	He	13.955	ppb	2.7	31217.13	1000	
60	Ni	89	He	37.816	ppb	0.4	23174.29	1000	
63	Cu	89	He	5.398	ppb	1.7	9436.87	2000	
66	Zn	89	He	88.368	ppb	0.9	16581.46	2000	
75	As	89	He	0.156	ppb	18.1	32.00	1000	
78	Se	89	H2	0.169	ppb	22.5	12.17	1000	
88	Sr	89	He	117.385	ppb	0.1	74577.08	2000	
95	Mo	89	He	0.168	ppb	5.4	134.45	1000	
107	Ag	89	He	0.039	ppb	17.0	126.67	100	
111	Cd	89	He	0.680	ppb	4.8	190.74	1000	
118	Sn	159	He	0.674	ppb	13.5	734.49	1000	
121	Sb	159	No Gas	0.067	ppb	18.3	390.44	1000	
137	Ba	159	No Gas	9.461	ppb	3.2	14160.14	2000	
182	W	159	No Gas	0.097	ppb	20.8	307.02	1000	
205	Tl	209	No Gas	0.011	ppb	71.3	236.94	1000	
208	Pb	209	No Gas	0.058	ppb	33.7	760.87	2000	
232	Th	209	No Gas	0.207	ppb	10.6	1688.68	1000	
238	U	209	No Gas	0.016	ppb	37.0	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9440628.42	1.1	9181465.1	102.82	29.5	120.4	
Sc	45	No Gas	16869292.24	0.8	16426983.07	102.69	29.5	120.4	
Sc	45	H2	1927196.94	0.5	1932518.05	99.72	29.5	120.4	
Sc	45	He	477802.72	1.0	478214.17	99.91	29.5	120.4	
Ge	72	No Gas	2824109.66	0.8	2769440.33	101.97	29.5	120.4	
Ge	72	H2	518732.48	1.2	546905.92	94.85	29.5	120.4	
Ge	72	He	272348.24	0.6	272551.69	99.93	29.5	120.4	
Y	89	H2	9686178.23	0.4	9834260.27	98.49	29.5	120.4	
Y	89	He	2111950.42	0.4	2139239.05	98.72	29.5	120.4	
Tb	159	No Gas	19482801.93	2.0	19495400.26	99.94	29.5	120.4	
Tb	159	He	7290539.27	0.8	7485871.83	97.39	29.5	120.4	
Bi	209	No Gas	8414829.32	1.5	8594079.3	97.91	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG14IMW2
File Name	032_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:35:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.015	ppb	19.0	27.78	0.5	
B	11	6	No Gas	3.816	ppb	4.7	5142.19	10	
Na	23	45	He	81.790	ppb	7.0	52671.54	500	
Mg	24	45	He	9.961	ppb	5.9	977.88	50	
Al	27	45	He	44.534	ppb	5.2	1571.26	50	
Si	28	45	H2	18.108	ppb	7.3	1424.98	250	
K	39	45	He	31.455	ppb	26.0	24219.56	500	
Ca	40	45	H2	19.340	ppb	0.8	13923.96	50	
V	51	89	He	0.179	ppb	27.7	391.13	2.5	
Cr	52	89	He	0.420	ppb	7.1	1239.17	2.5	
Mn	55	89	He	0.604	ppb	12.8	535.25	1	
Fe	56	89	H2	11.516	ppb	1.7	24445.29	50	
Co	59	89	He	0.080	ppb	24.9	215.57	0.5	
Ni	60	89	He	0.080	ppb	45.8	170.01	1	
Cu	63	89	He	4.688	ppb	1.2	8283.90	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	148.735	ppb	0.5	27771.73	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.025	ppb	186.7	15.67	2.5	
Se	78	89	H2	0.047	ppb	58.9	4.50	2.5	
Sr	88	89	He	0.028	ppb	56.9	40.00	2.5	
Mo	95	89	He	0.086	ppb	30.2	73.34	2.5	
Ag	107	89	He	0.013	ppb	39.5	65.56	0.5	
Cd	111	89	He	0.005	ppb	129.5	2.22	0.5	
Sn	118	159	He	0.629	ppb	4.5	711.16	2.5	
Sb	121	159	No Gas	0.032	ppb	47.7	253.62	0.5	
Ba	137	159	No Gas	0.048	ppb	76.7	140.16	1	
W	182	159	No Gas	0.053	ppb	29.1	180.20	2.5	
Tl	205	209	No Gas	0.002	ppb	676.5	193.55	0.5	
Pb	208	209	No Gas	0.018	ppb	102.0	470.54	0.5	
Th	232	209	No Gas	0.078	ppb	14.6	787.58	2.5	
U	238	209	No Gas	0.001	ppb	113.5	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9440782.33	2.1	9181465.1	102.82	29.5	120.4	
Sc	45	No Gas	16752560.93	1.3	16426983.07	101.98	29.5	120.4	
Sc	45	H2	1918059.83	0.9	1932518.05	99.25	29.5	120.4	
Sc	45	He	479529.40	0.7	478214.17	100.28	29.5	120.4	
Ge	72	No Gas	2802107.58	2.1	2769440.33	101.18	29.5	120.4	
Ge	72	H2	512372.55	1.0	546905.92	93.69	29.5	120.4	
Ge	72	He	270890.84	0.5	272551.69	99.39	29.5	120.4	
Y	89	H2	9761691.35	0.9	9834260.27	99.26	29.5	120.4	
Y	89	He	2117760.73	1.3	2139239.05	99	29.5	120.4	
Tb	159	No Gas	19392096.66	1.3	19495400.26	99.47	29.5	120.4	
Tb	159	He	7318808.50	0.3	7485871.83	97.77	29.5	120.4	
Bi	209	No Gas	8543478.91	1.3	8594079.3	99.41	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG14IMW2
File Name	033LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:38:40 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.838	ppb	8.6	88789.36	50	20.74	79.5	120.4	
B	11	6	No Gas	507.181	ppb	9.6	580104.24	500	20.29	79.5	120.4	
Na	23	45	He	8174.429	ppb	0.5	1463111.47	7500	21.8	79.5	120.4	
Mg	24	45	He	5823.357	ppb	0.9	527059.68	5000	23.29	79.5	120.4	
Al	27	45	He	2082.375	ppb	0.4	68546.07	2000	20.82	79.5	120.4	
Si	28	45	H2	1117.297	ppb	0.7	55345.40	1000	22.35	0	200	
K	39	45	He	11159.437	ppb	0.7	816343.35	10000	22.32	79.5	120.4	
Ca	40	45	H2	2791.848	ppb	1.0	1298625.80	2500	22.33	79.5	120.4	
V	51	89	He	573.061	ppb	0.8	622182.67	500	22.92	79.5	120.4	
Cr	52	89	He	232.618	ppb	0.6	320603.73	200	23.26	79.5	120.4	DoD
Mn	55	89	He	576.182	ppb	0.6	340107.22	500	23.05	79.5	120.4	DoD
Fe	56	89	H2	1128.724	ppb	0.3	1956975.59	1000	22.57	79.5	120.4	
Co	59	89	He	583.312	ppb	0.6	1310869.50	500	23.33	79.5	120.4	DoD
Ni	60	89	He	581.187	ppb	0.6	356473.98	500	23.25	79.5	120.4	
Cu	63	89	He	293.646	ppb	0.5	489545.77	250	23.49	79.5	120.4	
Zn	66	89	He	705.331	ppb	0.9	130925.50	500	28.21	79.5	120.4	6020□ DoD
As	75	89	He	115.078	ppb	0.9	14475.43	100	23.02	79.5	120.4	
Se	78	89	H2	110.090	ppb	1.0	6939.08	100	22.02	79.5	120.4	
Sr	88	89	He	549.071	ppb	0.7	350770.83	500	21.96	79.5	120.4	
Mo	95	89	He	115.725	ppb	0.2	88025.78	100	23.14	79.5	120.4	DoD
Ag	107	89	He	58.669	ppb	0.5	138239.75	50	23.47	79.5	120.4	DoD
Cd	111	89	He	281.096	ppb	0.6	78972.03	250	22.49	79.5	120.4	
Sn	118	159	He	550.087	ppb	0.8	320612.68	500	22	79.5	120.4	
Sb	121	159	No Gas	107.564	ppb	8.3	422782.47	100	21.51	79.5	120.4	
Ba	137	159	No Gas	2064.690	ppb	8.8	3139881.93	2000	20.65	79.5	120.4	
W	182	159	No Gas	103.832	ppb	9.3	307623.65	100	20.77	79.5	120.4	
Tl	205	209	No Gas	112.329	ppb	9.6	602593.55	100	22.47	79.5	120.4	
[Pb]	206	209	No Gas	107.181	ppb	9.2	207023.71	100	21.44	79.5	120.4	
[Pb]	207	209	No Gas	107.906	ppb	9.0	179823.88	100	21.58	79.5	120.4	
Pb	208	209	No Gas	106.930	ppb	8.8	819114.73	100	21.39	79.5	120.4	
Th	232	209	No Gas	106.557	ppb	9.8	780878.86	100	21.31	79.5	120.4	
U	238	209	No Gas	106.175	ppb	10.0	750126.89	100	21.24	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9764470.07	2.9	9181465.1	106.35	29.5	120.4	
Sc	45	No Gas	17067695.01	3.1	16426983.07	103.9	29.5	120.4	
Sc	45	H2	1903351.61	1.1	1932518.05	98.49	29.5	120.4	
Sc	45	He	479302.94	0.6	478214.17	100.23	29.5	120.4	
Ge	72	No Gas	2850875.23	3.2	2769440.33	102.94	29.5	120.4	
Ge	72	H2	506730.34	1.0	546905.92	92.65	29.5	120.4	
Ge	72	He	272191.18	1.1	272551.69	99.87	29.5	120.4	
Y	89	H2	9655529.36	1.3	9834260.27	98.18	29.5	120.4	
Y	89	He	2124199.42	0.7	2139239.05	99.3	29.5	120.4	
Tb	159	No Gas	19929571.79	3.6	19495400.26	102.23	29.5	120.4	
Tb	159	He	7347706.00	0.9	7485871.83	98.15	29.5	120.4	
Bi	209	No Gas	8658533.02	3.9	8594079.3	100.75	29.5	120.4	

Sample Report

Sample Name SN5646-004R

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:41:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.075	ppb	51.0	127.78	100	
11	B	6	No Gas	33.636	ppb	1.3	37973.14	1000	
23	Na	45	He	71000.748	ppb	7.5	12624372.99	200000	
24	Mg	45	He	22519.467	ppb	7.1	2072973.13	200000	
27	Al	45	He	9.970	ppb	10.0	442.25	200000	
28	Si	45	H2	2477.453	ppb	5.1	121354.28	10000	
39	K	45	He	2068.353	ppb	7.2	172154.32	200000	
40	Ca	45	H2	35380.680	ppb	5.8	16300086.70	200000	
51	V	89	He	0.248	ppb	6.4	474.47	1000	
52	Cr	89	He	0.444	ppb	18.6	1292.49	2000	
55	Mn	89	He	0.863	ppb	12.5	697.89	2000	
56	Fe	89	H2	12.069	ppb	6.2	24879.96	100000	
59	Co	89	He	0.321	ppb	10.4	766.74	1000	
60	Ni	89	He	6.247	ppb	11.3	3998.51	1000	
63	Cu	89	He	5.587	ppb	7.1	9932.76	2000	
66	Zn	89	He	114.227	ppb	7.2	21739.85	2000	
75	As	89	He	1.357	ppb	4.5	185.69	1000	
78	Se	89	H2	0.708	ppb	7.6	45.67	1000	
88	Sr	89	He	170.973	ppb	7.0	110651.26	2000	
95	Mo	89	He	0.201	ppb	1.8	163.34	1000	
107	Ag	89	He	0.022	ppb	34.2	90.00	100	
111	Cd	89	He	0.074	ppb	17.7	21.85	1000	
118	Sn	159	He	0.798	ppb	18.9	823.39	1000	
121	Sb	159	No Gas	0.210	ppb	33.9	941.09	1000	
137	Ba	159	No Gas	5.285	ppb	13.6	7934.66	2000	
182	W	159	No Gas	4.809	ppb	0.5	13983.35	1000	
205	Tl	209	No Gas	0.179	ppb	67.7	1097.96	1000	
208	Pb	209	No Gas	0.123	ppb	49.3	1234.74	2000	
232	Th	209	No Gas	1.023	ppb	32.3	7427.40	1000	
238	U	209	No Gas	0.192	ppb	63.7	1311.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9402400.51	0.5	9181465.1	102.41	29.5	120.4	
Sc	45	No Gas	16727467.29	1.0	16426983.07	101.83	29.5	120.4	
Sc	45	H2	1894071.13	3.5	1932518.05	98.01	29.5	120.4	
Sc	45	He	488720.83	5.3	478214.17	102.2	29.5	120.4	
Ge	72	No Gas	2799434.23	0.7	2769440.33	101.08	29.5	120.4	
Ge	72	H2	508087.76	3.0	546905.92	92.9	29.5	120.4	
Ge	72	He	274550.52	3.8	272551.69	100.73	29.5	120.4	
Y	89	H2	9571110.35	4.2	9834260.27	97.32	29.5	120.4	
Y	89	He	2156411.70	5.1	2139239.05	100.8	29.5	120.4	
Tb	159	No Gas	19480520.13	1.2	19495400.26	99.92	29.5	120.4	
Tb	159	He	7467899.12	4.8	7485871.83	99.76	29.5	120.4	
Bi	209	No Gas	8319991.78	0.6	8594079.3	96.81	29.5	120.4	

Sample Report

Sample Name SN5646-005R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:43:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.024	ppb	33.3	44.45	100	
11	B	6	No Gas	20.197	ppb	7.6	23593.42	1000	
23	Na	45	He	9845.495	ppb	0.7	1743419.20	200000	
24	Mg	45	He	2549.276	ppb	0.7	229335.81	200000	
27	Al	45	He	28.558	ppb	5.2	1038.97	200000	
28	Si	45	H2	3220.786	ppb	0.7	157139.03	10000	
39	K	45	He	315.709	ppb	2.6	44164.71	200000	
40	Ca	45	H2	4531.297	ppb	0.4	2086072.84	200000	
51	V	89	He	0.225	ppb	19.8	437.80	1000	
52	Cr	89	He	0.449	ppb	5.5	1268.50	2000	
55	Mn	89	He	6.099	ppb	3.5	3734.49	2000	
56	Fe	89	H2	16.607	ppb	1.2	32500.76	100000	
59	Co	89	He	0.337	ppb	6.5	782.30	1000	
60	Ni	89	He	2.586	ppb	1.8	1686.83	1000	
63	Cu	89	He	9.774	ppb	2.5	16579.24	2000	
66	Zn	89	He	110.548	ppb	1.2	20539.12	2000	
75	As	89	He	1.033	ppb	9.2	140.69	1000	
78	Se	89	H2	0.106	ppb	21.3	8.00	1000	
88	Sr	89	He	31.932	ppb	1.0	20178.70	2000	
95	Mo	89	He	0.116	ppb	10.1	94.45	1000	
107	Ag	89	He	0.017	ppb	21.5	75.56	100	
111	Cd	89	He	0.042	ppb	52.1	12.22	1000	
118	Sn	159	He	0.604	ppb	13.6	694.49	1000	
121	Sb	159	No Gas	0.053	ppb	8.0	340.38	1000	
137	Ba	159	No Gas	5.866	ppb	3.6	8896.28	2000	
182	W	159	No Gas	0.062	ppb	43.5	206.90	1000	
205	Tl	209	No Gas	0.003	ppb	388.9	203.56	1000	
208	Pb	209	No Gas	0.063	ppb	29.1	817.59	2000	
232	Th	209	No Gas	0.086	ppb	17.1	847.65	1000	
238	U	209	No Gas	0.017	ppb	30.6	126.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9583509.42	1.8	9181465.1	104.38	29.5	120.4	
Sc	45	No Gas	16874199.86	1.9	16426983.07	102.72	29.5	120.4	
Sc	45	H2	1886406.50	0.8	1932518.05	97.61	29.5	120.4	
Sc	45	He	476313.34	0.8	478214.17	99.6	29.5	120.4	
Ge	72	No Gas	2839069.41	2.4	2769440.33	102.51	29.5	120.4	
Ge	72	H2	507191.78	1.1	546905.92	92.74	29.5	120.4	
Ge	72	He	271334.39	1.0	272551.69	99.55	29.5	120.4	
Y	89	H2	9514508.34	1.2	9834260.27	96.75	29.5	120.4	
Y	89	He	2099040.80	1.0	2139239.05	98.12	29.5	120.4	
Tb	159	No Gas	19682113.60	1.2	19495400.26	100.96	29.5	120.4	
Tb	159	He	7295247.05	0.4	7485871.83	97.45	29.5	120.4	
Bi	209	No Gas	8635338.37	1.7	8594079.3	100.48	29.5	120.4	

Sample Report

Sample Name SN5646-005RA

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:46:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.063	ppb	3.7	16858.13	100	
11	B	6	No Gas	209.486	ppb	4.7	234858.82	1000	
23	Na	45	He	19940.326	ppb	0.9	3485790.09	200000	
24	Mg	45	He	3591.204	ppb	0.3	322490.66	200000	
27	Al	45	He	970.731	ppb	0.6	31757.16	200000	
28	Si	45	H2	7702.058	ppb	0.7	375453.63	10000	
39	K	45	He	10426.309	ppb	0.7	758100.40	200000	
40	Ca	45	H2	5412.553	ppb	0.6	2493453.68	200000	
51	V	89	He	50.411	ppb	1.2	54351.25	1000	
52	Cr	89	He	51.682	ppb	0.5	71014.08	2000	
55	Mn	89	He	27.269	ppb	0.6	16102.25	2000	
56	Fe	89	H2	1001.977	ppb	0.5	1724846.01	100000	
59	Co	89	He	10.911	ppb	0.8	24305.01	1000	
60	Ni	89	He	24.510	ppb	0.9	14995.21	1000	
63	Cu	89	He	38.056	ppb	0.8	63231.68	2000	
66	Zn	89	He	179.801	ppb	0.9	33267.16	2000	
75	As	89	He	51.322	ppb	0.7	6396.84	1000	
78	Se	89	H2	48.715	ppb	1.4	3048.53	1000	
88	Sr	89	He	79.915	ppb	1.3	50553.80	2000	
95	Mo	89	He	50.544	ppb	0.5	38057.30	1000	
107	Ag	89	He	10.623	ppb	1.1	24804.55	100	
111	Cd	89	He	10.375	ppb	1.3	2885.90	1000	
118	Sn	159	He	49.654	ppb	1.3	28880.59	1000	
121	Sb	159	No Gas	10.648	ppb	4.1	41510.47	1000	
137	Ba	159	No Gas	25.806	ppb	4.4	38880.49	2000	
182	W	159	No Gas	48.484	ppb	4.9	142078.88	1000	
205	Tl	209	No Gas	10.765	ppb	5.5	57869.72	1000	
208	Pb	209	No Gas	10.464	ppb	7.0	80367.07	2000	
232	Th	209	No Gas	10.408	ppb	4.7	76428.24	1000	
238	U	209	No Gas	10.321	ppb	5.7	72877.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9539551.09	2.8	9181465.1	103.9	29.5	120.4	
Sc	45	No Gas	16913470.58	2.7	16426983.07	102.96	29.5	120.4	
Sc	45	H2	1888240.95	1.6	1932518.05	97.71	29.5	120.4	
Sc	45	He	475512.05	1.1	478214.17	99.43	29.5	120.4	
Ge	72	No Gas	2831175.82	3.1	2769440.33	102.23	29.5	120.4	
Ge	72	H2	508445.08	1.8	546905.92	92.97	29.5	120.4	
Ge	72	He	267590.16	1.0	272551.69	98.18	29.5	120.4	
Y	89	H2	9583792.93	0.8	9834260.27	97.45	29.5	120.4	
Y	89	He	2102490.44	0.6	2139239.05	98.28	29.5	120.4	
Tb	159	No Gas	19683568.46	2.5	19495400.26	100.97	29.5	120.4	
Tb	159	He	7252887.88	0.7	7485871.83	96.89	29.5	120.4	
Bi	209	No Gas	8639950.27	3.2	8594079.3	100.53	29.5	120.4	

Sample Report

Sample Name SN5646-005RL

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:49:16 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.184	ppb	35.3	65.56	100	
11	B	6	No Gas	31.320	ppb	2.9	7985.82	1000	
23	Na	45	He	9652.474	ppb	0.8	372746.30	200000	
24	Mg	45	He	2495.569	ppb	0.7	44988.86	200000	
27	Al	45	He	38.445	ppb	17.6	357.80	200000	
28	Si	45	H2	3167.237	ppb	1.7	31419.71	10000	
39	K	45	He	417.701	ppb	11.1	27759.23	200000	
40	Ca	45	H2	4514.420	ppb	0.0	420808.11	200000	
51	V	89	He	0.297	ppb	60.4	261.12	1000	
52	Cr	89	He	0.888	ppb	17.6	903.87	2000	
55	Mn	89	He	6.440	ppb	8.0	933.87	2000	
56	Fe	89	H2	16.437	ppb	3.3	9881.09	100000	
59	Co	89	He	0.683	ppb	4.0	340.03	1000	
60	Ni	89	He	2.396	ppb	9.5	412.24	1000	
63	Cu	89	He	47.259	ppb	1.9	16128.70	2000	
66	Zn	89	He	699.700	ppb	1.7	26043.85	2000	
75	As	89	He	0.862	ppb	37.2	34.00	1000	
78	Se	89	H2	0.282	ppb	55.9	5.00	1000	
88	Sr	89	He	31.216	ppb	1.6	3981.84	2000	
95	Mo	89	He	0.515	ppb	17.7	85.56	1000	
107	Ag	89	He	0.022	ppb	174.4	45.56	100	
111	Cd	89	He	0.033	ppb	91.4	2.59	1000	
118	Sn	159	He	0.203	ppb	91.9	372.24	1000	
121	Sb	159	No Gas	0.235	ppb	10.0	323.70	1000	
137	Ba	159	No Gas	8.428	ppb	25.3	2653.27	2000	
182	W	159	No Gas	0.652	ppb	27.0	417.14	1000	
205	Tl	209	No Gas	0.121	ppb	84.8	317.03	1000	
208	Pb	209	No Gas	2.990	ppb	10.4	4972.63	2000	
232	Th	209	No Gas	0.343	ppb	20.7	730.84	1000	
238	U	209	No Gas	0.220	ppb	40.7	320.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9602549.50	0.5	9181465.1	104.59	29.5	120.4	
Sc	45	No Gas	17023824.27	2.2	16426983.07	103.63	29.5	120.4	
Sc	45	H2	1892188.21	0.5	1932518.05	97.91	29.5	120.4	
Sc	45	He	476606.51	0.5	478214.17	99.66	29.5	120.4	
Ge	72	No Gas	2861348.36	1.4	2769440.33	103.32	29.5	120.4	
Ge	72	H2	516707.17	1.2	546905.92	94.48	29.5	120.4	
Ge	72	He	272124.64	0.4	272551.69	99.84	29.5	120.4	
Y	89	H2	9597200.20	0.5	9834260.27	97.59	29.5	120.4	
Y	89	He	2109175.23	0.3	2139239.05	98.59	29.5	120.4	
Tb	159	No Gas	20064089.14	1.8	19495400.26	102.92	29.5	120.4	
Tb	159	He	7358689.96	0.9	7485871.83	98.3	29.5	120.4	
Bi	209	No Gas	8742605.74	1.6	8594079.3	101.73	29.5	120.4	

Sample Report

Sample Name SN5646-005RP

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:51:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.540	ppb	6.0	85989.69	100	
11	B	6	No Gas	500.065	ppb	4.1	568413.42	1000	
23	Na	45	He	17177.663	ppb	0.4	2995738.89	200000	
24	Mg	45	He	7902.145	ppb	0.9	706564.36	200000	
27	Al	45	He	2035.679	ppb	1.0	66201.95	200000	
28	Si	45	H2	4201.048	ppb	1.7	206706.71	10000	
39	K	45	He	10761.261	ppb	0.3	778503.97	200000	
40	Ca	45	H2	6886.644	ppb	1.1	3197270.96	200000	
51	V	89	He	524.272	ppb	0.3	560952.67	1000	
52	Cr	89	He	212.667	ppb	1.1	288884.19	2000	
55	Mn	89	He	534.934	ppb	0.5	311178.52	2000	
56	Fe	89	H2	1039.988	ppb	0.2	1792630.94	100000	
59	Co	89	He	533.026	ppb	1.3	1180414.73	1000	
60	Ni	89	He	537.926	ppb	0.5	325141.10	1000	
63	Cu	89	He	264.812	ppb	0.3	435107.47	2000	
66	Zn	89	He	519.430	ppb	0.3	95100.36	2000	
75	As	89	He	105.784	ppb	1.1	13113.60	1000	
78	Se	89	H2	101.532	ppb	1.2	6360.50	1000	
88	Sr	89	He	534.597	ppb	0.2	336555.87	2000	
95	Mo	89	He	105.302	ppb	0.7	78930.63	1000	
107	Ag	89	He	53.892	ppb	0.9	125136.72	100	
111	Cd	89	He	259.503	ppb	0.2	71846.24	1000	
118	Sn	159	He	503.098	ppb	1.3	289646.36	1000	
121	Sb	159	No Gas	104.937	ppb	4.3	408085.86	1000	
137	Ba	159	No Gas	2015.954	ppb	4.6	3033613.97	2000	
182	W	159	No Gas	101.283	ppb	4.0	296962.77	1000	
205	Tl	209	No Gas	108.020	ppb	3.3	575343.96	1000	
208	Pb	209	No Gas	103.878	ppb	3.8	789901.34	2000	
232	Th	209	No Gas	104.114	ppb	4.8	757474.37	1000	
238	U	209	No Gas	103.031	ppb	5.3	722627.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9690249.80	1.7	9181465.1	105.54	29.5	120.4	
Sc	45	No Gas	16678549.84	1.4	16426983.07	101.53	29.5	120.4	
Sc	45	H2	1903917.14	1.2	1932518.05	98.52	29.5	120.4	
Sc	45	He	473521.91	0.2	478214.17	99.02	29.5	120.4	
Ge	72	No Gas	2808055.64	1.5	2769440.33	101.39	29.5	120.4	
Ge	72	H2	509158.42	1.4	546905.92	93.1	29.5	120.4	
Ge	72	He	266818.53	0.6	272551.69	97.9	29.5	120.4	
Y	89	H2	9597245.66	0.6	9834260.27	97.59	29.5	120.4	
Y	89	He	2093263.23	0.4	2139239.05	97.85	29.5	120.4	
Tb	159	No Gas	19690134.70	1.9	19495400.26	101	29.5	120.4	
Tb	159	He	7257150.45	0.4	7485871.83	96.94	29.5	120.4	
Bi	209	No Gas	8578589.33	1.7	8594079.3	99.82	29.5	120.4	

Sample Report

Sample Name SN5646-005RS

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 4:54:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.485	ppb	3.9	88792.61	100	
11	B	6	No Gas	529.588	ppb	4.5	598319.27	1000	
23	Na	45	He	17851.745	ppb	0.4	3133208.28	200000	
24	Mg	45	He	8202.103	ppb	0.5	738430.16	200000	
27	Al	45	He	2000.448	ppb	0.5	65506.18	200000	
28	Si	45	H2	4413.555	ppb	1.4	215591.86	10000	
39	K	45	He	11080.854	ppb	1.2	806494.42	200000	
40	Ca	45	H2	7235.572	ppb	0.3	3334588.84	200000	
51	V	89	He	543.904	ppb	1.2	585772.44	1000	
52	Cr	89	He	220.371	ppb	0.7	301303.39	2000	
55	Mn	89	He	551.911	ppb	0.9	323164.09	2000	
56	Fe	89	H2	1076.066	ppb	0.7	1850731.66	100000	
59	Co	89	He	550.536	ppb	0.5	1227248.77	1000	
60	Ni	89	He	555.387	ppb	0.4	337906.88	1000	
63	Cu	89	He	273.925	ppb	0.8	453024.88	2000	
66	Zn	89	He	533.989	ppb	1.0	98398.54	2000	
75	As	89	He	111.204	ppb	0.7	13876.09	1000	
78	Se	89	H2	105.955	ppb	0.5	6623.94	1000	
88	Sr	89	He	552.915	ppb	1.4	350370.31	2000	
95	Mo	89	He	108.848	ppb	1.2	82125.76	1000	
107	Ag	89	He	56.177	ppb	0.7	131305.81	100	
111	Cd	89	He	270.177	ppb	0.5	75293.53	1000	
118	Sn	159	He	522.788	ppb	0.2	302501.50	1000	
121	Sb	159	No Gas	110.206	ppb	3.5	426989.13	1000	
137	Ba	159	No Gas	2112.519	ppb	3.8	3167093.75	2000	
182	W	159	No Gas	105.625	ppb	2.6	308564.39	1000	
205	Tl	209	No Gas	115.626	ppb	2.4	606518.97	1000	
208	Pb	209	No Gas	110.877	ppb	3.5	830247.18	2000	
232	Th	209	No Gas	111.848	ppb	4.4	801358.17	1000	
238	U	209	No Gas	109.979	ppb	3.5	759751.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9634572.15	2.3	9181465.1	104.94	29.5	120.4	
Sc	45	No Gas	16654470.76	1.1	16426983.07	101.38	29.5	120.4	
Sc	45	H2	1890047.38	1.5	1932518.05	97.8	29.5	120.4	
Sc	45	He	476779.73	0.1	478214.17	99.7	29.5	120.4	
Ge	72	No Gas	2782693.32	1.6	2769440.33	100.48	29.5	120.4	
Ge	72	H2	506204.94	0.6	546905.92	92.56	29.5	120.4	
Ge	72	He	269734.59	0.5	272551.69	98.97	29.5	120.4	
Y	89	H2	9577160.88	1.4	9834260.27	97.39	29.5	120.4	
Y	89	He	2107062.14	0.4	2139239.05	98.5	29.5	120.4	
Tb	159	No Gas	19613163.60	1.2	19495400.26	100.6	29.5	120.4	
Tb	159	He	7293883.85	0.2	7485871.83	97.44	29.5	120.4	
Bi	209	No Gas	8447088.46	1.2	8594079.3	98.29	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW2
File Name	040_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:57:13 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.054	ppb	16.0	94.45	0.5	
B	11	6	No Gas	9.579	ppb	7.7	11728.51	10	
Na	23	45	He	18.188	ppb	14.8	40983.41	500	
Mg	24	45	He	9.248	ppb	6.7	900.10	50	
Al	27	45	He	4.259	ppb	25.5	243.34	50	
Si	28	45	H2	25.062	ppb	31.7	1739.77	250	
K	39	45	He	27.396	ppb	42.3	23582.18	500	
Ca	40	45	H2	12.879	ppb	2.2	10719.98	50	
V	51	89	He	0.265	ppb	4.6	478.91	2.5	
Cr	52	89	He	0.265	ppb	3.1	1015.19	2.5	
Mn	55	89	He	0.453	ppb	14.6	441.26	1	
Fe	56	89	H2	3.269	ppb	3.8	9841.15	50	
Co	59	89	He	0.153	ppb	39.0	373.37	0.5	
Ni	60	89	He	0.156	ppb	63.2	213.34	1	
Cu	63	89	He	5.944	ppb	1.7	10245.21	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	107.223	ppb	1.5	19867.01	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.059	ppb	55.8	19.67	2.5	
Se	78	89	H2	0.120	ppb	28.4	9.00	2.5	
Sr	88	89	He	0.089	ppb	12.4	77.78	2.5	
Mo	95	89	He	0.143	ppb	10.5	114.45	2.5	
Ag	107	89	He	0.019	ppb	23.9	77.78	0.5	
Cd	111	89	He	0.050	ppb	30.1	14.45	0.5	
Sn	118	159	He	0.938	ppb	6.2	884.51	2.5	
Sb	121	159	No Gas	0.139	ppb	11.4	677.43	0.5	
Ba	137	159	No Gas	1.299	ppb	26.2	2035.80	1	PB 6020 Fails DoD
W	182	159	No Gas	0.246	ppb	11.7	750.87	2.5	
Tl	205	209	No Gas	0.116	ppb	30.4	807.60	0.5	
Pb	208	209	No Gas	0.082	ppb	34.8	967.77	0.5	
Th	232	209	No Gas	0.570	ppb	18.5	4399.06	2.5	
U	238	209	No Gas	0.107	ppb	46.4	770.89	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9601600.64	2.9	9181465.1	104.58	29.5	120.4	
Sc	45	No Gas	16728903.32	2.7	16426983.07	101.84	29.5	120.4	
Sc	45	H2	1885124.57	0.6	1932518.05	97.55	29.5	120.4	
Sc	45	He	472609.38	1.1	478214.17	98.83	29.5	120.4	
Ge	72	No Gas	2812543.15	3.1	2769440.33	101.56	29.5	120.4	
Ge	72	H2	502778.35	1.1	546905.92	91.93	29.5	120.4	
Ge	72	He	267232.61	0.9	272551.69	98.05	29.5	120.4	
Y	89	H2	9589265.18	0.7	9834260.27	97.51	29.5	120.4	
Y	89	He	2092419.88	1.1	2139239.05	97.81	29.5	120.4	
Tb	159	No Gas	19687469.15	3.0	19495400.26	100.99	29.5	120.4	
Tb	159	He	7268259.61	0.7	7485871.83	97.09	29.5	120.4	
Bi	209	No Gas	8616984.39	2.8	8594079.3	100.27	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 4:59:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.178	ppb	4.3	202009.94	25	96.71	89.8	110.2	
11	B	6	No Gas	23.906	ppb	4.3	134121.41	25	95.62	89.8	110.2	
23	Na	45	He	5092.699	ppb	1.5	4397564.65	5000	101.85	89.8	110.2	
24	Mg	45	He	5048.583	ppb	1.7	2244190.00	5000	100.97	89.8	110.2	
27	Al	45	He	497.316	ppb	0.8	80392.07	500	99.46	89.8	110.2	
28	Si	45	H2	478.625	ppb	0.9	118309.51	500	95.72	89.8	110.2	
39	K	45	He	5011.597	ppb	1.7	1773904.44	5000	100.23	89.8	110.2	
40	Ca	45	H2	4872.623	ppb	0.6	11330438.16	5000	97.45	89.8	110.2	
51	V	89	He	25.241	ppb	1.6	135898.70	25	100.96	89.8	110.2	
52	Cr	89	He	25.308	ppb	2.0	173064.61	25	101.23	89.8	110.2	
55	Mn	89	He	25.540	ppb	1.9	74815.37	25	102.16	89.8	110.2	
56	Fe	89	H2	4849.278	ppb	0.5	41897330.44	5000	96.99	89.8	110.2	
59	Co	89	He	25.268	ppb	2.2	281283.43	25	101.07	89.8	110.2	
60	Ni	89	He	25.107	ppb	0.8	76381.16	25	100.43	89.8	110.2	
63	Cu	89	He	25.538	ppb	1.7	211173.96	25	102.15	89.8	110.2	
66	Zn	89	He	25.356	ppb	1.1	23570.61	25	101.42	89.8	110.2	
75	As	89	He	24.987	ppb	2.7	15566.72	25	99.95	89.8	110.2	
78	Se	89	H2	24.267	ppb	1.3	7636.91	25	97.07	89.8	110.2	
88	Sr	89	He	24.591	ppb	1.8	77833.01	25	98.36	89.8	110.2	
95	Mo	89	He	25.108	ppb	1.9	94595.48	25	100.43	89.8	110.2	
107	Ag	89	He	25.706	ppb	2.3	299965.45	25	102.82	89.8	110.2	
111	Cd	89	He	25.037	ppb	1.8	34841.44	25	100.15	89.8	110.2	
118	Sn	159	He	24.741	ppb	1.3	71628.68	25	98.96	89.8	110.2	
121	Sb	159	No Gas	24.922	ppb	5.2	482308.57	25	99.69	89.8	110.2	
137	Ba	159	No Gas	24.883	ppb	3.4	186462.82	25	99.53	89.8	110.2	
182	W	159	No Gas	24.447	ppb	3.8	356794.81	25	97.79	89.8	110.2	
205	Tl	209	No Gas	25.395	ppb	3.6	674070.85	25	101.58	89.8	110.2	
208	Pb	209	No Gas	24.574	ppb	3.6	931278.98	25	98.3	89.8	110.2	
232	Th	209	No Gas	24.554	ppb	4.2	890286.53	25	98.22	89.8	110.2	
238	U	209	No Gas	24.921	ppb	3.5	871305.19	25	99.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9517573.38	2.4	9181465.1	103.66	29.5	120.4	
Sc	45	No Gas	16839912.23	1.8	16426983.07	102.51	29.5	120.4	
Sc	45	H2	1909229.46	0.5	1932518.05	98.79	29.5	120.4	
Sc	45	He	470888.68	0.8	478214.17	98.47	29.5	120.4	
Ge	72	No Gas	2829150.35	1.9	2769440.33	102.16	29.5	120.4	
Ge	72	H2	522654.02	1.2	546905.92	95.57	29.5	120.4	
Ge	72	He	268675.41	1.6	272551.69	98.58	29.5	120.4	
Y	89	H2	9643193.48	1.2	9834260.27	98.06	29.5	120.4	
Y	89	He	2104760.80	1.9	2139239.05	98.39	29.5	120.4	
Tb	159	No Gas	19604089.15	2.3	19495400.26	100.56	29.5	120.4	
Tb	159	He	7272664.27	1.1	7485871.83	97.15	29.5	120.4	
Bi	209	No Gas	8551741.55	2.0	8594079.3	99.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:02:33 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.019	ppb	44.3	161.12	0.2	
11	B	6	No Gas	0.523	ppb	1.8	3835.09	4	
23	Na	45	He	-1.561	ppb	N/A	36944.83	200	
24	Mg	45	He	0.837	ppb	11.9	453.37	20	
27	Al	45	He	0.589	ppb	35.9	203.34	20	
28	Si	45	H2	0.196	ppb	169.5	573.99	100	
39	K	45	He	5.754	ppb	49.9	23957.63	200	
40	Ca	45	H2	1.994	ppb	77.4	9501.94	20	
51	V	89	He	0.001	ppb	1114.9	203.34	1	
52	Cr	89	He	0.007	ppb	41.0	712.56	1	
55	Mn	89	He	0.006	ppb	170.0	197.96	0.4	
56	Fe	89	H2	2.335	ppb	58.7	24737.09	20	
59	Co	89	He	0.004	ppb	79.4	80.01	0.2	
60	Ni	89	He	-0.015	ppb	N/A	75.56	0.4	
63	Cu	89	He	0.005	ppb	90.5	541.14	0.6	
66	Zn	89	He	0.019	ppb	283.4	331.13	2	
75	As	89	He	0.006	ppb	58.7	16.33	1	
78	Se	89	H2	0.026	ppb	20.0	9.83	1	
88	Sr	89	He	0.005	ppb	126.4	37.78	1	
95	Mo	89	He	0.041	ppb	12.2	163.34	1	
107	Ag	89	He	0.005	ppb	23.8	95.56	0.2	
111	Cd	89	He	0.004	ppb	11.4	6.30	0.2	
118	Sn	159	He	0.071	ppb	4.3	552.26	1	
121	Sb	159	No Gas	0.030	ppb	14.7	720.83	0.2	
137	Ba	159	No Gas	0.026	ppb	13.1	266.97	0.4	
182	W	159	No Gas	0.076	ppb	4.9	1134.65	1	
205	Tl	209	No Gas	0.020	ppb	18.0	724.17	0.2	
208	Pb	209	No Gas	0.019	ppb	12.1	1077.89	0.2	
232	Th	209	No Gas	0.082	ppb	7.4	3237.40	1	
238	U	209	No Gas	0.020	ppb	12.5	710.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9494616.89	2.5	9181465.1	103.41	29.5	120.4	
Sc	45	No Gas	16713553.17	2.6	16426983.07	101.74	29.5	120.4	
Sc	45	H2	1903351.61	1.2	1932518.05	98.49	29.5	120.4	
Sc	45	He	478119.29	0.3	478214.17	99.98	29.5	120.4	
Ge	72	No Gas	2811566.18	2.9	2769440.33	101.52	29.5	120.4	
Ge	72	H2	530373.95	1.3	546905.92	96.98	29.5	120.4	
Ge	72	He	270892.11	1.0	272551.69	99.39	29.5	120.4	
Y	89	H2	9724658.59	1.4	9834260.27	98.89	29.5	120.4	
Y	89	He	2122167.73	0.6	2139239.05	99.2	29.5	120.4	
Tb	159	No Gas	19622097.62	2.0	19495400.26	100.65	29.5	120.4	
Tb	159	He	7309609.47	0.3	7485871.83	97.65	29.5	120.4	
Bi	209	No Gas	8661231.55	2.3	8594079.3	100.78	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW2
File Name	043LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:05:16 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	53.426	ppb	3.0	90702.15	50	21.37	79.5	120.4	
B	11	6	No Gas	526.224	ppb	2.5	596679.62	500	21.05	79.5	120.4	
Na	23	45	He	8059.199	ppb	0.5	1432282.48	7500	21.49	79.5	120.4	
Mg	24	45	He	5766.252	ppb	0.5	518016.60	5000	23.06	79.5	120.4	
Al	27	45	He	2109.390	ppb	0.5	68915.63	2000	21.09	79.5	120.4	
Si	28	45	H2	1076.460	ppb	2.5	53938.50	1000	21.53	0	200	
K	39	45	He	11221.094	ppb	1.7	814616.17	10000	22.44	79.5	120.4	
Ca	40	45	H2	2702.794	ppb	1.8	1271577.24	2500	21.62	79.5	120.4	
V	51	89	He	558.648	ppb	0.6	604170.87	500	22.35	79.5	120.4	
Cr	52	89	He	226.508	ppb	0.5	310970.42	200	22.65	79.5	120.4	
Mn	55	89	He	565.170	ppb	0.2	332313.60	500	22.61	79.5	120.4	
Fe	56	89	H2	1092.012	ppb	3.1	1907407.32	1000	21.84	79.5	120.4	
Co	59	89	He	565.950	ppb	0.4	1266892.00	500	22.64	79.5	120.4	
Ni	60	89	He	571.319	ppb	0.2	349050.94	500	22.85	79.5	120.4	
Cu	63	89	He	283.860	ppb	0.7	471395.68	250	22.71	79.5	120.4	
Zn	66	89	He	567.090	ppb	0.5	104917.18	500	22.68	79.5	120.4	
As	75	89	He	114.225	ppb	0.9	14311.92	100	22.84	79.5	120.4	
Se	78	89	H2	108.558	ppb	2.3	6893.06	100	21.71	79.5	120.4	
Sr	88	89	He	540.159	ppb	0.3	343728.19	500	21.61	79.5	120.4	
Mo	95	89	He	113.617	ppb	1.5	86081.80	100	22.72	79.5	120.4	
Ag	107	89	He	57.248	ppb	0.7	134362.75	50	22.9	79.5	120.4	
Cd	111	89	He	279.984	ppb	0.7	78351.94	250	22.4	79.5	120.4	
Sn	118	159	He	539.835	ppb	0.1	315355.31	500	21.59	79.5	120.4	
Sb	121	159	No Gas	114.685	ppb	1.2	440083.67	100	22.94	79.5	120.4	
Ba	137	159	No Gas	2188.792	ppb	1.9	3250206.03	2000	21.89	79.5	120.4	
W	182	159	No Gas	110.185	ppb	1.4	318795.12	100	22.04	79.5	120.4	
Tl	205	209	No Gas	118.568	ppb	3.2	626543.22	100	23.71	79.5	120.4	DoD
[Pb]	206	209	No Gas	113.746	ppb	3.9	216393.31	100	22.75	79.5	120.4	
[Pb]	207	209	No Gas	113.277	ppb	2.7	185930.36	100	22.66	79.5	120.4	
Pb	208	209	No Gas	113.286	ppb	3.1	854676.60	100	22.66	79.5	120.4	
Th	232	209	No Gas	114.711	ppb	2.4	828114.34	100	22.94	79.5	120.4	
U	238	209	No Gas	113.003	ppb	1.8	786532.91	100	22.6	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9663832.14	0.8	9181465.1	105.25	29.5	120.4	
Sc	45	No Gas	16554539.37	0.4	16426983.07	100.78	29.5	120.4	
Sc	45	H2	1924942.02	1.1	1932518.05	99.61	29.5	120.4	
Sc	45	He	475733.87	0.4	478214.17	99.48	29.5	120.4	
Ge	72	No Gas	2781495.33	0.9	2769440.33	100.44	29.5	120.4	
Ge	72	H2	517428.75	1.2	546905.92	94.61	29.5	120.4	
Ge	72	He	269855.41	0.1	272551.69	99.01	29.5	120.4	
Y	89	H2	9729754.62	1.7	9834260.27	98.94	29.5	120.4	
Y	89	He	2115873.65	0.5	2139239.05	98.91	29.5	120.4	
Tb	159	No Gas	19420341.66	0.8	19495400.26	99.61	29.5	120.4	
Tb	159	He	7363978.71	0.4	7485871.83	98.37	29.5	120.4	
Bi	209	No Gas	8509007.25	0.6	8594079.3	99.01	29.5	120.4	

Sample Report

Sample Name SN5646-004

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:07:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	65.5	155.56	100	
11	B	6	No Gas	33.471	ppb	1.4	38039.86	1000	
23	Na	45	He	70024.985	ppb	0.5	12169762.77	200000	
24	Mg	45	He	22230.612	ppb	1.1	1999771.60	200000	
27	Al	45	He	11.880	ppb	3.6	494.47	200000	
28	Si	45	H2	2361.161	ppb	1.3	117132.53	10000	
39	K	45	He	2044.866	ppb	1.0	166528.46	200000	
40	Ca	45	H2	33599.613	ppb	0.4	15679558.66	200000	
51	V	89	He	0.257	ppb	11.1	473.36	1000	
52	Cr	89	He	0.574	ppb	6.1	1443.15	2000	
55	Mn	89	He	0.876	ppb	7.4	691.23	2000	
56	Fe	89	H2	14.838	ppb	3.7	30052.55	100000	
59	Co	89	He	0.396	ppb	7.9	917.88	1000	
60	Ni	89	He	6.237	ppb	2.4	3910.70	1000	
63	Cu	89	He	6.377	ppb	1.0	11024.71	2000	
66	Zn	89	He	132.747	ppb	1.7	24675.84	2000	
75	As	89	He	1.340	ppb	1.2	179.35	1000	
78	Se	89	H2	0.650	ppb	8.7	42.67	1000	
88	Sr	89	He	169.381	ppb	1.0	107267.69	2000	
95	Mo	89	He	0.277	ppb	13.0	216.68	1000	
107	Ag	89	He	0.043	ppb	25.1	134.45	100	
111	Cd	89	He	0.110	ppb	8.9	31.48	1000	
118	Sn	159	He	0.962	ppb	4.1	901.18	1000	
121	Sb	159	No Gas	0.218	ppb	37.3	981.16	1000	
137	Ba	159	No Gas	5.815	ppb	28.9	8827.06	2000	
182	W	159	No Gas	4.714	ppb	9.1	13856.30	1000	
205	Tl	209	No Gas	0.164	ppb	62.1	1037.90	1000	
208	Pb	209	No Gas	1.438	ppb	12.2	11031.01	2000	
232	Th	209	No Gas	0.696	ppb	23.9	5203.67	1000	
238	U	209	No Gas	0.186	ppb	39.2	1291.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9465585.77	1.7	9181465.1	103.09	29.5	120.4	
Sc	45	No Gas	16773551.71	2.2	16426983.07	102.11	29.5	120.4	
Sc	45	H2	1916120.41	2.8	1932518.05	99.15	29.5	120.4	
Sc	45	He	476440.33	0.6	478214.17	99.63	29.5	120.4	
Ge	72	No Gas	2808866.76	3.3	2769440.33	101.42	29.5	120.4	
Ge	72	H2	516638.59	1.9	546905.92	94.47	29.5	120.4	
Ge	72	He	270798.86	0.5	272551.69	99.36	29.5	120.4	
Y	89	H2	9697979.20	1.6	9834260.27	98.61	29.5	120.4	
Y	89	He	2105450.80	0.3	2139239.05	98.42	29.5	120.4	
Tb	159	No Gas	19720885.82	3.3	19495400.26	101.16	29.5	120.4	
Tb	159	He	7293382.60	0.8	7485871.83	97.43	29.5	120.4	
Bi	209	No Gas	8416419.25	3.8	8594079.3	97.93	29.5	120.4	

Sample Report

Sample Name SN5646-005

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:10:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.030	ppb	8.9	53.34	100	
11	B	6	No Gas	22.204	ppb	4.2	25587.93	1000	
23	Na	45	He	10066.204	ppb	0.4	1777512.44	200000	
24	Mg	45	He	2682.618	ppb	1.0	240755.33	200000	
27	Al	45	He	64.567	ppb	10.0	2209.15	200000	
28	Si	45	H2	3339.975	ppb	1.5	164761.64	10000	
39	K	45	He	320.014	ppb	4.4	44362.07	200000	
40	Ca	45	H2	4600.845	ppb	1.0	2141676.48	200000	
51	V	89	He	0.273	ppb	17.7	491.14	1000	
52	Cr	89	He	0.313	ppb	0.7	1088.52	2000	
55	Mn	89	He	6.173	ppb	3.3	3794.50	2000	
56	Fe	89	H2	11.303	ppb	2.7	23856.93	100000	
59	Co	89	He	0.375	ppb	8.0	871.20	1000	
60	Ni	89	He	2.831	ppb	9.7	1843.53	1000	
63	Cu	89	He	4.084	ppb	0.8	7251.01	2000	
66	Zn	89	He	158.857	ppb	1.7	29520.96	2000	
75	As	89	He	1.070	ppb	8.3	146.02	1000	
78	Se	89	H2	0.096	ppb	26.1	7.50	1000	
88	Sr	89	He	32.744	ppb	1.9	20789.71	2000	
95	Mo	89	He	0.087	ppb	21.2	73.34	1000	
107	Ag	89	He	0.023	ppb	38.2	87.78	100	
111	Cd	89	He	0.046	ppb	17.0	13.70	1000	
118	Sn	159	He	0.902	ppb	12.6	873.42	1000	
121	Sb	159	No Gas	0.060	ppb	21.6	367.08	1000	
137	Ba	159	No Gas	6.417	ppb	10.2	9741.23	2000	
182	W	159	No Gas	0.043	ppb	32.8	153.50	1000	
205	Tl	209	No Gas	0.006	ppb	237.8	213.57	1000	
208	Pb	209	No Gas	0.042	ppb	39.8	650.74	2000	
232	Th	209	No Gas	0.085	ppb	16.0	834.31	1000	
238	U	209	No Gas	0.021	ppb	31.7	153.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9487188.00	2.8	9181465.1	103.33	29.5	120.4	
Sc	45	No Gas	16761723.42	3.2	16426983.07	102.04	29.5	120.4	
Sc	45	H2	1907425.95	0.7	1932518.05	98.7	29.5	120.4	
Sc	45	He	475212.73	1.1	478214.17	99.37	29.5	120.4	
Ge	72	No Gas	2836682.75	2.4	2769440.33	102.43	29.5	120.4	
Ge	72	H2	515824.38	0.8	546905.92	94.32	29.5	120.4	
Ge	72	He	271483.99	0.5	272551.69	99.61	29.5	120.4	
Y	89	H2	9674523.04	1.0	9834260.27	98.38	29.5	120.4	
Y	89	He	2109064.02	0.9	2139239.05	98.59	29.5	120.4	
Tb	159	No Gas	19748955.12	3.1	19495400.26	101.3	29.5	120.4	
Tb	159	He	7350416.07	0.4	7485871.83	98.19	29.5	120.4	
Bi	209	No Gas	8579371.15	2.7	8594079.3	99.83	29.5	120.4	

Sample Report

Sample Name SN5646-005A

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:13:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.249	ppb	5.2	16803.57	100	
11	B	6	No Gas	214.030	ppb	5.1	234890.00	1000	
23	Na	45	He	19886.244	ppb	0.8	3471761.53	200000	
24	Mg	45	He	3628.859	ppb	1.1	325410.98	200000	
27	Al	45	He	969.585	ppb	1.2	31674.76	200000	
28	Si	45	H2	7830.674	ppb	0.2	379860.84	10000	
39	K	45	He	10562.664	ppb	0.9	766660.34	200000	
40	Ca	45	H2	5462.669	ppb	0.3	2504236.40	200000	
51	V	89	He	51.617	ppb	1.2	55607.42	1000	
52	Cr	89	He	51.877	ppb	0.6	71228.42	2000	
55	Mn	89	He	27.595	ppb	0.4	16281.11	2000	
56	Fe	89	H2	1013.655	ppb	1.4	1741256.21	100000	
59	Co	89	He	11.120	ppb	1.1	24752.30	1000	
60	Ni	89	He	24.300	ppb	2.2	14857.29	1000	
63	Cu	89	He	35.620	ppb	0.8	59171.65	2000	
66	Zn	89	He	312.535	ppb	0.6	57555.11	2000	
75	As	89	He	51.503	ppb	1.1	6414.51	1000	
78	Se	89	H2	48.687	ppb	0.6	3040.36	1000	
88	Sr	89	He	81.305	ppb	1.9	51393.50	2000	
95	Mo	89	He	50.730	ppb	0.7	38169.80	1000	
107	Ag	89	He	10.775	ppb	1.6	25141.72	100	
111	Cd	89	He	10.626	ppb	1.0	2953.32	1000	
118	Sn	159	He	50.597	ppb	1.1	29546.51	1000	
121	Sb	159	No Gas	10.757	ppb	2.7	41660.68	1000	
137	Ba	159	No Gas	26.543	ppb	2.4	39733.75	2000	
182	W	159	No Gas	49.484	ppb	4.6	144050.13	1000	
205	Tl	209	No Gas	10.827	ppb	5.1	57679.51	1000	
208	Pb	209	No Gas	10.471	ppb	3.9	79711.03	2000	
232	Th	209	No Gas	10.636	ppb	5.2	77364.51	1000	
238	U	209	No Gas	10.516	ppb	6.7	73545.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9338646.24	2.5	9181465.1	101.71	29.5	120.4	
Sc	45	No Gas	16583849.52	1.2	16426983.07	100.95	29.5	120.4	
Sc	45	H2	1879207.06	1.6	1932518.05	97.24	29.5	120.4	
Sc	45	He	474868.94	1.2	478214.17	99.3	29.5	120.4	
Ge	72	No Gas	2802299.93	1.1	2769440.33	101.19	29.5	120.4	
Ge	72	H2	506374.12	1.0	546905.92	92.59	29.5	120.4	
Ge	72	He	269601.03	0.5	272551.69	98.92	29.5	120.4	
Y	89	H2	9564072.28	0.6	9834260.27	97.25	29.5	120.4	
Y	89	He	2100972.16	0.4	2139239.05	98.21	29.5	120.4	
Tb	159	No Gas	19547835.68	1.7	19495400.26	100.27	29.5	120.4	
Tb	159	He	7283308.02	0.2	7485871.83	97.29	29.5	120.4	
Bi	209	No Gas	8558096.13	2.6	8594079.3	99.58	29.5	120.4	

Sample Report

Sample Name SN5646-005L

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:15:47 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.100	ppb	40.9	36.67	100	
11	B	6	No Gas	34.397	ppb	4.2	8508.33	1000	
23	Na	45	He	9876.091	ppb	4.1	377473.89	200000	
24	Mg	45	He	2619.287	ppb	4.2	46835.10	200000	
27	Al	45	He	64.549	ppb	16.0	523.36	200000	
28	Si	45	H2	3365.245	ppb	2.5	33687.53	10000	
39	K	45	He	431.288	ppb	15.3	27732.71	200000	
40	Ca	45	H2	4548.180	ppb	0.7	428136.41	200000	
51	V	89	He	-0.013	ppb	N/A	193.34	1000	
52	Cr	89	He	0.437	ppb	68.3	777.88	2000	
55	Mn	89	He	6.901	ppb	4.2	983.86	2000	
56	Fe	89	H2	17.940	ppb	3.7	10569.13	100000	
59	Co	89	He	0.596	ppb	21.0	300.03	1000	
60	Ni	89	He	2.876	ppb	3.2	468.92	1000	
63	Cu	89	He	34.559	ppb	3.8	11878.85	2000	
66	Zn	89	He	682.007	ppb	4.3	25285.91	2000	
75	As	89	He	1.068	ppb	9.5	39.00	1000	
78	Se	89	H2	0.354	ppb	21.1	6.00	1000	
88	Sr	89	He	32.500	ppb	4.2	4127.44	2000	
95	Mo	89	He	0.429	ppb	18.4	72.23	1000	
107	Ag	89	He	0.049	ppb	73.1	57.78	100	
111	Cd	89	He	0.053	ppb	20.1	3.70	1000	
118	Sn	159	He	0.942	ppb	44.1	452.25	1000	
121	Sb	159	No Gas	0.180	ppb	68.8	276.98	1000	
137	Ba	159	No Gas	7.307	ppb	4.3	2292.74	2000	
182	W	159	No Gas	0.563	ppb	28.0	360.41	1000	
205	Tl	209	No Gas	0.085	ppb	44.5	276.98	1000	
208	Pb	209	No Gas	0.113	ppb	25.3	513.91	2000	
232	Th	209	No Gas	0.207	ppb	34.8	527.27	1000	
238	U	209	No Gas	0.117	ppb	23.2	173.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9418329.77	2.9	9181465.1	102.58	29.5	120.4	
Sc	45	No Gas	16775883.42	1.9	16426983.07	102.12	29.5	120.4	
Sc	45	H2	1910945.63	1.2	1932518.05	98.88	29.5	120.4	
Sc	45	He	473112.93	2.8	478214.17	98.93	29.5	120.4	
Ge	72	No Gas	2830651.80	2.7	2769440.33	102.21	29.5	120.4	
Ge	72	H2	526164.16	1.2	546905.92	96.21	29.5	120.4	
Ge	72	He	268906.39	2.0	272551.69	98.66	29.5	120.4	
Y	89	H2	9755595.25	0.9	9834260.27	99.2	29.5	120.4	
Y	89	He	2101701.39	2.5	2139239.05	98.25	29.5	120.4	
Tb	159	No Gas	19886580.82	1.6	19495400.26	102.01	29.5	120.4	
Tb	159	He	7275145.72	2.9	7485871.83	97.19	29.5	120.4	
Bi	209	No Gas	8660131.39	1.7	8594079.3	100.77	29.5	120.4	

Sample Report

Sample Name SN5646-005P

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:18:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.318	ppb	8.3	84525.46	100	
11	B	6	No Gas	509.934	ppb	7.1	572264.94	1000	
23	Na	45	He	17663.460	ppb	1.1	3096925.93	200000	
24	Mg	45	He	8219.540	ppb	0.9	739143.37	200000	
27	Al	45	He	2040.055	ppb	0.1	66727.60	200000	
28	Si	45	H2	4430.702	ppb	1.1	214856.51	10000	
39	K	45	He	11186.909	ppb	1.1	813047.59	200000	
40	Ca	45	H2	7292.882	ppb	0.1	3336981.31	200000	
51	V	89	He	544.221	ppb	0.9	584422.05	1000	
52	Cr	89	He	221.203	ppb	0.6	301564.50	2000	
55	Mn	89	He	560.406	ppb	0.2	327197.92	2000	
56	Fe	89	H2	1107.937	ppb	1.2	1907011.73	100000	
59	Co	89	He	554.760	ppb	0.3	1233123.97	1000	
60	Ni	89	He	558.667	ppb	0.4	338927.98	1000	
63	Cu	89	He	282.653	ppb	0.7	466091.18	2000	
66	Zn	89	He	663.769	ppb	1.5	121878.66	2000	
75	As	89	He	111.292	ppb	1.0	13846.73	1000	
78	Se	89	H2	105.586	ppb	1.4	6606.10	1000	
88	Sr	89	He	563.905	ppb	0.2	356323.08	2000	
95	Mo	89	He	110.453	ppb	0.6	83099.23	1000	
107	Ag	89	He	55.902	ppb	0.4	130289.75	100	
111	Cd	89	He	272.536	ppb	0.5	75734.91	1000	
118	Sn	159	He	526.362	ppb	0.5	305571.12	1000	
121	Sb	159	No Gas	105.616	ppb	7.7	408590.69	1000	
137	Ba	159	No Gas	2014.935	ppb	7.8	3016265.40	2000	
182	W	159	No Gas	101.265	ppb	8.5	295318.44	1000	
205	Tl	209	No Gas	110.390	ppb	8.4	584189.19	1000	
208	Pb	209	No Gas	105.727	ppb	7.6	798951.88	2000	
232	Th	209	No Gas	103.810	ppb	9.6	750345.66	1000	
238	U	209	No Gas	103.625	ppb	10.0	721969.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9575871.99	2.9	9181465.1	104.3	29.5	120.4	
Sc	45	No Gas	16719199.23	2.5	16426983.07	101.78	29.5	120.4	
Sc	45	H2	1876517.87	0.5	1932518.05	97.1	29.5	120.4	
Sc	45	He	476257.19	1.1	478214.17	99.59	29.5	120.4	
Ge	72	No Gas	2797037.25	3.0	2769440.33	101	29.5	120.4	
Ge	72	H2	510594.64	0.8	546905.92	93.36	29.5	120.4	
Ge	72	He	269323.71	0.9	272551.69	98.82	29.5	120.4	
Y	89	H2	9585604.43	1.0	9834260.27	97.47	29.5	120.4	
Y	89	He	2101032.62	1.0	2139239.05	98.21	29.5	120.4	
Tb	159	No Gas	19607334.01	2.9	19495400.26	100.57	29.5	120.4	
Tb	159	He	7317962.11	0.6	7485871.83	97.76	29.5	120.4	
Bi	209	No Gas	8537679.77	3.7	8594079.3	99.34	29.5	120.4	

Sample Report

Sample Name SN5646-005S

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:21:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	56.162	ppb	4.8	94037.63	100	
11	B	6	No Gas	570.939	ppb	4.6	638392.51	1000	
23	Na	45	He	19041.720	ppb	1.3	3303395.08	200000	
24	Mg	45	He	8662.727	ppb	0.7	771495.10	200000	
27	Al	45	He	2141.359	ppb	0.7	69360.24	200000	
28	Si	45	H2	4702.241	ppb	2.0	227881.46	10000	
39	K	45	He	11728.554	ppb	0.8	843238.41	200000	
40	Ca	45	H2	7853.606	ppb	1.4	3591644.08	200000	
51	V	89	He	581.398	ppb	0.6	621398.14	1000	
52	Cr	89	He	236.602	ppb	0.2	320999.31	2000	
55	Mn	89	He	595.039	ppb	0.3	345773.32	2000	
56	Fe	89	H2	1156.494	ppb	1.1	1985611.18	100000	
59	Co	89	He	591.767	ppb	0.6	1309143.18	1000	
60	Ni	89	He	596.333	ppb	0.9	360041.33	1000	
63	Cu	89	He	303.401	ppb	0.8	497900.26	2000	
66	Zn	89	He	708.864	ppb	1.2	129526.03	2000	
75	As	89	He	118.316	ppb	0.3	14651.31	1000	
78	Se	89	H2	112.234	ppb	1.6	7004.11	1000	
88	Sr	89	He	598.279	ppb	0.2	376255.20	2000	
95	Mo	89	He	118.356	ppb	1.5	88615.64	1000	
107	Ag	89	He	59.996	ppb	0.7	139161.56	100	
111	Cd	89	He	291.378	ppb	0.6	80585.03	1000	
118	Sn	159	He	561.979	ppb	0.6	324201.70	1000	
121	Sb	159	No Gas	117.770	ppb	3.9	454452.19	1000	
137	Ba	159	No Gas	2245.620	ppb	4.7	3352773.64	2000	
182	W	159	No Gas	114.201	ppb	4.8	332225.81	1000	
205	Tl	209	No Gas	122.917	ppb	5.2	646951.72	1000	
208	Pb	209	No Gas	118.086	ppb	4.9	887352.58	2000	
232	Th	209	No Gas	119.280	ppb	5.0	857729.38	1000	
238	U	209	No Gas	117.919	ppb	6.2	817332.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9535073.59	2.1	9181465.1	103.85	29.5	120.4	
Sc	45	No Gas	16644618.41	1.9	16426983.07	101.32	29.5	120.4	
Sc	45	H2	1875872.52	1.4	1932518.05	97.07	29.5	120.4	
Sc	45	He	471666.38	1.1	478214.17	98.63	29.5	120.4	
Ge	72	No Gas	2779469.40	2.0	2769440.33	100.36	29.5	120.4	
Ge	72	H2	510795.07	1.3	546905.92	93.4	29.5	120.4	
Ge	72	He	268305.82	0.8	272551.69	98.44	29.5	120.4	
Y	89	H2	9561717.00	1.3	9834260.27	97.23	29.5	120.4	
Y	89	He	2091129.71	1.2	2139239.05	97.75	29.5	120.4	
Tb	159	No Gas	19537729.71	1.9	19495400.26	100.22	29.5	120.4	
Tb	159	He	7272517.60	0.9	7485871.83	97.15	29.5	120.4	
Bi	209	No Gas	8482410.13	2.8	8594079.3	98.7	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNH04IMS1
File Name	050_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:23:43 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.029	ppb	42.2	52.23	0.5	
B	11	6	No Gas	13.054	ppb	4.5	15348.76	10	PB 6020 Fails DoD
Na	23	45	He	49.387	ppb	11.0	46058.39	500	
Mg	24	45	He	19.068	ppb	8.2	1764.68	50	
Al	27	45	He	37.211	ppb	7.9	1303.44	50	
Si	28	45	H2	27.342	ppb	9.6	1835.50	250	
K	39	45	He	68.102	ppb	17.7	26277.33	500	
Ca	40	45	H2	51.682	ppb	0.5	28320.11	50	PB 6020 Fails DoD
V	51	89	He	0.343	ppb	16.7	558.92	2.5	
Cr	52	89	He	0.787	ppb	10.6	1713.80	2.5	
Mn	55	89	He	1.305	ppb	3.3	931.20	1	PB 6020 Fails DoD
Fe	56	89	H2	15.326	ppb	1.9	30350.11	50	
Co	59	89	He	0.179	ppb	24.0	428.93	0.5	
Ni	60	89	He	0.607	ppb	9.4	483.36	1	
Cu	63	89	He	6.903	ppb	1.0	11757.54	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	132.617	ppb	1.0	24371.99	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.073	ppb	44.9	21.33	2.5	
Se	78	89	H2	0.156	ppb	26.4	11.17	2.5	
Sr	88	89	He	0.214	ppb	22.9	155.56	2.5	
Mo	95	89	He	0.173	ppb	11.5	136.67	2.5	
Ag	107	89	He	0.029	ppb	33.8	102.22	0.5	
Cd	111	89	He	0.050	ppb	14.2	14.45	0.5	
Sn	118	159	He	44.565	ppb	0.4	25787.57	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.154	ppb	17.3	734.17	0.5	
Ba	137	159	No Gas	1.221	ppb	16.4	1908.96	1	PB 6020 Fails DoD
W	182	159	No Gas	0.204	ppb	10.9	624.05	2.5	
Tl	205	209	No Gas	0.083	ppb	46.2	634.06	0.5	
Pb	208	209	No Gas	0.149	ppb	13.8	1478.36	0.5	
Th	232	209	No Gas	0.544	ppb	15.3	4212.16	2.5	
U	238	209	No Gas	0.073	ppb	39.5	523.94	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9426617.12	2.4	9181465.1	102.67	29.5	120.4	
Sc	45	No Gas	16667048.75	1.4	16426983.07	101.46	29.5	120.4	
Sc	45	H2	1871221.40	0.2	1932518.05	96.83	29.5	120.4	
Sc	45	He	469653.20	0.4	478214.17	98.21	29.5	120.4	
Ge	72	No Gas	2771731.19	1.5	2769440.33	100.08	29.5	120.4	
Ge	72	H2	505788.31	0.6	546905.92	92.48	29.5	120.4	
Ge	72	He	266524.95	0.2	272551.69	97.79	29.5	120.4	
Y	89	H2	9523602.64	0.5	9834260.27	96.84	29.5	120.4	
Y	89	He	2081436.29	0.2	2139239.05	97.3	29.5	120.4	
Tb	159	No Gas	19660810.54	1.6	19495400.26	100.85	29.5	120.4	
Tb	159	He	7205903.57	0.4	7485871.83	96.26	29.5	120.4	
Bi	209	No Gas	8628667.74	1.9	8594079.3	100.4	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH04IMS1
File Name	051LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:26:29 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.473	ppb	4.3	79648.67	50	18.99	79.5	120.4	
B	11	6	No Gas	479.954	ppb	3.6	537945.22	500	19.2	79.5	120.4	
Na	23	45	He	7940.917	ppb	0.5	1396326.11	7500	21.18	79.5	120.4	
Mg	24	45	He	5318.584	ppb	0.6	472564.86	5000	21.27	79.5	120.4	
Al	27	45	He	1849.579	ppb	0.2	59778.02	2000	18.5	79.5	120.4	
Si	28	45	H2	936.840	ppb	3.6	45553.56	1000	18.74	79.5	120.4	
K	39	45	He	10558.539	ppb	0.5	759389.66	10000	21.12	79.5	120.4	
Ca	40	45	H2	2587.062	ppb	0.2	1179632.58	2500	20.7	79.5	120.4	
V	51	89	He	497.766	ppb	0.4	532449.89	500	19.91	79.5	120.4	
Cr	52	89	He	202.776	ppb	0.5	275399.72	200	20.28	79.5	120.4	
Mn	55	89	He	503.604	ppb	0.6	292886.71	500	20.14	79.5	120.4	
Fe	56	89	H2	986.459	ppb	0.4	1690564.17	1000	19.73	79.5	120.4	
Co	59	89	He	506.072	ppb	0.9	1120390.36	500	20.24	79.5	120.4	
Ni	60	89	He	509.366	ppb	0.7	307792.69	500	20.37	79.5	120.4	
Cu	63	89	He	257.927	ppb	0.4	423685.09	250	20.63	79.5	120.4	
Zn	66	89	He	643.300	ppb	0.1	117670.20	500	25.73	79.5	120.4	6020□ DoD
As	75	89	He	104.182	ppb	0.7	12912.05	100	20.84	79.5	120.4	
Se	78	89	H2	100.944	ppb	1.3	6286.97	100	20.19	79.5	120.4	
Sr	88	89	He	499.501	ppb	0.5	314374.77	500	19.98	79.5	120.4	
Mo	95	89	He	104.812	ppb	0.5	78540.50	100	20.96	79.5	120.4	
Ag	107	89	He	51.271	ppb	0.2	119019.85	50	20.51	79.5	120.4	
Cd	111	89	He	258.952	ppb	0.4	71671.20	250	20.72	79.5	120.4	
Sn	118	159	He	539.021	ppb	0.5	311671.69	500	21.56	79.5	120.4	
Sb	121	159	No Gas	103.560	ppb	4.9	399802.14	100	20.71	79.5	120.4	
Ba	137	159	No Gas	1920.693	ppb	5.3	2869058.70	2000	19.21	79.5	120.4	
W	182	159	No Gas	99.602	ppb	4.0	289953.81	100	19.92	79.5	120.4	
Tl	205	209	No Gas	107.916	ppb	2.9	568867.38	100	21.58	79.5	120.4	
[Pb]	206	209	No Gas	104.241	ppb	3.5	197811.32	100	20.85	79.5	120.4	
[Pb]	207	209	No Gas	105.094	ppb	3.2	172058.84	100	21.02	79.5	120.4	
Pb	208	209	No Gas	104.306	ppb	3.1	784937.60	100	20.86	79.5	120.4	
Th	232	209	No Gas	102.415	ppb	3.9	737419.29	100	20.48	79.5	120.4	
U	238	209	No Gas	103.376	ppb	3.6	717647.21	100	20.68	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9554144.85	1.8	9181465.1	104.06	29.5	120.4	
Sc	45	No Gas	16493859.94	1.9	16426983.07	100.41	29.5	120.4	
Sc	45	H2	1865134.59	0.6	1932518.05	96.51	29.5	120.4	
Sc	45	He	470517.51	0.7	478214.17	98.39	29.5	120.4	
Ge	72	No Gas	2760468.60	2.5	2769440.33	99.68	29.5	120.4	
Ge	72	H2	507183.68	1.0	546905.92	92.74	29.5	120.4	
Ge	72	He	267246.39	1.0	272551.69	98.05	29.5	120.4	
Y	89	H2	9540907.76	0.7	9834260.27	97.02	29.5	120.4	
Y	89	He	2092638.75	0.6	2139239.05	97.82	29.5	120.4	
Tb	159	No Gas	19549217.90	2.1	19495400.26	100.28	29.5	120.4	
Tb	159	He	7288839.54	0.7	7485871.83	97.37	29.5	120.4	
Bi	209	No Gas	8489028.21	1.6	8594079.3	98.78	29.5	120.4	

Sample Report

Sample Name SN5717-004

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:29:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.444	ppb	2.3	8732.94	100	
11	B	6	No Gas	73.752	ppb	1.2	79747.31	1000	
23	Na	45	He	635.927	ppb	0.8	152444.41	200000	
24	Mg	45	He	35076.562	ppb	0.5	3242748.46	200000	
27	Al	45	He	105686.285	ppb	0.2	3548334.53	200000	
28	Si	45	H2	2698.293	ppb	4.3	136326.36	10000	
39	K	45	He	13013.473	ppb	0.1	968763.55	200000	
40	Ca	45	H2	28575.375	ppb	0.9	13588485.49	200000	
51	V	89	He	186.474	ppb	0.5	222383.31	1000	
52	Cr	89	He	132.800	ppb	0.6	201209.32	2000	
55	Mn	89	He	5059.806	ppb	0.0	3276841.94	2000	
56	Fe	89	H2	200012.105	ppb	0.7	383890940.75	100000	
59	Co	89	He	83.548	ppb	1.4	206108.48	1000	
60	Ni	89	He	201.729	ppb	0.7	135893.19	1000	
63	Cu	89	He	231.070	ppb	0.6	422945.56	2000	
66	Zn	89	He	802.030	ppb	0.7	163366.14	2000	
75	As	89	He	81.155	ppb	1.1	11208.74	1000	
78	Se	89	H2	2.487	ppb	6.7	175.49	1000	
88	Sr	89	He	83.353	ppb	1.0	58470.92	2000	
95	Mo	89	He	18.377	ppb	2.0	15347.98	1000	
107	Ag	89	He	0.376	ppb	5.3	1010.08	100	
111	Cd	89	He	2.421	ppb	5.6	747.07	1000	
118	Sn	159	He	45.387	ppb	0.6	26472.32	1000	
121	Sb	159	No Gas	1.936	ppb	2.7	7360.29	1000	
137	Ba	159	No Gas	512.504	ppb	1.1	741164.14	2000	
182	W	159	No Gas	0.500	ppb	16.4	1435.02	1000	
205	Tl	209	No Gas	3.674	ppb	0.4	18684.59	1000	
208	Pb	209	No Gas	327.121	ppb	1.4	2352695.68	2000	
232	Th	209	No Gas	39.728	ppb	0.3	273656.83	1000	
238	U	209	No Gas	7.210	ppb	1.0	47858.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9126767.49	1.2	9181465.1	99.4	29.5	120.4	
Sc	45	No Gas	16573861.19	2.5	16426983.07	100.89	29.5	120.4	
Sc	45	H2	1952289.47	0.8	1932518.05	101.02	29.5	120.4	
Sc	45	He	489627.07	0.8	478214.17	102.39	29.5	120.4	
Ge	72	No Gas	2699464.81	2.0	2769440.33	97.47	29.5	120.4	
Ge	72	H2	514537.18	1.3	546905.92	94.08	29.5	120.4	
Ge	72	He	272457.54	0.4	272551.69	99.97	29.5	120.4	
Y	89	H2	10711982.54	0.8	9834260.27	108.93	29.5	120.4	
Y	89	He	2331586.51	1.0	2139239.05	108.99	29.5	120.4	
Tb	159	No Gas	18915119.16	2.2	19495400.26	97.02	29.5	120.4	
Tb	159	He	7264933.09	0.3	7485871.83	97.05	29.5	120.4	
Bi	209	No Gas	8114475.18	1.8	8594079.3	94.42	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:31:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.845	ppb	5.7	200910.10	25	99.38	89.8	110.2	
11	B	6	No Gas	24.758	ppb	4.5	134428.46	25	99.03	89.8	110.2	
23	Na	45	He	4950.983	ppb	0.3	4382239.59	5000	99.02	89.8	110.2	
24	Mg	45	He	4939.761	ppb	0.8	2250238.60	5000	98.8	89.8	110.2	
27	Al	45	He	495.127	ppb	0.7	82017.28	500	99.03	89.8	110.2	
28	Si	45	H2	477.951	ppb	0.8	119372.41	500	95.59	89.8	110.2	
39	K	45	He	4917.600	ppb	0.3	1784193.28	5000	98.35	89.8	110.2	
40	Ca	45	H2	4853.520	ppb	0.4	11404149.13	5000	97.07	89.8	110.2	
51	V	89	He	24.992	ppb	0.5	136975.62	25	99.97	89.8	110.2	
52	Cr	89	He	24.915	ppb	0.2	173453.66	25	99.66	89.8	110.2	
55	Mn	89	He	25.125	ppb	0.4	74924.49	25	100.5	89.8	110.2	
56	Fe	89	H2	4851.613	ppb	0.6	42685257.09	5000	97.03	89.8	110.2	
59	Co	89	He	24.968	ppb	1.1	282947.92	25	99.87	89.8	110.2	
60	Ni	89	He	24.969	ppb	0.4	77316.54	25	99.88	89.8	110.2	
63	Cu	89	He	25.181	ppb	0.7	211969.83	25	100.72	89.8	110.2	
66	Zn	89	He	25.131	ppb	0.4	23782.04	25	100.52	89.8	110.2	
75	As	89	He	24.782	ppb	0.7	15717.56	25	99.13	89.8	110.2	
78	Se	89	H2	24.391	ppb	1.4	7817.00	25	97.56	89.8	110.2	
88	Sr	89	He	24.468	ppb	0.8	78833.00	25	97.87	89.8	110.2	
95	Mo	89	He	24.782	ppb	0.6	95046.41	25	99.13	89.8	110.2	
107	Ag	89	He	25.051	ppb	0.8	297591.14	25	100.2	89.8	110.2	
111	Cd	89	He	24.619	ppb	0.6	34875.59	25	98.48	89.8	110.2	
118	Sn	159	He	24.786	ppb	1.4	72877.32	25	99.14	89.8	110.2	
121	Sb	159	No Gas	25.986	ppb	4.4	486400.58	25	103.94	89.8	110.2	
137	Ba	159	No Gas	25.783	ppb	3.1	186846.12	25	103.13	89.8	110.2	
182	W	159	No Gas	24.921	ppb	5.3	351658.61	25	99.68	89.8	110.2	
205	Tl	209	No Gas	26.604	ppb	5.3	675330.42	25	106.42	89.8	110.2	
208	Pb	209	No Gas	25.594	ppb	2.9	927834.70	25	102.38	89.8	110.2	
232	Th	209	No Gas	25.760	ppb	5.9	893273.36	25	103.04	89.8	110.2	
238	U	209	No Gas	25.976	ppb	4.6	868585.59	25	103.9	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9213700.36	2.5	9181465.1	100.35	29.5	120.4	
Sc	45	No Gas	16408316.49	1.9	16426983.07	99.89	29.5	120.4	
Sc	45	H2	1929135.46	0.7	1932518.05	99.82	29.5	120.4	
Sc	45	He	482531.16	0.5	478214.17	100.9	29.5	120.4	
Ge	72	No Gas	2760739.96	1.1	2769440.33	99.69	29.5	120.4	
Ge	72	H2	533420.54	1.5	546905.92	97.53	29.5	120.4	
Ge	72	He	273446.54	0.4	272551.69	100.33	29.5	120.4	
Y	89	H2	9819386.44	0.5	9834260.27	99.85	29.5	120.4	
Y	89	He	2142115.44	0.2	2139239.05	100.13	29.5	120.4	
Tb	159	No Gas	18957371.94	2.1	19495400.26	97.24	29.5	120.4	
Tb	159	He	7385570.44	0.2	7485871.83	98.66	29.5	120.4	
Bi	209	No Gas	8179930.79	2.1	8594079.3	95.18	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:34:25 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.023	ppb	37.9	193.34	0.2	
11	B	6	No Gas	0.545	ppb	4.8	3930.66	4	
23	Na	45	He	-3.327	ppb	N/A	35302.75	200	
24	Mg	45	He	1.092	ppb	19.4	566.72	20	
27	Al	45	He	1.171	ppb	8.5	297.79	20	
28	Si	45	H2	0.301	ppb	114.0	600.68	100	
39	K	45	He	7.224	ppb	28.9	24409.93	200	
40	Ca	45	H2	1.067	ppb	13.7	7346.61	20	
51	V	89	He	-0.003	ppb	N/A	182.23	1	
52	Cr	89	He	0.007	ppb	37.8	717.22	1	
55	Mn	89	He	0.054	ppb	11.6	339.28	0.4	
56	Fe	89	H2	2.809	ppb	3.6	28745.04	20	
59	Co	89	He	0.005	ppb	26.2	86.67	0.2	
60	Ni	89	He	-0.014	ppb	N/A	80.00	0.4	
63	Cu	89	He	0.002	ppb	33.7	523.36	0.6	
66	Zn	89	He	0.009	ppb	212.1	322.24	2	
75	As	89	He	0.002	ppb	312.1	14.00	1	
78	Se	89	H2	0.030	ppb	14.4	11.00	1	
88	Sr	89	He	0.006	ppb	56.0	40.00	1	
95	Mo	89	He	0.042	ppb	31.0	167.79	1	
107	Ag	89	He	0.006	ppb	9.5	106.67	0.2	
111	Cd	89	He	0.005	ppb	22.7	8.15	0.2	
118	Sn	159	He	0.065	ppb	32.5	540.03	1	
121	Sb	159	No Gas	0.028	ppb	7.4	680.78	0.2	
137	Ba	159	No Gas	0.055	ppb	32.4	483.88	0.4	
182	W	159	No Gas	0.070	ppb	3.4	1037.87	1	
205	Tl	209	No Gas	0.023	ppb	30.8	797.59	0.2	
208	Pb	209	No Gas	0.027	ppb	37.4	1351.54	0.2	
232	Th	209	No Gas	0.066	ppb	13.8	2589.87	1	
238	U	209	No Gas	0.026	ppb	35.8	907.73	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9418354.07	2.8	9181465.1	102.58	29.5	120.4	
Sc	45	No Gas	16734702.24	2.2	16426983.07	101.87	29.5	120.4	
Sc	45	H2	1908782.66	0.8	1932518.05	98.77	29.5	120.4	
Sc	45	He	476693.41	0.2	478214.17	99.68	29.5	120.4	
Ge	72	No Gas	2806491.52	3.4	2769440.33	101.34	29.5	120.4	
Ge	72	H2	530458.32	1.3	546905.92	96.99	29.5	120.4	
Ge	72	He	271824.34	0.5	272551.69	99.73	29.5	120.4	
Y	89	H2	9721375.41	0.5	9834260.27	98.85	29.5	120.4	
Y	89	He	2127533.02	0.2	2139239.05	99.45	29.5	120.4	
Tb	159	No Gas	19473428.74	2.5	19495400.26	99.89	29.5	120.4	
Tb	159	He	7372767.95	0.5	7485871.83	98.49	29.5	120.4	
Bi	209	No Gas	8515268.72	2.9	8594079.3	99.08	29.5	120.4	

Sample Report

Sample Name SN5717-010

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:37:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.810	ppb	10.8	7934.68	100	
11	B	6	No Gas	77.293	ppb	7.2	85956.39	1000	
23	Na	45	He	1015.783	ppb	1.3	215963.41	200000	
24	Mg	45	He	99682.428	ppb	0.6	9043313.13	200000	
27	Al	45	He	93987.884	ppb	0.1	3096822.00	200000	
28	Si	45	H2	2398.085	ppb	1.2	118482.11	10000	
39	K	45	He	15804.122	ppb	0.1	1149863.02	200000	
40	Ca	45	H2	293410.003	ppb	1.7	136327855.75	200000	
51	V	89	He	173.249	ppb	1.2	200763.82	1000	
52	Cr	89	He	140.491	ppb	1.0	206793.86	2000	
55	Mn	89	He	3769.968	ppb	0.4	2372488.92	2000	
56	Fe	89	H2	202113.906	ppb	0.7	376831531.59	100000	
59	Co	89	He	87.804	ppb	0.6	210499.53	1000	
60	Ni	89	He	223.310	ppb	1.3	146158.76	1000	
63	Cu	89	He	213.079	ppb	0.4	379050.35	2000	
66	Zn	89	He	578.358	ppb	1.0	114563.78	2000	
75	As	89	He	76.298	ppb	0.8	10241.89	1000	
78	Se	89	H2	1.596	ppb	15.8	110.00	1000	
88	Sr	89	He	387.275	ppb	0.8	263891.92	2000	
95	Mo	89	He	15.394	ppb	3.3	12493.88	1000	
107	Ag	89	He	0.440	ppb	8.1	1143.42	100	
111	Cd	89	He	1.306	ppb	0.9	392.23	1000	
118	Sn	159	He	44.150	ppb	0.4	25588.39	1000	
121	Sb	159	No Gas	0.990	ppb	3.8	3955.00	1000	
137	Ba	159	No Gas	504.665	ppb	6.6	753305.60	2000	
182	W	159	No Gas	0.272	ppb	12.5	817.60	1000	
205	Tl	209	No Gas	3.092	ppb	12.6	16075.03	1000	
208	Pb	209	No Gas	156.468	ppb	7.4	1149875.71	2000	
232	Th	209	No Gas	39.960	ppb	9.1	281077.17	1000	
238	U	209	No Gas	6.316	ppb	7.2	42835.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9399453.29	2.0	9181465.1	102.37	29.5	120.4	
Sc	45	No Gas	17064007.99	2.0	16426983.07	103.88	29.5	120.4	
Sc	45	H2	1908179.98	0.8	1932518.05	98.74	29.5	120.4	
Sc	45	He	480504.86	1.0	478214.17	100.48	29.5	120.4	
Ge	72	No Gas	2770585.02	2.0	2769440.33	100.04	29.5	120.4	
Ge	72	H2	501163.71	1.2	546905.92	91.64	29.5	120.4	
Ge	72	He	266029.73	0.8	272551.69	97.61	29.5	120.4	
Y	89	H2	10405415.36	1.2	9834260.27	105.81	29.5	120.4	
Y	89	He	2265705.17	1.3	2139239.05	105.91	29.5	120.4	
Tb	159	No Gas	19536582.35	2.0	19495400.26	100.21	29.5	120.4	
Tb	159	He	7216577.18	0.4	7485871.83	96.4	29.5	120.4	
Bi	209	No Gas	8300267.37	2.8	8594079.3	96.58	29.5	120.4	

Sample Report

Sample Name SN5717-010A

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:39:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	14.193	ppb	6.8	23615.51	100	
11	B	6	No Gas	257.048	ppb	5.2	286194.41	1000	
23	Na	45	He	11041.118	ppb	0.3	1956668.53	200000	
24	Mg	45	He	95023.148	ppb	0.3	8572674.66	200000	
27	Al	45	He	89815.711	ppb	0.4	2942794.23	200000	
28	Si	45	H2	6715.707	ppb	0.8	328173.55	10000	
39	K	45	He	24779.665	ppb	0.6	1780390.08	200000	
40	Ca	45	H2	278706.628	ppb	0.2	128440660.31	200000	
51	V	89	He	211.028	ppb	0.3	241928.38	1000	
52	Cr	89	He	180.621	ppb	0.5	262859.35	2000	
55	Mn	89	He	3574.007	ppb	0.1	2225435.42	2000	
56	Fe	89	H2	192463.515	ppb	0.8	355107925.42	100000	
59	Co	89	He	92.831	ppb	0.8	220195.32	1000	
60	Ni	89	He	232.597	ppb	1.0	150628.79	1000	
63	Cu	89	He	227.231	ppb	0.5	399900.19	2000	
66	Zn	89	He	633.452	ppb	0.6	124126.22	2000	
75	As	89	He	119.669	ppb	1.3	15884.78	1000	
78	Se	89	H2	46.181	ppb	1.1	3105.04	1000	
88	Sr	89	He	408.098	ppb	0.2	275145.47	2000	
95	Mo	89	He	60.805	ppb	0.7	48815.81	1000	
107	Ag	89	He	10.067	ppb	1.7	25063.83	100	
111	Cd	89	He	10.822	ppb	2.9	3209.30	1000	
118	Sn	159	He	89.818	ppb	1.5	51227.18	1000	
121	Sb	159	No Gas	10.923	ppb	5.8	43425.62	1000	
137	Ba	159	No Gas	483.741	ppb	7.1	741553.30	2000	
182	W	159	No Gas	46.271	ppb	6.4	138225.56	1000	
205	Tl	209	No Gas	13.199	ppb	6.4	69611.07	1000	
208	Pb	209	No Gas	155.006	ppb	6.4	1164192.90	2000	
232	Th	209	No Gas	47.774	ppb	7.0	343521.60	1000	
238	U	209	No Gas	15.980	ppb	6.9	110727.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9483878.23	3.7	9181465.1	103.29	29.5	120.4	
Sc	45	No Gas	17605452.33	5.3	16426983.07	107.17	29.5	120.4	
Sc	45	H2	1892629.55	1.2	1932518.05	97.94	29.5	120.4	
Sc	45	He	477813.31	0.4	478214.17	99.92	29.5	120.4	
Ge	72	No Gas	2861857.57	4.3	2769440.33	103.34	29.5	120.4	
Ge	72	H2	498615.40	1.6	546905.92	91.17	29.5	120.4	
Ge	72	He	266308.25	0.5	272551.69	97.71	29.5	120.4	
Y	89	H2	10296718.86	0.9	9834260.27	104.7	29.5	120.4	
Y	89	He	2241705.56	0.7	2139239.05	104.79	29.5	120.4	
Tb	159	No Gas	20096045.26	5.5	19495400.26	103.08	29.5	120.4	
Tb	159	He	7150490.38	0.6	7485871.83	95.52	29.5	120.4	
Bi	209	No Gas	8490027.65	5.4	8594079.3	98.79	29.5	120.4	

Sample Report

Sample Name SN5717-010L

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:42:43 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.147	ppb	4.1	1707.94	100	
11	B	6	No Gas	95.010	ppb	3.3	21897.21	1000	
23	Na	45	He	933.597	ppb	2.4	70802.07	200000	
24	Mg	45	He	103850.928	ppb	0.3	1876120.02	200000	
27	Al	45	He	97198.243	ppb	0.6	637789.91	200000	
28	Si	45	H2	2466.202	ppb	7.7	24936.16	10000	
39	K	45	He	16878.947	ppb	0.8	261780.25	200000	
40	Ca	45	H2	300576.504	ppb	0.5	28104220.69	200000	
51	V	89	He	186.388	ppb	0.7	41357.15	1000	
52	Cr	89	He	154.327	ppb	1.5	43856.99	2000	
55	Mn	89	He	4190.783	ppb	0.6	503157.05	2000	
56	Fe	89	H2	222984.292	ppb	0.1	78351241.82	100000	
59	Co	89	He	97.330	ppb	2.2	44530.97	1000	
60	Ni	89	He	249.992	ppb	0.5	31305.92	1000	
63	Cu	89	He	268.114	ppb	1.0	91351.61	2000	
66	Zn	89	He	1492.168	ppb	1.4	56530.91	2000	
75	As	89	He	81.703	ppb	1.2	2101.73	1000	
78	Se	89	H2	1.862	ppb	13.3	25.33	1000	
88	Sr	89	He	418.964	ppb	1.5	54468.93	2000	
95	Mo	89	He	16.727	ppb	2.4	2595.89	1000	
107	Ag	89	He	0.505	ppb	13.8	277.79	100	
111	Cd	89	He	1.412	ppb	5.7	81.48	1000	
118	Sn	159	He	44.767	ppb	5.1	5556.89	1000	
121	Sb	159	No Gas	1.128	ppb	11.3	1004.50	1000	
137	Ba	159	No Gas	543.130	ppb	5.7	162264.43	2000	
182	W	159	No Gas	0.854	ppb	7.5	523.93	1000	
205	Tl	209	No Gas	3.130	ppb	2.3	3480.99	1000	
208	Pb	209	No Gas	165.174	ppb	5.3	248788.24	2000	
232	Th	209	No Gas	40.705	ppb	4.8	58816.92	1000	
238	U	209	No Gas	6.366	ppb	10.2	8839.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9425822.89	1.8	9181465.1	102.66	29.5	120.4	
Sc	45	No Gas	16857233.31	2.0	16426983.07	102.62	29.5	120.4	
Sc	45	H2	1919746.73	1.0	1932518.05	99.34	29.5	120.4	
Sc	45	He	478389.93	0.4	478214.17	100.04	29.5	120.4	
Ge	72	No Gas	2808898.83	2.0	2769440.33	101.42	29.5	120.4	
Ge	72	H2	520648.85	0.8	546905.92	95.2	29.5	120.4	
Ge	72	He	271999.84	0.6	272551.69	99.8	29.5	120.4	
Y	89	H2	9804545.03	0.8	9834260.27	99.7	29.5	120.4	
Y	89	He	2160631.90	0.5	2139239.05	101	29.5	120.4	
Tb	159	No Gas	19541942.63	1.8	19495400.26	100.24	29.5	120.4	
Tb	159	He	7341864.96	0.3	7485871.83	98.08	29.5	120.4	
Bi	209	No Gas	8491589.62	2.1	8594079.3	98.81	29.5	120.4	

Sample Report

Sample Name SN5717-010P

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:45:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	58.232	ppb	6.6	96286.15	100	
11	B	6	No Gas	575.609	ppb	5.1	635785.43	1000	
23	Na	45	He	9453.760	ppb	0.5	1683422.91	200000	
24	Mg	45	He	112144.136	ppb	0.8	10132395.96	200000	
27	Al	45	He	116430.735	ppb	0.4	3820544.07	200000	
28	Si	45	H2	3576.691	ppb	3.9	175047.27	10000	
39	K	45	He	29289.734	ppb	0.6	2103630.56	200000	
40	Ca	45	H2	292925.181	ppb	0.5	135084656.87	200000	
51	V	89	He	711.502	ppb	0.2	819735.16	1000	
52	Cr	89	He	367.892	ppb	0.2	537662.20	2000	
55	Mn	89	He	4784.202	ppb	0.4	2995515.70	2000	
56	Fe	89	H2	226625.897	ppb	0.4	419640368.92	100000	
59	Co	89	He	603.172	ppb	0.3	1438506.05	1000	
60	Ni	89	He	745.012	ppb	0.2	484885.95	1000	
63	Cu	89	He	490.059	ppb	0.3	866648.67	2000	
66	Zn	89	He	1252.894	ppb	0.6	246555.55	2000	
75	As	89	He	188.414	ppb	1.2	25143.36	1000	
78	Se	89	H2	97.261	ppb	0.6	6561.25	1000	
88	Sr	89	He	880.887	ppb	0.9	597185.60	2000	
95	Mo	89	He	115.663	ppb	1.0	93366.15	1000	
107	Ag	89	He	50.210	ppb	0.1	125556.70	100	
111	Cd	89	He	246.830	ppb	0.4	73591.08	1000	
118	Sn	159	He	569.352	ppb	0.9	321916.30	1000	
121	Sb	159	No Gas	28.835	ppb	4.5	108231.10	1000	
137	Ba	159	No Gas	2678.621	ppb	4.4	3887090.89	2000	
182	W	159	No Gas	60.035	ppb	5.9	169708.87	1000	
205	Tl	209	No Gas	119.537	ppb	4.2	595079.05	1000	
208	Pb	209	No Gas	283.315	ppb	4.6	2012910.22	2000	
232	Th	209	No Gas	158.485	ppb	5.8	1077395.23	1000	
238	U	209	No Gas	120.691	ppb	6.0	791078.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9424461.53	3.2	9181465.1	102.65	29.5	120.4	
Sc	45	No Gas	16744568.14	2.5	16426983.07	101.93	29.5	120.4	
Sc	45	H2	1893827.03	2.3	1932518.05	98	29.5	120.4	
Sc	45	He	478539.82	0.5	478214.17	100.07	29.5	120.4	
Ge	72	No Gas	2736886.56	2.7	2769440.33	98.82	29.5	120.4	
Ge	72	H2	492389.04	2.3	546905.92	90.03	29.5	120.4	
Ge	72	He	263987.87	0.8	272551.69	96.86	29.5	120.4	
Y	89	H2	10334260.04	2.0	9834260.27	105.08	29.5	120.4	
Y	89	He	2254198.21	0.6	2139239.05	105.37	29.5	120.4	
Tb	159	No Gas	18994938.47	2.9	19495400.26	97.43	29.5	120.4	
Tb	159	He	7127879.76	0.3	7485871.83	95.22	29.5	120.4	
Bi	209	No Gas	8021701.99	2.9	8594079.3	93.34	29.5	120.4	

Sample Report

Sample Name SN5717-010S

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:48:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	60.516	ppb	5.8	100110.04	100	
11	B	6	No Gas	594.084	ppb	4.1	656466.62	1000	
23	Na	45	He	9430.139	ppb	0.5	1701094.24	200000	
24	Mg	45	He	111343.816	ppb	0.4	10190924.29	200000	
27	Al	45	He	120887.562	ppb	0.6	4018273.62	200000	
28	Si	45	H2	3769.068	ppb	1.4	185339.72	10000	
39	K	45	He	32177.502	ppb	0.3	2338830.86	200000	
40	Ca	45	H2	291450.781	ppb	1.2	134965851.32	200000	
51	V	89	He	741.197	ppb	1.3	854257.43	1000	
52	Cr	89	He	382.122	ppb	0.9	558649.05	2000	
55	Mn	89	He	4725.465	ppb	0.3	2960036.16	2000	
56	Fe	89	H2	229125.020	ppb	0.8	425798463.46	100000	
59	Co	89	He	613.163	ppb	0.9	1462897.11	1000	
60	Ni	89	He	761.220	ppb	0.9	495634.51	1000	
63	Cu	89	He	495.233	ppb	0.5	876171.00	2000	
66	Zn	89	He	1257.080	ppb	0.3	247485.90	2000	
75	As	89	He	189.551	ppb	0.5	25306.02	1000	
78	Se	89	H2	97.310	ppb	1.2	6588.10	1000	
88	Sr	89	He	899.823	ppb	0.2	610308.18	2000	
95	Mo	89	He	116.999	ppb	0.4	94482.40	1000	
107	Ag	89	He	51.361	ppb	1.1	128488.81	100	
111	Cd	89	He	245.348	ppb	0.5	73181.01	1000	
118	Sn	159	He	569.912	ppb	0.3	319701.20	1000	
121	Sb	159	No Gas	28.606	ppb	2.7	108197.32	1000	
137	Ba	159	No Gas	2751.622	ppb	4.3	4022854.12	2000	
182	W	159	No Gas	58.460	ppb	4.6	166534.41	1000	
205	Tl	209	No Gas	119.833	ppb	4.4	594892.07	1000	
208	Pb	209	No Gas	304.195	ppb	4.7	2155323.48	2000	
232	Th	209	No Gas	160.052	ppb	6.3	1085045.59	1000	
238	U	209	No Gas	121.167	ppb	6.0	792052.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9425692.86	2.8	9181465.1	102.66	29.5	120.4	
Sc	45	No Gas	16844679.50	2.3	16426983.07	102.54	29.5	120.4	
Sc	45	H2	1901913.40	1.5	1932518.05	98.42	29.5	120.4	
Sc	45	He	484758.87	0.9	478214.17	101.37	29.5	120.4	
Ge	72	No Gas	2736152.33	2.6	2769440.33	98.8	29.5	120.4	
Ge	72	H2	493781.25	1.7	546905.92	90.29	29.5	120.4	
Ge	72	He	266196.12	1.0	272551.69	97.67	29.5	120.4	
Y	89	H2	10371287.38	0.4	9834260.27	105.46	29.5	120.4	
Y	89	He	2255223.49	1.1	2139239.05	105.42	29.5	120.4	
Tb	159	No Gas	19129139.85	1.5	19495400.26	98.12	29.5	120.4	
Tb	159	He	7072002.33	1.1	7485871.83	94.47	29.5	120.4	
Bi	209	No Gas	7999242.81	2.7	8594079.3	93.08	29.5	120.4	

Sample Report

Sample Name SN5717-013

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:50:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.333	ppb	1.5	7031.95	100	
11	B	6	No Gas	66.633	ppb	3.2	72969.39	1000	
23	Na	45	He	610.434	ppb	6.5	150949.48	200000	
24	Mg	45	He	43781.059	ppb	5.1	4130339.35	200000	
27	Al	45	He	78653.533	ppb	6.0	2694360.52	200000	
28	Si	45	H2	2795.566	ppb	2.6	142348.70	10000	
39	K	45	He	11545.581	ppb	5.1	879697.68	200000	
40	Ca	45	H2	71739.764	ppb	0.5	34375345.60	200000	
51	V	89	He	144.810	ppb	4.5	172417.90	1000	
52	Cr	89	He	108.859	ppb	5.3	164735.52	2000	
55	Mn	89	He	3640.334	ppb	5.4	2352757.29	2000	
56	Fe	89	H2	162725.978	ppb	0.3	304229088.37	100000	
59	Co	89	He	71.734	ppb	4.8	176643.11	1000	
60	Ni	89	He	179.766	ppb	5.0	120878.94	1000	
63	Cu	89	He	655.515	ppb	5.3	1196442.31	2000	
66	Zn	89	He	960.586	ppb	4.6	195231.48	2000	
75	As	89	He	69.059	ppb	5.7	9520.64	1000	
78	Se	89	H2	7.187	ppb	2.6	490.99	1000	
88	Sr	89	He	115.542	ppb	5.6	80871.81	2000	
95	Mo	89	He	13.042	ppb	6.6	10872.49	1000	
107	Ag	89	He	0.517	ppb	6.2	1372.35	100	
111	Cd	89	He	2.353	ppb	1.1	725.58	1000	
118	Sn	159	He	46.394	ppb	9.2	27404.46	1000	
121	Sb	159	No Gas	8.276	ppb	0.9	31321.52	1000	
137	Ba	159	No Gas	406.565	ppb	2.2	593094.65	2000	
182	W	159	No Gas	0.353	ppb	11.2	1027.86	1000	
205	Tl	209	No Gas	2.963	ppb	1.4	15079.03	1000	
208	Pb	209	No Gas	2967.807	ppb	1.9	21313835.16	2000	
232	Th	209	No Gas	32.014	ppb	3.2	220216.32	1000	
238	U	209	No Gas	5.777	ppb	4.8	38291.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9234721.16	1.8	9181465.1	100.58	29.5	120.4	
Sc	45	No Gas	16954804.21	0.9	16426983.07	103.21	29.5	120.4	
Sc	45	H2	1967580.33	0.9	1932518.05	101.81	29.5	120.4	
Sc	45	He	500196.01	3.2	478214.17	104.6	29.5	120.4	
Ge	72	No Gas	2760312.22	1.4	2769440.33	99.67	29.5	120.4	
Ge	72	H2	505501.96	1.0	546905.92	92.43	29.5	120.4	
Ge	72	He	275479.34	1.6	272551.69	101.07	29.5	120.4	
Y	89	H2	10434026.37	0.6	9834260.27	106.1	29.5	120.4	
Y	89	He	2329252.14	2.9	2139239.05	108.88	29.5	120.4	
Tb	159	No Gas	19078949.30	0.9	19495400.26	97.86	29.5	120.4	
Tb	159	He	7373808.64	3.3	7485871.83	98.5	29.5	120.4	
Bi	209	No Gas	8103387.17	1.0	8594079.3	94.29	29.5	120.4	

Sample Report

Sample Name SN5717-017

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 5:53:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.850	ppb	7.1	9536.82	100	
11	B	6	No Gas	50.160	ppb	4.5	55442.97	1000	
23	Na	45	He	350.913	ppb	0.6	102599.03	200000	
24	Mg	45	He	30038.808	ppb	1.1	2801388.68	200000	
27	Al	45	He	112569.165	ppb	0.9	3812599.56	200000	
28	Si	45	H2	2348.378	ppb	1.7	120228.51	10000	
39	K	45	He	11537.639	ppb	0.6	869030.42	200000	
40	Ca	45	H2	4354.645	ppb	0.7	2101261.13	200000	
51	V	89	He	180.290	ppb	0.7	213989.40	1000	
52	Cr	89	He	133.068	ppb	0.6	200661.89	2000	
55	Mn	89	He	3609.978	ppb	0.6	2326851.41	2000	
56	Fe	89	H2	199469.445	ppb	0.6	382167327.20	100000	
59	Co	89	He	86.859	ppb	0.7	213277.93	1000	
60	Ni	89	He	207.158	ppb	0.3	138892.88	1000	
63	Cu	89	He	239.631	ppb	0.4	436536.05	2000	
66	Zn	89	He	825.009	ppb	0.5	167247.41	2000	
75	As	89	He	82.464	ppb	1.3	11335.52	1000	
78	Se	89	H2	1.462	ppb	4.6	103.67	1000	
88	Sr	89	He	52.375	ppb	0.9	36575.29	2000	
95	Mo	89	He	14.406	ppb	0.9	11979.01	1000	
107	Ag	89	He	0.172	ppb	9.6	480.03	100	
111	Cd	89	He	1.583	ppb	2.9	486.68	1000	
118	Sn	159	He	46.355	ppb	1.2	26846.33	1000	
121	Sb	159	No Gas	0.860	ppb	6.9	3377.54	1000	
137	Ba	159	No Gas	450.270	ppb	4.6	657988.45	2000	
182	W	159	No Gas	0.243	ppb	9.2	717.50	1000	
205	Tl	209	No Gas	3.373	ppb	4.2	17164.08	1000	
208	Pb	209	No Gas	134.919	ppb	4.0	970634.40	2000	
232	Th	209	No Gas	45.023	ppb	5.0	310026.11	1000	
238	U	209	No Gas	5.251	ppb	5.4	34854.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9288878.13	3.3	9181465.1	101.17	29.5	120.4	
Sc	45	No Gas	17236960.52	2.6	16426983.07	104.93	29.5	120.4	
Sc	45	H2	1977005.86	0.1	1932518.05	102.3	29.5	120.4	
Sc	45	He	493956.17	1.1	478214.17	103.29	29.5	120.4	
Ge	72	No Gas	2805177.53	1.9	2769440.33	101.29	29.5	120.4	
Ge	72	H2	510304.23	0.5	546905.92	93.31	29.5	120.4	
Ge	72	He	272281.61	0.7	272551.69	99.9	29.5	120.4	
Y	89	H2	10692995.54	1.1	9834260.27	108.73	29.5	120.4	
Y	89	He	2320592.03	0.8	2139239.05	108.48	29.5	120.4	
Tb	159	No Gas	19124557.49	2.4	19495400.26	98.1	29.5	120.4	
Tb	159	He	7215396.98	0.6	7485871.83	96.39	29.5	120.4	
Bi	209	No Gas	8119573.87	2.6	8594079.3	94.48	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG31IMW1
File Name	062_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:56:28 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.003	ppb	6.7	31.11	0.1	
B	11	6	No Gas	0.899	ppb	4.6	5736.88	2	
Na	23	45	He	1.450	ppb	34.5	40010.30	100	
Mg	24	45	He	7.911	ppb	3.7	3687.41	10	
Al	27	45	He	6.824	ppb	10.4	1238.99	10	
Si	28	45	H2	10.085	ppb	7.9	3020.72	50	
K	39	45	He	4.913	ppb	23.6	23927.49	100	
Ca	40	45	H2	8.989	ppb	15.0	25866.72	10	
V	51	89	He	0.007	ppb	75.0	236.68	0.5	
Cr	52	89	He	0.023	ppb	36.4	830.54	0.5	
Mn	55	89	He	0.253	ppb	7.5	935.86	0.2	200.8 PB Fails DoD
Fe	56	89	H2	23.560	ppb	22.0	212008.98	10	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Co	59	89	He	0.008	ppb	31.3	124.45	0.1	
Ni	60	89	He	0.033	ppb	39.4	223.34	0.2	
Cu	63	89	He	0.041	ppb	13.0	850.06	0.3	
Zn	66	89	He	0.671	ppb	11.7	944.51	1	
As	75	89	He	0.002	ppb	523.2	14.00	0.5	
Se	78	89	H2	0.004	ppb	162.6	2.67	0.5	
Sr	88	89	He	0.029	ppb	12.9	115.56	0.5	
Mo	95	89	He	0.004	ppb	80.1	24.45	0.5	
Ag	107	89	He	0.001	ppb	153.6	53.33	0.1	
Cd	111	89	He	0.003	ppb	89.2	4.44	0.1	
Sn	118	159	He	0.005	ppb	303.0	360.02	0.5	
Sb	121	159	No Gas	-0.002	ppb	N/A	96.77	0.1	
Ba	137	159	No Gas	0.073	ppb	22.1	604.03	0.2	
W	182	159	No Gas	0.006	ppb	32.6	110.12	0.5	
Tl	205	209	No Gas	-0.001	ppb	N/A	150.17	0.1	
[Pb]	206	209	No Gas	0.069	ppb	9.9	747.52	0.1	
[Pb]	207	209	No Gas	0.082	ppb	12.1	714.15	0.1	
Pb	208	209	No Gas	0.074	ppb	5.9	3060.24	0.1	
Th	232	209	No Gas	0.020	ppb	26.6	924.40	0.5	
U	238	209	No Gas	0.002	ppb	61.0	73.41	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9186976.86	1.6	9181465.1	100.06	29.5	120.4	
Sc	45	No Gas	16763344.00	1.0	16426983.07	102.05	29.5	120.4	
Sc	45	H2	1916605.30	0.6	1932518.05	99.18	29.5	120.4	
Sc	45	He	483519.73	1.4	478214.17	101.11	29.5	120.4	
Ge	72	No Gas	2799572.89	1.7	2769440.33	101.09	29.5	120.4	
Ge	72	H2	533860.40	0.1	546905.92	97.61	29.5	120.4	
Ge	72	He	273624.66	0.7	272551.69	100.39	29.5	120.4	
Y	89	H2	9836474.46	0.6	9834260.27	100.02	29.5	120.4	
Y	89	He	2145021.81	1.6	2139239.05	100.27	29.5	120.4	
Tb	159	No Gas	19144474.99	1.3	19495400.26	98.2	29.5	120.4	
Tb	159	He	7307090.59	0.5	7485871.83	97.61	29.5	120.4	
Bi	209	No Gas	8363205.20	1.2	8594079.3	97.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG31IMW1
File Name	063_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 5:59:11 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	44.330	ppb	5.0	398073.21	50	88.66	79.5	120.4	
B	11	6	No Gas	422.276	ppb	4.9	2529663.97	500	84.46	79.5	120.4	> +/- 15% (EPA)
Na	23	45	He	7564.201	ppb	0.5	6546452.78	7500	100.86	79.5	120.4	
Mg	24	45	He	5002.378	ppb	0.5	2234985.33	5000	100.05	79.5	120.4	
Al	27	45	He	1836.673	ppb	0.6	298105.99	2000	91.83	79.5	120.4	
Si	28	45	H2	967.564	ppb	0.7	237937.18	1000	96.76	79.5	120.4	
K	39	45	He	10008.089	ppb	0.6	3538791.54	10000	100.08	79.5	120.4	
Ca	40	45	H2	2467.788	ppb	0.7	5724387.00	2500	98.71	79.5	120.4	
V	51	89	He	494.821	ppb	0.2	2678534.73	500	98.96	79.5	120.4	
Cr	52	89	He	195.831	ppb	0.3	1343803.72	200	97.92	79.5	120.4	
Mn	55	89	He	489.179	ppb	0.4	1439421.14	500	97.84	79.5	120.4	
Fe	56	89	H2	996.660	ppb	2.3	8615750.76	1000	99.67	79.5	120.4	
Co	59	89	He	500.642	ppb	0.0	5610633.81	500	100.13	79.5	120.4	
Ni	60	89	He	495.388	ppb	0.7	1514829.55	500	99.08	79.5	120.4	
Cu	63	89	He	240.944	ppb	0.6	2001610.77	250	96.38	79.5	120.4	
Zn	66	89	He	487.015	ppb	0.4	450071.79	500	97.4	79.5	120.4	
As	75	89	He	103.497	ppb	0.5	64880.54	100	103.5	79.5	120.4	
Se	78	89	H2	100.206	ppb	0.3	31538.62	100	100.21	79.5	120.4	
Sr	88	89	He	494.592	ppb	0.4	1575633.94	500	98.92	79.5	120.4	
Mo	95	89	He	101.796	ppb	0.6	386109.41	100	101.8	79.5	120.4	
Ag	107	89	He	50.102	ppb	1.0	588602.36	50	100.2	79.5	120.4	
Cd	111	89	He	252.334	ppb	0.4	353530.14	250	100.93	79.5	120.4	
Sn	118	159	He	497.639	ppb	0.4	1437533.09	500	99.53	79.5	120.4	
Sb	121	159	No Gas	102.230	ppb	2.6	1914647.44	100	102.23	79.5	120.4	
Ba	137	159	No Gas	1967.124	ppb	3.0	14259202.34	2000	98.36	79.5	120.4	
W	182	159	No Gas	95.448	ppb	3.4	1347973.36	100	95.45	79.5	120.4	
Tl	205	209	No Gas	104.262	ppb	2.8	2648531.20	100	104.26	79.5	120.4	
Pb	208	209	No Gas	100.461	ppb	3.5	3642834.41	100	100.46	79.5	120.4	
Th	232	209	No Gas	100.743	ppb	5.1	3495493.47	100	100.74	79.5	120.4	
U	238	209	No Gas	99.362	ppb	4.5	3324729.17	100	99.36	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	10229764.51	2.2	9181465.1	111.42	29.5	120.4	
Sc	45	No Gas	16682208.29	1.8	16426983.07	101.55	29.5	120.4	
Sc	45	H2	1903724.02	0.7	1932518.05	98.51	29.5	120.4	
Sc	45	He	473263.61	1.1	478214.17	98.96	29.5	120.4	
Ge	72	No Gas	2783540.01	2.2	2769440.33	100.51	29.5	120.4	
Ge	72	H2	520297.96	0.4	546905.92	95.13	29.5	120.4	
Ge	72	He	269873.64	0.7	272551.69	99.02	29.5	120.4	
Y	89	H2	9644983.71	0.6	9834260.27	98.08	29.5	120.4	
Y	89	He	2118600.39	0.4	2139239.05	99.04	29.5	120.4	
Tb	159	No Gas	18962329.99	0.4	19495400.26	97.27	29.5	120.4	
Tb	159	He	7289241.76	0.4	7485871.83	97.37	29.5	120.4	
Bi	209	No Gas	8183479.65	1.1	8594079.3	95.22	29.5	120.4	

Sample Report

Sample Name SN6347-001

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b

Acq Time 8/6/2020 6:01:49 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	16.0	402.24	100	
11	B	6	No Gas	8.372	ppb	7.2	44745.73	1000	
23	Na	45	He	1431.510	ppb	0.5	1285130.07	200000	
24	Mg	45	He	2206.889	ppb	0.6	998051.20	200000	
27	Al	45	He	17.849	ppb	43.5	3030.48	200000	
28	Si	45	H2	6422.215	ppb	0.7	1578187.08	10000	
39	K	45	He	886.626	ppb	0.5	337343.66	200000	
40	Ca	45	H2	9946.378	ppb	1.0	23084324.93	200000	
51	V	89	He	0.181	ppb	31.2	1184.54	1000	
52	Cr	89	He	0.156	ppb	20.1	1749.80	2000	
55	Mn	89	He	144.172	ppb	0.4	427995.57	2000	
56	Fe	89	H2	2856.919	ppb	1.1	24976640.55	100000	
59	Co	89	He	6.518	ppb	1.4	73706.83	1000	
60	Ni	89	He	5.911	ppb	2.5	18348.16	1000	
63	Cu	89	He	0.536	ppb	12.1	4988.87	2000	
66	Zn	89	He	2.346	ppb	5.6	2501.42	2000	
75	As	89	He	0.234	ppb	7.1	160.69	1000	
78	Se	89	H2	0.118	ppb	17.9	39.17	1000	
88	Sr	89	He	18.206	ppb	0.3	58519.75	2000	
95	Mo	89	He	0.274	ppb	3.4	1057.86	1000	
107	Ag	89	He	0.012	ppb	50.5	182.23	100	
111	Cd	89	He	0.279	ppb	16.0	394.46	1000	
118	Sn	159	He	0.755	ppb	12.1	2525.89	1000	
121	Sb	159	No Gas	0.117	ppb	5.9	2282.75	1000	
137	Ba	159	No Gas	4.277	ppb	5.3	30669.52	2000	
182	W	159	No Gas	0.388	ppb	4.2	5440.56	1000	
205	Tl	209	No Gas	0.093	ppb	14.0	2563.12	1000	
208	Pb	209	No Gas	0.264	ppb	4.1	9982.72	2000	
232	Th	209	No Gas	0.185	ppb	20.1	6682.75	1000	
238	U	209	No Gas	0.085	ppb	24.6	2863.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8946320.38	0.3	9181465.1	97.44	29.5	120.4	
Sc	45	No Gas	15953216.51	2.2	16426983.07	97.12	29.5	120.4	
Sc	45	H2	1905805.52	1.5	1932518.05	98.62	29.5	120.4	
Sc	45	He	479035.24	1.1	478214.17	100.17	29.5	120.4	
Ge	72	No Gas	2702243.19	1.8	2769440.33	97.57	29.5	120.4	
Ge	72	H2	528014.54	1.3	546905.92	96.55	29.5	120.4	
Ge	72	He	273426.91	0.4	272551.69	100.32	29.5	120.4	
Y	89	H2	9756724.19	0.7	9834260.27	99.21	29.5	120.4	
Y	89	He	2136846.77	1.0	2139239.05	99.89	29.5	120.4	
Tb	159	No Gas	18730675.00	2.0	19495400.26	96.08	29.5	120.4	
Tb	159	He	7287564.96	0.2	7485871.83	97.35	29.5	120.4	
Bi	209	No Gas	8246029.28	1.9	8594079.3	95.95	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 6:04:29 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.296	ppb	5.9	195463.81	25	97.18	89.8	110.2	
11	B	6	No Gas	25.010	ppb	4.6	135109.01	25	100.04	89.8	110.2	
23	Na	45	He	4926.220	ppb	0.7	4330437.79	5000	98.52	89.8	110.2	
24	Mg	45	He	4915.944	ppb	0.5	2224005.64	5000	98.32	89.8	110.2	
27	Al	45	He	485.945	ppb	0.8	79948.65	500	97.19	89.8	110.2	
28	Si	45	H2	484.966	ppb	1.4	120008.17	500	96.99	89.8	110.2	
39	K	45	He	4924.852	ppb	0.1	1774513.93	5000	98.5	89.8	110.2	
40	Ca	45	H2	4899.445	ppb	0.9	11406858.44	5000	97.99	89.8	110.2	
51	V	89	He	24.772	ppb	0.9	135282.10	25	99.09	89.8	110.2	
52	Cr	89	He	24.921	ppb	0.6	172867.84	25	99.68	89.8	110.2	
55	Mn	89	He	25.256	ppb	1.1	75039.02	25	101.02	89.8	110.2	
56	Fe	89	H2	4831.744	ppb	0.9	42153500.35	5000	96.63	89.8	110.2	
59	Co	89	He	24.922	ppb	0.9	281404.40	25	99.69	89.8	110.2	
60	Ni	89	He	24.897	ppb	1.3	76812.35	25	99.59	89.8	110.2	
63	Cu	89	He	25.258	ppb	0.8	211833.22	25	101.03	89.8	110.2	
66	Zn	89	He	25.191	ppb	1.4	23750.87	25	100.76	89.8	110.2	
75	As	89	He	24.999	ppb	1.4	15796.69	25	100	89.8	110.2	
78	Se	89	H2	24.522	ppb	0.9	7792.99	25	98.09	89.8	110.2	
88	Sr	89	He	24.731	ppb	0.4	79396.23	25	98.92	89.8	110.2	
95	Mo	89	He	24.800	ppb	1.1	94768.91	25	99.2	89.8	110.2	
107	Ag	89	He	24.951	ppb	0.9	295325.43	25	99.8	89.8	110.2	
111	Cd	89	He	24.513	ppb	0.8	34599.70	25	98.05	89.8	110.2	
118	Sn	159	He	25.182	ppb	0.9	73200.53	25	100.73	89.8	110.2	
121	Sb	159	No Gas	24.850	ppb	3.8	473918.89	25	99.4	89.8	110.2	
137	Ba	159	No Gas	24.742	ppb	4.8	182634.86	25	98.97	89.8	110.2	
182	W	159	No Gas	23.949	ppb	3.9	344358.78	25	95.8	89.8	110.2	
205	Tl	209	No Gas	25.135	ppb	5.6	652218.19	25	100.54	89.8	110.2	
208	Pb	209	No Gas	24.484	ppb	4.3	907260.30	25	97.94	89.8	110.2	
232	Th	209	No Gas	24.570	ppb	4.9	871120.67	25	98.28	89.8	110.2	
238	U	209	No Gas	24.644	ppb	5.8	842233.68	25	98.58	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9169188.24	3.0	9181465.1	99.87	29.5	120.4	
Sc	45	No Gas	16678693.94	2.0	16426983.07	101.53	29.5	120.4	
Sc	45	H2	1911500.71	0.7	1932518.05	98.91	29.5	120.4	
Sc	45	He	479213.23	0.6	478214.17	100.21	29.5	120.4	
Ge	72	No Gas	2787104.40	2.0	2769440.33	100.64	29.5	120.4	
Ge	72	H2	530448.78	0.8	546905.92	96.99	29.5	120.4	
Ge	72	He	272908.82	0.9	272551.69	100.13	29.5	120.4	
Y	89	H2	9737132.83	0.2	9834260.27	99.01	29.5	120.4	
Y	89	He	2134412.64	0.9	2139239.05	99.77	29.5	120.4	
Tb	159	No Gas	19313345.96	2.0	19495400.26	99.07	29.5	120.4	
Tb	159	He	7302180.38	0.3	7485871.83	97.55	29.5	120.4	
Bi	209	No Gas	8364909.93	2.9	8594079.3	97.33	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH06A.b
Acq Time	8/6/2020 6:07:06 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.036	ppb	46.7	295.57	0.2	
11	B	6	No Gas	0.978	ppb	1.7	6200.44	4	
23	Na	45	He	-6.481	ppb	N/A	32944.27	200	
24	Mg	45	He	1.014	ppb	10.6	537.83	20	
27	Al	45	He	0.982	ppb	83.6	270.09	20	
28	Si	45	H2	1.629	ppb	34.8	934.40	100	
39	K	45	He	4.404	ppb	28.5	23680.54	200	
40	Ca	45	H2	5.020	ppb	21.1	16649.69	20	
51	V	89	He	0.008	ppb	20.2	246.68	1	
52	Cr	89	He	0.009	ppb	97.7	735.89	1	
55	Mn	89	He	0.025	ppb	29.9	257.95	0.4	
56	Fe	89	H2	4.085	ppb	18.5	40148.66	20	
59	Co	89	He	0.011	ppb	46.5	160.02	0.2	
60	Ni	89	He	-0.004	ppb	N/A	108.89	0.4	
63	Cu	89	He	0.009	ppb	11.8	583.37	0.6	
66	Zn	89	He	0.023	ppb	180.9	338.91	2	
75	As	89	He	0.009	ppb	70.0	18.67	1	
78	Se	89	H2	0.041	ppb	28.2	14.50	1	
88	Sr	89	He	0.008	ppb	50.8	46.67	1	
95	Mo	89	He	0.044	ppb	23.7	175.57	1	
107	Ag	89	He	0.005	ppb	10.6	96.67	0.2	
111	Cd	89	He	0.007	ppb	11.6	11.11	0.2	
118	Sn	159	He	0.129	ppb	21.1	722.28	1	
121	Sb	159	No Gas	0.039	ppb	47.6	874.34	0.2	
137	Ba	159	No Gas	0.056	ppb	56.8	487.22	0.4	
182	W	159	No Gas	0.077	ppb	9.8	1131.32	1	
205	Tl	209	No Gas	0.036	ppb	39.7	1134.65	0.2	
208	Pb	209	No Gas	0.040	ppb	24.9	1812.09	0.2	
232	Th	209	No Gas	0.103	ppb	24.2	3911.74	1	
238	U	209	No Gas	0.042	ppb	51.3	1468.43	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9243073.16	3.2	9181465.1	100.67	29.5	120.4	
Sc	45	No Gas	16734967.50	1.9	16426983.07	101.87	29.5	120.4	
Sc	45	H2	1924472.65	1.5	1932518.05	99.58	29.5	120.4	
Sc	45	He	482200.84	0.4	478214.17	100.83	29.5	120.4	
Ge	72	No Gas	2812061.10	2.8	2769440.33	101.54	29.5	120.4	
Ge	72	H2	534957.06	0.6	546905.92	97.82	29.5	120.4	
Ge	72	He	274342.33	0.7	272551.69	100.66	29.5	120.4	
Y	89	H2	9795982.30	0.9	9834260.27	99.61	29.5	120.4	
Y	89	He	2149454.86	0.9	2139239.05	100.48	29.5	120.4	
Tb	159	No Gas	19266206.94	1.9	19495400.26	98.82	29.5	120.4	
Tb	159	He	7344077.94	0.6	7485871.83	98.11	29.5	120.4	
Bi	209	No Gas	8411702.76	3.6	8594079.3	97.88	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: KC **ANALYSIS DATE**: 8/13/2020

REVIEWED
mc 8/19/20
KATAHDIN ANALYTICAL
METALS SECTION

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH12B

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19544	08/11/20	10/08/20	Varies by Element
ICV	MW19535	08/05/20	10/15/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19538	08/06/20	10/01/20	Varies by Element
LRS2	MW19548	08/11/20	09/21/20	Varies by Element
ICSA	MW19552	08/11/20	08/18/20	Varies by Element
ICSAB	MW19546	08/11/20	08/18/20	Varies by Element
CCV	MW19539	08/06/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19531	08/04/20	11/04/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (15:21) fails low for B and high for Ni (0.728 ug/L). Closing PQL (21:57) fails high for B and Na (249.363 ug/L) and low for Mn (0.242 ug/L) Ni (-4.568 ug/L) Cu (-0.124 ug/L)

ICSA (15:24) fails high for Mn (0.704 ug/L) and low for Ni (-2.718 ug/L). ICSAB (15:27) fails low for Ni (15.875 ug/L).

LRS1 (15:30) fails low for Ag. LRS2 (15:32) fails high for Ca.

CCV (17:18, 17:49, 18:20, 18:52, 19:23, 19:55, 20:26, 20:57, 21:29, 21:52) fails low for Ni (22.311 ug/L, 21.782 ug/L, 21.733 ug/L, 20.606 ug/L, 20.869 ug/L, 19.901 ug/L, 19.415 ug/L, 19.571 ug/L, 19.936ug/L, 20.478 ug/L). CCV (19:23 & 19:55) fails high for B.

CCB (all) fail low for Ni (lowest value -5.118 ug/L and the highest -1.964 ug/L). CCB (17:20, 18:23, 18:55, 19:26, 19:58, 20:29, 21:00, 21:31, 21:55) fails low for Cu (-0.408 ug/L, -0.574 ug/L, -0.596 ug/L, -0.638 ug/L, -0.650 ug/L, -0.683 ug/L, -0.711 ug/L, -0.722 ug/L, -0.727 ug/L). CCB (18:55, 19:26, 19:58, 20:29) fails high for B. CCB (21:31) fails high for Na (108.04 ug/L).

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH12B	08/12/2020	15:10	KC
CalStd	1	LNH12B	08/12/2020	15:13	KC
ICV	1	LNH12B	08/12/2020	15:16	KC
ICB	1	LNH12B	08/12/2020	15:19	KC
PQL	1	LNH12B	08/12/2020	15:21	KC
ICSA	1	LNH12B	08/12/2020	15:24	KC
ICSAB	1	LNH12B	08/12/2020	15:27	KC
LRS1	1	LNH12B	08/12/2020	15:30	KC
LRS2	1	LNH12B	08/12/2020	15:32	KC
RINSE	1	LNH12B	08/12/2020	15:35	KC
RINSE	1	LNH12B	08/12/2020	15:37	KC
CCV	1	LNH12B	08/12/2020	15:40	KC
CCB	1	LNH12B	08/12/2020	15:43	KC
PBSNH05IMS1	5	LNH12B	08/12/2020	15:46	KC
LCSONH05IMS1	5	LNH12B	08/12/2020	15:48	KC
SN6100-001	5	LNH12B	08/12/2020	15:51	KC
SN6100-002	10	LNH12B	08/12/2020	15:54	KC
RINSE	1	LNH12B	08/12/2020	15:56	KC
SN6100-003	10	LNH12B	08/12/2020	15:59	KC
RINSE	1	LNH12B	08/12/2020	16:01	KC
SN6100-004	5	LNH12B	08/12/2020	16:04	KC
SN6100-004A	5	LNH12B	08/12/2020	16:06	KC
SN6100-004L	25	LNH12B	08/12/2020	16:09	KC
CCV	1	LNH12B	08/12/2020	16:12	KC
CCB	1	LNH12B	08/12/2020	16:14	KC
SN6100-004P	5	LNH12B	08/12/2020	16:17	KC
SN6100-004S	5	LNH12B	08/12/2020	16:19	KC
SN6100-005	5	LNH12B	08/12/2020	16:22	KC
SN6100-006	5	LNH12B	08/12/2020	16:25	KC
SN6100-007	5	LNH12B	08/12/2020	16:27	KC
SN6100-008	5	LNH12B	08/12/2020	16:34	KC
RINSE	1	LNH12B	08/12/2020	16:36	KC
RINSE	1	LNH12B	08/12/2020	16:39	KC
RINSE	1	LNH12B	08/12/2020	16:41	KC
RINSE	1	LNH12B	08/12/2020	16:44	KC
CCV	1	LNH12B	08/12/2020	16:47	KC
CCB	1	LNH12B	08/12/2020	16:49	KC
SN6100-009	5	LNH12B	08/12/2020	16:52	KC
PBWNH04IMW1	5	LNH12B	08/12/2020	16:54	KC
LCSWNH04IMW1	5	LNH12B	08/12/2020	16:57	KC
SN6316-008	10	LNH12B	08/12/2020	17:00	KC
SN6316-009	10	LNH12B	08/12/2020	17:02	KC
SN6316-008	20	LNH12B	08/12/2020	17:05	KC
SN6316-009	20	LNH12B	08/12/2020	17:07	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNH06IMW2	5	LNH12B	08/12/2020	17:10	KC
LCSWNH06IMW2	5	LNH12B	08/12/2020	17:13	KC
SN5589-006R	5	LNH12B	08/12/2020	17:15	KC
CCV	1	LNH12B	08/12/2020	17:18	KC
CCB	1	LNH12B	08/12/2020	17:20	KC
PBWNG14IMW2	5	LNH12B	08/12/2020	17:23	KC
LCSWNG14IMW2	5	LNH12B	08/12/2020	17:26	KC
SN5646-004R	5	LNH12B	08/12/2020	17:28	KC
SN5646-005R	5	LNH12B	08/12/2020	17:31	KC
SN5646-005RA	5	LNH12B	08/12/2020	17:33	KC
SN5646-005RL	25	LNH12B	08/12/2020	17:36	KC
SN5646-005RP	5	LNH12B	08/12/2020	17:38	KC
SN5646-005RS	5	LNH12B	08/12/2020	17:41	KC
PBSNH04IMS1	5	LNH12B	08/12/2020	17:44	KC
LCSONH04IMS1	5	LNH12B	08/12/2020	17:46	KC
CCV	1	LNH12B	08/12/2020	17:49	KC
CCB	1	LNH12B	08/12/2020	17:51	KC
SN5717-004	5	LNH12B	08/12/2020	17:54	KC
SN5717-010	5	LNH12B	08/12/2020	17:57	KC
SN5717-010A	5	LNH12B	08/12/2020	17:59	KC
SN5717-010L	25	LNH12B	08/12/2020	18:02	KC
SN5717-010P	5	LNH12B	08/12/2020	18:04	KC
SN5717-010S	5	LNH12B	08/12/2020	18:07	KC
SN5717-013	5	LNH12B	08/12/2020	18:10	KC
SN5717-017	5	LNH12B	08/12/2020	18:12	KC
PBWNG30IMW2	5	LNH12B	08/12/2020	18:15	KC
LCSWNG30IMW2	5	LNH12B	08/12/2020	18:18	KC
CCV	1	LNH12B	08/12/2020	18:20	KC
CCB	1	LNH12B	08/12/2020	18:23	KC
SN6224-001	10	LNH12B	08/12/2020	18:25	KC
SN6224-002	10	LNH12B	08/12/2020	18:28	KC
RINSE	1	LNH12B	08/12/2020	18:31	KC
SN6224-003	10	LNH12B	08/12/2020	18:33	KC
SN6224-004	10	LNH12B	08/12/2020	18:36	KC
SN6224-004A	10	LNH12B	08/12/2020	18:39	KC
SN6224-004L	50	LNH12B	08/12/2020	18:41	KC
SN6224-004P	10	LNH12B	08/12/2020	18:44	KC
SN6224-004S	10	LNH12B	08/12/2020	18:47	KC
SN6224-005	10	LNH12B	08/12/2020	18:49	KC
CCV	1	LNH12B	08/12/2020	18:52	KC
CCB	1	LNH12B	08/12/2020	18:55	KC
SN6224-006	10	LNH12B	08/12/2020	18:57	KC
RINSE	1	LNH12B	08/12/2020	19:00	KC
SN6224-001	20	LNH12B	08/12/2020	19:02	KC
SN6224-002	20	LNH12B	08/12/2020	19:05	KC
RINSE	1	LNH12B	08/12/2020	19:08	KC
SN6224-003	20	LNH12B	08/12/2020	19:10	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6224-004	20	LNH12B	08/12/2020	19:13	KC
SN6224-004P	20	LNH12B	08/12/2020	19:16	KC
SN6224-004S	20	LNH12B	08/12/2020	19:18	KC
SN6224-005	20	LNH12B	08/12/2020	19:21	KC
CCV	1	LNH12B	08/12/2020	19:23	KC
CCB	1	LNH12B	08/12/2020	19:26	KC
SN6224-006	20	LNH12B	08/12/2020	19:29	KC
RINSE	1	LNH12B	08/12/2020	19:31	KC
SN6224-001	25	LNH12B	08/12/2020	19:34	KC
SN6224-002	25	LNH12B	08/12/2020	19:37	KC
RINSE	1	LNH12B	08/12/2020	19:39	KC
SN6224-003	25	LNH12B	08/12/2020	19:42	KC
SN6224-004	25	LNH12B	08/12/2020	19:44	KC
SN6224-004A	25	LNH12B	08/12/2020	19:47	KC
SN6224-004L	125	LNH12B	08/12/2020	19:50	KC
SN6224-004P	25	LNH12B	08/12/2020	19:52	KC
CCV	1	LNH12B	08/12/2020	19:55	KC
CCB	1	LNH12B	08/12/2020	19:58	KC
SN6224-004S	25	LNH12B	08/12/2020	20:00	KC
SN6224-005	25	LNH12B	08/12/2020	20:03	KC
SN6224-006	25	LNH12B	08/12/2020	20:05	KC
RINSE	1	LNH12B	08/12/2020	20:08	KC
SN6224-002	50	LNH12B	08/12/2020	20:11	KC
RINSE	1	LNH12B	08/12/2020	20:13	KC
PBWNG31IMW2	5	LNH12B	08/12/2020	20:16	KC
LCSWNG31IMW2	5	LNH12B	08/12/2020	20:18	KC
SN6316-001	20	LNH12B	08/12/2020	20:21	KC
RINSE	1	LNH12B	08/12/2020	20:24	KC
CCV	1	LNH12B	08/12/2020	20:26	KC
CCB	1	LNH12B	08/12/2020	20:29	KC
SN6316-002	20	LNH12B	08/12/2020	20:31	KC
SN6316-003	20	LNH12B	08/12/2020	20:34	KC
SN6316-004	20	LNH12B	08/12/2020	20:37	KC
SN6316-005	20	LNH12B	08/12/2020	20:39	KC
SN6316-006	20	LNH12B	08/12/2020	20:42	KC
SN6316-007	20	LNH12B	08/12/2020	20:44	KC
SN6316-001	25	LNH12B	08/12/2020	20:47	KC
SN6100-004P	5	LNH12B	08/12/2020	20:50	KC
SN6100-004S	5	LNH12B	08/12/2020	20:52	KC
SN6100-005	5	LNH12B	08/12/2020	20:55	KC
CCV	1	LNH12B	08/12/2020	20:57	KC
CCB	1	LNH12B	08/12/2020	21:00	KC
SN6100-006	5	LNH12B	08/12/2020	21:03	KC
SN6100-007	5	LNH12B	08/12/2020	21:05	KC
SN6100-008	5	LNH12B	08/12/2020	21:08	KC
PBWNH06IMW1	5	LNH12B	08/12/2020	21:10	KC
LCSWNH06IMW1	5	LNH12B	08/12/2020	21:13	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-002X	10	LNH12B	08/12/2020	21:16	KC
RINSE	1	LNH12B	08/12/2020	21:18	KC
SN6492-001	20	LNH12B	08/12/2020	21:21	KC
RINSE	1	LNH12B	08/12/2020	21:24	KC
SN6517-001	1	LNH12B	08/12/2020	21:26	KC
CCV	1	LNH12B	08/12/2020	21:29	KC
CCB	1	LNH12B	08/12/2020	21:31	KC
SN6517-003	1	LNH12B	08/12/2020	21:34	KC
SN6528-001	125	LNH12B	08/12/2020	21:37	KC
RINSE	1	LNH12B	08/12/2020	21:39	KC
SN6528-001	150	LNH12B	08/12/2020	21:42	KC
RINSE	1	LNH12B	08/12/2020	21:44	KC
RINSE	1	LNH12B	08/12/2020	21:47	KC
RINSE	1	LNH12B	08/12/2020	21:49	KC
CCV	1	LNH12B	08/12/2020	21:52	KC
CCB	1	LNH12B	08/12/2020	21:55	KC
PQL	1	LNH12B	08/12/2020	21:57	KC
RINSE	1	LNH12B	08/12/2020	22:00	KC
RINSE	1	LNH12B	08/12/2020	22:02	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12A.b
Acq. Date-Time	8/12/2020 11:37:12 AM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

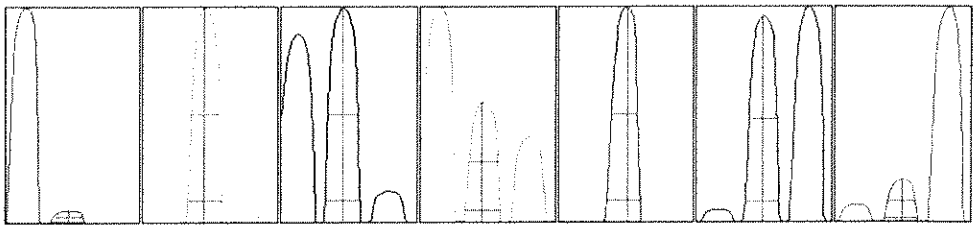
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	14959	149593.44	0.353	5.000	
9	5856	58558.19	0.484	5.000	
24	245528	2455279.02	0.347	5.000	
59	42386	423857.63	0.313	5.000	
115	464675	4646745.74	0.511	5.000	
205	24553	245533.79	0.237	5.000	
208	53704	537040.47	0.453	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	14944	15038	14978	14896	14941
9	5807	5876	5876	5864	5856
24	244556	244726	246178	246454	245725
59	42222	42293	42457	42559	42398
115	461804	462563	465510	466208	467287
205	24493	24519	24631	24597	24527
208	53344	53635	53969	53689	53883

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	24409.80	6.95	6.90 - 7.10	
9	9687.37	8.90	8.90 - 9.10	
24	388709.68	23.90	23.90 - 24.10	
59	69092.94	58.90	58.90 - 59.10	
115	821776.64	115.05	114.90 - 115.10	
205	41247.53	205.00	204.90 - 205.10	
208	90542.01	208.00	207.90 - 208.10	

Katahdin Analytical Services 4000771

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.731	0.900	
9	0.64	0.758	0.900	
24	0.66	0.772	0.900	
59	0.64	0.768	0.900	
115	0.58	0.744	0.900	
205	0.62	0.738	0.900	
208	0.61	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	12.4 V
Extract 2	-170.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2786	27863.98	0.883	5.000	
89	300361	3003613.77	1.518	5.000	
205	25914	259141.39	0.737	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2752	2783	2785	2791	2821
89	292915	299796	301760	302337	304999
205	25678	25770	25987	26159	25977

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	1.6 V
Extract 2	-170.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	8843	88431.54	1.108	5.000	
89	61573	615729.11	1.308	5.000	
205	11470	114704.02	0.805	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8689	8825	8847	8920	8935
89	60208	61539	61823	62087	62207
205	11319	11463	11518	11562	11490

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.5 V	Deflect	1.2 V
Extract 2	-170.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2444 V	Pulse HV	1194 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:10:20 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	20.00	72.7
11	B	6	No Gas	1343.44	4.3
23	Na	45	He	39862.65	1.4
24	Mg	45	He	388.93	11.4
27	Al	45	He	104.45	22.6
28	Si	45	H2	350.39	11.4
39	K	45	He	16003.49	0.3
40	Ca	45	H2	3038.21	2.4
51	V	89	He	92.23	16.3
52	Cr	89	He	265.96	2.0
55	Mn	89	He	565.91	5.9
56	Fe	89	H2	10632.55	3.4
59	Co	89	He	66.67	26.5
60	Ni	89	He	18136.76	1.2
63	Cu	89	He	5901.47	0.8
66	Zn	89	He	251.12	8.5
75	As	89	He	15.67	45.3
78	Se	89	H2	1.33	78.1
88	Sr	89	He	11.11	75.5
95	Mo	89	He	257.79	10.5
107	Ag	89	He	26.67	25.0
111	Cd	89	He	1.48	43.3
118	Sn	159	He	260.01	14.3
121	Sb	159	No Gas	360.41	5.6
137	Ba	159	No Gas	86.76	17.6
182	W	159	No Gas	146.83	30.7
205	Tl	209	No Gas	327.04	16.9
208	Pb	209	No Gas	240.27	0.0
232	Th	209	No Gas	256.95	19.2
238	U	209	No Gas	26.70	21.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	4785442.25	1.4
Sc	45	No Gas	11869896.98	0.7
Sc	45	H2	1440463.34	0.2
Sc	45	He	342270.52	0.7
Ge	72	No Gas	2254278.57	1.0
Ge	72	H2	432978.24	0.1
Ge	72	He	219029.81	0.5
Y	89	H2	7788630.76	0.3
Y	89	He	1720337.72	0.9
Tb	159	No Gas	19085444.99	0.7
Tb	159	He	6890196.91	1.0
Bi	209	No Gas	8525371.63	1.3

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:13:42 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	214172.68	3.4
11	B	6	No Gas	143958.57	3.9
23	Na	45	He	5949366.08	0.8
24	Mg	45	He	3120482.11	1.4
27	Al	45	He	112001.84	1.7
28	Si	45	H2	165526.38	0.3
39	K	45	He	2424902.88	0.4
40	Ca	45	H2	16803220.72	1.1
51	V	89	He	206309.86	0.3
52	Cr	89	He	264961.89	0.5
55	Mn	89	He	115766.87	1.3
56	Fe	89	H2	67141632.60	0.8
59	Co	89	He	443880.48	0.5
60	Ni	89	He	136685.47	1.0
63	Cu	89	He	336481.77	1.2
66	Zn	89	He	38217.93	0.8
75	As	89	He	25611.30	0.2
78	Se	89	H2	12612.30	0.9
88	Sr	89	He	129912.15	0.6
95	Mo	89	He	164834.96	1.3
107	Ag	89	He	538000.50	0.3
111	Cd	89	He	62963.98	1.1
118	Sn	159	He	129631.00	1.1
121	Sb	159	No Gas	923734.63	3.4
137	Ba	159	No Gas	350630.41	4.0
182	W	159	No Gas	710351.49	3.9
205	Tl	209	No Gas	1329451.30	4.3
208	Pb	209	No Gas	1892128.55	3.0
232	Th	209	No Gas	1789860.75	4.1
238	U	209	No Gas	1727990.98	4.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4774038.24	0.8	4785442.25	99.76	29.5	120.4	
Sc	45	No Gas	11901286.07	0.3	11869896.98	100.26	29.5	120.4	
Sc	45	H2	1436643.88	1.5	1440463.34	99.73	29.5	120.4	
Sc	45	He	336425.72	2.9	342270.52	98.29	29.5	120.4	
Ge	72	No Gas	2239941.53	1.2	2254278.57	99.36	29.5	120.4	
Ge	72	H2	426029.13	1.3	432978.24	98.4	29.5	120.4	
Ge	72	He	217465.17	2.6	219029.81	99.29	29.5	120.4	
Y	89	H2	7754307.68	1.1	7788630.76	99.56	29.5	120.4	
Y	89	He	1706504.40	3.4	1720337.72	99.2	29.5	120.4	
Tb	159	No Gas	19243640.41	0.6	19085444.99	100.83	29.5	120.4	
Tb	159	He	6775352.05	3.7	6890196.91	98.33	29.5	120.4	
Bi	209	No Gas	8427850.99	0.6	8525371.63	98.86	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:16:45 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	18.954	ppb	10.3	83295.45	20	94.77	89.6	110.4	
11	B	6	No Gas	20.214	ppb	8.0	60553.00	20	101.07	89.6	110.4	
23	Na	45	He	3945.317	ppb	0.5	2430933.22	4000	98.63	89.6	110.4	
24	Mg	45	He	3982.143	ppb	0.2	1274340.68	4000	99.55	89.6	110.4	
27	Al	45	He	378.320	ppb	1.8	43507.42	400	94.58	89.6	110.4	
28	Si	45	H2	423.984	ppb	0.4	70858.14	400	106	89.6	110.4	
39	K	45	He	3913.959	ppb	1.1	982849.54	4000	97.85	89.6	110.4	
40	Ca	45	H2	4019.704	ppb	0.6	6800768.37	4000	100.49	89.6	110.4	
51	V	89	He	19.486	ppb	0.5	82292.44	20	97.43	89.6	110.4	
52	Cr	89	He	19.571	ppb	0.4	106239.23	20	97.86	89.6	110.4	
55	Mn	89	He	19.578	ppb	1.0	46714.66	20	97.89	89.6	110.4	
56	Fe	89	H2	3976.057	ppb	0.7	26880152.95	4000	99.4	89.6	110.4	
59	Co	89	He	19.521	ppb	0.9	177293.87	20	97.6	89.6	110.4	
60	Ni	89	He	20.034	ppb	0.9	67043.45	20	100.17	89.6	110.4	
63	Cu	89	He	19.854	ppb	0.3	140281.93	20	99.27	89.6	110.4	
66	Zn	89	He	19.534	ppb	0.6	15423.48	20	97.67	89.6	110.4	
75	As	89	He	19.471	ppb	1.6	10210.19	20	97.36	89.6	110.4	
78	Se	89	H2	19.806	ppb	0.8	5030.02	20	99.03	89.6	110.4	
88	Sr	89	He	19.136	ppb	1.1	50861.78	20	95.68	89.6	110.4	
95	Mo	89	He	39.413	ppb	0.4	132953.58	40	98.53	89.6	110.4	
107	Ag	89	He	19.659	ppb	0.8	216376.33	20	98.3	89.6	110.4	
111	Cd	89	He	19.996	ppb	0.7	25751.59	20	99.98	89.6	110.4	
118	Sn	159	He	19.191	ppb	0.8	51162.42	20	95.95	89.6	110.4	
121	Sb	159	No Gas	19.077	ppb	9.0	359302.44	20	95.38	89.6	110.4	
137	Ba	159	No Gas	19.364	ppb	9.2	138402.94	20	96.82	89.6	110.4	
182	W	159	No Gas	19.874	ppb	8.5	287807.26	20	99.37	89.6	110.4	
205	Tl	209	No Gas	20.211	ppb	9.5	555949.63	20	101.05	89.6	110.4	
208	Pb	209	No Gas	19.315	ppb	9.3	756000.93	20	96.58	89.6	110.4	
232	Th	209	No Gas	19.591	ppb	9.1	725485.05	20	97.96	89.6	110.4	
238	U	209	No Gas	19.306	ppb	10.3	689899.22	20	96.53	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4908265.60	3.6	4785442.25	102.57	29.5	120.4	
Sc	45	No Gas	12221928.48	4.3	11869896.98	102.97	29.5	120.4	
Sc	45	H2	1446113.00	1.0	1440463.34	100.39	29.5	120.4	
Sc	45	He	344713.78	0.7	342270.52	100.71	29.5	120.4	
Ge	72	No Gas	2312325.35	3.4	2254278.57	102.57	29.5	120.4	
Ge	72	H2	429802.83	0.2	432978.24	99.27	29.5	120.4	
Ge	72	He	221367.26	0.6	219029.81	101.07	29.5	120.4	
Y	89	H2	7805882.90	0.5	7788630.76	100.22	29.5	120.4	
Y	89	He	1743974.52	0.3	1720337.72	101.37	29.5	120.4	
Tb	159	No Gas	19635629.29	2.6	19085444.99	102.88	29.5	120.4	
Tb	159	He	6936931.84	0.4	6890196.91	100.68	29.5	120.4	
Bi	209	No Gas	8733246.79	3.6	8525371.63	102.44	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:19:23 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.017	ppb	47.5	93.34	0.2	
11	B	6	No Gas	0.543	ppb	4.7	2960.41	4	
23	Na	45	He	1.096	ppb	85.0	40354.94	200	
24	Mg	45	He	0.307	ppb	28.4	484.49	20	
27	Al	45	He	-0.193	ppb	N/A	82.23	20	
28	Si	45	H2	0.380	ppb	18.9	410.46	100	
39	K	45	He	2.333	ppb	55.6	16508.78	200	
40	Ca	45	H2	0.990	ppb	4.3	4674.27	20	
51	V	89	He	-0.001	ppb	N/A	87.78	1	
52	Cr	89	He	0.006	ppb	39.9	298.62	1	
55	Mn	89	He	-0.037	ppb	N/A	482.59	0.4	
56	Fe	89	H2	1.208	ppb	2.3	18666.78	20	
59	Co	89	He	0.005	ppb	66.2	108.90	0.2	
60	Ni	89	He	0.160	ppb	92.5	18664.11	0.4	
63	Cu	89	He	-0.052	ppb	N/A	5595.77	0.6	
66	Zn	89	He	0.061	ppb	62.0	300.01	2	
75	As	89	He	0.025	ppb	4.9	28.67	1	
78	Se	89	H2	0.042	ppb	13.1	12.00	1	
88	Sr	89	He	0.005	ppb	38.4	24.44	1	
95	Mo	89	He	0.100	ppb	36.9	593.37	1	
107	Ag	89	He	0.009	ppb	19.1	130.01	0.2	
111	Cd	89	He	0.003	ppb	38.8	5.93	0.2	
118	Sn	159	He	0.053	ppb	9.9	401.13	1	
121	Sb	159	No Gas	0.012	ppb	20.7	590.68	0.2	
137	Ba	159	No Gas	0.014	ppb	14.6	186.87	0.4	
182	W	159	No Gas	0.072	ppb	11.0	1171.36	1	
205	Tl	209	No Gas	0.036	ppb	23.8	1334.90	0.2	
208	Pb	209	No Gas	0.016	ppb	30.6	881.01	0.2	
232	Th	209	No Gas	0.053	ppb	9.2	2226.04	1	
238	U	209	No Gas	0.015	ppb	45.7	573.99	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4892504.41	2.8	4785442.25	102.24	29.5	120.4	
Sc	45	No Gas	12076377.31	2.5	11869896.98	101.74	29.5	120.4	
Sc	45	H2	1430476.32	0.6	1440463.34	99.31	29.5	120.4	
Sc	45	He	340865.57	0.3	342270.52	99.59	29.5	120.4	
Ge	72	No Gas	2295643.64	2.1	2254278.57	101.83	29.5	120.4	
Ge	72	H2	424658.75	1.5	432978.24	98.08	29.5	120.4	
Ge	72	He	220548.06	0.1	219029.81	100.69	29.5	120.4	
Y	89	H2	7741545.80	0.6	7788630.76	99.4	29.5	120.4	
Y	89	He	1733625.48	0.3	1720337.72	100.77	29.5	120.4	
Tb	159	No Gas	19404067.49	3.4	19085444.99	101.67	29.5	120.4	
Tb	159	He	6902193.37	0.1	6890196.91	100.17	29.5	120.4	
Bi	209	No Gas	8687038.81	3.2	8525371.63	101.9	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:21:54 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.211	ppb	13.7	963.40	0.2	105.5	79.5	120.4
11	B	6	No Gas	0.255	ppb	5.8	2159.13	4	6.38	79.5	120.4
23	Na	45	He	214.532	ppb	3.5	163133.17	200	107.27	79.5	120.4
24	Mg	45	He	21.658	ppb	4.0	7017.77	20	108.29	79.5	120.4
27	Al	45	He	20.029	ppb	1.3	2304.71	20	100.14	79.5	120.4
28	Si	45	H2	100.377	ppb	6.3	17045.88	100	100.38	79.5	120.4
39	K	45	He	210.436	ppb	1.6	65302.28	200	105.22	79.5	120.4
40	Ca	45	H2	20.253	ppb	1.6	37302.31	20	101.26	79.5	120.4
51	V	89	He	1.014	ppb	2.6	4228.58	1	101.4	79.5	120.4
52	Cr	89	He	1.014	ppb	4.5	5572.12	1	101.4	79.5	120.4
55	Mn	89	He	0.390	ppb	9.5	1442.49	0.4	97.5	79.5	120.4
56	Fe	89	H2	21.012	ppb	2.5	154093.17	20	105.06	79.5	120.4
59	Co	89	He	0.214	ppb	6.6	1946.94	0.2	107	79.5	120.4
60	Ni	89	He	0.728	ppb	30.5	19500.80	0.4	182	79.5	120.4
63	Cu	89	He	0.614	ppb	7.9	9807.12	0.6	102.33	79.5	120.4
66	Zn	89	He	2.057	ppb	3.5	1793.51	2	102.85	79.5	120.4
75	As	89	He	1.053	ppb	11.0	547.74	1	105.3	79.5	120.4
78	Se	89	H2	0.974	ppb	3.3	250.99	1	97.4	79.5	120.4
88	Sr	89	He	0.982	ppb	4.7	2534.76	1	98.2	79.5	120.4
95	Mo	89	He	0.986	ppb	4.9	3462.80	1	98.6	79.5	120.4
107	Ag	89	He	0.213	ppb	4.4	2289.17	0.2	106.5	79.5	120.4
111	Cd	89	He	0.216	ppb	8.4	270.38	0.2	108	79.5	120.4
118	Sn	159	He	0.976	ppb	6.7	2780.39	1	97.6	79.5	120.4
121	Sb	159	No Gas	0.207	ppb	10.2	4225.40	0.2	103.5	79.5	120.4
137	Ba	159	No Gas	0.377	ppb	10.7	2750.02	0.4	94.25	79.5	120.4
182	W	159	No Gas	0.984	ppb	5.2	14247.22	1	98.4	79.5	120.4
205	Tl	209	No Gas	0.224	ppb	3.9	6509.03	0.2	112	79.5	120.4
208	Pb	209	No Gas	0.202	ppb	7.4	8160.20	0.2	101	79.5	120.4
232	Th	209	No Gas	0.185	ppb	5.8	7133.37	0.2	92.5	79.5	120.4
238	U	209	No Gas	0.205	ppb	4.6	7360.40	0.2	102.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4983599.41	2.4	4785442.25	104.14	29.5	120.4	
Sc	45	No Gas	12209873.71	3.0	11869896.98	102.86	29.5	120.4	
Sc	45	H2	1446243.22	0.7	1440463.34	100.4	29.5	120.4	
Sc	45	He	330617.79	2.0	342270.52	96.6	29.5	120.4	
Ge	72	No Gas	2297787.73	2.9	2254278.57	101.93	29.5	120.4	
Ge	72	H2	427228.89	0.7	432978.24	98.67	29.5	120.4	
Ge	72	He	216336.37	2.0	219029.81	98.77	29.5	120.4	
Y	89	H2	7879581.13	1.0	7788630.76	101.17	29.5	120.4	
Y	89	He	1687939.63	2.8	1720337.72	98.12	29.5	120.4	
Tb	159	No Gas	19410514.57	1.9	19085444.99	101.7	29.5	120.4	
Tb	159	He	6767792.88	2.3	6890196.91	98.22	29.5	120.4	
Bi	209	No Gas	8731445.51	2.5	8525371.63	102.42	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:24:34 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.002	ppb	142.0	26.67	0.2	-50	50	
B	11	6	No Gas	0.452	ppb	10.7	2360.28	4	-50	100	
Na	23	45	He	95659.337	ppb	2.0	52768560.03	100000	80	120	
Mg	24	45	He	94369.892	ppb	2.2	27463671.81	100000	80	120	
Al	27	45	He	88724.733	ppb	2.6	9259502.64	100000	80	120	
Si	28	45	H2	5.845	ppb	27.1	1218.26	100	-50	50	
K	39	45	He	95168.603	ppb	1.6	21398927.47	100000	80	120	
Ca	40	45	H2	100447.458	ppb	1.1	156382401.00	100000	80	120	
V	51	89	He	0.020	ppb	30.4	164.45	1	-50	100	
Cr	52	89	He	0.303	ppb	1.2	1764.46	0.78	-100	100	
Mn	55	89	He	0.704	ppb	8.3	2063.79	0.0826	100	100	DoD□ 6020/EPA
Fe	56	89	H2	94601.182	ppb	0.7	600688447.29	100000	80	120	
Co	59	89	He	0.268	ppb	2.1	2311.47	0.2	-50	100	
Ni	60	89	He	-2.718	ppb	N/A	10892.36	0.114	100	100	DoD□ 6020/EPA
Cu	63	89	He	0.116	ppb	24.4	6257.20	-0.043	100	100	
Zn	66	89	He	0.496	ppb	4.7	591.14	-0.7632	100	100	
As	75	89	He	0.047	ppb	15.7	37.67	1	-50	100	
Se	78	89	H2	0.087	ppb	17.0	22.00	1	-50	100	
Sr	88	89	He	0.796	ppb	1.4	1966.88	0.0578	100	100	
Mo	95	89	He	1935.580	ppb	2.4	6022291.09	2000	80	120	
Ag	107	89	He	0.020	ppb	5.3	223.34	0.2	-50	50	
Cd	111	89	He	0.385	ppb	12.5	459.28	0.268	100	100	
Sn	118	159	He	0.313	ppb	16.6	981.19	-0.24	100	100	
Sb	121	159	No Gas	0.184	ppb	13.7	3577.81	0.089	100	100	
Ba	137	159	No Gas	0.182	ppb	6.1	1304.85	-0.0794	100	100	
W	182	159	No Gas	0.203	ppb	10.6	2886.90	0.32	-100	100	
Tl	205	209	No Gas	0.003	ppb	50.4	367.08	0.2	-50	50	
Pb	208	209	No Gas	0.080	ppb	14.2	2923.43	0.03	100	100	
Th	232	209	No Gas	0.025	ppb	13.9	1014.52	0.2	-50	50	
U	238	209	No Gas	0.000	ppb	N/A	10.01	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4293405.65	5.0	4785442.25	89.72	29.5	120.4	
Sc	45	No Gas	11375067.38	4.6	11869896.98	95.83	29.5	120.4	
Sc	45	H2	1331263.56	0.4	1440463.34	92.42	29.5	120.4	
Sc	45	He	313625.94	1.3	342270.52	91.63	29.5	120.4	
Ge	72	No Gas	2115580.97	3.9	2254278.57	93.85	29.5	120.4	
Ge	72	H2	378228.19	0.5	432978.24	87.36	29.5	120.4	
Ge	72	He	199072.73	0.7	219029.81	90.89	29.5	120.4	
Y	89	H2	7334064.69	0.3	7788630.76	94.16	29.5	120.4	
Y	89	He	1612017.89	1.4	1720337.72	93.7	29.5	120.4	
Tb	159	No Gas	18396606.95	4.1	19085444.99	96.39	29.5	120.4	
Tb	159	He	6234285.25	1.2	6890196.91	90.48	29.5	120.4	
Bi	209	No Gas	7524754.65	4.6	8525371.63	88.26	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:27:16 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.122	ppb	7.4	71871.88	20	79.5	120.4	
11	B	6	No Gas	20.044	ppb	7.2	48792.89	20	79.5	120.4	
23	Na	45	He	98685.688	ppb	1.1	53728337.28	100000	79.5	120.4	
24	Mg	45	He	97346.017	ppb	0.8	27961617.36	100000	79.5	120.4	
27	Al	45	He	90270.565	ppb	0.6	9298976.18	100000	79.5	120.4	
28	Si	45	H2	488.848	ppb	1.7	73220.04	500	79.5	120.4	
39	K	45	He	97703.109	ppb	0.6	21682481.33	100000	79.5	120.4	
40	Ca	45	H2	103683.017	ppb	0.5	157292425.43	100000	79.5	120.4	
51	V	89	He	20.012	ppb	0.5	76920.60	20	79.5	120.4	
52	Cr	89	He	19.702	ppb	1.1	97339.53	20	79.5	120.4	
55	Mn	89	He	20.101	ppb	1.1	43639.32	20	79.5	120.4	
56	Fe	89	H2	97822.287	ppb	1.3	606275300.61	100000	79.5	120.4	
59	Co	89	He	19.769	ppb	1.8	163409.15	20	79.5	120.4	
60	Ni	89	He	15.875	ppb	1.9	51824.68	20	79.5	120.4	> +/- 10%
63	Cu	89	He	18.772	ppb	0.4	121020.81	20	79.5	120.4	
66	Zn	89	He	19.014	ppb	3.2	13669.38	20	79.5	120.4	
75	As	89	He	20.397	ppb	1.0	9734.14	20	79.5	120.4	
78	Se	89	H2	20.419	ppb	1.7	4755.93	20	79.5	120.4	
88	Sr	89	He	20.260	ppb	0.4	49012.87	20	79.5	120.4	
95	Mo	89	He	2032.206	ppb	1.1	6227362.96	2000	79.5	120.4	
107	Ag	89	He	18.505	ppb	0.7	185381.90	20	79.5	120.4	
111	Cd	89	He	19.569	ppb	1.0	22938.04	20	79.5	120.4	
118	Sn	159	He	20.513	ppb	0.3	48143.67	20	79.5	120.4	
121	Sb	159	No Gas	19.679	ppb	7.3	333218.72	20	79.5	120.4	
137	Ba	159	No Gas	19.790	ppb	8.9	127140.04	20	79.5	120.4	
182	W	159	No Gas	19.797	ppb	7.1	257721.70	20	79.5	120.4	
205	Tl	209	No Gas	20.356	ppb	7.9	462553.09	20	79.5	120.4	
208	Pb	209	No Gas	20.250	ppb	8.2	654690.79	20	79.5	120.4	
232	Th	209	No Gas	21.251	ppb	7.7	650049.94	20	79.5	120.4	
238	U	209	No Gas	20.854	ppb	7.3	615755.88	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	3985373.15	2.9	4785442.25	83.28	29.5	120.4	
Sc	45	No Gas	10882566.14	2.0	11869896.98	91.68	29.5	120.4	
Sc	45	H2	1297104.70	2.3	1440463.34	90.05	29.5	120.4	
Sc	45	He	309507.86	0.7	342270.52	90.43	29.5	120.4	
Ge	72	No Gas	2041866.98	2.9	2254278.57	90.58	29.5	120.4	
Ge	72	H2	372086.01	1.1	432978.24	85.94	29.5	120.4	
Ge	72	He	196805.60	0.7	219029.81	89.85	29.5	120.4	
Y	89	H2	7158400.96	0.5	7788630.76	91.91	29.5	120.4	
Y	89	He	1587343.17	0.7	1720337.72	92.27	29.5	120.4	
Tb	159	No Gas	17645900.85	2.4	19085444.99	92.46	29.5	120.4	
Tb	159	He	6109068.10	0.6	6890196.91	88.66	29.5	120.4	
Bi	209	No Gas	7208645.47	3.0	8525371.63	84.56	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:30:02 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	99.664	ppb	7.4	401228.04	100	99.66	89.5	110.4	
11	B	6	No Gas	520.347	ppb	7.1	1396341.93	500	104.07	89.5	110.4	
51	V	89	He	974.408	ppb	0.6	3980271.96	1000	97.44	89.5	110.4	
52	Cr	89	He	1932.019	ppb	0.8	10129884.61	2000	96.6	89.5	110.4	
55	Mn	89	He	1903.711	ppb	0.3	4345185.69	2000	95.19	89.5	110.4	
59	Co	89	He	979.503	ppb	1.0	8610903.48	1000	97.95	89.5	110.4	
60	Ni	89	He	999.641	ppb	0.9	2368607.07	1000	99.96	89.5	110.4	
63	Cu	89	He	1953.303	ppb	0.7	12799900.37	2000	97.67	89.5	110.4	
66	Zn	89	He	1922.757	ppb	0.7	1446079.89	2000	96.14	89.5	110.4	
75	As	89	He	988.791	ppb	0.6	501329.48	1000	98.88	89.5	110.4	
78	Se	89	H2	995.200	ppb	1.8	245216.39	1000	99.52	89.5	110.4	
88	Sr	89	He	1913.339	ppb	0.4	4923438.02	2000	95.67	89.5	110.4	
95	Mo	89	He	999.896	ppb	0.8	3259871.23	1000	99.99	89.5	110.4	
107	Ag	89	He	89.493	ppb	0.7	953695.78	100	89.49	89.5	110.4	> +/- 10%
111	Cd	89	He	997.084	ppb	1.0	1243315.89	1000	99.71	89.5	110.4	
118	Sn	159	He	986.055	ppb	0.9	2510667.77	1000	98.61	89.5	110.4	
121	Sb	159	No Gas	967.046	ppb	8.0	17705718.85	1000	96.7	89.5	110.4	
137	Ba	159	No Gas	1945.957	ppb	7.5	13527051.05	2000	97.3	89.5	110.4	
182	W	159	No Gas	935.205	ppb	8.1	13170403.38	1000	93.52	89.5	110.4	
205	Tl	209	No Gas	1010.674	ppb	6.2	27033809.52	1000	101.07	89.5	110.4	
208	Pb	209	No Gas	1880.853	ppb	6.9	71599334.94	2000	94.04	89.5	110.4	
232	Th	209	No Gas	952.048	ppb	7.5	34281460.25	1000	95.2	89.5	110.4	
238	U	209	No Gas	942.739	ppb	7.6	32776625.68	1000	94.27	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4491429.24	2.2	4785442.25	93.86	29.5	120.4	
Sc	45	No Gas	11572082.51	2.9	11869896.98	97.49	29.5	120.4	
Ge	72	No Gas	2235097.99	2.7	2254278.57	99.15	29.5	120.4	
Tb	159	No Gas	19105199.86	2.7	19085444.99	100.1	29.5	120.4	
Bi	209	No Gas	8486593.06	2.3	8525371.63	99.55	29.5	120.4	
Sc	45	H2	1361660.91	2.0	1440463.34	94.53	29.5	120.4	
Ge	72	H2	407861.19	0.4	432978.24	94.2	29.5	120.4	
Y	89	H2	7577242.03	2.4	7788630.76	97.29	29.5	120.4	
Sc	45	He	328491.47	1.1	342270.52	95.97	29.5	120.4	
Ge	72	He	213262.59	1.3	219029.81	97.37	29.5	120.4	
Y	89	He	1688820.08	1.4	1720337.72	98.17	29.5	120.4	
Tb	159	He	6658567.82	0.3	6890196.91	96.64	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:32:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.240	ppb	69.2	871.18	100	
11	B	6	No Gas	11.664	ppb	14.8	28626.27	1000	
23	Na	45	He	190355.253	ppb	1.5	107974883.58	200000	
24	Mg	45	He	186678.251	ppb	0.3	55887711.39	200000	
27	Al	45	He	182544.766	ppb	0.4	19598928.04	200000	
28	Si	45	H2	9340.262	ppb	2.2	1433917.61	10000	
39	K	45	He	192063.570	ppb	2.0	44409009.02	200000	
40	Ca	45	H2	203880.174	ppb	0.9	318268324.15	200000	>LDR
51	V	89	He	0.199	ppb	5.3	865.62	1000	
52	Cr	89	He	0.624	ppb	1.2	3389.14	2000	
55	Mn	89	He	7.331	ppb	0.6	16588.12	2000	
56	Fe	89	H2	95492.435	ppb	0.3	593336835.94	100000	
59	Co	89	He	0.564	ppb	5.5	4823.41	1000	
60	Ni	89	He	-3.300	ppb	N/A	9638.07	1000	
63	Cu	89	He	0.410	ppb	4.0	8138.21	2000	
66	Zn	89	He	1.793	ppb	2.7	1530.14	2000	
75	As	89	He	0.381	ppb	6.6	200.36	1000	
78	Se	89	H2	0.756	ppb	1.0	177.66	1000	
88	Sr	89	He	1.164	ppb	6.2	2883.75	2000	
95	Mo	89	He	1.999	ppb	3.2	6498.44	1000	
107	Ag	89	He	0.114	ppb	1.1	1195.65	100	
111	Cd	89	He	0.117	ppb	8.8	141.11	1000	
118	Sn	159	He	1.644	ppb	8.3	4026.30	1000	
121	Sb	159	No Gas	1.966	ppb	54.5	33041.25	1000	
137	Ba	159	No Gas	3.739	ppb	56.2	23699.98	2000	
182	W	159	No Gas	3.910	ppb	32.8	50038.58	1000	
205	Tl	209	No Gas	0.978	ppb	44.2	21421.93	1000	
208	Pb	209	No Gas	3.102	ppb	61.6	95957.32	2000	
232	Th	209	No Gas	5.212	ppb	55.5	152239.88	1000	
238	U	209	No Gas	2.988	ppb	65.0	84312.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	3943080.23	1.6	4785442.25	82.4	29.5	120.4	
Sc	45	No Gas	10911059.22	1.6	11869896.98	91.92	29.5	120.4	
Sc	45	H2	1335008.58	1.9	1440463.34	92.68	29.5	120.4	
Sc	45	He	322589.02	1.1	342270.52	94.25	29.5	120.4	
Ge	72	No Gas	2000672.37	1.4	2254278.57	88.75	29.5	120.4	
Ge	72	H2	368985.09	1.3	432978.24	85.22	29.5	120.4	
Ge	72	He	198832.64	1.3	219029.81	90.78	29.5	120.4	
Y	89	H2	7176679.91	1.1	7788630.76	92.14	29.5	120.4	
Y	89	He	1620493.85	0.7	1720337.72	94.2	29.5	120.4	
Tb	159	No Gas	17220419.05	1.9	19085444.99	90.23	29.5	120.4	
Tb	159	He	6040896.09	0.5	6890196.91	87.67	29.5	120.4	
Bi	209	No Gas	6813639.91	2.4	8525371.63	79.92	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	015SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:35:24 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	37.4	38.89	100	
11	B	6	No Gas	2.059	ppb	6.1	7077.54	1000	
23	Na	45	He	65.061	ppb	14.6	78512.58	200000	
24	Mg	45	He	21.990	ppb	11.1	7326.85	200000	
27	Al	45	He	18.600	ppb	19.7	2209.14	200000	
28	Si	45	H2	2.003	ppb	21.6	680.78	10000	
39	K	45	He	40.750	ppb	11.2	25835.18	200000	
40	Ca	45	H2	33.947	ppb	4.5	60106.98	200000	
51	V	89	He	0.017	ppb	7.6	165.56	1000	
52	Cr	89	He	0.036	ppb	5.0	461.26	2000	
55	Mn	89	He	0.296	ppb	7.4	1260.50	2000	
56	Fe	89	H2	18.808	ppb	4.4	137880.97	100000	
59	Co	89	He	0.035	ppb	21.4	377.81	1000	
60	Ni	89	He	-3.807	ppb	N/A	9063.25	1000	
63	Cu	89	He	-0.084	ppb	N/A	5365.66	2000	
66	Zn	89	He	0.086	ppb	94.5	317.80	2000	
75	As	89	He	0.061	ppb	22.7	47.34	1000	
78	Se	89	H2	0.128	ppb	6.8	33.83	1000	
88	Sr	89	He	0.038	ppb	16.0	112.23	2000	
95	Mo	89	He	0.439	ppb	15.5	1723.51	1000	
107	Ag	89	He	0.008	ppb	28.0	118.89	100	
111	Cd	89	He	0.017	ppb	24.4	23.70	1000	
118	Sn	159	He	0.328	ppb	17.6	1095.64	1000	
121	Sb	159	No Gas	0.048	ppb	3.4	1231.43	1000	
137	Ba	159	No Gas	0.040	ppb	27.0	363.75	2000	
182	W	159	No Gas	0.213	ppb	9.1	3123.89	1000	
205	Tl	209	No Gas	0.035	ppb	17.9	1234.79	1000	
208	Pb	209	No Gas	0.075	ppb	12.2	3026.86	2000	
232	Th	209	No Gas	0.025	ppb	5.3	1131.33	1000	
238	U	209	No Gas	0.023	ppb	15.4	810.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4686482.57	2.4	4785442.25	97.93	29.5	120.4	
Sc	45	No Gas	12151847.98	2.8	11869896.98	102.38	29.5	120.4	
Sc	45	H2	1437595.61	0.3	1440463.34	99.8	29.5	120.4	
Sc	45	He	340165.97	0.6	342270.52	99.39	29.5	120.4	
Ge	72	No Gas	2311404.29	3.6	2254278.57	102.53	29.5	120.4	
Ge	72	H2	422678.52	0.8	432978.24	97.62	29.5	120.4	
Ge	72	He	219896.93	0.3	219029.81	100.4	29.5	120.4	
Y	89	H2	7813933.13	0.8	7788630.76	100.32	29.5	120.4	
Y	89	He	1728989.63	0.9	1720337.72	100.5	29.5	120.4	
Tb	159	No Gas	18994050.27	3.1	19085444.99	99.52	29.5	120.4	
Tb	159	He	6716272.75	0.6	6890196.91	97.48	29.5	120.4	
Bi	209	No Gas	8298481.94	2.8	8525371.63	97.34	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:37:55 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.006	ppb	53.5	47.78	100	
11	B	6	No Gas	1.223	ppb	4.8	4808.76	1000	
23	Na	45	He	24.603	ppb	17.0	54360.22	200000	
24	Mg	45	He	6.579	ppb	28.0	2462.63	200000	
27	Al	45	He	5.306	ppb	23.2	704.49	200000	
28	Si	45	H2	-0.121	ppb	N/A	330.37	10000	
39	K	45	He	14.992	ppb	16.8	19572.96	200000	
40	Ca	45	H2	5.360	ppb	1.9	12061.10	200000	
51	V	89	He	0.005	ppb	28.6	114.45	1000	
52	Cr	89	He	0.023	ppb	17.6	393.27	2000	
55	Mn	89	He	0.242	ppb	6.5	1135.84	2000	
56	Fe	89	H2	3.185	ppb	1.5	32259.55	100000	
59	Co	89	He	0.021	ppb	16.4	257.80	1000	
60	Ni	89	He	-3.330	ppb	N/A	10230.74	1000	
63	Cu	89	He	-0.147	ppb	N/A	4955.52	2000	
66	Zn	89	He	0.041	ppb	122.3	284.46	2000	
75	As	89	He	0.023	ppb	23.4	28.00	1000	
78	Se	89	H2	0.059	ppb	20.8	16.33	1000	
88	Sr	89	He	0.015	ppb	18.2	50.00	2000	
95	Mo	89	He	0.229	ppb	18.3	1026.75	1000	
107	Ag	89	He	0.004	ppb	50.9	66.67	100	
111	Cd	89	He	0.008	ppb	10.6	11.11	1000	
118	Sn	159	He	0.164	ppb	8.1	684.49	1000	
121	Sb	159	No Gas	0.027	ppb	17.8	860.99	1000	
137	Ba	159	No Gas	0.027	ppb	55.5	276.98	2000	
182	W	159	No Gas	0.116	ppb	12.0	1792.13	1000	
205	Tl	209	No Gas	0.020	ppb	24.4	854.32	1000	
208	Pb	209	No Gas	0.041	ppb	28.4	1822.09	2000	
232	Th	209	No Gas	0.025	ppb	6.3	1158.02	1000	
238	U	209	No Gas	0.020	ppb	27.6	720.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4754723.72	3.3	4785442.25	99.36	29.5	120.4	
Sc	45	No Gas	12200206.65	3.6	11869896.98	102.78	29.5	120.4	
Sc	45	H2	1439808.43	0.6	1440463.34	99.95	29.5	120.4	
Sc	45	He	340452.67	1.1	342270.52	99.47	29.5	120.4	
Ge	72	No Gas	2301874.27	3.0	2254278.57	102.11	29.5	120.4	
Ge	72	H2	426652.28	0.6	432978.24	98.54	29.5	120.4	
Ge	72	He	220362.09	0.8	219029.81	100.61	29.5	120.4	
Y	89	H2	7825520.19	0.5	7788630.76	100.47	29.5	120.4	
Y	89	He	1732304.37	0.8	1720337.72	100.7	29.5	120.4	
Tb	159	No Gas	19234964.85	3.5	19085444.99	100.78	29.5	120.4	
Tb	159	He	6805520.32	0.6	6890196.91	98.77	29.5	120.4	
Bi	209	No Gas	8471196.52	3.5	8525371.63	99.36	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:40:34 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.562	ppb	8.6	100758.32	25	94.25	89.8	110.2	
11	B	6	No Gas	24.305	ppb	10.0	70525.46	25	97.22	89.8	110.2	
23	Na	45	He	5042.477	ppb	3.4	3013736.96	5000	100.85	89.8	110.2	
24	Mg	45	He	5050.674	ppb	3.8	1573240.67	5000	101.01	89.8	110.2	
27	Al	45	He	501.522	ppb	3.5	56116.31	500	100.3	89.8	110.2	
28	Si	45	H2	492.346	ppb	0.6	82625.91	500	98.47	89.8	110.2	
39	K	45	He	5047.460	ppb	3.5	1229364.77	5000	100.95	89.8	110.2	
40	Ca	45	H2	4904.971	ppb	0.6	8338254.25	5000	98.1	89.8	110.2	
51	V	89	He	25.212	ppb	4.4	103252.61	25	100.85	89.8	110.2	
52	Cr	89	He	25.176	ppb	3.8	132502.83	25	100.7	89.8	110.2	
55	Mn	89	He	25.427	ppb	4.4	58682.06	25	101.71	89.8	110.2	
56	Fe	89	H2	4875.326	ppb	0.3	33432685.68	5000	97.51	89.8	110.2	
59	Co	89	He	25.159	ppb	5.3	221577.03	25	100.64	89.8	110.2	
60	Ni	89	He	22.607	ppb	6.5	71084.74	25	90.43	89.8	110.2	
63	Cu	89	He	25.678	ppb	4.3	174295.69	25	102.71	89.8	110.2	
66	Zn	89	He	25.278	ppb	3.0	19293.98	25	101.11	89.8	110.2	
75	As	89	He	24.943	ppb	4.7	12682.16	25	99.77	89.8	110.2	
78	Se	89	H2	24.348	ppb	1.0	6272.13	25	97.39	89.8	110.2	
88	Sr	89	He	25.023	ppb	5.0	64497.07	25	100.09	89.8	110.2	
95	Mo	89	He	25.489	ppb	3.9	83498.75	25	101.96	89.8	110.2	
107	Ag	89	He	25.283	ppb	4.5	269910.36	25	101.13	89.8	110.2	
111	Cd	89	He	25.218	ppb	4.7	31499.33	25	100.87	89.8	110.2	
118	Sn	159	He	25.460	ppb	4.5	65352.03	25	101.84	89.8	110.2	
121	Sb	159	No Gas	23.891	ppb	8.8	442187.63	25	95.56	89.8	110.2	
137	Ba	159	No Gas	24.058	ppb	7.4	169036.10	25	96.23	89.8	110.2	
182	W	159	No Gas	23.706	ppb	8.6	337357.40	25	94.82	89.8	110.2	
205	Tl	209	No Gas	23.628	ppb	8.6	632979.86	25	94.51	89.8	110.2	
208	Pb	209	No Gas	23.388	ppb	7.1	891731.10	25	93.55	89.8	110.2	
232	Th	209	No Gas	23.299	ppb	8.7	840212.59	25	93.2	89.8	110.2	
238	U	209	No Gas	23.543	ppb	8.4	819599.99	25	94.17	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4774693.27	3.5	4785442.25	99.78	29.5	120.4	
Sc	45	No Gas	12229545.16	3.1	11869896.98	103.03	29.5	120.4	
Sc	45	H2	1453135.02	0.8	1440463.34	100.88	29.5	120.4	
Sc	45	He	335762.93	2.5	342270.52	98.1	29.5	120.4	
Ge	72	No Gas	2301961.73	2.1	2254278.57	102.12	29.5	120.4	
Ge	72	H2	423930.44	1.3	432978.24	97.91	29.5	120.4	
Ge	72	He	215718.85	2.1	219029.81	98.49	29.5	120.4	
Y	89	H2	7918308.55	0.7	7788630.76	101.66	29.5	120.4	
Y	89	He	1693433.93	3.7	1720337.72	98.44	29.5	120.4	
Tb	159	No Gas	19300176.24	2.8	19085444.99	101.13	29.5	120.4	
Tb	159	He	6694160.73	3.3	6890196.91	97.15	29.5	120.4	
Bi	209	No Gas	8497515.65	2.1	8525371.63	99.67	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:43:09 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.024	ppb	25.9	125.56	0.2	
11	B	6	No Gas	1.038	ppb	6.7	4410.83	4	
23	Na	45	He	11.588	ppb	15.3	47202.88	200	
24	Mg	45	He	4.630	ppb	13.0	1873.60	20	
27	Al	45	He	4.214	ppb	13.0	588.92	20	
28	Si	45	H2	0.170	ppb	207.2	387.10	100	
39	K	45	He	10.439	ppb	33.1	18710.53	200	
40	Ca	45	H2	6.086	ppb	2.0	13591.45	20	
51	V	89	He	0.014	ppb	49.8	153.34	1	
52	Cr	89	He	0.029	ppb	14.4	429.93	1	
55	Mn	89	He	0.195	ppb	14.5	1043.18	0.4	
56	Fe	89	H2	4.291	ppb	5.3	40794.46	20	
59	Co	89	He	0.028	ppb	2.6	324.47	0.2	
60	Ni	89	He	-2.880	ppb	N/A	11490.67	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.188	ppb	N/A	4754.32	0.6	
66	Zn	89	He	0.061	ppb	49.1	304.46	2	
75	As	89	He	0.023	ppb	28.8	28.33	1	
78	Se	89	H2	0.067	ppb	35.3	18.83	1	
88	Sr	89	He	0.022	ppb	42.5	70.00	1	
95	Mo	89	He	0.164	ppb	6.5	821.17	1	
107	Ag	89	He	0.008	ppb	34.2	111.12	0.2	
111	Cd	89	He	0.016	ppb	5.8	22.22	0.2	
118	Sn	159	He	0.133	ppb	5.0	612.26	1	
121	Sb	159	No Gas	0.039	ppb	6.9	1114.63	0.2	
137	Ba	159	No Gas	0.046	ppb	11.1	420.47	0.4	
182	W	159	No Gas	0.132	ppb	6.4	2089.17	1	
205	Tl	209	No Gas	0.051	ppb	30.8	1755.44	0.2	
208	Pb	209	No Gas	0.051	ppb	15.3	2242.59	0.2	
232	Th	209	No Gas	0.109	ppb	16.3	4348.96	1	
238	U	209	No Gas	0.037	ppb	34.6	1358.26	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4895306.96	2.7	4785442.25	102.3	29.5	120.4	
Sc	45	No Gas	12594112.94	3.4	11869896.98	106.1	29.5	120.4	
Sc	45	H2	1473303.98	1.0	1440463.34	102.28	29.5	120.4	
Sc	45	He	344993.66	0.6	342270.52	100.8	29.5	120.4	
Ge	72	No Gas	2380354.33	3.2	2254278.57	105.59	29.5	120.4	
Ge	72	H2	439112.84	0.5	432978.24	101.42	29.5	120.4	
Ge	72	He	222810.29	0.6	219029.81	101.73	29.5	120.4	
Y	89	H2	8033340.14	1.4	7788630.76	103.14	29.5	120.4	
Y	89	He	1758971.95	0.4	1720337.72	102.25	29.5	120.4	
Tb	159	No Gas	19832884.56	3.5	19085444.99	103.92	29.5	120.4	
Tb	159	He	6909135.17	0.6	6890196.91	100.27	29.5	120.4	
Bi	209	No Gas	8757330.46	4.0	8525371.63	102.72	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNH05IMS1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:46:21 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.011	ppb	95.3	30.00	0.5	
B	11	6	No Gas	4.893	ppb	9.0	4216.32	10	
Na	23	45	He	63.836	ppb	6.1	48284.70	500	
Mg	24	45	He	21.780	ppb	5.7	1800.24	50	
Al	27	45	He	14.524	ppb	5.2	442.25	50	
Si	28	45	H2	19.004	ppb	9.7	1001.15	250	
K	39	45	He	59.355	ppb	7.2	19210.90	500	
Ca	40	45	H2	60.823	ppb	5.6	24058.01	50	PB 6020 Fails DoD
V	51	89	He	0.252	ppb	26.9	308.90	2.5	
Cr	52	89	He	0.775	ppb	4.0	1117.85	2.5	
Mn	55	89	He	1.614	ppb	8.0	1345.16	1	PB 6020 Fails DoD
Fe	56	89	H2	23.924	ppb	8.3	43847.56	50	
Co	59	89	He	0.095	ppb	6.0	242.24	0.5	
Ni	60	89	He	-11.714	ppb	N/A	12801.84	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	2.861	ppb	5.3	9933.87	1.5	PB 6020 Fails DoD
Zn	66	89	He	5.792	ppb	4.8	1163.43	5	PB 6020 Fails DoD
As	75	89	He	0.236	ppb	14.2	41.00	2.5	
Se	78	89	H2	0.318	ppb	7.2	17.83	2.5	
Sr	88	89	He	0.132	ppb	22.3	82.22	2.5	
Mo	95	89	He	0.532	ppb	4.2	624.48	2.5	
Ag	107	89	He	0.027	ppb	22.1	87.78	0.5	
Cd	111	89	He	0.023	ppb	43.8	7.41	0.5	
Sn	118	159	He	42.187	ppb	1.9	22798.87	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.214	ppb	19.3	1184.71	0.5	
Ba	137	159	No Gas	0.255	ppb	31.9	457.18	1	
W	182	159	No Gas	0.336	ppb	20.3	1131.32	2.5	
Tl	205	209	No Gas	0.103	ppb	12.1	924.40	0.5	
Pb	208	209	No Gas	0.318	ppb	13.0	2799.92	0.5	
Th	232	209	No Gas	0.321	ppb	3.7	2710.01	2.5	
U	238	209	No Gas	0.060	ppb	9.8	470.53	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4874527.17	3.0	4785442.25	101.86	29.5	120.4	
Sc	45	No Gas	12555845.50	3.5	11869896.98	105.78	29.5	120.4	
Sc	45	H2	1472269.84	1.4	1440463.34	102.21	29.5	120.4	
Sc	45	He	347607.86	0.3	342270.52	101.56	29.5	120.4	
Ge	72	No Gas	2360158.77	3.3	2254278.57	104.7	29.5	120.4	
Ge	72	H2	424292.75	1.1	432978.24	97.99	29.5	120.4	
Ge	72	He	220089.29	0.2	219029.81	100.48	29.5	120.4	
Y	89	H2	7958474.49	0.8	7788630.76	102.18	29.5	120.4	
Y	89	He	1758241.67	0.2	1720337.72	102.2	29.5	120.4	
Tb	159	No Gas	19811280.82	3.1	19085444.99	103.8	29.5	120.4	
Tb	159	He	6985991.01	0.7	6890196.91	101.39	29.5	120.4	
Bi	209	No Gas	8948981.69	3.5	8525371.63	104.97	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH05IMS1
File Name	020LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:48:54 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.739	ppb	9.9	43182.62	50	19.1	79.5	120.4	
B	11	6	No Gas	501.592	ppb	9.0	303489.74	500	20.06	79.5	120.4	
Na	23	45	He	7741.313	ppb	0.5	995836.85	7500	20.64	79.5	120.4	
Mg	24	45	He	5162.759	ppb	1.1	336655.87	5000	20.65	79.5	120.4	
Al	27	45	He	1874.764	ppb	1.3	43896.49	2000	18.75	79.5	120.4	
Si	28	45	H2	1040.744	ppb	1.6	35370.00	1000	20.81	79.5	120.4	
K	39	45	He	10434.217	ppb	0.5	541068.59	10000	20.87	79.5	120.4	
Ca	40	45	H2	2602.544	ppb	0.5	893575.70	2500	20.82	79.5	120.4	
V	51	89	He	496.941	ppb	0.4	426311.32	500	19.88	79.5	120.4	
Cr	52	89	He	202.266	ppb	0.4	222949.58	200	20.23	79.5	120.4	
Mn	55	89	He	503.589	ppb	0.6	241891.34	500	20.14	79.5	120.4	
Fe	56	89	H2	1042.258	ppb	0.8	1454129.57	1000	20.85	79.5	120.4	
Co	59	89	He	501.460	ppb	0.6	925739.72	500	20.06	79.5	120.4	
Ni	60	89	He	514.257	ppb	0.7	272631.21	500	20.57	79.5	120.4	
Cu	63	89	He	257.174	ppb	0.2	359781.55	250	20.57	79.5	120.4	
Zn	66	89	He	493.207	ppb	1.1	78133.87	500	19.73	79.5	120.4	
As	75	89	He	102.789	ppb	1.1	10958.53	100	20.56	79.5	120.4	
Se	78	89	H2	102.729	ppb	0.9	5345.79	100	20.55	79.5	120.4	
Sr	88	89	He	497.161	ppb	0.6	268623.66	500	19.89	79.5	120.4	
Mo	95	89	He	103.330	ppb	0.8	70997.24	100	20.67	79.5	120.4	
Ag	107	89	He	51.292	ppb	0.5	114793.91	50	20.52	79.5	120.4	
Cd	111	89	He	256.881	ppb	0.7	67261.91	250	20.55	79.5	120.4	
Sn	118	159	He	543.078	ppb	1.0	291980.96	500	21.72	79.5	120.4	
Sb	121	159	No Gas	100.431	ppb	9.5	387250.04	100	20.09	79.5	120.4	
Ba	137	159	No Gas	1939.765	ppb	8.5	2837293.76	2000	19.4	79.5	120.4	
W	182	159	No Gas	99.219	ppb	8.8	294167.22	100	19.84	79.5	120.4	
Tl	205	209	No Gas	103.314	ppb	10.4	577030.78	100	20.66	79.5	120.4	
[Pb]	206	209	No Gas	100.731	ppb	9.2	203132.21	100	20.15	79.5	120.4	
[Pb]	207	209	No Gas	99.779	ppb	8.9	176504.01	100	19.96	79.5	120.4	
Pb	208	209	No Gas	101.452	ppb	9.0	806528.39	100	20.29	79.5	120.4	
Th	232	209	No Gas	99.511	ppb	9.7	748320.74	100	19.9	79.5	120.4	
U	238	209	No Gas	100.087	ppb	9.6	726481.46	100	20.02	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5047414.32	2.7	4785442.25	105.47	29.5	120.4	
Sc	45	No Gas	12651145.91	2.7	11869896.98	106.58	29.5	120.4	
Sc	45	H2	1462955.88	1.4	1440463.34	101.56	29.5	120.4	
Sc	45	He	350875.11	0.9	342270.52	102.51	29.5	120.4	
Ge	72	No Gas	2368485.51	2.2	2254278.57	105.07	29.5	120.4	
Ge	72	H2	426972.78	1.4	432978.24	98.61	29.5	120.4	
Ge	72	He	222959.93	1.0	219029.81	101.79	29.5	120.4	
Y	89	H2	7997060.42	0.1	7788630.76	102.68	29.5	120.4	
Y	89	He	1772922.87	0.4	1720337.72	103.06	29.5	120.4	
Tb	159	No Gas	20106421.92	2.9	19085444.99	105.35	29.5	120.4	
Tb	159	He	7024466.91	0.5	6890196.91	101.95	29.5	120.4	
Bi	209	No Gas	8866635.60	3.2	8525371.63	104	29.5	120.4	

Sample Report

Sample Name SN6100-001

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:51:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.122	ppb	6.9	1884.64	100	
11	B	6	No Gas	28.143	ppb	1.6	17850.57	1000	
23	Na	45	He	335.901	ppb	1.8	82135.01	200000	
24	Mg	45	He	5179.580	ppb	0.4	337045.11	200000	
27	Al	45	He	19914.632	ppb	0.6	464293.51	200000	
28	Si	45	H2	2206.598	ppb	2.9	76562.30	10000	
39	K	45	He	1369.413	ppb	0.5	85092.53	200000	
40	Ca	45	H2	23642.297	ppb	1.1	8305917.37	200000	
51	V	89	He	66.876	ppb	0.2	58623.54	1000	
52	Cr	89	He	24.670	ppb	1.3	27991.31	2000	
55	Mn	89	He	2589.474	ppb	0.4	1266673.12	2000	
56	Fe	89	H2	20513.385	ppb	0.7	29508678.27	100000	
59	Co	89	He	17.106	ppb	0.2	32290.51	1000	
60	Ni	89	He	12.688	ppb	2.8	25466.10	1000	
63	Cu	89	He	35.748	ppb	1.8	56372.67	2000	
66	Zn	89	He	82.934	ppb	0.8	13624.91	2000	
75	As	89	He	18.267	ppb	2.6	2000.70	1000	
78	Se	89	H2	4.669	ppb	2.8	253.66	1000	
88	Sr	89	He	124.618	ppb	0.9	68712.65	2000	
95	Mo	89	He	5.461	ppb	2.4	4085.22	1000	
107	Ag	89	He	0.423	ppb	3.1	993.41	100	
111	Cd	89	He	1.425	ppb	3.1	382.24	1000	
118	Sn	159	He	42.489	ppb	1.3	23149.48	1000	
121	Sb	159	No Gas	0.963	ppb	6.2	4085.21	1000	
137	Ba	159	No Gas	132.543	ppb	7.5	193700.02	2000	
182	W	159	No Gas	1.244	ppb	8.7	3834.87	1000	
205	Tl	209	No Gas	0.654	ppb	7.7	4061.83	1000	
208	Pb	209	No Gas	280.378	ppb	7.8	2263307.34	2000	
232	Th	209	No Gas	6.429	ppb	4.3	49396.21	1000	
238	U	209	No Gas	23.518	ppb	7.9	173416.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4899127.96	1.9	4785442.25	102.38	29.5	120.4	
Sc	45	No Gas	12693448.73	2.6	11869896.98	106.94	29.5	120.4	
Sc	45	H2	1501528.66	0.6	1440463.34	104.24	29.5	120.4	
Sc	45	He	350162.00	0.2	342270.52	102.31	29.5	120.4	
Ge	72	No Gas	2389378.33	2.8	2254278.57	105.99	29.5	120.4	
Ge	72	H2	438820.63	0.8	432978.24	101.35	29.5	120.4	
Ge	72	He	223964.76	0.3	219029.81	102.25	29.5	120.4	
Y	89	H2	8304723.60	0.6	7788630.76	106.63	29.5	120.4	
Y	89	He	1809029.28	0.4	1720337.72	105.16	29.5	120.4	
Tb	159	No Gas	20071874.56	2.5	19085444.99	105.17	29.5	120.4	
Tb	159	He	7043225.86	0.4	6890196.91	102.22	29.5	120.4	
Bi	209	No Gas	8999620.03	2.5	8525371.63	105.56	29.5	120.4	

Sample Report

Sample Name	SN6100-002
File Name	022SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:54:05 PM
Sample Type	Sample
Total Dilution	10.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.846	ppb	11.9	833.39	100	
11	B	6	No Gas	24.118	ppb	6.7	8462.75	1000	
23	Na	45	He	257.564	ppb	4.3	56430.69	200000	
24	Mg	45	He	4312.986	ppb	0.5	140054.25	200000	
27	Al	45	He	17105.334	ppb	1.7	198736.72	200000	
28	Si	45	H2	2091.622	ppb	1.0	35821.92	10000	
39	K	45	He	1193.852	ppb	1.6	46162.28	200000	
40	Ca	45	H2	20205.136	ppb	0.6	3486966.79	200000	
51	V	89	He	55.567	ppb	0.8	24222.76	1000	
52	Cr	89	He	21.376	ppb	0.4	12191.07	2000	
55	Mn	89	He	2534.410	ppb	0.9	615364.72	2000	
56	Fe	89	H2	18156.247	ppb	0.7	12755790.97	100000	
59	Co	89	He	16.015	ppb	0.3	15035.75	1000	
60	Ni	89	He	-2.952	ppb	N/A	18187.89	1000	
63	Cu	89	He	31.046	ppb	1.6	27773.95	2000	
66	Zn	89	He	76.432	ppb	1.6	6371.70	2000	
75	As	89	He	16.407	ppb	3.5	900.46	1000	
78	Se	89	H2	4.539	ppb	13.0	121.16	1000	
88	Sr	89	He	107.314	ppb	0.9	29364.47	2000	
95	Mo	89	He	4.516	ppb	8.0	1834.63	1000	
107	Ag	89	He	0.434	ppb	5.3	518.92	100	
111	Cd	89	He	1.343	ppb	8.0	179.63	1000	
118	Sn	159	He	43.033	ppb	1.3	11870.09	1000	
121	Sb	159	No Gas	0.810	ppb	13.7	1952.32	1000	
137	Ba	159	No Gas	115.887	ppb	8.9	85402.69	2000	
182	W	159	No Gas	0.982	ppb	15.2	1618.59	1000	
205	Tl	209	No Gas	0.384	ppb	5.4	1455.05	1000	
208	Pb	209	No Gas	237.411	ppb	9.5	969364.65	2000	
232	Th	209	No Gas	5.106	ppb	5.1	20011.81	1000	
238	U	209	No Gas	20.253	ppb	10.4	75526.99	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4921923.00	4.0	4785442.25	102.85	29.5	120.4	
Sc	45	No Gas	12759216.58	3.9	11869896.98	107.49	29.5	120.4	
Sc	45	H2	1474420.11	0.3	1440463.34	102.36	29.5	120.4	
Sc	45	He	348904.23	0.4	342270.52	101.94	29.5	120.4	
Ge	72	No Gas	2397113.62	3.9	2254278.57	106.34	29.5	120.4	
Ge	72	H2	433145.68	0.5	432978.24	100.04	29.5	120.4	
Ge	72	He	222802.25	0.1	219029.81	101.72	29.5	120.4	
Y	89	H2	8108167.26	0.7	7788630.76	104.1	29.5	120.4	
Y	89	He	1795119.54	1.0	1720337.72	104.35	29.5	120.4	
Tb	159	No Gas	20247311.50	3.6	19085444.99	106.09	29.5	120.4	
Tb	159	He	7052801.08	0.2	6890196.91	102.36	29.5	120.4	
Bi	209	No Gas	9110713.31	3.5	8525371.63	106.87	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	023SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 3:56:40 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.003	ppb	91.1	34.45	100	
11	B	6	No Gas	0.421	ppb	10.1	2593.66	1000	
23	Na	45	He	-6.136	ppb	N/A	36728.12	200000	
24	Mg	45	He	0.271	ppb	10.7	482.27	200000	
27	Al	45	He	0.235	ppb	32.2	133.34	200000	
28	Si	45	H2	-0.048	ppb	N/A	350.39	10000	
39	K	45	He	0.335	ppb	318.5	16333.63	200000	
40	Ca	45	H2	-0.065	ppb	N/A	2995.99	200000	
51	V	89	He	-0.002	ppb	N/A	84.45	1000	
52	Cr	89	He	0.006	ppb	56.8	309.28	2000	
55	Mn	89	He	0.136	ppb	12.3	907.87	2000	
56	Fe	89	H2	0.062	ppb	223.3	11420.86	100000	
59	Co	89	He	0.017	ppb	20.7	224.46	1000	
60	Ni	89	He	-2.448	ppb	N/A	12633.87	1000	
63	Cu	89	He	-0.274	ppb	N/A	4191.90	2000	
66	Zn	89	He	0.035	ppb	100.8	285.57	2000	
75	As	89	He	0.004	ppb	161.3	18.33	1000	
78	Se	89	H2	0.012	ppb	55.4	4.50	1000	
88	Sr	89	He	0.004	ppb	77.3	22.22	2000	
95	Mo	89	He	-0.013	ppb	N/A	221.12	1000	
107	Ag	89	He	0.001	ppb	184.5	35.56	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	0.021	ppb	28.4	320.02	1000	
121	Sb	159	No Gas	-0.004	ppb	N/A	290.33	1000	
137	Ba	159	No Gas	0.011	ppb	64.5	170.19	2000	
182	W	159	No Gas	0.010	ppb	15.2	300.34	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	270.31	1000	
208	Pb	209	No Gas	0.025	ppb	22.6	1231.40	2000	
232	Th	209	No Gas	0.005	ppb	55.7	457.19	1000	
238	U	209	No Gas	0.003	ppb	101.3	126.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4875879.04	3.0	4785442.25	101.89	29.5	120.4	
Sc	45	No Gas	12534988.61	2.1	11869896.98	105.6	29.5	120.4	
Sc	45	H2	1473161.05	0.7	1440463.34	102.27	29.5	120.4	
Sc	45	He	347558.35	1.0	342270.52	101.54	29.5	120.4	
Ge	72	No Gas	2375138.13	2.7	2254278.57	105.36	29.5	120.4	
Ge	72	H2	439708.25	0.3	432978.24	101.55	29.5	120.4	
Ge	72	He	224263.80	0.2	219029.81	102.39	29.5	120.4	
Y	89	H2	8048831.99	0.5	7788630.76	103.34	29.5	120.4	
Y	89	He	1770861.38	0.5	1720337.72	102.94	29.5	120.4	
Tb	159	No Gas	19769703.18	2.1	19085444.99	103.59	29.5	120.4	
Tb	159	He	7012619.27	0.2	6890196.91	101.78	29.5	120.4	
Bi	209	No Gas	8788027.61	2.1	8525371.63	103.08	29.5	120.4	

Sample Report

Sample Name SN6100-003

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 3:59:12 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.102	ppb	22.6	962.29	100	
11	B	6	No Gas	25.902	ppb	7.6	9153.23	1000	
23	Na	45	He	308.830	ppb	5.8	60324.01	200000	
24	Mg	45	He	5398.055	ppb	0.3	177404.08	200000	
27	Al	45	He	19318.847	ppb	1.0	227273.72	200000	
28	Si	45	H2	2438.861	ppb	2.2	41371.30	10000	
39	K	45	He	1642.744	ppb	1.3	58113.08	200000	
40	Ca	45	H2	26848.831	ppb	1.1	4594989.76	200000	
51	V	89	He	72.748	ppb	1.8	31743.50	1000	
52	Cr	89	He	23.040	ppb	1.3	13142.43	2000	
55	Mn	89	He	4040.623	ppb	0.8	982607.50	2000	
56	Fe	89	H2	25704.277	ppb	0.8	18011290.66	100000	
59	Co	89	He	27.557	ppb	1.1	25870.13	1000	
60	Ni	89	He	2.792	ppb	64.8	19662.19	1000	
63	Cu	89	He	39.849	ppb	0.2	33966.69	2000	
66	Zn	89	He	94.805	ppb	1.5	7854.74	2000	
75	As	89	He	20.904	ppb	3.4	1145.17	1000	
78	Se	89	H2	4.577	ppb	6.6	121.83	1000	
88	Sr	89	He	143.285	ppb	0.6	39275.99	2000	
95	Mo	89	He	5.981	ppb	4.1	2345.84	1000	
107	Ag	89	He	0.442	ppb	3.9	528.92	100	
111	Cd	89	He	1.536	ppb	4.6	205.56	1000	
118	Sn	159	He	44.601	ppb	2.7	12421.70	1000	
121	Sb	159	No Gas	0.977	ppb	16.4	2262.74	1000	
137	Ba	159	No Gas	141.209	ppb	9.9	103463.93	2000	
182	W	159	No Gas	1.198	ppb	19.0	1928.99	1000	
205	Tl	209	No Gas	0.494	ppb	10.4	1775.45	1000	
208	Pb	209	No Gas	310.051	ppb	9.5	1271328.38	2000	
232	Th	209	No Gas	5.256	ppb	12.5	20643.76	1000	
238	U	209	No Gas	21.082	ppb	9.2	78975.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5011567.28	3.5	4785442.25	104.73	29.5	120.4	
Sc	45	No Gas	12703040.41	3.5	11869896.98	107.02	29.5	120.4	
Sc	45	H2	1462353.42	1.2	1440463.34	101.52	29.5	120.4	
Sc	45	He	353321.09	1.4	342270.52	103.23	29.5	120.4	
Ge	72	No Gas	2407635.88	3.1	2254278.57	106.8	29.5	120.4	
Ge	72	H2	437936.70	0.8	432978.24	101.15	29.5	120.4	
Ge	72	He	224770.74	1.4	219029.81	102.62	29.5	120.4	
Y	89	H2	8088485.39	1.0	7788630.76	103.85	29.5	120.4	
Y	89	He	1798420.80	0.4	1720337.72	104.54	29.5	120.4	
Tb	159	No Gas	20134596.51	3.2	19085444.99	105.5	29.5	120.4	
Tb	159	He	7127764.55	1.1	6890196.91	103.45	29.5	120.4	
Bi	209	No Gas	9152475.80	3.9	8525371.63	107.36	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:01:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	17.78	100	
11	B	6	No Gas	0.276	ppb	23.9	2181.36	1000	
23	Na	45	He	-6.447	ppb	N/A	36359.71	200000	
24	Mg	45	He	0.839	ppb	13.1	662.29	200000	
27	Al	45	He	0.694	ppb	12.2	185.56	200000	
28	Si	45	H2	0.041	ppb	941.5	377.09	10000	
39	K	45	He	2.870	ppb	51.1	16884.07	200000	
40	Ca	45	H2	0.124	ppb	65.8	3416.10	200000	
51	V	89	He	0.001	ppb	202.5	98.89	1000	
52	Cr	89	He	0.007	ppb	92.7	313.28	2000	
55	Mn	89	He	0.129	ppb	4.1	886.54	2000	
56	Fe	89	H2	0.126	ppb	17.3	12195.56	100000	
59	Co	89	He	0.015	ppb	18.8	202.24	1000	
60	Ni	89	He	-2.076	ppb	N/A	13490.29	1000	
63	Cu	89	He	-0.255	ppb	N/A	4304.16	2000	
66	Zn	89	He	0.023	ppb	328.1	275.57	2000	
75	As	89	He	0.005	ppb	121.2	19.00	1000	
78	Se	89	H2	0.013	ppb	45.3	4.83	1000	
88	Sr	89	He	0.007	ppb	17.5	30.00	2000	
95	Mo	89	He	-0.022	ppb	N/A	190.01	1000	
107	Ag	89	He	0.002	ppb	50.4	47.78	100	
111	Cd	89	He	0.002	ppb	24.4	4.07	1000	
118	Sn	159	He	0.009	ppb	100.3	287.79	1000	
121	Sb	159	No Gas	-0.006	ppb	N/A	253.62	1000	
137	Ba	159	No Gas	0.009	ppb	79.7	153.51	2000	
182	W	159	No Gas	0.004	ppb	58.2	210.24	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	303.68	1000	
208	Pb	209	No Gas	0.027	ppb	29.0	1308.16	2000	
232	Th	209	No Gas	0.003	ppb	40.4	383.78	1000	
238	U	209	No Gas	0.002	ppb	132.5	100.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4892690.85	0.4	4785442.25	102.24	29.5	120.4	
Sc	45	No Gas	12409984.86	0.7	11869896.98	104.55	29.5	120.4	
Sc	45	H2	1516299.03	2.6	1440463.34	105.26	29.5	120.4	
Sc	45	He	345866.92	0.3	342270.52	101.05	29.5	120.4	
Ge	72	No Gas	2352074.10	2.0	2254278.57	104.34	29.5	120.4	
Ge	72	H2	444257.83	1.3	432978.24	102.61	29.5	120.4	
Ge	72	He	224158.72	0.5	219029.81	102.34	29.5	120.4	
Y	89	H2	8272685.10	2.1	7788630.76	106.21	29.5	120.4	
Y	89	He	1762796.12	0.6	1720337.72	102.47	29.5	120.4	
Tb	159	No Gas	19627290.54	0.8	19085444.99	102.84	29.5	120.4	
Tb	159	He	6991255.31	0.7	6890196.91	101.47	29.5	120.4	
Bi	209	No Gas	8752482.91	0.4	8525371.63	102.66	29.5	120.4	

Sample Report

Sample Name SN6100-004

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:04:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.312	ppb	18.6	301.12	100	
11	B	6	No Gas	14.927	ppb	8.6	10364.10	1000	
23	Na	45	He	226.334	ppb	3.2	68182.47	200000	
24	Mg	45	He	2601.142	ppb	0.6	168314.69	200000	
27	Al	45	He	2545.783	ppb	1.0	59045.62	200000	
28	Si	45	H2	1019.072	ppb	7.4	35051.30	10000	
39	K	45	He	500.567	ppb	3.3	41209.48	200000	
40	Ca	45	H2	24651.893	ppb	1.4	8529765.15	200000	
51	V	89	He	47.595	ppb	0.7	40872.57	1000	
52	Cr	89	He	5.768	ppb	1.3	6617.02	2000	
55	Mn	89	He	34.278	ppb	0.3	16989.85	2000	
56	Fe	89	H2	4773.976	ppb	0.6	6672464.94	100000	
59	Co	89	He	3.307	ppb	1.6	6166.28	1000	
60	Ni	89	He	15.021	ppb	9.4	26079.46	1000	
63	Cu	89	He	78.327	ppb	1.0	113682.76	2000	
66	Zn	89	He	69.118	ppb	2.1	11159.29	2000	
75	As	89	He	2.516	ppb	1.9	283.70	1000	
78	Se	89	H2	2.568	ppb	2.0	135.99	1000	
88	Sr	89	He	168.437	ppb	0.5	90917.82	2000	
95	Mo	89	He	3.319	ppb	2.0	2534.78	1000	
107	Ag	89	He	0.188	ppb	8.6	447.80	100	
111	Cd	89	He	1.439	ppb	8.9	377.79	1000	
118	Sn	159	He	42.935	ppb	0.8	23621.45	1000	
121	Sb	159	No Gas	1.782	ppb	9.2	7300.18	1000	
137	Ba	159	No Gas	85.736	ppb	10.5	126399.13	2000	
182	W	159	No Gas	0.646	ppb	7.6	2085.83	1000	
205	Tl	209	No Gas	0.128	ppb	13.6	1091.28	1000	
208	Pb	209	No Gas	207.921	ppb	9.7	1707942.85	2000	
232	Th	209	No Gas	0.633	ppb	11.0	5193.58	1000	
238	U	209	No Gas	1.532	ppb	9.2	11524.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5027666.45	3.2	4785442.25	105.06	29.5	120.4	
Sc	45	No Gas	12640010.29	4.3	11869896.98	106.49	29.5	120.4	
Sc	45	H2	1479077.93	1.9	1440463.34	102.68	29.5	120.4	
Sc	45	He	347789.84	0.6	342270.52	101.61	29.5	120.4	
Ge	72	No Gas	2367635.13	3.3	2254278.57	105.03	29.5	120.4	
Ge	72	H2	429736.54	0.4	432978.24	99.25	29.5	120.4	
Ge	72	He	222434.00	0.2	219029.81	101.55	29.5	120.4	
Y	89	H2	8059090.47	1.3	7788630.76	103.47	29.5	120.4	
Y	89	He	1771014.42	0.7	1720337.72	102.95	29.5	120.4	
Tb	159	No Gas	20264428.17	3.3	19085444.99	106.18	29.5	120.4	
Tb	159	He	7112959.76	0.6	6890196.91	103.23	29.5	120.4	
Bi	209	No Gas	9167924.58	3.8	8525371.63	107.54	29.5	120.4	

Sample Report

Sample Name SN6100-004A

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:06:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.240	ppb	11.5	9194.34	100	
11	B	6	No Gas	213.227	ppb	10.4	128683.42	1000	
23	Na	45	He	10316.625	ppb	0.7	1306705.16	200000	
24	Mg	45	He	3570.032	ppb	1.3	231690.20	200000	
27	Al	45	He	3436.611	ppb	0.6	79954.98	200000	
28	Si	45	H2	6001.065	ppb	1.3	202147.23	10000	
39	K	45	He	10764.616	ppb	0.8	554783.27	200000	
40	Ca	45	H2	25788.059	ppb	1.7	8821897.71	200000	
51	V	89	He	97.054	ppb	1.4	83441.79	1000	
52	Cr	89	He	55.535	ppb	0.9	61491.16	2000	
55	Mn	89	He	54.157	ppb	1.4	26567.50	2000	
56	Fe	89	H2	5771.795	ppb	1.2	8037390.44	100000	
59	Co	89	He	13.810	ppb	1.0	25593.92	1000	
60	Ni	89	He	34.904	ppb	2.8	35973.73	1000	
63	Cu	89	He	107.169	ppb	0.6	153669.06	2000	
66	Zn	89	He	167.590	ppb	1.8	26753.19	2000	
75	As	89	He	51.485	ppb	2.2	5503.69	1000	
78	Se	89	H2	51.610	ppb	1.5	2697.81	1000	
88	Sr	89	He	215.547	ppb	0.7	116618.01	2000	
95	Mo	89	He	53.807	ppb	1.6	37145.78	1000	
107	Ag	89	He	10.694	ppb	1.4	23985.30	100	
111	Cd	89	He	11.926	ppb	0.7	3128.18	1000	
118	Sn	159	He	91.347	ppb	1.3	50130.65	1000	
121	Sb	159	No Gas	11.548	ppb	10.9	45578.26	1000	
137	Ba	159	No Gas	104.334	ppb	10.9	155096.59	2000	
182	W	159	No Gas	48.903	ppb	8.8	147419.54	1000	
205	Tl	209	No Gas	10.359	ppb	11.2	59818.02	1000	
208	Pb	209	No Gas	217.729	ppb	9.6	1779919.61	2000	
232	Th	209	No Gas	10.536	ppb	10.9	81714.80	1000	
238	U	209	No Gas	11.412	ppb	10.8	85206.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5010675.50	4.8	4785442.25	104.71	29.5	120.4	
Sc	45	No Gas	12657745.01	3.0	11869896.98	106.64	29.5	120.4	
Sc	45	H2	1462061.28	0.5	1440463.34	101.5	29.5	120.4	
Sc	45	He	349048.17	0.3	342270.52	101.98	29.5	120.4	
Ge	72	No Gas	2365249.38	3.7	2254278.57	104.92	29.5	120.4	
Ge	72	H2	429045.67	1.0	432978.24	99.09	29.5	120.4	
Ge	72	He	221221.91	0.1	219029.81	101	29.5	120.4	
Y	89	H2	8031288.71	0.1	7788630.76	103.12	29.5	120.4	
Y	89	He	1775198.41	0.4	1720337.72	103.19	29.5	120.4	
Tb	159	No Gas	20432656.78	3.1	19085444.99	107.06	29.5	120.4	
Tb	159	He	7138194.34	0.3	6890196.91	103.6	29.5	120.4	
Bi	209	No Gas	9125065.68	4.0	8525371.63	107.03	29.5	120.4	

Sample Report

Sample Name SN6100-004L

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:09:32 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.484	ppb	15.2	105.56	100	
11	B	6	No Gas	30.841	ppb	2.6	4977.69	1000	
23	Na	45	He	143.433	ppb	63.4	42967.99	200000	
24	Mg	45	He	2701.087	ppb	3.8	34441.59	200000	
27	Al	45	He	2659.669	ppb	4.9	12126.75	200000	
28	Si	45	H2	1074.688	ppb	10.7	7663.32	10000	
39	K	45	He	566.599	ppb	10.5	21404.70	200000	
40	Ca	45	H2	25049.289	ppb	1.3	1734083.85	200000	
51	V	89	He	49.816	ppb	2.7	8383.91	1000	
52	Cr	89	He	6.146	ppb	9.5	1576.48	2000	
55	Mn	89	He	36.458	ppb	4.5	3954.51	2000	
56	Fe	89	H2	4866.998	ppb	0.2	1365779.26	100000	
59	Co	89	He	3.799	ppb	5.6	1426.85	1000	
60	Ni	89	He	-22.178	ppb	N/A	16010.78	1000	
63	Cu	89	He	76.104	ppb	6.6	26188.73	2000	
66	Zn	89	He	74.467	ppb	3.8	2531.43	2000	
75	As	89	He	2.627	ppb	1.0	70.01	1000	
78	Se	89	H2	2.753	ppb	8.4	30.17	1000	
88	Sr	89	He	174.507	ppb	5.0	18291.66	2000	
95	Mo	89	He	2.931	ppb	13.7	647.81	1000	
107	Ag	89	He	0.207	ppb	12.3	116.67	100	
111	Cd	89	He	1.644	ppb	20.0	84.82	1000	
118	Sn	159	He	44.587	ppb	5.2	4948.88	1000	
121	Sb	159	No Gas	1.731	ppb	20.6	1675.29	1000	
137	Ba	159	No Gas	89.208	ppb	6.4	25653.52	2000	
182	W	159	No Gas	0.806	ppb	30.8	617.38	1000	
205	Tl	209	No Gas	0.085	ppb	68.0	440.50	1000	
208	Pb	209	No Gas	220.071	ppb	7.9	354210.71	2000	
232	Th	209	No Gas	0.805	ppb	12.4	1495.09	1000	
238	U	209	No Gas	1.654	ppb	7.9	2459.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4891426.88	2.6	4785442.25	102.21	29.5	120.4	
Sc	45	No Gas	12331183.67	2.3	11869896.98	103.89	29.5	120.4	
Sc	45	H2	1477352.95	1.2	1440463.34	102.56	29.5	120.4	
Sc	45	He	339965.74	3.9	342270.52	99.33	29.5	120.4	
Ge	72	No Gas	2346080.19	2.9	2254278.57	104.07	29.5	120.4	
Ge	72	H2	436613.20	0.9	432978.24	100.84	29.5	120.4	
Ge	72	He	217141.65	4.6	219029.81	99.14	29.5	120.4	
Y	89	H2	8038201.35	0.3	7788630.76	103.2	29.5	120.4	
Y	89	He	1721086.73	4.3	1720337.72	100.04	29.5	120.4	
Tb	159	No Gas	19682708.60	2.3	19085444.99	103.13	29.5	120.4	
Tb	159	He	6885696.84	4.1	6890196.91	99.93	29.5	120.4	
Bi	209	No Gas	8966399.63	2.7	8525371.63	105.17	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:12:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.440	ppb	11.3	104194.49	25	93.76	89.8	110.2	
11	B	6	No Gas	24.074	ppb	10.4	72658.09	25	96.3	89.8	110.2	
23	Na	45	He	4859.339	ppb	0.8	3018295.14	5000	97.19	89.8	110.2	
24	Mg	45	He	4891.434	ppb	1.1	1582768.87	5000	97.83	89.8	110.2	
27	Al	45	He	486.743	ppb	2.9	56571.42	500	97.35	89.8	110.2	
28	Si	45	H2	505.487	ppb	0.6	86014.10	500	101.1	89.8	110.2	
39	K	45	He	4871.851	ppb	0.7	1233130.05	5000	97.44	89.8	110.2	
40	Ca	45	H2	4976.115	ppb	0.9	8577799.60	5000	99.52	89.8	110.2	
51	V	89	He	24.152	ppb	0.6	103014.35	25	96.61	89.8	110.2	
52	Cr	89	He	24.200	ppb	0.6	132641.36	25	96.8	89.8	110.2	
55	Mn	89	He	24.254	ppb	0.7	58320.79	25	97.02	89.8	110.2	
56	Fe	89	H2	4892.265	ppb	1.5	34137934.65	5000	97.85	89.8	110.2	
59	Co	89	He	24.418	ppb	0.2	224019.00	25	97.67	89.8	110.2	
60	Ni	89	He	22.464	ppb	0.8	73690.25	25	89.86	89.8	110.2	
63	Cu	89	He	24.380	ppb	0.2	172640.32	25	97.52	89.8	110.2	
66	Zn	89	He	24.051	ppb	1.5	19125.96	25	96.2	89.8	110.2	
75	As	89	He	23.979	ppb	0.9	12698.19	25	95.92	89.8	110.2	
78	Se	89	H2	24.449	ppb	0.8	6408.69	25	97.8	89.8	110.2	
88	Sr	89	He	24.230	ppb	1.5	65057.07	25	96.92	89.8	110.2	
95	Mo	89	He	24.230	ppb	0.9	82666.00	25	96.92	89.8	110.2	
107	Ag	89	He	24.720	ppb	0.1	274843.63	25	98.88	89.8	110.2	
111	Cd	89	He	24.471	ppb	0.4	31835.58	25	97.88	89.8	110.2	
118	Sn	159	He	24.010	ppb	1.3	65110.27	25	96.04	89.8	110.2	
121	Sb	159	No Gas	23.596	ppb	10.5	452009.80	25	94.38	89.8	110.2	
137	Ba	159	No Gas	23.814	ppb	11.0	173105.84	25	95.26	89.8	110.2	
182	W	159	No Gas	23.544	ppb	10.4	346766.53	25	94.18	89.8	110.2	
205	Tl	209	No Gas	23.685	ppb	10.9	662969.22	25	94.74	89.8	110.2	
208	Pb	209	No Gas	23.408	ppb	9.6	932618.46	25	93.63	89.8	110.2	
232	Th	209	No Gas	23.124	ppb	11.1	871304.40	25	92.5	89.8	110.2	
238	U	209	No Gas	23.664	ppb	10.3	860859.44	25	94.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4965803.86	3.6	4785442.25	103.77	29.5	120.4	
Sc	45	No Gas	12593693.15	3.3	11869896.98	106.1	29.5	120.4	
Sc	45	H2	1473589.34	1.3	1440463.34	102.3	29.5	120.4	
Sc	45	He	348581.36	1.0	342270.52	101.84	29.5	120.4	
Ge	72	No Gas	2388131.12	3.7	2254278.57	105.94	29.5	120.4	
Ge	72	H2	440525.16	0.8	432978.24	101.74	29.5	120.4	
Ge	72	He	223568.93	1.0	219029.81	102.07	29.5	120.4	
Y	89	H2	8057248.42	0.8	7788630.76	103.45	29.5	120.4	
Y	89	He	1761729.90	0.7	1720337.72	102.41	29.5	120.4	
Tb	159	No Gas	19991869.98	3.4	19085444.99	104.75	29.5	120.4	
Tb	159	He	7064285.45	1.2	6890196.91	102.53	29.5	120.4	
Bi	209	No Gas	8889748.39	3.4	8525371.63	104.27	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:14:45 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.015	ppb	32.5	88.89	0.2	
11	B	6	No Gas	0.533	ppb	4.9	2932.63	4	
23	Na	45	He	-4.714	ppb	N/A	37246.40	200	
24	Mg	45	He	1.553	ppb	100.8	888.99	20	
27	Al	45	He	1.193	ppb	125.2	242.23	20	
28	Si	45	H2	0.162	ppb	281.9	383.76	100	
39	K	45	He	3.175	ppb	75.8	16882.40	200	
40	Ca	45	H2	0.578	ppb	34.6	4028.49	20	
51	V	89	He	0.010	ppb	86.8	137.79	1	
52	Cr	89	He	0.010	ppb	77.8	323.95	1	
55	Mn	89	He	0.013	ppb	192.0	606.57	0.4	
56	Fe	89	H2	0.794	ppb	9.8	16170.68	20	
59	Co	89	He	0.017	ppb	26.5	220.02	0.2	
60	Ni	89	He	-1.964	ppb	N/A	13655.97	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.253	ppb	N/A	4284.14	0.6	
66	Zn	89	He	0.050	ppb	85.6	294.46	2	
75	As	89	He	0.018	ppb	65.3	25.67	1	
78	Se	89	H2	0.042	ppb	30.4	12.33	1	
88	Sr	89	He	0.014	ppb	102.2	48.89	1	
95	Mo	89	He	0.067	ppb	53.6	488.92	1	
107	Ag	89	He	0.004	ppb	1.2	73.34	0.2	
111	Cd	89	He	0.005	ppb	110.0	7.78	0.2	
118	Sn	159	He	0.073	ppb	30.6	457.80	1	
121	Sb	159	No Gas	0.015	ppb	26.5	664.10	0.2	
137	Ba	159	No Gas	0.012	ppb	76.1	180.20	0.4	
182	W	159	No Gas	0.088	ppb	3.6	1438.35	1	
205	Tl	209	No Gas	0.029	ppb	40.5	1154.69	0.2	
208	Pb	209	No Gas	0.016	ppb	40.2	901.03	0.2	
232	Th	209	No Gas	0.097	ppb	1.4	3878.28	1	
238	U	209	No Gas	0.017	ppb	41.7	647.41	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4896591.52	3.4	4785442.25	102.32	29.5	120.4	
Sc	45	No Gas	12308566.47	3.6	11869896.98	103.7	29.5	120.4	
Sc	45	H2	1451823.97	7.2	1440463.34	100.79	29.5	120.4	
Sc	45	He	344320.77	0.7	342270.52	100.6	29.5	120.4	
Ge	72	No Gas	2325720.04	3.7	2254278.57	103.17	29.5	120.4	
Ge	72	H2	429456.23	4.6	432978.24	99.19	29.5	120.4	
Ge	72	He	221770.84	0.5	219029.81	101.25	29.5	120.4	
Y	89	H2	7885873.83	6.9	7788630.76	101.25	29.5	120.4	
Y	89	He	1748909.16	0.7	1720337.72	101.66	29.5	120.4	
Tb	159	No Gas	19713488.04	4.3	19085444.99	103.29	29.5	120.4	
Tb	159	He	6976448.23	0.3	6890196.91	101.25	29.5	120.4	
Bi	209	No Gas	8765619.06	4.7	8525371.63	102.82	29.5	120.4	

Sample Report

Sample Name SN6100-004P

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:17:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	25.55	100	
11	B	6	No Gas	0.503	ppb	190.1	3685.06	1000	
23	Na	45	He	-136.958	ppb	N/A	34168.42	200000	
24	Mg	45	He	0.290	ppb	1115.3	580.05	200000	
27	Al	45	He	-0.670	ppb	N/A	135.56	200000	
28	Si	45	H2	5.241	ppb	53.0	523.94	10000	
39	K	45	He	-198.921	ppb	N/A	9170.76	200000	
40	Ca	45	H2	-1.887	ppb	N/A	2409.22	200000	
51	V	89	He	-0.082	ppb	N/A	33.33	1000	
52	Cr	89	He	-0.110	ppb	N/A	220.63	2000	
55	Mn	89	He	-0.797	ppb	N/A	293.95	2000	
56	Fe	89	H2	-1.173	ppb	N/A	9267.27	100000	
59	Co	89	He	0.000	ppb	N/A	91.12	1000	
60	Ni	89	He	-25.309	ppb	N/A	9265.74	1000	
63	Cu	89	He	-2.824	ppb	N/A	3279.42	2000	
66	Zn	89	He	-0.413	ppb	N/A	308.91	2000	
75	As	89	He	-0.062	ppb	N/A	14.00	1000	
78	Se	89	H2	0.072	ppb	42.8	5.50	1000	
88	Sr	89	He	0.011	ppb	386.0	22.22	2000	
95	Mo	89	He	-0.166	ppb	N/A	194.45	1000	
107	Ag	89	He	0.002	ppb	416.3	46.67	100	
111	Cd	89	He	0.003	ppb	164.5	3.33	1000	
118	Sn	159	He	-0.198	ppb	N/A	231.12	1000	
121	Sb	159	No Gas	-0.035	ppb	N/A	553.96	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	170.19	2000	
182	W	159	No Gas	0.025	ppb	248.1	407.13	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	560.64	1000	
208	Pb	209	No Gas	0.012	ppb	120.7	747.51	2000	
232	Th	209	No Gas	0.095	ppb	36.4	2232.74	1000	
238	U	209	No Gas	0.001	ppb	189.9	76.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	12239770.95	54.8	4785442.25	255.77	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	30213634.24	52.0	11869896.98	254.54	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	1474304.69	35.2	1440463.34	102.35	29.5	120.4	
Sc	45	He	530962.66	29.1	342270.52	155.13	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	5784501.87	54.3	2254278.57	256.6	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	418887.92	35.7	432978.24	96.75	29.5	120.4	
Ge	72	He	357321.46	30.0	219029.81	163.14	29.5	120.4	6020/DoD□ EPA
Y	89	H2	8083235.76	34.8	7788630.76	103.78	29.5	120.4	
Y	89	He	2804642.58	30.7	1720337.72	163.03	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	48490385.95	51.6	19085444.99	254.07	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11267418.86	29.3	6890196.91	163.53	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	21724178.62	53.1	8525371.63	254.82	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-004S

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:19:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.007	ppb	N/A	23.33	100	
11	B	6	No Gas	0.511	ppb	159.9	2912.62	1000	
23	Na	45	He	-30.452	ppb	N/A	35118.79	200000	
24	Mg	45	He	1.681	ppb	295.8	468.93	200000	
27	Al	45	He	-1.059	ppb	N/A	100.01	200000	
28	Si	45	H2	16.630	ppb	57.2	427.15	10000	
39	K	45	He	-148.867	ppb	N/A	8857.41	200000	
40	Ca	45	H2	13.545	ppb	136.7	2268.09	200000	
51	V	89	He	-0.068	ppb	N/A	37.78	1000	
52	Cr	89	He	-0.012	ppb	N/A	257.29	2000	
55	Mn	89	He	-0.713	ppb	N/A	255.96	2000	
56	Fe	89	H2	12.086	ppb	149.8	7407.40	100000	
59	Co	89	He	0.022	ppb	115.9	115.57	1000	
60	Ni	89	He	-19.509	ppb	N/A	9045.54	1000	
63	Cu	89	He	-1.961	ppb	N/A	3478.37	2000	
66	Zn	89	He	-0.380	ppb	N/A	245.57	2000	
75	As	89	He	-0.025	ppb	N/A	14.33	1000	
78	Se	89	H2	0.297	ppb	143.0	2.67	1000	
88	Sr	89	He	0.019	ppb	71.2	24.44	2000	
95	Mo	89	He	-0.136	ppb	N/A	168.90	1000	
107	Ag	89	He	0.004	ppb	320.7	33.33	100	
111	Cd	89	He	0.010	ppb	176.8	4.44	1000	
118	Sn	159	He	-0.109	ppb	N/A	232.24	1000	
121	Sb	159	No Gas	-0.034	ppb	N/A	400.46	1000	
137	Ba	159	No Gas	-0.018	ppb	N/A	123.47	2000	
182	W	159	No Gas	0.044	ppb	112.9	450.51	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	567.32	1000	
208	Pb	209	No Gas	0.023	ppb	74.7	727.50	2000	
232	Th	209	No Gas	0.029	ppb	12.5	897.72	1000	
238	U	209	No Gas	0.005	ppb	16.5	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9218274.05	41.6	4785442.25	192.63	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	22378587.69	39.0	11869896.98	188.53	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	861065.78	116.9	1440463.34	59.78	29.5	120.4	
Sc	45	He	437986.83	63.0	342270.52	127.97	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	4302602.48	42.2	2254278.57	190.86	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	247094.46	117.3	432978.24	57.07	29.5	120.4	EPA
Ge	72	He	292468.77	65.7	219029.81	133.53	29.5	120.4	6020/DoD□ EPA
Y	89	H2	4626207.66	116.4	7788630.76	59.4	29.5	120.4	EPA
Y	89	He	2300326.17	66.3	1720337.72	133.71	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	36442368.35	39.5	19085444.99	190.94	29.5	120.4	6020/DoD□ EPA
Tb	159	He	9245690.56	66.1	6890196.91	134.19	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	16342168.36	40.6	8525371.63	191.69	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-005

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:22:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	17.78	100	
11	B	6	No Gas	0.746	ppb	86.4	2611.44	1000	
23	Na	45	He	-149.318	ppb	N/A	33001.21	200000	
24	Mg	45	He	-0.468	ppb	N/A	535.61	200000	
27	Al	45	He	-0.478	ppb	N/A	141.12	200000	
28	Si	45	H2	9.950	ppb	67.4	310.35	10000	
39	K	45	He	-208.856	ppb	N/A	8702.40	200000	
40	Ca	45	H2	1.890	ppb	192.2	1586.83	200000	
51	V	89	He	-0.086	ppb	N/A	34.44	1000	
52	Cr	89	He	-0.103	ppb	N/A	253.29	2000	
55	Mn	89	He	-0.831	ppb	N/A	288.62	2000	
56	Fe	89	H2	2.900	ppb	148.1	6001.32	100000	
59	Co	89	He	-0.009	ppb	N/A	82.23	1000	
60	Ni	89	He	-25.948	ppb	N/A	9183.43	1000	
63	Cu	89	He	-2.905	ppb	N/A	3282.75	2000	
66	Zn	89	He	-0.534	ppb	N/A	274.46	2000	
75	As	89	He	-0.091	ppb	N/A	10.00	1000	
78	Se	89	H2	0.069	ppb	132.2	2.50	1000	
88	Sr	89	He	0.009	ppb	41.3	25.55	2000	
95	Mo	89	He	-0.292	ppb	N/A	106.67	1000	
107	Ag	89	He	-0.001	ppb	N/A	41.11	100	
111	Cd	89	He	0.000	ppb	N/A	2.22	1000	
118	Sn	159	He	-0.280	ppb	N/A	183.34	1000	
121	Sb	159	No Gas	-0.028	ppb	N/A	397.12	1000	
137	Ba	159	No Gas	0.006	ppb	543.3	133.48	2000	
182	W	159	No Gas	0.003	ppb	580.7	230.26	1000	
205	Tl	209	No Gas	0.003	ppb	365.2	517.26	1000	
208	Pb	209	No Gas	0.016	ppb	65.4	550.62	2000	
232	Th	209	No Gas	0.017	ppb	7.2	604.03	1000	
238	U	209	No Gas	0.001	ppb	179.4	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7434305.50	36.4	4785442.25	155.35	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	18436152.17	33.5	11869896.98	155.32	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	713808.75	59.7	1440463.34	49.55	29.5	120.4	EPA
Sc	45	He	524668.07	15.3	342270.52	153.29	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	3512978.82	36.1	2254278.57	155.84	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	198947.25	59.4	432978.24	45.95	29.5	120.4	EPA
Ge	72	He	354654.13	12.9	219029.81	161.92	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3852722.61	62.7	7788630.76	49.47	29.5	120.4	EPA
Y	89	He	2796197.23	12.9	1720337.72	162.54	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	29933084.28	34.0	19085444.99	156.84	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11301444.14	12.8	6890196.91	164.02	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	13367103.19	34.7	8525371.63	156.79	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-006

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:25:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	22.22	100	
11	B	6	No Gas	0.783	ppb	185.1	2791.49	1000	
23	Na	45	He	-153.474	ppb	N/A	33907.60	200000	
24	Mg	45	He	-1.974	ppb	N/A	424.48	200000	
27	Al	45	He	-2.246	ppb	N/A	84.45	200000	
28	Si	45	H2	9.695	ppb	60.1	1004.61	10000	
39	K	45	He	-203.923	ppb	N/A	9676.02	200000	
40	Ca	45	H2	-4.126	ppb	N/A	2442.54	200000	
51	V	89	He	-0.090	ppb	N/A	30.00	1000	
52	Cr	89	He	-0.072	ppb	N/A	315.28	2000	
55	Mn	89	He	-0.848	ppb	N/A	289.29	2000	
56	Fe	89	H2	-3.335	ppb	N/A	9213.67	100000	
59	Co	89	He	-0.001	ppb	N/A	106.68	1000	
60	Ni	89	He	-25.274	ppb	N/A	10002.93	1000	
63	Cu	89	He	-2.783	ppb	N/A	3618.40	2000	
66	Zn	89	He	-0.119	ppb	N/A	391.14	2000	
75	As	89	He	-0.073	ppb	N/A	13.67	1000	
78	Se	89	H2	0.015	ppb	93.8	3.17	1000	
88	Sr	89	He	0.009	ppb	81.1	26.67	2000	
95	Mo	89	He	-0.250	ppb	N/A	155.56	1000	
107	Ag	89	He	0.000	ppb	1854.8	45.56	100	
111	Cd	89	He	-0.002	ppb	N/A	1.85	1000	
118	Sn	159	He	-0.258	ppb	N/A	213.35	1000	
121	Sb	159	No Gas	-0.031	ppb	N/A	457.19	1000	
137	Ba	159	No Gas	-0.004	ppb	N/A	140.16	2000	
182	W	159	No Gas	0.083	ppb	93.7	600.69	1000	
205	Tl	209	No Gas	0.001	ppb	2177.5	530.60	1000	
208	Pb	209	No Gas	0.013	ppb	76.0	570.65	2000	
232	Th	209	No Gas	0.038	ppb	48.3	947.78	1000	
238	U	209	No Gas	0.003	ppb	139.2	73.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8846830.11	51.0	4785442.25	184.87	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	21256733.59	49.9	11869896.98	179.08	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2131848.41	7.0	1440463.34	148	29.5	120.4	6020/DoD□ EPA
Sc	45	He	552081.45	13.9	342270.52	161.3	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	4061887.86	47.3	2254278.57	180.19	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	614959.28	10.2	432978.24	142.03	29.5	120.4	6020/DoD□ EPA
Ge	72	He	364758.44	12.2	219029.81	166.53	29.5	120.4	6020/DoD□ EPA
Y	89	H2	11686822.87	6.2	7788630.76	150.05	29.5	120.4	6020/DoD□ EPA
Y	89	He	2876669.89	12.7	1720337.72	167.22	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	34773982.40	51.1	19085444.99	182.2	29.5	120.4	6020/DoD□ EPA
Tb	159	He	11616286.08	13.0	6890196.91	168.59	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	15552249.20	49.8	8525371.63	182.42	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-007

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:27:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	24.45	100	
11	B	6	No Gas	0.513	ppb	109.6	2240.26	1000	
23	Na	45	He	-58.577	ppb	N/A	34285.81	200000	
24	Mg	45	He	-0.355	ppb	N/A	375.59	200000	
27	Al	45	He	-0.951	ppb	N/A	91.11	200000	
28	Si	45	H2	49.202	ppb	100.0	190.22	10000	
39	K	45	He	-169.515	ppb	N/A	8393.96	200000	
40	Ca	45	H2	18.475	ppb	152.4	667.82	200000	
51	V	89	He	-0.093	ppb	N/A	23.33	1000	
52	Cr	89	He	-0.050	ppb	N/A	250.63	2000	
55	Mn	89	He	-0.773	ppb	N/A	241.96	2000	
56	Fe	89	H2	25.394	ppb	118.7	3103.83	100000	
59	Co	89	He	-0.004	ppb	N/A	73.34	1000	
60	Ni	89	He	-21.510	ppb	N/A	8886.60	1000	
63	Cu	89	He	-2.442	ppb	N/A	3110.50	2000	
66	Zn	89	He	-0.105	ppb	N/A	283.35	2000	
75	As	89	He	-0.077	ppb	N/A	9.33	1000	
78	Se	89	H2	0.303	ppb	83.8	1.50	1000	
88	Sr	89	He	0.006	ppb	221.2	17.78	2000	
95	Mo	89	He	-0.305	ppb	N/A	76.67	1000	
107	Ag	89	He	-0.002	ppb	N/A	25.56	100	
111	Cd	89	He	-0.001	ppb	N/A	1.85	1000	
118	Sn	159	He	-0.228	ppb	N/A	174.45	1000	
121	Sb	159	No Gas	-0.040	ppb	N/A	293.66	1000	
137	Ba	159	No Gas	-0.018	ppb	N/A	86.76	2000	
182	W	159	No Gas	0.003	ppb	515.9	210.24	1000	
205	Tl	209	No Gas	0.001	ppb	1074.9	460.52	1000	
208	Pb	209	No Gas	0.007	ppb	100.8	420.47	2000	
232	Th	209	No Gas	0.002	ppb	191.6	397.11	1000	
238	U	209	No Gas	-0.002	ppb	N/A	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6819596.08	30.5	4785442.25	142.51	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	16823642.43	28.1	11869896.98	141.73	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	327156.63	135.5	1440463.34	22.71	29.5	120.4	6020/DoD□ EPA
Sc	45	He	412823.86	49.9	342270.52	120.61	29.5	120.4	6020/DoD
Ge	72	No Gas	3182059.68	30.5	2254278.57	141.16	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	91992.31	134.7	432978.24	21.25	29.5	120.4	6020/DoD□ EPA
Ge	72	He	277054.62	50.2	219029.81	126.49	29.5	120.4	6020/DoD□ EPA
Y	89	H2	1773410.50	136.5	7788630.76	22.77	29.5	120.4	6020/DoD□ EPA
Y	89	He	2170723.94	50.0	1720337.72	126.18	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	27282653.48	29.2	19085444.99	142.95	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8810549.11	49.3	6890196.91	127.87	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	12226402.95	29.0	8525371.63	143.41	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6100-008

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:34:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	56.5	47.78	100	
11	B	6	No Gas	-0.139	ppb	N/A	1577.92	1000	
23	Na	45	He	-12.084	ppb	N/A	37173.54	200000	
24	Mg	45	He	0.048	ppb	9379.6	377.81	200000	
27	Al	45	He	-0.953	ppb	N/A	98.90	200000	
28	Si	45	H2	30.445	ppb	91.4	163.52	10000	
39	K	45	He	-161.080	ppb	N/A	8450.70	200000	
40	Ca	45	H2	49.371	ppb	120.8	1405.71	200000	
51	V	89	He	-0.094	ppb	N/A	16.67	1000	
52	Cr	89	He	-0.097	ppb	N/A	180.64	2000	
55	Mn	89	He	-0.854	ppb	N/A	196.63	2000	
56	Fe	89	H2	44.090	ppb	120.8	5293.86	100000	
59	Co	89	He	-0.002	ppb	N/A	71.12	1000	
60	Ni	89	He	-21.384	ppb	N/A	8246.16	1000	
63	Cu	89	He	-2.618	ppb	N/A	2573.71	2000	
66	Zn	89	He	-0.302	ppb	N/A	267.80	2000	
75	As	89	He	-0.086	ppb	N/A	9.67	1000	
78	Se	89	H2	0.330	ppb	104.8	1.33	1000	
88	Sr	89	He	-0.010	ppb	N/A	10.00	2000	
95	Mo	89	He	-0.369	ppb	N/A	12.22	1000	
107	Ag	89	He	-0.003	ppb	N/A	25.55	100	
111	Cd	89	He	0.000	ppb	989.9	1.85	1000	
118	Sn	159	He	-0.313	ppb	N/A	113.34	1000	
121	Sb	159	No Gas	0.100	ppb	37.7	891.03	1000	
137	Ba	159	No Gas	0.378	ppb	19.2	750.86	2000	
182	W	159	No Gas	0.124	ppb	29.7	607.36	1000	
205	Tl	209	No Gas	0.144	ppb	40.0	1351.59	1000	
208	Pb	209	No Gas	0.319	ppb	32.5	3273.85	2000	
232	Th	209	No Gas	0.141	ppb	41.5	1551.84	1000	
238	U	209	No Gas	0.147	ppb	41.3	1278.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6083536.71	16.6	4785442.25	127.13	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	14711632.36	12.9	11869896.98	123.94	29.5	120.4	6020/DoD
Sc	45	H2	287024.52	121.4	1440463.34	19.93	29.5	120.4	6020/DoD□ EPA
Sc	45	He	437004.81	50.8	342270.52	127.68	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	2824715.42	14.9	2254278.57	125.3	29.5	120.4	6020/DoD
Ge	72	H2	85128.78	122.7	432978.24	19.66	29.5	120.4	6020/DoD□ EPA
Ge	72	He	284539.92	50.4	219029.81	129.91	29.5	120.4	6020/DoD□ EPA
Y	89	H2	1579306.34	122.2	7788630.76	20.28	29.5	120.4	6020/DoD□ EPA
Y	89	He	2303403.77	51.9	1720337.72	133.89	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	23751037.14	13.3	19085444.99	124.45	29.5	120.4	6020/DoD
Tb	159	He	9269787.05	51.4	6890196.91	134.54	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	10685935.87	13.8	8525371.63	125.34	29.5	120.4	6020/DoD

Sample Report

Sample Name	RINSE
File Name	037SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:36:36 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	16.67	100	
11	B	6	No Gas	0.080	ppb	15.0	1657.93	1000	
23	Na	45	He	-7.495	ppb	N/A	35546.85	200000	
24	Mg	45	He	-0.160	ppb	N/A	340.03	200000	
27	Al	45	He	-0.112	ppb	N/A	92.23	200000	
28	Si	45	H2	-0.096	ppb	N/A	343.72	10000	
39	K	45	He	0.273	ppb	787.8	16158.56	200000	
40	Ca	45	H2	-0.495	ppb	N/A	2262.49	200000	
51	V	89	He	-0.002	ppb	N/A	85.56	1000	
52	Cr	89	He	-0.002	ppb	N/A	256.63	2000	
55	Mn	89	He	-0.043	ppb	N/A	471.25	2000	
56	Fe	89	H2	-0.395	ppb	N/A	8198.25	100000	
59	Co	89	He	0.005	ppb	74.9	111.12	1000	
60	Ni	89	He	-1.826	ppb	N/A	13952.92	1000	
63	Cu	89	He	-0.260	ppb	N/A	4221.92	2000	
66	Zn	89	He	-0.011	ppb	N/A	245.57	2000	
75	As	89	He	0.007	ppb	121.9	19.33	1000	
78	Se	89	H2	0.013	ppb	69.7	4.67	1000	
88	Sr	89	He	0.001	ppb	267.2	14.44	2000	
95	Mo	89	He	-0.028	ppb	N/A	165.57	1000	
107	Ag	89	He	0.002	ppb	46.9	44.45	100	
111	Cd	89	He	0.001	ppb	154.2	2.22	1000	
118	Sn	159	He	0.010	ppb	195.7	290.01	1000	
121	Sb	159	No Gas	-0.004	ppb	N/A	310.35	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	56.73	2000	
182	W	159	No Gas	0.007	ppb	82.2	256.96	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	243.61	1000	
208	Pb	209	No Gas	0.000	ppb	117.9	273.64	2000	
232	Th	209	No Gas	0.001	ppb	165.8	297.00	1000	
238	U	209	No Gas	0.000	ppb	N/A	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5048215.27	3.6	4785442.25	105.49	29.5	120.4	
Sc	45	No Gas	12603416.72	2.9	11869896.98	106.18	29.5	120.4	
Sc	45	H2	1479086.79	1.8	1440463.34	102.68	29.5	120.4	
Sc	45	He	344157.36	0.3	342270.52	100.55	29.5	120.4	
Ge	72	No Gas	2375554.22	3.5	2254278.57	105.38	29.5	120.4	
Ge	72	H2	435330.65	2.8	432978.24	100.54	29.5	120.4	
Ge	72	He	222442.68	0.7	219029.81	101.56	29.5	120.4	
Y	89	H2	8019923.86	1.9	7788630.76	102.97	29.5	120.4	
Y	89	He	1744044.96	0.6	1720337.72	101.38	29.5	120.4	
Tb	159	No Gas	20187085.95	3.3	19085444.99	105.77	29.5	120.4	
Tb	159	He	7012122.19	1.1	6890196.91	101.77	29.5	120.4	
Bi	209	No Gas	9035936.03	3.7	8525371.63	105.99	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:39:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	13.33	100	
11	B	6	No Gas	-0.003	ppb	N/A	1411.23	1000	
23	Na	45	He	-9.424	ppb	N/A	34526.58	200000	
24	Mg	45	He	-0.344	ppb	N/A	282.25	200000	
27	Al	45	He	0.048	ppb	657.3	111.13	200000	
28	Si	45	H2	0.023	ppb	2024.8	360.40	10000	
39	K	45	He	-0.096	ppb	N/A	16136.84	200000	
40	Ca	45	H2	-0.478	ppb	N/A	2270.27	200000	
51	V	89	He	-0.002	ppb	N/A	87.78	1000	
52	Cr	89	He	-0.002	ppb	N/A	261.96	2000	
55	Mn	89	He	-0.069	ppb	N/A	415.27	2000	
56	Fe	89	H2	-0.420	ppb	N/A	7994.51	100000	
59	Co	89	He	0.006	ppb	63.5	126.68	1000	
60	Ni	89	He	-1.827	ppb	N/A	14074.20	1000	
63	Cu	89	He	-0.278	ppb	N/A	4140.76	2000	
66	Zn	89	He	0.021	ppb	343.0	273.35	2000	
75	As	89	He	0.009	ppb	46.9	20.67	1000	
78	Se	89	H2	0.008	ppb	64.7	3.33	1000	
88	Sr	89	He	0.000	ppb	N/A	11.11	2000	
95	Mo	89	He	-0.048	ppb	N/A	101.11	1000	
107	Ag	89	He	0.002	ppb	79.4	44.45	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	-0.009	ppb	N/A	241.12	1000	
121	Sb	159	No Gas	-0.008	ppb	N/A	216.91	1000	
137	Ba	159	No Gas	-0.003	ppb	N/A	70.08	2000	
182	W	159	No Gas	0.000	ppb	578.5	156.85	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	0.001	ppb	139.2	276.98	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	233.59	1000	
238	U	209	No Gas	0.000	ppb	N/A	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5062749.39	2.9	4785442.25	105.79	29.5	120.4	
Sc	45	No Gas	12522356.71	3.9	11869896.98	105.5	29.5	120.4	
Sc	45	H2	1464426.76	1.4	1440463.34	101.66	29.5	120.4	
Sc	45	He	345621.49	0.5	342270.52	100.98	29.5	120.4	
Ge	72	No Gas	2382135.70	3.5	2254278.57	105.67	29.5	120.4	
Ge	72	H2	439028.37	0.5	432978.24	101.4	29.5	120.4	
Ge	72	He	221096.02	0.6	219029.81	100.94	29.5	120.4	
Y	89	H2	7982624.27	0.6	7788630.76	102.49	29.5	120.4	
Y	89	He	1759424.45	0.4	1720337.72	102.27	29.5	120.4	
Tb	159	No Gas	19915788.87	3.0	19085444.99	104.35	29.5	120.4	
Tb	159	He	7049256.56	0.8	6890196.91	102.31	29.5	120.4	
Bi	209	No Gas	9023529.78	3.7	8525371.63	105.84	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:41:51 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	12.22	100	
11	B	6	No Gas	-0.024	ppb	N/A	1325.66	1000	
23	Na	45	He	-7.747	ppb	N/A	35296.05	200000	
24	Mg	45	He	1.774	ppb	41.9	955.66	200000	
27	Al	45	He	2.194	ppb	29.6	355.57	200000	
28	Si	45	H2	-0.534	ppb	N/A	266.97	10000	
39	K	45	He	2.175	ppb	92.3	16583.84	200000	
40	Ca	45	H2	0.121	ppb	49.0	3298.28	200000	
51	V	89	He	0.005	ppb	105.5	113.34	1000	
52	Cr	89	He	0.015	ppb	26.8	349.28	2000	
55	Mn	89	He	-0.017	ppb	N/A	529.92	2000	
56	Fe	89	H2	-0.373	ppb	N/A	8221.52	100000	
59	Co	89	He	0.008	ppb	34.2	142.24	1000	
60	Ni	89	He	-1.813	ppb	N/A	13892.88	1000	
63	Cu	89	He	-0.255	ppb	N/A	4231.91	2000	
66	Zn	89	He	0.038	ppb	49.8	282.24	2000	
75	As	89	He	0.001	ppb	129.7	16.33	1000	
78	Se	89	H2	0.004	ppb	105.7	2.33	1000	
88	Sr	89	He	0.017	ppb	26.5	56.67	2000	
95	Mo	89	He	-0.036	ppb	N/A	137.78	1000	
107	Ag	89	He	0.002	ppb	40.2	52.23	100	
111	Cd	89	He	0.008	ppb	38.9	11.11	1000	
118	Sn	159	He	0.033	ppb	168.2	349.08	1000	
121	Sb	159	No Gas	-0.010	ppb	N/A	186.88	1000	
137	Ba	159	No Gas	0.002	ppb	186.9	106.79	2000	
182	W	159	No Gas	-0.003	ppb	N/A	113.46	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	166.85	1000	
208	Pb	209	No Gas	0.002	ppb	33.5	337.05	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	223.59	1000	
238	U	209	No Gas	0.000	ppb	N/A	26.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4982719.16	2.8	4785442.25	104.12	29.5	120.4	
Sc	45	No Gas	12359184.38	2.1	11869896.98	104.12	29.5	120.4	
Sc	45	H2	1465351.38	0.9	1440463.34	101.73	29.5	120.4	
Sc	45	He	343181.69	0.7	342270.52	100.27	29.5	120.4	
Ge	72	No Gas	2359875.62	2.9	2254278.57	104.68	29.5	120.4	
Ge	72	H2	433677.31	0.3	432978.24	100.16	29.5	120.4	
Ge	72	He	220652.40	0.2	219029.81	100.74	29.5	120.4	
Y	89	H2	7888788.93	0.3	7788630.76	101.29	29.5	120.4	
Y	89	He	1732405.55	0.9	1720337.72	100.7	29.5	120.4	
Tb	159	No Gas	19779330.82	2.2	19085444.99	103.64	29.5	120.4	
Tb	159	He	6953688.37	0.4	6890196.91	100.92	29.5	120.4	
Bi	209	No Gas	8891134.05	2.3	8525371.63	104.29	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:44:31 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	12.22	100	
11	B	6	No Gas	-0.040	ppb	N/A	1266.77	1000	
23	Na	45	He	-9.366	ppb	N/A	34292.14	200000	
24	Mg	45	He	-0.457	ppb	N/A	244.47	200000	
27	Al	45	He	-0.207	ppb	N/A	81.11	200000	
28	Si	45	H2	-0.273	ppb	N/A	310.37	10000	
39	K	45	He	1.156	ppb	50.6	16318.77	200000	
40	Ca	45	H2	-0.297	ppb	N/A	2575.89	200000	
51	V	89	He	-0.002	ppb	N/A	83.34	1000	
52	Cr	89	He	0.000	ppb	N/A	269.29	2000	
55	Mn	89	He	-0.061	ppb	N/A	430.60	2000	
56	Fe	89	H2	-0.464	ppb	N/A	7647.20	100000	
59	Co	89	He	0.006	ppb	111.1	117.79	1000	
60	Ni	89	He	-1.821	ppb	N/A	13960.76	1000	
63	Cu	89	He	-0.275	ppb	N/A	4122.98	2000	
66	Zn	89	He	-0.044	ppb	N/A	220.01	2000	
75	As	89	He	-0.007	ppb	N/A	12.00	1000	
78	Se	89	H2	0.004	ppb	75.8	2.50	1000	
88	Sr	89	He	0.004	ppb	50.1	21.11	2000	
95	Mo	89	He	-0.059	ppb	N/A	62.23	1000	
107	Ag	89	He	0.000	ppb	N/A	24.45	100	
111	Cd	89	He	-0.001	ppb	N/A	0.74	1000	
118	Sn	159	He	0.006	ppb	232.6	280.01	1000	
121	Sb	159	No Gas	-0.010	ppb	N/A	186.88	1000	
137	Ba	159	No Gas	-0.001	ppb	N/A	80.09	2000	
182	W	159	No Gas	-0.003	ppb	N/A	103.45	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	186.88	1000	
208	Pb	209	No Gas	0.001	ppb	186.1	273.64	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	246.95	1000	
238	U	209	No Gas	0.000	ppb	N/A	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4932485.59	1.0	4785442.25	103.07	29.5	120.4	
Sc	45	No Gas	12336550.91	1.8	11869896.98	103.93	29.5	120.4	
Sc	45	H2	1462414.75	1.2	1440463.34	101.52	29.5	120.4	
Sc	45	He	342923.35	0.5	342270.52	100.19	29.5	120.4	
Ge	72	No Gas	2339204.69	2.4	2254278.57	103.77	29.5	120.4	
Ge	72	H2	430218.74	0.5	432978.24	99.36	29.5	120.4	
Ge	72	He	220633.22	1.0	219029.81	100.73	29.5	120.4	
Y	89	H2	7935646.20	0.2	7788630.76	101.89	29.5	120.4	
Y	89	He	1743242.73	0.9	1720337.72	101.33	29.5	120.4	
Tb	159	No Gas	19706085.40	2.5	19085444.99	103.25	29.5	120.4	
Tb	159	He	7003786.84	0.3	6890196.91	101.65	29.5	120.4	
Bi	209	No Gas	8846224.46	2.8	8525371.63	103.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:47:06 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.177	ppb	8.8	104451.82	25	92.71	89.8	110.2	
11	B	6	No Gas	23.399	ppb	9.0	71625.97	25	93.6	89.8	110.2	
23	Na	45	He	5047.963	ppb	5.2	3017338.22	5000	100.96	89.8	110.2	
24	Mg	45	He	5101.020	ppb	6.1	1588657.67	5000	102.02	89.8	110.2	
27	Al	45	He	504.792	ppb	8.2	56430.45	500	100.96	89.8	110.2	
28	Si	45	H2	505.014	ppb	2.2	85279.32	500	101	89.8	110.2	
39	K	45	He	5013.158	ppb	5.9	1220982.13	5000	100.26	89.8	110.2	
40	Ca	45	H2	4973.871	ppb	1.1	8508828.14	5000	99.48	89.8	110.2	
51	V	89	He	25.187	ppb	6.7	103173.17	25	100.75	89.8	110.2	
52	Cr	89	He	25.040	ppb	6.9	131803.38	25	100.16	89.8	110.2	
55	Mn	89	He	24.920	ppb	6.2	57549.17	25	99.68	89.8	110.2	
56	Fe	89	H2	4920.011	ppb	0.3	33727150.13	5000	98.4	89.8	110.2	
59	Co	89	He	25.256	ppb	7.4	222489.96	25	101.02	89.8	110.2	
60	Ni	89	He	24.079	ppb	8.6	74580.47	25	96.32	89.8	110.2	
63	Cu	89	He	25.358	ppb	7.0	172225.66	25	101.43	89.8	110.2	
66	Zn	89	He	24.800	ppb	6.4	18937.91	25	99.2	89.8	110.2	
75	As	89	He	24.824	ppb	6.0	12629.44	25	99.3	89.8	110.2	
78	Se	89	H2	24.521	ppb	0.8	6314.48	25	98.08	89.8	110.2	
88	Sr	89	He	24.913	ppb	6.2	64255.79	25	99.65	89.8	110.2	
95	Mo	89	He	24.903	ppb	7.2	81587.27	25	99.61	89.8	110.2	
107	Ag	89	He	25.157	ppb	6.4	268669.63	25	100.63	89.8	110.2	
111	Cd	89	He	25.188	ppb	5.7	31485.55	25	100.75	89.8	110.2	
118	Sn	159	He	24.878	ppb	6.9	65188.08	25	99.51	89.8	110.2	
121	Sb	159	No Gas	23.322	ppb	7.8	446111.52	25	93.29	89.8	110.2	
137	Ba	159	No Gas	23.578	ppb	7.3	171175.81	25	94.31	89.8	110.2	
182	W	159	No Gas	23.694	ppb	8.0	348465.06	25	94.78	89.8	110.2	
205	Tl	209	No Gas	23.496	ppb	8.5	660509.39	25	93.98	89.8	110.2	
208	Pb	209	No Gas	23.389	ppb	7.9	935683.00	25	93.56	89.8	110.2	
232	Th	209	No Gas	22.892	ppb	8.3	866327.17	25	91.57	89.8	110.2	
238	U	209	No Gas	23.290	ppb	8.8	850725.89	25	93.16	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5030537.23	2.9	4785442.25	105.12	29.5	120.4	
Sc	45	No Gas	12487819.46	2.2	11869896.98	105.21	29.5	120.4	
Sc	45	H2	1462351.31	0.6	1440463.34	101.52	29.5	120.4	
Sc	45	He	336229.12	5.4	342270.52	98.23	29.5	120.4	
Ge	72	No Gas	2359854.35	2.1	2254278.57	104.68	29.5	120.4	
Ge	72	H2	431839.61	0.9	432978.24	99.74	29.5	120.4	
Ge	72	He	216079.20	4.0	219029.81	98.65	29.5	120.4	
Y	89	H2	7915608.56	0.9	7788630.76	101.63	29.5	120.4	
Y	89	He	1695995.30	5.2	1720337.72	98.59	29.5	120.4	
Tb	159	No Gas	19932432.06	1.8	19085444.99	104.44	29.5	120.4	
Tb	159	He	6842988.65	5.4	6890196.91	99.31	29.5	120.4	
Bi	209	No Gas	8917449.43	2.3	8525371.63	104.6	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:49:42 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.028	ppb	59.6	147.78	0.2	
11	B	6	No Gas	0.320	ppb	3.4	2354.72	4	
23	Na	45	He	-9.867	ppb	N/A	33796.90	200	
24	Mg	45	He	-0.010	ppb	N/A	384.48	20	
27	Al	45	He	-0.369	ppb	N/A	62.22	20	
28	Si	45	H2	0.218	ppb	86.2	390.45	100	
39	K	45	He	0.815	ppb	76.4	16141.91	200	
40	Ca	45	H2	0.733	ppb	31.2	4316.38	20	
51	V	89	He	-0.002	ppb	N/A	84.45	1	
52	Cr	89	He	0.002	ppb	233.2	277.29	1	
55	Mn	89	He	-0.058	ppb	N/A	431.93	0.4	
56	Fe	89	H2	1.155	ppb	14.6	18699.85	20	
59	Co	89	He	0.005	ppb	19.5	108.90	0.2	
60	Ni	89	He	-2.001	ppb	N/A	13382.37	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.272	ppb	N/A	4100.76	0.6	
66	Zn	89	He	0.047	ppb	84.5	287.79	2	
75	As	89	He	0.006	ppb	173.3	18.67	1	
78	Se	89	H2	0.037	ppb	7.6	10.83	1	
88	Sr	89	He	0.005	ppb	95.2	23.33	1	
95	Mo	89	He	0.037	ppb	30.8	382.24	1	
107	Ag	89	He	0.003	ppb	31.1	58.89	0.2	
111	Cd	89	He	0.005	ppb	68.1	8.15	0.2	
118	Sn	159	He	0.060	ppb	34.1	422.24	1	
121	Sb	159	No Gas	0.027	ppb	49.6	894.37	0.2	
137	Ba	159	No Gas	0.018	ppb	81.3	220.25	0.4	
182	W	159	No Gas	0.088	ppb	7.2	1448.38	1	
205	Tl	209	No Gas	0.041	ppb	40.0	1505.13	0.2	
208	Pb	209	No Gas	0.023	ppb	61.5	1198.04	0.2	
232	Th	209	No Gas	0.110	ppb	9.5	4449.15	1	
238	U	209	No Gas	0.030	ppb	60.8	1131.34	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4991450.91	4.2	4785442.25	104.3	29.5	120.4	
Sc	45	No Gas	12415631.55	3.2	11869896.98	104.6	29.5	120.4	
Sc	45	H2	1455831.12	1.3	1440463.34	101.07	29.5	120.4	
Sc	45	He	340974.32	0.9	342270.52	99.62	29.5	120.4	
Ge	72	No Gas	2336003.14	3.0	2254278.57	103.63	29.5	120.4	
Ge	72	H2	434025.79	0.6	432978.24	100.24	29.5	120.4	
Ge	72	He	218546.30	0.5	219029.81	99.78	29.5	120.4	
Y	89	H2	7907804.87	0.6	7788630.76	101.53	29.5	120.4	
Y	89	He	1724930.08	0.7	1720337.72	100.27	29.5	120.4	
Tb	159	No Gas	19889423.45	2.7	19085444.99	104.21	29.5	120.4	
Tb	159	He	6951794.89	0.9	6890196.91	100.89	29.5	120.4	
Bi	209	No Gas	8931483.46	3.1	8525371.63	104.76	29.5	120.4	

Sample Report

Sample Name SN6100-009

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 4:52:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.815	ppb	5.6	1641.26	100	
11	B	6	No Gas	9.540	ppb	5.8	7069.77	1000	
23	Na	45	He	441.255	ppb	3.7	93242.29	200000	
24	Mg	45	He	2011.601	ppb	0.5	128574.11	200000	
27	Al	45	He	8975.248	ppb	0.5	205215.41	200000	
28	Si	45	H2	1919.651	ppb	0.4	64651.90	10000	
39	K	45	He	988.194	ppb	1.6	64670.14	200000	
40	Ca	45	H2	13805.919	ppb	0.9	4705591.04	200000	
51	V	89	He	56.016	ppb	0.7	48305.14	1000	
52	Cr	89	He	12.362	ppb	2.1	13931.71	2000	
55	Mn	89	He	623.293	ppb	1.0	300262.10	2000	
56	Fe	89	H2	22067.427	ppb	0.6	30740167.42	100000	
59	Co	89	He	22.103	ppb	0.6	41009.21	1000	
60	Ni	89	He	41.813	ppb	1.4	39474.41	1000	
63	Cu	89	He	1091.557	ppb	0.7	1512469.02	2000	
66	Zn	89	He	303.413	ppb	0.8	48329.18	2000	
75	As	89	He	31.705	ppb	1.0	3402.79	1000	
78	Se	89	H2	2.572	ppb	12.4	135.83	1000	
88	Sr	89	He	80.854	ppb	1.1	43848.75	2000	
95	Mo	89	He	2.735	ppb	2.9	2144.69	1000	
107	Ag	89	He	0.890	ppb	1.8	2024.67	100	
111	Cd	89	He	3.550	ppb	5.9	934.12	1000	
118	Sn	159	He	43.570	ppb	2.9	23876.35	1000	
121	Sb	159	No Gas	26.098	ppb	6.6	100288.90	1000	
137	Ba	159	No Gas	126.596	ppb	5.7	184085.28	2000	
182	W	159	No Gas	0.618	ppb	7.4	1972.37	1000	
205	Tl	209	No Gas	0.396	ppb	9.1	2649.92	1000	
208	Pb	209	No Gas	3962.229	ppb	6.4	32673442.50	2000	
232	Th	209	No Gas	2.212	ppb	3.1	17531.91	1000	
238	U	209	No Gas	4.011	ppb	5.5	30240.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4976130.07	0.6	4785442.25	103.98	29.5	120.4	
Sc	45	No Gas	12277233.05	0.4	11869896.98	103.43	29.5	120.4	
Sc	45	H2	1456352.84	0.5	1440463.34	101.1	29.5	120.4	
Sc	45	He	343308.50	0.3	342270.52	100.3	29.5	120.4	
Ge	72	No Gas	2295138.10	0.4	2254278.57	101.81	29.5	120.4	
Ge	72	H2	420728.62	0.6	432978.24	97.17	29.5	120.4	
Ge	72	He	219836.92	1.1	219029.81	100.37	29.5	120.4	
Y	89	H2	8042154.52	0.9	7788630.76	103.26	29.5	120.4	
Y	89	He	1779021.26	0.8	1720337.72	103.41	29.5	120.4	
Tb	159	No Gas	19943806.37	0.6	19085444.99	104.5	29.5	120.4	
Tb	159	He	7086848.50	0.7	6890196.91	102.85	29.5	120.4	
Bi	209	No Gas	9184676.96	0.6	8525371.63	107.73	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNH04IMW1
File Name	044_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:54:54 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.007	ppb	N/A	14.44	0.5	
B	11	6	No Gas	1.279	ppb	11.6	2158.02	10	
Na	23	45	He	-13.236	ppb	N/A	36921.43	500	
Mg	24	45	He	3.509	ppb	15.5	591.17	50	
Al	27	45	He	5.702	ppb	41.6	225.57	50	
Si	28	45	H2	11.383	ppb	26.8	724.17	250	
K	39	45	He	12.709	ppb	146.0	16053.49	500	
Ca	40	45	H2	14.635	ppb	6.1	7923.63	50	
V	51	89	He	0.150	ppb	8.7	213.34	2.5	
Cr	52	89	He	0.172	ppb	17.2	440.60	2.5	
Mn	55	89	He	0.079	ppb	93.0	590.58	1	
Fe	56	89	H2	3.476	ppb	8.9	15449.00	50	
Co	59	89	He	0.043	ppb	75.3	142.23	0.5	
Ni	60	89	He	-8.621	ppb	N/A	13741.66	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.490	ppb	67.4	6423.94	1.5	
Zn	66	89	He	1.504	ppb	18.3	473.36	5	
As	75	89	He	0.054	ppb	132.8	21.00	2.5	
Se	78	89	H2	0.059	ppb	35.3	4.33	2.5	
Sr	88	89	He	0.024	ppb	53.6	23.33	2.5	
Mo	95	89	He	-0.254	ppb	N/A	86.67	2.5	
Ag	107	89	He	0.009	ppb	116.6	44.44	0.5	
Cd	111	89	He	0.000	ppb	2092.6	1.48	0.5	
Sn	118	159	He	0.586	ppb	11.6	564.48	2.5	
Sb	121	159	No Gas	0.018	ppb	89.5	447.17	0.5	
Ba	137	159	No Gas	0.078	ppb	65.8	206.90	1	
W	182	159	No Gas	0.033	ppb	86.6	250.28	2.5	
Tl	205	209	No Gas	-0.032	ppb	N/A	166.85	0.5	
Pb	208	209	No Gas	2.319	ppb	34.6	19107.54	0.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.045	ppb	39.2	610.70	2.5	
U	238	209	No Gas	0.003	ppb	85.4	53.39	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4973150.06	2.5	4785442.25	103.92	29.5	120.4	
Sc	45	No Gas	12480449.28	2.1	11869896.98	105.14	29.5	120.4	
Sc	45	H2	1432944.12	1.9	1440463.34	99.48	29.5	120.4	
Sc	45	He	330974.17	4.6	342270.52	96.7	29.5	120.4	
Ge	72	No Gas	2329369.32	2.8	2254278.57	103.33	29.5	120.4	
Ge	72	H2	425691.68	0.3	432978.24	98.32	29.5	120.4	
Ge	72	He	213152.91	2.8	219029.81	97.32	29.5	120.4	
Y	89	H2	7854446.41	0.4	7788630.76	100.85	29.5	120.4	
Y	89	He	1689618.41	5.0	1720337.72	98.21	29.5	120.4	
Tb	159	No Gas	20081201.92	2.6	19085444.99	105.22	29.5	120.4	
Tb	159	He	6830831.70	4.0	6890196.91	99.14	29.5	120.4	
Bi	209	No Gas	8987097.72	3.2	8525371.63	105.42	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNH04IMW1
File Name	045LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 4:57:28 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.359	ppb	7.0	45281.25	50	20.14	79.5	120.4	
B	11	6	No Gas	517.542	ppb	8.1	311173.54	500	20.7	79.5	120.4	
Na	23	45	He	8080.176	ppb	1.2	1010722.37	7500	21.55	79.5	120.4	
Mg	24	45	He	5433.776	ppb	1.4	345094.38	5000	21.74	79.5	120.4	
Al	27	45	He	1977.907	ppb	2.2	45100.25	2000	19.78	79.5	120.4	
Si	28	45	H2	1076.881	ppb	1.3	36186.36	1000	21.54	0	200	
K	39	45	He	10921.832	ppb	0.7	550923.84	10000	21.84	79.5	120.4	
Ca	40	45	H2	2716.636	ppb	1.4	922359.29	2500	21.73	79.5	120.4	
V	51	89	He	518.852	ppb	0.6	436708.42	500	20.75	79.5	120.4	
Cr	52	89	He	210.759	ppb	1.5	227901.05	200	21.08	79.5	120.4	
Mn	55	89	He	523.521	ppb	0.4	246707.95	500	20.94	79.5	120.4	
Fe	56	89	H2	1070.225	ppb	0.2	1472513.63	1000	21.4	79.5	120.4	
Co	59	89	He	522.360	ppb	1.1	946070.55	500	20.89	79.5	120.4	
Ni	60	89	He	533.780	ppb	1.6	276931.02	500	21.35	79.5	120.4	
Cu	63	89	He	265.572	ppb	1.6	364299.14	250	21.25	79.5	120.4	
Zn	66	89	He	517.103	ppb	1.0	80359.20	500	20.68	79.5	120.4	
As	75	89	He	106.776	ppb	1.0	11167.71	100	21.36	79.5	120.4	
Se	78	89	H2	106.671	ppb	0.8	5475.16	100	21.33	79.5	120.4	
Sr	88	89	He	518.241	ppb	0.3	274737.79	500	20.73	79.5	120.4	
Mo	95	89	He	106.350	ppb	1.4	71679.60	100	21.27	79.5	120.4	
Ag	107	89	He	53.975	ppb	0.8	118517.53	50	21.59	79.5	120.4	
Cd	111	89	He	269.391	ppb	1.0	69205.64	250	21.55	79.5	120.4	
Sn	118	159	He	515.592	ppb	0.8	278353.33	500	20.62	79.5	120.4	
Sb	121	159	No Gas	105.250	ppb	8.3	400490.75	100	21.05	79.5	120.4	
Ba	137	159	No Gas	2021.563	ppb	7.4	2917966.46	2000	20.22	79.5	120.4	
W	182	159	No Gas	103.265	ppb	8.1	302119.91	100	20.65	79.5	120.4	
Tl	205	209	No Gas	106.112	ppb	8.4	600209.46	100	21.22	79.5	120.4	
[Pb]	206	209	No Gas	103.262	ppb	8.4	210840.18	100	20.65	79.5	120.4	
[Pb]	207	209	No Gas	102.019	ppb	7.8	182715.17	100	20.4	79.5	120.4	
Pb	208	209	No Gas	104.079	ppb	8.0	837734.35	100	20.82	79.5	120.4	
Th	232	209	No Gas	103.008	ppb	8.4	784319.77	100	20.6	79.5	120.4	
U	238	209	No Gas	103.885	ppb	8.1	763560.27	100	20.78	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5010710.27	1.6	4785442.25	104.71	29.5	120.4	
Sc	45	No Gas	12285005.41	1.9	11869896.98	103.5	29.5	120.4	
Sc	45	H2	1446795.82	0.4	1440463.34	100.44	29.5	120.4	
Sc	45	He	341781.22	1.1	342270.52	99.86	29.5	120.4	
Ge	72	No Gas	2337655.57	2.3	2254278.57	103.7	29.5	120.4	
Ge	72	H2	425421.85	0.8	432978.24	98.25	29.5	120.4	
Ge	72	He	218586.24	1.1	219029.81	99.8	29.5	120.4	
Y	89	H2	7888019.20	0.5	7788630.76	101.28	29.5	120.4	
Y	89	He	1739559.75	1.4	1720337.72	101.12	29.5	120.4	
Tb	159	No Gas	19821749.29	1.7	19085444.99	103.86	29.5	120.4	
Tb	159	He	7053031.08	0.5	6890196.91	102.36	29.5	120.4	
Bi	209	No Gas	8967728.04	1.6	8525371.63	105.19	29.5	120.4	

Sample Report

Sample Name SN6316-008

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:00:06 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.250	ppb	17.7	124.45	100	
11	B	6	No Gas	2657.500	ppb	7.5	743282.93	1000	
23	Na	45	He	799953.920	ppb	2.1	47023259.94	200000	
24	Mg	45	He	60300.526	ppb	1.3	1870365.49	200000	
27	Al	45	He	154.183	ppb	5.7	1816.85	200000	
28	Si	45	H2	12929.054	ppb	1.0	214860.38	10000	
39	K	45	He	204643.351	ppb	2.4	4914712.48	200000	
40	Ca	45	H2	202543.293	ppb	0.6	34177280.05	200000	
51	V	89	He	23.483	ppb	4.3	9630.31	1000	
52	Cr	89	He	69.075	ppb	2.7	36283.81	2000	
55	Mn	89	He	54.134	ppb	3.7	12838.89	2000	
56	Fe	89	H2	4658.935	ppb	0.8	3135502.11	100000	
59	Co	89	He	16.252	ppb	4.3	14272.73	1000	
60	Ni	89	He	22.020	ppb	9.9	22863.71	1000	
63	Cu	89	He	-0.189	ppb	N/A	5636.89	2000	
66	Zn	89	He	17.980	ppb	2.5	1591.27	2000	
75	As	89	He	178.604	ppb	3.1	9021.57	1000	
78	Se	89	H2	1.363	ppb	12.8	35.67	1000	
88	Sr	89	He	2823.533	ppb	3.5	722596.05	2000	
95	Mo	89	He	6.946	ppb	4.5	2503.65	1000	
107	Ag	89	He	0.028	ppb	20.5	55.56	100	
111	Cd	89	He	0.057	ppb	77.5	8.52	1000	
118	Sn	159	He	15.101	ppb	1.8	4174.16	1000	
121	Sb	159	No Gas	16.697	ppb	4.8	30963.60	1000	
137	Ba	159	No Gas	160.993	ppb	4.4	112103.09	2000	
182	W	159	No Gas	1.428	ppb	8.6	2159.28	1000	
205	Tl	209	No Gas	0.267	ppb	39.2	1007.84	1000	
208	Pb	209	No Gas	1.173	ppb	5.2	4568.81	2000	
232	Th	209	No Gas	1.986	ppb	14.4	7190.11	1000	
238	U	209	No Gas	1.604	ppb	5.4	5440.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4674959.43	1.3	4785442.25	97.69	29.5	120.4	
Sc	45	No Gas	11879887.70	1.4	11869896.98	100.08	29.5	120.4	
Sc	45	H2	1442723.95	0.8	1440463.34	100.16	29.5	120.4	
Sc	45	He	334204.93	2.1	342270.52	97.64	29.5	120.4	
Ge	72	No Gas	2246612.45	0.5	2254278.57	99.66	29.5	120.4	
Ge	72	H2	420989.97	1.7	432978.24	97.23	29.5	120.4	
Ge	72	He	213810.86	1.4	219029.81	97.62	29.5	120.4	
Y	89	H2	7747407.87	0.4	7788630.76	99.47	29.5	120.4	
Y	89	He	1680539.30	2.7	1720337.72	97.69	29.5	120.4	
Tb	159	No Gas	19092737.35	0.9	19085444.99	100.04	29.5	120.4	
Tb	159	He	6787924.14	2.5	6890196.91	98.52	29.5	120.4	
Bi	209	No Gas	8235536.81	0.8	8525371.63	96.6	29.5	120.4	

Sample Report

Sample Name SN6316-009

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:02:39 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.087	ppb	48.2	58.89	100	
11	B	6	No Gas	1916.636	ppb	6.1	565482.59	1000	
23	Na	45	He	639214.387	ppb	5.1	38111959.37	200000	
24	Mg	45	He	48947.939	ppb	4.9	1539598.53	200000	
27	Al	45	He	244.007	ppb	5.8	2854.83	200000	
28	Si	45	H2	11451.382	ppb	16.2	201955.11	10000	
39	K	45	He	161150.527	ppb	5.9	3927302.62	200000	
40	Ca	45	H2	153677.458	ppb	16.1	27515714.87	200000	
51	V	89	He	18.221	ppb	4.7	7631.23	1000	
52	Cr	89	He	49.127	ppb	5.2	26353.02	2000	
55	Mn	89	He	60.796	ppb	3.9	14620.31	2000	
56	Fe	89	H2	3846.168	ppb	15.9	2773661.14	100000	
59	Co	89	He	12.340	ppb	3.7	11058.53	1000	
60	Ni	89	He	16.047	ppb	22.2	21863.25	1000	
63	Cu	89	He	7.535	ppb	13.0	10864.61	2000	
66	Zn	89	He	50.493	ppb	6.8	4094.08	2000	
75	As	89	He	133.628	ppb	5.1	6877.79	1000	
78	Se	89	H2	0.954	ppb	36.2	27.00	1000	
88	Sr	89	He	2309.162	ppb	5.5	601798.47	2000	
95	Mo	89	He	8.096	ppb	2.5	2931.53	1000	
107	Ag	89	He	0.074	ppb	58.4	107.78	100	
111	Cd	89	He	0.211	ppb	22.6	28.15	1000	
118	Sn	159	He	12.056	ppb	2.3	3423.89	1000	
121	Sb	159	No Gas	12.234	ppb	3.7	23319.61	1000	
137	Ba	159	No Gas	129.816	ppb	7.5	92543.85	2000	
182	W	159	No Gas	0.789	ppb	5.5	1288.18	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	18.096	ppb	8.1	69043.92	2000	
232	Th	209	No Gas	0.182	ppb	15.9	911.06	1000	
238	U	209	No Gas	1.153	ppb	3.8	4031.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4926012.56	0.3	4785442.25	102.94	29.5	120.4	
Sc	45	No Gas	12318521.21	0.7	11869896.98	103.78	29.5	120.4	
Sc	45	H2	1552390.90	12.9	1440463.34	107.77	29.5	120.4	
Sc	45	He	339268.00	4.0	342270.52	99.12	29.5	120.4	
Ge	72	No Gas	2305789.38	2.0	2254278.57	102.29	29.5	120.4	
Ge	72	H2	446802.08	9.1	432978.24	103.19	29.5	120.4	
Ge	72	He	217294.19	3.4	219029.81	99.21	29.5	120.4	
Y	89	H2	8399979.69	11.8	7788630.76	107.85	29.5	120.4	
Y	89	He	1712481.27	3.5	1720337.72	99.54	29.5	120.4	
Tb	159	No Gas	19548226.24	0.4	19085444.99	102.42	29.5	120.4	
Tb	159	He	6866710.52	4.5	6890196.91	99.66	29.5	120.4	
Bi	209	No Gas	8473179.34	1.3	8525371.63	99.39	29.5	120.4	

Sample Report

Sample Name SN6316-008

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:05:14 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.104	ppb	37.6	44.45	100	
11	B	6	No Gas	2553.635	ppb	10.3	382977.85	1000	
23	Na	45	He	829099.503	ppb	2.8	24200818.51	200000	
24	Mg	45	He	62765.893	ppb	2.3	966098.11	200000	
27	Al	45	He	163.873	ppb	8.1	1006.74	200000	
28	Si	45	H2	12538.495	ppb	8.2	110850.93	10000	
39	K	45	He	214114.225	ppb	3.1	2558904.38	200000	
40	Ca	45	H2	195553.440	ppb	10.3	17507150.99	200000	
51	V	89	He	23.910	ppb	2.9	4959.95	1000	
52	Cr	89	He	72.597	ppb	4.5	19232.29	2000	
55	Mn	89	He	54.516	ppb	4.6	6755.09	2000	
56	Fe	89	H2	4591.801	ppb	10.6	1647199.01	100000	
59	Co	89	He	17.326	ppb	7.3	7653.82	1000	
60	Ni	89	He	9.529	ppb	48.3	18873.30	1000	
63	Cu	89	He	-3.951	ppb	N/A	4487.56	2000	
66	Zn	89	He	17.451	ppb	8.4	901.18	2000	
75	As	89	He	186.532	ppb	3.1	4730.32	1000	
78	Se	89	H2	1.020	ppb	13.5	15.17	1000	
88	Sr	89	He	2926.621	ppb	2.9	375470.93	2000	
95	Mo	89	He	6.387	ppb	10.0	1290.11	1000	
107	Ag	89	He	0.039	ppb	37.4	46.67	100	
111	Cd	89	He	0.036	ppb	55.7	3.70	1000	
118	Sn	159	He	15.229	ppb	2.0	2230.27	1000	
121	Sb	159	No Gas	16.212	ppb	11.8	16014.08	1000	
137	Ba	159	No Gas	159.838	ppb	12.3	58597.97	2000	
182	W	159	No Gas	1.126	ppb	22.1	987.81	1000	
205	Tl	209	No Gas	-0.111	ppb	N/A	183.54	1000	
208	Pb	209	No Gas	1.106	ppb	3.3	2436.16	2000	
232	Th	209	No Gas	0.094	ppb	17.2	440.50	1000	
238	U	209	No Gas	1.319	ppb	19.8	2399.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5015173.90	4.1	4785442.25	104.8	29.5	120.4	
Sc	45	No Gas	12608113.40	3.8	11869896.98	106.22	29.5	120.4	
Sc	45	H2	1538837.25	7.6	1440463.34	106.83	29.5	120.4	
Sc	45	He	331676.28	2.0	342270.52	96.9	29.5	120.4	
Ge	72	No Gas	2367998.82	4.0	2254278.57	105.04	29.5	120.4	
Ge	72	H2	457338.31	4.2	432978.24	105.63	29.5	120.4	
Ge	72	He	215847.96	2.3	219029.81	98.55	29.5	120.4	
Y	89	H2	8277151.39	8.0	7788630.76	106.27	29.5	120.4	
Y	89	He	1684848.84	2.8	1720337.72	97.94	29.5	120.4	
Tb	159	No Gas	20164732.06	4.4	19085444.99	105.66	29.5	120.4	
Tb	159	He	6782990.94	3.1	6890196.91	98.44	29.5	120.4	
Bi	209	No Gas	8814176.47	4.7	8525371.63	103.39	29.5	120.4	

Sample Report

Sample Name SN6316-009

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:07:49 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	95.0	47.78	100	
11	B	6	No Gas	1927.455	ppb	9.7	287076.99	1000	
23	Na	45	He	638970.662	ppb	7.1	19202252.20	200000	
24	Mg	45	He	48871.130	ppb	7.0	774113.31	200000	
27	Al	45	He	234.199	ppb	11.0	1432.34	200000	
28	Si	45	H2	12657.875	ppb	0.6	107282.44	10000	
39	K	45	He	162584.222	ppb	7.2	2003204.60	200000	
40	Ca	45	H2	169517.992	ppb	0.4	14566248.53	200000	
51	V	89	He	18.807	ppb	13.4	3999.62	1000	
52	Cr	89	He	49.491	ppb	8.3	13488.00	2000	
55	Mn	89	He	60.728	ppb	9.9	7625.38	2000	
56	Fe	89	H2	4280.755	ppb	0.4	1483766.15	100000	
59	Co	89	He	12.833	ppb	11.0	5810.54	1000	
60	Ni	89	He	-4.272	ppb	N/A	17641.62	1000	
63	Cu	89	He	4.473	ppb	27.9	7403.33	2000	
66	Zn	89	He	52.229	ppb	6.5	2254.71	2000	
75	As	89	He	134.925	ppb	8.5	3500.83	1000	
78	Se	89	H2	1.325	ppb	14.0	18.50	1000	
88	Sr	89	He	2332.624	ppb	7.6	305918.26	2000	
95	Mo	89	He	7.636	ppb	10.7	1525.69	1000	
107	Ag	89	He	0.065	ppb	15.9	62.23	100	
111	Cd	89	He	0.164	ppb	64.9	11.85	1000	
118	Sn	159	He	12.073	ppb	11.9	1850.20	1000	
121	Sb	159	No Gas	12.006	ppb	9.8	11851.81	1000	
137	Ba	159	No Gas	130.335	ppb	11.2	47364.10	2000	
182	W	159	No Gas	0.723	ppb	15.8	684.13	1000	
205	Tl	209	No Gas	-0.067	ppb	N/A	243.61	1000	
208	Pb	209	No Gas	18.287	ppb	11.6	36144.00	2000	
232	Th	209	No Gas	0.118	ppb	25.8	483.89	1000	
238	U	209	No Gas	1.069	ppb	20.4	1938.99	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4971695.32	3.5	4785442.25	103.89	29.5	120.4	
Sc	45	No Gas	12654612.81	3.8	11869896.98	106.61	29.5	120.4	
Sc	45	H2	1469207.59	1.1	1440463.34	102	29.5	120.4	
Sc	45	He	341979.31	5.1	342270.52	99.91	29.5	120.4	
Ge	72	No Gas	2385680.13	3.6	2254278.57	105.83	29.5	120.4	
Ge	72	H2	440027.10	1.4	432978.24	101.63	29.5	120.4	
Ge	72	He	220013.97	5.9	219029.81	100.45	29.5	120.4	
Y	89	H2	7948778.29	1.1	7788630.76	102.06	29.5	120.4	
Y	89	He	1725906.02	5.3	1720337.72	100.32	29.5	120.4	
Tb	159	No Gas	19969538.45	4.0	19085444.99	104.63	29.5	120.4	
Tb	159	He	6915393.37	5.5	6890196.91	100.37	29.5	120.4	
Bi	209	No Gas	8771095.58	4.1	8525371.63	102.88	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNH06IMW2
File Name	050_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:10:29 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.010	ppb	N/A	12.22	0.5	
B	11	6	No Gas	14.915	ppb	3.5	10396.33	10	PB 6020 Fails DoD
Na	23	45	He	80.391	ppb	21.9	48525.44	500	
Mg	24	45	He	6.305	ppb	12.1	773.41	50	
Al	27	45	He	3.418	ppb	17.5	178.90	50	
Si	28	45	H2	29.519	ppb	11.7	1341.58	250	
K	39	45	He	29.909	ppb	31.6	17120.94	500	
Ca	40	45	H2	19.712	ppb	4.9	9777.05	50	
V	51	89	He	0.195	ppb	26.3	254.46	2.5	
Cr	52	89	He	0.251	ppb	22.9	533.25	2.5	
Mn	55	89	He	0.122	ppb	13.8	621.90	1	
Fe	56	89	H2	-0.566	ppb	N/A	10084.81	50	
Co	59	89	He	0.051	ppb	77.3	157.79	0.5	
Ni	60	89	He	-8.244	ppb	N/A	14172.05	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	-0.086	ppb	N/A	5780.31	1.5	
Zn	66	89	He	5.691	ppb	5.6	1122.31	5	PB 6020 Fails DoD
As	75	89	He	0.113	ppb	11.7	27.33	2.5	
Se	78	89	H2	0.061	ppb	55.5	4.50	2.5	
Sr	88	89	He	0.104	ppb	9.3	65.56	2.5	
Mo	95	89	He	-0.299	ppb	N/A	58.89	2.5	
Ag	107	89	He	0.007	ppb	47.6	41.11	0.5	
Cd	111	89	He	0.003	ppb	267.1	2.22	0.5	
Sn	118	159	He	0.518	ppb	14.0	533.36	2.5	
Sb	121	159	No Gas	0.024	ppb	104.6	470.53	0.5	
Ba	137	159	No Gas	0.083	ppb	31.7	213.57	1	
W	182	159	No Gas	0.001	ppb	1112.1	156.84	2.5	
Tl	205	209	No Gas	-0.028	ppb	N/A	190.21	0.5	
Pb	208	209	No Gas	0.064	ppb	32.4	774.22	0.5	
Th	232	209	No Gas	0.023	ppb	15.2	450.52	2.5	
U	238	209	No Gas	-0.001	ppb	N/A	23.36	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5035856.77	3.3	4785442.25	105.23	29.5	120.4	
Sc	45	No Gas	12494953.47	4.0	11869896.98	105.27	29.5	120.4	
Sc	45	H2	1455442.16	1.5	1440463.34	101.04	29.5	120.4	
Sc	45	He	335606.43	3.4	342270.52	98.05	29.5	120.4	
Ge	72	No Gas	2368536.42	3.7	2254278.57	105.07	29.5	120.4	
Ge	72	H2	431316.91	1.5	432978.24	99.62	29.5	120.4	
Ge	72	He	216838.18	2.5	219029.81	99	29.5	120.4	
Y	89	H2	7959303.50	1.1	7788630.76	102.19	29.5	120.4	
Y	89	He	1719086.57	2.9	1720337.72	99.93	29.5	120.4	
Tb	159	No Gas	20087276.37	3.3	19085444.99	105.25	29.5	120.4	
Tb	159	He	6903871.01	3.1	6890196.91	100.2	29.5	120.4	
Bi	209	No Gas	9042784.24	3.7	8525371.63	106.07	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNH06IMW2
File Name	051LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:13:00 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.597	ppb	8.5	43759.73	50	19.44	79.5	120.4	
B	11	6	No Gas	506.731	ppb	7.7	305169.73	500	20.27	79.5	120.4	
Na	23	45	He	7816.681	ppb	1.1	988417.95	7500	20.84	79.5	120.4	
Mg	24	45	He	5236.904	ppb	1.0	335764.08	5000	20.95	79.5	120.4	
Al	27	45	He	1924.077	ppb	1.1	44296.69	2000	19.24	79.5	120.4	
Si	28	45	H2	1071.315	ppb	1.1	36312.99	1000	21.43	0	200	
K	39	45	He	10566.152	ppb	0.7	538594.52	10000	21.13	79.5	120.4	
Ca	40	45	H2	2625.755	ppb	0.8	899316.99	2500	21.01	79.5	120.4	
V	51	89	He	502.538	ppb	0.5	429105.34	500	20.1	79.5	120.4	
Cr	52	89	He	203.866	ppb	0.7	223666.44	200	20.39	79.5	120.4	
Mn	55	89	He	509.901	ppb	1.0	243768.42	500	20.4	79.5	120.4	
Fe	56	89	H2	1035.853	ppb	0.4	1450911.67	1000	20.72	79.5	120.4	
Co	59	89	He	506.428	ppb	1.4	930513.55	500	20.26	79.5	120.4	
Ni	60	89	He	516.127	ppb	0.4	272279.59	500	20.64	79.5	120.4	
Cu	63	89	He	256.784	ppb	0.9	357565.97	250	20.54	79.5	120.4	
Zn	66	89	He	501.627	ppb	0.3	79092.56	500	20.06	79.5	120.4	
As	75	89	He	102.741	ppb	1.7	10901.79	100	20.55	79.5	120.4	
Se	78	89	H2	103.452	ppb	0.3	5404.47	100	20.69	79.5	120.4	
Sr	88	89	He	505.639	ppb	0.4	271931.48	500	20.23	79.5	120.4	
Mo	95	89	He	103.269	ppb	0.4	70624.58	100	20.65	79.5	120.4	
Ag	107	89	He	51.653	ppb	0.8	115065.10	50	20.66	79.5	120.4	
Cd	111	89	He	259.634	ppb	0.4	67666.40	250	20.77	79.5	120.4	
Sn	118	159	He	499.614	ppb	0.5	270647.89	500	19.98	79.5	120.4	
Sb	121	159	No Gas	99.873	ppb	8.0	385412.50	100	19.98	79.5	120.4	
Ba	137	159	No Gas	1948.966	ppb	8.3	2852512.62	2000	19.49	79.5	120.4	
W	182	159	No Gas	98.340	ppb	8.0	291765.68	100	19.67	79.5	120.4	
Tl	205	209	No Gas	103.672	ppb	7.1	587047.18	100	20.73	79.5	120.4	
[Pb]	206	209	No Gas	98.816	ppb	7.5	201967.62	100	19.76	79.5	120.4	
[Pb]	207	209	No Gas	97.224	ppb	8.9	174266.14	100	19.44	79.5	120.4	
Pb	208	209	No Gas	99.549	ppb	8.5	801973.02	100	19.91	79.5	120.4	
Th	232	209	No Gas	99.155	ppb	7.8	755741.04	100	19.83	79.5	120.4	
U	238	209	No Gas	99.749	ppb	8.4	733819.46	100	19.95	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	5018601.65	1.1	4785442.25	104.87	29.5	120.4	
Sc	45	No Gas	12387958.56	0.8	11869896.98	104.36	29.5	120.4	
Sc	45	H2	1459390.98	1.0	1440463.34	101.31	29.5	120.4	
Sc	45	He	345040.20	1.0	342270.52	100.81	29.5	120.4	
Ge	72	No Gas	2358679.77	1.8	2254278.57	104.63	29.5	120.4	
Ge	72	H2	431291.57	0.6	432978.24	99.61	29.5	120.4	
Ge	72	He	222989.34	0.3	219029.81	101.81	29.5	120.4	
Y	89	H2	8028293.32	0.3	7788630.76	103.08	29.5	120.4	
Y	89	He	1764708.46	0.6	1720337.72	102.58	29.5	120.4	
Tb	159	No Gas	20099009.70	1.3	19085444.99	105.31	29.5	120.4	
Tb	159	He	7077082.88	0.2	6890196.91	102.71	29.5	120.4	
Bi	209	No Gas	8976045.84	1.6	8525371.63	105.29	29.5	120.4	

Sample Report

Sample Name SN5589-006R

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:15:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	146.8	30.00	100	
11	B	6	No Gas	40.111	ppb	7.5	24614.12	1000	
23	Na	45	He	93162.969	ppb	0.7	11235893.83	200000	
24	Mg	45	He	4941.842	ppb	1.3	313915.06	200000	
27	Al	45	He	9.425	ppb	4.2	318.91	200000	
28	Si	45	H2	3051.497	ppb	2.3	102592.46	10000	
39	K	45	He	1817.070	ppb	0.3	104996.26	200000	
40	Ca	45	H2	15989.949	ppb	0.6	5450617.00	200000	
51	V	89	He	0.301	ppb	14.5	346.69	1000	
52	Cr	89	He	0.387	ppb	7.3	687.89	2000	
55	Mn	89	He	1.015	ppb	2.2	1051.19	2000	
56	Fe	89	H2	4.346	ppb	5.1	16848.96	100000	
59	Co	89	He	0.368	ppb	2.8	735.63	1000	
60	Ni	89	He	-8.347	ppb	N/A	14321.13	1000	
63	Cu	89	He	-0.077	ppb	N/A	5873.64	2000	
66	Zn	89	He	7.414	ppb	6.4	1404.57	2000	
75	As	89	He	1.107	ppb	7.2	131.68	1000	
78	Se	89	H2	0.354	ppb	20.9	19.67	1000	
88	Sr	89	He	71.601	ppb	1.4	38031.41	2000	
95	Mo	89	He	-0.073	ppb	N/A	212.23	1000	
107	Ag	89	He	0.027	ppb	21.5	86.67	100	
111	Cd	89	He	0.058	ppb	4.8	16.30	1000	
118	Sn	159	He	0.866	ppb	6.8	727.82	1000	
121	Sb	159	No Gas	0.147	ppb	12.0	944.43	1000	
137	Ba	159	No Gas	6.977	ppb	9.2	10275.58	2000	
182	W	159	No Gas	0.170	ppb	15.4	657.41	1000	
205	Tl	209	No Gas	0.079	ppb	49.2	787.58	1000	
208	Pb	209	No Gas	0.121	ppb	16.1	1218.06	2000	
232	Th	209	No Gas	0.830	ppb	13.5	6555.78	1000	
238	U	209	No Gas	0.069	ppb	6.2	533.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4861145.66	4.9	4785442.25	101.58	29.5	120.4	
Sc	45	No Gas	12493487.63	3.8	11869896.98	105.25	29.5	120.4	
Sc	45	H2	1456599.74	1.3	1440463.34	101.12	29.5	120.4	
Sc	45	He	341827.34	0.8	342270.52	99.87	29.5	120.4	
Ge	72	No Gas	2381441.93	3.4	2254278.57	105.64	29.5	120.4	
Ge	72	H2	435537.73	1.2	432978.24	100.59	29.5	120.4	
Ge	72	He	221375.00	0.7	219029.81	101.07	29.5	120.4	
Y	89	H2	7957512.70	1.5	7788630.76	102.17	29.5	120.4	
Y	89	He	1742460.20	0.7	1720337.72	101.29	29.5	120.4	
Tb	159	No Gas	20074195.39	3.5	19085444.99	105.18	29.5	120.4	
Tb	159	He	7004105.45	0.5	6890196.91	101.65	29.5	120.4	
Bi	209	No Gas	8903018.23	3.3	8525371.63	104.43	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:18:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.206	ppb	10.8	100596.51	25	92.82	89.8	110.2	
11	B	6	No Gas	24.685	ppb	10.5	72617.69	25	98.74	89.8	110.2	
23	Na	45	He	4889.675	ppb	1.0	2987792.74	5000	97.79	89.8	110.2	
24	Mg	45	He	4941.319	ppb	0.6	1573073.97	5000	98.83	89.8	110.2	
27	Al	45	He	492.844	ppb	0.2	56358.02	500	98.57	89.8	110.2	
28	Si	45	H2	504.550	ppb	1.3	84882.60	500	100.91	89.8	110.2	
39	K	45	He	4886.244	ppb	1.3	1216733.43	5000	97.72	89.8	110.2	
40	Ca	45	H2	4985.052	ppb	0.4	8496828.41	5000	99.7	89.8	110.2	
51	V	89	He	24.239	ppb	0.5	102354.70	25	96.96	89.8	110.2	
52	Cr	89	He	24.165	ppb	0.4	131128.71	25	96.66	89.8	110.2	
55	Mn	89	He	24.151	ppb	0.6	57496.86	25	96.6	89.8	110.2	
56	Fe	89	H2	4935.367	ppb	0.8	33985701.59	5000	98.71	89.8	110.2	
59	Co	89	He	24.357	ppb	1.1	221221.10	25	97.43	89.8	110.2	
60	Ni	89	He	22.311	ppb	1.2	72579.04	25	89.24	89.8	110.2	> +/- 10%
63	Cu	89	He	24.351	ppb	0.9	170721.00	25	97.4	89.8	110.2	
66	Zn	89	He	24.476	ppb	2.4	19262.82	25	97.9	89.8	110.2	
75	As	89	He	24.143	ppb	1.4	12658.14	25	96.57	89.8	110.2	
78	Se	89	H2	24.670	ppb	1.7	6382.00	25	98.68	89.8	110.2	
88	Sr	89	He	24.180	ppb	0.2	64273.29	25	96.72	89.8	110.2	
95	Mo	89	He	24.207	ppb	0.3	81766.09	25	96.83	89.8	110.2	
107	Ag	89	He	24.480	ppb	0.5	269456.69	25	97.92	89.8	110.2	
111	Cd	89	He	24.365	ppb	0.3	31381.57	25	97.46	89.8	110.2	
118	Sn	159	He	24.296	ppb	0.4	64910.38	25	97.18	89.8	110.2	
121	Sb	159	No Gas	23.241	ppb	9.9	446503.85	25	92.96	89.8	110.2	
137	Ba	159	No Gas	23.485	ppb	10.7	171200.90	25	93.94	89.8	110.2	
182	W	159	No Gas	23.566	ppb	10.0	348110.99	25	94.26	89.8	110.2	
205	Tl	209	No Gas	23.696	ppb	10.4	663528.66	25	94.78	89.8	110.2	
208	Pb	209	No Gas	23.271	ppb	10.5	927237.53	25	93.08	89.8	110.2	
232	Th	209	No Gas	23.102	ppb	11.5	870588.42	25	92.41	89.8	110.2	
238	U	209	No Gas	23.497	ppb	11.3	854810.82	25	93.99	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4843337.75	3.7	4785442.25	101.21	29.5	120.4	
Sc	45	No Gas	12532309.79	4.3	11869896.98	105.58	29.5	120.4	
Sc	45	H2	1456993.36	1.4	1440463.34	101.15	29.5	120.4	
Sc	45	He	342936.13	0.3	342270.52	100.19	29.5	120.4	
Ge	72	No Gas	2370365.72	4.0	2254278.57	105.15	29.5	120.4	
Ge	72	H2	436209.46	0.6	432978.24	100.75	29.5	120.4	
Ge	72	He	221248.58	0.3	219029.81	101.01	29.5	120.4	
Y	89	H2	7951209.32	0.5	7788630.76	102.09	29.5	120.4	
Y	89	He	1744158.84	0.4	1720337.72	101.38	29.5	120.4	
Tb	159	No Gas	20047053.73	3.5	19085444.99	105.04	29.5	120.4	
Tb	159	He	6959182.81	0.6	6890196.91	101	29.5	120.4	
Bi	209	No Gas	8895814.77	3.9	8525371.63	104.35	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:20:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.017	ppb	40.3	94.45	0.2	
11	B	6	No Gas	0.899	ppb	2.1	4022.94	4	
23	Na	45	He	-3.098	ppb	N/A	38085.98	200	
24	Mg	45	He	-0.352	ppb	N/A	277.80	20	
27	Al	45	He	-0.392	ppb	N/A	60.00	20	
28	Si	45	H2	1.045	ppb	24.5	527.27	100	
39	K	45	He	1.374	ppb	69.0	16378.74	200	
40	Ca	45	H2	0.610	ppb	22.6	4095.18	20	
51	V	89	He	0.006	ppb	88.6	120.01	1	
52	Cr	89	He	0.001	ppb	590.5	271.95	1	
55	Mn	89	He	-0.084	ppb	N/A	373.94	0.4	
56	Fe	89	H2	0.744	ppb	14.2	15990.25	20	
59	Co	89	He	0.010	ppb	28.9	153.35	0.2	
60	Ni	89	He	-2.390	ppb	N/A	12514.92	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.408	ppb	N/A	3204.93	0.6	Failed DoD
66	Zn	89	He	-0.010	ppb	N/A	245.56	2	
75	As	89	He	0.015	ppb	65.4	23.67	1	
78	Se	89	H2	0.039	ppb	9.6	11.50	1	
88	Sr	89	He	0.001	ppb	156.3	13.33	1	
95	Mo	89	He	0.023	ppb	85.2	335.57	1	
107	Ag	89	He	0.003	ppb	50.8	60.00	0.2	
111	Cd	89	He	0.004	ppb	35.4	6.30	0.2	
118	Sn	159	He	0.074	ppb	11.7	460.03	1	
121	Sb	159	No Gas	0.013	ppb	27.9	627.39	0.2	
137	Ba	159	No Gas	0.015	ppb	76.1	200.23	0.4	
182	W	159	No Gas	0.076	ppb	13.2	1251.47	1	
205	Tl	209	No Gas	0.019	ppb	39.7	897.71	0.2	
208	Pb	209	No Gas	0.017	ppb	32.0	934.39	0.2	
232	Th	209	No Gas	0.098	ppb	16.1	3988.50	1	
238	U	209	No Gas	0.016	ppb	36.1	637.40	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4920772.74	3.9	4785442.25	102.83	29.5	120.4	
Sc	45	No Gas	12474621.27	3.4	11869896.98	105.09	29.5	120.4	
Sc	45	H2	1450903.56	0.6	1440463.34	100.72	29.5	120.4	
Sc	45	He	343064.56	0.5	342270.52	100.23	29.5	120.4	
Ge	72	No Gas	2364626.26	3.7	2254278.57	104.9	29.5	120.4	
Ge	72	H2	438526.38	1.4	432978.24	101.28	29.5	120.4	
Ge	72	He	221103.65	0.4	219029.81	100.95	29.5	120.4	
Y	89	H2	7961208.53	1.1	7788630.76	102.22	29.5	120.4	
Y	89	He	1734735.90	0.8	1720337.72	100.84	29.5	120.4	
Tb	159	No Gas	19758475.82	3.9	19085444.99	103.53	29.5	120.4	
Tb	159	He	6957339.55	0.6	6890196.91	100.97	29.5	120.4	
Bi	209	No Gas	8936444.46	3.7	8525371.63	104.82	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG14IMW2
File Name	055_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:23:25 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ppb	126.1	28.89	0.5	
B	11	6	No Gas	6.534	ppb	6.4	5180.00	10	
Na	23	45	He	0.879	ppb	606.1	40007.04	500	
Mg	24	45	He	3.826	ppb	40.5	633.40	50	
Al	27	45	He	3.939	ppb	14.3	194.45	50	
Si	28	45	H2	26.501	ppb	27.9	1238.10	250	
K	39	45	He	5.159	ppb	62.4	16273.65	500	
Ca	40	45	H2	15.277	ppb	2.2	8278.26	50	
V	51	89	He	0.174	ppb	32.5	241.12	2.5	
Cr	52	89	He	0.385	ppb	6.6	687.90	2.5	
Mn	55	89	He	0.028	ppb	300.6	587.91	1	
Fe	56	89	H2	7.644	ppb	2.7	21366.72	50	
Co	59	89	He	0.043	ppb	68.6	146.68	0.5	
Ni	60	89	He	-10.643	ppb	N/A	13243.39	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	-0.317	ppb	N/A	5564.64	1.5	
Zn	66	89	He	1.396	ppb	18.2	472.25	5	
As	75	89	He	0.115	ppb	35.8	28.00	2.5	
Se	78	89	H2	0.077	ppb	17.1	5.33	2.5	
Sr	88	89	He	0.025	ppb	39.1	24.44	2.5	
Mo	95	89	He	-0.146	ppb	N/A	163.34	2.5	
Ag	107	89	He	0.012	ppb	40.9	54.45	0.5	
Cd	111	89	He	0.003	ppb	155.9	2.22	0.5	
Sn	118	159	He	0.624	ppb	22.9	602.26	2.5	
Sb	121	159	No Gas	0.030	ppb	56.2	487.22	0.5	
Ba	137	159	No Gas	0.068	ppb	23.5	186.88	1	
W	182	159	No Gas	0.065	ppb	42.9	340.38	2.5	
Tl	205	209	No Gas	-0.020	ppb	N/A	230.26	0.5	
Pb	208	209	No Gas	0.066	ppb	14.7	777.55	0.5	
Th	232	209	No Gas	0.320	ppb	3.6	2679.95	2.5	
U	238	209	No Gas	0.014	ppb	8.9	126.81	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4883825.89	3.3	4785442.25	102.06	29.5	120.4	
Sc	45	No Gas	12246720.66	1.3	11869896.98	103.17	29.5	120.4	
Sc	45	H2	1456595.92	2.5	1440463.34	101.12	29.5	120.4	
Sc	45	He	342638.76	1.0	342270.52	100.11	29.5	120.4	
Ge	72	No Gas	2316176.20	2.0	2254278.57	102.75	29.5	120.4	
Ge	72	H2	432732.17	1.9	432978.24	99.94	29.5	120.4	
Ge	72	He	220501.59	0.4	219029.81	100.67	29.5	120.4	
Y	89	H2	7945877.84	1.7	7788630.76	102.02	29.5	120.4	
Y	89	He	1747256.88	0.9	1720337.72	101.56	29.5	120.4	
Tb	159	No Gas	19727237.34	1.3	19085444.99	103.36	29.5	120.4	
Tb	159	He	7047732.39	0.8	6890196.91	102.29	29.5	120.4	
Bi	209	No Gas	8862550.47	2.3	8525371.63	103.96	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG14IMW2
File Name	056LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:26:03 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.729	ppb	9.0	44174.37	50	19.89	79.5	120.4	
B	11	6	No Gas	515.120	ppb	8.0	306054.44	500	20.6	79.5	120.4	
Na	23	45	He	7402.554	ppb	1.1	928204.71	7500	19.74	79.5	120.4	
Mg	24	45	He	5367.986	ppb	0.9	340513.69	5000	21.47	79.5	120.4	
Al	27	45	He	1965.576	ppb	0.6	44769.15	2000	19.66	79.5	120.4	
Si	28	45	H2	1092.594	ppb	2.2	36869.01	1000	21.85	0	200	
K	39	45	He	10586.977	ppb	0.5	533893.93	10000	21.17	79.5	120.4	
Ca	40	45	H2	2651.555	ppb	1.5	904341.75	2500	21.21	79.5	120.4	
V	51	89	He	521.628	ppb	1.5	440996.24	500	20.87	79.5	120.4	
Cr	52	89	He	208.311	ppb	0.7	226281.76	200	20.83	79.5	120.4	
Mn	55	89	He	521.736	ppb	0.4	246969.27	500	20.87	79.5	120.4	
Fe	56	89	H2	1068.753	ppb	0.7	1476364.37	1000	21.38	79.5	120.4	
Co	59	89	He	518.398	ppb	0.1	943174.47	500	20.74	79.5	120.4	
Ni	60	89	He	526.403	ppb	0.1	274602.61	500	21.06	79.5	120.4	
Cu	63	89	He	262.809	ppb	0.7	362215.29	250	21.02	79.5	120.4	
Zn	66	89	He	514.268	ppb	0.5	80282.46	500	20.57	79.5	120.4	
As	75	89	He	105.755	ppb	0.2	11111.32	100	21.15	79.5	120.4	
Se	78	89	H2	106.063	ppb	0.9	5465.66	100	21.21	79.5	120.4	
Sr	88	89	He	516.958	ppb	0.3	275286.74	500	20.68	79.5	120.4	
Mo	95	89	He	105.783	ppb	0.1	71626.27	100	21.16	79.5	120.4	
Ag	107	89	He	53.332	ppb	0.6	117633.40	50	21.33	79.5	120.4	
Cd	111	89	He	263.191	ppb	0.3	67918.84	250	21.06	79.5	120.4	
Sn	118	159	He	509.872	ppb	0.3	275358.03	500	20.39	79.5	120.4	
Sb	121	159	No Gas	102.729	ppb	9.2	395123.82	100	20.55	79.5	120.4	
Ba	137	159	No Gas	1998.278	ppb	9.3	2915074.66	2000	19.98	79.5	120.4	
W	182	159	No Gas	102.754	ppb	7.6	303952.83	100	20.55	79.5	120.4	
Tl	205	209	No Gas	105.715	ppb	9.0	598498.47	100	21.14	79.5	120.4	
[Pb]	206	209	No Gas	101.737	ppb	9.4	207897.04	100	20.35	79.5	120.4	
[Pb]	207	209	No Gas	100.668	ppb	8.5	180468.78	100	20.13	79.5	120.4	
Pb	208	209	No Gas	102.764	ppb	9.3	827817.40	100	20.55	79.5	120.4	
Th	232	209	No Gas	102.942	ppb	9.3	784485.55	100	20.59	79.5	120.4	
U	238	209	No Gas	102.126	ppb	9.9	751157.64	100	20.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4956708.46	3.0	4785442.25	103.58	29.5	120.4	
Sc	45	No Gas	12412098.85	3.5	11869896.98	104.57	29.5	120.4	
Sc	45	H2	1453284.69	1.0	1440463.34	100.89	29.5	120.4	
Sc	45	He	341376.86	0.7	342270.52	99.74	29.5	120.4	
Ge	72	No Gas	2350266.49	3.3	2254278.57	104.26	29.5	120.4	
Ge	72	H2	435161.35	1.7	432978.24	100.5	29.5	120.4	
Ge	72	He	222065.78	0.5	219029.81	101.39	29.5	120.4	
Y	89	H2	7919268.00	0.7	7788630.76	101.68	29.5	120.4	
Y	89	He	1747320.01	0.6	1720337.72	101.57	29.5	120.4	
Tb	159	No Gas	20058593.45	3.2	19085444.99	105.1	29.5	120.4	
Tb	159	He	7055483.78	0.2	6890196.91	102.4	29.5	120.4	
Bi	209	No Gas	8985589.86	3.3	8525371.63	105.4	29.5	120.4	

Sample Report

Sample Name SN5646-004R

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:28:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	86.1	60.00	100	
11	B	6	No Gas	37.050	ppb	5.2	22700.78	1000	
23	Na	45	He	67698.599	ppb	0.8	8229864.58	200000	
24	Mg	45	He	21735.297	ppb	0.7	1388531.80	200000	
27	Al	45	He	7.295	ppb	25.5	272.24	200000	
28	Si	45	H2	2469.713	ppb	0.7	83014.28	10000	
39	K	45	He	1987.894	ppb	0.7	114112.96	200000	
40	Ca	45	H2	34294.068	ppb	0.4	11676042.61	200000	
51	V	89	He	0.288	ppb	26.6	335.57	1000	
52	Cr	89	He	0.429	ppb	13.7	733.22	2000	
55	Mn	89	He	0.319	ppb	24.1	723.22	2000	
56	Fe	89	H2	9.675	ppb	4.6	24107.47	100000	
59	Co	89	He	0.345	ppb	4.1	693.40	1000	
60	Ni	89	He	-6.016	ppb	N/A	15446.76	1000	
63	Cu	89	He	0.524	ppb	12.8	6682.96	2000	
66	Zn	89	He	5.512	ppb	7.8	1108.98	2000	
75	As	89	He	1.436	ppb	10.5	166.02	1000	
78	Se	89	H2	0.756	ppb	9.0	40.33	1000	
88	Sr	89	He	167.097	ppb	0.3	88704.50	2000	
95	Mo	89	He	-0.038	ppb	N/A	235.57	1000	
107	Ag	89	He	0.028	ppb	34.5	88.89	100	
111	Cd	89	He	0.076	ppb	11.2	21.11	1000	
118	Sn	159	He	1.006	ppb	11.0	800.06	1000	
121	Sb	159	No Gas	0.163	ppb	31.7	1017.84	1000	
137	Ba	159	No Gas	4.684	ppb	2.8	6996.27	2000	
182	W	159	No Gas	4.786	ppb	9.1	14414.27	1000	
205	Tl	209	No Gas	0.171	ppb	33.1	1301.54	1000	
208	Pb	209	No Gas	0.153	ppb	19.9	1471.69	2000	
232	Th	209	No Gas	1.071	ppb	18.7	8342.27	1000	
238	U	209	No Gas	0.118	ppb	28.5	887.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4825997.23	3.1	4785442.25	100.85	29.5	120.4	
Sc	45	No Gas	12434220.97	3.4	11869896.98	104.75	29.5	120.4	
Sc	45	H2	1455329.67	1.1	1440463.34	101.03	29.5	120.4	
Sc	45	He	344089.53	0.7	342270.52	100.53	29.5	120.4	
Ge	72	No Gas	2344542.90	3.0	2254278.57	104	29.5	120.4	
Ge	72	H2	431538.45	0.3	432978.24	99.67	29.5	120.4	
Ge	72	He	221134.85	1.0	219029.81	100.96	29.5	120.4	
Y	89	H2	7928857.17	0.1	7788630.76	101.8	29.5	120.4	
Y	89	He	1741755.15	0.6	1720337.72	101.24	29.5	120.4	
Tb	159	No Gas	20220144.70	3.4	19085444.99	105.95	29.5	120.4	
Tb	159	He	6979835.03	0.3	6890196.91	101.3	29.5	120.4	
Bi	209	No Gas	8840918.42	4.2	8525371.63	103.7	29.5	120.4	

Sample Report

Sample Name SN5646-005R

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:31:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.037	ppb	89.7	53.33	100	
11	B	6	No Gas	23.468	ppb	9.8	14820.37	1000	
23	Na	45	He	9261.952	ppb	0.8	1158083.73	200000	
24	Mg	45	He	2467.714	ppb	1.2	157659.22	200000	
27	Al	45	He	21.520	ppb	3.3	596.70	200000	
28	Si	45	H2	3366.844	ppb	0.3	113133.69	10000	
39	K	45	He	278.544	ppb	0.4	29760.99	200000	
40	Ca	45	H2	4464.700	ppb	0.5	1523964.68	200000	
51	V	89	He	0.236	ppb	12.5	292.24	1000	
52	Cr	89	He	0.408	ppb	12.3	710.56	2000	
55	Mn	89	He	5.237	ppb	0.6	3037.12	2000	
56	Fe	89	H2	10.902	ppb	3.2	25989.70	100000	
59	Co	89	He	0.277	ppb	6.1	568.94	1000	
60	Ni	89	He	-9.864	ppb	N/A	13573.70	1000	
63	Cu	89	He	76.375	ppb	0.4	109133.56	2000	
66	Zn	89	He	28.234	ppb	3.5	4632.04	2000	
75	As	89	He	0.980	ppb	10.3	118.35	1000	
78	Se	89	H2	0.108	ppb	14.9	7.00	1000	
88	Sr	89	He	31.395	ppb	0.7	16669.56	2000	
95	Mo	89	He	-0.247	ppb	N/A	94.45	1000	
107	Ag	89	He	0.011	ppb	85.8	52.23	100	
111	Cd	89	He	0.049	ppb	19.2	14.07	1000	
118	Sn	159	He	0.815	ppb	5.2	701.16	1000	
121	Sb	159	No Gas	0.019	ppb	164.5	457.18	1000	
137	Ba	159	No Gas	5.915	ppb	8.1	8786.03	2000	
182	W	159	No Gas	0.017	ppb	281.9	203.56	1000	
205	Tl	209	No Gas	-0.020	ppb	N/A	233.60	1000	
208	Pb	209	No Gas	2.160	ppb	8.1	17617.84	2000	
232	Th	209	No Gas	0.101	ppb	8.1	1041.22	1000	
238	U	209	No Gas	0.017	ppb	27.9	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4816831.35	4.7	4785442.25	100.66	29.5	120.4	
Sc	45	No Gas	12419458.50	3.6	11869896.98	104.63	29.5	120.4	
Sc	45	H2	1456472.92	1.6	1440463.34	101.11	29.5	120.4	
Sc	45	He	343355.99	0.3	342270.52	100.32	29.5	120.4	
Ge	72	No Gas	2379771.69	3.4	2254278.57	105.57	29.5	120.4	
Ge	72	H2	439172.78	0.7	432978.24	101.43	29.5	120.4	
Ge	72	He	221600.79	0.1	219029.81	101.17	29.5	120.4	
Y	89	H2	7989691.70	0.5	7788630.76	102.58	29.5	120.4	
Y	89	He	1741160.25	0.7	1720337.72	101.21	29.5	120.4	
Tb	159	No Gas	20206336.09	3.6	19085444.99	105.87	29.5	120.4	
Tb	159	He	7011410.73	0.4	6890196.91	101.76	29.5	120.4	
Bi	209	No Gas	8969879.77	3.9	8525371.63	105.21	29.5	120.4	

Sample Report

Sample Name SN5646-005RA

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:33:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.934	ppb	8.7	8433.83	100	
11	B	6	No Gas	224.250	ppb	9.7	127784.60	1000	
23	Na	45	He	18732.633	ppb	0.7	2287718.24	200000	
24	Mg	45	He	3384.704	ppb	0.3	214817.93	200000	
27	Al	45	He	931.682	ppb	0.3	21272.09	200000	
28	Si	45	H2	8156.785	ppb	0.3	271723.35	10000	
39	K	45	He	10336.471	ppb	1.0	521578.50	200000	
40	Ca	45	H2	5397.909	ppb	1.0	1829348.86	200000	
51	V	89	He	50.073	ppb	1.3	42183.16	1000	
52	Cr	89	He	49.898	ppb	0.3	54106.57	2000	
55	Mn	89	He	25.679	ppb	1.2	12630.71	2000	
56	Fe	89	H2	1020.318	ppb	0.7	1406643.27	100000	
59	Co	89	He	10.720	ppb	2.5	19459.52	1000	
60	Ni	89	He	11.075	ppb	7.7	23677.34	1000	
63	Cu	89	He	30.266	ppb	1.0	46759.34	2000	
66	Zn	89	He	104.608	ppb	1.1	16440.26	2000	
75	As	89	He	49.465	ppb	0.5	5176.86	1000	
78	Se	89	H2	49.508	ppb	1.7	2546.12	1000	
88	Sr	89	He	79.179	ppb	0.9	41937.23	2000	
95	Mo	89	He	49.488	ppb	1.1	33458.48	1000	
107	Ag	89	He	10.585	ppb	1.1	23237.27	100	
111	Cd	89	He	10.535	ppb	2.7	2705.12	1000	
118	Sn	159	He	48.791	ppb	1.7	26581.41	1000	
121	Sb	159	No Gas	10.202	ppb	8.9	39408.79	1000	
137	Ba	159	No Gas	24.990	ppb	8.8	36390.54	2000	
182	W	159	No Gas	48.792	ppb	7.1	143775.41	1000	
205	Tl	209	No Gas	10.347	ppb	8.9	58442.15	1000	
208	Pb	209	No Gas	10.158	ppb	7.5	81453.28	2000	
232	Th	209	No Gas	10.294	ppb	9.0	78091.14	1000	
238	U	209	No Gas	10.228	ppb	7.9	74710.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4732037.97	4.5	4785442.25	98.88	29.5	120.4	
Sc	45	No Gas	12183862.81	3.1	11869896.98	102.65	29.5	120.4	
Sc	45	H2	1446557.74	0.6	1440463.34	100.42	29.5	120.4	
Sc	45	He	341317.80	0.7	342270.52	99.72	29.5	120.4	
Ge	72	No Gas	2326650.53	3.2	2254278.57	103.21	29.5	120.4	
Ge	72	H2	432338.30	0.7	432978.24	99.85	29.5	120.4	
Ge	72	He	221249.90	1.1	219029.81	101.01	29.5	120.4	
Y	89	H2	7901045.19	0.2	7788630.76	101.44	29.5	120.4	
Y	89	He	1737631.14	1.3	1720337.72	101.01	29.5	120.4	
Tb	159	No Gas	19960028.59	2.4	19085444.99	104.58	29.5	120.4	
Tb	159	He	7053599.90	0.8	6890196.91	102.37	29.5	120.4	
Bi	209	No Gas	8911990.43	2.3	8525371.63	104.53	29.5	120.4	

Sample Report

Sample Name SN5646-005RL

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:36:22 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.383	ppb	23.1	113.34	100	
11	B	6	No Gas	33.844	ppb	9.9	7056.51	1000	
23	Na	45	He	1260.016	ppb	305.5	35683.95	200000	
24	Mg	45	He	0.065	ppb	58656.3	217.80	200000	
27	Al	45	He	-8.848	ppb	N/A	94.45	200000	
28	Si	45	H2	70.182	ppb	38.3	493.90	10000	
39	K	45	He	-196.697	ppb	N/A	8889.04	200000	
40	Ca	45	H2	5.731	ppb	354.2	1926.88	200000	
51	V	89	He	-0.276	ppb	N/A	43.34	1000	
52	Cr	89	He	0.192	ppb	826.3	217.96	2000	
55	Mn	89	He	-3.226	ppb	N/A	209.97	2000	
56	Fe	89	H2	-11.906	ppb	N/A	4278.88	100000	
59	Co	89	He	0.100	ppb	334.0	68.90	1000	
60	Ni	89	He	-70.516	ppb	N/A	7456.79	1000	
63	Cu	89	He	-12.114	ppb	N/A	2109.15	2000	
66	Zn	89	He	-1.706	ppb	N/A	313.35	2000	
75	As	89	He	-0.189	ppb	N/A	11.33	1000	
78	Se	89	H2	0.261	ppb	107.0	2.00	1000	
88	Sr	89	He	0.065	ppb	166.2	20.00	2000	
95	Mo	89	He	-1.022	ppb	N/A	112.23	1000	
107	Ag	89	He	0.059	ppb	176.6	46.67	100	
111	Cd	89	He	-0.023	ppb	N/A	0.74	1000	
118	Sn	159	He	-0.790	ppb	N/A	212.23	1000	
121	Sb	159	No Gas	0.205	ppb	43.7	727.51	1000	
137	Ba	159	No Gas	1.336	ppb	38.3	644.07	2000	
182	W	159	No Gas	2.601	ppb	20.3	2282.79	1000	
205	Tl	209	No Gas	0.979	ppb	29.5	1955.69	1000	
208	Pb	209	No Gas	0.538	ppb	14.7	1491.71	2000	
232	Th	209	No Gas	0.389	ppb	29.1	1191.41	1000	
238	U	209	No Gas	0.540	ppb	16.2	1121.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6538614.63	27.2	4785442.25	136.64	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	16174151.19	24.8	11869896.98	136.26	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	960395.73	63.0	1440463.34	66.67	29.5	120.4	
Sc	45	He	501229.89	74.2	342270.52	146.44	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	3157830.45	26.8	2254278.57	140.08	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	275679.03	61.1	432978.24	63.67	29.5	120.4	
Ge	72	He	344087.07	73.6	219029.81	157.1	29.5	120.4	6020/DoD□ EPA
Y	89	H2	5269733.06	64.5	7788630.76	67.66	29.5	120.4	
Y	89	He	2684590.32	74.2	1720337.72	156.05	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	26661070.43	26.7	19085444.99	139.69	29.5	120.4	6020/DoD□ EPA
Tb	159	He	10871580.39	73.3	6890196.91	157.78	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	12027053.82	26.8	8525371.63	141.07	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5646-005RP

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:38:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.869	ppb	8.3	43202.48	100	
11	B	6	No Gas	520.779	ppb	8.8	307832.50	1000	
23	Na	45	He	16574.701	ppb	0.3	2036428.83	200000	
24	Mg	45	He	7737.573	ppb	0.6	492424.83	200000	
27	Al	45	He	1940.276	ppb	1.6	44351.21	200000	
28	Si	45	H2	4452.276	ppb	0.9	149314.97	10000	
39	K	45	He	10624.690	ppb	0.6	537675.80	200000	
40	Ca	45	H2	7091.125	ppb	0.5	2415795.52	200000	
51	V	89	He	512.630	ppb	0.4	430803.29	1000	
52	Cr	89	He	206.281	ppb	0.7	222733.41	2000	
55	Mn	89	He	520.083	ppb	0.3	244700.30	2000	
56	Fe	89	H2	1050.818	ppb	0.8	1458441.27	100000	
59	Co	89	He	511.910	ppb	0.4	925750.98	1000	
60	Ni	89	He	519.822	ppb	0.7	269759.73	1000	
63	Cu	89	He	259.654	ppb	0.2	355787.57	2000	
66	Zn	89	He	514.914	ppb	0.6	79897.07	2000	
75	As	89	He	104.651	ppb	1.5	10929.49	1000	
78	Se	89	H2	102.187	ppb	0.4	5290.10	1000	
88	Sr	89	He	535.899	ppb	1.0	283645.84	2000	
95	Mo	89	He	102.534	ppb	0.9	69016.16	1000	
107	Ag	89	He	52.554	ppb	1.6	115220.03	100	
111	Cd	89	He	261.369	ppb	0.8	67042.26	1000	
118	Sn	159	He	498.567	ppb	1.0	267339.03	1000	
121	Sb	159	No Gas	100.633	ppb	9.9	384357.78	1000	
137	Ba	159	No Gas	1954.704	ppb	9.7	2831898.88	2000	
182	W	159	No Gas	100.162	ppb	8.3	294219.40	1000	
205	Tl	209	No Gas	102.709	ppb	8.9	579939.83	1000	
208	Pb	209	No Gas	99.711	ppb	9.3	801112.92	2000	
232	Th	209	No Gas	99.576	ppb	9.4	756825.87	1000	
238	U	209	No Gas	98.604	ppb	8.4	723511.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4929576.49	2.1	4785442.25	103.01	29.5	120.4	
Sc	45	No Gas	12331928.99	2.7	11869896.98	103.89	29.5	120.4	
Sc	45	H2	1454706.10	0.4	1440463.34	100.99	29.5	120.4	
Sc	45	He	342606.19	0.8	342270.52	100.1	29.5	120.4	
Ge	72	No Gas	2346723.54	2.0	2254278.57	104.1	29.5	120.4	
Ge	72	H2	428572.93	0.8	432978.24	98.98	29.5	120.4	
Ge	72	He	220971.45	0.5	219029.81	100.89	29.5	120.4	
Y	89	H2	7955802.34	1.2	7788630.76	102.15	29.5	120.4	
Y	89	He	1736774.78	0.3	1720337.72	100.96	29.5	120.4	
Tb	159	No Gas	19911207.07	2.6	19085444.99	104.33	29.5	120.4	
Tb	159	He	7005222.53	0.5	6890196.91	101.67	29.5	120.4	
Bi	209	No Gas	8957551.71	2.6	8525371.63	105.07	29.5	120.4	

Sample Report

Sample Name SN5646-005RS

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b

Acq Time 8/12/2020 5:41:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.008	ppb	35.5	1522.36	100	
11	B	6	No Gas	21.698	ppb	27.3	24639.51	1000	
23	Na	45	He	46809.453	ppb	173.7	52361.46	200000	
24	Mg	45	He	158.471	ppb	175.5	317.81	200000	
27	Al	45	He	-2.258	ppb	N/A	95.56	200000	
28	Si	45	H2	10.232	ppb	42.3	944.44	10000	
39	K	45	He	12345.752	ppb	176.0	9996.13	200000	
40	Ca	45	H2	6.912	ppb	161.6	6796.14	200000	
51	V	89	He	1.471	ppb	167.7	151.12	1000	
52	Cr	89	He	7.243	ppb	174.5	277.96	2000	
55	Mn	89	He	12.549	ppb	184.1	262.62	2000	
56	Fe	89	H2	-1.753	ppb	N/A	11148.09	100000	
59	Co	89	He	2.585	ppb	165.1	328.92	1000	
60	Ni	89	He	653.794	ppb	180.6	7057.75	1000	
63	Cu	89	He	27.890	ppb	194.3	1768.00	2000	
66	Zn	89	He	0.606	ppb	252.1	275.57	2000	
75	As	89	He	1.113	ppb	179.3	14.00	1000	
78	Se	89	H2	0.201	ppb	55.7	19.00	1000	
88	Sr	89	He	0.093	ppb	151.9	91.11	2000	
95	Mo	89	He	0.115	ppb	377.8	176.68	1000	
107	Ag	89	He	0.473	ppb	170.1	50.00	100	
111	Cd	89	He	0.830	ppb	164.9	12.96	1000	
118	Sn	159	He	27.794	ppb	171.4	512.26	1000	
121	Sb	159	No Gas	2.034	ppb	32.2	14581.18	1000	
137	Ba	159	No Gas	41.425	ppb	30.3	108252.20	2000	
182	W	159	No Gas	2.137	ppb	31.0	11508.16	1000	
205	Tl	209	No Gas	3.674	ppb	35.9	36515.57	1000	
208	Pb	209	No Gas	2.117	ppb	33.7	30348.98	2000	
232	Th	209	No Gas	1.853	ppb	19.7	26918.57	1000	
238	U	209	No Gas	2.034	ppb	27.9	26506.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9317273.09	52.4	4785442.25	194.7	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	23625302.70	48.2	11869896.98	199.04	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2139194.67	62.7	1440463.34	148.51	29.5	120.4	6020/DoD□ EPA
Sc	45	He	428481.42	102.9	342270.52	125.19	29.5	120.4	6020/DoD
Ge	72	No Gas	4562443.25	52.1	2254278.57	202.39	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	624958.51	60.5	432978.24	144.34	29.5	120.4	6020/DoD□ EPA
Ge	72	He	278017.02	101.6	219029.81	126.93	29.5	120.4	6020/DoD□ EPA
Y	89	H2	11863067.07	61.7	7788630.76	152.31	29.5	120.4	6020/DoD□ EPA
Y	89	He	2250732.61	103.2	1720337.72	130.83	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	39094821.36	48.4	19085444.99	204.84	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8976124.07	102.7	6890196.91	130.27	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	17335412.41	49.3	8525371.63	203.34	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBSNH04IMS1
File Name	063_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:44:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.017	ppb	N/A	13.33	0.5	
B	11	6	No Gas	2.061	ppb	39.9	7535.79	10	
Na	23	45	He	-45.779	ppb	N/A	36828.00	500	
Mg	24	45	He	-0.422	ppb	N/A	433.37	50	
Al	27	45	He	-0.064	ppb	N/A	124.45	50	
Si	28	45	H2	2.685	ppb	104.3	640.73	250	
K	39	45	He	-143.536	ppb	N/A	9992.61	500	
Ca	40	45	H2	-1.960	ppb	N/A	3291.62	50	
V	51	89	He	-0.036	ppb	N/A	76.67	2.5	
Cr	52	89	He	0.499	ppb	47.4	996.54	2.5	
Mn	55	89	He	0.872	ppb	100.2	1266.53	1	
Fe	56	89	H2	-3.464	ppb	N/A	8318.57	50	
Co	59	89	He	0.050	ppb	28.3	188.91	0.5	
Ni	60	89	He	-22.235	ppb	N/A	8604.19	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	-2.212	ppb	N/A	3536.17	1.5	PB 6020 Fails DoD
Zn	66	89	He	0.409	ppb	128.9	402.25	5	
As	75	89	He	-0.043	ppb	N/A	14.33	2.5	
Se	78	89	H2	0.126	ppb	15.6	10.83	2.5	
Sr	88	89	He	0.061	ppb	7.3	54.45	2.5	
Mo	95	89	He	-0.255	ppb	N/A	114.45	2.5	
Ag	107	89	He	0.008	ppb	83.2	50.00	0.5	
Cd	111	89	He	0.007	ppb	95.1	4.45	0.5	
Sn	118	159	He	5.959	ppb	51.6	4483.58	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	-0.042	ppb	N/A	497.23	0.5	
Ba	137	159	No Gas	0.047	ppb	155.5	400.45	1	
W	182	159	No Gas	-0.029	ppb	N/A	170.19	2.5	
Tl	205	209	No Gas	-0.028	ppb	N/A	510.58	0.5	
Pb	208	209	No Gas	0.006	ppb	195.5	817.60	0.5	
Th	232	209	No Gas	0.039	ppb	67.7	1621.97	2.5	
U	238	209	No Gas	0.000	ppb	753.1	76.75	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	14935662.79	44.1	4785442.25	312.11	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	36470811.61	48.7	11869896.98	307.25	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	2034358.94	29.9	1440463.34	141.23	29.5	120.4	6020/DoD□ EPA
Sc	45	He	407626.76	40.5	342270.52	119.09	29.5	120.4	
Ge	72	No Gas	6955076.94	48.4	2254278.57	308.53	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	630435.85	31.2	432978.24	145.6	29.5	120.4	6020/DoD□ EPA
Ge	72	He	271088.29	42.6	219029.81	123.77	29.5	120.4	6020/DoD
Y	89	H2	11203450.97	30.2	7788630.76	143.84	29.5	120.4	6020/DoD□ EPA
Y	89	He	2133632.19	42.5	1720337.72	124.02	29.5	120.4	6020/DoD
Tb	159	No Gas	60616736.32	47.2	19085444.99	317.61	29.5	120.4	6020/DoD□ EPA
Tb	159	He	8556534.87	41.4	6890196.91	124.18	29.5	120.4	6020/DoD
Bi	209	No Gas	26982942.41	47.1	8525371.63	316.5	29.5	120.4	6020/DoD□ EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSONH04IMS1
File Name	064LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:46:40 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.340	ppb	11.4	40338.76	50	18.14	79.5	120.4	
B	11	6	No Gas	484.941	ppb	10.8	288624.43	500	19.4	79.5	120.4	
Na	23	45	He	7621.963	ppb	1.5	948622.84	7500	20.33	79.5	120.4	
Mg	24	45	He	5150.773	ppb	0.9	324733.04	5000	20.6	79.5	120.4	
Al	27	45	He	1831.727	ppb	1.2	41469.40	2000	18.32	79.5	120.4	
Si	28	45	H2	1013.994	ppb	3.4	33918.08	1000	20.28	79.5	120.4	
K	39	45	He	10590.165	ppb	0.6	530749.51	10000	21.18	79.5	120.4	
Ca	40	45	H2	2612.827	ppb	0.5	882769.84	2500	20.9	79.5	120.4	
V	51	89	He	481.921	ppb	0.6	405052.87	500	19.28	79.5	120.4	
Cr	52	89	He	195.698	ppb	0.2	211343.87	200	19.57	79.5	120.4	
Mn	55	89	He	486.617	ppb	0.3	229018.67	500	19.46	79.5	120.4	
Fe	56	89	H2	1003.071	ppb	0.4	1387908.03	1000	20.06	79.5	120.4	
Co	59	89	He	490.743	ppb	0.6	887574.29	500	19.63	79.5	120.4	
Ni	60	89	He	492.068	ppb	0.5	256364.96	500	19.68	79.5	120.4	
Cu	63	89	He	247.339	ppb	0.2	339235.98	250	19.79	79.5	120.4	
Zn	66	89	He	477.442	ppb	0.5	74108.77	500	19.1	79.5	120.4	
As	75	89	He	101.465	ppb	0.6	10598.19	100	20.29	79.5	120.4	
Se	78	89	H2	102.042	ppb	1.3	5264.43	100	20.41	79.5	120.4	
Sr	88	89	He	499.800	ppb	0.3	264572.44	500	19.99	79.5	120.4	
Mo	95	89	He	102.965	ppb	0.3	69311.79	100	20.59	79.5	120.4	
Ag	107	89	He	49.919	ppb	0.4	109458.50	50	19.97	79.5	120.4	
Cd	111	89	He	257.944	ppb	0.3	66170.56	250	20.64	79.5	120.4	
Sn	118	159	He	538.765	ppb	0.2	289176.90	500	21.55	79.5	120.4	
Sb	121	159	No Gas	97.162	ppb	11.2	374916.88	100	19.43	79.5	120.4	
Ba	137	159	No Gas	1832.462	ppb	10.6	2682107.28	2000	18.32	79.5	120.4	
W	182	159	No Gas	97.083	ppb	11.7	287994.47	100	19.42	79.5	120.4	
Tl	205	209	No Gas	100.847	ppb	10.9	574380.94	100	20.17	79.5	120.4	
[Pb]	206	209	No Gas	96.950	ppb	10.5	199341.10	100	19.39	79.5	120.4	
[Pb]	207	209	No Gas	95.725	ppb	12.1	172572.35	100	19.14	79.5	120.4	
Pb	208	209	No Gas	97.332	ppb	11.1	788801.47	100	19.47	79.5	120.4	
Th	232	209	No Gas	96.201	ppb	12.4	737331.08	100	19.24	79.5	120.4	
U	238	209	No Gas	98.189	ppb	11.8	726534.27	100	19.64	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4967589.13	3.2	4785442.25	103.81	29.5	120.4	
Sc	45	No Gas	12462165.69	3.4	11869896.98	104.99	29.5	120.4	
Sc	45	H2	1439556.04	0.7	1440463.34	99.94	29.5	120.4	
Sc	45	He	339264.99	0.6	342270.52	99.12	29.5	120.4	
Ge	72	No Gas	2364680.14	3.9	2254278.57	104.9	29.5	120.4	
Ge	72	H2	430508.45	1.2	432978.24	99.43	29.5	120.4	
Ge	72	He	220208.82	0.6	219029.81	100.54	29.5	120.4	
Y	89	H2	7928559.69	0.7	7788630.76	101.8	29.5	120.4	
Y	89	He	1736991.60	0.4	1720337.72	100.97	29.5	120.4	
Tb	159	No Gas	20135757.34	3.6	19085444.99	105.5	29.5	120.4	
Tb	159	He	7012572.95	0.2	6890196.91	101.78	29.5	120.4	
Bi	209	No Gas	9044243.41	3.5	8525371.63	106.09	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:49:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.215	ppb	10.3	100491.94	25	92.86	89.8	110.2	
11	B	6	No Gas	24.937	ppb	8.4	73250.79	25	99.75	89.8	110.2	
23	Na	45	He	4805.447	ppb	0.4	2964444.86	5000	96.11	89.8	110.2	
24	Mg	45	He	4892.225	ppb	0.5	1571997.29	5000	97.84	89.8	110.2	
27	Al	45	He	487.200	ppb	0.8	56234.27	500	97.44	89.8	110.2	
28	Si	45	H2	498.566	ppb	1.5	83769.46	500	99.71	89.8	110.2	
39	K	45	He	4834.104	ppb	1.8	1215143.74	5000	96.68	89.8	110.2	
40	Ca	45	H2	4947.110	ppb	0.6	8420499.39	5000	98.94	89.8	110.2	
51	V	89	He	24.074	ppb	0.6	102277.54	25	96.3	89.8	110.2	
52	Cr	89	He	24.192	ppb	0.3	132075.65	25	96.77	89.8	110.2	
55	Mn	89	He	23.981	ppb	0.5	57446.53	25	95.92	89.8	110.2	
56	Fe	89	H2	4917.657	ppb	0.7	33764694.34	5000	98.35	89.8	110.2	
59	Co	89	He	24.124	ppb	1.0	220453.52	25	96.5	89.8	110.2	
60	Ni	89	He	21.782	ppb	0.8	71732.21	25	87.13	89.8	110.2	> +/- 10%
63	Cu	89	He	24.135	ppb	0.5	170295.63	25	96.54	89.8	110.2	
66	Zn	89	He	24.156	ppb	1.7	19131.49	25	96.62	89.8	110.2	
75	As	89	He	24.096	ppb	1.3	12710.51	25	96.38	89.8	110.2	
78	Se	89	H2	24.779	ppb	1.6	6391.34	25	99.12	89.8	110.2	
88	Sr	89	He	23.920	ppb	1.9	63969.80	25	95.68	89.8	110.2	
95	Mo	89	He	24.055	ppb	0.4	81751.37	25	96.22	89.8	110.2	
107	Ag	89	He	24.351	ppb	0.5	269681.56	25	97.4	89.8	110.2	
111	Cd	89	He	24.359	ppb	0.3	31566.07	25	97.44	89.8	110.2	
118	Sn	159	He	24.176	ppb	1.0	65282.40	25	96.7	89.8	110.2	
121	Sb	159	No Gas	23.470	ppb	10.4	448055.10	25	93.88	89.8	110.2	
137	Ba	159	No Gas	23.676	ppb	9.1	171578.44	25	94.7	89.8	110.2	
182	W	159	No Gas	23.544	ppb	9.6	345611.10	25	94.18	89.8	110.2	
205	Tl	209	No Gas	23.781	ppb	10.0	663509.95	25	95.12	89.8	110.2	
208	Pb	209	No Gas	23.637	ppb	9.7	938482.77	25	94.55	89.8	110.2	
232	Th	209	No Gas	23.466	ppb	9.8	881344.78	25	93.86	89.8	110.2	
238	U	209	No Gas	23.614	ppb	9.3	856264.29	25	94.46	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4830658.09	2.3	4785442.25	100.94	29.5	120.4	
Sc	45	No Gas	12203815.05	2.6	11869896.98	102.81	29.5	120.4	
Sc	45	H2	1454958.93	0.8	1440463.34	101.01	29.5	120.4	
Sc	45	He	346147.92	0.5	342270.52	101.13	29.5	120.4	
Ge	72	No Gas	2328612.26	2.9	2254278.57	103.3	29.5	120.4	
Ge	72	H2	437794.33	0.6	432978.24	101.11	29.5	120.4	
Ge	72	He	222938.98	0.1	219029.81	101.78	29.5	120.4	
Y	89	H2	7927863.31	0.7	7788630.76	101.79	29.5	120.4	
Y	89	He	1754824.07	0.1	1720337.72	102	29.5	120.4	
Tb	159	No Gas	19919347.20	3.4	19085444.99	104.37	29.5	120.4	
Tb	159	He	7034016.21	0.4	6890196.91	102.09	29.5	120.4	
Bi	209	No Gas	8856318.40	2.9	8525371.63	103.88	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH12B.b
Acq Time	8/12/2020 5:51:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.020	ppb	30.2	108.89	0.2	
11	B	6	No Gas	0.946	ppb	2.5	4080.73	4	
23	Na	45	He	-6.020	ppb	N/A	35530.31	200	
24	Mg	45	He	0.072	ppb	58.2	404.48	20	
27	Al	45	He	-0.329	ppb	N/A	65.56	20	
28	Si	45	H2	0.217	ppb	271.7	403.79	100	
39	K	45	He	1.575	ppb	132.8	16073.56	200	
40	Ca	45	H2	0.628	ppb	24.0	4299.69	20	
51	V	89	He	0.007	ppb	24.2	118.89	1	
52	Cr	89	He	0.005	ppb	62.3	292.62	1	
55	Mn	89	He	-0.082	ppb	N/A	373.27	0.4	
56	Fe	89	H2	0.579	ppb	25.8	15435.93	20	
59	Co	89	He	0.017	ppb	30.3	213.35	0.2	
60	Ni	89	He	-2.798	ppb	N/A	11367.20	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.482	ppb	N/A	2672.57	0.6	Failed DoD
66	Zn	89	He	0.030	ppb	191.8	272.23	2	
75	As	89	He	0.012	ppb	35.6	21.67	1	
78	Se	89	H2	0.034	ppb	14.9	10.67	1	
88	Sr	89	He	0.013	ppb	49.0	44.45	1	
95	Mo	89	He	0.014	ppb	98.0	303.35	1	
107	Ag	89	He	0.006	ppb	65.2	86.67	0.2	
111	Cd	89	He	0.009	ppb	36.9	13.33	0.2	
118	Sn	159	He	0.091	ppb	17.6	493.36	1	
121	Sb	159	No Gas	0.016	ppb	64.4	670.77	0.2	
137	Ba	159	No Gas	0.051	ppb	20.3	453.85	0.4	
182	W	159	No Gas	0.093	ppb	2.5	1495.11	1	
205	Tl	209	No Gas	0.029	ppb	60.7	1151.36	0.2	
208	Pb	209	No Gas	0.020	ppb	21.2	1031.17	0.2	
232	Th	209	No Gas	0.089	ppb	17.5	3607.91	1	
238	U	209	No Gas	0.021	ppb	29.5	780.90	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	4823280.19	3.0	4785442.25	100.79	29.5	120.4	
Sc	45	No Gas	12193478.99	2.1	11869896.98	102.73	29.5	120.4	
Sc	45	H2	1516099.05	6.4	1440463.34	105.25	29.5	120.4	
Sc	45	He	335853.50	3.8	342270.52	98.13	29.5	120.4	
Ge	72	No Gas	2320038.40	2.1	2254278.57	102.92	29.5	120.4	
Ge	72	H2	458333.11	6.2	432978.24	105.86	29.5	120.4	
Ge	72	He	217199.39	4.4	219029.81	99.16	29.5	120.4	
Y	89	H2	8291941.29	5.9	7788630.76	106.46	29.5	120.4	
Y	89	He	1710974.96	3.6	1720337.72	99.46	29.5	120.4	
Tb	159	No Gas	19618482.21	2.3	19085444.99	102.79	29.5	120.4	
Tb	159	He	6808258.93	3.6	6890196.91	98.81	29.5	120.4	
Bi	209	No Gas	8845477.56	3.0	8525371.63	103.75	29.5	120.4	

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSC182 HCL: MSC185 Digestion Vessels: MLDG26000601 Filter Paper: 170 99497

1:1 HNO3: MC2716 H2O2: MSC184 Boiling Stones: MSC174

Pipet	LCS / Spike	LCS/Spiking Information:
M11	☐ ☐	CLPP-SPK-1 (ID/Vol): MS2725 / 0.1 mL
M2	☐ ☐	CLPP-SPK-INT1 (ID/Vol): MM5476 / 1 mL
M21	☐ ☐	CLPP-SPK-INT2 (ID/Vol): MM5477 / 1 mL
-	☐ ☐	- Spike (ID/Vol): - / - mL

LCSS: Balance ID: Bal09

Heat Source ID : D
Start Time: 8:30 /Temp. 90 °C
End Time: 16:36 /Temp. 95 °C
Thermometer ID/Pos: WLC25 / 5,6

EP 7/16/20

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONG16IMS1	NG16IMS1	1.0	g	0.1	L	SL	IM	MC	07/16/2020	-
PBSNG16IMS1	NG16IMS1	1.0	g		L	SL	IM	MC	07/16/2020	-
SN5107-017RP	NG16IMS1	1.03	g		L	SL	IM	MC	07/16/2020	-
SN5107-017RS	NG16IMS1	1.03	g		L	SL	IM	MC	07/16/2020	-
~~SN5515-001R~~	~~NG16IMS1~~	~~5.46~~	~~g~~		~~L~~	~~SL~~	~~IM~~	~~MC~~	~~07/16/2020~~	~~A~~
SN5594-002	NG16IMS1	1.03	g		L	~~SL~~FP	IM	MC	07/16/2020	A
SN5594-003	NG16IMS1	1.07	g		L	~~SL~~FP	IM	MC	07/16/2020	A
SN5717-001	NG16IMS1	1.17	g		L	SL	IM	MC	07/16/2020	A
SN5717-005	NG16IMS1	1.35	g		L	SL	IM	MC	07/16/2020	A
SN5717-005P	NG16IMS1	1.38	g EP 7/16/20		L	SL	IM	MC	07/16/2020	A
SN5717-005S	NG16IMS1	1.36	g		L	SL	IM	MC	07/16/2020	A
SN5717-007	NG16IMS1	~~1.15~~	g 1.36		L	SL	IM	MC	07/16/2020	A
SN5717-007P	NG16IMS1	~~1.15~~	g 1.36		L	SL	IM	MC	07/16/2020	A
SN5717-007S	NG16IMS1	~~1.14~~	g 1.36		L	SL	IM	MC	07/16/2020	A
SN5717-008	NG16IMS1	1.15	g		L	SL	IM	MC	07/16/2020	A
SN5717-009	NG16IMS1	1.10	g		L	SL	IM	MC	07/16/2020	A
SN5717-012	NG16IMS1	1.09	g		L	SL	IM	MC	07/16/2020	A
SN5717-018	NG16IMS1	1.18	g		L	SL	IM	MC	07/16/2020	A
SN5717-018P	NG16IMS1	1.15	g		L	SL	IM	MC	07/16/2020	A
SN5717-018S	NG16IMS1	1.14	g		L	SL	IM	MC	07/16/2020	A

EP 7/16/20

Client requested sample prepped at 10-20g, but sample boiled over when prepped in this manner, so half the weight requested was used to prepare the sample.

EP
7/16/20

Sample overflowed at 5g and was removed from the batch

REVIEWED
CD 7-17-20
KATAHDIN ANALYTICAL
METALS SECTION

Katahdin Analytical Services 4000849

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSR187 HCL: MSR185 Digestion Vessels: MLD0126000021 Filter Paper: 17031561

1:1 HNO3: MR2718 H2O2: MSR184 Boiling Stones: MSR174

Pipet	LCS / Spike	LCS/Spiking Information:
M11	☑ ☑	CLPP-SPK-1 (ID/Vol): MS2225 / 0.100 mL
M21	☑ ☑	CLPP-SPK-INT1 (ID/Vol): MW19476 / 1.00 mL
M21	☑ ☑	CLPP-SPK-INT2 (ID/Vol): MW19477 / 1.00 mL
—	☐ ☐	— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: Bal 09

Heat Source ID : E

Start Time: 8:36 /Temp. 95 °C

End Time: 15:52 /Temp. 95 °C

Thermometer ID/Pos: ALC25 / 6:5

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONG20IMS2	NG20IMS2	1.0	g	0.1	L	SL	IM	MC	07/20/2020	—
PBSNG20IMS2	NG20IMS2	1.0	g		L	SL	IM	MC	07/20/2020	
SN5717-014	NG20IMS2	1.00	g		L	SL	IM	MC	07/20/2020	A
SN5717-015	NG20IMS2	1.13	g		L	SL	IM	MC	07/20/2020	A
SN5717-016	NG20IMS2	1.01	g		L	SL	IM	MC	07/20/2020	A

REVIEWED

CD 7-23-20

KATAHDIN ANALYTICAL

METALS SECTION

Digestion performed by: EP/SF On: 7/20/20

Katahdin Analytical Services 4000850

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

Metals Preparation Benchsheet

Method: 3010-MS

HNO3: MSR187 **HCL:** MSR185 **Digestion Vessels:** MLDO 26000021

1:1 HNO3: MR2718 **1:1 HCL:** MR2725

Pipet **LCS/Spiking Information:**

M11 **CLPP-SPK-1 (ID/Vol):** MS2225 / 0.05 mL

M21 **CLPP-SPK-INT1 (ID/Vol):** MW19476 / 0.500 mL

M21 **CLPP-SPK-INT2 (ID/Vol):** MW19477 / 0.500 mL

— ——— **Spike (ID/Vol):** ——— / ——— mL

Heat Source ID : D

Start Time: 9:35 **/Temp.** 90 °C

End Time: 15:58 **/Temp.** 95 °C

Thermometer ID/Pos: ALC30 / 2:3

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWNG21IMW2	NG21IMW2	0.05	L	0.05	L	AQ	IM	MC	07/21/2020	—	✓
PBWNG21IMW2	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	—	
SN5717-020	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	A	
SN5830-002	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	D	
SN5832-001	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5832-002	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	S	
SN5832-003	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5832-004	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5859-001	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5859-002	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5859-003	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5897-001	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5897-002	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5897-002P	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5897-002S	NG21IMW2		L		L	AQ	IM	MC	07/21/2020	6	
SN5946-001	NG21IMW2	↓	L	↓	L	AQ	IM	MC	07/21/2020	6	↓

REVIEWED

CD 7-23-20

KATAHDIN ANALYTICAL

METALS SECTION

Katahdin Analytical Services 4000851

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

Metals Preparation Benchsheet

Method: 3010-MS

HNO3: MSR187 **HCL:** MSR186 **Digestion Vessels:** MLD026000021

1:1 HNO3: MR2733 **1:1 HCL:** MR2737

Pipet **LCS/Spiking Information:**

M11 **CLPP-SPK-1 (ID/Vol):** MS2225 / 0.05 mL

M21 **CLPP-SPK-INT1 (ID/Vol):** MW19519 / 0.500 mL

M21 **CLPP-SPK-INT2 (ID/Vol):** MW19520 / 0.500 mL

— — **Spike (ID/Vol):** — / — mL

Heat Source ID : D

Start Time: 8:01 **/Temp.** 90 °C

End Time: 16:00 **/Temp.** 92 °C

Thermometer ID/Pos: ALC30 / 14:8

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWNG29IMW2	NG29IMW2	0.05	L	0.05	L	AQ	IM	SF	07/29/2020	—	✓
PBWNG29IMW2	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	—	
SN5124-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5124-002RP	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5124-002RS	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5717-020R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	A	
SN5830-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	D	
SN5832-001R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5832-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	U	
SN5832-003R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5832-004R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5897-001R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN6056-004	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	A	
SN6061-002	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	2G	

SF
7/29/20

REVIEWED
CD 7-30-20
KATAHDIN ANALYTICAL
METALS SECTION

Digestion performed by: SF/EP **On:** 7/29/20

Katahdin Analytical Services 4000852

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSR197 HCL: MSR186 Digestion Vessels: MLD0460000021 Filter Paper: 17094497

1:1 HNO3: MR2740 H2O2: MSR161 Boiling Stones: MSR174

Pipet	LCS / Spike	LCS/Spiking Information:
M11	☑ ☑	CLPP-SPK-1 (ID/Vol): MS2225 / 0.1 mL
M21	☑ ☑	CLPP-SPK-INT1 (ID/Vol): MW19519 / 1.0 mL
M21	☑ ☑	CLPP-SPK-INT2 (ID/Vol): MW19520 / 1.0 mL
—	☐ ☐	— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: Bal09

Heat Source ID : D

Start Time: 9:45 /Temp. 90 °C

End Time: 17:53 /Temp. 95 °C

Thermometer ID/Pos: AC30 / 6:5

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONH04IMS1	NH04IMS1	1.0	g	0.1	L	SL	IM	SF	08/04/2020	—
PBSNH04IMS1	NH04IMS1	1.0	g		L	SL	IM	SF	08/04/2020	—
SN5717-004	NH04IMS1	1.09	g		L	SL	IM	SF	08/04/2020	A
SN5717-010	NH04IMS1	1.01	g		L	SL	IM	SF	08/04/2020	A
SN5717-010P	NH04IMS1	1.02	g		L	SL	IM	SF	08/04/2020	A
SN5717-010S	NH04IMS1	1.02	g		L	SL	IM	SF	08/04/2020	A
SN5717-013	NH04IMS1	1.02	g		L	SL	IM	SF	08/04/2020	A
SN5717-017	NH04IMS1	1.00	g		L	SL	IM	SF	08/04/2020	A

REVIEWED
EP 8/6/20
KATAHDIN ANALYTICAL
METALS SECTION

 Digestion performed by: SF/EP On: 8/4/20

Katahdin Analytical Services 4000853

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282007	SW3540C	16-JUL-20	15-JUL-20	100 %	1 %	N/A
MBLANK	WG282324	SW3540C	21-JUL-20	20-JUL-20	100 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282324-2	LCS	WG282324	21-JUL-20	20-JUL-20	%	90	90.	100	90-110	
WG282007-2	LCS	WG282007	16-JUL-20	15-JUL-20	%	90	90.	100	90-110	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282324-3	SN5717-2	WG282324	21-JUL-20	%	90.	90.	0	20
WG282007-5	SN5717-7	WG282007	16-JUL-20	%	94.	94.	1	20
WG282007-3	SN5717-5	WG282007	16-JUL-20	%	90.	91.	0	20
WG282007-4	SN5717-18	WG282007	16-JUL-20	%	87.	88.	1	20

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-1
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DA01A	SL	08-JUL-20 17:30:00	28-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000008

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-4
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DB02A	SL	08-JUL-20 17:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services 5000009

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-5
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR01DA02A	SL	08-JUL-20 17:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	90. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000010

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-7
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA01A	SL	10-JUL-20 16:25:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000011

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-8
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA02B	SL	10-JUL-20 16:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	91. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000012

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-9
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DA02A	SL	10-JUL-20 16:45:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	90. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000013

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-10
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR02DB02A	SL	10-JUL-20 16:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services 5000014

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-12
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA01A	SL	09-JUL-20 17:08:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	86. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000015

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-13
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DB01A	SL	09-JUL-20 17:15:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	81. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services 5000016

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-14
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA02A	SL	10-JUL-20 15:50:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	88. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000017

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-15
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA02B	SL	10-JUL-20 15:55:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	87. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000018

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-17
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DB03A	SL	09-JUL-20 15:49:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	89. %	1		N/A	SW3540C	WG282324	21-JUL-20 09:12:00	SW3540C	20-JUL-20	

Katahdin Analytical Services 5000019

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5717-18
Report Date: 25-AUG-20
Project: Former Small Arms Ra
SDG: SN5717

Sample Description	Matrix	Date Sampled	Date Received
COR03DA03A	SL	09-JUL-20 15:43:00	14-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	87. %	1		N/A	SW3540C	WG282007	16-JUL-20 09:04:00	SW3540C	15-JUL-20	

Katahdin Analytical Services 5000020

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jul 21 2020, 10:08 am
Batch: WG282007

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SN5717-1	SL	SAMP	15-JUL-20	1.3 g	28.8457 g	26.3618 g	26.3618 g	JG	16-JUL-20	90.9830	91. %		
SN5717-12	SL	SAMP	15-JUL-20	1.3 g	30.1389 g	26.0523 g	26.0523 g	JG	16-JUL-20	85.8300	86. %		
SN5717-14	SL	SAMP	15-JUL-20	1.3 g	21.3542 g	18.9633 g	18.9633 g	JG	16-JUL-20	88.0780	88. %		
SN5717-15	SL	SAMP	15-JUL-20	1.3 g	22.1551 g	19.4685 g	19.4685 g	JG	16-JUL-20	87.1180	87. %		
SN5717-18	SL	SAMP	15-JUL-20	1.3 g	18.7297 g	16.5047 g	16.5047 g	JG	16-JUL-20	87.2340	87. %		
SN5717-5	SL	SAMP	15-JUL-20	1.3 g	21.4369 g	19.5187 g	19.5187 g	JG	16-JUL-20	90.4740	90. %		
SN5717-7	SL	SAMP	15-JUL-20	1.3 g	22.1215 g	20.8112 g	20.8112 g	JG	16-JUL-20	93.7070	94. %		
SN5717-8	SL	SAMP	15-JUL-20	1.3 g	23.5024 g	21.4154 g	21.4154 g	JG	16-JUL-20	90.6000	91. %		
SN5717-9	SL	SAMP	15-JUL-20	1.3 g	21.382 g	19.4876 g	19.4876 g	JG	16-JUL-20	90.5670	90. %		
SN5718-1	SL	SAMP	15-JUL-20	1.3 g	34.7532 g	17.4875 g	17.4875 g	JG	16-JUL-20	48.3880	48. %		
SN5760-1	SL	SAMP	15-JUL-20	1.3 g	13.999 g	13.458 g	13.458 g	JG	16-JUL-20	95.7400	96. %		
SN5760-2	SL	SAMP	15-JUL-20	1.3 g	15.2572 g	14.6482 g	14.6482 g	JG	16-JUL-20	95.6370	96. %		
WG282007-1	SL	MBLANK	15-JUL-20	1.3 g	5.7213 g	5.7217 g	5.7217 g	JG	16-JUL-20	100.0090	100 %		
WG282007-2	SL	LCS	15-JUL-20	1.3 g	6.2878 g	5.792 g	5.792 g	JG	16-JUL-20	90.0600	90. %	100	
WG282007-3	SL	DUP	15-JUL-20	1.3 g	21.6564 g	19.7811 g	19.7811 g	JG	16-JUL-20	90.7880	91. %		0
WG282007-4	SL	DUP	15-JUL-20	1.3 g	18.6235 g	16.5099 g	16.5099 g	JG	16-JUL-20	87.7990	88. %		1
WG282007-5	SL	DUP	15-JUL-20	1.3 g	20.412 g	19.3419 g	19.3419 g	JG	16-JUL-20	94.4010	94. %		1

Comments:

SN5717-18	MS/MSD
SN5717-5	MS/MSD
SN5717-7	MS/MSD
WG282007-1	SN5717-5
WG282007-2	SN5717-5
WG282007-3	SN5717-5
WG282007-4	SN5717-18
WG282007-5	SN5717-7

Entered by: JG Date: 7/21/20 Accepted by: Date: 07/21/20

Katahdin Analytical Services 5000022

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

21-JUL-20 10:08 AM

Work Group: WG282007
Department: 100 Wetlab Prep
Operator:
Created: 15-JUL-20
Due:

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR Location
3 ~~3~~	SN5717-1	[redacted]	TS	Solid	ENT	U	22-JUL-20	
4 ~~4~~	SN5717-5		TS	Solid	COMP	U	22-JUL-20	
11 ~~11~~	SN5717-7		TS	Solid	COMP	U	24-JUL-20	
12 ~~12~~	SN5717-8		TS	Solid	COMP	U	24-JUL-20	
6	SN5717-9		TS	Solid	COMP	U	24-JUL-20	
7	SN5717-12		TS	Solid	COMP	U	23-JUL-20	
8	SN5717-14		TS	Solid	COMP	U	24-JUL-20	
13	SN5717-15		TS	Solid	COMP	U	24-JUL-20	
9	SN5717-18		TS	Solid	COMP	U	23-JUL-20	
15	SN5718-1		TS	Solid	COMP	U	19-JUL-20	
16	SN5760-1		TS	Solid	COMP	U	22-JUL-20	
17	SN5760-2		TS	Solid	COMP	U	22-JUL-20	
1	WG282007-1	MBLANK	TS	Solid	COMP	U	15-JUL-20	
2	WG282007-2	LCS	TS	Solid	COMP	U	15-JUL-20	
5	WG282007-3	DUP	TS	Solid	COMP	U	15-JUL-20	
10	WG282007-4	DUP	TS	Solid	COMP	U	15-JUL-20	
14	WG282007-5	DUP	TS	Solid	COMP	U	15-JUL-20	

Comments:

SN5717-18	MS/MSD
SN5717-5	MS/MSD
SN5717-7	MS/MSD
WG282007-1	SN5717-5
WG282007-2	SN5717-5
WG282007-3	SN5717-5
WG282007-4	SN5717-18
WG282007-5	SN5717-7

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	(Y)/ N
ANALYST IN:	JG		ANALYST OUT:	KD		In: ✓
DATE IN:	~~7/14~~ 7/15/20		DATE OUT:	7/16/20		Out (TS): ✓
TIME IN:	17:19		TIME OUT:	7:23		Balance ID: Bal. 01
TEMP IN:	104°		TEMP OUT:	104°		S/N 1124016031

TOTAL SOLIDS BATCH REPORT
Jul 21 2020, 10:19 am
Batch: WG282324

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SN5717-10	SL	SAMP	20-JUL-20	1.3 g	29.5923 g	27.2724 g	27.2724 g	JG	21-JUL-20	91.8000	92. %		
SN5717-13	SL	SAMP	20-JUL-20	1.3 g	31.5923 g	25.7966 g	25.7966 g	JG	21-JUL-20	80.8670	81. %		
SN5717-16	SL	SAMP	20-JUL-20	1.3 g	39.9097 g	30.5741 g	30.5741 g	JG	21-JUL-20	75.8200	76. %		
SN5717-17	SL	SAMP	20-JUL-20	1.3 g	28.3981 g	25.4444 g	25.4444 g	JG	21-JUL-20	89.1000	89. %		
SN5717-2	SL	SAMP	20-JUL-20	1.3 g	26.5059 g	23.9354 g	23.9354 g	JG	21-JUL-20	89.8020	90. %		
SN5717-3	SL	SAMP	20-JUL-20	1.3 g	31.5636 g	26.4402 g	26.4402 g	JG	21-JUL-20	83.0710	83. %		
SN5717-4	SL	SAMP	20-JUL-20	1.3 g	29.8781 g	27.2809 g	27.2809 g	JG	21-JUL-20	90.9120	91. %		
SN5885-1	SL	SAMP	20-JUL-20	1.3 g	38.7609 g	25.983 g	25.983 g	JG	21-JUL-20	65.8900	66. %		
WG282324-1	SL	MBLANK	20-JUL-20	1.3 g	5.8019 g	5.8017 g	5.8017 g	JG	21-JUL-20	99.9960	100 %		
WG282324-2	SL	LCS	20-JUL-20	1.3 g	6.2945 g	5.7939 g	5.7939 g	JG	21-JUL-20	89.9770	90. %	100	
WG282324-3	SL	DUP	20-JUL-20	1.3 g	26.6528 g	24.1404 g	24.1404 g	JG	21-JUL-20	90.0900	90. %		0

Comments:

SN5717-10	HOLD Pending SN5717-9 result
SN5717-13	HOLD Pending SN5717-12 result
SN5717-16	HOLD Pending SN5717-14 result
SN5717-17	HOLD Pending SN5717-18 result
SN5717-2	HOLD Pending SN5717-1 result
SN5717-3	HOLD Pending SN5717-1 result
SN5717-4	HOLD Pending SN5717-5 result
WG282324-1	SN5717-2
WG282324-2	SN5717-2
WG282324-3	SN5717-2

Entered by: JG Date: 7/21/20 Accepted by: Date: 07/21/20

Katahdin Analytical Services 5000024

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

21-JUL-20 10:19 AM

Work Group: WG282324
Department: 100 Wetlab Prep
Operator:
Created: 20-JUL-20
Due:

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR	Location
10	SN5717-2	[redacted]	TS	Solid	ENT	U	22-JUL-20		
12	SN5717-3		TS	Solid	ENT	U	22-JUL-20		
13	SN5717-4		TS	Solid	ENT	U	22-JUL-20		
14	SN5717-10		TS	Solid	ENT	U	24-JUL-20		
15	SN5717-13		TS	Solid	ENT	U	23-JUL-20		
16	SN5717-16		TS	Solid	ENT	U	24-JUL-20		
17	SN5717-17		TS	Solid	ENT	U	23-JUL-20		
18	SN5885-1		TS	Solid	ENT	U	23-JUL-20		
1	WG282324-1	MBLANK	TS	Solid	ENT	U	20-JUL-20		
2	WG282324-2	LCS	TS	Solid	ENT	U	20-JUL-20		
11	WG282324-3	DUP	TS	Solid	ENT	U	20-JUL-20		

Comments:

SN5717-10	HOLD Pending SN5717-9 result
SN5717-13	HOLD Pending SN5717-12 result
SN5717-16	HOLD Pending SN5717-14 result
SN5717-17	HOLD Pending SN5717-18 result
SN5717-2	HOLD Pending SN5717-1 result
SN5717-3	HOLD Pending SN5717-1 result
SN5717-4	HOLD Pending SN5717-5 result
WG282324-1	SN5717-2
WG282324-2	SN5717-2
WG282324-3	SN5717-2

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	Y / N
ANALYST IN:	JG		ANALYST OUT:	ILD		In: ✓
DATE IN:	7/20/20		DATE OUT:	7/21/20		Out (TS): ✓
TIME IN:	11:57		TIME OUT:	7:32		Balance ID: Bal. 01
TEMP IN:	104°		TEMP OUT:	104°		S/N 1124016031

AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES
CAMP O'RYAN
SN5719

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

TABLE OF CONTENTS

Total number of pages: 364

SAMPLE DATA PACKAGE		0000001		
Narrative	----------	0000002	to	0000006
Supporting Documents	----------	0000007	to	0000007
Chain of Custody Record	----------	0000008	to	0000008
Login Report	----------	0000009	to	0000011
SAMPLE DATA SUMMARY				
Report of Analytical Results	----------	A0000001	to	A0000068
METALS DATA		4000001		
Sample Data	----------	4000002	to	4000013
QC Summary Section	----------	4000014	to	4000058
Raw Data	----------	4000059	to	4000264
Logbooks and Supporting Documents	----------	4000265	to	4000266
CONVENTIONAL AND PHYSICAL DATA		5000001		
QC Summary	----------	5000002	to	5000005
Sample Data	----------	5000006	to	5000016
Raw Data	----------	5000017	to	5000019

SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES – CAMP O'RYAN
SN5719

Sample Receipt

The following samples were received on July 14, 2020 and were logged in under Katahdin Analytical Services work order number SN5719 for a hardcopy due date of July 26, 2020.

KATAHDIN Sample No.	AECOM Sample Identification
SN5719-1	COR01IS01
SN5719-2	COR01IS02
SN5719-3	COR01IS03
SN5719-4	COR02IS01
SN5719-5	COR02IS02
SN5719-6	COR02IS03
SN5719-7	COR03IS01
SN5719-8	COR03IS02
SN5719-9	COR03IS03

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Metals Analysis

The samples of Katahdin Work Order SN5719 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

ISM Soil Preparation (EPA Method 8330B)

Katahdin Sample Numbers SN5719-(1-9) are solid samples that were dried to a constant weight, sieved, then sub-sampled in accordance with the SW846 8330B preparation method prior to acid digestion.

Inductively-Coupled Plasma Mass Spectrometric Analysis (ICP-MS)

Solid-matrix Katahdin Sample Numbers SN5719-(1-9) were digested for ICP-MS analysis on 07/20/20 (QC Batch NG20IMS1) in accordance with USEPA Method 3050B.

ICP-MS analyses of Katahdin Work Order SN5719 sample digestates were performed using an Agilent 7800 ICP-MS spectrometer in accordance with USEPA Method 6020A. Results for all standards and samples are reported using the mean of 3 replicate measurements. All sample digestates were diluted by a factor of 5 during analysis to reduce mass interferences from chlorine, which is present in the digestates from the hydrochloric acid used in digesting the samples. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following exception:

The CCBs run at 22:44, 23:16, 23:42 in analytical batch LNG22B have lead concentrations (0.112 ug/L, 0.184 ug/L, 0.130 ug/L) that are above laboratory acceptance criteria. Because the associated samples have lead concentrations greater than ten times that, no action was taken.

Internal standard recoveries for ICP-MS analyses can be found in the raw data section of the accompanying data package. The following table indicates which analytes are associated with each internal standard element.

Internal Standard Element	Associated Analytes
Lithium	Beryllium, Boron
Scandium	Sodium, Magnesium, Aluminum, Potassium, Calcium
Germanium or Yttrium	Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Zinc, Arsenic, Selenium, Silver, Cadmium, Strontium, Molybdenum
Terbium	Antimony, Barium, Tin, Tungsten
Bismuth	Lead, Thallium, Thorium, Uranium

Instrument tuning information can also be found in the raw data section in the reports labeled "USEPA Method Tune Report". For Method 6020A, the relative standard deviation was

determined from 5 replicate measurements and the peak width was measured at 10% of the peak height.

Matrix QC Summary

The measured recoveries of antimony, copper, and lead in one or both of the matrix-spiked aliquots of Katahdin Sample Number SN5719-1 are outside project acceptance criteria. For lead, this could be because the concentration of lead in the sample is significantly higher than the spike added. Because the laboratory control sample is acceptable, no action was taken.

The relative percent difference between the duplicate matrix-spiked analyses of Katahdin Sample Number SN5719-1 are within project acceptance criteria.

The measured recovery of lead in the post-digestion spiked aliquot of Katahdin Sample Number SN5719-1 is outside project acceptance criteria. This could be because the concentration of lead in the sample is significantly higher than the spike added. Because the serial dilution analysis is acceptable, no action was taken.

The serial dilution analysis of Katahdin Sample Number SN5719-1 is within project acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD).

The measured recoveries of antimony, copper, and lead in one or both of the matrix-spiked aliquots of Katahdin Sample Number SN5719-5 are outside project acceptance criteria. For lead, this could be because the concentration of lead in the sample is significantly higher than the spike added. Because the laboratory control sample is acceptable, no action was taken.

The relative percent difference between the duplicate matrix-spiked analyses of Katahdin Sample Number SN5719-5 are within project acceptance criteria.

The measured recovery of lead in the post-digestion spiked aliquot of Katahdin Sample Number SN5719-5 is outside project acceptance criteria. This could be because the concentration of lead in the sample is significantly higher than the spike added.

The serial dilution analysis of Katahdin Sample Number SN5719-5 is outside project acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for lead.

The measured recoveries of antimony, copper, and lead in one or both of the matrix-spiked aliquots of Katahdin Sample Number SN5719-9 are outside project acceptance criteria. For lead, this could be because the concentration of lead in the sample is significantly higher than the spike added. Because the laboratory control sample is acceptable, no action was taken.

The relative percent difference between the duplicate matrix-spiked analyses of Katahdin Sample Number SN5719-9 are within project acceptance criteria.

The measured recovery of lead, copper, and zinc in the post-digestion spiked aliquot of Katahdin Sample Number SN5719-9 is outside project acceptance criteria. This could be because the

concentrations of lead, copper, and zinc in the sample are significantly higher than the spike added. Because the serial dilution analysis is acceptable, no action was taken.

The serial dilution analysis of Katahdin Sample Number SN5719-9 is within project acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD).

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted LOD is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SN5719 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times, and all quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

8.6.20

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, LLC. — Sample Receipt Condition Report

Client:	AECOM	KAS PM:	[illegible]	Sampled By:	Client
Project:		KIMS Entry By:	JLB	Delivered By:	Fedex
KAS Work Order#:	SN5719	KIMS Review By:	[illegible]	Received By:	JLB
SDG #:		Cooler: 1 of 1		Date/Time Rec.:	7.14.20 1020

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 5.6 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: AECOM
Contact: Joe Witte, Amibeth Salvatore
Phone #: 301-944-3617, (703) 307-0558
Fax #: ( )

Address: 12420 Milestone Center Dr
City: Germantown
State: MD
Zip Code: 20876

Purchase Order #: 60519685
Proj. Name / No.: SARS 6 Camp O'Ryan
Katahdin Quote #:

Bill (if different than above): same as above
Address:

Sampler (Print / Sign): Meagen Wallace / Meagen Wallace
Copies To: joe.witte@aecom.com, amibeth.salvatore@aecom.com

LAB USE ONLY
WORK ORDER #: SN5719
KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	EPA 6020A/CA 6004H 6020 TARGET Metals (Pb, Sb, Zn, Cu)	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	COR01IS01	7/7/20/1220	SOIL	1	X			*COLLECT MS/MSD							
	COR01IS02	7/7/20/1230	SOIL	1	X										
	COR01IS03	7/7/20/1240	SOIL	1	X										
	COR02IS01	7/8/20/0750	SOIL	1	X										
	COR02IS02	7/8/20/0730	SOIL	1	X			*COLLECT MS/MSD							
	COR02IS03	7/8/20/0740	SOIL	1	X										
	COR03IS01	7/10/20/0810	SOIL	1	X										
	COR03IS02	7/10/20/0820	SOIL	1	X										
	COR03IS03	7/10/20/0800	SOIL	1	X			*COLLECT MS/MSD							
		/													
		/													
		/													
		/													
		/													
		/													
		/													

COMMENTS: Do not grind ISM samples

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
[signature]	7/13/20 1400	[signature] 7.14.20 1020			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jul. 15, 2020
10:29 AM

Quote/Incoming: SMALLARMS-NGB

Login Number: SN5719

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Primary Report Address:
Joe Witte
AECOM
12420 Milestone Center Drive
Suite 150
Germantown,MD 20876
joe.witte@aecom.com

Primary Invoice Address:
Accounts Payable
AECOM
PO Box 5604

Glen Allen,VA 23058-5604

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DoD QSM 5.1. "U" LOD w/ J flags. All samples in this work order require ISM. ISM= dry and sieve for metals (no grinding for metals). Must report soils in mg/kg.
CHECK NO.	:	
CLIENT PO#	:	97532, Proj 60519685
CLIENT PROJECT MANAGE	:	Naoum Tavantzis
CONTRACT	:	W9133L-14-D-0001/006
COOLER TEMPERATURE	:	5.6
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ERIS EDD & KAS153
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Former Small Arms Ranges - Camp O'Ryan
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	SDS needs all forms. Email final PDF & EDD to joe.witte@aecom.com, amibeth.salvatore@aecom.com, & Meagen.Wallace@aecom.com. Email invoice to USAPImaging@aecom.com & joe.witte@aecom.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	1

Login Number: SN5719

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5719-1	COR01IS01	07-JUL-20 12:20	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	03-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	03-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	03-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	03-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	03-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	21-JUL-20	4oz Glass		
Solid	S	TS	21-JUL-20			

SN5719-2	COR01IS02	07-JUL-20 12:30	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	03-JAN-21			
Solid	S	SW6020-ANTIMONY	03-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	03-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	03-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	03-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	21-JUL-20	4oz Glass		
Solid	S	TS	21-JUL-20			

SN5719-3	COR01IS03	07-JUL-20 12:40	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	03-JAN-21			
Solid	S	SW6020-ANTIMONY	03-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	03-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	03-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	03-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	21-JUL-20	4oz Glass		
Solid	S	TS	21-JUL-20			

SN5719-4	COR02IS01	08-JUL-20 07:50	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	22-JUL-20	4oz Glass		
Solid	S	TS	22-JUL-20			

SN5719-5	COR02IS02	08-JUL-20 07:30	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	22-JUL-20	4oz Glass		
Solid	S	TS	22-JUL-20			

SN5719-6	COR02IS03	08-JUL-20 07:40	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	04-JAN-21			
Solid	S	SW6020-ANTIMONY	04-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	04-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	04-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	04-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	22-JUL-20	4oz Glass		
Solid	S	TS	22-JUL-20			

Login Number: SN5719

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5719-7	COR03IS01	10-JUL-20 08:10	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	24-JUL-20	4oz Glass		
Solid	S	TS	24-JUL-20			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5719-8	COR03IS02	10-JUL-20 08:20	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	24-JUL-20	4oz Glass		
Solid	S	TS	24-JUL-20			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN5719-9	COR03IS03	10-JUL-20 08:00	14-JUL-20			26-JUL-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	06-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	06-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	06-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	06-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	06-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	24-JUL-20	4oz Glass		
Solid	S	TS	24-JUL-20			

Total Samples: 9 ***Total Analyses: 63***

SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.225		N	MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	30.8		N	MS	5	0.29	0.069	0.20
7439-92-1	LEAD, TOTAL	56.1		NA	MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	93.3			MS	5	0.98	0.13	0.78

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.3 **Lab Sample ID:** SN5719-002

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.285			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	28.7			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	63.0			MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	96.3			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.1 **Lab Sample ID:** SN5719-003

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.19			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	29.2			MS	5	0.31	0.072	0.21
7439-92-1	LEAD, TOTAL	38.5			MS	5	0.10	0.0072	0.052
7440-66-6	ZINC, TOTAL	95.6			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.6 **Lab Sample ID:** SN5719-004

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.293			MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	33.6			MS	5	0.30	0.069	0.20
7439-92-1	LEAD, TOTAL	82.9			MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	91.3			MS	5	0.98	0.13	0.79

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.327		N	MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	31.9		N	MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	98.7		NEA	MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	93.1			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.7 **Lab Sample ID:** SN5719-006

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.293			MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	39.9			MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	72.1			MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	98.3			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 95.6 **Lab Sample ID:** SN5719-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.425			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	24.9			MS	5	0.31	0.072	0.21
7439-92-1	LEAD, TOTAL	164			MS	5	0.10	0.0072	0.052
7440-66-6	ZINC, TOTAL	119			MS	5	1.0	0.13	0.83

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 95.2 **Lab Sample ID:** SN5719-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.725			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	41.4			MS	5	0.31	0.073	0.21
7439-92-1	LEAD, TOTAL	179			MS	5	0.10	0.0073	0.052
7440-66-6	ZINC, TOTAL	82.5			MS	5	1.0	0.14	0.83

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.429		N	MS	5	0.11	0.021	0.053
7440-50-8	COPPER, TOTAL	36.0		NA	MS	5	0.32	0.074	0.21
7439-92-1	LEAD, TOTAL	248		NA	MS	5	0.11	0.0074	0.053
7440-66-6	ZINC, TOTAL	84.5		A	MS	5	1.1	0.14	0.85

Comments:

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICV

File: LNG22B Jul 22, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	392.62	98.2
ANTIMONY	20.0	20.64	103.2
CALCIUM	4000.0	3893.29	97.3
COPPER	20.0	20.15	100.7
IRON	4000.0	3831.66	95.8
LEAD	20.0	20.79	103.9
MAGNESIUM	4000.0	4073.63	101.8
MOLYBDENUM	40.0	40.37	100.9
POTASSIUM	4000.0	4076.81	101.9
SODIUM	4000.0	4182.70	104.6
ZINC	20.0	20.82	104.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.29	96.1
ANTIMONY	25.0	23.05	92.2
CALCIUM	5000.0	5073.42	101.5
COPPER	25.0	25.18	100.7
IRON	5000.0	5011.31	100.2
LEAD	25.0	23.59	94.4
MAGNESIUM	5000.0	4890.81	97.8
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4902.15	98.0
SODIUM	5000.0	5112.27	102.2
ZINC	25.0	25.16	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.88	96.6
ANTIMONY	25.0	23.95	95.8
CALCIUM	5000.0	5072.61	101.5
COPPER	25.0	24.43	97.7
IRON	5000.0	5026.23	100.5
LEAD	25.0	24.13	96.5
MAGNESIUM	5000.0	4889.83	97.8
MOLYBDENUM	25.0	24.82	99.3
POTASSIUM	5000.0	4868.57	97.4
SODIUM	5000.0	5076.93	101.5
ZINC	25.0	24.78	99.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 17:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.58	96.5
ANTIMONY	25.0	22.85	91.4
CALCIUM	5000.0	4907.23	98.1
COPPER	25.0	24.41	97.6
IRON	5000.0	4800.26	96.0
LEAD	25.0	23.61	94.4
MAGNESIUM	5000.0	4922.58	98.5
MOLYBDENUM	25.0	25.17	100.7
POTASSIUM	5000.0	4898.25	98.0
SODIUM	5000.0	5131.11	102.6
ZINC	25.0	24.79	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 18:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.57	97.1
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4960.35	99.2
COPPER	25.0	24.92	99.7
IRON	5000.0	4881.74	97.6
LEAD	25.0	24.02	96.1
MAGNESIUM	5000.0	4918.00	98.4
MOLYBDENUM	25.0	25.24	101.0
POTASSIUM	5000.0	4919.43	98.4
SODIUM	5000.0	5123.14	102.5
ZINC	25.0	25.00	100.0

SAMPLE: CCV

File: LNG22B Jul 22, 2020 19:00

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.97	97.8
ANTIMONY	25.0	24.41	97.6
CALCIUM	5000.0	4928.76	98.6
COPPER	25.0	24.77	99.1
IRON	5000.0	4855.01	97.1
LEAD	25.0	25.16	100.6
MAGNESIUM	5000.0	4920.82	98.4
MOLYBDENUM	25.0	25.08	100.3
POTASSIUM	5000.0	4905.50	98.1
SODIUM	5000.0	5079.71	101.6
ZINC	25.0	25.32	101.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 19:32

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.15	96.6
ANTIMONY	25.0	22.87	91.5
CALCIUM	5000.0	4894.99	97.9
COPPER	25.0	24.50	98.0
IRON	5000.0	4822.35	96.4
LEAD	25.0	23.41	93.6
MAGNESIUM	5000.0	4951.70	99.0
MOLYBDENUM	25.0	25.26	101.0
POTASSIUM	5000.0	4940.85	98.8
SODIUM	5000.0	5134.80	102.7
ZINC	25.0	25.06	100.2

SAMPLE: CCV

File: LNG22B Jul 22, 2020 20:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.13	95.2
ANTIMONY	25.0	24.36	97.4
CALCIUM	5000.0	4910.41	98.2
COPPER	25.0	24.72	98.9
IRON	5000.0	4820.91	96.4
LEAD	25.0	24.54	98.2
MAGNESIUM	5000.0	4904.38	98.1
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4913.38	98.3
SODIUM	5000.0	5104.14	102.1
ZINC	25.0	24.56	98.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 20:36

Analyte	True	Found	%R (1)
ALUMINUM	500.0	495.07	99.0
ANTIMONY	25.0	23.63	94.5
CALCIUM	5000.0	4882.59	97.7
COPPER	25.0	25.39	101.6
IRON	5000.0	4804.80	96.1
LEAD	25.0	23.99	96.0
MAGNESIUM	5000.0	5030.87	100.6
MOLYBDENUM	25.0	25.81	103.2
POTASSIUM	5000.0	5040.70	100.8
SODIUM	5000.0	5237.89	104.8
ZINC	25.0	25.28	101.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 21:07

Analyte	True	Found	%R (1)
ALUMINUM	500.0	504.01	100.8
ANTIMONY	25.0	22.88	91.5
CALCIUM	5000.0	4895.25	97.9
COPPER	25.0	25.62	102.5
IRON	5000.0	4829.99	96.6
LEAD	25.0	23.42	93.7
MAGNESIUM	5000.0	5063.76	101.3
MOLYBDENUM	25.0	25.77	103.1
POTASSIUM	5000.0	5022.07	100.4
SODIUM	5000.0	5245.85	104.9
ZINC	25.0	25.98	103.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 21:39

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.19	96.0
ANTIMONY	25.0	23.26	93.0
CALCIUM	5000.0	4952.36	99.0
COPPER	25.0	24.82	99.3
IRON	5000.0	4860.08	97.2
LEAD	25.0	24.01	96.0
MAGNESIUM	5000.0	5006.68	100.1
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4906.85	98.1
SODIUM	5000.0	5127.78	102.6
ZINC	25.0	25.01	100.0

SAMPLE: CCV

File: LNG22B Jul 22, 2020 22:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.61	95.1
ANTIMONY	25.0	22.43	89.7
CALCIUM	5000.0	4873.01	97.5
COPPER	25.0	24.98	99.9
IRON	5000.0	4834.68	96.7
LEAD	25.0	23.24	93.0
MAGNESIUM	5000.0	4934.05	98.7
MOLYBDENUM	25.0	25.32	101.3
POTASSIUM	5000.0	4930.23	98.6
SODIUM	5000.0	5089.16	101.8
ZINC	25.0	25.44	101.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 22:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.01	96.4
ANTIMONY	25.0	24.12	96.5
CALCIUM	5000.0	4854.18	97.1
COPPER	25.0	25.21	100.8
IRON	5000.0	4839.78	96.8
LEAD	25.0	24.82	99.3
MAGNESIUM	5000.0	4843.45	96.9
MOLYBDENUM	25.0	24.91	99.6
POTASSIUM	5000.0	4815.06	96.3
SODIUM	5000.0	5035.19	100.7
ZINC	25.0	25.16	100.6

SAMPLE: CCV

File: LNG22B Jul 22, 2020 23:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	494.01	98.8
ANTIMONY	25.0	24.44	97.8
CALCIUM	5000.0	4955.40	99.1
COPPER	25.0	27.04	108.2
IRON	5000.0	4939.66	98.8
LEAD	25.0	24.68	98.7
MAGNESIUM	5000.0	4923.20	98.5
MOLYBDENUM	25.0	25.26	101.0
POTASSIUM	5000.0	4913.84	98.3
SODIUM	5000.0	5069.44	101.4
ZINC	25.0	25.68	102.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 23:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.97	94.8
ANTIMONY	25.0	23.12	92.5
CALCIUM	5000.0	4917.08	98.3
COPPER	25.0	25.26	101.0
IRON	5000.0	4880.62	97.6
LEAD	25.0	23.57	94.3
MAGNESIUM	5000.0	4858.66	97.2
MOLYBDENUM	25.0	25.47	101.9
POTASSIUM	5000.0	4874.50	97.5
SODIUM	5000.0	4998.34	100.0
ZINC	25.0	24.90	99.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: PQL

File: LNG22B Jul 22, 2020 16:33

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.87	94.3
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.96	109.8
COPPER	0.6	0.51	85.0
IRON	20.0	23.04	115.2
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	20.66	103.3
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.62	104.8
SODIUM	200.0	217.63	108.8
ZINC	2.0	2.17	108.5

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICB

File: LNG22B Jul 22, 2020 16:30

Analyte	Result	C
ALUMINUM	0.388	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.115	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	0.829	J
MOLYBDENUM	0.197	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG22B Jul 22, 2020 16:54

Analyte	Result	C
ALUMINUM	10.251	B
ANTIMONY	0.061	U
CALCIUM	14.749	B
COPPER	0.102	J
IRON	14.158	B
LEAD	0.090	J
MAGNESIUM	10.613	B
MOLYBDENUM	0.192	J
POTASSIUM	15.852	J
SODIUM	57.775	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG22B Jul 22, 2020 17:26

Analyte	Result	C
ALUMINUM	0.542	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.142	U
IRON	6.400	U
LEAD	0.028	J
MAGNESIUM	1.293	J
MOLYBDENUM	0.048	J
POTASSIUM	12.000	U
SODIUM	16.885	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 17:58

Analyte	Result	C
ALUMINUM	0.387	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.156	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	4.961	J
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	18.707	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 18:31

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.203	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	2.348	J
MOLYBDENUM	0.062	J
POTASSIUM	12.000	U
SODIUM	9.402	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 19:02

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.183	U
IRON	6.400	U
LEAD	0.067	J
MAGNESIUM	2.049	J
MOLYBDENUM	0.044	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 19:34

Analyte	Result	C
ALUMINUM	0.940	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.176	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	1.135	J
MOLYBDENUM	0.040	J
POTASSIUM	12.000	U
SODIUM	20.888	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 20:06

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.218	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	8.646	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 20:38

Analyte	Result	C
ALUMINUM	1.029	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.179	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	1.069	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	10.086	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 21:10

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.177	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	-2.358	U
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 21:42

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.185	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.851	U
MOLYBDENUM	0.047	J
POTASSIUM	-15.413	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 22:13

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.174	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	-3.219	U
MOLYBDENUM	0.043	J
POTASSIUM	-12.994	U
SODIUM	11.321	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 22:44

Analyte	Result	C
ALUMINUM	3.955	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.155	U
IRON	12.189	B
LEAD	0.112	B
MAGNESIUM	-3.941	U
MOLYBDENUM	0.060	J
POTASSIUM	-14.608	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 23:16

Analyte	Result	C
ALUMINUM	2.773	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.135	U
IRON	9.395	J
LEAD	0.184	B
MAGNESIUM	-3.894	U
MOLYBDENUM	0.084	J
POTASSIUM	-14.700	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 23:42

Analyte	Result	C
ALUMINUM	1.870	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.162	U
IRON	6.400	U
LEAD	0.130	B
MAGNESIUM	-2.488	U
MOLYBDENUM	0.069	J
POTASSIUM	-20.983	U
SODIUM	6.600	U
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG20IMS1

Matrix: SOIL **SDG Name:** SN5719

QC Batch ID: NG20IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.024	J
ZINC	0.28	J

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG22B Jul 22, 2020 16:36

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92785.31	92.8
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	99238.10	99.2
COPPER	0.26	0.26	
IRON	100000.00	95988.97	96.0
LEAD	0.13	0.08	
MAGNESIUM	100000.00	96563.33	96.6
MOLYBDENUM	2000.00	2029.58	101.5
POTASSIUM	100000.00	95581.88	95.6
SODIUM	100000.00	96939.50	96.9
ZINC	0.24	0.54	

SAMPLE: ICSAB

File: LNG22B Jul 22, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92419.28	92.4
ANTIMONY	20.00	18.66	95.0
CALCIUM	100000.00	97491.74	97.5
COPPER	20.47	19.37	95.0
IRON	100000.00	93970.82	94.0
LEAD	20.13	19.58	100.0
MAGNESIUM	100000.00	96588.66	96.6
MOLYBDENUM	2000.00	2040.87	102.1
POTASSIUM	100000.00	95223.27	95.2
SODIUM	100000.00	96992.70	97.0
ZINC	20.40	19.97	100.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.50		0.225		9.63	23.6	N	72	124	MS
COPPER, TOTAL	50.6		30.8		24.06	82.4	N	84	119	MS
LEAD, TOTAL	64.2		56.1		9.63	84.6		84	118	MS
ZINC, TOTAL	141		93.3		48.13	99.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.58		0.225		9.72	24.2	N	72	124	MS
COPPER, TOTAL	52.0		30.8		24.29	87.3		84	119	MS
LEAD, TOTAL	62.6		56.1		9.72	66.8	N	84	118	MS
ZINC, TOTAL	137		93.3		48.58	90.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.58		0.327		9.32	24.2	N	72	124	MS
COPPER, TOTAL	50.4		31.9		23.31	79.5	N	84	119	MS
LEAD, TOTAL	101		98.7		9.32	27.8	N	84	118	MS
ZINC, TOTAL	137		93.1		46.62	94.4		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.32		0.327		9.24	21.6	N	72	124	MS
COPPER, TOTAL	52.6		31.9		23.1	89.4		84	119	MS
LEAD, TOTAL	102		98.7		9.24	37.6	N	84	118	MS
ZINC, TOTAL	135		93.1		46.2	91.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.88		0.429		10.51	32.8	N	72	124	MS
COPPER, TOTAL	55.9		36.0		26.28	75.8	N	84	119	MS
LEAD, TOTAL	224		248		10.51	-222.9	N	84	118	MS
ZINC, TOTAL	138		84.5		52.57	101.3		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.76		0.429		10.62	31.3	N	72	124	MS
COPPER, TOTAL	65.6		36.0		26.55	111.7		84	119	MS
LEAD, TOTAL	274		248		10.62	240.2	N	84	118	MS
ZINC, TOTAL	141		84.5		53.09	107.0		82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.54		0.460		2	103.8		80	120	MS
COPPER, TOTAL	68.6		62.9		6	94.2		80	120	MS
LEAD, TOTAL	115		114		2	39.8	A	80	120	MS
ZINC, TOTAL	209		190		20	96.4		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.76		0.695		2	103.1		80	120	MS
COPPER, TOTAL	74.1		67.8		6	104.7		80	120	MS
LEAD, TOTAL	211		210		2	69.4	A	80	120	MS
ZINC, TOTAL	217		198		20	95.0		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.01		0.808		2	110.1		80	120	MS
COPPER, TOTAL	71.0		67.8		6	53.8	A	80	120	MS
LEAD, TOTAL	462		468		2	-278.2	A	80	120	MS
ZINC, TOTAL	172		159		20	65.7	A	80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.58		2.50		3.2		MS
COPPER, TOTAL		52.0		50.6		2.7		MS
LEAD, TOTAL		62.6		64.2		2.6		MS
ZINC, TOTAL		137		141		2.6		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.32		2.58		10.5		MS
COPPER, TOTAL		52.6		50.4		4.1		MS
LEAD, TOTAL		102		101		0.9		MS
ZINC, TOTAL		135		137		1.2		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.76		3.88		3.3		MS
COPPER, TOTAL		65.6		55.9		16.0		MS
LEAD, TOTAL		274		224		19.6		MS
ZINC, TOTAL		141		138		2.6		MS

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG20IMS1

Matrix: SOIL **SDG Name:** SN5719

QC Batch ID: NG20IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.30	93.0	72	124
COPPER	25.0	24.9	99.8	84	119
LEAD	10.0	9.70	97.0	84	118
ZINC	50.0	49.0	98.1	82	119

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-001L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.460		0.49	J	6.5		MS
COPPER, TOTAL	62.9		66.1		5.1		MS
LEAD, TOTAL	114		121		6.1		MS
ZINC, TOTAL	190		202		6.3		MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-005L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.695		0.81	J	16.5		MS
COPPER, TOTAL	67.8		74.5		9.9		MS
LEAD, TOTAL	210		238		13.3	E	MS
ZINC, TOTAL	198		217		9.6		MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-009L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.808		0.74	J	8.4		MS
COPPER, TOTAL	67.8		71.4		5.3		MS
LEAD, TOTAL	468		502		7.3		MS
ZINC, TOTAL	159		164		3.1		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG20IMS1

Matrix: SOIL **SDG Name:** SN5719

Method: MS **Prep Date:** 07/20/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG20IMS1	LCSONG20IMS1	1	0.1	
PBSNG20IMS1	PBSNG20IMS1	1	0.1	
COR01IS01	SN5719-001	1.06	0.1	
COR01IS01P	SN5719-001P	1.08	0.1	
COR01IS01S	SN5719-001S	1.07	0.1	
COR01IS02	SN5719-002	1.02	0.1	
COR01IS03	SN5719-003	1.01	0.1	
COR02IS01	SN5719-004	1.04	0.1	
COR02IS02	SN5719-005	1.09	0.1	
COR02IS02P	SN5719-005P	1.1	0.1	
COR02IS02S	SN5719-005S	1.11	0.1	
COR02IS03	SN5719-006	1.09	0.1	
COR03IS01	SN5719-007	1.01	0.1	
COR03IS02	SN5719-008	1.01	0.1	
COR03IS03	SN5719-009	1.01	0.1	
COR03IS03P	SN5719-009P	1.02	0.1	
COR03IS03S	SN5719-009S	1.01	0.1	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	16:21	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	16:25	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	16:27	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	16:30	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	16:33	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:36	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	16:38	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:41											
ZZZZZZ		1	16:43											
ZZZZZZ		1	16:46											
ZZZZZZ		1	16:49											
CCV		1	16:51	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:54	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:57											
ZZZZZZ		5	16:59											
ZZZZZZ		5	17:02											
ZZZZZZ		1	17:05											
ZZZZZZ		1	17:07											
ZZZZZZ		1	17:10											
LCSONG20IMS1		5	17:13				Cu							
PBSNG20IMS1		5	17:15		Sb									Zn
ZZZZZZ		5	17:18											
ZZZZZZ		1	17:21											
CCV		1	17:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:29											
ZZZZZZ		1	17:31											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	17:34									
ZZZZZZ		1	17:37									
ZZZZZZ		1	17:40									
ZZZZZZ		1	17:42									
ZZZZZZ		5	17:45									
ZZZZZZ		5	17:48									
ZZZZZZ		5	17:50									
ZZZZZZ		5	17:53									
CCV		1	17:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:01									
ZZZZZZ		5	18:04									
ZZZZZZ		5	18:06									
ZZZZZZ		25	18:09									
ZZZZZZ		5	18:12									
ZZZZZZ		5	18:14									
ZZZZZZ		5	18:17									
ZZZZZZ		5	18:20									
ZZZZZZ		5	18:23									
ZZZZZZ		5	18:25									
CCV		1	18:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:33									
ZZZZZZ		5	18:36									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:41									
ZZZZZZ		5	18:44									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	18:47	
ZZZZZZ		5	18:49	
ZZZZZZ		5	18:52	
ZZZZZZ		5	18:54	
ZZZZZZ		1	18:57	
CCV		1	19:00	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:02	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:05	
ZZZZZZ		1	19:08	
ZZZZZZ		1	19:10	
ZZZZZZ		1	19:13	
ZZZZZZ		5	19:16	
ZZZZZZ		5	19:18	
ZZZZZZ		5	19:21	
ZZZZZZ		5	19:24	
ZZZZZZ		5	19:26	
ZZZZZZ		5	19:29	
CCV		1	19:32	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:34	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:37	
ZZZZZZ		25	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:45	
ZZZZZZ		5	19:48	
ZZZZZZ		5	19:51	
ZZZZZZ		5	19:53	
ZZZZZZ		5	19:56	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:59									
ZZZZZZ		5	20:01									
CCV		1	20:04	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:06	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:09									
ZZZZZZ		5	20:12									
ZZZZZZ		5	20:15									
ZZZZZZ		5	20:17									
ZZZZZZ		5	20:20									
ZZZZZZ		5	20:22									
ZZZZZZ		5	20:25									
ZZZZZZ		5	20:28									
ZZZZZZ		5	20:30									
ZZZZZZ		25	20:33									
CCV		1	20:36	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:38	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:41									
ZZZZZZ		5	20:44									
ZZZZZZ		5	20:46									
ZZZZZZ		5	20:49									
ZZZZZZ		25	20:52									
ZZZZZZ		5	20:54									
ZZZZZZ		5	20:57									
ZZZZZZ		5	21:00									
ZZZZZZ		5	21:02									
ZZZZZZ		5	21:05									
CCV		1	21:07	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	21:10	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	21:13	
ZZZZZZ		5	21:15	
ZZZZZZ		5	21:18	
ZZZZZZ		5	21:21	
ZZZZZZ		5	21:23	
ZZZZZZ		5	21:26	
ZZZZZZ		5	21:28	
ZZZZZZ		25	21:31	
ZZZZZZ		5	21:34	
ZZZZZZ		5	21:36	
CCV		1	21:39	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	21:42	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	21:44	
ZZZZZZ		5	21:47	
ZZZZZZ		5	21:49	
ZZZZZZ		5	21:52	
ZZZZZZ		5	21:55	
ZZZZZZ		5	21:57	
ZZZZZZ		5	22:00	
ZZZZZZ		5	22:02	
ZZZZZZ		5	22:05	
ZZZZZZ		5	22:08	
CCV		1	22:10	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	22:13	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
LCSONG20IMS1		5	22:16	Sb Pb Zn
PBSNG20IMS1		5	22:18	Cu Pb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements										
SN5719-001	COR01IS01	5	22:21		Sb			Cu		Pb				Zn
SN5719-001L	COR01IS01L	25	22:24		Sb			Cu		Pb				Zn
SN5719-001A	COR01IS01A	5	22:26		Sb			Cu		Pb				Zn
SN5719-001S	COR01IS01S	5	22:29		Sb			Cu		Pb				Zn
SN5719-001P	COR01IS01P	5	22:31		Sb			Cu		Pb				Zn
SN5719-002	COR01IS02	5	22:34		Sb			Cu		Pb				Zn
SN5719-003	COR01IS03	5	22:37		Sb			Cu		Pb				Zn
SN5719-004	COR02IS01	5	22:39		Sb			Cu		Pb				Zn
CCV		1	22:42	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:44	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5719-005	COR02IS02	5	22:47		Sb			Cu		Pb				Zn
SN5719-005L	COR02IS02L	25	22:50		Sb			Cu		Pb				Zn
SN5719-005A	COR02IS02A	5	22:52		Sb			Cu		Pb				Zn
SN5719-005S	COR02IS02S	5	22:55		Sb			Cu		Pb				Zn
SN5719-005P	COR02IS02P	5	22:58		Sb			Cu		Pb				Zn
SN5719-006	COR02IS03	5	23:00		Sb			Cu		Pb				Zn
SN5719-007	COR03IS01	5	23:03		Sb			Cu		Pb				Zn
SN5719-008	COR03IS02	5	23:05		Sb			Cu		Pb				Zn
SN5719-009	COR03IS03	5	23:08		Sb			Cu		Pb				Zn
SN5719-009L	COR03IS03L	25	23:11		Sb			Cu		Pb				Zn
CCV		1	23:14	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:16	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5719-009A	COR03IS03A	5	23:19		Sb			Cu		Pb				Zn
SN5719-009S	COR03IS03S	5	23:22		Sb			Cu		Pb				Zn
SN5719-009P	COR03IS03P	5	23:24		Sb			Cu		Pb				Zn
ZZZZZZ		5	23:27											
ZZZZZZ		5	23:29											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	23:32									
ZZZZZZ		5	23:35									
ZZZZZZ		5	23:37									
CCV		1	23:40	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	23:42	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-1
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS01	SL	07-JUL-20 12:20:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000057

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-2
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS02	SL	07-JUL-20 12:30:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000058

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-3
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS03	SL	07-JUL-20 12:40:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000059

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-4
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS01	SL	08-JUL-20 07:50:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	98. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000060

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-5
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS02	SL	08-JUL-20 07:30:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	97. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000061

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-6
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS03	SL	08-JUL-20 07:40:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	98. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000062

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-7
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS01	SL	10-JUL-20 08:10:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000063

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-8
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS02	SL	10-JUL-20 08:20:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	95. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000064

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-9
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS03	SL	10-JUL-20 08:00:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	93. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services A0000065

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282141	SW3540C	20-JUL-20	17-JUL-20	100 %	1 %	N/A

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282141-2	LCS	WG282141	20-JUL-20	17-JUL-20	%	90	90.	100	90-110	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282141-3	SN5719-1	WG282141	20-JUL-20	%	96.	96.	0	20
WG282141-4	SN5719-5	WG282141	20-JUL-20	%	97.	97.	0	20
WG282141-5	SN5719-9	WG282141	20-JUL-20	%	93.	94.	0	20

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SN5719 **SOW No.** SW846

Client Field ID	Lab Sample ID
COR01IS01	SN5719-001
COR01IS01P	SN5719-001P
COR01IS01S	SN5719-001S
COR01IS02	SN5719-002
COR01IS03	SN5719-003
COR02IS01	SN5719-004
COR02IS02	SN5719-005
COR02IS02P	SN5719-005P
COR02IS02S	SN5719-005S
COR02IS03	SN5719-006
COR03IS01	SN5719-007
COR03IS02	SN5719-008
COR03IS03	SN5719-009
COR03IS03P	SN5719-009P
COR03IS03S	SN5719-009S

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Maren Cargill Name: Maren Cargill

Date: 7/30/20 Title: Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.225		N	MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	30.8		N	MS	5	0.29	0.069	0.20
7439-92-1	LEAD, TOTAL	56.1		NA	MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	93.3			MS	5	0.98	0.13	0.78

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.3 **Lab Sample ID:** SN5719-002

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.285			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	28.7			MS	5	0.30	0.071	0.20
7439-92-1	LEAD, TOTAL	63.0			MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	96.3			MS	5	1.0	0.13	0.81

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.1 **Lab Sample ID:** SN5719-003

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.19			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	29.2			MS	5	0.31	0.072	0.21
7439-92-1	LEAD, TOTAL	38.5			MS	5	0.10	0.0072	0.052
7440-66-6	ZINC, TOTAL	95.6			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.6 **Lab Sample ID:** SN5719-004

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.293			MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	33.6			MS	5	0.30	0.069	0.20
7439-92-1	LEAD, TOTAL	82.9			MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	91.3			MS	5	0.98	0.13	0.79

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.327		N	MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	31.9		N	MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	98.7		NEA	MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	93.1			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.7 **Lab Sample ID:** SN5719-006

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.293			MS	5	0.094	0.019	0.047
7440-50-8	COPPER, TOTAL	39.9			MS	5	0.28	0.066	0.19
7439-92-1	LEAD, TOTAL	72.1			MS	5	0.094	0.0066	0.047
7440-66-6	ZINC, TOTAL	98.3			MS	5	0.94	0.12	0.75

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 95.6 **Lab Sample ID:** SN5719-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.425			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	24.9			MS	5	0.31	0.072	0.21
7439-92-1	LEAD, TOTAL	164			MS	5	0.10	0.0072	0.052
7440-66-6	ZINC, TOTAL	119			MS	5	1.0	0.13	0.83

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 95.2 **Lab Sample ID:** SN5719-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.725			MS	5	0.10	0.021	0.052
7440-50-8	COPPER, TOTAL	41.4			MS	5	0.31	0.073	0.21
7439-92-1	LEAD, TOTAL	179			MS	5	0.10	0.0073	0.052
7440-66-6	ZINC, TOTAL	82.5			MS	5	1.0	0.14	0.83

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.429		N	MS	5	0.11	0.021	0.053
7440-50-8	COPPER, TOTAL	36.0		NA	MS	5	0.32	0.074	0.21
7439-92-1	LEAD, TOTAL	248		NA	MS	5	0.11	0.0074	0.053
7440-66-6	ZINC, TOTAL	84.5		A	MS	5	1.1	0.14	0.85

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICV

File: LNG22B Jul 22, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	392.62	98.2
ANTIMONY	20.0	20.64	103.2
CALCIUM	4000.0	3893.29	97.3
COPPER	20.0	20.15	100.7
IRON	4000.0	3831.66	95.8
LEAD	20.0	20.79	103.9
MAGNESIUM	4000.0	4073.63	101.8
MOLYBDENUM	40.0	40.37	100.9
POTASSIUM	4000.0	4076.81	101.9
SODIUM	4000.0	4182.70	104.6
ZINC	20.0	20.82	104.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.29	96.1
ANTIMONY	25.0	23.05	92.2
CALCIUM	5000.0	5073.42	101.5
COPPER	25.0	25.18	100.7
IRON	5000.0	5011.31	100.2
LEAD	25.0	23.59	94.4
MAGNESIUM	5000.0	4890.81	97.8
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4902.15	98.0
SODIUM	5000.0	5112.27	102.2
ZINC	25.0	25.16	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.88	96.6
ANTIMONY	25.0	23.95	95.8
CALCIUM	5000.0	5072.61	101.5
COPPER	25.0	24.43	97.7
IRON	5000.0	5026.23	100.5
LEAD	25.0	24.13	96.5
MAGNESIUM	5000.0	4889.83	97.8
MOLYBDENUM	25.0	24.82	99.3
POTASSIUM	5000.0	4868.57	97.4
SODIUM	5000.0	5076.93	101.5
ZINC	25.0	24.78	99.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 17:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.58	96.5
ANTIMONY	25.0	22.85	91.4
CALCIUM	5000.0	4907.23	98.1
COPPER	25.0	24.41	97.6
IRON	5000.0	4800.26	96.0
LEAD	25.0	23.61	94.4
MAGNESIUM	5000.0	4922.58	98.5
MOLYBDENUM	25.0	25.17	100.7
POTASSIUM	5000.0	4898.25	98.0
SODIUM	5000.0	5131.11	102.6
ZINC	25.0	24.79	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 18:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.57	97.1
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4960.35	99.2
COPPER	25.0	24.92	99.7
IRON	5000.0	4881.74	97.6
LEAD	25.0	24.02	96.1
MAGNESIUM	5000.0	4918.00	98.4
MOLYBDENUM	25.0	25.24	101.0
POTASSIUM	5000.0	4919.43	98.4
SODIUM	5000.0	5123.14	102.5
ZINC	25.0	25.00	100.0

SAMPLE: CCV

File: LNG22B Jul 22, 2020 19:00

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.97	97.8
ANTIMONY	25.0	24.41	97.6
CALCIUM	5000.0	4928.76	98.6
COPPER	25.0	24.77	99.1
IRON	5000.0	4855.01	97.1
LEAD	25.0	25.16	100.6
MAGNESIUM	5000.0	4920.82	98.4
MOLYBDENUM	25.0	25.08	100.3
POTASSIUM	5000.0	4905.50	98.1
SODIUM	5000.0	5079.71	101.6
ZINC	25.0	25.32	101.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 19:32

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.15	96.6
ANTIMONY	25.0	22.87	91.5
CALCIUM	5000.0	4894.99	97.9
COPPER	25.0	24.50	98.0
IRON	5000.0	4822.35	96.4
LEAD	25.0	23.41	93.6
MAGNESIUM	5000.0	4951.70	99.0
MOLYBDENUM	25.0	25.26	101.0
POTASSIUM	5000.0	4940.85	98.8
SODIUM	5000.0	5134.80	102.7
ZINC	25.0	25.06	100.2

SAMPLE: CCV

File: LNG22B Jul 22, 2020 20:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.13	95.2
ANTIMONY	25.0	24.36	97.4
CALCIUM	5000.0	4910.41	98.2
COPPER	25.0	24.72	98.9
IRON	5000.0	4820.91	96.4
LEAD	25.0	24.54	98.2
MAGNESIUM	5000.0	4904.38	98.1
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4913.38	98.3
SODIUM	5000.0	5104.14	102.1
ZINC	25.0	24.56	98.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 20:36

Analyte	True	Found	%R (1)
ALUMINUM	500.0	495.07	99.0
ANTIMONY	25.0	23.63	94.5
CALCIUM	5000.0	4882.59	97.7
COPPER	25.0	25.39	101.6
IRON	5000.0	4804.80	96.1
LEAD	25.0	23.99	96.0
MAGNESIUM	5000.0	5030.87	100.6
MOLYBDENUM	25.0	25.81	103.2
POTASSIUM	5000.0	5040.70	100.8
SODIUM	5000.0	5237.89	104.8
ZINC	25.0	25.28	101.1

SAMPLE: CCV

File: LNG22B Jul 22, 2020 21:07

Analyte	True	Found	%R (1)
ALUMINUM	500.0	504.01	100.8
ANTIMONY	25.0	22.88	91.5
CALCIUM	5000.0	4895.25	97.9
COPPER	25.0	25.62	102.5
IRON	5000.0	4829.99	96.6
LEAD	25.0	23.42	93.7
MAGNESIUM	5000.0	5063.76	101.3
MOLYBDENUM	25.0	25.77	103.1
POTASSIUM	5000.0	5022.07	100.4
SODIUM	5000.0	5245.85	104.9
ZINC	25.0	25.98	103.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 21:39

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.19	96.0
ANTIMONY	25.0	23.26	93.0
CALCIUM	5000.0	4952.36	99.0
COPPER	25.0	24.82	99.3
IRON	5000.0	4860.08	97.2
LEAD	25.0	24.01	96.0
MAGNESIUM	5000.0	5006.68	100.1
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4906.85	98.1
SODIUM	5000.0	5127.78	102.6
ZINC	25.0	25.01	100.0

SAMPLE: CCV

File: LNG22B Jul 22, 2020 22:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.61	95.1
ANTIMONY	25.0	22.43	89.7
CALCIUM	5000.0	4873.01	97.5
COPPER	25.0	24.98	99.9
IRON	5000.0	4834.68	96.7
LEAD	25.0	23.24	93.0
MAGNESIUM	5000.0	4934.05	98.7
MOLYBDENUM	25.0	25.32	101.3
POTASSIUM	5000.0	4930.23	98.6
SODIUM	5000.0	5089.16	101.8
ZINC	25.0	25.44	101.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 22:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.01	96.4
ANTIMONY	25.0	24.12	96.5
CALCIUM	5000.0	4854.18	97.1
COPPER	25.0	25.21	100.8
IRON	5000.0	4839.78	96.8
LEAD	25.0	24.82	99.3
MAGNESIUM	5000.0	4843.45	96.9
MOLYBDENUM	25.0	24.91	99.6
POTASSIUM	5000.0	4815.06	96.3
SODIUM	5000.0	5035.19	100.7
ZINC	25.0	25.16	100.6

SAMPLE: CCV

File: LNG22B Jul 22, 2020 23:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	494.01	98.8
ANTIMONY	25.0	24.44	97.8
CALCIUM	5000.0	4955.40	99.1
COPPER	25.0	27.04	108.2
IRON	5000.0	4939.66	98.8
LEAD	25.0	24.68	98.7
MAGNESIUM	5000.0	4923.20	98.5
MOLYBDENUM	25.0	25.26	101.0
POTASSIUM	5000.0	4913.84	98.3
SODIUM	5000.0	5069.44	101.4
ZINC	25.0	25.68	102.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCV

File: LNG22B Jul 22, 2020 23:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.97	94.8
ANTIMONY	25.0	23.12	92.5
CALCIUM	5000.0	4917.08	98.3
COPPER	25.0	25.26	101.0
IRON	5000.0	4880.62	97.6
LEAD	25.0	23.57	94.3
MAGNESIUM	5000.0	4858.66	97.2
MOLYBDENUM	25.0	25.47	101.9
POTASSIUM	5000.0	4874.50	97.5
SODIUM	5000.0	4998.34	100.0
ZINC	25.0	24.90	99.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: PQL

File: LNG22B Jul 22, 2020 16:33

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.87	94.3
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.96	109.8
COPPER	0.6	0.51	85.0
IRON	20.0	23.04	115.2
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	20.66	103.3
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.62	104.8
SODIUM	200.0	217.63	108.8
ZINC	2.0	2.17	108.5

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICB

File: LNG22B Jul 22, 2020 16:30

Analyte	Result	C
ALUMINUM	0.388	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.115	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	0.829	J
MOLYBDENUM	0.197	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG22B Jul 22, 2020 16:54

Analyte	Result	C
ALUMINUM	10.251	B
ANTIMONY	0.061	U
CALCIUM	14.749	B
COPPER	0.102	J
IRON	14.158	B
LEAD	0.090	J
MAGNESIUM	10.613	B
MOLYBDENUM	0.192	J
POTASSIUM	15.852	J
SODIUM	57.775	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG22B Jul 22, 2020 17:26

Analyte	Result	C
ALUMINUM	0.542	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.142	U
IRON	6.400	U
LEAD	0.028	J
MAGNESIUM	1.293	J
MOLYBDENUM	0.048	J
POTASSIUM	12.000	U
SODIUM	16.885	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 17:58

Analyte	Result	C
ALUMINUM	0.387	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.156	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	4.961	J
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	18.707	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 18:31

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.203	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	2.348	J
MOLYBDENUM	0.062	J
POTASSIUM	12.000	U
SODIUM	9.402	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 19:02

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.183	U
IRON	6.400	U
LEAD	0.067	J
MAGNESIUM	2.049	J
MOLYBDENUM	0.044	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 19:34

Analyte	Result	C
ALUMINUM	0.940	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.176	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	1.135	J
MOLYBDENUM	0.040	J
POTASSIUM	12.000	U
SODIUM	20.888	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 20:06

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.218	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	8.646	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 20:38

Analyte	Result	C
ALUMINUM	1.029	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.179	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	1.069	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	10.086	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 21:10

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.177	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	-2.358	U
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 21:42

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.185	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.851	U
MOLYBDENUM	0.047	J
POTASSIUM	-15.413	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 22:13

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.174	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	-3.219	U
MOLYBDENUM	0.043	J
POTASSIUM	-12.994	U
SODIUM	11.321	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: CCB
File: LNG22B Jul 22, 2020 22:44

Analyte	Result	C
ALUMINUM	3.955	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.155	U
IRON	12.189	B
LEAD	0.112	B
MAGNESIUM	-3.941	U
MOLYBDENUM	0.060	J
POTASSIUM	-14.608	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 23:16

Analyte	Result	C
ALUMINUM	2.773	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.135	U
IRON	9.395	J
LEAD	0.184	B
MAGNESIUM	-3.894	U
MOLYBDENUM	0.084	J
POTASSIUM	-14.700	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG22B Jul 22, 2020 23:42

Analyte	Result	C
ALUMINUM	1.870	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.162	U
IRON	6.400	U
LEAD	0.130	B
MAGNESIUM	-2.488	U
MOLYBDENUM	0.069	J
POTASSIUM	-20.983	U
SODIUM	6.600	U
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG20IMS1

Matrix: SOIL **SDG Name:** SN5719

QC Batch ID: NG20IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.024	J
ZINC	0.28	J

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG22B Jul 22, 2020 16:36

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92785.31	92.8
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	99238.10	99.2
COPPER	0.26	0.26	
IRON	100000.00	95988.97	96.0
LEAD	0.13	0.08	
MAGNESIUM	100000.00	96563.33	96.6
MOLYBDENUM	2000.00	2029.58	101.5
POTASSIUM	100000.00	95581.88	95.6
SODIUM	100000.00	96939.50	96.9
ZINC	0.24	0.54	

SAMPLE: ICSAB

File: LNG22B Jul 22, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92419.28	92.4
ANTIMONY	20.00	18.66	95.0
CALCIUM	100000.00	97491.74	97.5
COPPER	20.47	19.37	95.0
IRON	100000.00	93970.82	94.0
LEAD	20.13	19.58	100.0
MAGNESIUM	100000.00	96588.66	96.6
MOLYBDENUM	2000.00	2040.87	102.1
POTASSIUM	100000.00	95223.27	95.2
SODIUM	100000.00	96992.70	97.0
ZINC	20.40	19.97	100.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.50		0.225		9.63	23.6	N	72	124	MS
COPPER, TOTAL	50.6		30.8		24.06	82.4	N	84	119	MS
LEAD, TOTAL	64.2		56.1		9.63	84.6		84	118	MS
ZINC, TOTAL	141		93.3		48.13	99.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.58		0.225		9.72	24.2	N	72	124	MS
COPPER, TOTAL	52.0		30.8		24.29	87.3		84	119	MS
LEAD, TOTAL	62.6		56.1		9.72	66.8	N	84	118	MS
ZINC, TOTAL	137		93.3		48.58	90.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.58		0.327		9.32	24.2	N	72	124	MS
COPPER, TOTAL	50.4		31.9		23.31	79.5	N	84	119	MS
LEAD, TOTAL	101		98.7		9.32	27.8	N	84	118	MS
ZINC, TOTAL	137		93.1		46.62	94.4		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.32		0.327		9.24	21.6	N	72	124	MS
COPPER, TOTAL	52.6		31.9		23.1	89.4		84	119	MS
LEAD, TOTAL	102		98.7		9.24	37.6	N	84	118	MS
ZINC, TOTAL	135		93.1		46.2	91.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03P

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.88		0.429		10.51	32.8	N	72	124	MS
COPPER, TOTAL	55.9		36.0		26.28	75.8	N	84	119	MS
LEAD, TOTAL	224		248		10.51	-222.9	N	84	118	MS
ZINC, TOTAL	138		84.5		52.57	101.3		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03S

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.76		0.429		10.62	31.3	N	72	124	MS
COPPER, TOTAL	65.6		36.0		26.55	111.7		84	119	MS
LEAD, TOTAL	274		248		10.62	240.2	N	84	118	MS
ZINC, TOTAL	141		84.5		53.09	107.0		82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.54		0.460		2	103.8		80	120	MS
COPPER, TOTAL	68.6		62.9		6	94.2		80	120	MS
LEAD, TOTAL	115		114		2	39.8	A	80	120	MS
ZINC, TOTAL	209		190		20	96.4		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.76		0.695		2	103.1		80	120	MS
COPPER, TOTAL	74.1		67.8		6	104.7		80	120	MS
LEAD, TOTAL	211		210		2	69.4	A	80	120	MS
ZINC, TOTAL	217		198		20	95.0		80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03A

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.01		0.808		2	110.1		80	120	MS
COPPER, TOTAL	71.0		67.8		6	53.8	A	80	120	MS
LEAD, TOTAL	462		468		2	-278.2	A	80	120	MS
ZINC, TOTAL	172		159		20	65.7	A	80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 96.2 **Lab Sample ID:** SN5719-001

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.58		2.50		3.2		MS
COPPER, TOTAL		52.0		50.6		2.7		MS
LEAD, TOTAL		62.6		64.2		2.6		MS
ZINC, TOTAL		137		141		2.6		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 97.5 **Lab Sample ID:** SN5719-005

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		2.32		2.58		10.5		MS
COPPER, TOTAL		52.6		50.4		4.1		MS
LEAD, TOTAL		102		101		0.9		MS
ZINC, TOTAL		135		137		1.2		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03

Matrix: SOIL **SDG Name:** SN5719

Percent Solids: 93.2 **Lab Sample ID:** SN5719-009

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		3.76		3.88		3.3		MS
COPPER, TOTAL		65.6		55.9		16.0		MS
LEAD, TOTAL		274		224		19.6		MS
ZINC, TOTAL		141		138		2.6		MS

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG20IMS1

Matrix: SOIL **SDG Name:** SN5719

QC Batch ID: NG20IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.30	93.0	72	124
COPPER	25.0	24.9	99.8	84	119
LEAD	10.0	9.70	97.0	84	118
ZINC	50.0	49.0	98.1	82	119

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR01IS01L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-001L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.460		0.49	J	6.5		MS
COPPER, TOTAL	62.9		66.1		5.1		MS
LEAD, TOTAL	114		121		6.1		MS
ZINC, TOTAL	190		202		6.3		MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR02IS02L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-005L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.695		0.81	J	16.5		MS
COPPER, TOTAL	67.8		74.5		9.9		MS
LEAD, TOTAL	210		238		13.3	E	MS
ZINC, TOTAL	198		217		9.6		MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR03IS03L

Matrix: SOIL **SDG Name:** SN5719

Lab Sample ID: SN5719-009L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.808		0.74	J	8.4		MS
COPPER, TOTAL	67.8		71.4		5.3		MS
LEAD, TOTAL	468		502		7.3		MS
ZINC, TOTAL	159		164		3.1		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG20IMS1

Matrix: SOIL **SDG Name:** SN5719

Method: MS **Prep Date:** 07/20/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG20IMS1	LCSONG20IMS1	1	0.1	
PBSNG20IMS1	PBSNG20IMS1	1	0.1	
COR01IS01	SN5719-001	1.06	0.1	
COR01IS01P	SN5719-001P	1.08	0.1	
COR01IS01S	SN5719-001S	1.07	0.1	
COR01IS02	SN5719-002	1.02	0.1	
COR01IS03	SN5719-003	1.01	0.1	
COR02IS01	SN5719-004	1.04	0.1	
COR02IS02	SN5719-005	1.09	0.1	
COR02IS02P	SN5719-005P	1.1	0.1	
COR02IS02S	SN5719-005S	1.11	0.1	
COR02IS03	SN5719-006	1.09	0.1	
COR03IS01	SN5719-007	1.01	0.1	
COR03IS02	SN5719-008	1.01	0.1	
COR03IS03	SN5719-009	1.01	0.1	
COR03IS03P	SN5719-009P	1.02	0.1	
COR03IS03S	SN5719-009S	1.01	0.1	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
CalBlank		1	16:21	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CalStd		1	16:25	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ICV		1	16:27	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ICB		1	16:30	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
PQL		1	16:33	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ICSA		1	16:36	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ICSAB		1	16:38	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		1	16:41	
ZZZZZZ		1	16:43	
ZZZZZZ		1	16:46	
ZZZZZZ		1	16:49	
CCV		1	16:51	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	16:54	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	16:57	
ZZZZZZ		5	16:59	
ZZZZZZ		5	17:02	
ZZZZZZ		1	17:05	
ZZZZZZ		1	17:07	
ZZZZZZ		1	17:10	
LCSONG20IMS1		5	17:13	Cu
PBSNG20IMS1		5	17:15	Sb Zn
ZZZZZZ		5	17:18	
ZZZZZZ		1	17:21	
CCV		1	17:23	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	17:26	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	17:29	
ZZZZZZ		1	17:31	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	17:34									
ZZZZZZ		1	17:37									
ZZZZZZ		1	17:40									
ZZZZZZ		1	17:42									
ZZZZZZ		5	17:45									
ZZZZZZ		5	17:48									
ZZZZZZ		5	17:50									
ZZZZZZ		5	17:53									
CCV		1	17:56	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:01									
ZZZZZZ		5	18:04									
ZZZZZZ		5	18:06									
ZZZZZZ		25	18:09									
ZZZZZZ		5	18:12									
ZZZZZZ		5	18:14									
ZZZZZZ		5	18:17									
ZZZZZZ		5	18:20									
ZZZZZZ		5	18:23									
ZZZZZZ		5	18:25									
CCV		1	18:28	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:31	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:33									
ZZZZZZ		5	18:36									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:41									
ZZZZZZ		5	18:44									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		5	18:47										
ZZZZZZ		5	18:49										
ZZZZZZ		5	18:52										
ZZZZZZ		5	18:54										
ZZZZZZ		1	18:57										
CCV		1	19:00	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:02	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:05										
ZZZZZZ		1	19:08										
ZZZZZZ		1	19:10										
ZZZZZZ		1	19:13										
ZZZZZZ		5	19:16										
ZZZZZZ		5	19:18										
ZZZZZZ		5	19:21										
ZZZZZZ		5	19:24										
ZZZZZZ		5	19:26										
ZZZZZZ		5	19:29										
CCV		1	19:32	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:34	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:37										
ZZZZZZ		25	19:40										
ZZZZZZ		5	19:43										
ZZZZZZ		5	19:45										
ZZZZZZ		5	19:48										
ZZZZZZ		5	19:51										
ZZZZZZ		5	19:53										
ZZZZZZ		5	19:56										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:59									
ZZZZZZ		5	20:01									
CCV		1	20:04	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:06	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:09									
ZZZZZZ		5	20:12									
ZZZZZZ		5	20:15									
ZZZZZZ		5	20:17									
ZZZZZZ		5	20:20									
ZZZZZZ		5	20:22									
ZZZZZZ		5	20:25									
ZZZZZZ		5	20:28									
ZZZZZZ		5	20:30									
ZZZZZZ		25	20:33									
CCV		1	20:36	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:38	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:41									
ZZZZZZ		5	20:44									
ZZZZZZ		5	20:46									
ZZZZZZ		5	20:49									
ZZZZZZ		25	20:52									
ZZZZZZ		5	20:54									
ZZZZZZ		5	20:57									
ZZZZZZ		5	21:00									
ZZZZZZ		5	21:02									
ZZZZZZ		5	21:05									
CCV		1	21:07	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	21:10	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	21:13	
ZZZZZZ		5	21:15	
ZZZZZZ		5	21:18	
ZZZZZZ		5	21:21	
ZZZZZZ		5	21:23	
ZZZZZZ		5	21:26	
ZZZZZZ		5	21:28	
ZZZZZZ		25	21:31	
ZZZZZZ		5	21:34	
ZZZZZZ		5	21:36	
CCV		1	21:39	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	21:42	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	21:44	
ZZZZZZ		5	21:47	
ZZZZZZ		5	21:49	
ZZZZZZ		5	21:52	
ZZZZZZ		5	21:55	
ZZZZZZ		5	21:57	
ZZZZZZ		5	22:00	
ZZZZZZ		5	22:02	
ZZZZZZ		5	22:05	
ZZZZZZ		5	22:08	
CCV		1	22:10	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	22:13	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
LCSONG20IMS1		5	22:16	Sb Pb Zn
PBSNG20IMS1		5	22:18	Cu Pb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements										
SN5719-001	COR01IS01	5	22:21		Sb			Cu		Pb				Zn
SN5719-001L	COR01IS01L	25	22:24		Sb			Cu		Pb				Zn
SN5719-001A	COR01IS01A	5	22:26		Sb			Cu		Pb				Zn
SN5719-001S	COR01IS01S	5	22:29		Sb			Cu		Pb				Zn
SN5719-001P	COR01IS01P	5	22:31		Sb			Cu		Pb				Zn
SN5719-002	COR01IS02	5	22:34		Sb			Cu		Pb				Zn
SN5719-003	COR01IS03	5	22:37		Sb			Cu		Pb				Zn
SN5719-004	COR02IS01	5	22:39		Sb			Cu		Pb				Zn
CCV		1	22:42	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:44	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5719-005	COR02IS02	5	22:47		Sb			Cu		Pb				Zn
SN5719-005L	COR02IS02L	25	22:50		Sb			Cu		Pb				Zn
SN5719-005A	COR02IS02A	5	22:52		Sb			Cu		Pb				Zn
SN5719-005S	COR02IS02S	5	22:55		Sb			Cu		Pb				Zn
SN5719-005P	COR02IS02P	5	22:58		Sb			Cu		Pb				Zn
SN5719-006	COR02IS03	5	23:00		Sb			Cu		Pb				Zn
SN5719-007	COR03IS01	5	23:03		Sb			Cu		Pb				Zn
SN5719-008	COR03IS02	5	23:05		Sb			Cu		Pb				Zn
SN5719-009	COR03IS03	5	23:08		Sb			Cu		Pb				Zn
SN5719-009L	COR03IS03L	25	23:11		Sb			Cu		Pb				Zn
CCV		1	23:14	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:16	Al	Sb		Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN5719-009A	COR03IS03A	5	23:19		Sb			Cu		Pb				Zn
SN5719-009S	COR03IS03S	5	23:22		Sb			Cu		Pb				Zn
SN5719-009P	COR03IS03P	5	23:24		Sb			Cu		Pb				Zn
ZZZZZZ		5	23:27											
ZZZZZZ		5	23:29											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN5719

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG22B

Date: 07/22/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	23:32									
ZZZZZZ		5	23:35									
ZZZZZZ		5	23:37									
CCV		1	23:40	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	23:42	Al Sb	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/22/2020

METHOD: **ICP-MS**
- ❑ 200.8
- ❑ 6020
- ❑ DOD

REVIEWED 07/24/20 KATAHDIN ANALYTICAL METALS SECTION

FILE NAME: LNG22B

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

CCB fails at 16:54 for Mg (10.613 ug/L) Al (10.251 ug/L) Ca (14.749 ug/L) Fe (14.158 ug/L), 21:10 for V (5.49 ug/L)

Opening PQL (16:33) fails high for Co (0.246 ug/L)

Closing PQL (11:45) fails high for V (1.493 ug/L) Pb (0.292 ug/L)

For high failing ICB/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

PRE-FILTERED Fe (0.14 mg/L) all samples > 10x

AP 7/24/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG22B	07/22/2020	16:21	AP
CalStd	1	LNG22B	07/22/2020	16:25	AP
ICV	1	LNG22B	07/22/2020	16:27	AP
ICB	1	LNG22B	07/22/2020	16:30	AP
PQL	1	LNG22B	07/22/2020	16:33	AP
ICSA	1	LNG22B	07/22/2020	16:36	AP
ICSAB	1	LNG22B	07/22/2020	16:38	AP
LRS1	1	LNG22B	07/22/2020	16:41	AP
LRS2	1	LNG22B	07/22/2020	16:43	AP
RINSE	1	LNG22B	07/22/2020	16:46	AP
RINSE	1	LNG22B	07/22/2020	16:49	AP
CCV	1	LNG22B	07/22/2020	16:51	AP
CCB	1	LNG22B	07/22/2020	16:54	AP
PBWNG10IMW1	5	LNG22B	07/22/2020	16:57	AP
LCSWNG10IMW1	5	LNG22B	07/22/2020	16:59	AP
SN5497-007	5	LNG22B	07/22/2020	17:02	AP
PBWNG20IMW2	1	LNG22B	07/22/2020	17:05	AP
LCSWNG20IMW2	1	LNG22B	07/22/2020	17:07	AP
SN5541-001X	1	LNG22B	07/22/2020	17:10	AP
LCSONG20IMS1	5	LNG22B	07/22/2020	17:13	AP
PBSNG20IMS1	5	LNG22B	07/22/2020	17:15	AP
SN5515-001R	5	LNG22B	07/22/2020	17:18	AP
PBWNG13IMW3	1	LNG22B	07/22/2020	17:21	AP
CCV	1	LNG22B	07/22/2020	17:23	AP
CCB	1	LNG22B	07/22/2020	17:26	AP
LCSWNG13IMW3	5	LNG22B	07/22/2020	17:29	AP
SN5596-002	1	LNG22B	07/22/2020	17:31	AP
SN5625-001	1	LNG22B	07/22/2020	17:34	AP
PBWNG15IMW1	1	LNG22B	07/22/2020	17:37	AP
LCSWNG15IMW1	1	LNG22B	07/22/2020	17:40	AP
SN5691-001	1	LNG22B	07/22/2020	17:42	AP
PBWNG13IMW1	5	LNG22B	07/22/2020	17:45	AP
LCSWNG13IMW1	5	LNG22B	07/22/2020	17:48	AP
SN5589-003	5	LNG22B	07/22/2020	17:50	AP
SN5589-004	5	LNG22B	07/22/2020	17:53	AP
CCV	1	LNG22B	07/22/2020	17:56	AP
CCB	1	LNG22B	07/22/2020	17:58	AP
SN5589-005	5	LNG22B	07/22/2020	18:01	AP
SN5589-006	5	LNG22B	07/22/2020	18:04	AP
SN5589-007	5	LNG22B	07/22/2020	18:06	AP
SN5589-007L	25	LNG22B	07/22/2020	18:09	AP
SN5589-007A	5	LNG22B	07/22/2020	18:12	AP
SN5589-007S	5	LNG22B	07/22/2020	18:14	AP
SN5589-007P	5	LNG22B	07/22/2020	18:17	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5589-008	5	LNG22B	07/22/2020	18:20	AP
SN5589-009	5	LNG22B	07/22/2020	18:23	AP
SN5646-001	5	LNG22B	07/22/2020	18:25	AP
CCV	1	LNG22B	07/22/2020	18:28	AP
CCB	1	LNG22B	07/22/2020	18:31	AP
PBWNG15IMW2	5	LNG22B	07/22/2020	18:33	AP
LCSWNG15IMW2	5	LNG22B	07/22/2020	18:36	AP
SN5734-003	5	LNG22B	07/22/2020	18:39	AP
SN5734-004	5	LNG22B	07/22/2020	18:41	AP
SN5734-005	5	LNG22B	07/22/2020	18:44	AP
PBSNG16IMS1	5	LNG22B	07/22/2020	18:47	AP
LCSONG16IMS1	5	LNG22B	07/22/2020	18:49	AP
SN5594-002	5	LNG22B	07/22/2020	18:52	AP
SN5594-003	5	LNG22B	07/22/2020	18:54	AP
PBWNG16IMW1	1	LNG22B	07/22/2020	18:57	AP
CCV	1	LNG22B	07/22/2020	19:00	AP
CCB	1	LNG22B	07/22/2020	19:02	AP
LCSWNG16IMW1	5	LNG22B	07/22/2020	19:05	AP
SN5778-001	1	LNG22B	07/22/2020	19:08	AP
SN5779-001	1	LNG22B	07/22/2020	19:10	AP
SN5790-001	1	LNG22B	07/22/2020	19:13	AP
PBWNG16IMW2	5	LNG22B	07/22/2020	19:16	AP
LCSWNG16IMW2	5	LNG22B	07/22/2020	19:18	AP
SN5772-001	5	LNG22B	07/22/2020	19:21	AP
SN5772-002	5	LNG22B	07/22/2020	19:24	AP
SN5788-002	5	LNG22B	07/22/2020	19:26	AP
SN5788-003	5	LNG22B	07/22/2020	19:29	AP
CCV	1	LNG22B	07/22/2020	19:32	AP
CCB	1	LNG22B	07/22/2020	19:34	AP
SN5788-004	5	LNG22B	07/22/2020	19:37	AP
SN5788-004L	25	LNG22B	07/22/2020	19:40	AP
SN5788-004A	5	LNG22B	07/22/2020	19:43	AP
SN5788-004S	5	LNG22B	07/22/2020	19:45	AP
SN5788-004P	5	LNG22B	07/22/2020	19:48	AP
SN5788-005	5	LNG22B	07/22/2020	19:51	AP
SN5788-006	5	LNG22B	07/22/2020	19:53	AP
SN5788-007	5	LNG22B	07/22/2020	19:56	AP
PBWNG17IMW1	5	LNG22B	07/22/2020	19:59	AP
LCSWNG17IMW1	5	LNG22B	07/22/2020	20:01	AP
CCV	1	LNG22B	07/22/2020	20:04	AP
CCB	1	LNG22B	07/22/2020	20:06	AP
SN5772-003R	5	LNG22B	07/22/2020	20:09	AP
SN5814-001	5	LNG22B	07/22/2020	20:12	AP
SN5814-002	5	LNG22B	07/22/2020	20:15	AP
SN5814-003	5	LNG22B	07/22/2020	20:17	AP
SN5827-001	5	LNG22B	07/22/2020	20:20	AP
SN5827-002	5	LNG22B	07/22/2020	20:22	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5827-003	5	LNG22B	07/22/2020	20:25	AP
SN5827-004	5	LNG22B	07/22/2020	20:28	AP
SN5827-005	5	LNG22B	07/22/2020	20:30	AP
SN5827-005L	25	LNG22B	07/22/2020	20:33	AP
CCV	1	LNG22B	07/22/2020	20:36	AP
CCB	1	LNG22B	07/22/2020	20:38	AP
SN5827-005A	5	LNG22B	07/22/2020	20:41	AP
SN5827-005S	5	LNG22B	07/22/2020	20:44	AP
SN5827-005P	5	LNG22B	07/22/2020	20:46	AP
SN5827-006	5	LNG22B	07/22/2020	20:49	AP
SN5827-006L	25	LNG22B	07/22/2020	20:52	AP
SN5827-006A	5	LNG22B	07/22/2020	20:54	AP
SN5827-006S	5	LNG22B	07/22/2020	20:57	AP
SN5827-006P	5	LNG22B	07/22/2020	21:00	AP
SN5827-007	5	LNG22B	07/22/2020	21:02	AP
SN5827-008	5	LNG22B	07/22/2020	21:05	AP
CCV	1	LNG22B	07/22/2020	21:07	AP
CCB	1	LNG22B	07/22/2020	21:10	AP
SN5827-009	5	LNG22B	07/22/2020	21:13	AP
SN5827-010	5	LNG22B	07/22/2020	21:15	AP
PBWNG17IMW2	5	LNG22B	07/22/2020	21:18	AP
LCSWNG17IMW2	5	LNG22B	07/22/2020	21:21	AP
SN5788-001	5	LNG22B	07/22/2020	21:23	AP
SN5788-008	5	LNG22B	07/22/2020	21:26	AP
SN5814-004	5	LNG22B	07/22/2020	21:28	AP
SN5814-004L	25	LNG22B	07/22/2020	21:31	AP
SN5814-004A	5	LNG22B	07/22/2020	21:34	AP
SN5814-004S	5	LNG22B	07/22/2020	21:36	AP
CCV	1	LNG22B	07/22/2020	21:39	AP
CCB	1	LNG22B	07/22/2020	21:42	AP
SN5814-004P	5	LNG22B	07/22/2020	21:44	AP
SN5814-005	5	LNG22B	07/22/2020	21:47	AP
SN5814-006	5	LNG22B	07/22/2020	21:49	AP
SN5814-007	5	LNG22B	07/22/2020	21:52	AP
SN5814-008	5	LNG22B	07/22/2020	21:55	AP
SN5830-001	5	LNG22B	07/22/2020	21:57	AP
SN5858-001	5	LNG22B	07/22/2020	22:00	AP
SN5858-002	5	LNG22B	07/22/2020	22:02	AP
SN5858-003	5	LNG22B	07/22/2020	22:05	AP
SN5858-004	5	LNG22B	07/22/2020	22:08	AP
CCV	1	LNG22B	07/22/2020	22:10	AP
CCB	1	LNG22B	07/22/2020	22:13	AP
LCSONG20IMS1	5	LNG22B	07/22/2020	22:16	AP
PBSNG20IMS1	5	LNG22B	07/22/2020	22:18	AP
SN5719-001	5	LNG22B	07/22/2020	22:21	AP
SN5719-001L	25	LNG22B	07/22/2020	22:24	AP
SN5719-001A	5	LNG22B	07/22/2020	22:26	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5719-001S	5	LNG22B	07/22/2020	22:29	AP
SN5719-001P	5	LNG22B	07/22/2020	22:31	AP
SN5719-002	5	LNG22B	07/22/2020	22:34	AP
SN5719-003	5	LNG22B	07/22/2020	22:37	AP
SN5719-004	5	LNG22B	07/22/2020	22:39	AP
CCV	1	LNG22B	07/22/2020	22:42	AP
CCB	1	LNG22B	07/22/2020	22:44	AP
SN5719-005	5	LNG22B	07/22/2020	22:47	AP
SN5719-005L	25	LNG22B	07/22/2020	22:50	AP
SN5719-005A	5	LNG22B	07/22/2020	22:52	AP
SN5719-005S	5	LNG22B	07/22/2020	22:55	AP
SN5719-005P	5	LNG22B	07/22/2020	22:58	AP
SN5719-006	5	LNG22B	07/22/2020	23:00	AP
SN5719-007	5	LNG22B	07/22/2020	23:03	AP
SN5719-008	5	LNG22B	07/22/2020	23:05	AP
SN5719-009	5	LNG22B	07/22/2020	23:08	AP
SN5719-009L	25	LNG22B	07/22/2020	23:11	AP
CCV	1	LNG22B	07/22/2020	23:14	AP
CCB	1	LNG22B	07/22/2020	23:16	AP
SN5719-009A	5	LNG22B	07/22/2020	23:19	AP
SN5719-009S	5	LNG22B	07/22/2020	23:22	AP
SN5719-009P	5	LNG22B	07/22/2020	23:24	AP
PBWNG20IMW1	5	LNG22B	07/22/2020	23:27	AP
LCSWNG20IMW1	5	LNG22B	07/22/2020	23:29	AP
SN5920-001	5	LNG22B	07/22/2020	23:32	AP
SN5920-002	5	LNG22B	07/22/2020	23:35	AP
SN5920-003	5	LNG22B	07/22/2020	23:37	AP
CCV	1	LNG22B	07/22/2020	23:40	AP
CCB	1	LNG22B	07/22/2020	23:42	AP
PQL	1	LNG22B	07/22/2020	23:45	AP
RINSE	1	LNG22B	07/22/2020	23:48	AP
RINSE	1	LNG22B	07/22/2020	23:50	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22A.b
Acq. Date-Time	7/22/2020 11:20:52 AM
Report Comment	---
Instrument Name	G8421A SG18503526

Tune imported from LNG224
AP 7/23/20

[No Gas]

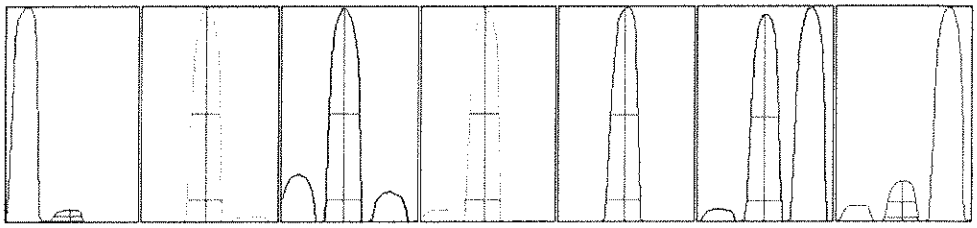
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2620	26199.93	0.523	5.000	
9	1145	11446.67	0.658	5.000	
24	47682	476823.35	0.300	5.000	
59	8832	88318.55	0.387	5.000	
115	154524	1545238.49	0.187	5.000	
205	9718	97182.38	0.626	5.000	
208	21494	214937.46	0.332	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2601	2630	2629	2630	2610
9	1154	1136	1138	1149	1146
24	47440	47813	47739	47684	47736
59	8832	8797	8882	8844	8804
115	154320	154825	154852	154362	154261
205	9619	9713	9778	9729	9752
208	21370	21497	21521	21544	21537

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4292.65	7.00	6.90 - 7.10	
9	1875.72	8.95	8.90 - 9.10	
24	74178.17	23.90	23.90 - 24.10	
59	14147.94	58.95	58.90 - 59.10	
115	261453.84	115.00	114.90 - 115.10	
205	16204.13	205.00	204.90 - 205.10	
208	35584.67	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.63	0.726	0.900	
9	0.64	0.755	0.900	
24	0.68	0.778	0.900	
59	0.65	0.765	0.900	
115	0.61	0.752	0.900	
205	0.63	0.771	0.900	
208	0.63	0.746	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	12.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	494	4935.77	0.665	5.000	
89	76949	769494.88	1.526	5.000	
205	8062	80618.36	1.094	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	488	492	495	496	496
89	75412	76214	76961	77918	78242
205	7929	8027	8075	8142	8136

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.6 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1665	16650.59	0.407	5.000	
89	16031	160310.91	0.495	5.000	
205	4562	45622.36	0.613	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1661	1668	1674	1656	1667
89	16037	15947	15960	16073	16138
205	4562	4538	4540	4565	4607

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	1.2 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:21:55 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	24.44	31.5
11	B	6	No Gas	1975.76	5.8
23	Na	45	He	3270.69	3.7
24	Mg	45	He	724.51	1.1
27	Al	45	He	14.44	58.1
28	Si	45	H2	523.93	9.4
39	K	45	He	11681.24	0.4
40	Ca	45	H2	1087.86	9.8
51	V	89	He	208.90	10.6
52	Cr	89	He	55.32	31.2
55	Mn	89	He	10.67	57.3
56	Fe	89	H2	2155.90	2.8
59	Co	89	He	13.33	50.0
60	Ni	89	He	62.23	8.2
63	Cu	89	He	438.91	5.3
66	Zn	89	He	65.56	16.3
75	As	89	He	6.33	39.7
78	Se	89	H2	0.83	69.3
88	Sr	89	He	4.45	86.6
95	Mo	89	He	16.67	20.0
107	Ag	89	He	14.44	13.4
111	Cd	89	He	0.74	86.6
118	Sn	159	He	60.00	20.0
121	Sb	159	No Gas	53.39	39.0
137	Ba	159	No Gas	23.36	49.5
182	W	159	No Gas	23.36	49.5
205	Tl	209	No Gas	40.05	66.1
208	Pb	209	No Gas	163.51	18.7
232	Th	209	No Gas	103.45	14.8
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1826145.95	0.1
Sc	45	No Gas	4103184.45	0.7
Sc	45	H2	476452.62	1.9
Sc	45	He	95435.38	1.3
Ge	72	No Gas	904931.62	0.5
Ge	72	H2	172351.67	1.3
Ge	72	He	72380.83	1.7
Y	89	H2	2964265.20	2.8
Y	89	He	618281.42	1.4
Tb	159	No Gas	8714728.06	0.2
Tb	159	He	3206480.02	1.1
Bi	209	No Gas	4440413.54	0.9

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:25:00 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	70253.08	0.6
11	B	6	No Gas	48168.94	1.0
23	Na	45	He	1155017.37	0.6
24	Mg	45	He	636823.96	0.6
27	Al	45	He	24364.79	0.5
28	Si	45	H2	45937.95	1.4
39	K	45	He	569518.30	0.4
40	Ca	45	H2	4307644.31	0.6
51	V	89	He	44768.67	1.0
52	Cr	89	He	55356.79	0.4
55	Mn	89	He	25567.11	0.4
56	Fe	89	H2	17052548.41	0.1
59	Co	89	He	93154.87	1.0
60	Ni	89	He	25491.73	0.8
63	Cu	89	He	73136.19	0.2
66	Zn	89	He	9661.47	1.4
75	As	89	He	7860.74	0.9
78	Se	89	H2	4050.58	1.5
88	Sr	89	He	38342.09	0.2
95	Mo	89	He	43954.72	0.9
107	Ag	89	He	150486.69	0.2
111	Cd	89	He	19031.60	1.4
118	Sn	159	He	42064.38	1.3
121	Sb	159	No Gas	357667.65	0.6
137	Ba	159	No Gas	138543.01	1.2
182	W	159	No Gas	268480.29	1.5
205	Tl	209	No Gas	568398.50	0.7
208	Pb	209	No Gas	783630.19	0.8
232	Th	209	No Gas	799576.70	1.6
238	U	209	No Gas	748405.36	0.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1800279.71	0.2	1826145.95	98.58	29.5	120.4	
Sc	45	No Gas	4089520.05	0.9	4103184.45	99.67	29.5	120.4	
Sc	45	H2	480759.91	1.3	476452.62	100.9	29.5	120.4	
Sc	45	He	95103.41	1.0	95435.38	99.65	29.5	120.4	
Ge	72	No Gas	899612.80	0.6	904931.62	99.41	29.5	120.4	
Ge	72	H2	172883.90	0.9	172351.67	100.31	29.5	120.4	
Ge	72	He	72049.69	1.0	72380.83	99.54	29.5	120.4	
Y	89	H2	2958319.05	1.0	2964265.2	99.8	29.5	120.4	
Y	89	He	616154.77	0.2	618281.42	99.66	29.5	120.4	
Tb	159	No Gas	8825543.76	0.8	8714728.06	101.27	29.5	120.4	
Tb	159	He	3234235.54	0.3	3206480.02	100.87	29.5	120.4	
Bi	209	No Gas	4417157.16	0.4	4440413.54	99.48	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:27:56 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.530	ppb	1.1	29329.29	20	102.65	89.6	110.4	
11	B	6	No Gas	18.899	ppb	0.9	19734.00	20	94.5	89.6	110.4	
23	Na	45	He	4182.705	ppb	1.8	482153.13	4000	104.57	89.6	110.4	
24	Mg	45	He	4073.630	ppb	1.3	258329.43	4000	101.84	89.6	110.4	
27	Al	45	He	392.615	ppb	2.7	9519.06	400	98.15	89.6	110.4	
28	Si	45	H2	424.343	ppb	7.9	20023.11	400	106.09	89.6	110.4	
39	K	45	He	4076.808	ppb	0.9	237684.09	4000	101.92	89.6	110.4	
40	Ca	45	H2	3893.287	ppb	6.8	1696849.54	4000	97.33	89.6	110.4	
51	V	89	He	20.366	ppb	0.7	18304.66	20	101.83	89.6	110.4	
52	Cr	89	He	20.124	ppb	0.4	22248.06	20	100.62	89.6	110.4	
55	Mn	89	He	20.464	ppb	1.0	10440.00	20	102.32	89.6	110.4	
56	Fe	89	H2	3831.660	ppb	7.3	6663659.05	4000	95.79	89.6	110.4	
59	Co	89	He	21.027	ppb	1.4	39067.74	20	105.14	89.6	110.4	
60	Ni	89	He	20.402	ppb	2.4	10407.56	20	102.01	89.6	110.4	
63	Cu	89	He	20.152	ppb	0.7	29651.12	20	100.76	89.6	110.4	
66	Zn	89	He	20.820	ppb	4.0	4049.63	20	104.1	89.6	110.4	
75	As	89	He	20.435	ppb	1.3	3207.06	20	102.18	89.6	110.4	
78	Se	89	H2	19.529	ppb	8.5	1613.02	20	97.65	89.6	110.4	
88	Sr	89	He	19.819	ppb	1.4	15156.65	20	99.1	89.6	110.4	
95	Mo	89	He	40.371	ppb	0.3	35390.01	40	100.93	89.6	110.4	
107	Ag	89	He	20.723	ppb	1.4	62197.62	20	103.62	89.6	110.4	
111	Cd	89	He	20.903	ppb	1.2	7933.51	20	104.52	89.6	110.4	
118	Sn	159	He	19.772	ppb	0.4	16562.90	20	98.86	89.6	110.4	
121	Sb	159	No Gas	20.636	ppb	1.4	146178.91	20	103.18	89.6	110.4	
137	Ba	159	No Gas	21.279	ppb	1.5	58389.36	20	106.4	89.6	110.4	
182	W	159	No Gas	20.458	ppb	0.5	108767.40	20	102.29	89.6	110.4	
205	Tl	209	No Gas	21.136	ppb	0.7	242537.99	20	105.68	89.6	110.4	
208	Pb	209	No Gas	20.787	ppb	1.9	328878.16	20	103.94	89.6	110.4	
232	Th	209	No Gas	20.228	ppb	1.1	326555.92	20	101.14	89.6	110.4	
238	U	209	No Gas	20.193	ppb	1.5	305054.09	20	100.97	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1829591.89	1.2	1826145.95	100.19	29.5	120.4	
Sc	45	No Gas	4063443.20	1.6	4103184.45	99.03	29.5	120.4	
Sc	45	H2	487150.68	4.5	476452.62	102.25	29.5	120.4	
Sc	45	He	94543.42	0.5	95435.38	99.07	29.5	120.4	
Ge	72	No Gas	894164.53	1.4	904931.62	98.81	29.5	120.4	
Ge	72	H2	174458.66	2.9	172351.67	101.22	29.5	120.4	
Ge	72	He	72076.01	0.3	72380.83	99.58	29.5	120.4	
Y	89	H2	3022738.39	4.5	2964265.2	101.97	29.5	120.4	
Y	89	He	614357.09	0.2	618281.42	99.37	29.5	120.4	
Tb	159	No Gas	8737109.73	1.3	8714728.06	100.26	29.5	120.4	
Tb	159	He	3213256.37	0.5	3206480.02	100.21	29.5	120.4	
Bi	209	No Gas	4458603.81	1.4	4440413.54	100.41	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:30:36 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.048	ppb	28.1	93.34	0.2	
11	B	6	No Gas	0.436	ppb	24.9	2386.95	4	
23	Na	45	He	3.346	ppb	87.1	3551.07	200	
24	Mg	45	He	0.829	ppb	171.2	755.64	20	
27	Al	45	He	0.388	ppb	32.4	23.33	20	
28	Si	45	H2	-1.380	ppb	N/A	457.18	100	
39	K	45	He	1.588	ppb	888.1	11421.16	200	
40	Ca	45	H2	2.976	ppb	62.9	2333.85	20	
51	V	89	He	-0.011	ppb	N/A	194.45	1	
52	Cr	89	He	0.002	ppb	307.2	55.99	1	
55	Mn	89	He	0.013	ppb	39.0	16.67	0.4	
56	Fe	89	H2	3.579	ppb	43.1	8151.71	20	
59	Co	89	He	0.003	ppb	212.4	17.78	0.2	
60	Ni	89	He	-0.002	ppb	N/A	60.00	0.4	
63	Cu	89	He	-0.115	ppb	N/A	264.46	0.6	
66	Zn	89	He	0.133	ppb	60.9	88.89	2	
75	As	89	He	0.005	ppb	319.5	7.00	1	
78	Se	89	H2	0.067	ppb	5.5	6.17	1	
88	Sr	89	He	0.005	ppb	112.6	7.78	1	
95	Mo	89	He	0.197	ppb	19.7	185.57	1	
107	Ag	89	He	0.008	ppb	47.0	36.67	0.2	
111	Cd	89	He	0.007	ppb	84.0	3.33	0.2	
118	Sn	159	He	0.097	ppb	53.3	138.90	1	
121	Sb	159	No Gas	0.015	ppb	15.3	160.18	0.2	
137	Ba	159	No Gas	0.007	ppb	30.4	43.38	0.4	
182	W	159	No Gas	0.083	ppb	27.2	463.86	1	
205	Tl	209	No Gas	0.020	ppb	12.0	266.97	0.2	
208	Pb	209	No Gas	0.018	ppb	5.7	453.84	0.2	
232	Th	209	No Gas	0.028	ppb	15.8	560.64	1	
238	U	209	No Gas	0.016	ppb	25.0	250.28	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1827348.01	1.4	1826145.95	100.07	29.5	120.4	
Sc	45	No Gas	3991080.68	1.1	4103184.45	97.27	29.5	120.4	
Sc	45	H2	471484.94	1.3	476452.62	98.96	29.5	120.4	
Sc	45	He	92685.43	2.2	95435.38	97.12	29.5	120.4	
Ge	72	No Gas	884144.16	1.4	904931.62	97.7	29.5	120.4	
Ge	72	H2	169034.16	0.4	172351.67	98.08	29.5	120.4	
Ge	72	He	70671.27	0.9	72380.83	97.64	29.5	120.4	
Y	89	H2	2921040.73	0.4	2964265.2	98.54	29.5	120.4	
Y	89	He	602524.86	2.0	618281.42	97.45	29.5	120.4	
Tb	159	No Gas	8713052.44	1.0	8714728.06	99.98	29.5	120.4	
Tb	159	He	3161298.25	1.2	3206480.02	98.59	29.5	120.4	
Bi	209	No Gas	4466161.73	1.5	4440413.54	100.58	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:33:18 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.236	ppb	8.6	357.80	0.2	118	79.5	120.4	
11	B	6	No Gas	3.958	ppb	6.2	5644.64	4	98.95	79.5	120.4	
23	Na	45	He	217.627	ppb	3.6	27891.41	200	108.81	79.5	120.4	
24	Mg	45	He	20.661	ppb	11.5	2004.74	20	103.3	79.5	120.4	
27	Al	45	He	18.873	ppb	12.0	466.70	20	94.36	79.5	120.4	
28	Si	45	H2	105.916	ppb	8.4	5036.46	100	105.92	79.5	120.4	
39	K	45	He	209.624	ppb	2.0	22984.75	200	104.81	79.5	120.4	
40	Ca	45	H2	21.964	ppb	3.1	9964.94	20	109.82	79.5	120.4	
51	V	89	He	1.036	ppb	13.8	1112.31	1	103.6	79.5	120.4	
52	Cr	89	He	1.033	ppb	6.3	1175.84	1	103.3	79.5	120.4	
55	Mn	89	He	0.437	ppb	7.1	229.96	0.4	109.25	79.5	120.4	
56	Fe	89	H2	23.036	ppb	4.8	39469.44	20	115.18	79.5	120.4	
59	Co	89	He	0.246	ppb	9.7	462.27	0.2	123	79.5	120.4	Failed DoD
60	Ni	89	He	0.436	ppb	3.9	278.90	0.4	109	79.5	120.4	
63	Cu	89	He	0.512	ppb	7.2	1161.20	0.6	85.33	79.5	120.4	
66	Zn	89	He	2.165	ppb	10.3	472.25	2	108.25	79.5	120.4	
75	As	89	He	0.971	ppb	9.2	156.02	1	97.1	79.5	120.4	
78	Se	89	H2	1.106	ppb	23.4	86.00	1	110.6	79.5	120.4	
88	Sr	89	He	1.062	ppb	12.8	804.50	1	106.2	79.5	120.4	
95	Mo	89	He	1.124	ppb	8.3	986.74	1	112.4	79.5	120.4	
107	Ag	89	He	0.229	ppb	5.5	692.27	0.2	114.5	79.5	120.4	
111	Cd	89	He	0.198	ppb	11.7	74.82	0.2	99	79.5	120.4	
118	Sn	159	He	1.126	ppb	1.4	990.07	1	112.6	79.5	120.4	
121	Sb	159	No Gas	0.213	ppb	2.9	1565.18	0.2	106.5	79.5	120.4	
137	Ba	159	No Gas	0.380	ppb	8.5	1067.90	0.4	95	79.5	120.4	
182	W	159	No Gas	1.033	ppb	2.8	5527.38	1	103.3	79.5	120.4	
205	Tl	209	No Gas	0.196	ppb	1.1	2319.49	0.2	98	79.5	120.4	
208	Pb	209	No Gas	0.218	ppb	7.0	3657.64	0.2	109	79.5	120.4	
232	Th	209	No Gas	0.201	ppb	6.5	3384.25	0.2	100.5	79.5	120.4	
238	U	209	No Gas	0.203	ppb	7.0	3100.56	0.2	101.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1812080.65	0.8	1826145.95	99.23	29.5	120.4	
Sc	45	No Gas	4016361.22	1.9	4103184.45	97.88	29.5	120.4	
Sc	45	H2	453957.85	2.9	476452.62	95.28	29.5	120.4	
Sc	45	He	93667.20	1.0	95435.38	98.15	29.5	120.4	
Ge	72	No Gas	887888.08	1.2	904931.62	98.12	29.5	120.4	
Ge	72	H2	164089.89	1.9	172351.67	95.21	29.5	120.4	
Ge	72	He	71286.20	0.2	72380.83	98.49	29.5	120.4	
Y	89	H2	2819581.96	1.6	2964265.2	95.12	29.5	120.4	
Y	89	He	605219.25	0.6	618281.42	97.89	29.5	120.4	
Tb	159	No Gas	8756458.48	1.3	8714728.06	100.48	29.5	120.4	
Tb	159	He	3181879.33	0.4	3206480.02	99.23	29.5	120.4	
Bi	209	No Gas	4512492.28	1.7	4440413.54	101.62	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:36:00 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.017	ppb	55.8	45.56	0.2	-50	50	
B	11	6	No Gas	0.275	ppb	19.3	2086.88	4	-50	100	
Na	23	45	He	96939.502	ppb	0.7	10595643.61	100000	80	120	
Mg	24	45	He	96563.335	ppb	0.5	5828393.25	100000	80	120	
Al	27	45	He	92785.312	ppb	0.8	2143482.47	100000	80	120	
Si	28	45	H2	3.288	ppb	36.5	637.39	100	-50	50	
K	39	45	He	95581.877	ppb	0.8	5070059.81	100000	80	120	
Ca	40	45	H2	99238.099	ppb	1.1	40147097.18	100000	80	120	
V	51	89	He	0.198	ppb	20.1	370.02	1	-50	100	
Cr	52	89	He	0.311	ppb	2.9	384.61	0.78	-100	100	
Mn	55	89	He	0.451	ppb	8.1	231.96	0.0826	100	100	
Fe	56	89	H2	95988.974	ppb	0.7	157686058.84	100000	80	120	
Co	59	89	He	0.263	ppb	6.3	484.49	0.2	-50	100	
Ni	60	89	He	0.280	ppb	30.9	196.68	0.114	100	100	
Cu	63	89	He	0.261	ppb	12.4	786.72	-0.043	100	100	
Zn	66	89	He	0.544	ppb	35.6	163.34	-0.7632	100	100	
As	75	89	He	0.050	ppb	67.7	13.67	1	-50	100	
Se	78	89	H2	0.094	ppb	34.4	8.17	1	-50	100	
Sr	88	89	He	0.744	ppb	4.5	553.36	0.0578	100	100	
Mo	95	89	He	2029.579	ppb	0.4	1716190.15	2000	80	120	
Ag	107	89	He	0.020	ppb	36.0	72.23	0.2	-50	50	
Cd	111	89	He	0.349	ppb	21.8	128.52	0.268	100	100	
Sn	118	159	He	0.335	ppb	9.3	337.79	-0.24	100	100	
Sb	121	159	No Gas	0.162	ppb	9.4	1194.73	0.089	100	100	
Ba	137	159	No Gas	0.156	ppb	17.4	447.17	-0.0794	100	100	
W	182	159	No Gas	0.192	ppb	2.4	1041.21	0.32	-100	100	
Tl	205	209	No Gas	0.006	ppb	16.0	100.11	0.2	-50	50	
Pb	208	209	No Gas	0.081	ppb	10.6	1364.89	0.03	100	100	
Th	232	209	No Gas	0.021	ppb	19.9	423.82	0.2	-50	50	
U	238	209	No Gas	0.004	ppb	81.6	53.39	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1705848.76	2.9	1826145.95	93.41	29.5	120.4	
Sc	45	No Gas	3944245.31	3.7	4103184.45	96.13	29.5	120.4	
Sc	45	H2	451589.77	0.7	476452.62	94.78	29.5	120.4	
Sc	45	He	90224.80	0.8	95435.38	94.54	29.5	120.4	
Ge	72	No Gas	872374.03	3.6	904931.62	96.4	29.5	120.4	
Ge	72	H2	160819.61	1.8	172351.67	93.31	29.5	120.4	
Ge	72	He	68169.22	0.4	72380.83	94.18	29.5	120.4	
Y	89	H2	2850075.00	0.6	2964265.2	96.15	29.5	120.4	
Y	89	He	592886.41	0.8	618281.42	95.89	29.5	120.4	
Tb	159	No Gas	8697924.45	3.1	8714728.06	99.81	29.5	120.4	
Tb	159	He	3198756.38	0.8	3206480.02	99.76	29.5	120.4	
Bi	209	No Gas	4239391.90	3.6	4440413.54	95.47	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:38:34 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	18.522	ppb	5.0	24377.91	20	79.5	120.4	
11	B	6	No Gas	18.889	ppb	5.4	18170.90	20	79.5	120.4	
23	Na	45	He	96992.702	ppb	1.1	10672370.54	100000	79.5	120.4	
24	Mg	45	He	96588.661	ppb	1.1	5868835.05	100000	79.5	120.4	
27	Al	45	He	92419.280	ppb	1.2	2149303.70	100000	79.5	120.4	
28	Si	45	H2	481.564	ppb	1.4	21319.57	500	79.5	120.4	
39	K	45	He	95223.271	ppb	1.0	5084966.58	100000	79.5	120.4	
40	Ca	45	H2	97491.735	ppb	1.5	39964017.74	100000	79.5	120.4	
51	V	89	He	20.393	ppb	0.5	17854.09	20	79.5	120.4	
52	Cr	89	He	19.820	ppb	0.6	21346.21	20	79.5	120.4	
55	Mn	89	He	20.239	ppb	2.1	10059.11	20	79.5	120.4	
56	Fe	89	H2	93970.820	ppb	0.3	157517248.37	100000	79.5	120.4	
59	Co	89	He	20.034	ppb	0.2	36260.57	20	79.5	120.4	
60	Ni	89	He	19.686	ppb	1.3	9784.88	20	79.5	120.4	
63	Cu	89	He	19.365	ppb	1.0	27771.73	20	79.5	120.4	
66	Zn	89	He	19.966	ppb	5.6	3786.20	20	79.5	120.4	
75	As	89	He	19.992	ppb	1.0	3056.34	20	79.5	120.4	
78	Se	89	H2	19.505	ppb	0.9	1553.85	20	79.5	120.4	
88	Sr	89	He	20.646	ppb	0.8	15380.19	20	79.5	120.4	
95	Mo	89	He	2040.865	ppb	1.3	1741886.57	2000	79.5	120.4	
107	Ag	89	He	19.067	ppb	1.2	55748.61	20	79.5	120.4	
111	Cd	89	He	19.817	ppb	2.3	7326.50	20	79.5	120.4	
118	Sn	159	He	19.590	ppb	1.3	16336.00	20	79.5	120.4	
121	Sb	159	No Gas	18.661	ppb	6.6	135053.73	20	79.5	120.4	
137	Ba	159	No Gas	19.165	ppb	4.8	53738.87	20	79.5	120.4	
182	W	159	No Gas	19.545	ppb	6.2	106182.28	20	79.5	120.4	
205	Tl	209	No Gas	19.480	ppb	4.2	217724.12	20	79.5	120.4	
208	Pb	209	No Gas	19.583	ppb	4.7	301782.86	20	79.5	120.4	
232	Th	209	No Gas	20.336	ppb	6.6	319640.54	20	79.5	120.4	
238	U	209	No Gas	20.298	ppb	5.2	298627.34	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686295.83	1.6	1826145.95	92.34	29.5	120.4	
Sc	45	No Gas	3928361.58	2.1	4103184.45	95.74	29.5	120.4	
Sc	45	H2	457620.57	1.3	476452.62	96.05	29.5	120.4	
Sc	45	He	90829.76	0.9	95435.38	95.17	29.5	120.4	
Ge	72	No Gas	873882.33	2.4	904931.62	96.57	29.5	120.4	
Ge	72	H2	161508.23	1.6	172351.67	93.71	29.5	120.4	
Ge	72	He	69593.02	0.6	72380.83	96.15	29.5	120.4	
Y	89	H2	2908145.91	0.7	2964265.2	98.11	29.5	120.4	
Y	89	He	598462.02	0.8	618281.42	96.79	29.5	120.4	
Tb	159	No Gas	8935370.49	2.5	8714728.06	102.53	29.5	120.4	
Tb	159	He	3198666.45	0.5	3206480.02	99.76	29.5	120.4	
Bi	209	No Gas	4345171.79	2.5	4440413.54	97.86	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:41:13 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	99.985	ppb	1.3	140430.41	100	99.98	89.5	110.4	
11	B	6	No Gas	470.868	ppb	2.6	437096.50	500	94.17	89.5	110.4	
51	V	89	He	1013.829	ppb	0.4	884524.86	1000	101.38	89.5	110.4	
52	Cr	89	He	2002.561	ppb	0.3	2167875.35	2000	100.13	89.5	110.4	
55	Mn	89	He	2009.845	ppb	0.8	1005467.76	2000	100.49	89.5	110.4	
59	Co	89	He	1030.918	ppb	0.4	1879598.79	1000	103.09	89.5	110.4	
60	Ni	89	He	1044.163	ppb	0.4	519831.84	1000	104.42	89.5	110.4	
63	Cu	89	He	1959.809	ppb	0.4	2789397.46	2000	97.99	89.5	110.4	
66	Zn	89	He	2038.942	ppb	0.5	383068.17	2000	101.95	89.5	110.4	
75	As	89	He	1020.373	ppb	0.5	156887.37	1000	102.04	89.5	110.4	
78	Se	89	H2	1018.986	ppb	0.8	82392.19	1000	101.9	89.5	110.4	
88	Sr	89	He	1996.875	ppb	0.4	1498576.82	2000	99.84	89.5	110.4	
95	Mo	89	He	1029.017	ppb	0.3	885072.34	1000	102.9	89.5	110.4	
107	Ag	89	He	110.499	ppb	0.5	325485.88	100	110.5	89.5	110.4	> +/- 10%
111	Cd	89	He	1051.330	ppb	0.7	391649.21	1000	105.13	89.5	110.4	
118	Sn	159	He	980.940	ppb	0.6	823375.00	1000	98.09	89.5	110.4	
121	Sb	159	No Gas	964.327	ppb	1.1	7177629.15	1000	96.43	89.5	110.4	
137	Ba	159	No Gas	1968.542	ppb	1.5	5675023.99	2000	98.43	89.5	110.4	
182	W	159	No Gas	1013.722	ppb	1.4	5663986.60	1000	101.37	89.5	110.4	
205	Tl	209	No Gas	991.486	ppb	1.8	12125506.43	1000	99.15	89.5	110.4	
208	Pb	209	No Gas	1939.884	ppb	1.9	32702252.09	2000	96.99	89.5	110.4	
232	Th	209	No Gas	980.248	ppb	1.2	16863668.49	1000	98.02	89.5	110.4	
238	U	209	No Gas	971.301	ppb	1.7	15641734.31	1000	97.13	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1800052.76	1.1	1826145.95	98.57	29.5	120.4	
Sc	45	No Gas	4083139.50	1.2	4103184.45	99.51	29.5	120.4	
Ge	72	No Gas	903694.09	0.7	904931.62	99.86	29.5	120.4	
Tb	159	No Gas	9184359.31	1.1	8714728.06	105.39	29.5	120.4	
Bi	209	No Gas	4753072.38	1.4	4440413.54	107.04	29.5	120.4	
Sc	45	H2	465399.15	0.5	476452.62	97.68	29.5	120.4	
Ge	72	H2	168770.83	0.3	172351.67	97.92	29.5	120.4	
Y	89	H2	2953347.36	0.2	2964265.2	99.63	29.5	120.4	
Sc	45	He	91304.09	0.1	95435.38	95.67	29.5	120.4	
Ge	72	He	70862.16	0.9	72380.83	97.9	29.5	120.4	
Y	89	He	603060.47	0.2	618281.42	97.54	29.5	120.4	
Tb	159	He	3231296.79	0.9	3206480.02	100.77	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 4:43:44 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.255	ppb	14.2	344.46	100	
11	B	6	No Gas	7.981	ppb	10.5	8408.31	1000	
23	Na	45	He	193562.778	ppb	1.3	21448565.73	200000	
24	Mg	45	He	193666.440	ppb	1.0	11851964.69	200000	
27	Al	45	He	189666.549	ppb	0.8	4442931.64	200000	
28	Si	45	H2	9900.676	ppb	1.0	420714.93	10000	
39	K	45	He	192702.552	ppb	0.7	10353720.44	200000	
40	Ca	45	H2	198893.860	ppb	0.2	80053520.47	200000	
51	V	89	He	0.230	ppb	104.6	395.59	1000	
52	Cr	89	He	1.608	ppb	22.5	1758.52	2000	
55	Mn	89	He	7.746	ppb	6.1	3811.18	2000	
56	Fe	89	H2	96270.710	ppb	0.5	156890773.58	100000	
59	Co	89	He	0.751	ppb	27.6	1353.52	1000	
60	Ni	89	He	2.082	ppb	10.6	1075.64	1000	
63	Cu	89	He	1.212	ppb	23.1	2110.30	2000	
66	Zn	89	He	2.882	ppb	21.0	593.37	2000	
75	As	89	He	0.417	ppb	57.1	68.68	1000	
78	Se	89	H2	0.804	ppb	10.2	63.00	1000	
88	Sr	89	He	1.356	ppb	22.3	1001.21	2000	
95	Mo	89	He	2.181	ppb	28.1	1853.66	1000	
107	Ag	89	He	0.131	ppb	27.0	392.25	100	
111	Cd	89	He	0.271	ppb	66.4	99.26	1000	
118	Sn	159	He	1.296	ppb	14.8	1110.10	1000	
121	Sb	159	No Gas	1.013	ppb	21.5	7166.68	1000	
137	Ba	159	No Gas	1.921	ppb	25.2	5253.65	2000	
182	W	159	No Gas	1.914	ppb	9.7	10098.62	1000	
205	Tl	209	No Gas	0.762	ppb	14.7	8151.81	1000	
208	Pb	209	No Gas	1.628	ppb	27.7	24129.92	2000	
232	Th	209	No Gas	1.383	ppb	37.5	20933.01	1000	
238	U	209	No Gas	1.040	ppb	40.3	14662.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1621353.82	2.4	1826145.95	88.79	29.5	120.4	
Sc	45	No Gas	3878193.97	2.8	4103184.45	94.52	29.5	120.4	
Sc	45	H2	449281.71	1.1	476452.62	94.3	29.5	120.4	
Sc	45	He	91491.13	1.5	95435.38	95.87	29.5	120.4	
Ge	72	No Gas	841489.69	2.3	904931.62	92.99	29.5	120.4	
Ge	72	H2	159414.67	1.4	172351.67	92.49	29.5	120.4	
Ge	72	He	67938.45	1.4	72380.83	93.86	29.5	120.4	
Y	89	H2	2827422.25	0.9	2964265.2	95.38	29.5	120.4	
Y	89	He	591861.19	1.4	618281.42	95.73	29.5	120.4	
Tb	159	No Gas	8633332.99	3.3	8714728.06	99.07	29.5	120.4	
Tb	159	He	3126918.11	1.2	3206480.02	97.52	29.5	120.4	
Bi	209	No Gas	4129786.88	3.3	4440413.54	93	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	015SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:46:34 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.065	ppb	15.1	123.34	100	
11	B	6	No Gas	1.164	ppb	10.2	3234.92	1000	
23	Na	45	He	176.569	ppb	9.0	23348.31	200000	
24	Mg	45	He	25.275	ppb	14.0	2304.81	200000	
27	Al	45	He	28.417	ppb	9.2	698.93	200000	
28	Si	45	H2	2.903	ppb	62.5	647.42	10000	
39	K	45	He	45.733	ppb	21.5	14047.27	200000	
40	Ca	45	H2	42.284	ppb	10.8	18916.57	200000	
51	V	89	He	0.545	ppb	13.4	693.38	1000	
52	Cr	89	He	0.120	ppb	3.8	187.97	2000	
55	Mn	89	He	0.165	ppb	13.1	94.65	2000	
56	Fe	89	H2	29.612	ppb	9.7	52375.83	100000	
59	Co	89	He	0.055	ppb	3.7	115.56	1000	
60	Ni	89	He	0.110	ppb	64.9	117.78	1000	
63	Cu	89	He	1.311	ppb	12.3	2336.94	2000	
66	Zn	89	He	0.610	ppb	5.3	182.23	2000	
75	As	89	He	0.073	ppb	52.1	17.67	1000	
78	Se	89	H2	0.275	ppb	17.5	23.00	1000	
88	Sr	89	He	0.055	ppb	14.3	46.67	2000	
95	Mo	89	He	0.554	ppb	20.1	502.25	1000	
107	Ag	89	He	0.016	ppb	27.6	61.11	100	
111	Cd	89	He	0.081	ppb	11.3	31.48	1000	
118	Sn	159	He	0.538	ppb	5.6	515.59	1000	
121	Sb	159	No Gas	0.091	ppb	7.5	724.16	1000	
137	Ba	159	No Gas	0.123	ppb	7.8	373.76	2000	
182	W	159	No Gas	0.293	ppb	21.3	1641.95	1000	
205	Tl	209	No Gas	0.075	ppb	2.8	941.10	1000	
208	Pb	209	No Gas	0.198	ppb	10.5	3440.73	2000	
232	Th	209	No Gas	0.091	ppb	13.2	1631.96	1000	
238	U	209	No Gas	0.060	ppb	15.0	944.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1927110.31	2.0	1826145.95	105.53	29.5	120.4	
Sc	45	No Gas	4083752.15	2.5	4103184.45	99.53	29.5	120.4	
Sc	45	H2	471503.11	2.1	476452.62	98.96	29.5	120.4	
Sc	45	He	94132.61	1.2	95435.38	98.63	29.5	120.4	
Ge	72	No Gas	910264.84	2.9	904931.62	100.59	29.5	120.4	
Ge	72	H2	169247.68	1.1	172351.67	98.2	29.5	120.4	
Ge	72	He	71913.01	1.1	72380.83	99.35	29.5	120.4	
Y	89	H2	2945291.18	1.4	2964265.2	99.36	29.5	120.4	
Y	89	He	614817.17	0.9	618281.42	99.44	29.5	120.4	
Tb	159	No Gas	9073931.81	2.4	8714728.06	104.12	29.5	120.4	
Tb	159	He	3254912.17	0.6	3206480.02	101.51	29.5	120.4	
Bi	209	No Gas	4641106.67	2.8	4440413.54	104.52	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:49:15 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.060	ppb	44.4	113.34	100	
11	B	6	No Gas	0.568	ppb	21.5	2562.54	1000	
23	Na	45	He	92.558	ppb	2.2	13868.86	200000	
24	Mg	45	He	0.463	ppb	362.5	748.96	200000	
27	Al	45	He	5.819	ppb	16.0	155.56	200000	
28	Si	45	H2	5.246	ppb	55.3	750.89	10000	
39	K	45	He	10.997	ppb	33.8	12211.39	200000	
40	Ca	45	H2	80.502	ppb	140.5	34447.53	200000	
51	V	89	He	0.580	ppb	10.7	727.82	1000	
52	Cr	89	He	0.061	ppb	7.9	122.65	2000	
55	Mn	89	He	0.095	ppb	23.9	59.32	2000	
56	Fe	89	H2	49.239	ppb	127.0	84749.38	100000	
59	Co	89	He	0.034	ppb	23.4	77.78	1000	
60	Ni	89	He	0.116	ppb	24.1	121.12	1000	
63	Cu	89	He	0.736	ppb	6.8	1512.36	2000	
66	Zn	89	He	0.616	ppb	25.4	184.45	2000	
75	As	89	He	0.055	ppb	42.6	15.00	1000	
78	Se	89	H2	0.253	ppb	80.7	21.17	1000	
88	Sr	89	He	0.010	ppb	98.8	12.22	2000	
95	Mo	89	He	0.288	ppb	14.0	271.12	1000	
107	Ag	89	He	0.013	ppb	30.9	54.45	100	
111	Cd	89	He	0.022	ppb	53.4	9.26	1000	
118	Sn	159	He	0.255	ppb	33.8	276.68	1000	
121	Sb	159	No Gas	0.035	ppb	22.5	317.03	1000	
137	Ba	159	No Gas	0.052	ppb	31.9	173.54	2000	
182	W	159	No Gas	0.113	ppb	21.5	654.09	1000	
205	Tl	209	No Gas	0.025	ppb	7.6	340.39	1000	
208	Pb	209	No Gas	0.089	ppb	9.7	1658.57	2000	
232	Th	209	No Gas	0.042	ppb	14.9	824.30	1000	
238	U	209	No Gas	0.022	ppb	22.8	360.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1866980.19	2.4	1826145.95	102.24	29.5	120.4	
Sc	45	No Gas	4108237.47	2.5	4103184.45	100.12	29.5	120.4	
Sc	45	H2	471298.72	2.1	476452.62	98.92	29.5	120.4	
Sc	45	He	94756.66	0.3	95435.38	99.29	29.5	120.4	
Ge	72	No Gas	911799.79	2.6	904931.62	100.76	29.5	120.4	
Ge	72	H2	169053.40	2.2	172351.67	98.09	29.5	120.4	
Ge	72	He	72014.15	0.5	72380.83	99.49	29.5	120.4	
Y	89	H2	2969945.91	2.4	2964265.2	100.19	29.5	120.4	
Y	89	He	618325.52	0.8	618281.42	100.01	29.5	120.4	
Tb	159	No Gas	9147544.03	2.1	8714728.06	104.97	29.5	120.4	
Tb	159	He	3249524.26	0.7	3206480.02	101.34	29.5	120.4	
Bi	209	No Gas	4688255.33	2.4	4440413.54	105.58	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:51:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.680	ppb	4.3	32076.32	25	90.72	89.8	110.2	
11	B	6	No Gas	22.470	ppb	4.8	22857.54	25	89.88	89.8	110.2	
23	Na	45	He	5112.269	ppb	2.6	593203.84	5000	102.25	89.8	110.2	
24	Mg	45	He	4890.806	ppb	2.6	312430.62	5000	97.82	89.8	110.2	
27	Al	45	He	480.294	ppb	5.0	11727.45	500	96.06	89.8	110.2	
28	Si	45	H2	496.437	ppb	7.3	21887.91	500	99.29	89.8	110.2	
39	K	45	He	4902.146	ppb	2.0	285700.62	5000	98.04	89.8	110.2	
40	Ca	45	H2	5073.424	ppb	5.3	2074107.88	5000	101.47	89.8	110.2	
51	V	89	He	25.304	ppb	3.1	22776.88	25	101.22	89.8	110.2	
52	Cr	89	He	25.062	ppb	1.2	27802.16	25	100.25	89.8	110.2	
55	Mn	89	He	25.212	ppb	1.9	12908.91	25	100.85	89.8	110.2	
56	Fe	89	H2	5011.305	ppb	5.8	8365361.53	5000	100.23	89.8	110.2	
59	Co	89	He	25.155	ppb	2.6	46910.21	25	100.62	89.8	110.2	
60	Ni	89	He	25.682	ppb	2.4	13134.42	25	102.73	89.8	110.2	
63	Cu	89	He	25.179	ppb	2.6	37077.83	25	100.72	89.8	110.2	
66	Zn	89	He	25.160	ppb	2.9	4898.83	25	100.64	89.8	110.2	
75	As	89	He	24.740	ppb	0.3	3896.98	25	98.96	89.8	110.2	
78	Se	89	H2	25.225	ppb	5.5	2000.72	25	100.9	89.8	110.2	
88	Sr	89	He	24.197	ppb	2.9	18573.06	25	96.79	89.8	110.2	
95	Mo	89	He	25.094	ppb	2.6	22086.25	25	100.38	89.8	110.2	
107	Ag	89	He	25.014	ppb	2.3	75355.63	25	100.06	89.8	110.2	
111	Cd	89	He	25.023	ppb	3.4	9531.60	25	100.09	89.8	110.2	
118	Sn	159	He	24.235	ppb	2.4	20516.28	25	96.94	89.8	110.2	
121	Sb	159	No Gas	23.051	ppb	4.6	172844.53	25	92.2	89.8	110.2	
137	Ba	159	No Gas	23.580	ppb	3.5	68484.77	25	94.32	89.8	110.2	
182	W	159	No Gas	22.862	ppb	4.7	128670.41	25	91.45	89.8	110.2	
205	Tl	209	No Gas	23.732	ppb	2.1	288384.73	25	94.93	89.8	110.2	
208	Pb	209	No Gas	23.593	ppb	4.1	395276.37	25	94.37	89.8	110.2	
232	Th	209	No Gas	22.706	ppb	5.8	388085.74	25	90.82	89.8	110.2	
238	U	209	No Gas	22.911	ppb	5.0	366502.28	25	91.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1811691.69	1.1	1826145.95	99.21	29.5	120.4	
Sc	45	No Gas	4148817.26	0.3	4103184.45	101.11	29.5	120.4	
Sc	45	H2	456803.42	4.3	476452.62	95.88	29.5	120.4	
Sc	45	He	95316.81	2.3	95435.38	99.88	29.5	120.4	
Ge	72	No Gas	925756.78	0.5	904931.62	102.3	29.5	120.4	
Ge	72	H2	165847.05	3.3	172351.67	96.23	29.5	120.4	
Ge	72	He	72836.19	1.1	72380.83	100.63	29.5	120.4	
Y	89	H2	2899994.97	4.1	2964265.2	97.83	29.5	120.4	
Y	89	He	616818.93	1.7	618281.42	99.76	29.5	120.4	
Tb	159	No Gas	9249153.61	0.6	8714728.06	106.13	29.5	120.4	
Tb	159	He	3250056.00	1.6	3206480.02	101.36	29.5	120.4	
Bi	209	No Gas	4721700.18	0.7	4440413.54	106.33	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:54:35 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.073	ppb	21.2	128.89	0.2	
11	B	6	No Gas	0.495	ppb	25.2	2452.51	4	
23	Na	45	He	57.775	ppb	26.2	9971.24	200	
24	Mg	45	He	10.613	ppb	113.7	1402.41	20	Failed DoD
27	Al	45	He	10.251	ppb	112.3	264.46	20	Failed DoD
28	Si	45	H2	0.975	ppb	235.4	567.30	100	
39	K	45	He	15.852	ppb	63.3	12606.65	200	
40	Ca	45	H2	14.749	ppb	3.6	7367.74	20	Failed DoD
51	V	89	He	0.265	ppb	14.1	446.69	1	
52	Cr	89	He	0.086	ppb	98.4	151.31	1	
55	Mn	89	He	0.074	ppb	90.1	48.66	0.4	
56	Fe	89	H2	14.158	ppb	5.6	26404.18	20	Failed DoD
59	Co	89	He	0.033	ppb	99.2	75.56	0.2	
60	Ni	89	He	0.078	ppb	17.5	102.22	0.4	
63	Cu	89	He	0.102	ppb	115.2	588.92	0.6	
66	Zn	89	He	0.056	ppb	184.8	76.67	2	
75	As	89	He	0.044	ppb	50.6	13.33	1	
78	Se	89	H2	0.094	ppb	28.6	8.50	1	
88	Sr	89	He	0.058	ppb	132.2	48.89	1	
95	Mo	89	He	0.192	ppb	40.9	186.67	1	
107	Ag	89	He	0.018	ppb	79.8	67.78	0.2	
111	Cd	89	He	0.044	ppb	81.5	17.41	0.2	
118	Sn	159	He	0.095	ppb	36.9	140.01	1	
121	Sb	159	No Gas	0.060	ppb	11.2	503.90	0.2	
137	Ba	159	No Gas	0.069	ppb	35.8	223.59	0.4	
182	W	159	No Gas	0.110	ppb	9.6	637.40	1	
205	Tl	209	No Gas	0.049	ppb	8.2	627.38	0.2	
208	Pb	209	No Gas	0.090	ppb	16.8	1671.92	0.2	
232	Th	209	No Gas	0.066	ppb	16.9	1218.09	1	
238	U	209	No Gas	0.046	ppb	8.2	727.51	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1837094.74	3.2	1826145.95	100.6	29.5	120.4	
Sc	45	No Gas	4174987.24	3.6	4103184.45	101.75	29.5	120.4	
Sc	45	H2	475398.45	0.1	476452.62	99.78	29.5	120.4	
Sc	45	He	95735.77	1.1	95435.38	100.31	29.5	120.4	
Ge	72	No Gas	925672.35	2.8	904931.62	102.29	29.5	120.4	
Ge	72	H2	171395.52	0.3	172351.67	99.45	29.5	120.4	
Ge	72	He	72894.76	0.8	72380.83	100.71	29.5	120.4	
Y	89	H2	2970886.59	0.2	2964265.2	100.22	29.5	120.4	
Y	89	He	619673.20	0.2	618281.42	100.23	29.5	120.4	
Tb	159	No Gas	9182146.46	3.6	8714728.06	105.36	29.5	120.4	
Tb	159	He	3230387.10	0.7	3206480.02	100.75	29.5	120.4	
Bi	209	No Gas	4691346.03	4.0	4440413.54	105.65	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG10IMW1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:57:21 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.303	ppb	32.1	112.22	0.5	
B	11	6	No Gas	-0.249	ppb	N/A	1946.87	10	
Na	23	45	He	269.668	ppb	2.1	9490.35	500	
Mg	24	45	He	4.428	ppb	92.1	780.08	50	
Al	27	45	He	20.263	ppb	23.9	113.34	50	
Si	28	45	H2	-0.027	ppb	N/A	517.25	250	
K	39	45	He	-4.572	ppb	N/A	11614.51	500	
Ca	40	45	H2	32.724	ppb	6.8	3830.67	50	
V	51	89	He	4.002	ppb	4.7	920.07	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.406	ppb	21.3	144.64	2.5	
Mn	55	89	He	0.517	ppb	1.7	63.32	1	
Fe	56	89	H2	34.312	ppb	4.0	13919.14	50	
Co	59	89	He	0.120	ppb	31.7	57.78	0.5	
Ni	60	89	He	0.332	ppb	48.0	95.56	1	
Cu	63	89	He	1.310	ppb	11.2	816.72	1.5	
Zn	66	89	He	2.500	ppb	13.3	161.12	5	
As	75	89	He	0.235	ppb	55.6	13.67	2.5	
Se	78	89	H2	0.337	ppb	11.3	6.33	2.5	
Sr	88	89	He	0.087	ppb	79.2	17.78	2.5	
Mo	95	89	He	0.406	ppb	23.1	87.78	2.5	
Ag	107	89	He	0.039	ppb	30.5	37.78	0.5	
Cd	111	89	He	0.073	ppb	23.3	6.30	0.5	
Sn	118	159	He	1.186	ppb	17.0	262.24	2.5	
Sb	121	159	No Gas	0.066	ppb	93.4	156.84	0.5	
Ba	137	159	No Gas	0.118	ppb	17.5	93.44	1	
W	182	159	No Gas	0.245	ppb	11.1	300.34	2.5	
Tl	205	209	No Gas	0.052	ppb	50.1	170.19	0.5	
Pb	208	209	No Gas	0.279	ppb	16.5	1114.61	0.5	
Th	232	209	No Gas	0.179	ppb	13.7	724.17	2.5	
U	238	209	No Gas	0.046	ppb	55.4	153.51	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1843708.81	3.4	1826145.95	100.96	29.5	120.4	
Sc	45	No Gas	4188873.26	3.9	4103184.45	102.09	29.5	120.4	
Sc	45	H2	470204.10	1.3	476452.62	98.69	29.5	120.4	
Sc	45	He	95295.91	0.4	95435.38	99.85	29.5	120.4	
Ge	72	No Gas	922022.72	2.2	904931.62	101.89	29.5	120.4	
Ge	72	H2	167025.91	1.1	172351.67	96.91	29.5	120.4	
Ge	72	He	72204.10	0.9	72380.83	99.76	29.5	120.4	
Y	89	H2	2973298.85	1.6	2964265.2	100.3	29.5	120.4	
Y	89	He	614971.29	0.8	618281.42	99.46	29.5	120.4	
Tb	159	No Gas	9239645.42	3.5	8714728.06	106.02	29.5	120.4	
Tb	159	He	3265731.55	1.0	3206480.02	101.85	29.5	120.4	
Bi	209	No Gas	4735189.03	3.5	4440413.54	106.64	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG10IMW1
File Name	020LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 4:59:59 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.241	ppb	4.7	13677.99	50	19.3	79.5	120.4	
B	11	6	No Gas	485.901	ppb	4.3	92485.12	500	19.44	79.5	120.4	
Na	23	45	He	7836.662	ppb	1.4	184346.04	7500	20.9	79.5	120.4	
Mg	24	45	He	5237.911	ppb	1.7	67568.95	5000	20.95	79.5	120.4	
Al	27	45	He	1874.708	ppb	1.8	9173.27	2000	18.75	79.5	120.4	
Si	28	45	H2	1005.632	ppb	1.8	9533.79	1000	20.11	0	200	
K	39	45	He	10323.399	ppb	0.2	127231.31	10000	20.65	79.5	120.4	
Ca	40	45	H2	2584.785	ppb	0.8	220735.10	2500	20.68	79.5	120.4	
V	51	89	He	522.377	ppb	0.5	93224.55	500	20.9	79.5	120.4	
Cr	52	89	He	211.892	ppb	0.4	46880.59	200	21.19	79.5	120.4	
Mn	55	89	He	526.319	ppb	0.4	53761.25	500	21.05	79.5	120.4	
Fe	56	89	H2	1066.133	ppb	0.8	369564.86	1000	21.32	79.5	120.4	
Co	59	89	He	535.258	ppb	0.3	199234.11	500	21.41	79.5	120.4	
Ni	60	89	He	540.392	ppb	1.2	54975.31	500	21.62	79.5	120.4	
Cu	63	89	He	262.142	ppb	0.7	76591.09	250	20.97	79.5	120.4	
Zn	66	89	He	517.763	ppb	2.3	19920.36	500	20.71	79.5	120.4	
As	75	89	He	107.517	ppb	3.0	3380.79	100	21.5	79.5	120.4	
Se	78	89	H2	100.453	ppb	1.6	1645.02	100	20.09	79.5	120.4	
Sr	88	89	He	508.816	ppb	1.0	77954.82	500	20.35	79.5	120.4	
Mo	95	89	He	105.881	ppb	0.5	18607.64	100	21.18	79.5	120.4	
Ag	107	89	He	53.284	ppb	1.0	32053.07	50	21.31	79.5	120.4	
Cd	111	89	He	264.382	ppb	1.0	20106.87	250	21.15	79.5	120.4	
Sn	118	159	He	505.663	ppb	0.4	85644.24	500	20.23	79.5	120.4	
Sb	121	159	No Gas	99.690	ppb	4.4	151980.59	100	19.94	79.5	120.4	
Ba	137	159	No Gas	1975.940	ppb	3.2	1166491.59	2000	19.76	79.5	120.4	
W	182	159	No Gas	100.940	ppb	4.7	115500.60	100	20.19	79.5	120.4	
Tl	205	209	No Gas	102.138	ppb	2.8	250259.22	100	20.43	79.5	120.4	
[Pb]	206	209	No Gas	102.020	ppb	2.4	86720.94	100	20.4	79.5	120.4	
[Pb]	207	209	No Gas	103.337	ppb	2.1	76342.59	100	20.67	79.5	120.4	
Pb	208	209	No Gas	102.310	ppb	3.1	345660.45	100	20.46	79.5	120.4	
Th	232	209	No Gas	100.536	ppb	4.5	346503.63	100	20.11	79.5	120.4	
U	238	209	No Gas	99.595	ppb	3.1	321279.47	100	19.92	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1815034.75	2.1	1826145.95	99.39	29.5	120.4	
Sc	45	No Gas	4212963.91	1.3	4103184.45	102.68	29.5	120.4	
Sc	45	H2	474275.98	0.6	476452.62	99.54	29.5	120.4	
Sc	45	He	95398.89	0.7	95435.38	99.96	29.5	120.4	
Ge	72	No Gas	942237.69	1.8	904931.62	104.12	29.5	120.4	
Ge	72	H2	168508.98	1.4	172351.67	97.77	29.5	120.4	
Ge	72	He	72652.81	0.7	72380.83	100.38	29.5	120.4	
Y	89	H2	2989362.12	0.5	2964265.2	100.85	29.5	120.4	
Y	89	He	615550.52	0.4	618281.42	99.56	29.5	120.4	
Tb	159	No Gas	9405119.37	1.3	8714728.06	107.92	29.5	120.4	
Tb	159	He	3258005.12	1.0	3206480.02	101.61	29.5	120.4	
Bi	209	No Gas	4760855.01	1.2	4440413.54	107.22	29.5	120.4	

Sample Report

Sample Name SN5497-007

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:02:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.293	ppb	23.1	103.34	100	
11	B	6	No Gas	19.857	ppb	2.4	5463.44	1000	
23	Na	45	He	2339.009	ppb	1.0	56282.26	200000	
24	Mg	45	He	2814.909	ppb	3.3	35985.22	200000	
27	Al	45	He	43.388	ppb	15.2	222.23	200000	
28	Si	45	H2	3000.188	ppb	2.4	26744.99	10000	
39	K	45	He	3999.363	ppb	0.3	55425.38	200000	
40	Ca	45	H2	28847.457	ppb	0.6	2393394.49	200000	
51	V	89	He	4.002	ppb	5.9	908.95	1000	
52	Cr	89	He	0.777	ppb	6.8	223.96	2000	
55	Mn	89	He	1.901	ppb	15.3	201.97	2000	
56	Fe	89	H2	51.451	ppb	3.7	19602.17	100000	
59	Co	89	He	0.273	ppb	35.9	113.34	1000	
60	Ni	89	He	1.397	ppb	20.5	201.12	1000	
63	Cu	89	He	2.426	ppb	7.9	1126.76	2000	
66	Zn	89	He	4.489	ppb	15.4	234.46	2000	
75	As	89	He	0.927	ppb	44.9	35.00	1000	
78	Se	89	H2	0.527	ppb	38.9	9.33	1000	
88	Sr	89	He	129.756	ppb	1.6	19622.39	2000	
95	Mo	89	He	0.669	ppb	39.4	132.23	1000	
107	Ag	89	He	0.031	ppb	102.8	32.22	100	
111	Cd	89	He	0.064	ppb	39.8	5.55	1000	
118	Sn	159	He	1.187	ppb	11.4	261.12	1000	
121	Sb	159	No Gas	0.180	ppb	44.8	330.38	1000	
137	Ba	159	No Gas	48.179	ppb	2.6	28412.20	2000	
182	W	159	No Gas	0.362	ppb	42.8	437.17	1000	
205	Tl	209	No Gas	0.154	ppb	46.9	420.49	1000	
208	Pb	209	No Gas	0.279	ppb	26.1	1117.94	2000	
232	Th	209	No Gas	0.384	ppb	27.9	1435.03	1000	
238	U	209	No Gas	0.234	ppb	35.8	757.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1750655.97	1.3	1826145.95	95.87	29.5	120.4	
Sc	45	No Gas	4156872.46	1.0	4103184.45	101.31	29.5	120.4	
Sc	45	H2	462858.72	0.2	476452.62	97.15	29.5	120.4	
Sc	45	He	93676.41	0.7	95435.38	98.16	29.5	120.4	
Ge	72	No Gas	937637.09	1.3	904931.62	103.61	29.5	120.4	
Ge	72	H2	165345.50	1.2	172351.67	95.93	29.5	120.4	
Ge	72	He	71826.74	0.6	72380.83	99.23	29.5	120.4	
Y	89	H2	2944110.54	0.4	2964265.2	99.32	29.5	120.4	
Y	89	He	607520.96	0.7	618281.42	98.26	29.5	120.4	
Tb	159	No Gas	9385764.10	1.0	8714728.06	107.7	29.5	120.4	
Tb	159	He	3250587.00	0.3	3206480.02	101.38	29.5	120.4	
Bi	209	No Gas	4768068.26	1.4	4440413.54	107.38	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG20IMW2
File Name	022_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:05:17 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.050	ppb	51.1	91.12	0.1	
B	11	6	No Gas	1.556	ppb	12.4	3279.38	2	
Na	23	45	He	34.580	ppb	3.2	7249.84	100	
Mg	24	45	He	12.552	ppb	16.6	1522.42	10	200.8 PB Fails DoD
Al	27	45	He	15.816	ppb	4.2	400.02	10	200.8 PB Fails DoD
Si	28	45	H2	11.238	ppb	9.4	1027.85	50	
K	39	45	He	-3.020	ppb	N/A	11486.17	100	
Ca	40	45	H2	11.647	ppb	3.6	6044.84	10	200.8 PB Fails DoD
V	51	89	He	0.180	ppb	14.4	370.02	0.5	
Cr	52	89	He	0.068	ppb	20.2	131.31	0.5	
Mn	55	89	He	0.632	ppb	11.4	334.61	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Fe	56	89	H2	23.157	ppb	1.8	41728.41	10	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Co	59	89	He	0.067	ppb	17.1	137.79	0.1	
Ni	60	89	He	0.081	ppb	6.3	103.34	0.2	
Cu	63	89	He	-0.011	ppb	N/A	423.36	0.3	
Zn	66	89	He	0.564	ppb	23.7	174.45	1	
As	75	89	He	-0.002	ppb	N/A	6.00	0.5	
Se	78	89	H2	0.033	ppb	1.0	3.50	0.5	
Sr	88	89	He	0.078	ppb	14.7	64.45	0.5	
Mo	95	89	He	0.039	ppb	5.4	51.11	0.5	
Ag	107	89	He	0.006	ppb	18.6	33.33	0.1	
Cd	111	89	He	0.015	ppb	45.7	6.30	0.1	
Sn	118	159	He	0.113	ppb	21.3	156.67	0.5	
Sb	121	159	No Gas	0.050	ppb	158.3	427.20	0.1	
Ba	137	159	No Gas	0.499	ppb	44.3	1475.08	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.074	ppb	107.5	440.53	0.5	
Tl	205	209	No Gas	0.061	ppb	123.1	791.06	0.1	
[Pb]	206	209	No Gas	0.192	ppb	78.3	864.42	0.1	200.8 PB Fails DoD
[Pb]	207	209	No Gas	0.186	ppb	66.9	734.22	0.1	200.8 PB Fails DoD
Pb	208	209	No Gas	0.190	ppb	74.7	3401.05	0.1	200.8 PB Fails DoD
Th	232	209	No Gas	0.062	ppb	137.9	1178.40	0.5	
U	238	209	No Gas	0.069	ppb	125.4	1121.66	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1743924.66	1.1	1826145.95	95.5	29.5	120.4	
Sc	45	No Gas	4142219.73	1.2	4103184.45	100.95	29.5	120.4	
Sc	45	H2	475263.77	0.9	476452.62	99.75	29.5	120.4	
Sc	45	He	95208.51	0.3	95435.38	99.76	29.5	120.4	
Ge	72	No Gas	912099.82	0.5	904931.62	100.79	29.5	120.4	
Ge	72	H2	167614.34	0.7	172351.67	97.25	29.5	120.4	
Ge	72	He	72948.00	0.5	72380.83	100.78	29.5	120.4	
Y	89	H2	2964840.33	0.7	2964265.2	100.02	29.5	120.4	
Y	89	He	618171.44	0.7	618281.42	99.98	29.5	120.4	
Tb	159	No Gas	9287427.92	1.5	8714728.06	106.57	29.5	120.4	
Tb	159	He	3251831.13	0.5	3206480.02	101.41	29.5	120.4	
Bi	209	No Gas	4781162.56	1.2	4440413.54	107.67	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG20IMW2
File Name	023_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:07:57 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	46.433	ppb	5.8	70442.97	50	92.87	79.5	120.4	
B	11	6	No Gas	464.497	ppb	5.9	465712.64	500	92.9	79.5	120.4	
Na	23	45	He	7366.600	ppb	2.4	855345.54	7500	98.22	79.5	120.4	
Mg	24	45	He	5231.807	ppb	2.8	334936.76	5000	104.64	79.5	120.4	
Al	27	45	He	1959.946	ppb	1.8	47945.71	2000	98	79.5	120.4	
Si	28	45	H2	1058.425	ppb	0.8	48468.98	1000	105.84	79.5	120.4	
K	39	45	He	10234.416	ppb	2.7	585085.54	10000	102.34	79.5	120.4	
Ca	40	45	H2	2550.244	ppb	1.4	1096509.12	2500	102.01	79.5	120.4	
V	51	89	He	525.826	ppb	2.1	470788.98	500	105.17	79.5	120.4	
Cr	52	89	He	209.636	ppb	2.1	232892.09	200	104.82	79.5	120.4	
Mn	55	89	He	527.240	ppb	2.2	270627.47	500	105.45	79.5	120.4	
Fe	56	89	H2	1038.915	ppb	1.3	1804970.69	1000	103.89	79.5	120.4	
Co	59	89	He	531.167	ppb	1.9	993647.00	500	106.23	79.5	120.4	
Ni	60	89	He	531.098	ppb	2.3	271306.10	500	106.22	79.5	120.4	
Cu	63	89	He	257.609	ppb	2.3	376565.02	250	103.04	79.5	120.4	
Zn	66	89	He	525.456	ppb	2.4	101335.72	500	105.09	79.5	120.4	
As	75	89	He	105.886	ppb	2.4	16709.15	100	105.89	79.5	120.4	
Se	78	89	H2	102.448	ppb	0.3	8445.35	100	102.45	79.5	120.4	
Sr	88	89	He	514.265	ppb	2.8	395953.43	500	102.85	79.5	120.4	
Mo	95	89	He	107.026	ppb	3.2	94454.31	100	107.03	79.5	120.4	
Ag	107	89	He	52.924	ppb	1.4	159963.50	50	105.85	79.5	120.4	
Cd	111	89	He	262.281	ppb	2.8	100241.99	250	104.91	79.5	120.4	
Sn	118	159	He	509.770	ppb	2.7	432768.00	500	101.95	79.5	120.4	
Sb	121	159	No Gas	101.588	ppb	7.2	757728.16	100	101.59	79.5	120.4	
Ba	137	159	No Gas	2022.008	ppb	6.5	5842348.66	2000	101.1	79.5	120.4	
W	182	159	No Gas	102.525	ppb	7.1	574066.36	100	102.52	79.5	120.4	
Tl	205	209	No Gas	101.319	ppb	6.4	1204841.75	100	101.32	79.5	120.4	
Pb	208	209	No Gas	104.329	ppb	6.4	1710247.76	100	104.33	79.5	120.4	
Th	232	209	No Gas	102.235	ppb	7.2	1709761.83	100	102.24	79.5	120.4	
U	238	209	No Gas	101.423	ppb	6.0	1588237.74	100	101.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1945933.35	2.9	1826145.95	106.56	29.5	120.4	
Sc	45	No Gas	4182793.53	4.4	4103184.45	101.94	29.5	120.4	
Sc	45	H2	479507.10	1.0	476452.62	100.64	29.5	120.4	
Sc	45	He	95529.98	1.7	95435.38	100.1	29.5	120.4	
Ge	72	No Gas	919105.89	2.7	904931.62	101.57	29.5	120.4	
Ge	72	H2	170700.72	1.5	172351.67	99.04	29.5	120.4	
Ge	72	He	73555.65	0.6	72380.83	101.62	29.5	120.4	
Y	89	H2	3010767.07	0.9	2964265.2	101.57	29.5	120.4	
Y	89	He	618834.87	1.2	618281.42	100.09	29.5	120.4	
Tb	159	No Gas	9221048.33	4.2	8714728.06	105.81	29.5	120.4	
Tb	159	He	3268577.41	1.3	3206480.02	101.94	29.5	120.4	
Bi	209	No Gas	4628458.61	3.9	4440413.54	104.23	29.5	120.4	

Sample Report

Sample Name SN5541-001X

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:10:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.116	ppb	21.0	188.89	100	
11	B	6	No Gas	202.877	ppb	7.3	191200.80	1000	
23	Na	45	He	6072.608	ppb	1.4	704294.91	200000	
24	Mg	45	He	121.021	ppb	1.9	8440.80	200000	
27	Al	45	He	77.195	ppb	5.3	1897.97	200000	
28	Si	45	H2	441.161	ppb	4.2	20338.82	10000	
39	K	45	He	4052.464	ppb	1.4	238271.17	200000	
40	Ca	45	H2	599.702	ppb	1.5	256520.75	200000	
51	V	89	He	0.948	ppb	8.9	1055.64	1000	
52	Cr	89	He	0.521	ppb	9.8	632.57	2000	
55	Mn	89	He	5.372	ppb	3.2	2763.78	2000	
56	Fe	89	H2	370.867	ppb	0.6	641330.61	100000	
59	Co	89	He	0.149	ppb	22.5	291.14	1000	
60	Ni	89	He	0.388	ppb	17.1	260.01	1000	
63	Cu	89	He	0.856	ppb	1.9	1686.84	2000	
66	Zn	89	He	4.551	ppb	12.2	941.18	2000	
75	As	89	He	0.112	ppb	14.8	24.00	1000	
78	Se	89	H2	0.134	ppb	41.7	11.83	1000	
88	Sr	89	He	4.937	ppb	1.0	3799.57	2000	
95	Mo	89	He	0.303	ppb	8.0	283.35	1000	
107	Ag	89	He	9.945	ppb	2.7	30022.81	100	
111	Cd	89	He	0.047	ppb	50.6	18.52	1000	
118	Sn	159	He	0.875	ppb	14.5	800.05	1000	
121	Sb	159	No Gas	0.259	ppb	9.8	2002.40	1000	
137	Ba	159	No Gas	2.831	ppb	13.7	8285.29	2000	
182	W	159	No Gas	0.241	ppb	7.0	1384.95	1000	
205	Tl	209	No Gas	0.084	ppb	29.3	1074.59	1000	
208	Pb	209	No Gas	0.224	ppb	13.0	3931.31	2000	
232	Th	209	No Gas	0.139	ppb	21.7	2493.05	1000	
238	U	209	No Gas	0.075	ppb	49.4	1208.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1818805.17	2.7	1826145.95	99.6	29.5	120.4	
Sc	45	No Gas	4187495.89	3.3	4103184.45	102.05	29.5	120.4	
Sc	45	H2	475495.23	1.0	476452.62	99.8	29.5	120.4	
Sc	45	He	95323.83	1.0	95435.38	99.88	29.5	120.4	
Ge	72	No Gas	928828.58	3.3	904931.62	102.64	29.5	120.4	
Ge	72	H2	170693.44	0.7	172351.67	99.04	29.5	120.4	
Ge	72	He	73016.58	0.2	72380.83	100.88	29.5	120.4	
Y	89	H2	2990028.49	0.4	2964265.2	100.87	29.5	120.4	
Y	89	He	617790.59	0.3	618281.42	99.92	29.5	120.4	
Tb	159	No Gas	9273267.22	3.4	8714728.06	106.41	29.5	120.4	
Tb	159	He	3250832.73	0.3	3206480.02	101.38	29.5	120.4	
Bi	209	No Gas	4728691.02	3.5	4440413.54	106.49	29.5	120.4	

Prep Blank (PB) Report

Sample Name	LCSONG20IMS1
File Name	025_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:13:21 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	44.964	ppb	5.1	12854.97	60.2	
B	11	6	No Gas	479.940	ppb	4.8	92117.07	602	
Na	23	45	He	7422.994	ppb	0.6	175067.35	9030	
Mg	24	45	He	4977.709	ppb	1.3	64350.24	6020	
Al	27	45	He	1813.084	ppb	2.1	8885.30	2408	
Si	28	45	H2	975.219	ppb	4.4	9112.99	1204	
K	39	45	He	9639.701	ppb	0.7	119764.27	12040	
Ca	40	45	H2	2500.169	ppb	0.5	210215.06	3010	
V	51	89	He	497.785	ppb	1.4	88861.10	602	
Cr	52	89	He	200.475	ppb	1.1	44365.78	240.8	
Mn	55	89	He	498.604	ppb	0.6	50941.44	602	
Fe	56	89	H2	1028.636	ppb	0.8	353961.25	1204	
Co	59	89	He	512.403	ppb	0.5	190768.93	602	
Ni	60	89	He	510.608	ppb	1.2	51959.40	602	
Cu	63	89	He	249.453	ppb	0.9	72919.60	301	
Zn	66	89	He	492.009	ppb	2.2	18937.85	602	
As	75	89	He	101.498	ppb	0.3	3192.72	120.4	
Se	78	89	H2	97.350	ppb	1.3	1582.19	120.4	
Sr	88	89	He	484.126	ppb	0.8	74189.42	602	
Mo	95	89	He	101.834	ppb	1.1	17900.05	120.4	
Ag	107	89	He	51.226	ppb	2.7	30820.15	60.2	
Cd	111	89	He	252.357	ppb	1.6	19195.55	301	
Sn	118	159	He	517.615	ppb	0.7	87793.03	602	
Sb	121	159	No Gas	95.347	ppb	5.5	145354.67	120.4	
Ba	137	159	No Gas	1856.614	ppb	5.5	1095879.32	2408	
W	182	159	No Gas	96.258	ppb	6.6	110119.29	120.4	
Tl	205	209	No Gas	97.690	ppb	5.5	239176.83	120.4	
[Pb]	206	209	No Gas	97.938	ppb	4.7	83199.57	120.4	
[Pb]	207	209	No Gas	97.474	ppb	5.7	71949.73	120.4	
Pb	208	209	No Gas	97.801	ppb	5.5	330185.92	120.4	
Th	232	209	No Gas	96.044	ppb	7.4	330674.15	120.4	
U	238	209	No Gas	95.282	ppb	6.9	307034.29	120.4	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1830081.29	2.3	1826145.95	100.22	29.5	120.4	
Sc	45	No Gas	4196229.41	2.7	4103184.45	102.27	29.5	120.4	
Sc	45	H2	466875.35	1.3	476452.62	97.99	29.5	120.4	
Sc	45	He	95547.46	0.8	95435.38	100.12	29.5	120.4	
Ge	72	No Gas	943003.19	2.9	904931.62	104.21	29.5	120.4	
Ge	72	H2	165993.08	1.3	172351.67	96.31	29.5	120.4	
Ge	72	He	72358.70	0.9	72380.83	99.97	29.5	120.4	
Y	89	H2	2966848.20	1.0	2964265.2	100.09	29.5	120.4	
Y	89	He	615698.42	0.9	618281.42	99.58	29.5	120.4	
Tb	159	No Gas	9410788.05	2.8	8714728.06	107.99	29.5	120.4	
Tb	159	He	3262637.83	0.7	3206480.02	101.75	29.5	120.4	
Bi	209	No Gas	4761986.46	3.4	4440413.54	107.24	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS1
File Name	026LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:15:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.319	ppb	8.4	108.89	0.5	
B	11	6	No Gas	15.101	ppb	3.0	4548.64	10	PB 6020 Fails DoD
Na	23	45	He	172.323	ppb	6.3	7203.09	500	
Mg	24	45	He	23.523	ppb	15.1	1017.89	50	
Al	27	45	He	19.460	ppb	14.3	108.90	50	
Si	28	45	H2	6.753	ppb	88.8	570.65	250	
K	39	45	He	6.295	ppb	825.2	11669.56	500	
Ca	40	45	H2	49.295	ppb	5.4	5166.69	50	
V	51	89	He	6.017	ppb	2.8	1275.66	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	1.142	ppb	9.8	306.62	2.5	
Mn	55	89	He	1.225	ppb	6.6	135.31	1	PB 6020 Fails DoD
Fe	56	89	H2	38.108	ppb	1.4	15121.77	50	
Co	59	89	He	0.192	ppb	48.1	84.45	0.5	
Ni	60	89	He	0.795	ppb	26.9	142.23	1	
Cu	63	89	He	0.691	ppb	32.5	635.59	1.5	
Zn	66	89	He	2.859	ppb	9.0	174.45	5	
As	75	89	He	0.353	ppb	37.9	17.33	2.5	
Se	78	89	H2	0.504	ppb	15.0	9.00	2.5	
Sr	88	89	He	0.270	ppb	24.9	45.56	2.5	
Mo	95	89	He	0.356	ppb	27.1	78.89	2.5	
Ag	107	89	He	0.039	ppb	59.4	37.78	0.5	
Cd	111	89	He	0.108	ppb	59.0	8.89	0.5	
Sn	118	159	He	42.463	ppb	2.1	7245.55	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.110	ppb	24.9	226.92	0.5	
Ba	137	159	No Gas	1.725	ppb	22.7	1054.56	1	PB 6020 Fails DoD
W	182	159	No Gas	0.315	ppb	29.5	387.11	2.5	
Tl	205	209	No Gas	0.141	ppb	22.7	397.12	0.5	
Pb	208	209	No Gas	0.355	ppb	3.1	1398.27	0.5	
Th	232	209	No Gas	0.494	ppb	8.6	1845.53	2.5	
U	238	209	No Gas	0.108	ppb	33.1	360.41	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1727255.88	2.3	1826145.95	94.58	29.5	120.4	
Sc	45	No Gas	4177317.74	2.2	4103184.45	101.81	29.5	120.4	
Sc	45	H2	464875.49	2.0	476452.62	97.57	29.5	120.4	
Sc	45	He	94771.56	0.6	95435.38	99.3	29.5	120.4	
Ge	72	No Gas	937404.72	0.9	904931.62	103.59	29.5	120.4	
Ge	72	H2	165001.13	1.7	172351.67	95.74	29.5	120.4	
Ge	72	He	71845.82	0.5	72380.83	99.26	29.5	120.4	
Y	89	H2	2953415.05	1.3	2964265.2	99.63	29.5	120.4	
Y	89	He	613589.25	0.3	618281.42	99.24	29.5	120.4	
Tb	159	No Gas	9480743.75	2.3	8714728.06	108.79	29.5	120.4	
Tb	159	He	3256782.35	0.4	3206480.02	101.57	29.5	120.4	
Bi	209	No Gas	4843417.83	2.2	4440413.54	109.08	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:18:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.591	ppb	6.7	445.58	100	
11	B	6	No Gas	318.858	ppb	1.7	57637.83	1000	
23	Na	45	He	2040.241	ppb	4.6	47360.66	200000	
24	Mg	45	He	31093.064	ppb	5.9	373238.63	200000	
27	Al	45	He	36950.132	ppb	6.2	169470.65	200000	
28	Si	45	H2	2622.873	ppb	1.6	23231.72	10000	
39	K	45	He	9882.092	ppb	6.2	114821.99	200000	
40	Ca	45	H2	212531.997	ppb	2.1	17463819.60	200000	
51	V	89	He	78.477	ppb	5.5	13661.53	1000	
52	Cr	89	He	393.325	ppb	5.0	83793.05	2000	
55	Mn	89	He	9722.113	ppb	5.2	956510.91	2000	
56	Fe	89	H2	298577.114	ppb	1.5	103008128.67	100000	
59	Co	89	He	48.789	ppb	3.9	17512.05	1000	
60	Ni	89	He	245.072	ppb	5.7	24051.40	1000	
63	Cu	89	He	3500.375	ppb	3.5	980480.65	2000	
66	Zn	89	He	4100.981	ppb	5.1	151565.29	2000	
75	As	89	He	51.648	ppb	3.9	1568.26	1000	
78	Se	89	H2	39.152	ppb	1.2	642.49	1000	
88	Sr	89	He	1448.471	ppb	4.9	213792.59	2000	
95	Mo	89	He	119.762	ppb	5.8	20271.18	1000	
107	Ag	89	He	20.877	ppb	4.3	12110.22	100	
111	Cd	89	He	7.097	ppb	1.9	521.13	1000	
118	Sn	159	He	325.635	ppb	5.7	53543.70	1000	
121	Sb	159	No Gas	11.704	ppb	2.7	18232.56	1000	
137	Ba	159	No Gas	2659.527	ppb	1.5	1599703.65	2000	
182	W	159	No Gas	21.223	ppb	3.4	24764.62	1000	
205	Tl	209	No Gas	0.434	ppb	3.4	1381.63	1000	
208	Pb	209	No Gas	226.748	ppb	1.7	956615.99	2000	
232	Th	209	No Gas	0.298	ppb	8.0	1421.71	1000	
238	U	209	No Gas	18.338	ppb	2.6	73889.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1704054.80	1.3	1826145.95	93.31	29.5	120.4	
Sc	45	No Gas	4143919.56	0.4	4103184.45	100.99	29.5	120.4	
Sc	45	H2	458663.99	1.5	476452.62	96.27	29.5	120.4	
Sc	45	He	89736.60	4.9	95435.38	94.03	29.5	120.4	
Ge	72	No Gas	929100.80	0.8	904931.62	102.67	29.5	120.4	
Ge	72	H2	161490.86	1.4	172351.67	93.7	29.5	120.4	
Ge	72	He	68285.38	3.0	72380.83	94.34	29.5	120.4	
Y	89	H2	2992899.98	1.0	2964265.2	100.97	29.5	120.4	
Y	89	He	593775.88	3.8	618281.42	96.04	29.5	120.4	
Tb	159	No Gas	9580576.45	0.5	8714728.06	109.94	29.5	120.4	
Tb	159	He	3166547.77	4.1	3206480.02	98.75	29.5	120.4	
Bi	209	No Gas	5945556.07	0.7	4440413.54	133.9	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG13IMW3
File Name	028_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:21:16 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.041	ppb	21.9	76.67	0.1	
B	11	6	No Gas	1.263	ppb	16.7	2921.50	2	
Na	23	45	He	19.981	ppb	6.0	5497.17	100	
Mg	24	45	He	-0.606	ppb	N/A	675.63	10	
Al	27	45	He	2.866	ppb	37.5	83.34	10	
Si	28	45	H2	0.884	ppb	244.8	547.29	50	
K	39	45	He	-8.532	ppb	N/A	11039.40	100	
Ca	40	45	H2	12.748	ppb	4.1	6339.41	10	200.8 PB Fails DoD
V	51	89	He	0.209	ppb	20.9	390.02	0.5	
Cr	52	89	He	0.142	ppb	12.6	209.30	0.5	
Mn	55	89	He	0.473	ppb	9.4	249.29	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Fe	56	89	H2	17.280	ppb	8.2	31697.73	10	200.8 PB Fails DoD
Co	59	89	He	0.009	ppb	48.2	28.89	0.1	
Ni	60	89	He	0.042	ppb	48.4	82.23	0.2	
Cu	63	89	He	0.018	ppb	142.5	458.91	0.3	
Zn	66	89	He	0.660	ppb	16.7	190.01	1	
As	75	89	He	0.011	ppb	100.0	8.00	0.5	
Se	78	89	H2	0.025	ppb	97.5	2.83	0.5	
Sr	88	89	He	0.037	ppb	42.6	32.22	0.5	
Mo	95	89	He	0.035	ppb	11.8	46.67	0.5	
Ag	107	89	He	0.001	ppb	196.1	17.78	0.1	
Cd	111	89	He	0.004	ppb	128.2	2.22	0.1	
Sn	118	159	He	0.145	ppb	24.5	183.34	0.5	
Sb	121	159	No Gas	0.002	ppb	123.7	76.75	0.1	
Ba	137	159	No Gas	0.406	ppb	48.3	1234.77	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.020	ppb	14.8	140.16	0.5	
Tl	205	209	No Gas	0.002	ppb	24.9	66.74	0.1	
[Pb]	206	209	No Gas	0.074	ppb	42.2	367.08	0.1	
[Pb]	207	209	No Gas	0.058	ppb	48.0	263.63	0.1	
Pb	208	209	No Gas	0.070	ppb	27.9	1378.24	0.1	
Th	232	209	No Gas	0.007	ppb	47.3	230.26	0.5	
U	238	209	No Gas	0.005	ppb	23.3	93.44	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1688048.93	0.3	1826145.95	92.44	29.5	120.4	
Sc	45	No Gas	4155175.60	0.7	4103184.45	101.27	29.5	120.4	
Sc	45	H2	462720.54	1.8	476452.62	97.12	29.5	120.4	
Sc	45	He	94025.37	0.4	95435.38	98.52	29.5	120.4	
Ge	72	No Gas	928430.09	0.4	904931.62	102.6	29.5	120.4	
Ge	72	H2	167951.69	1.8	172351.67	97.45	29.5	120.4	
Ge	72	He	71622.29	0.6	72380.83	98.95	29.5	120.4	
Y	89	H2	2968653.94	1.8	2964265.2	100.15	29.5	120.4	
Y	89	He	609333.24	0.6	618281.42	98.55	29.5	120.4	
Tb	159	No Gas	9481859.58	0.3	8714728.06	108.8	29.5	120.4	
Tb	159	He	3250506.30	0.0	3206480.02	101.37	29.5	120.4	
Bi	209	No Gas	4836676.98	0.2	4440413.54	108.92	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:23:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.179	ppb	1.8	32445.01	25	96.72	89.8	110.2	
11	B	6	No Gas	24.223	ppb	2.2	23237.08	25	96.89	89.8	110.2	
23	Na	45	He	5076.926	ppb	1.0	595966.38	5000	101.54	89.8	110.2	
24	Mg	45	He	4889.827	ppb	0.6	316005.01	5000	97.8	89.8	110.2	
27	Al	45	He	482.883	ppb	1.2	11932.04	500	96.58	89.8	110.2	
28	Si	45	H2	493.046	ppb	11.7	21891.30	500	98.61	89.8	110.2	
39	K	45	He	4868.574	ppb	1.6	287088.65	5000	97.37	89.8	110.2	
40	Ca	45	H2	5072.605	ppb	12.8	2085464.74	5000	101.45	89.8	110.2	
51	V	89	He	24.639	ppb	2.2	22528.76	25	98.56	89.8	110.2	
52	Cr	89	He	24.943	ppb	0.8	28095.36	25	99.77	89.8	110.2	
55	Mn	89	He	25.250	ppb	1.2	13127.77	25	101	89.8	110.2	
56	Fe	89	H2	5026.231	ppb	14.0	8406390.68	5000	100.52	89.8	110.2	
59	Co	89	He	25.174	ppb	1.0	47676.95	25	100.7	89.8	110.2	
60	Ni	89	He	25.263	ppb	0.6	13122.13	25	101.05	89.8	110.2	
63	Cu	89	He	24.431	ppb	0.3	36548.60	25	97.72	89.8	110.2	
66	Zn	89	He	24.777	ppb	3.2	4899.94	25	99.11	89.8	110.2	
75	As	89	He	24.882	ppb	2.5	3979.00	25	99.53	89.8	110.2	
78	Se	89	H2	25.530	ppb	11.5	2031.89	25	102.12	89.8	110.2	
88	Sr	89	He	23.720	ppb	1.0	18489.67	25	94.88	89.8	110.2	
95	Mo	89	He	24.823	ppb	0.6	22187.57	25	99.29	89.8	110.2	
107	Ag	89	He	24.886	ppb	0.3	76134.50	25	99.54	89.8	110.2	
111	Cd	89	He	24.732	ppb	1.4	9567.92	25	98.93	89.8	110.2	
118	Sn	159	He	23.739	ppb	1.4	20412.76	25	94.96	89.8	110.2	
121	Sb	159	No Gas	23.947	ppb	1.8	180994.69	25	95.79	89.8	110.2	
137	Ba	159	No Gas	24.556	ppb	1.4	71891.19	25	98.22	89.8	110.2	
182	W	159	No Gas	23.430	ppb	2.3	132916.78	25	93.72	89.8	110.2	
205	Tl	209	No Gas	24.247	ppb	1.2	295415.08	25	96.99	89.8	110.2	
208	Pb	209	No Gas	24.134	ppb	1.1	405424.67	25	96.54	89.8	110.2	
232	Th	209	No Gas	23.728	ppb	1.6	406684.72	25	94.91	89.8	110.2	
238	U	209	No Gas	23.947	ppb	1.9	384125.12	25	95.79	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1718596.90	0.5	1826145.95	94.11	29.5	120.4	
Sc	45	No Gas	4156768.29	1.1	4103184.45	101.31	29.5	120.4	
Sc	45	H2	462323.87	9.3	476452.62	97.03	29.5	120.4	
Sc	45	He	96389.99	0.6	95435.38	101	29.5	120.4	
Ge	72	No Gas	924648.63	0.1	904931.62	102.18	29.5	120.4	
Ge	72	H2	165749.83	7.1	172351.67	96.17	29.5	120.4	
Ge	72	He	73472.61	0.2	72380.83	101.51	29.5	120.4	
Y	89	H2	2927573.77	9.8	2964265.2	98.76	29.5	120.4	
Y	89	He	626236.11	0.3	618281.42	101.29	29.5	120.4	
Tb	159	No Gas	9323157.22	0.4	8714728.06	106.98	29.5	120.4	
Tb	159	He	3300412.38	0.2	3206480.02	102.93	29.5	120.4	
Bi	209	No Gas	4733644.10	0.1	4440413.54	106.6	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:26:32 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.082	ppb	15.3	135.56	0.2	
11	B	6	No Gas	0.853	ppb	5.6	2657.00	4	
23	Na	45	He	16.885	ppb	14.3	5233.45	200	
24	Mg	45	He	1.293	ppb	86.6	808.97	20	
27	Al	45	He	0.542	ppb	102.6	27.78	20	
28	Si	45	H2	-0.865	ppb	N/A	493.89	100	
39	K	45	He	1.739	ppb	420.0	11806.26	200	
40	Ca	45	H2	1.787	ppb	11.1	1883.53	20	
51	V	89	He	0.142	ppb	20.0	337.79	1	
52	Cr	89	He	0.022	ppb	69.2	79.99	1	
55	Mn	89	He	0.080	ppb	28.4	51.99	0.4	
56	Fe	89	H2	4.306	ppb	1.8	9767.64	20	
59	Co	89	He	0.013	ppb	39.9	37.78	0.2	
60	Ni	89	He	0.008	ppb	359.7	66.67	0.4	
63	Cu	89	He	-0.142	ppb	N/A	232.23	0.6	
66	Zn	89	He	0.050	ppb	64.1	75.56	2	
75	As	89	He	0.015	ppb	55.5	8.67	1	
78	Se	89	H2	0.054	ppb	46.5	5.33	1	
88	Sr	89	He	0.003	ppb	151.4	6.67	1	
95	Mo	89	He	0.048	ppb	10.1	58.89	1	
107	Ag	89	He	0.008	ppb	61.6	37.78	0.2	
111	Cd	89	He	0.002	ppb	171.7	1.48	0.2	
118	Sn	159	He	0.048	ppb	78.1	101.11	1	
121	Sb	159	No Gas	0.022	ppb	44.7	213.58	0.2	
137	Ba	159	No Gas	0.020	ppb	61.3	80.09	0.4	
182	W	159	No Gas	0.067	ppb	8.0	393.78	1	
205	Tl	209	No Gas	0.017	ppb	21.8	250.29	0.2	
208	Pb	209	No Gas	0.028	ppb	43.5	627.38	0.2	
232	Th	209	No Gas	0.054	ppb	16.5	1014.51	1	
238	U	209	No Gas	0.022	ppb	26.8	347.06	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1748283.36	1.0	1826145.95	95.74	29.5	120.4	
Sc	45	No Gas	4124736.42	0.5	4103184.45	100.53	29.5	120.4	
Sc	45	H2	484585.16	0.5	476452.62	101.71	29.5	120.4	
Sc	45	He	95653.99	0.4	95435.38	100.23	29.5	120.4	
Ge	72	No Gas	921800.47	1.2	904931.62	101.86	29.5	120.4	
Ge	72	H2	173213.31	0.8	172351.67	100.5	29.5	120.4	
Ge	72	He	73116.66	0.6	72380.83	101.02	29.5	120.4	
Y	89	H2	3043515.31	0.2	2964265.2	102.67	29.5	120.4	
Y	89	He	621278.34	1.5	618281.42	100.48	29.5	120.4	
Tb	159	No Gas	9065959.38	0.7	8714728.06	104.03	29.5	120.4	
Tb	159	He	3255776.27	0.7	3206480.02	101.54	29.5	120.4	
Bi	209	No Gas	4660163.54	0.6	4440413.54	104.95	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW3
File Name	031_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:29:19 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.292	ppb	4.8	14228.54	50	20.12	79.5	120.4	
B	11	6	No Gas	502.652	ppb	4.4	95399.63	500	20.11	79.5	120.4	
Na	23	45	He	7868.388	ppb	2.0	187511.29	7500	20.98	79.5	120.4	
Mg	24	45	He	5380.253	ppb	2.1	70298.12	5000	21.52	79.5	120.4	
Al	27	45	He	1968.509	ppb	2.7	9757.00	2000	19.69	79.5	120.4	
Si	28	45	H2	1076.369	ppb	1.6	10171.51	1000	21.53	79.5	120.4	
K	39	45	He	10575.398	ppb	2.2	131758.32	10000	21.15	79.5	120.4	
Ca	40	45	H2	2680.900	ppb	1.1	229022.29	2500	21.45	79.5	120.4	
V	51	89	He	532.597	ppb	2.2	96275.09	500	21.3	79.5	120.4	
Cr	52	89	He	212.868	ppb	1.1	47710.70	200	21.29	79.5	120.4	
Mn	55	89	He	535.205	ppb	1.9	55377.81	500	21.41	79.5	120.4	
Fe	56	89	H2	1088.382	ppb	0.5	379991.75	1000	21.77	79.5	120.4	
Co	59	89	He	551.086	ppb	2.2	207779.18	500	22.04	79.5	120.4	
Ni	60	89	He	547.282	ppb	0.8	56403.21	500	21.89	79.5	120.4	
Cu	63	89	He	265.617	ppb	1.8	78608.87	250	21.25	79.5	120.4	
Zn	66	89	He	535.065	ppb	1.1	20851.83	500	21.4	79.5	120.4	
As	75	89	He	111.356	ppb	4.1	3546.18	100	22.27	79.5	120.4	
Se	78	89	H2	104.932	ppb	2.6	1730.86	100	20.99	79.5	120.4	
Sr	88	89	He	519.805	ppb	1.5	80674.76	500	20.79	79.5	120.4	
Mo	95	89	He	108.474	ppb	1.5	19310.84	100	21.7	79.5	120.4	
Ag	107	89	He	54.230	ppb	1.4	33047.57	50	21.69	79.5	120.4	
Cd	111	89	He	272.207	ppb	1.8	20970.40	250	21.78	79.5	120.4	
Sn	118	159	He	516.877	ppb	2.5	88070.96	500	20.67	79.5	120.4	
Sb	121	159	No Gas	102.582	ppb	5.6	156033.84	100	20.52	79.5	120.4	
Ba	137	159	No Gas	2023.417	ppb	4.6	1191890.39	2000	20.23	79.5	120.4	
W	182	159	No Gas	101.693	ppb	4.2	116124.43	100	20.34	79.5	120.4	
Tl	205	209	No Gas	104.060	ppb	4.5	254983.35	100	20.81	79.5	120.4	
Pb	208	209	No Gas	104.317	ppb	4.3	352477.68	100	20.86	79.5	120.4	
Th	232	209	No Gas	101.278	ppb	5.6	349069.10	100	20.26	79.5	120.4	
U	238	209	No Gas	101.384	ppb	5.6	327016.42	100	20.28	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1811151.44	2.1	1826145.95	99.18	29.5	120.4	
Sc	45	No Gas	4254195.61	1.9	4103184.45	103.68	29.5	120.4	
Sc	45	H2	474504.11	1.1	476452.62	99.59	29.5	120.4	
Sc	45	He	96658.32	1.0	95435.38	101.28	29.5	120.4	
Ge	72	No Gas	943927.29	2.3	904931.62	104.31	29.5	120.4	
Ge	72	H2	169591.09	0.7	172351.67	98.4	29.5	120.4	
Ge	72	He	73821.54	1.0	72380.83	101.99	29.5	120.4	
Y	89	H2	3011075.71	0.8	2964265.2	101.58	29.5	120.4	
Y	89	He	623624.72	1.2	618281.42	100.86	29.5	120.4	
Tb	159	No Gas	9388132.15	2.2	8714728.06	107.73	29.5	120.4	
Tb	159	He	3278309.53	1.4	3206480.02	102.24	29.5	120.4	
Bi	209	No Gas	4763539.26	2.4	4440413.54	107.28	29.5	120.4	

Sample Report

Sample Name SN5596-002

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:31:55 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	11.8	92.23	100	
11	B	6	No Gas	20.654	ppb	3.5	20386.12	1000	
23	Na	45	He	14262.773	ppb	1.6	1708147.29	200000	
24	Mg	45	He	15503.146	ppb	1.8	1024182.36	200000	
27	Al	45	He	26.623	ppb	1.8	687.82	200000	
28	Si	45	H2	3571.519	ppb	1.1	166276.65	10000	
39	K	45	He	553.941	ppb	2.3	44152.74	200000	
40	Ca	45	H2	1573.714	ppb	0.5	693684.76	200000	
51	V	89	He	1.629	ppb	2.6	1711.28	1000	
52	Cr	89	He	0.660	ppb	5.4	809.88	2000	
55	Mn	89	He	9.336	ppb	1.7	4929.98	2000	
56	Fe	89	H2	50.012	ppb	1.2	90957.55	100000	
59	Co	89	He	0.136	ppb	8.9	275.58	1000	
60	Ni	89	He	3.600	ppb	6.3	1951.32	1000	
63	Cu	89	He	2.257	ppb	5.6	3832.89	2000	
66	Zn	89	He	21.814	ppb	1.1	4383.07	2000	
75	As	89	He	0.390	ppb	21.9	69.68	1000	
78	Se	89	H2	0.043	ppb	35.9	4.50	1000	
88	Sr	89	He	9.631	ppb	0.6	7616.84	2000	
95	Mo	89	He	1.285	ppb	6.1	1181.21	1000	
107	Ag	89	He	0.015	ppb	41.5	61.11	100	
111	Cd	89	He	0.017	ppb	10.2	7.41	1000	
118	Sn	159	He	0.212	ppb	6.9	245.57	1000	
121	Sb	159	No Gas	0.043	ppb	23.9	377.09	1000	
137	Ba	159	No Gas	1.302	ppb	2.7	3804.84	2000	
182	W	159	No Gas	39.696	ppb	4.1	223421.25	1000	
205	Tl	209	No Gas	0.029	ppb	8.1	387.11	1000	
208	Pb	209	No Gas	0.094	ppb	18.5	1718.65	2000	
232	Th	209	No Gas	0.130	ppb	11.7	2279.44	1000	
238	U	209	No Gas	0.084	ppb	4.3	1324.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744349.12	0.3	1826145.95	95.52	29.5	120.4	
Sc	45	No Gas	4206917.76	0.7	4103184.45	102.53	29.5	120.4	
Sc	45	H2	491249.21	0.8	476452.62	103.11	29.5	120.4	
Sc	45	He	98696.74	0.6	95435.38	103.42	29.5	120.4	
Ge	72	No Gas	941661.33	0.8	904931.62	104.06	29.5	120.4	
Ge	72	H2	175228.42	1.0	172351.67	101.67	29.5	120.4	
Ge	72	He	75816.55	0.0	72380.83	104.75	29.5	120.4	
Y	89	H2	3077755.69	0.7	2964265.2	103.83	29.5	120.4	
Y	89	He	635152.26	0.5	618281.42	102.73	29.5	120.4	
Tb	159	No Gas	9250206.60	0.3	8714728.06	106.14	29.5	120.4	
Tb	159	He	3326191.48	0.5	3206480.02	103.73	29.5	120.4	
Bi	209	No Gas	4624009.68	0.7	4440413.54	104.13	29.5	120.4	

Sample Report

Sample Name	SN5625-001
File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:34:40 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.038	ppb	20.9	72.22	100	
11	B	6	No Gas	34.681	ppb	1.9	31739.46	1000	
23	Na	45	He	12692.415	ppb	0.5	1495084.47	200000	
24	Mg	45	He	681.428	ppb	0.1	44971.21	200000	
27	Al	45	He	26.686	ppb	3.8	677.82	200000	
28	Si	45	H2	1386.803	ppb	1.7	63300.29	10000	
39	K	45	He	2949.557	ppb	1.3	179801.15	200000	
40	Ca	45	H2	4155.700	ppb	0.4	1785000.17	200000	
51	V	89	He	0.875	ppb	9.4	1002.30	1000	
52	Cr	89	He	0.088	ppb	15.8	154.64	2000	
55	Mn	89	He	8.148	ppb	2.9	4233.22	2000	
56	Fe	89	H2	20.641	ppb	1.3	38425.18	100000	
59	Co	89	He	0.086	ppb	8.8	175.57	1000	
60	Ni	89	He	0.656	ppb	1.8	401.13	1000	
63	Cu	89	He	2.125	ppb	1.2	3576.15	2000	
66	Zn	89	He	8.722	ppb	2.8	1763.51	2000	
75	As	89	He	0.052	ppb	6.6	14.67	1000	
78	Se	89	H2	0.046	ppb	42.7	4.67	1000	
88	Sr	89	He	17.685	ppb	1.1	13752.93	2000	
95	Mo	89	He	0.638	ppb	3.4	585.59	1000	
107	Ag	89	He	0.003	ppb	152.6	23.33	100	
111	Cd	89	He	0.018	ppb	47.4	7.78	1000	
118	Sn	159	He	0.152	ppb	20.8	191.12	1000	
121	Sb	159	No Gas	0.052	ppb	16.4	423.82	1000	
137	Ba	159	No Gas	2.829	ppb	5.3	7827.72	2000	
182	W	159	No Gas	0.089	ppb	6.5	497.24	1000	
205	Tl	209	No Gas	0.004	ppb	71.5	86.77	1000	
208	Pb	209	No Gas	0.108	ppb	5.5	1868.82	2000	
232	Th	209	No Gas	0.006	ppb	28.9	203.56	1000	
238	U	209	No Gas	0.005	ppb	4.7	76.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1680576.92	5.2	1826145.95	92.03	29.5	120.4	
Sc	45	No Gas	4007488.86	4.5	4103184.45	97.67	29.5	120.4	
Sc	45	H2	479168.18	0.3	476452.62	100.57	29.5	120.4	
Sc	45	He	97044.45	0.3	95435.38	101.69	29.5	120.4	
Ge	72	No Gas	891665.62	6.8	904931.62	98.53	29.5	120.4	
Ge	72	H2	173424.30	0.6	172351.67	100.62	29.5	120.4	
Ge	72	He	74193.07	0.6	72380.83	102.5	29.5	120.4	
Y	89	H2	3043687.51	0.4	2964265.2	102.68	29.5	120.4	
Y	89	He	624722.84	0.3	618281.42	101.04	29.5	120.4	
Tb	159	No Gas	8799232.99	4.5	8714728.06	100.97	29.5	120.4	
Tb	159	He	3288259.05	0.8	3206480.02	102.55	29.5	120.4	
Bi	209	No Gas	4474348.57	4.4	4440413.54	100.76	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG15IMW1
File Name	034_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:37:20 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.023	ppb	36.3	56.67	0.1	
B	11	6	No Gas	2.079	ppb	7.1	3850.65	2	200.8 PB Fails DoD
Na	23	45	He	30.569	ppb	9.0	6926.02	100	
Mg	24	45	He	8.314	ppb	28.9	1277.92	10	
Al	27	45	He	5.969	ppb	10.2	163.34	10	
Si	28	45	H2	14.442	ppb	7.8	1184.71	50	
K	39	45	He	-9.027	ppb	N/A	11384.45	100	
Ca	40	45	H2	4.847	ppb	6.1	3184.91	10	
V	51	89	He	0.703	ppb	5.1	848.95	0.5	200.8 PB Fails DoD
Cr	52	89	He	0.034	ppb	31.5	94.65	0.5	
Mn	55	89	He	0.243	ppb	29.1	137.31	0.2	200.8 PB Fails DoD
Fe	56	89	H2	2.952	ppb	4.9	7333.42	10	
Co	59	89	He	0.018	ppb	88.2	46.67	0.1	
Ni	60	89	He	0.091	ppb	44.0	110.00	0.2	
Cu	63	89	He	-0.053	ppb	N/A	366.68	0.3	
Zn	66	89	He	0.735	ppb	8.6	210.01	1	
As	75	89	He	0.020	ppb	49.2	9.67	0.5	
Se	78	89	H2	0.010	ppb	142.2	1.67	0.5	
Sr	88	89	He	0.008	ppb	57.6	11.11	0.5	
Mo	95	89	He	0.013	ppb	112.7	28.89	0.5	
Ag	107	89	He	0.001	ppb	264.2	17.78	0.1	
Cd	111	89	He	0.002	ppb	229.7	1.48	0.1	
Sn	118	159	He	0.045	ppb	8.1	100.01	0.5	
Sb	121	159	No Gas	0.007	ppb	29.6	113.46	0.1	
Ba	137	159	No Gas	0.171	ppb	101.6	523.97	0.2	
W	182	159	No Gas	0.031	ppb	59.9	200.22	0.5	
Tl	205	209	No Gas	0.005	ppb	175.3	106.79	0.1	
[Pb]	206	209	No Gas	0.030	ppb	51.4	176.87	0.1	
[Pb]	207	209	No Gas	0.015	ppb	70.5	103.45	0.1	
Pb	208	209	No Gas	0.026	ppb	57.8	620.71	0.1	
Th	232	209	No Gas	0.008	ppb	100.6	243.62	0.5	
U	238	209	No Gas	0.008	ppb	138.8	133.49	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1791445.39	2.8	1826145.95	98.1	29.5	120.4	
Sc	45	No Gas	4248500.17	2.9	4103184.45	103.54	29.5	120.4	
Sc	45	H2	480561.12	0.7	476452.62	100.86	29.5	120.4	
Sc	45	He	97190.80	1.2	95435.38	101.84	29.5	120.4	
Ge	72	No Gas	931473.60	1.0	904931.62	102.93	29.5	120.4	
Ge	72	H2	171467.16	0.6	172351.67	99.49	29.5	120.4	
Ge	72	He	73808.51	1.3	72380.83	101.97	29.5	120.4	
Y	89	H2	3019608.28	0.7	2964265.2	101.87	29.5	120.4	
Y	89	He	626609.93	0.9	618281.42	101.35	29.5	120.4	
Tb	159	No Gas	9386111.60	2.4	8714728.06	107.7	29.5	120.4	
Tb	159	He	3295887.45	1.0	3206480.02	102.79	29.5	120.4	
Bi	209	No Gas	4812347.70	2.9	4440413.54	108.38	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG15IMW1
File Name	035_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:40:04 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	46.563	ppb	3.0	70401.37	50	93.13	79.5	120.4	
B	11	6	No Gas	465.027	ppb	3.6	464633.83	500	93.01	79.5	120.4	
Na	23	45	He	7485.473	ppb	3.7	869238.15	7500	99.81	79.5	120.4	
Mg	24	45	He	5367.443	ppb	4.1	343649.68	5000	107.35	79.5	120.4	
Al	27	45	He	1981.461	ppb	4.5	48469.61	2000	99.07	79.5	120.4	
Si	28	45	H2	1054.097	ppb	2.2	48205.15	1000	105.41	79.5	120.4	
K	39	45	He	10416.685	ppb	4.2	595364.11	10000	104.17	79.5	120.4	
Ca	40	45	H2	2566.068	ppb	0.9	1101813.27	2500	102.64	79.5	120.4	
V	51	89	He	534.380	ppb	3.5	476503.09	500	106.88	79.5	120.4	
Cr	52	89	He	212.803	ppb	3.4	235453.07	200	106.4	79.5	120.4	
Mn	55	89	He	535.968	ppb	3.5	273993.84	500	107.19	79.5	120.4	
Fe	56	89	H2	1024.335	ppb	0.3	1788546.71	1000	102.43	79.5	120.4	
Co	59	89	He	538.641	ppb	3.2	1003558.44	500	107.73	79.5	120.4	
Ni	60	89	He	539.712	ppb	3.2	274600.43	500	107.94	79.5	120.4	
Cu	63	89	He	260.598	ppb	3.1	379404.87	250	104.24	79.5	120.4	
Zn	66	89	He	535.202	ppb	4.1	102787.66	500	107.04	79.5	120.4	
As	75	89	He	110.229	ppb	3.6	17323.96	100	110.23	79.5	120.4	
Se	78	89	H2	102.879	ppb	0.9	8522.55	100	102.88	79.5	120.4	
Sr	88	89	He	520.889	ppb	3.3	399452.88	500	104.18	79.5	120.4	
Mo	95	89	He	107.428	ppb	3.3	94435.54	100	107.43	79.5	120.4	
Ag	107	89	He	53.972	ppb	2.8	162474.98	50	107.94	79.5	120.4	
Cd	111	89	He	270.357	ppb	3.3	102917.92	250	108.14	79.5	120.4	
Sn	118	159	He	512.719	ppb	4.3	433946.21	500	102.54	79.5	120.4	
Sb	121	159	No Gas	101.854	ppb	3.9	773545.16	100	101.85	79.5	120.4	
Ba	137	159	No Gas	2008.184	ppb	3.8	5907226.24	2000	100.41	79.5	120.4	
W	182	159	No Gas	101.262	ppb	3.7	577308.25	100	101.26	79.5	120.4	
Tl	205	209	No Gas	101.484	ppb	4.6	1223707.64	100	101.48	79.5	120.4	
Pb	208	209	No Gas	104.393	ppb	4.2	1735414.97	100	104.39	79.5	120.4	
Th	232	209	No Gas	101.074	ppb	4.8	1714411.42	100	101.07	79.5	120.4	
U	238	209	No Gas	100.117	ppb	4.4	1589669.89	100	100.12	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1937843.31	1.8	1826145.95	106.12	29.5	120.4	
Sc	45	No Gas	4205321.74	2.0	4103184.45	102.49	29.5	120.4	
Sc	45	H2	478833.42	0.7	476452.62	100.5	29.5	120.4	
Sc	45	He	95592.24	3.1	95435.38	100.16	29.5	120.4	
Ge	72	No Gas	931898.34	2.4	904931.62	102.98	29.5	120.4	
Ge	72	H2	174086.48	0.3	172351.67	101.01	29.5	120.4	
Ge	72	He	73250.99	1.6	72380.83	101.2	29.5	120.4	
Y	89	H2	3025572.65	0.4	2964265.2	102.07	29.5	120.4	
Y	89	He	616496.32	1.9	618281.42	99.71	29.5	120.4	
Tb	159	No Gas	9374371.73	1.9	8714728.06	107.57	29.5	120.4	
Tb	159	He	3260288.53	2.6	3206480.02	101.68	29.5	120.4	
Bi	209	No Gas	4689338.50	2.7	4440413.54	105.61	29.5	120.4	

Sample Report

Sample Name SN5691-001

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:42:43 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.117	ppb	22.0	180.01	100	
11	B	6	No Gas	18.794	ppb	1.8	18371.10	1000	
23	Na	45	He	40126.517	ppb	0.3	4556372.51	200000	
24	Mg	45	He	12905.368	ppb	0.7	809482.51	200000	
27	Al	45	He	5.937	ppb	10.8	156.68	200000	
28	Si	45	H2	5875.047	ppb	0.4	258680.22	10000	
39	K	45	He	5138.267	ppb	0.4	293886.44	200000	
40	Ca	45	H2	55136.536	ppb	0.5	22978397.99	200000	
51	V	89	He	0.308	ppb	15.8	477.80	1000	
52	Cr	89	He	0.435	ppb	3.7	531.25	2000	
55	Mn	89	He	0.648	ppb	8.4	338.61	2000	
56	Fe	89	H2	11.921	ppb	3.4	22285.87	100000	
59	Co	89	He	0.139	ppb	21.3	268.91	1000	
60	Ni	89	He	1.127	ppb	8.0	628.93	1000	
63	Cu	89	He	58.812	ppb	1.6	85099.81	2000	
66	Zn	89	He	17.846	ppb	2.2	3456.11	2000	
75	As	89	He	1.346	ppb	1.4	215.70	1000	
78	Se	89	H2	0.241	ppb	1.5	20.17	1000	
88	Sr	89	He	226.458	ppb	0.6	171930.84	2000	
95	Mo	89	He	0.684	ppb	3.5	611.15	1000	
107	Ag	89	He	0.019	ppb	18.2	71.11	100	
111	Cd	89	He	0.050	ppb	42.8	19.63	1000	
118	Sn	159	He	0.807	ppb	9.6	743.38	1000	
121	Sb	159	No Gas	0.097	ppb	27.6	777.55	1000	
137	Ba	159	No Gas	23.761	ppb	3.3	68488.11	2000	
182	W	159	No Gas	0.237	ppb	7.7	1351.58	1000	
205	Tl	209	No Gas	0.073	ppb	18.9	901.05	1000	
208	Pb	209	No Gas	1.110	ppb	1.8	18235.46	2000	
232	Th	209	No Gas	0.140	ppb	7.0	2429.66	1000	
238	U	209	No Gas	1.244	ppb	3.2	19346.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1711614.26	2.2	1826145.95	93.73	29.5	120.4	
Sc	45	No Gas	4087134.65	1.5	4103184.45	99.61	29.5	120.4	
Sc	45	H2	465178.38	0.2	476452.62	97.63	29.5	120.4	
Sc	45	He	93689.51	0.3	95435.38	98.17	29.5	120.4	
Ge	72	No Gas	913619.02	1.6	904931.62	100.96	29.5	120.4	
Ge	72	H2	166963.56	1.1	172351.67	96.87	29.5	120.4	
Ge	72	He	71938.76	0.5	72380.83	99.39	29.5	120.4	
Y	89	H2	2932810.47	0.1	2964265.2	98.94	29.5	120.4	
Y	89	He	610080.45	0.3	618281.42	98.67	29.5	120.4	
Tb	159	No Gas	9181803.41	1.7	8714728.06	105.36	29.5	120.4	
Tb	159	He	3257344.05	0.2	3206480.02	101.59	29.5	120.4	
Bi	209	No Gas	4589467.22	2.3	4440413.54	103.36	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW1
File Name	037_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:45:26 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.266	ppb	28.8	94.45	0.5	
B	11	6	No Gas	9.923	ppb	9.5	3618.37	10	
Na	23	45	He	221.166	ppb	2.7	8211.41	500	
Mg	24	45	He	13.594	ppb	92.4	880.10	50	
Al	27	45	He	56.002	ppb	22.3	282.24	50	PB 6020 Fails DoD
Si	28	45	H2	8.873	ppb	226.2	587.34	250	
K	39	45	He	-10.152	ppb	N/A	11332.78	500	
Ca	40	45	H2	66.591	ppb	3.9	6586.21	50	PB 6020 Fails DoD
V	51	89	He	4.043	ppb	5.7	916.73	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.404	ppb	10.6	142.64	2.5	
Mn	55	89	He	1.706	ppb	13.3	182.63	1	PB 6020 Fails DoD
Fe	56	89	H2	9.615	ppb	8.7	5413.74	50	
Co	59	89	He	0.079	ppb	66.5	42.23	0.5	
Ni	60	89	He	0.331	ppb	36.2	94.45	1	
Cu	63	89	He	2.397	ppb	13.5	1118.98	1.5	PB 6020 Fails DoD
Zn	66	89	He	2.109	ppb	7.6	144.45	5	
As	75	89	He	0.336	ppb	49.2	16.67	2.5	
Se	78	89	H2	0.465	ppb	39.1	8.33	2.5	
Sr	88	89	He	0.273	ppb	41.5	45.56	2.5	
Mo	95	89	He	0.335	ppb	31.4	74.45	2.5	
Ag	107	89	He	0.043	ppb	33.8	40.00	0.5	
Cd	111	89	He	0.084	ppb	56.2	7.04	0.5	
Sn	118	159	He	11.303	ppb	2.9	1990.23	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.075	ppb	26.7	166.85	0.5	
Ba	137	159	No Gas	1.421	ppb	20.4	840.97	1	PB 6020 Fails DoD
W	182	159	No Gas	0.201	ppb	23.4	246.95	2.5	
Tl	205	209	No Gas	0.038	ppb	52.6	133.48	0.5	
Pb	208	209	No Gas	0.251	ppb	4.9	1007.80	0.5	
Th	232	209	No Gas	0.233	ppb	19.7	901.04	2.5	
U	238	209	No Gas	0.025	ppb	28.5	83.43	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1721966.87	1.1	1826145.95	94.3	29.5	120.4	
Sc	45	No Gas	3949015.41	1.9	4103184.45	96.24	29.5	120.4	
Sc	45	H2	463328.91	0.7	476452.62	97.25	29.5	120.4	
Sc	45	He	93481.82	0.4	95435.38	97.95	29.5	120.4	
Ge	72	No Gas	881541.92	1.7	904931.62	97.42	29.5	120.4	
Ge	72	H2	165216.46	0.7	172351.67	95.86	29.5	120.4	
Ge	72	He	71193.51	0.5	72380.83	98.36	29.5	120.4	
Y	89	H2	2949537.64	0.9	2964265.2	99.5	29.5	120.4	
Y	89	He	608060.45	0.7	618281.42	98.35	29.5	120.4	
Tb	159	No Gas	9136522.23	1.8	8714728.06	104.84	29.5	120.4	
Tb	159	He	3284446.52	0.6	3206480.02	102.43	29.5	120.4	
Bi	209	No Gas	4691847.47	1.5	4440413.54	105.66	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW1
File Name	038LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:48:06 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.787	ppb	2.3	13525.64	50	19.91	79.5	120.4	
B	11	6	No Gas	499.787	ppb	4.0	91072.07	500	19.99	79.5	120.4	
Na	23	45	He	7755.164	ppb	0.5	178295.54	7500	20.68	79.5	120.4	
Mg	24	45	He	5276.914	ppb	0.8	66512.89	5000	21.11	79.5	120.4	
Al	27	45	He	2027.127	ppb	1.9	9691.43	2000	20.27	79.5	120.4	
Si	28	45	H2	1017.211	ppb	5.6	9310.04	1000	20.34	0	200	
K	39	45	He	10128.841	ppb	0.4	122186.90	10000	20.26	79.5	120.4	
Ca	40	45	H2	2643.832	ppb	1.7	218150.99	2500	21.15	79.5	120.4	
V	51	89	He	519.432	ppb	1.0	91850.05	500	20.78	79.5	120.4	
Cr	52	89	He	209.469	ppb	1.1	45919.81	200	20.95	79.5	120.4	
Mn	55	89	He	524.408	ppb	0.6	53077.52	500	20.98	79.5	120.4	
Fe	56	89	H2	1074.323	ppb	0.3	367569.55	1000	21.49	79.5	120.4	
Co	59	89	He	537.241	ppb	0.5	198141.96	500	21.49	79.5	120.4	
Ni	60	89	He	538.252	ppb	0.7	54256.99	500	21.53	79.5	120.4	
Cu	63	89	He	260.231	ppb	0.8	75340.11	250	20.82	79.5	120.4	
Zn	66	89	He	524.248	ppb	1.5	19983.75	500	20.97	79.5	120.4	
As	75	89	He	104.619	ppb	1.2	3259.74	100	20.92	79.5	120.4	
Se	78	89	H2	102.710	ppb	1.9	1660.19	100	20.54	79.5	120.4	
Sr	88	89	He	505.660	ppb	0.9	76763.44	500	20.23	79.5	120.4	
Mo	95	89	He	105.822	ppb	1.0	18427.48	100	21.16	79.5	120.4	
Ag	107	89	He	54.113	ppb	0.1	32254.68	50	21.65	79.5	120.4	
Cd	111	89	He	261.873	ppb	0.9	19733.37	250	20.95	79.5	120.4	
Sn	118	159	He	493.796	ppb	0.6	84190.40	500	19.75	79.5	120.4	
Sb	121	159	No Gas	101.178	ppb	2.0	157045.24	100	20.24	79.5	120.4	
Ba	137	159	No Gas	1995.403	ppb	2.3	1199193.90	2000	19.95	79.5	120.4	
W	182	159	No Gas	103.295	ppb	2.8	120332.70	100	20.66	79.5	120.4	
Tl	205	209	No Gas	103.809	ppb	2.5	259714.48	100	20.76	79.5	120.4	
[Pb]	206	209	No Gas	103.616	ppb	1.8	89935.86	100	20.72	79.5	120.4	
[Pb]	207	209	No Gas	104.135	ppb	3.4	78542.32	100	20.83	79.5	120.4	
Pb	208	209	No Gas	104.316	ppb	1.7	359905.18	100	20.86	79.5	120.4	
Th	232	209	No Gas	103.269	ppb	2.2	363482.52	100	20.65	79.5	120.4	
U	238	209	No Gas	102.621	ppb	1.9	338042.90	100	20.52	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1738532.72	1.9	1826145.95	95.2	29.5	120.4	
Sc	45	No Gas	4117334.06	1.4	4103184.45	100.34	29.5	120.4	
Sc	45	H2	458368.50	1.6	476452.62	96.2	29.5	120.4	
Sc	45	He	93213.73	0.7	95435.38	97.67	29.5	120.4	
Ge	72	No Gas	927423.07	1.4	904931.62	102.49	29.5	120.4	
Ge	72	H2	162033.57	2.3	172351.67	94.01	29.5	120.4	
Ge	72	He	71603.31	0.8	72380.83	98.93	29.5	120.4	
Y	89	H2	2950610.27	0.6	2964265.2	99.54	29.5	120.4	
Y	89	He	609923.36	0.6	618281.42	98.65	29.5	120.4	
Tb	159	No Gas	9574022.22	1.5	8714728.06	109.86	29.5	120.4	
Tb	159	He	3279569.47	0.5	3206480.02	102.28	29.5	120.4	
Bi	209	No Gas	4861330.85	1.5	4440413.54	109.48	29.5	120.4	

Sample Report

Sample Name SN5589-003

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:50:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.240	ppb	5.1	86.67	100	
11	B	6	No Gas	20.656	ppb	7.2	5448.99	1000	
23	Na	45	He	7402.240	ppb	1.2	170279.17	200000	
24	Mg	45	He	18025.875	ppb	0.8	225438.94	200000	
27	Al	45	He	51.031	ppb	6.8	257.79	200000	
28	Si	45	H2	2169.837	ppb	2.1	19354.66	10000	
39	K	45	He	1752.352	ppb	3.1	30572.04	200000	
40	Ca	45	H2	30763.080	ppb	1.0	2534568.35	200000	
51	V	89	He	3.051	ppb	10.5	737.82	1000	
52	Cr	89	He	0.512	ppb	10.0	165.30	2000	
55	Mn	89	He	2498.686	ppb	0.5	250652.73	2000	
56	Fe	89	H2	35.922	ppb	5.0	14350.13	100000	
59	Co	89	He	0.851	ppb	7.4	324.47	1000	
60	Ni	89	He	4.244	ppb	3.0	484.48	1000	
63	Cu	89	He	0.066	ppb	173.1	447.80	2000	
66	Zn	89	He	5.295	ppb	25.1	263.35	2000	
75	As	89	He	0.533	ppb	42.7	22.67	1000	
78	Se	89	H2	0.362	ppb	35.6	6.67	1000	
88	Sr	89	He	164.113	ppb	1.1	24698.42	2000	
95	Mo	89	He	0.453	ppb	7.7	94.45	1000	
107	Ag	89	He	0.025	ppb	27.9	28.89	100	
111	Cd	89	He	0.159	ppb	14.5	12.59	1000	
118	Sn	159	He	1.393	ppb	11.0	297.79	1000	
121	Sb	159	No Gas	0.084	ppb	42.2	190.22	1000	
137	Ba	159	No Gas	8.992	ppb	11.9	5477.95	2000	
182	W	159	No Gas	0.219	ppb	5.5	283.65	1000	
205	Tl	209	No Gas	0.068	ppb	31.5	213.58	1000	
208	Pb	209	No Gas	0.391	ppb	11.8	1538.42	2000	
232	Th	209	No Gas	0.334	ppb	13.7	1294.86	1000	
238	U	209	No Gas	0.071	ppb	20.9	236.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1702382.36	2.9	1826145.95	93.22	29.5	120.4	
Sc	45	No Gas	4125538.31	3.6	4103184.45	100.54	29.5	120.4	
Sc	45	H2	459671.10	2.0	476452.62	96.48	29.5	120.4	
Sc	45	He	93192.96	0.8	95435.38	97.65	29.5	120.4	
Ge	72	No Gas	933600.12	1.8	904931.62	103.17	29.5	120.4	
Ge	72	H2	164017.35	2.5	172351.67	95.16	29.5	120.4	
Ge	72	He	71353.18	0.9	72380.83	98.58	29.5	120.4	
Y	89	H2	2948157.82	1.3	2964265.2	99.46	29.5	120.4	
Y	89	He	604616.19	1.0	618281.42	97.79	29.5	120.4	
Tb	159	No Gas	9682957.29	3.8	8714728.06	111.11	29.5	120.4	
Tb	159	He	3270311.37	1.2	3206480.02	101.99	29.5	120.4	
Bi	209	No Gas	4897825.52	3.7	4440413.54	110.3	29.5	120.4	

Sample Report

Sample Name SN5589-004

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 5:53:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.183	ppb	16.7	71.12	100	
11	B	6	No Gas	13.754	ppb	8.9	4206.31	1000	
23	Na	45	He	29485.046	ppb	2.0	660884.48	200000	
24	Mg	45	He	16751.405	ppb	2.1	207081.40	200000	
27	Al	45	He	61.413	ppb	18.3	303.35	200000	
28	Si	45	H2	3336.882	ppb	0.1	29366.08	10000	
39	K	45	He	621.309	ppb	5.9	17988.22	200000	
40	Ca	45	H2	13887.545	ppb	1.4	1140139.96	200000	
51	V	89	He	2.570	ppb	2.0	647.82	1000	
52	Cr	89	He	0.516	ppb	17.7	164.64	2000	
55	Mn	89	He	1099.211	ppb	1.8	109213.24	2000	
56	Fe	89	H2	20414.730	ppb	1.6	6937525.98	100000	
59	Co	89	He	11.577	ppb	7.7	4203.16	1000	
60	Ni	89	He	31.892	ppb	7.1	3212.71	1000	
63	Cu	89	He	-0.053	ppb	N/A	410.02	2000	
66	Zn	89	He	47.754	ppb	4.8	1844.63	2000	
75	As	89	He	10.207	ppb	5.3	317.71	1000	
78	Se	89	H2	0.207	ppb	77.9	4.17	1000	
88	Sr	89	He	42.605	ppb	3.9	6352.82	2000	
95	Mo	89	He	0.120	ppb	58.1	36.67	1000	
107	Ag	89	He	0.014	ppb	153.0	22.22	100	
111	Cd	89	He	0.071	ppb	44.8	5.93	1000	
118	Sn	159	He	1.476	ppb	19.1	308.90	1000	
121	Sb	159	No Gas	0.038	ppb	86.5	120.13	1000	
137	Ba	159	No Gas	12.736	ppb	4.7	7744.22	2000	
182	W	159	No Gas	0.111	ppb	32.5	156.84	1000	
205	Tl	209	No Gas	0.022	ppb	90.7	100.11	1000	
208	Pb	209	No Gas	0.081	ppb	14.6	467.20	2000	
232	Th	209	No Gas	0.091	ppb	11.8	440.50	1000	
238	U	209	No Gas	0.015	ppb	73.3	53.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1688212.76	3.5	1826145.95	92.45	29.5	120.4	
Sc	45	No Gas	4136140.52	3.5	4103184.45	100.8	29.5	120.4	
Sc	45	H2	457806.71	0.6	476452.62	96.09	29.5	120.4	
Sc	45	He	92103.42	1.0	95435.38	96.51	29.5	120.4	
Ge	72	No Gas	935477.26	3.4	904931.62	103.38	29.5	120.4	
Ge	72	H2	164200.47	1.7	172351.67	95.27	29.5	120.4	
Ge	72	He	71210.68	0.5	72380.83	98.38	29.5	120.4	
Y	89	H2	2947232.39	0.9	2964265.2	99.43	29.5	120.4	
Y	89	He	598846.93	0.9	618281.42	96.86	29.5	120.4	
Tb	159	No Gas	9659687.42	2.9	8714728.06	110.84	29.5	120.4	
Tb	159	He	3241641.86	1.2	3206480.02	101.1	29.5	120.4	
Bi	209	No Gas	4932625.37	3.7	4440413.54	111.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:56:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.120	ppb	7.3	30879.26	25	92.48	89.8	110.2	
11	B	6	No Gas	23.446	ppb	9.7	22438.11	25	93.78	89.8	110.2	
23	Na	45	He	5131.109	ppb	0.7	588729.47	5000	102.62	89.8	110.2	
24	Mg	45	He	4922.576	ppb	0.4	310949.02	5000	98.45	89.8	110.2	
27	Al	45	He	482.579	ppb	2.1	11656.24	500	96.52	89.8	110.2	
28	Si	45	H2	465.956	ppb	2.0	20707.95	500	93.19	89.8	110.2	
39	K	45	He	4898.247	ppb	0.3	282271.07	5000	97.96	89.8	110.2	
40	Ca	45	H2	4907.232	ppb	1.5	2018432.07	5000	98.14	89.8	110.2	
51	V	89	He	24.999	ppb	0.1	22435.23	25	100	89.8	110.2	
52	Cr	89	He	24.835	ppb	0.6	27458.84	25	99.34	89.8	110.2	
55	Mn	89	He	24.854	ppb	1.0	12684.78	25	99.42	89.8	110.2	
56	Fe	89	H2	4800.260	ppb	0.8	8128390.92	5000	96.01	89.8	110.2	
59	Co	89	He	25.282	ppb	1.6	46999.46	25	101.13	89.8	110.2	
60	Ni	89	He	25.099	ppb	1.1	12797.40	25	100.4	89.8	110.2	
63	Cu	89	He	24.413	ppb	1.8	35849.08	25	97.65	89.8	110.2	
66	Zn	89	He	24.785	ppb	2.3	4811.02	25	99.14	89.8	110.2	
75	As	89	He	24.468	ppb	2.0	3840.95	25	97.87	89.8	110.2	
78	Se	89	H2	24.297	ppb	1.4	1954.55	25	97.19	89.8	110.2	
88	Sr	89	He	23.576	ppb	1.1	18039.03	25	94.3	89.8	110.2	
95	Mo	89	He	25.171	ppb	1.1	22085.13	25	100.68	89.8	110.2	
107	Ag	89	He	25.305	ppb	0.8	75991.60	25	101.22	89.8	110.2	
111	Cd	89	He	25.102	ppb	1.2	9533.06	25	100.41	89.8	110.2	
118	Sn	159	He	23.684	ppb	0.6	20265.83	25	94.74	89.8	110.2	
121	Sb	159	No Gas	22.854	ppb	8.2	175373.68	25	91.42	89.8	110.2	
137	Ba	159	No Gas	23.785	ppb	8.4	70696.69	25	95.14	89.8	110.2	
182	W	159	No Gas	22.972	ppb	7.9	132314.52	25	91.89	89.8	110.2	
205	Tl	209	No Gas	24.097	ppb	6.3	299836.96	25	96.39	89.8	110.2	
208	Pb	209	No Gas	23.611	ppb	7.9	404973.29	25	94.44	89.8	110.2	
232	Th	209	No Gas	22.799	ppb	9.4	398856.97	25	91.2	89.8	110.2	
238	U	209	No Gas	23.164	ppb	9.0	379300.73	25	92.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1712983.74	2.9	1826145.95	93.8	29.5	120.4	
Sc	45	No Gas	4142325.62	2.8	4103184.45	100.95	29.5	120.4	
Sc	45	H2	458909.10	1.1	476452.62	96.32	29.5	120.4	
Sc	45	He	94216.64	0.2	95435.38	98.72	29.5	120.4	
Ge	72	No Gas	926580.57	2.6	904931.62	102.39	29.5	120.4	
Ge	72	H2	163079.26	2.6	172351.67	94.62	29.5	120.4	
Ge	72	He	72110.45	0.7	72380.83	99.63	29.5	120.4	
Y	89	H2	2937154.58	1.2	2964265.2	99.09	29.5	120.4	
Y	89	He	614724.42	0.2	618281.42	99.42	29.5	120.4	
Tb	159	No Gas	9479720.34	2.9	8714728.06	108.78	29.5	120.4	
Tb	159	He	3284224.71	0.1	3206480.02	102.42	29.5	120.4	
Bi	209	No Gas	4841043.63	3.2	4440413.54	109.02	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 5:58:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.071	ppb	23.4	121.12	0.2	
11	B	6	No Gas	0.653	ppb	23.9	2483.64	4	
23	Na	45	He	18.707	ppb	7.0	5276.80	200	
24	Mg	45	He	4.961	ppb	67.1	1013.45	20	
27	Al	45	He	0.387	ppb	142.3	23.33	20	
28	Si	45	H2	0.441	ppb	559.6	533.94	100	
39	K	45	He	-4.282	ppb	N/A	11117.66	200	
40	Ca	45	H2	1.823	ppb	11.6	1831.30	20	
51	V	89	He	0.139	ppb	26.1	326.68	1	
52	Cr	89	He	0.023	ppb	65.2	79.32	1	
55	Mn	89	He	0.052	ppb	41.4	36.66	0.4	
56	Fe	89	H2	2.217	ppb	8.2	5891.20	20	
59	Co	89	He	0.016	ppb	79.2	42.22	0.2	
60	Ni	89	He	0.050	ppb	46.8	85.56	0.4	
63	Cu	89	He	-0.156	ppb	N/A	206.68	0.6	
66	Zn	89	He	0.120	ppb	105.3	86.67	2	
75	As	89	He	0.005	ppb	437.9	7.00	1	
78	Se	89	H2	0.054	ppb	18.0	5.17	1	
88	Sr	89	He	0.015	ppb	140.3	15.55	1	
95	Mo	89	He	0.056	ppb	21.3	64.45	1	
107	Ag	89	He	0.010	ppb	60.6	43.33	0.2	
111	Cd	89	He	0.008	ppb	41.6	3.70	0.2	
118	Sn	159	He	0.064	ppb	71.2	114.45	1	
121	Sb	159	No Gas	0.020	ppb	59.8	203.56	0.2	
137	Ba	159	No Gas	0.019	ppb	52.3	80.09	0.4	
182	W	159	No Gas	0.052	ppb	9.7	320.36	1	
205	Tl	209	No Gas	0.016	ppb	23.8	233.60	0.2	
208	Pb	209	No Gas	0.017	ppb	37.6	460.52	0.2	
232	Th	209	No Gas	0.039	ppb	23.6	790.92	1	
238	U	209	No Gas	0.018	ppb	38.5	290.33	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1753087.74	1.7	1826145.95	96	29.5	120.4	
Sc	45	No Gas	4095286.65	1.9	4103184.45	99.81	29.5	120.4	
Sc	45	H2	467422.11	0.8	476452.62	98.1	29.5	120.4	
Sc	45	He	92734.29	1.8	95435.38	97.17	29.5	120.4	
Ge	72	No Gas	910286.30	2.5	904931.62	100.59	29.5	120.4	
Ge	72	H2	166236.08	0.3	172351.67	96.45	29.5	120.4	
Ge	72	He	71370.79	1.0	72380.83	98.6	29.5	120.4	
Y	89	H2	2937728.15	0.4	2964265.2	99.1	29.5	120.4	
Y	89	He	604829.26	1.6	618281.42	97.82	29.5	120.4	
Tb	159	No Gas	9270703.33	1.8	8714728.06	106.38	29.5	120.4	
Tb	159	He	3222759.57	1.5	3206480.02	100.51	29.5	120.4	
Bi	209	No Gas	4765961.78	1.8	4440413.54	107.33	29.5	120.4	

Sample Report

Sample Name SN5589-005

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:01:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.255	ppb	7.3	92.23	100	
11	B	6	No Gas	21.644	ppb	3.7	5727.99	1000	
23	Na	45	He	33230.293	ppb	0.9	750824.06	200000	
24	Mg	45	He	20389.851	ppb	0.9	254075.26	200000	
27	Al	45	He	11.297	ppb	31.7	67.78	200000	
28	Si	45	H2	3627.987	ppb	1.8	31961.35	10000	
39	K	45	He	747.451	ppb	7.0	19514.53	200000	
40	Ca	45	H2	18407.447	ppb	0.5	1514500.79	200000	
51	V	89	He	2.237	ppb	10.3	593.37	1000	
52	Cr	89	He	0.411	ppb	29.4	142.64	2000	
55	Mn	89	He	1190.687	ppb	0.9	118988.38	2000	
56	Fe	89	H2	24182.624	ppb	0.9	8139919.32	100000	
59	Co	89	He	12.036	ppb	1.4	4396.56	1000	
60	Ni	89	He	41.606	ppb	2.3	4197.44	1000	
63	Cu	89	He	-0.132	ppb	N/A	390.02	2000	
66	Zn	89	He	61.999	ppb	4.8	2390.29	2000	
75	As	89	He	2.554	ppb	18.2	84.68	1000	
78	Se	89	H2	0.271	ppb	18.1	5.17	1000	
88	Sr	89	He	59.304	ppb	2.0	8894.31	2000	
95	Mo	89	He	0.028	ppb	79.7	21.11	1000	
107	Ag	89	He	0.012	ppb	29.6	21.11	100	
111	Cd	89	He	0.035	ppb	42.4	3.33	1000	
118	Sn	159	He	1.103	ppb	35.0	245.57	1000	
121	Sb	159	No Gas	0.070	ppb	26.3	163.52	1000	
137	Ba	159	No Gas	20.369	ppb	7.3	11995.51	2000	
182	W	159	No Gas	0.156	ppb	19.4	203.56	1000	
205	Tl	209	No Gas	0.014	ppb	95.3	76.76	1000	
208	Pb	209	No Gas	0.078	ppb	45.1	440.50	2000	
232	Th	209	No Gas	0.177	ppb	23.0	724.16	1000	
238	U	209	No Gas	0.013	ppb	94.1	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1733867.84	3.3	1826145.95	94.95	29.5	120.4	
Sc	45	No Gas	4088436.94	3.6	4103184.45	99.64	29.5	120.4	
Sc	45	H2	458882.30	0.9	476452.62	96.31	29.5	120.4	
Sc	45	He	92887.88	0.9	95435.38	97.33	29.5	120.4	
Ge	72	No Gas	917103.21	3.5	904931.62	101.35	29.5	120.4	
Ge	72	H2	166067.68	1.5	172351.67	96.35	29.5	120.4	
Ge	72	He	71088.85	0.6	72380.83	98.22	29.5	120.4	
Y	89	H2	2919207.49	0.5	2964265.2	98.48	29.5	120.4	
Y	89	He	602301.45	0.8	618281.42	97.42	29.5	120.4	
Tb	159	No Gas	9375512.08	3.6	8714728.06	107.58	29.5	120.4	
Tb	159	He	3229330.85	0.2	3206480.02	100.71	29.5	120.4	
Bi	209	No Gas	4793704.26	3.8	4440413.54	107.96	29.5	120.4	

Sample Report

Sample Name SN5589-006

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:04:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.184	ppb	25.2	71.11	100	
11	B	6	No Gas	25.769	ppb	4.6	6303.81	1000	
23	Na	45	He	88691.257	ppb	1.2	2010369.46	200000	
24	Mg	45	He	4639.773	ppb	2.4	58698.80	200000	
27	Al	45	He	17.690	ppb	8.1	98.89	200000	
28	Si	45	H2	2759.921	ppb	1.3	24247.70	10000	
39	K	45	He	1651.116	ppb	2.5	29537.01	200000	
40	Ca	45	H2	15022.137	ppb	1.6	1226772.13	200000	
51	V	89	He	2.013	ppb	4.8	556.70	1000	
52	Cr	89	He	0.423	ppb	17.3	145.98	2000	
55	Mn	89	He	1.856	ppb	10.5	196.63	2000	
56	Fe	89	H2	16.908	ppb	5.5	7780.87	100000	
59	Co	89	He	0.317	ppb	44.8	128.90	1000	
60	Ni	89	He	2.028	ppb	22.7	263.35	1000	
63	Cu	89	He	0.088	ppb	107.7	454.47	2000	
66	Zn	89	He	2.394	ppb	12.0	154.45	2000	
75	As	89	He	1.204	ppb	18.0	43.34	1000	
78	Se	89	H2	0.293	ppb	27.9	5.50	1000	
88	Sr	89	He	67.173	ppb	1.7	10116.26	2000	
95	Mo	89	He	0.028	ppb	174.4	21.11	1000	
107	Ag	89	He	0.033	ppb	75.6	33.33	100	
111	Cd	89	He	0.065	ppb	23.0	5.56	1000	
118	Sn	159	He	0.849	ppb	10.7	204.45	1000	
121	Sb	159	No Gas	0.058	ppb	14.7	146.83	1000	
137	Ba	159	No Gas	5.650	ppb	8.8	3374.19	2000	
182	W	159	No Gas	0.106	ppb	18.4	146.83	1000	
205	Tl	209	No Gas	0.020	ppb	79.4	93.44	1000	
208	Pb	209	No Gas	0.075	ppb	26.7	433.82	2000	
232	Th	209	No Gas	0.058	ppb	28.1	313.69	1000	
238	U	209	No Gas	0.013	ppb	27.8	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1691476.96	2.2	1826145.95	92.63	29.5	120.4	
Sc	45	No Gas	4097809.18	2.2	4103184.45	99.87	29.5	120.4	
Sc	45	H2	455439.44	1.1	476452.62	95.59	29.5	120.4	
Sc	45	He	93436.04	0.9	95435.38	97.91	29.5	120.4	
Ge	72	No Gas	919826.94	2.6	904931.62	101.65	29.5	120.4	
Ge	72	H2	163856.58	1.1	172351.67	95.07	29.5	120.4	
Ge	72	He	71283.52	0.2	72380.83	98.48	29.5	120.4	
Y	89	H2	2907439.73	0.8	2964265.2	98.08	29.5	120.4	
Y	89	He	604837.99	0.1	618281.42	97.83	29.5	120.4	
Tb	159	No Gas	9450590.83	1.9	8714728.06	108.44	29.5	120.4	
Tb	159	He	3254859.40	0.2	3206480.02	101.51	29.5	120.4	
Bi	209	No Gas	4820493.19	2.2	4440413.54	108.56	29.5	120.4	

Sample Report

Sample Name SN5589-007

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:06:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.095	ppb	88.4	55.56	100	
11	B	6	No Gas	0.144	ppb	1535.8	2130.26	1000	
23	Na	45	He	3852.246	ppb	30.9	117183.07	200000	
24	Mg	45	He	3073.273	ppb	31.2	50759.24	200000	
27	Al	45	He	13.988	ppb	40.1	104.45	200000	
28	Si	45	H2	1042.675	ppb	42.3	14244.39	10000	
39	K	45	He	-321.189	ppb	N/A	10286.11	200000	
40	Ca	45	H2	3604.882	ppb	40.2	444739.93	200000	
51	V	89	He	-0.093	ppb	N/A	243.34	1000	
52	Cr	89	He	0.123	ppb	98.8	104.65	2000	
55	Mn	89	He	439.277	ppb	31.3	56842.57	2000	
56	Fe	89	H2	8688.166	ppb	44.4	4483976.40	100000	
59	Co	89	He	4.858	ppb	28.2	2307.06	1000	
60	Ni	89	He	13.050	ppb	32.8	1757.97	1000	
63	Cu	89	He	-0.907	ppb	N/A	218.90	2000	
66	Zn	89	He	19.377	ppb	31.5	1025.64	2000	
75	As	89	He	0.852	ppb	23.7	42.00	1000	
78	Se	89	H2	0.013	ppb	287.2	1.67	1000	
88	Sr	89	He	11.820	ppb	32.7	2295.88	2000	
95	Mo	89	He	0.013	ppb	509.2	24.44	1000	
107	Ag	89	He	0.000	ppb	N/A	17.78	100	
111	Cd	89	He	-0.002	ppb	N/A	0.74	1000	
118	Sn	159	He	0.297	ppb	40.2	143.34	1000	
121	Sb	159	No Gas	0.041	ppb	33.6	130.15	1000	
137	Ba	159	No Gas	0.539	ppb	48.1	360.41	2000	
182	W	159	No Gas	0.090	ppb	63.1	133.48	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.035	ppb	114.7	313.68	2000	
232	Th	209	No Gas	0.043	ppb	31.8	293.67	1000	
238	U	209	No Gas	0.002	ppb	181.2	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1955876.88	10.1	1826145.95	107.1	29.5	120.4	
Sc	45	No Gas	4531404.03	16.2	4103184.45	110.44	29.5	120.4	
Sc	45	H2	692643.97	12.0	476452.62	145.38	29.5	120.4	6020/DoD□ EPA
Sc	45	He	121765.93	5.9	95435.38	127.59	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	984676.54	18.2	904931.62	108.81	29.5	120.4	
Ge	72	H2	258997.93	12.1	172351.67	150.27	29.5	120.4	6020/DoD□ EPA
Ge	72	He	93201.12	5.3	72380.83	128.76	29.5	120.4	6020/DoD□ EPA
Y	89	H2	4563904.42	12.8	2964265.2	153.96	29.5	120.4	6020/DoD□ EPA
Y	89	He	783215.63	5.7	618281.42	126.68	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	10366268.39	16.6	8714728.06	118.95	29.5	120.4	
Tb	159	He	4193824.28	5.2	3206480.02	130.79	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	5299080.82	17.4	4440413.54	119.34	29.5	120.4	

Sample Report

Sample Name SN5589-007L

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:09:37 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.717	ppb	11.2	62.22	100	
11	B	6	No Gas	15.433	ppb	28.5	2435.85	1000	
23	Na	45	He	10721.774	ppb	1.1	52166.62	200000	
24	Mg	45	He	8517.461	ppb	3.6	22183.17	200000	
27	Al	45	He	25.559	ppb	64.4	38.89	200000	
28	Si	45	H2	3232.181	ppb	8.7	6141.52	10000	
39	K	45	He	295.369	ppb	38.6	12188.15	200000	
40	Ca	45	H2	11192.708	ppb	9.3	185886.50	200000	
51	V	89	He	6.739	ppb	22.2	444.47	1000	
52	Cr	89	He	1.124	ppb	7.5	103.98	2000	
55	Mn	89	He	1208.791	ppb	0.7	24500.11	2000	
56	Fe	89	H2	27857.553	ppb	9.2	1888308.45	100000	
59	Co	89	He	14.181	ppb	8.8	1060.13	1000	
60	Ni	89	He	39.008	ppb	6.3	847.84	1000	
63	Cu	89	He	-3.739	ppb	N/A	217.79	2000	
66	Zn	89	He	59.689	ppb	3.2	518.92	2000	
75	As	89	He	2.421	ppb	39.2	21.33	1000	
78	Se	89	H2	0.465	ppb	106.5	2.33	1000	
88	Sr	89	He	35.501	ppb	9.8	1083.42	2000	
95	Mo	89	He	0.197	ppb	127.5	23.33	1000	
107	Ag	89	He	0.039	ppb	181.2	18.89	100	
111	Cd	89	He	0.074	ppb	150.7	1.85	1000	
118	Sn	159	He	2.238	ppb	22.0	136.67	1000	
121	Sb	159	No Gas	0.249	ppb	43.5	133.48	1000	
137	Ba	159	No Gas	21.347	ppb	3.8	2553.10	2000	
182	W	159	No Gas	0.193	ppb	64.0	70.08	1000	
205	Tl	209	No Gas	0.033	ppb	53.9	60.07	1000	
208	Pb	209	No Gas	0.457	ppb	15.7	490.56	2000	
232	Th	209	No Gas	0.164	ppb	53.7	226.92	1000	
238	U	209	No Gas	0.030	ppb	26.4	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1740204.07	1.5	1826145.95	95.29	29.5	120.4	
Sc	45	No Gas	4180820.31	2.1	4103184.45	101.89	29.5	120.4	
Sc	45	H2	462792.72	6.9	476452.62	97.13	29.5	120.4	
Sc	45	He	94224.70	1.1	95435.38	98.73	29.5	120.4	
Ge	72	No Gas	937019.97	2.7	904931.62	103.55	29.5	120.4	
Ge	72	H2	167089.74	5.5	172351.67	96.95	29.5	120.4	
Ge	72	He	72385.40	0.7	72380.83	100.01	29.5	120.4	
Y	89	H2	2948511.59	6.5	2964265.2	99.47	29.5	120.4	
Y	89	He	610564.14	0.2	618281.42	98.75	29.5	120.4	
Tb	159	No Gas	9433278.47	2.4	8714728.06	108.25	29.5	120.4	
Tb	159	He	3257054.33	0.5	3206480.02	101.58	29.5	120.4	
Bi	209	No Gas	4827864.57	2.3	4440413.54	108.73	29.5	120.4	

Sample Report

Sample Name SN5589-007A

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:12:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.672	ppb	6.8	2882.61	100	
11	B	6	No Gas	225.261	ppb	5.3	41597.29	1000	
23	Na	45	He	20858.215	ppb	2.0	480938.94	200000	
24	Mg	45	He	9054.892	ppb	1.8	115254.61	200000	
27	Al	45	He	976.643	ppb	1.1	4744.28	200000	
28	Si	45	H2	8129.258	ppb	1.3	72382.61	10000	
39	K	45	He	10792.989	ppb	1.6	131312.70	200000	
40	Ca	45	H2	11501.077	ppb	1.7	965198.84	200000	
51	V	89	He	55.750	ppb	4.4	10056.15	1000	
52	Cr	89	He	52.956	ppb	1.4	11666.69	2000	
55	Mn	89	He	1195.858	ppb	2.5	121179.32	2000	
56	Fe	89	H2	27515.358	ppb	1.4	9413700.87	100000	
59	Co	89	He	24.123	ppb	4.3	8921.21	1000	
60	Ni	89	He	60.207	ppb	2.9	6131.55	1000	
63	Cu	89	He	33.562	ppb	3.4	10106.24	2000	
66	Zn	89	He	158.293	ppb	2.6	6087.10	2000	
75	As	89	He	56.783	ppb	1.7	1774.64	1000	
78	Se	89	H2	51.171	ppb	1.8	832.32	1000	
88	Sr	89	He	85.183	ppb	1.9	12954.33	2000	
95	Mo	89	He	53.253	ppb	3.5	9292.34	1000	
107	Ag	89	He	11.355	ppb	3.5	6788.61	100	
111	Cd	89	He	11.266	ppb	5.9	850.78	1000	
118	Sn	159	He	51.168	ppb	4.0	8767.62	1000	
121	Sb	159	No Gas	10.923	ppb	4.5	16806.02	1000	
137	Ba	159	No Gas	25.241	ppb	2.9	15018.57	2000	
182	W	159	No Gas	51.426	ppb	5.4	59207.51	1000	
205	Tl	209	No Gas	10.637	ppb	4.5	26530.47	1000	
208	Pb	209	No Gas	10.715	ppb	3.9	36962.32	2000	
232	Th	209	No Gas	10.463	ppb	3.7	36765.17	1000	
238	U	209	No Gas	10.437	ppb	8.3	34208.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1719206.71	2.6	1826145.95	94.14	29.5	120.4	
Sc	45	No Gas	4140203.03	2.6	4103184.45	100.9	29.5	120.4	
Sc	45	H2	467935.08	1.4	476452.62	98.21	29.5	120.4	
Sc	45	He	94566.79	1.5	95435.38	99.09	29.5	120.4	
Ge	72	No Gas	933511.79	2.3	904931.62	103.16	29.5	120.4	
Ge	72	H2	166968.29	0.6	172351.67	96.88	29.5	120.4	
Ge	72	He	72216.15	1.1	72380.83	99.77	29.5	120.4	
Y	89	H2	2967352.14	0.9	2964265.2	100.1	29.5	120.4	
Y	89	He	610848.95	1.4	618281.42	98.8	29.5	120.4	
Tb	159	No Gas	9465453.89	2.3	8714728.06	108.61	29.5	120.4	
Tb	159	He	3276217.00	1.2	3206480.02	102.17	29.5	120.4	
Bi	209	No Gas	4841589.29	2.4	4440413.54	109.03	29.5	120.4	

Sample Report

Sample Name SN5589-007S

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:14:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.985	ppb	4.9	13368.83	100	
11	B	6	No Gas	537.464	ppb	5.7	96287.99	1000	
23	Na	45	He	18264.266	ppb	0.0	414791.60	200000	
24	Mg	45	He	13682.467	ppb	0.7	171007.79	200000	
27	Al	45	He	1996.071	ppb	2.9	9523.47	200000	
28	Si	45	H2	4280.579	ppb	1.4	37413.48	10000	
39	K	45	He	10927.003	ppb	1.0	130666.77	200000	
40	Ca	45	H2	13495.265	ppb	0.7	1104544.95	200000	
51	V	89	He	536.987	ppb	0.5	94635.05	1000	
52	Cr	89	He	219.152	ppb	0.6	47883.19	2000	
55	Mn	89	He	1753.362	ppb	0.3	176852.67	2000	
56	Fe	89	H2	28568.858	ppb	0.5	9641769.66	100000	
59	Co	89	He	566.653	ppb	0.8	208295.85	1000	
60	Ni	89	He	583.759	ppb	0.6	58644.69	1000	
63	Cu	89	He	267.533	ppb	0.5	77188.73	2000	
66	Zn	89	He	581.154	ppb	0.3	22073.66	2000	
75	As	89	He	111.421	ppb	1.6	3460.15	1000	
78	Se	89	H2	104.177	ppb	2.1	1670.36	1000	
88	Sr	89	He	550.725	ppb	1.2	83325.92	2000	
95	Mo	89	He	108.628	ppb	1.4	18853.61	1000	
107	Ag	89	He	55.347	ppb	0.6	32880.53	100	
111	Cd	89	He	266.602	ppb	0.2	20023.77	1000	
118	Sn	159	He	512.440	ppb	0.4	86583.19	1000	
121	Sb	159	No Gas	101.837	ppb	6.3	157169.44	1000	
137	Ba	159	No Gas	2019.961	ppb	6.0	1207158.97	2000	
182	W	159	No Gas	102.845	ppb	5.6	119154.89	1000	
205	Tl	209	No Gas	104.570	ppb	6.2	260231.74	1000	
208	Pb	209	No Gas	103.436	ppb	5.8	354990.00	2000	
232	Th	209	No Gas	103.043	ppb	7.2	360712.41	1000	
238	U	209	No Gas	102.655	ppb	6.8	336316.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1712400.46	2.3	1826145.95	93.77	29.5	120.4	
Sc	45	No Gas	4137507.94	2.9	4103184.45	100.84	29.5	120.4	
Sc	45	H2	456378.35	0.6	476452.62	95.79	29.5	120.4	
Sc	45	He	93037.52	0.7	95435.38	97.49	29.5	120.4	
Ge	72	No Gas	934614.42	3.2	904931.62	103.28	29.5	120.4	
Ge	72	H2	162754.75	1.4	172351.67	94.43	29.5	120.4	
Ge	72	He	71839.38	0.9	72380.83	99.25	29.5	120.4	
Y	89	H2	2927028.62	0.6	2964265.2	98.74	29.5	120.4	
Y	89	He	607905.72	0.5	618281.42	98.32	29.5	120.4	
Tb	159	No Gas	9528895.34	2.8	8714728.06	109.34	29.5	120.4	
Tb	159	He	3250104.26	1.0	3206480.02	101.36	29.5	120.4	
Bi	209	No Gas	4840000.40	2.8	4440413.54	109	29.5	120.4	

Sample Report

Sample Name SN5589-007P

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:17:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.850	ppb	5.4	13517.83	100	
11	B	6	No Gas	524.045	ppb	6.6	95224.28	1000	
23	Na	45	He	17553.953	ppb	0.7	406257.18	200000	
24	Mg	45	He	13301.553	ppb	0.6	169385.76	200000	
27	Al	45	He	1962.877	ppb	2.7	9541.27	200000	
28	Si	45	H2	4219.096	ppb	1.2	37889.21	10000	
39	K	45	He	10646.226	ppb	0.7	129996.64	200000	
40	Ca	45	H2	13027.585	ppb	1.1	1095452.61	200000	
51	V	89	He	524.502	ppb	1.7	94058.80	1000	
52	Cr	89	He	209.895	ppb	0.1	46668.03	2000	
55	Mn	89	He	1697.181	ppb	0.4	174187.85	2000	
56	Fe	89	H2	27419.839	ppb	1.6	9465903.70	100000	
59	Co	89	He	548.626	ppb	0.4	205216.23	1000	
60	Ni	89	He	571.512	ppb	0.8	58423.82	1000	
63	Cu	89	He	261.354	ppb	1.0	76736.53	2000	
66	Zn	89	He	561.630	ppb	0.9	21708.68	2000	
75	As	89	He	107.906	ppb	2.0	3409.79	1000	
78	Se	89	H2	101.883	ppb	1.2	1671.19	1000	
88	Sr	89	He	541.866	ppb	0.2	83427.34	2000	
95	Mo	89	He	106.838	ppb	0.9	18868.11	1000	
107	Ag	89	He	54.040	ppb	1.2	32666.82	100	
111	Cd	89	He	261.794	ppb	0.3	20007.82	1000	
118	Sn	159	He	504.529	ppb	1.0	86502.85	1000	
121	Sb	159	No Gas	100.996	ppb	7.9	156594.93	1000	
137	Ba	159	No Gas	1988.478	ppb	6.8	1194092.85	2000	
182	W	159	No Gas	102.412	ppb	5.8	119242.86	1000	
205	Tl	209	No Gas	102.613	ppb	6.7	256498.15	1000	
208	Pb	209	No Gas	102.383	ppb	6.2	352957.48	2000	
232	Th	209	No Gas	100.945	ppb	7.4	354926.34	1000	
238	U	209	No Gas	99.714	ppb	8.3	328041.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1736795.74	3.1	1826145.95	95.11	29.5	120.4	
Sc	45	No Gas	4186295.63	3.7	4103184.45	102.03	29.5	120.4	
Sc	45	H2	468861.91	0.4	476452.62	98.41	29.5	120.4	
Sc	45	He	94784.49	0.8	95435.38	99.32	29.5	120.4	
Ge	72	No Gas	945177.61	3.0	904931.62	104.45	29.5	120.4	
Ge	72	H2	167383.95	0.1	172351.67	97.12	29.5	120.4	
Ge	72	He	72318.00	0.4	72380.83	99.91	29.5	120.4	
Y	89	H2	2994244.97	0.9	2964265.2	101.01	29.5	120.4	
Y	89	He	618581.65	0.7	618281.42	100.05	29.5	120.4	
Tb	159	No Gas	9579972.98	3.6	8714728.06	109.93	29.5	120.4	
Tb	159	He	3298086.65	0.6	3206480.02	102.86	29.5	120.4	
Bi	209	No Gas	4863570.06	3.5	4440413.54	109.53	29.5	120.4	

Sample Report

Sample Name SN5589-008

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:20:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.227	ppb	25.0	82.22	100	
11	B	6	No Gas	33.022	ppb	5.6	7522.22	1000	
23	Na	45	He	10708.662	ppb	3.5	247569.29	200000	
24	Mg	45	He	8439.014	ppb	3.5	107058.43	200000	
27	Al	45	He	24.216	ppb	7.9	131.12	200000	
28	Si	45	H2	3086.159	ppb	2.4	27824.68	10000	
39	K	45	He	616.318	ppb	10.8	18341.81	200000	
40	Ca	45	H2	6049.520	ppb	0.7	508776.38	200000	
51	V	89	He	2.486	ppb	10.3	644.49	1000	
52	Cr	89	He	0.443	ppb	27.5	151.31	2000	
55	Mn	89	He	865.127	ppb	3.7	87430.49	2000	
56	Fe	89	H2	13542.279	ppb	0.6	4681200.25	100000	
59	Co	89	He	23.871	ppb	5.5	8803.39	1000	
60	Ni	89	He	43.562	ppb	4.6	4440.87	1000	
63	Cu	89	He	-0.092	ppb	N/A	405.58	2000	
66	Zn	89	He	46.769	ppb	3.4	1840.19	2000	
75	As	89	He	1.883	ppb	13.2	64.68	1000	
78	Se	89	H2	0.263	ppb	17.0	5.17	1000	
88	Sr	89	He	20.400	ppb	1.1	3098.23	2000	
95	Mo	89	He	0.148	ppb	30.9	42.22	1000	
107	Ag	89	He	0.028	ppb	94.7	31.11	100	
111	Cd	89	He	0.187	ppb	15.1	14.82	1000	
118	Sn	159	He	1.401	ppb	13.6	297.79	1000	
121	Sb	159	No Gas	0.168	ppb	22.7	320.36	1000	
137	Ba	159	No Gas	12.638	ppb	3.8	7650.75	2000	
182	W	159	No Gas	0.243	ppb	9.7	310.35	1000	
205	Tl	209	No Gas	0.114	ppb	8.8	330.38	1000	
208	Pb	209	No Gas	0.151	ppb	31.0	700.80	2000	
232	Th	209	No Gas	0.313	ppb	16.8	1218.11	1000	
238	U	209	No Gas	0.115	ppb	37.5	383.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682778.14	2.5	1826145.95	92.15	29.5	120.4	
Sc	45	No Gas	4190036.19	3.0	4103184.45	102.12	29.5	120.4	
Sc	45	H2	468403.32	0.6	476452.62	98.31	29.5	120.4	
Sc	45	He	94242.96	2.3	95435.38	98.75	29.5	120.4	
Ge	72	No Gas	950935.57	3.3	904931.62	105.08	29.5	120.4	
Ge	72	H2	167172.87	1.7	172351.67	97	29.5	120.4	
Ge	72	He	72359.05	1.2	72380.83	99.97	29.5	120.4	
Y	89	H2	2997184.68	0.6	2964265.2	101.11	29.5	120.4	
Y	89	He	609335.22	1.9	618281.42	98.55	29.5	120.4	
Tb	159	No Gas	9616054.37	2.8	8714728.06	110.34	29.5	120.4	
Tb	159	He	3258454.78	2.0	3206480.02	101.62	29.5	120.4	
Bi	209	No Gas	4869074.21	2.4	4440413.54	109.65	29.5	120.4	

Sample Report

Sample Name SN5589-009

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:23:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.210	ppb	33.1	75.56	100	
11	B	6	No Gas	17.445	ppb	8.7	4727.60	1000	
23	Na	45	He	12765.380	ppb	1.1	297220.12	200000	
24	Mg	45	He	5945.670	ppb	0.8	76344.42	200000	
27	Al	45	He	214.579	ppb	11.5	1060.08	200000	
28	Si	45	H2	3086.344	ppb	1.8	28018.64	10000	
39	K	45	He	820.482	ppb	3.8	20789.10	200000	
40	Ca	45	H2	7329.076	ppb	1.3	620349.65	200000	
51	V	89	He	3.029	ppb	6.8	744.49	1000	
52	Cr	89	He	3.364	ppb	6.0	795.22	2000	
55	Mn	89	He	36.064	ppb	2.2	3677.83	2000	
56	Fe	89	H2	106.769	ppb	3.3	38968.55	100000	
59	Co	89	He	0.846	ppb	17.3	326.70	1000	
60	Ni	89	He	14.246	ppb	7.6	1503.47	1000	
63	Cu	89	He	0.232	ppb	62.8	502.25	2000	
66	Zn	89	He	10.054	ppb	9.3	448.91	2000	
75	As	89	He	0.865	ppb	12.0	33.33	1000	
78	Se	89	H2	0.446	ppb	52.4	8.17	1000	
88	Sr	89	He	33.338	ppb	1.5	5090.02	2000	
95	Mo	89	He	0.160	ppb	36.9	44.45	1000	
107	Ag	89	He	0.023	ppb	94.0	27.78	100	
111	Cd	89	He	0.118	ppb	52.3	9.63	1000	
118	Sn	159	He	1.126	ppb	10.4	253.34	1000	
121	Sb	159	No Gas	0.076	ppb	19.7	170.19	1000	
137	Ba	159	No Gas	4.634	ppb	11.6	2696.63	2000	
182	W	159	No Gas	0.692	ppb	15.2	797.58	1000	
205	Tl	209	No Gas	0.011	ppb	62.9	70.08	1000	
208	Pb	209	No Gas	0.228	ppb	9.5	931.06	2000	
232	Th	209	No Gas	0.081	ppb	12.3	383.77	1000	
238	U	209	No Gas	0.027	ppb	8.4	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1646894.90	3.1	1826145.95	90.18	29.5	120.4	
Sc	45	No Gas	4044549.12	4.9	4103184.45	98.57	29.5	120.4	
Sc	45	H2	471579.94	0.4	476452.62	98.98	29.5	120.4	
Sc	45	He	95077.09	1.2	95435.38	99.62	29.5	120.4	
Ge	72	No Gas	912189.32	3.1	904931.62	100.8	29.5	120.4	
Ge	72	H2	166316.04	0.2	172351.67	96.5	29.5	120.4	
Ge	72	He	72804.99	0.6	72380.83	100.59	29.5	120.4	
Y	89	H2	2989761.04	0.6	2964265.2	100.86	29.5	120.4	
Y	89	He	612939.57	0.4	618281.42	99.14	29.5	120.4	
Tb	159	No Gas	9214216.04	4.3	8714728.06	105.73	29.5	120.4	
Tb	159	He	3281611.48	0.4	3206480.02	102.34	29.5	120.4	
Bi	209	No Gas	4695257.96	4.7	4440413.54	105.74	29.5	120.4	

Sample Report

Sample Name SN5646-001

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:25:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	31.7	50.00	100	
11	B	6	No Gas	25.614	ppb	9.6	6219.34	1000	
23	Na	45	He	10762.333	ppb	1.1	251097.65	200000	
24	Mg	45	He	28028.405	ppb	1.5	357200.52	200000	
27	Al	45	He	11.426	ppb	34.2	70.00	200000	
28	Si	45	H2	3099.041	ppb	2.8	27774.60	10000	
39	K	45	He	742.458	ppb	3.7	19919.91	200000	
40	Ca	45	H2	26110.948	ppb	1.3	2179634.95	200000	
51	V	89	He	2.503	ppb	11.1	652.26	1000	
52	Cr	89	He	0.500	ppb	8.6	165.30	2000	
55	Mn	89	He	1282.284	ppb	0.7	130672.23	2000	
56	Fe	89	H2	6653.269	ppb	2.1	2295192.43	100000	
59	Co	89	He	11.103	ppb	0.2	4136.46	1000	
60	Ni	89	He	22.493	ppb	2.5	2342.50	1000	
63	Cu	89	He	-0.430	ppb	N/A	311.13	2000	
66	Zn	89	He	17.757	ppb	7.8	744.50	2000	
75	As	89	He	4.599	ppb	6.1	150.35	1000	
78	Se	89	H2	0.100	ppb	80.1	2.50	1000	
88	Sr	89	He	84.428	ppb	0.7	12909.83	2000	
95	Mo	89	He	0.128	ppb	67.9	38.89	1000	
107	Ag	89	He	0.015	ppb	63.5	23.34	100	
111	Cd	89	He	0.044	ppb	18.9	4.07	1000	
118	Sn	159	He	1.241	ppb	18.7	272.23	1000	
121	Sb	159	No Gas	0.040	ppb	26.0	120.14	1000	
137	Ba	159	No Gas	12.501	ppb	6.2	7520.49	2000	
182	W	159	No Gas	0.070	ppb	16.3	106.79	1000	
205	Tl	209	No Gas	0.015	ppb	84.9	80.09	1000	
208	Pb	209	No Gas	0.227	ppb	15.7	951.08	2000	
232	Th	209	No Gas	0.039	ppb	35.1	246.95	1000	
238	U	209	No Gas	0.020	ppb	12.7	70.08	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1677232.41	2.8	1826145.95	91.85	29.5	120.4	
Sc	45	No Gas	4187609.02	3.2	4103184.45	102.06	29.5	120.4	
Sc	45	H2	465726.53	1.7	476452.62	97.75	29.5	120.4	
Sc	45	He	95077.00	0.9	95435.38	99.62	29.5	120.4	
Ge	72	No Gas	929165.88	1.1	904931.62	102.68	29.5	120.4	
Ge	72	H2	168323.83	0.7	172351.67	97.66	29.5	120.4	
Ge	72	He	72872.33	0.4	72380.83	100.68	29.5	120.4	
Y	89	H2	2990184.51	1.5	2964265.2	100.87	29.5	120.4	
Y	89	He	614180.36	0.6	618281.42	99.34	29.5	120.4	
Tb	159	No Gas	9557014.79	2.8	8714728.06	109.67	29.5	120.4	
Tb	159	He	3273453.98	0.2	3206480.02	102.09	29.5	120.4	
Bi	209	No Gas	4814161.28	2.8	4440413.54	108.42	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:28:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.253	ppb	4.9	32971.74	25	97.01	89.8	110.2	
11	B	6	No Gas	24.050	ppb	4.0	23391.73	25	96.2	89.8	110.2	
23	Na	45	He	5123.142	ppb	1.9	600494.13	5000	102.46	89.8	110.2	
24	Mg	45	He	4918.002	ppb	0.4	317389.33	5000	98.36	89.8	110.2	
27	Al	45	He	485.574	ppb	0.6	11982.11	500	97.11	89.8	110.2	
28	Si	45	H2	476.944	ppb	1.3	22034.80	500	95.39	89.8	110.2	
39	K	45	He	4919.428	ppb	0.3	289579.38	5000	98.39	89.8	110.2	
40	Ca	45	H2	4960.355	ppb	1.6	2122593.09	5000	99.21	89.8	110.2	
51	V	89	He	25.251	ppb	0.8	22957.13	25	101	89.8	110.2	
52	Cr	89	He	25.064	ppb	0.3	28076.63	25	100.26	89.8	110.2	
55	Mn	89	He	25.467	ppb	1.4	13168.41	25	101.87	89.8	110.2	
56	Fe	89	H2	4881.745	ppb	0.9	8488690.68	5000	97.63	89.8	110.2	
59	Co	89	He	25.714	ppb	0.7	48430.79	25	102.86	89.8	110.2	
60	Ni	89	He	25.269	ppb	2.7	13053.18	25	101.08	89.8	110.2	
63	Cu	89	He	24.920	ppb	0.8	37065.62	25	99.68	89.8	110.2	
66	Zn	89	He	24.997	ppb	1.0	4915.51	25	99.99	89.8	110.2	
75	As	89	He	25.023	ppb	0.6	3979.68	25	100.09	89.8	110.2	
78	Se	89	H2	24.529	ppb	2.6	2026.22	25	98.12	89.8	110.2	
88	Sr	89	He	23.995	ppb	0.2	18600.99	25	95.98	89.8	110.2	
95	Mo	89	He	25.240	ppb	2.0	22435.77	25	100.96	89.8	110.2	
107	Ag	89	He	25.604	ppb	0.4	77899.25	25	102.42	89.8	110.2	
111	Cd	89	He	25.369	ppb	1.0	9760.63	25	101.48	89.8	110.2	
118	Sn	159	He	23.931	ppb	2.2	20456.13	25	95.72	89.8	110.2	
121	Sb	159	No Gas	23.751	ppb	6.5	182344.02	25	95	89.8	110.2	
137	Ba	159	No Gas	24.300	ppb	5.7	72279.24	25	97.2	89.8	110.2	
182	W	159	No Gas	23.375	ppb	6.3	134704.33	25	93.5	89.8	110.2	
205	Tl	209	No Gas	24.145	ppb	4.1	299076.35	25	96.58	89.8	110.2	
208	Pb	209	No Gas	24.024	ppb	6.4	410053.26	25	96.1	89.8	110.2	
232	Th	209	No Gas	23.202	ppb	6.2	404093.52	25	92.81	89.8	110.2	
238	U	209	No Gas	23.623	ppb	5.5	385110.90	25	94.49	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1742468.05	2.1	1826145.95	95.42	29.5	120.4	
Sc	45	No Gas	4287474.67	3.9	4103184.45	104.49	29.5	120.4	
Sc	45	H2	477443.71	1.1	476452.62	100.21	29.5	120.4	
Sc	45	He	96257.64	1.0	95435.38	100.86	29.5	120.4	
Ge	72	No Gas	943836.11	1.8	904931.62	104.3	29.5	120.4	
Ge	72	H2	171220.97	0.4	172351.67	99.34	29.5	120.4	
Ge	72	He	73674.35	0.8	72380.83	101.79	29.5	120.4	
Y	89	H2	3016134.23	0.7	2964265.2	101.75	29.5	120.4	
Y	89	He	622798.02	0.1	618281.42	100.73	29.5	120.4	
Tb	159	No Gas	9485873.47	3.9	8714728.06	108.85	29.5	120.4	
Tb	159	He	3280888.49	0.4	3206480.02	102.32	29.5	120.4	
Bi	209	No Gas	4817701.80	4.0	4440413.54	108.5	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:31:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.057	ppb	23.0	103.34	0.2	
11	B	6	No Gas	0.526	ppb	11.9	2410.28	4	
23	Na	45	He	9.402	ppb	15.8	4402.27	200	
24	Mg	45	He	2.348	ppb	101.1	884.54	20	
27	Al	45	He	0.261	ppb	30.9	21.11	20	
28	Si	45	H2	-1.699	ppb	N/A	447.17	100	
39	K	45	He	-4.476	ppb	N/A	11551.21	200	
40	Ca	45	H2	1.792	ppb	36.6	1850.19	20	
51	V	89	He	0.101	ppb	11.8	302.24	1	
52	Cr	89	He	0.002	ppb	528.9	58.66	1	
55	Mn	89	He	0.043	ppb	22.6	32.66	0.4	
56	Fe	89	H2	1.996	ppb	10.6	5640.73	20	
59	Co	89	He	0.001	ppb	493.4	15.56	0.2	
60	Ni	89	He	-0.008	ppb	N/A	58.89	0.4	
63	Cu	89	He	-0.203	ppb	N/A	143.34	0.6	
66	Zn	89	He	0.077	ppb	122.1	81.11	2	
75	As	89	He	-0.007	ppb	N/A	5.33	1	
78	Se	89	H2	0.032	ppb	32.0	3.50	1	
88	Sr	89	He	0.006	ppb	156.3	8.89	1	
95	Mo	89	He	0.062	ppb	26.0	72.23	1	
107	Ag	89	He	0.005	ppb	76.9	30.00	0.2	
111	Cd	89	He	0.002	ppb	84.7	1.48	0.2	
118	Sn	159	He	0.038	ppb	30.3	93.34	1	
121	Sb	159	No Gas	0.017	ppb	37.7	180.20	0.2	
137	Ba	159	No Gas	0.009	ppb	62.1	50.05	0.4	
182	W	159	No Gas	0.045	ppb	34.9	276.98	1	
205	Tl	209	No Gas	0.023	ppb	26.8	320.36	0.2	
208	Pb	209	No Gas	0.017	ppb	15.3	463.85	0.2	
232	Th	209	No Gas	0.036	ppb	17.3	734.18	1	
238	U	209	No Gas	0.018	ppb	7.5	290.33	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1783312.32	2.0	1826145.95	97.65	29.5	120.4	
Sc	45	No Gas	4211234.94	2.6	4103184.45	102.63	29.5	120.4	
Sc	45	H2	476186.15	1.9	476452.62	99.94	29.5	120.4	
Sc	45	He	96442.17	0.9	95435.38	101.05	29.5	120.4	
Ge	72	No Gas	933110.74	2.6	904931.62	103.11	29.5	120.4	
Ge	72	H2	170685.11	1.3	172351.67	99.03	29.5	120.4	
Ge	72	He	72864.50	0.9	72380.83	100.67	29.5	120.4	
Y	89	H2	3004438.13	1.0	2964265.2	101.36	29.5	120.4	
Y	89	He	622991.61	1.1	618281.42	100.76	29.5	120.4	
Tb	159	No Gas	9261176.18	3.2	8714728.06	106.27	29.5	120.4	
Tb	159	He	3263356.41	1.2	3206480.02	101.77	29.5	120.4	
Bi	209	No Gas	4738925.68	3.3	4440413.54	106.72	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG15IMW2
File Name	055_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:33:43 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.192	ppb	14.2	76.67	0.5	
B	11	6	No Gas	0.238	ppb	356.2	1954.65	10	
Na	23	45	He	85.445	ppb	18.1	5213.42	500	
Mg	24	45	He	16.657	ppb	7.3	931.20	50	
Al	27	45	He	20.822	ppb	5.4	115.56	50	
Si	28	45	H2	-0.037	ppb	N/A	517.25	250	
K	39	45	He	-16.832	ppb	N/A	11416.15	500	
Ca	40	45	H2	21.522	ppb	10.5	2885.96	50	
V	51	89	He	2.341	ppb	20.8	623.37	2.5	
Cr	52	89	He	0.360	ppb	33.3	134.64	2.5	
Mn	55	89	He	0.433	ppb	22.6	54.66	1	
Fe	56	89	H2	6.434	ppb	18.9	4365.54	50	
Co	59	89	He	0.000	ppb	29101.3	13.33	0.5	
Ni	60	89	He	0.004	ppb	2020.7	62.23	1	
Cu	63	89	He	-0.526	ppb	N/A	283.35	1.5	
Zn	66	89	He	1.549	ppb	54.7	124.45	5	
As	75	89	He	0.118	ppb	25.6	10.00	2.5	
Se	78	89	H2	0.143	ppb	89.7	3.17	2.5	
Sr	88	89	He	0.044	ppb	125.1	11.11	2.5	
Mo	95	89	He	0.007	ppb	417.0	17.78	2.5	
Ag	107	89	He	0.000	ppb	8195.4	14.44	0.5	
Cd	111	89	He	0.025	ppb	92.2	2.59	0.5	
Sn	118	159	He	0.753	ppb	52.4	188.90	2.5	
Sb	121	159	No Gas	0.037	ppb	36.6	113.46	0.5	
Ba	137	159	No Gas	0.081	ppb	81.1	73.42	1	
W	182	159	No Gas	0.049	ppb	51.3	80.09	2.5	
Tl	205	209	No Gas	0.000	ppb	956.3	43.38	0.5	
Pb	208	209	No Gas	0.045	ppb	10.1	327.03	0.5	
Th	232	209	No Gas	0.136	ppb	37.9	573.99	2.5	
U	238	209	No Gas	0.008	ppb	73.1	30.03	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1768535.43	3.4	1826145.95	96.85	29.5	120.4	
Sc	45	No Gas	4187053.78	3.5	4103184.45	102.04	29.5	120.4	
Sc	45	H2	469975.66	0.3	476452.62	98.64	29.5	120.4	
Sc	45	He	94810.53	1.2	95435.38	99.35	29.5	120.4	
Ge	72	No Gas	929969.51	3.3	904931.62	102.77	29.5	120.4	
Ge	72	H2	165730.08	0.4	172351.67	96.16	29.5	120.4	
Ge	72	He	71981.92	0.9	72380.83	99.45	29.5	120.4	
Y	89	H2	2969651.53	1.1	2964265.2	100.18	29.5	120.4	
Y	89	He	614445.50	1.0	618281.42	99.38	29.5	120.4	
Tb	159	No Gas	9339213.06	3.5	8714728.06	107.17	29.5	120.4	
Tb	159	He	3265856.31	1.1	3206480.02	101.85	29.5	120.4	
Bi	209	No Gas	4750590.74	3.0	4440413.54	106.99	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG15IMW2
File Name	056LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:36:17 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.751	ppb	7.9	13110.79	50	19.1	79.5	120.4	
B	11	6	No Gas	494.143	ppb	7.0	91050.95	500	19.77	79.5	120.4	
Na	23	45	He	7824.990	ppb	1.2	183684.43	7500	20.87	79.5	120.4	
Mg	24	45	He	5335.004	ppb	0.6	68662.56	5000	21.34	79.5	120.4	
Al	27	45	He	1969.950	ppb	2.9	9618.00	2000	19.7	79.5	120.4	
Si	28	45	H2	1051.618	ppb	8.9	9907.82	1000	21.03	0	200	
K	39	45	He	10421.471	ppb	0.8	128052.35	10000	20.84	79.5	120.4	
Ca	40	45	H2	2676.593	ppb	0.7	227654.92	2500	21.41	79.5	120.4	
V	51	89	He	537.846	ppb	0.3	96473.05	500	21.51	79.5	120.4	
Cr	52	89	He	217.058	ppb	1.7	48269.11	200	21.71	79.5	120.4	
Mn	55	89	He	539.038	ppb	0.3	55342.29	500	21.56	79.5	120.4	
Fe	56	89	H2	1086.572	ppb	0.3	378358.95	1000	21.73	79.5	120.4	
Co	59	89	He	549.145	ppb	1.2	205442.17	500	21.97	79.5	120.4	
Ni	60	89	He	549.141	ppb	1.3	56149.04	500	21.97	79.5	120.4	
Cu	63	89	He	268.492	ppb	1.1	78837.09	250	21.48	79.5	120.4	
Zn	66	89	He	529.955	ppb	1.7	20492.38	500	21.2	79.5	120.4	
As	75	89	He	106.546	ppb	2.0	3367.44	100	21.31	79.5	120.4	
Se	78	89	H2	104.529	ppb	2.2	1719.53	100	20.91	79.5	120.4	
Sr	88	89	He	522.336	ppb	1.0	80436.71	500	20.89	79.5	120.4	
Mo	95	89	He	109.851	ppb	0.9	19403.25	100	21.97	79.5	120.4	
Ag	107	89	He	54.897	ppb	1.4	33193.56	50	21.96	79.5	120.4	
Cd	111	89	He	268.439	ppb	1.1	20518.95	250	21.48	79.5	120.4	
Sn	118	159	He	512.997	ppb	0.7	87406.61	500	20.52	79.5	120.4	
Sb	121	159	No Gas	98.480	ppb	8.7	151964.15	100	19.7	79.5	120.4	
Ba	137	159	No Gas	1955.930	ppb	8.2	1168752.47	2000	19.56	79.5	120.4	
W	182	159	No Gas	98.743	ppb	8.7	114360.90	100	19.75	79.5	120.4	
Tl	205	209	No Gas	101.235	ppb	8.9	251247.40	100	20.25	79.5	120.4	
[Pb]	206	209	No Gas	102.865	ppb	8.2	88577.82	100	20.57	79.5	120.4	
[Pb]	207	209	No Gas	102.134	ppb	8.2	76437.56	100	20.43	79.5	120.4	
Pb	208	209	No Gas	101.661	ppb	7.6	348013.27	100	20.33	79.5	120.4	
Th	232	209	No Gas	98.349	ppb	9.1	343381.43	100	19.67	79.5	120.4	
U	238	209	No Gas	98.344	ppb	10.5	321251.21	100	19.67	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1758892.31	2.7	1826145.95	96.32	29.5	120.4	
Sc	45	No Gas	4233722.69	3.2	4103184.45	103.18	29.5	120.4	
Sc	45	H2	472483.18	1.3	476452.62	99.17	29.5	120.4	
Sc	45	He	95193.16	0.9	95435.38	99.75	29.5	120.4	
Ge	72	No Gas	936456.52	1.6	904931.62	103.48	29.5	120.4	
Ge	72	H2	168125.72	1.4	172351.67	97.55	29.5	120.4	
Ge	72	He	72452.79	0.6	72380.83	100.1	29.5	120.4	
Y	89	H2	3003143.17	0.8	2964265.2	101.31	29.5	120.4	
Y	89	He	618710.23	0.7	618281.42	100.07	29.5	120.4	
Tb	159	No Gas	9533323.61	3.2	8714728.06	109.39	29.5	120.4	
Tb	159	He	3277357.63	0.6	3206480.02	102.21	29.5	120.4	
Bi	209	No Gas	4830483.23	3.2	4440413.54	108.78	29.5	120.4	

Sample Report

Sample Name SN5734-003

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:39:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.202	ppb	17.8	76.67	100	
11	B	6	No Gas	52.229	ppb	3.6	10993.45	1000	
23	Na	45	He	61630.369	ppb	0.6	1429338.49	200000	
24	Mg	45	He	4351.996	ppb	0.9	56342.92	200000	
27	Al	45	He	18.378	ppb	17.0	104.45	200000	
28	Si	45	H2	2966.187	ppb	3.8	26908.70	10000	
39	K	45	He	1690.928	ppb	2.6	30647.35	200000	
40	Ca	45	H2	15323.446	ppb	1.1	1293887.25	200000	
51	V	89	He	2.150	ppb	8.0	592.26	1000	
52	Cr	89	He	0.368	ppb	19.2	136.64	2000	
55	Mn	89	He	3.349	ppb	0.8	353.27	2000	
56	Fe	89	H2	18.204	ppb	4.3	8478.68	100000	
59	Co	89	He	0.894	ppb	20.1	346.70	1000	
60	Ni	89	He	5.885	ppb	8.6	661.15	1000	
63	Cu	89	He	0.379	ppb	25.8	547.81	2000	
66	Zn	89	He	6.796	ppb	11.7	326.68	2000	
75	As	89	He	0.563	ppb	40.2	24.00	1000	
78	Se	89	H2	0.477	ppb	44.7	8.67	1000	
88	Sr	89	He	74.756	ppb	1.7	11478.55	2000	
95	Mo	89	He	0.165	ppb	35.4	45.56	1000	
107	Ag	89	He	0.133	ppb	5.9	94.45	100	
111	Cd	89	He	0.068	ppb	33.2	5.93	1000	
118	Sn	159	He	1.184	ppb	13.0	263.34	1000	
121	Sb	159	No Gas	0.132	ppb	38.8	260.30	1000	
137	Ba	159	No Gas	3.429	ppb	7.8	2072.49	2000	
182	W	159	No Gas	0.244	ppb	26.2	307.01	1000	
205	Tl	209	No Gas	0.106	ppb	28.3	303.68	1000	
208	Pb	209	No Gas	0.105	ppb	9.8	537.27	2000	
232	Th	209	No Gas	0.373	ppb	5.2	1411.66	1000	
238	U	209	No Gas	0.074	ppb	17.6	243.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706256.38	2.2	1826145.95	93.43	29.5	120.4	
Sc	45	No Gas	4235224.87	3.0	4103184.45	103.22	29.5	120.4	
Sc	45	H2	470864.72	0.6	476452.62	98.83	29.5	120.4	
Sc	45	He	95527.67	0.3	95435.38	100.1	29.5	120.4	
Ge	72	No Gas	946276.20	1.9	904931.62	104.57	29.5	120.4	
Ge	72	H2	167576.28	0.9	172351.67	97.23	29.5	120.4	
Ge	72	He	72836.27	0.8	72380.83	100.63	29.5	120.4	
Y	89	H2	3000989.53	1.1	2964265.2	101.24	29.5	120.4	
Y	89	He	616730.88	0.4	618281.42	99.75	29.5	120.4	
Tb	159	No Gas	9520607.36	3.0	8714728.06	109.25	29.5	120.4	
Tb	159	He	3284104.92	0.2	3206480.02	102.42	29.5	120.4	
Bi	209	No Gas	4813607.66	3.2	4440413.54	108.4	29.5	120.4	

Sample Report

Sample Name SN5734-004

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:41:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.191	ppb	32.6	72.22	100	
11	B	6	No Gas	44.114	ppb	3.6	9363.34	1000	
23	Na	45	He	52444.266	ppb	0.6	1203519.97	200000	
24	Mg	45	He	13431.722	ppb	0.9	170502.70	200000	
27	Al	45	He	737.738	ppb	1.2	3583.92	200000	
28	Si	45	H2	4903.919	ppb	3.8	43839.60	10000	
39	K	45	He	1112.998	ppb	3.4	23907.54	200000	
40	Ca	45	H2	27988.152	ppb	1.2	2346286.06	200000	
51	V	89	He	4.025	ppb	1.7	925.62	1000	
52	Cr	89	He	4.621	ppb	5.4	1077.18	2000	
55	Mn	89	He	167.278	ppb	1.8	17108.59	2000	
56	Fe	89	H2	2067.716	ppb	0.9	716631.75	100000	
59	Co	89	He	2.978	ppb	7.0	1122.35	1000	
60	Ni	89	He	15.617	ppb	2.1	1650.15	1000	
63	Cu	89	He	2.652	ppb	5.7	1207.88	2000	
66	Zn	89	He	18.031	ppb	6.4	757.83	2000	
75	As	89	He	0.849	ppb	22.6	33.00	1000	
78	Se	89	H2	0.903	ppb	19.5	15.67	1000	
88	Sr	89	He	105.411	ppb	0.9	16169.96	2000	
95	Mo	89	He	0.260	ppb	27.3	62.23	1000	
107	Ag	89	He	0.125	ppb	25.7	90.00	100	
111	Cd	89	He	0.116	ppb	61.9	9.63	1000	
118	Sn	159	He	1.120	ppb	8.6	252.23	1000	
121	Sb	159	No Gas	0.090	ppb	24.8	193.55	1000	
137	Ba	159	No Gas	8.327	ppb	3.0	4893.05	2000	
182	W	159	No Gas	0.685	ppb	5.0	800.93	1000	
205	Tl	209	No Gas	0.020	ppb	73.4	90.10	1000	
208	Pb	209	No Gas	0.702	ppb	10.7	2512.91	2000	
232	Th	209	No Gas	0.307	ppb	18.4	1151.34	1000	
238	U	209	No Gas	0.055	ppb	8.3	176.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1668327.14	0.7	1826145.95	91.36	29.5	120.4	
Sc	45	No Gas	4105023.05	0.8	4103184.45	100.04	29.5	120.4	
Sc	45	H2	467700.17	0.8	476452.62	98.16	29.5	120.4	
Sc	45	He	94488.14	0.7	95435.38	99.01	29.5	120.4	
Ge	72	No Gas	922440.93	1.9	904931.62	101.93	29.5	120.4	
Ge	72	H2	167577.61	0.3	172351.67	97.23	29.5	120.4	
Ge	72	He	73064.94	1.3	72380.83	100.95	29.5	120.4	
Y	89	H2	2997458.47	1.0	2964265.2	101.12	29.5	120.4	
Y	89	He	616127.50	1.3	618281.42	99.65	29.5	120.4	
Tb	159	No Gas	9310441.04	1.0	8714728.06	106.84	29.5	120.4	
Tb	159	He	3278758.04	0.8	3206480.02	102.25	29.5	120.4	
Bi	209	No Gas	4691955.59	1.6	4440413.54	105.66	29.5	120.4	

Sample Report

Sample Name SN5734-005

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:44:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.106	ppb	74.3	51.11	100	
11	B	6	No Gas	19.730	ppb	3.3	5275.59	1000	
23	Na	45	He	22387.166	ppb	0.4	520329.85	200000	
24	Mg	45	He	8995.994	ppb	1.4	115473.60	200000	
27	Al	45	He	33.433	ppb	11.5	177.78	200000	
28	Si	45	H2	4373.546	ppb	2.0	39441.83	10000	
39	K	45	He	781.466	ppb	4.5	20413.80	200000	
40	Ca	45	H2	13741.354	ppb	0.9	1160906.12	200000	
51	V	89	He	2.444	ppb	8.2	642.26	1000	
52	Cr	89	He	0.615	ppb	20.7	190.63	2000	
55	Mn	89	He	1266.874	ppb	1.0	129120.05	2000	
56	Fe	89	H2	554.845	ppb	1.3	194266.73	100000	
59	Co	89	He	14.959	ppb	1.3	5570.38	1000	
60	Ni	89	He	38.966	ppb	2.6	4012.95	1000	
63	Cu	89	He	0.114	ppb	46.2	468.92	2000	
66	Zn	89	He	41.923	ppb	4.4	1670.17	2000	
75	As	89	He	0.150	ppb	24.1	11.00	1000	
78	Se	89	H2	0.151	ppb	11.8	3.33	1000	
88	Sr	89	He	121.462	ppb	0.7	18574.23	2000	
95	Mo	89	He	0.058	ppb	56.4	26.66	1000	
107	Ag	89	He	-0.002	ppb	N/A	13.33	100	
111	Cd	89	He	0.673	ppb	12.6	51.85	1000	
118	Sn	159	He	0.730	ppb	12.3	185.56	1000	
121	Sb	159	No Gas	-0.008	ppb	N/A	46.72	1000	
137	Ba	159	No Gas	8.298	ppb	3.3	5026.56	2000	
182	W	159	No Gas	0.046	ppb	95.9	80.09	1000	
205	Tl	209	No Gas	0.020	ppb	38.2	93.44	1000	
208	Pb	209	No Gas	0.043	ppb	67.4	327.04	2000	
232	Th	209	No Gas	0.045	ppb	46.8	270.30	1000	
238	U	209	No Gas	0.012	ppb	41.7	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1697711.04	3.2	1826145.95	92.97	29.5	120.4	
Sc	45	No Gas	4234492.42	3.9	4103184.45	103.2	29.5	120.4	
Sc	45	H2	471086.45	0.9	476452.62	98.87	29.5	120.4	
Sc	45	He	95353.03	0.8	95435.38	99.91	29.5	120.4	
Ge	72	No Gas	948377.56	1.4	904931.62	104.8	29.5	120.4	
Ge	72	H2	168331.77	0.4	172351.67	97.67	29.5	120.4	
Ge	72	He	72632.69	0.8	72380.83	100.35	29.5	120.4	
Y	89	H2	3002967.00	0.5	2964265.2	101.31	29.5	120.4	
Y	89	He	614300.89	1.2	618281.42	99.36	29.5	120.4	
Tb	159	No Gas	9606529.79	3.7	8714728.06	110.23	29.5	120.4	
Tb	159	He	3276648.91	0.9	3206480.02	102.19	29.5	120.4	
Bi	209	No Gas	4870043.31	4.1	4440413.54	109.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG16IMS1
File Name	060_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:47:01 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.086	ppb	41.6	45.56	0.5	
B	11	6	No Gas	2.386	ppb	40.0	2261.37	10	
Na	23	45	He	114.642	ppb	8.2	5857.69	500	
Mg	24	45	He	30.511	ppb	15.9	1102.35	50	
Al	27	45	He	28.740	ppb	7.2	153.34	50	
Si	28	45	H2	5.414	ppb	172.4	570.64	250	
K	39	45	He	21.231	ppb	145.3	11794.66	500	
Ca	40	45	H2	56.214	ppb	9.3	5839.19	50	PB 6020 Fails DoD
V	51	89	He	3.019	ppb	4.8	744.49	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.893	ppb	12.0	251.96	2.5	
Mn	55	89	He	2.021	ppb	5.9	216.63	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	30.594	ppb	2.6	12836.79	50	
Co	59	89	He	0.060	ppb	68.5	35.56	0.5	
Ni	60	89	He	1.078	ppb	11.2	171.12	1	PB 6020 Fails DoD
Cu	63	89	He	0.320	ppb	57.9	528.92	1.5	
Zn	66	89	He	5.262	ppb	6.4	266.68	5	PB 6020 Fails DoD
As	75	89	He	0.171	ppb	56.2	11.67	2.5	
Se	78	89	H2	0.090	ppb	100.6	2.33	2.5	
Sr	88	89	He	0.095	ppb	74.2	18.89	2.5	
Mo	95	89	He	0.064	ppb	16.2	27.78	2.5	
Ag	107	89	He	0.011	ppb	186.3	21.11	0.5	
Cd	111	89	He	0.020	ppb	74.9	2.22	0.5	
Sn	118	159	He	46.831	ppb	1.5	8023.77	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.027	ppb	69.4	100.11	0.5	
Ba	137	159	No Gas	0.396	ppb	4.4	263.63	1	
W	182	159	No Gas	0.070	ppb	30.3	106.79	2.5	
Tl	205	209	No Gas	0.018	ppb	61.8	90.11	0.5	
Pb	208	209	No Gas	0.177	ppb	25.3	794.23	0.5	
Th	232	209	No Gas	0.037	ppb	42.8	246.94	2.5	
U	238	209	No Gas	0.006	ppb	79.3	23.36	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706835.72	3.2	1826145.95	93.47	29.5	120.4	
Sc	45	No Gas	4218224.48	4.4	4103184.45	102.8	29.5	120.4	
Sc	45	H2	473063.93	2.4	476452.62	99.29	29.5	120.4	
Sc	45	He	94429.00	0.1	95435.38	98.95	29.5	120.4	
Ge	72	No Gas	937492.79	2.0	904931.62	103.6	29.5	120.4	
Ge	72	H2	167126.56	1.0	172351.67	96.97	29.5	120.4	
Ge	72	He	72065.02	0.4	72380.83	99.56	29.5	120.4	
Y	89	H2	3018102.40	1.8	2964265.2	101.82	29.5	120.4	
Y	89	He	614535.09	0.4	618281.42	99.39	29.5	120.4	
Tb	159	No Gas	9586538.88	4.5	8714728.06	110	29.5	120.4	
Tb	159	He	3273166.72	0.9	3206480.02	102.08	29.5	120.4	
Bi	209	No Gas	4903841.79	4.3	4440413.54	110.44	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG16IMS1
File Name	061LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:49:44 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.003	ppb	5.7	13242.04	50	19.6	79.5	120.4	
B	11	6	No Gas	496.768	ppb	6.5	90060.39	500	19.87	79.5	120.4	
Na	23	45	He	7784.008	ppb	2.6	181524.84	7500	20.76	79.5	120.4	
Mg	24	45	He	5270.288	ppb	2.5	67383.84	5000	21.08	79.5	120.4	
Al	27	45	He	1932.053	ppb	5.1	9366.72	2000	19.32	79.5	120.4	
Si	28	45	H2	912.562	ppb	3.8	8712.31	1000	18.25	79.5	120.4	
K	39	45	He	10272.104	ppb	2.4	125535.92	10000	20.54	79.5	120.4	
Ca	40	45	H2	2581.092	ppb	1.5	220756.36	2500	20.65	79.5	120.4	
V	51	89	He	522.668	ppb	2.4	93006.55	500	20.91	79.5	120.4	
Cr	52	89	He	212.588	ppb	2.9	46896.05	200	21.26	79.5	120.4	
Mn	55	89	He	531.471	ppb	2.2	54130.60	500	21.26	79.5	120.4	
Fe	56	89	H2	1056.119	ppb	1.4	369089.76	1000	21.12	79.5	120.4	
Co	59	89	He	540.062	ppb	2.6	200431.19	500	21.6	79.5	120.4	
Ni	60	89	He	543.168	ppb	1.8	55099.30	500	21.73	79.5	120.4	
Cu	63	89	He	264.060	ppb	1.7	76928.77	250	21.12	79.5	120.4	
Zn	66	89	He	518.036	ppb	3.3	19870.33	500	20.72	79.5	120.4	
As	75	89	He	104.348	ppb	2.6	3272.75	100	20.87	79.5	120.4	
Se	78	89	H2	102.056	ppb	2.0	1684.86	100	20.41	79.5	120.4	
Sr	88	89	He	506.096	ppb	2.5	77310.91	500	20.24	79.5	120.4	
Mo	95	89	He	107.708	ppb	1.5	18874.62	100	21.54	79.5	120.4	
Ag	107	89	He	53.677	ppb	3.4	32192.27	50	21.47	79.5	120.4	
Cd	111	89	He	260.212	ppb	2.2	19731.89	250	20.82	79.5	120.4	
Sn	118	159	He	540.671	ppb	3.3	92182.14	500	21.63	79.5	120.4	
Sb	121	159	No Gas	98.793	ppb	6.5	154060.99	100	19.76	79.5	120.4	
Ba	137	159	No Gas	1962.127	ppb	5.7	1184883.79	2000	19.62	79.5	120.4	
W	182	159	No Gas	99.513	ppb	7.1	116445.76	100	19.9	79.5	120.4	
Tl	205	209	No Gas	102.592	ppb	6.7	257235.40	100	20.52	79.5	120.4	
[Pb]	206	209	No Gas	102.903	ppb	7.1	89496.32	100	20.58	79.5	120.4	
[Pb]	207	209	No Gas	101.092	ppb	6.9	76420.42	100	20.22	79.5	120.4	
Pb	208	209	No Gas	102.308	ppb	6.6	353735.88	100	20.46	79.5	120.4	
Th	232	209	No Gas	98.964	ppb	6.9	349066.90	100	19.79	79.5	120.4	
U	238	209	No Gas	99.041	ppb	7.7	326872.83	100	19.81	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1730514.36	2.7	1826145.95	94.76	29.5	120.4	
Sc	45	No Gas	4228169.74	3.3	4103184.45	103.05	29.5	120.4	
Sc	45	H2	475024.55	0.6	476452.62	99.7	29.5	120.4	
Sc	45	He	94574.97	1.7	95435.38	99.1	29.5	120.4	
Ge	72	No Gas	946516.30	1.4	904931.62	104.6	29.5	120.4	
Ge	72	H2	169040.37	1.2	172351.67	98.08	29.5	120.4	
Ge	72	He	72095.70	1.6	72380.83	99.61	29.5	120.4	
Y	89	H2	3013631.73	0.3	2964265.2	101.67	29.5	120.4	
Y	89	He	613875.85	1.4	618281.42	99.29	29.5	120.4	
Tb	159	No Gas	9629708.19	3.4	8714728.06	110.5	29.5	120.4	
Tb	159	He	3280704.88	1.6	3206480.02	102.31	29.5	120.4	
Bi	209	No Gas	4878487.01	3.6	4440413.54	109.87	29.5	120.4	

Sample Report

Sample Name SN5594-002

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:52:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.203	ppb	42.2	77.78	100	
11	B	6	No Gas	1890.085	ppb	2.4	336554.16	1000	
23	Na	45	He	17890.640	ppb	1.0	417035.05	200000	
24	Mg	45	He	36.775	ppb	30.3	1193.47	200000	
27	Al	45	He	111.337	ppb	8.3	558.92	200000	
28	Si	45	H2	190.559	ppb	15.3	2259.36	10000	
39	K	45	He	1685.778	ppb	2.5	30572.05	200000	
40	Ca	45	H2	197.043	ppb	0.2	18074.29	200000	
51	V	89	He	2.489	ppb	10.3	653.37	1000	
52	Cr	89	He	1.787	ppb	7.5	451.26	2000	
55	Mn	89	He	5.479	ppb	4.9	571.91	2000	
56	Fe	89	H2	240.529	ppb	0.7	86082.34	100000	
59	Co	89	He	0.381	ppb	10.1	155.57	1000	
60	Ni	89	He	7.775	ppb	1.0	854.50	1000	
63	Cu	89	He	104.694	ppb	0.8	30940.50	2000	
66	Zn	89	He	201.315	ppb	2.4	7806.91	2000	
75	As	89	He	0.360	ppb	40.5	17.67	1000	
78	Se	89	H2	0.179	ppb	20.0	3.83	1000	
88	Sr	89	He	0.803	ppb	15.7	127.78	2000	
95	Mo	89	He	57.021	ppb	1.4	10057.39	1000	
107	Ag	89	He	0.147	ppb	3.3	103.34	100	
111	Cd	89	He	0.170	ppb	10.5	13.70	1000	
118	Sn	159	He	51.193	ppb	3.6	8788.75	1000	
121	Sb	159	No Gas	0.791	ppb	5.1	1271.47	1000	
137	Ba	159	No Gas	4.902	ppb	7.8	2940.32	2000	
182	W	159	No Gas	0.213	ppb	42.6	270.31	1000	
205	Tl	209	No Gas	0.142	ppb	26.2	397.12	1000	
208	Pb	209	No Gas	556.500	ppb	0.9	1913585.20	2000	
232	Th	209	No Gas	0.516	ppb	9.4	1922.30	1000	
238	U	209	No Gas	0.074	ppb	12.8	246.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1724367.05	0.5	1826145.95	94.43	29.5	120.4	
Sc	45	No Gas	4187509.18	0.6	4103184.45	102.06	29.5	120.4	
Sc	45	H2	480828.49	0.7	476452.62	100.92	29.5	120.4	
Sc	45	He	95487.50	1.4	95435.38	100.05	29.5	120.4	
Ge	72	No Gas	944348.98	0.4	904931.62	104.36	29.5	120.4	
Ge	72	H2	172051.90	0.4	172351.67	99.83	29.5	120.4	
Ge	72	He	72898.52	0.8	72380.83	100.72	29.5	120.4	
Y	89	H2	3025242.45	0.5	2964265.2	102.06	29.5	120.4	
Y	89	He	617340.38	0.8	618281.42	99.85	29.5	120.4	
Tb	159	No Gas	9470396.04	0.2	8714728.06	108.67	29.5	120.4	
Tb	159	He	3281887.70	0.8	3206480.02	102.35	29.5	120.4	
Bi	209	No Gas	4846220.37	0.2	4440413.54	109.14	29.5	120.4	

Sample Report

Sample Name SN5594-003

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 6:54:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.093	ppb	12.4	48.89	100	
11	B	6	No Gas	40.406	ppb	3.3	9186.56	1000	
23	Na	45	He	357.674	ppb	8.1	11487.34	200000	
24	Mg	45	He	342.645	ppb	3.1	5076.82	200000	
27	Al	45	He	37.438	ppb	5.5	196.68	200000	
28	Si	45	H2	60.231	ppb	24.2	1054.56	10000	
39	K	45	He	-10.255	ppb	N/A	11517.82	200000	
40	Ca	45	H2	2594.704	ppb	0.4	220198.96	200000	
51	V	89	He	3.644	ppb	3.7	856.72	1000	
52	Cr	89	He	2.244	ppb	13.2	550.58	2000	
55	Mn	89	He	4.506	ppb	5.9	470.59	2000	
56	Fe	89	H2	197.374	ppb	1.4	70273.63	100000	
59	Co	89	He	0.149	ppb	65.9	68.89	1000	
60	Ni	89	He	2.290	ppb	9.8	294.46	1000	
63	Cu	89	He	131.747	ppb	1.2	38694.49	2000	
66	Zn	89	He	3969.642	ppb	0.4	152225.86	2000	
75	As	89	He	0.277	ppb	76.0	15.00	1000	
78	Se	89	H2	0.141	ppb	45.1	3.17	1000	
88	Sr	89	He	1.429	ppb	5.1	223.35	2000	
95	Mo	89	He	36.576	ppb	1.0	6436.20	1000	
107	Ag	89	He	0.043	ppb	51.7	40.00	100	
111	Cd	89	He	2.490	ppb	10.6	190.00	1000	
118	Sn	159	He	43.222	ppb	3.5	7451.22	1000	
121	Sb	159	No Gas	0.079	ppb	20.2	183.54	1000	
137	Ba	159	No Gas	13.301	ppb	6.6	8118.25	2000	
182	W	159	No Gas	0.088	ppb	10.6	130.15	1000	
205	Tl	209	No Gas	0.029	ppb	27.1	120.13	1000	
208	Pb	209	No Gas	1734.759	ppb	6.0	6163875.47	2000	
232	Th	209	No Gas	0.125	ppb	24.2	567.32	1000	
238	U	209	No Gas	0.092	ppb	17.8	313.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1755383.59	2.6	1826145.95	96.13	29.5	120.4	
Sc	45	No Gas	4254647.99	3.2	4103184.45	103.69	29.5	120.4	
Sc	45	H2	471326.36	1.0	476452.62	98.92	29.5	120.4	
Sc	45	He	95022.09	1.1	95435.38	99.57	29.5	120.4	
Ge	72	No Gas	943542.67	1.9	904931.62	104.27	29.5	120.4	
Ge	72	H2	164111.06	1.4	172351.67	95.22	29.5	120.4	
Ge	72	He	71493.53	0.4	72380.83	98.77	29.5	120.4	
Y	89	H2	2993013.35	0.6	2964265.2	100.97	29.5	120.4	
Y	89	He	615290.79	0.4	618281.42	99.52	29.5	120.4	
Tb	159	No Gas	9700792.01	2.5	8714728.06	111.31	29.5	120.4	
Tb	159	He	3291081.17	0.1	3206480.02	102.64	29.5	120.4	
Bi	209	No Gas	5014558.81	3.3	4440413.54	112.93	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW1
File Name	064_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 6:57:34 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.012	ppb	91.5	40.00	0.1	
B	11	6	No Gas	1.110	ppb	4.8	2861.49	2	
Na	23	45	He	10.636	ppb	22.2	4532.42	100	
Mg	24	45	He	2.951	ppb	19.2	920.10	10	
Al	27	45	He	3.619	ppb	32.5	103.34	10	
Si	28	45	H2	-0.468	ppb	N/A	507.24	50	
K	39	45	He	-8.592	ppb	N/A	11289.44	100	
Ca	40	45	H2	5.109	ppb	6.6	3291.61	10	
V	51	89	He	0.171	ppb	14.8	362.24	0.5	
Cr	52	89	He	0.030	ppb	37.2	88.65	0.5	
Mn	55	89	He	0.110	ppb	22.8	67.32	0.2	
Fe	56	89	H2	0.792	ppb	19.1	3567.76	10	
Co	59	89	He	0.012	ppb	90.5	35.56	0.1	
Ni	60	89	He	-0.011	ppb	N/A	56.67	0.2	
Cu	63	89	He	-0.142	ppb	N/A	232.23	0.3	
Zn	66	89	He	0.468	ppb	52.1	155.56	1	
As	75	89	He	-0.004	ppb	N/A	5.67	0.5	
Se	78	89	H2	0.002	ppb	720.0	1.00	0.5	
Sr	88	89	He	0.085	ppb	25.3	70.01	0.5	
Mo	95	89	He	0.015	ppb	40.8	30.00	0.5	
Ag	107	89	He	-0.001	ppb	N/A	11.11	0.1	
Cd	111	89	He	0.000	ppb	7216.7	0.74	0.1	
Sn	118	159	He	0.084	ppb	45.9	132.23	0.5	
Sb	121	159	No Gas	0.001	ppb	307.8	63.41	0.1	
Ba	137	159	No Gas	2.978	ppb	5.0	8933.07	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.006	ppb	51.7	60.07	0.5	
Tl	205	209	No Gas	0.000	ppb	1458.2	46.72	0.1	
[Pb]	206	209	No Gas	0.292	ppb	24.8	1311.54	0.1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
[Pb]	207	209	No Gas	0.285	ppb	14.3	1117.97	0.1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Pb	208	209	No Gas	0.282	ppb	19.2	5022.67	0.1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Th	232	209	No Gas	0.005	ppb	53.7	196.89	0.5	
U	238	209	No Gas	0.001	ppb	161.1	20.02	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1732394.02	1.0	1826145.95	94.87	29.5	120.4	
Sc	45	No Gas	4211900.45	1.4	4103184.45	102.65	29.5	120.4	
Sc	45	H2	479999.67	2.2	476452.62	100.74	29.5	120.4	
Sc	45	He	96261.89	3.2	95435.38	100.87	29.5	120.4	
Ge	72	No Gas	940136.20	2.8	904931.62	103.89	29.5	120.4	
Ge	72	H2	171138.67	1.2	172351.67	99.3	29.5	120.4	
Ge	72	He	72606.23	2.7	72380.83	100.31	29.5	120.4	
Y	89	H2	3014008.54	1.6	2964265.2	101.68	29.5	120.4	
Y	89	He	618792.13	2.3	618281.42	100.08	29.5	120.4	
Tb	159	No Gas	9527850.35	1.9	8714728.06	109.33	29.5	120.4	
Tb	159	He	3281591.62	2.0	3206480.02	102.34	29.5	120.4	
Bi	209	No Gas	4840424.42	1.6	4440413.54	109.01	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:00:14 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.824	ppb	3.6	33617.60	25	99.3	89.8	110.2	
11	B	6	No Gas	25.094	ppb	3.2	24229.83	25	100.38	89.8	110.2	
23	Na	45	He	5079.708	ppb	1.5	597273.25	5000	101.59	89.8	110.2	
24	Mg	45	He	4920.822	ppb	1.7	318531.62	5000	98.42	89.8	110.2	
27	Al	45	He	488.967	ppb	1.0	12102.20	500	97.79	89.8	110.2	
28	Si	45	H2	485.559	ppb	1.0	22606.17	500	97.11	89.8	110.2	
39	K	45	He	4905.496	ppb	1.2	289658.42	5000	98.11	89.8	110.2	
40	Ca	45	H2	4928.758	ppb	0.3	2126179.71	5000	98.58	89.8	110.2	
51	V	89	He	24.869	ppb	2.1	22595.49	25	99.48	89.8	110.2	
52	Cr	89	He	25.065	ppb	1.3	28056.04	25	100.26	89.8	110.2	
55	Mn	89	He	25.080	ppb	1.3	12958.29	25	100.32	89.8	110.2	
56	Fe	89	H2	4855.012	ppb	0.1	8472995.62	5000	97.1	89.8	110.2	
59	Co	89	He	25.323	ppb	0.3	47657.42	25	101.29	89.8	110.2	
60	Ni	89	He	25.347	ppb	1.1	13083.21	25	101.39	89.8	110.2	
63	Cu	89	He	24.771	ppb	0.2	36818.23	25	99.08	89.8	110.2	
66	Zn	89	He	25.321	ppb	4.4	4974.41	25	101.28	89.8	110.2	
75	As	89	He	24.731	ppb	2.6	3930.33	25	98.92	89.8	110.2	
78	Se	89	H2	24.229	ppb	0.9	2008.72	25	96.92	89.8	110.2	
88	Sr	89	He	23.973	ppb	0.6	18569.83	25	95.89	89.8	110.2	
95	Mo	89	He	25.080	ppb	1.7	22276.55	25	100.32	89.8	110.2	
107	Ag	89	He	25.231	ppb	1.4	76703.78	25	100.92	89.8	110.2	
111	Cd	89	He	24.884	ppb	0.8	9566.81	25	99.54	89.8	110.2	
118	Sn	159	He	23.916	ppb	0.6	20520.69	25	95.66	89.8	110.2	
121	Sb	159	No Gas	24.414	ppb	3.3	183047.12	25	97.66	89.8	110.2	
137	Ba	159	No Gas	25.307	ppb	1.4	73510.61	25	101.23	89.8	110.2	
182	W	159	No Gas	23.986	ppb	4.3	134980.51	25	95.94	89.8	110.2	
205	Tl	209	No Gas	25.028	ppb	1.3	300262.18	25	100.11	89.8	110.2	
208	Pb	209	No Gas	25.161	ppb	2.4	416191.08	25	100.64	89.8	110.2	
232	Th	209	No Gas	24.316	ppb	3.0	410358.41	25	97.26	89.8	110.2	
238	U	209	No Gas	24.756	ppb	2.3	391013.95	25	99.02	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1734914.32	0.9	1826145.95	95	29.5	120.4	
Sc	45	No Gas	4135382.01	0.9	4103184.45	100.78	29.5	120.4	
Sc	45	H2	481268.30	1.2	476452.62	101.01	29.5	120.4	
Sc	45	He	96551.04	0.9	95435.38	101.17	29.5	120.4	
Ge	72	No Gas	922120.42	0.7	904931.62	101.9	29.5	120.4	
Ge	72	H2	171931.49	1.2	172351.67	99.76	29.5	120.4	
Ge	72	He	73561.81	0.2	72380.83	101.63	29.5	120.4	
Y	89	H2	3027034.92	0.9	2964265.2	102.12	29.5	120.4	
Y	89	He	622325.16	0.3	618281.42	100.65	29.5	120.4	
Tb	159	No Gas	9251096.25	1.5	8714728.06	106.15	29.5	120.4	
Tb	159	He	3293479.12	0.6	3206480.02	102.71	29.5	120.4	
Bi	209	No Gas	4661451.39	0.9	4440413.54	104.98	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:02:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.071	ppb	43.7	122.23	0.2	
11	B	6	No Gas	0.796	ppb	18.8	2645.89	4	
23	Na	45	He	6.212	ppb	49.2	4028.37	200	
24	Mg	45	He	2.049	ppb	17.8	864.53	20	
27	Al	45	He	0.261	ppb	119.1	21.11	20	
28	Si	45	H2	0.715	ppb	207.6	567.31	100	
39	K	45	He	-5.820	ppb	N/A	11477.81	200	
40	Ca	45	H2	1.110	ppb	41.6	1590.15	20	
51	V	89	He	0.080	ppb	66.3	283.35	1	
52	Cr	89	He	0.015	ppb	43.1	72.66	1	
55	Mn	89	He	0.005	ppb	318.0	13.33	0.4	
56	Fe	89	H2	1.282	ppb	37.3	4449.01	20	
59	Co	89	He	0.008	ppb	68.6	28.89	0.2	
60	Ni	89	He	-0.040	ppb	N/A	42.23	0.4	
63	Cu	89	He	-0.183	ppb	N/A	173.34	0.6	
66	Zn	89	He	0.041	ppb	201.0	74.45	2	
75	As	89	He	0.010	ppb	225.1	8.00	1	
78	Se	89	H2	0.042	ppb	42.8	4.33	1	
88	Sr	89	He	0.001	ppb	492.0	5.56	1	
95	Mo	89	He	0.044	ppb	34.6	55.56	1	
107	Ag	89	He	0.006	ppb	93.1	32.22	0.2	
111	Cd	89	He	0.004	ppb	130.1	2.22	0.2	
118	Sn	159	He	0.033	ppb	16.2	88.89	1	
121	Sb	159	No Gas	0.027	ppb	30.1	260.29	0.2	
137	Ba	159	No Gas	0.040	ppb	39.1	140.16	0.4	
182	W	159	No Gas	0.060	ppb	20.4	357.07	1	
205	Tl	209	No Gas	0.024	ppb	26.4	333.71	0.2	
208	Pb	209	No Gas	0.067	ppb	5.2	1281.46	0.2	
232	Th	209	No Gas	0.065	ppb	31.7	1218.09	1	
238	U	209	No Gas	0.036	ppb	43.6	574.00	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1775364.94	1.1	1826145.95	97.22	29.5	120.4	
Sc	45	No Gas	4182305.75	0.7	4103184.45	101.93	29.5	120.4	
Sc	45	H2	485205.03	1.1	476452.62	101.84	29.5	120.4	
Sc	45	He	96451.40	0.9	95435.38	101.06	29.5	120.4	
Ge	72	No Gas	927127.09	0.8	904931.62	102.45	29.5	120.4	
Ge	72	H2	173041.07	0.8	172351.67	100.4	29.5	120.4	
Ge	72	He	73570.24	0.9	72380.83	101.64	29.5	120.4	
Y	89	H2	3038305.10	1.0	2964265.2	102.5	29.5	120.4	
Y	89	He	624507.59	1.4	618281.42	101.01	29.5	120.4	
Tb	159	No Gas	9169023.96	0.8	8714728.06	105.21	29.5	120.4	
Tb	159	He	3260999.50	1.4	3206480.02	101.7	29.5	120.4	
Bi	209	No Gas	4688421.48	1.2	4440413.54	105.59	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW1
File Name	067_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:05:35 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High
Be	9	6	No Gas	49.625	ppb	5.7	14444.35	50	19.85	79.5	120.4
B	11	6	No Gas	971.376	ppb	5.1	187792.20	500	38.86	79.5	120.4
Na	23	45	He	15544.439	ppb	0.8	367284.17	7500	41.45	79.5	120.4
Mg	24	45	He	10775.120	ppb	0.3	140079.92	5000	43.1	79.5	120.4
Al	27	45	He	1961.119	ppb	1.2	9722.52	2000	19.61	79.5	120.4
Si	28	45	H2	2158.283	ppb	1.2	20086.41	1000	43.17	79.5	120.4
K	39	45	He	21011.929	ppb	0.8	250146.50	10000	42.02	79.5	120.4
Ca	40	45	H2	5327.437	ppb	1.2	458938.94	2500	42.62	79.5	120.4
V	51	89	He	532.626	ppb	1.0	96512.12	500	21.31	79.5	120.4
Cr	52	89	He	213.493	ppb	0.2	47963.45	200	21.35	79.5	120.4
Mn	55	89	He	538.314	ppb	1.1	55832.85	500	21.53	79.5	120.4
Fe	56	89	H2	1081.788	ppb	1.5	379256.76	1000	21.64	79.5	120.4
Co	59	89	He	545.764	ppb	0.8	206272.10	500	21.83	79.5	120.4
Ni	60	89	He	548.645	ppb	0.9	56674.22	500	21.95	79.5	120.4
Cu	63	89	He	263.810	ppb	0.4	78264.79	250	21.1	79.5	120.4
Zn	66	89	He	529.648	ppb	2.2	20688.16	500	21.19	79.5	120.4
As	75	89	He	214.746	ppb	0.5	6850.44	100	42.95	79.5	120.4
Se	78	89	H2	210.160	ppb	1.2	3480.28	100	42.03	79.5	120.4
Sr	88	89	He	1038.216	ppb	1.0	161517.74	500	41.53	79.5	120.4
Mo	95	89	He	212.172	ppb	0.3	37845.32	100	42.43	79.5	120.4
Ag	107	89	He	54.414	ppb	1.8	33240.46	50	21.77	79.5	120.4
Cd	111	89	He	537.527	ppb	0.8	41510.40	250	43	79.5	120.4
Sn	118	159	He	1037.555	ppb	0.7	177397.21	500	41.5	79.5	120.4
Sb	121	159	No Gas	204.294	ppb	5.4	308097.63	100	40.86	79.5	120.4
Ba	137	159	No Gas	2024.321	ppb	4.5	1182492.03	2000	20.24	79.5	120.4
W	182	159	No Gas	202.648	ppb	4.9	229422.42	100	40.53	79.5	120.4
Tl	205	209	No Gas	207.665	ppb	6.0	501926.20	100	41.53	79.5	120.4
Pb	208	209	No Gas	208.153	ppb	4.9	693795.80	100	41.63	79.5	120.4
Th	232	209	No Gas	203.984	ppb	5.9	693564.25	100	40.8	79.5	120.4
U	238	209	No Gas	203.337	ppb	7.0	646954.70	100	40.67	79.5	120.4

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)

Laboratory Control Sample (LCS) Report

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)
> +/- 20% (6020)□ > +/- 15% (EPA)
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> +/- 20% (6020)□ > +/- 15% (EPA)

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1863970.52	2.7	1826145.95	102.07	29.5	120.4	
Sc	45	No Gas	4244921.81	3.2	4103184.45	103.45	29.5	120.4	
Sc	45	H2	479669.87	0.8	476452.62	100.68	29.5	120.4	
Sc	45	He	96666.51	0.4	95435.38	101.29	29.5	120.4	
Ge	72	No Gas	935442.20	2.3	904931.62	103.37	29.5	120.4	
Ge	72	H2	172541.19	1.7	172351.67	100.11	29.5	120.4	
Ge	72	He	73662.10	0.8	72380.83	101.77	29.5	120.4	
Y	89	H2	3023827.29	0.9	2964265.2	102.01	29.5	120.4	
Y	89	He	625046.44	0.7	618281.42	101.09	29.5	120.4	
Tb	159	No Gas	9312272.43	3.1	8714728.06	106.86	29.5	120.4	
Tb	159	He	3290025.16	0.8	3206480.02	102.61	29.5	120.4	
Bi	209	No Gas	4701976.39	3.4	4440413.54	105.89	29.5	120.4	

Sample Report

Sample Name SN5778-001

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:08:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	25.6	66.67	100	
11	B	6	No Gas	38.003	ppb	3.6	36646.05	1000	
23	Na	45	He	19737.592	ppb	1.1	2279370.83	200000	
24	Mg	45	He	1613.962	ppb	1.0	103520.33	200000	
27	Al	45	He	35.081	ppb	7.9	870.06	200000	
28	Si	45	H2	1453.391	ppb	2.8	65542.47	10000	
39	K	45	He	3353.661	ppb	1.4	198987.83	200000	
40	Ca	45	H2	8469.839	ppb	1.5	3594486.92	200000	
51	V	89	He	0.167	ppb	29.3	360.02	1000	
52	Cr	89	He	0.125	ppb	14.8	195.30	2000	
55	Mn	89	He	7.658	ppb	0.5	3957.19	2000	
56	Fe	89	H2	31.546	ppb	0.3	56797.42	100000	
59	Co	89	He	0.106	ppb	19.6	213.35	1000	
60	Ni	89	He	0.470	ppb	19.4	303.35	1000	
63	Cu	89	He	2.504	ppb	2.2	4111.86	2000	
66	Zn	89	He	6.372	ppb	6.1	1299.00	2000	
75	As	89	He	0.236	ppb	16.6	43.67	1000	
78	Se	89	H2	0.089	ppb	35.8	8.17	1000	
88	Sr	89	He	33.599	ppb	1.1	25979.75	2000	
95	Mo	89	He	0.232	ppb	3.0	222.23	1000	
107	Ag	89	He	0.002	ppb	115.3	21.11	100	
111	Cd	89	He	0.015	ppb	23.7	6.30	1000	
118	Sn	159	He	0.482	ppb	12.3	472.25	1000	
121	Sb	159	No Gas	0.079	ppb	13.6	647.41	1000	
137	Ba	159	No Gas	2.817	ppb	10.4	8178.37	2000	
182	W	159	No Gas	0.085	ppb	13.9	503.91	1000	
205	Tl	209	No Gas	0.023	ppb	30.2	320.36	1000	
208	Pb	209	No Gas	0.148	ppb	12.1	2636.41	2000	
232	Th	209	No Gas	0.068	ppb	2.4	1268.17	1000	
238	U	209	No Gas	0.060	ppb	18.3	954.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1780286.89	2.5	1826145.95	97.49	29.5	120.4	
Sc	45	No Gas	4225901.33	3.4	4103184.45	102.99	29.5	120.4	
Sc	45	H2	473659.37	1.8	476452.62	99.41	29.5	120.4	
Sc	45	He	95218.87	0.6	95435.38	99.77	29.5	120.4	
Ge	72	No Gas	934262.63	1.4	904931.62	103.24	29.5	120.4	
Ge	72	H2	171078.59	1.6	172351.67	99.26	29.5	120.4	
Ge	72	He	73068.64	0.7	72380.83	100.95	29.5	120.4	
Y	89	H2	3003511.69	1.0	2964265.2	101.32	29.5	120.4	
Y	89	He	621268.81	0.6	618281.42	100.48	29.5	120.4	
Tb	159	No Gas	9236550.42	3.3	8714728.06	105.99	29.5	120.4	
Tb	159	He	3283938.07	0.4	3206480.02	102.42	29.5	120.4	
Bi	209	No Gas	4689162.02	2.8	4440413.54	105.6	29.5	120.4	

Sample Report

Sample Name SN5779-001

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:10:58 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	10.6	50.00	100	
11	B	6	No Gas	19.942	ppb	3.2	20017.76	1000	
23	Na	45	He	14282.036	ppb	1.3	1646354.72	200000	
24	Mg	45	He	443.921	ppb	1.7	28928.86	200000	
27	Al	45	He	12.701	ppb	12.1	323.35	200000	
28	Si	45	H2	637.912	ppb	2.9	29339.53	10000	
39	K	45	He	1558.240	ppb	1.0	98464.66	200000	
40	Ca	45	H2	3644.805	ppb	0.3	1562033.74	200000	
51	V	89	He	0.219	ppb	10.6	402.24	1000	
52	Cr	89	He	0.107	ppb	15.1	172.64	2000	
55	Mn	89	He	4.658	ppb	3.5	2384.44	2000	
56	Fe	89	H2	34.394	ppb	1.5	61931.32	100000	
59	Co	89	He	0.047	ppb	28.6	100.01	1000	
60	Ni	89	He	0.343	ppb	7.2	235.57	1000	
63	Cu	89	He	5.797	ppb	1.4	8838.64	2000	
66	Zn	89	He	16.854	ppb	1.8	3290.52	2000	
75	As	89	He	0.187	ppb	25.1	35.67	1000	
78	Se	89	H2	0.060	ppb	41.6	5.83	1000	
88	Sr	89	He	18.278	ppb	0.3	13977.59	2000	
95	Mo	89	He	0.203	ppb	8.3	194.45	1000	
107	Ag	89	He	0.005	ppb	137.6	27.78	100	
111	Cd	89	He	0.020	ppb	46.1	8.15	1000	
118	Sn	159	He	0.201	ppb	9.2	233.34	1000	
121	Sb	159	No Gas	0.049	ppb	7.4	423.82	1000	
137	Ba	159	No Gas	3.065	ppb	5.0	8899.55	2000	
182	W	159	No Gas	0.152	ppb	11.7	874.34	1000	
205	Tl	209	No Gas	0.008	ppb	135.8	143.50	1000	
208	Pb	209	No Gas	0.147	ppb	4.0	2626.39	2000	
232	Th	209	No Gas	0.021	ppb	67.2	460.53	1000	
238	U	209	No Gas	0.113	ppb	12.7	1805.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1768513.54	1.4	1826145.95	96.84	29.5	120.4	
Sc	45	No Gas	4164087.01	1.4	4103184.45	101.48	29.5	120.4	
Sc	45	H2	478043.67	1.1	476452.62	100.33	29.5	120.4	
Sc	45	He	94992.69	0.5	95435.38	99.54	29.5	120.4	
Ge	72	No Gas	927568.62	1.1	904931.62	102.5	29.5	120.4	
Ge	72	H2	171870.02	0.4	172351.67	99.72	29.5	120.4	
Ge	72	He	72821.33	0.6	72380.83	100.61	29.5	120.4	
Y	89	H2	3013380.44	0.3	2964265.2	101.66	29.5	120.4	
Y	89	He	614329.61	0.9	618281.42	99.36	29.5	120.4	
Tb	159	No Gas	9220965.49	1.6	8714728.06	105.81	29.5	120.4	
Tb	159	He	3291296.83	0.7	3206480.02	102.65	29.5	120.4	
Bi	209	No Gas	4700998.07	1.1	4440413.54	105.87	29.5	120.4	

Sample Report

Sample Name SN5790-001

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:13:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	50.7	51.11	100	
11	B	6	No Gas	34.180	ppb	4.3	32684.52	1000	
23	Na	45	He	16587.715	ppb	0.6	1909166.73	200000	
24	Mg	45	He	1598.366	ppb	0.5	102160.05	200000	
27	Al	45	He	10.426	ppb	6.7	267.79	200000	
28	Si	45	H2	1043.423	ppb	1.3	46962.57	10000	
39	K	45	He	2487.630	ppb	0.7	150065.64	200000	
40	Ca	45	H2	8845.820	ppb	0.9	3734934.28	200000	
51	V	89	He	0.164	ppb	33.4	353.35	1000	
52	Cr	89	He	0.088	ppb	8.1	151.97	2000	
55	Mn	89	He	23.007	ppb	0.8	11721.44	2000	
56	Fe	89	H2	28.801	ppb	0.1	51541.70	100000	
59	Co	89	He	0.049	ppb	21.4	104.45	1000	
60	Ni	89	He	0.409	ppb	14.2	268.90	1000	
63	Cu	89	He	3.710	ppb	0.5	5808.08	2000	
66	Zn	89	He	7.922	ppb	8.1	1579.04	2000	
75	As	89	He	0.938	ppb	11.9	153.02	1000	
78	Se	89	H2	0.055	ppb	45.4	5.33	1000	
88	Sr	89	He	31.630	ppb	1.6	24156.29	2000	
95	Mo	89	He	0.130	ppb	18.5	130.01	1000	
107	Ag	89	He	0.000	ppb	684.4	15.56	100	
111	Cd	89	He	0.009	ppb	68.7	4.07	1000	
118	Sn	159	He	0.109	ppb	17.0	153.34	1000	
121	Sb	159	No Gas	0.074	ppb	8.8	600.69	1000	
137	Ba	159	No Gas	1.124	ppb	6.8	3250.71	2000	
182	W	159	No Gas	0.010	ppb	64.1	80.09	1000	
205	Tl	209	No Gas	0.004	ppb	37.1	90.10	1000	
208	Pb	209	No Gas	0.071	ppb	14.7	1344.87	2000	
232	Th	209	No Gas	0.009	ppb	12.6	253.62	1000	
238	U	209	No Gas	0.007	ppb	30.0	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1754825.41	1.6	1826145.95	96.09	29.5	120.4	
Sc	45	No Gas	4119006.36	2.0	4103184.45	100.39	29.5	120.4	
Sc	45	H2	471175.38	0.3	476452.62	98.89	29.5	120.4	
Sc	45	He	94874.07	1.0	95435.38	99.41	29.5	120.4	
Ge	72	No Gas	924567.79	2.3	904931.62	102.17	29.5	120.4	
Ge	72	H2	169821.77	0.9	172351.67	98.53	29.5	120.4	
Ge	72	He	72860.11	0.5	72380.83	100.66	29.5	120.4	
Y	89	H2	2974481.90	0.5	2964265.2	100.34	29.5	120.4	
Y	89	He	613617.82	0.5	618281.42	99.25	29.5	120.4	
Tb	159	No Gas	9148773.54	2.1	8714728.06	104.98	29.5	120.4	
Tb	159	He	3267350.65	0.5	3206480.02	101.9	29.5	120.4	
Bi	209	No Gas	4669409.66	1.9	4440413.54	105.16	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG16IMW2
File Name	071_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:16:14 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.064	ppb	54.0	41.11	0.5	
B	11	6	No Gas	3.187	ppb	12.1	2476.96	10	
Na	23	45	He	142.898	ppb	7.5	6388.53	500	
Mg	24	45	He	10.954	ppb	55.7	840.09	50	
Al	27	45	He	8.722	ppb	25.5	55.56	50	
Si	28	45	H2	4.174	ppb	207.1	550.63	250	
K	39	45	He	-31.196	ppb	N/A	11015.97	500	
Ca	40	45	H2	57.695	ppb	72.6	5851.47	50	PB 6020 Fails DoD
V	51	89	He	2.173	ppb	18.7	585.59	2.5	
Cr	52	89	He	0.321	ppb	36.2	123.98	2.5	
Mn	55	89	He	0.374	ppb	35.2	47.99	1	
Fe	56	89	H2	2.574	ppb	10.7	3027.05	50	
Co	59	89	He	0.025	ppb	84.2	22.22	0.5	
Ni	60	89	He	-0.064	ppb	N/A	54.45	1	
Cu	63	89	He	-0.306	ppb	N/A	342.24	1.5	
Zn	66	89	He	1.535	ppb	23.5	122.23	5	
As	75	89	He	0.187	ppb	96.5	12.00	2.5	
Se	78	89	H2	0.051	ppb	34.6	1.67	2.5	
Sr	88	89	He	0.089	ppb	94.1	17.78	2.5	
Mo	95	89	He	0.008	ppb	348.7	17.78	2.5	
Ag	107	89	He	0.010	ppb	0.9	20.00	0.5	
Cd	111	89	He	0.020	ppb	127.9	2.22	0.5	
Sn	118	159	He	1.264	ppb	1.4	274.46	2.5	
Sb	121	159	No Gas	0.028	ppb	45.4	100.11	0.5	
Ba	137	159	No Gas	0.178	ppb	29.7	130.14	1	
W	182	159	No Gas	0.028	ppb	80.8	56.73	2.5	
Tl	205	209	No Gas	0.016	ppb	27.8	83.43	0.5	
Pb	208	209	No Gas	0.098	ppb	17.2	507.24	0.5	
Th	232	209	No Gas	0.055	ppb	26.0	300.34	2.5	
U	238	209	No Gas	0.010	ppb	70.8	36.71	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1756855.24	2.4	1826145.95	96.21	29.5	120.4	
Sc	45	No Gas	4107764.86	2.4	4103184.45	100.11	29.5	120.4	
Sc	45	H2	466492.85	1.6	476452.62	97.91	29.5	120.4	
Sc	45	He	92759.21	0.3	95435.38	97.2	29.5	120.4	
Ge	72	No Gas	920429.08	2.4	904931.62	101.71	29.5	120.4	
Ge	72	H2	165827.43	1.4	172351.67	96.21	29.5	120.4	
Ge	72	He	70655.26	0.3	72380.83	97.62	29.5	120.4	
Y	89	H2	2955882.73	0.5	2964265.2	99.72	29.5	120.4	
Y	89	He	605526.92	0.3	618281.42	97.94	29.5	120.4	
Tb	159	No Gas	9363509.58	2.5	8714728.06	107.44	29.5	120.4	
Tb	159	He	3253204.47	1.0	3206480.02	101.46	29.5	120.4	
Bi	209	No Gas	4770743.03	2.7	4440413.54	107.44	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG16IMW2
File Name	072LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:18:54 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.202	ppb	5.1	13495.62	50	19.68	79.5	120.4	
B	11	6	No Gas	501.570	ppb	4.5	92289.69	500	20.06	79.5	120.4	
Na	23	45	He	7911.268	ppb	1.5	183526.45	7500	21.1	79.5	120.4	
Mg	24	45	He	5403.115	ppb	1.4	68728.00	5000	21.61	79.5	120.4	
Al	27	45	He	1975.023	ppb	0.5	9531.29	2000	19.75	79.5	120.4	
Si	28	45	H2	1071.709	ppb	3.9	9971.24	1000	21.43	0	200	
K	39	45	He	10543.781	ppb	1.1	127920.62	10000	21.09	79.5	120.4	
Ca	40	45	H2	2712.986	ppb	1.6	228124.56	2500	21.7	79.5	120.4	
V	51	89	He	529.874	ppb	1.3	94052.25	500	21.2	79.5	120.4	
Cr	52	89	He	213.952	ppb	1.9	47081.22	200	21.4	79.5	120.4	
Mn	55	89	He	531.874	ppb	1.1	54037.58	500	21.28	79.5	120.4	
Fe	56	89	H2	1081.324	ppb	0.8	374056.41	1000	21.63	79.5	120.4	
Co	59	89	He	551.097	ppb	1.3	204025.93	500	22.04	79.5	120.4	
Ni	60	89	He	549.374	ppb	0.7	55593.55	500	21.98	79.5	120.4	
Cu	63	89	He	264.854	ppb	0.4	76970.07	250	21.19	79.5	120.4	
Zn	66	89	He	535.444	ppb	2.2	20485.76	500	21.42	79.5	120.4	
As	75	89	He	109.702	ppb	3.1	3430.47	100	21.94	79.5	120.4	
Se	78	89	H2	104.771	ppb	0.4	1712.36	100	20.95	79.5	120.4	
Sr	88	89	He	515.567	ppb	0.5	78571.28	500	20.62	79.5	120.4	
Mo	95	89	He	108.051	ppb	1.3	18889.16	100	21.61	79.5	120.4	
Ag	107	89	He	54.301	ppb	1.4	32492.01	50	21.72	79.5	120.4	
Cd	111	89	He	269.956	ppb	1.5	20419.93	250	21.6	79.5	120.4	
Sn	118	159	He	503.401	ppb	0.8	86002.86	500	20.14	79.5	120.4	
Sb	121	159	No Gas	102.136	ppb	5.0	156542.86	100	20.43	79.5	120.4	
Ba	137	159	No Gas	2002.762	ppb	4.9	1188559.85	2000	20.03	79.5	120.4	
W	182	159	No Gas	102.536	ppb	5.8	117940.89	100	20.51	79.5	120.4	
Tl	205	209	No Gas	104.954	ppb	4.4	258911.74	100	20.99	79.5	120.4	
[Pb]	206	209	No Gas	106.002	ppb	4.5	90715.61	100	21.2	79.5	120.4	
[Pb]	207	209	No Gas	106.252	ppb	3.8	79032.76	100	21.25	79.5	120.4	
Pb	208	209	No Gas	106.167	ppb	5.2	361106.44	100	21.23	79.5	120.4	
Th	232	209	No Gas	101.549	ppb	6.3	352347.07	100	20.31	79.5	120.4	
U	238	209	No Gas	102.050	ppb	5.5	331404.64	100	20.41	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1755771.50	1.9	1826145.95	96.15	29.5	120.4	
Sc	45	No Gas	4117939.04	1.6	4103184.45	100.36	29.5	120.4	
Sc	45	H2	467145.59	0.9	476452.62	98.05	29.5	120.4	
Sc	45	He	94100.07	1.2	95435.38	98.6	29.5	120.4	
Ge	72	No Gas	920224.80	0.6	904931.62	101.69	29.5	120.4	
Ge	72	H2	166600.44	0.7	172351.67	96.66	29.5	120.4	
Ge	72	He	71792.46	0.8	72380.83	99.19	29.5	120.4	
Y	89	H2	2983353.59	0.5	2964265.2	100.64	29.5	120.4	
Y	89	He	612301.90	1.2	618281.42	99.03	29.5	120.4	
Tb	159	No Gas	9458781.73	2.2	8714728.06	108.54	29.5	120.4	
Tb	159	He	3286237.45	0.6	3206480.02	102.49	29.5	120.4	
Bi	209	No Gas	4794913.13	1.9	4440413.54	107.98	29.5	120.4	

Sample Report

Sample Name SN5772-001

File Name 073SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:21:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.600	ppb	9.6	181.12	100	
11	B	6	No Gas	383.760	ppb	4.9	68351.89	1000	
23	Na	45	He	86465.512	ppb	0.5	1947009.32	200000	
24	Mg	45	He	10222.455	ppb	0.4	127631.79	200000	
27	Al	45	He	4537.179	ppb	0.1	21579.14	200000	
28	Si	45	H2	19904.811	ppb	1.2	174889.18	10000	
39	K	45	He	1374.654	ppb	1.5	26330.76	200000	
40	Ca	45	H2	75537.200	ppb	1.2	6276727.96	200000	
51	V	89	He	14.121	ppb	2.5	2692.59	1000	
52	Cr	89	He	12.421	ppb	3.9	2769.11	2000	
55	Mn	89	He	1251.932	ppb	0.5	126450.73	2000	
56	Fe	89	H2	10719.023	ppb	0.7	3668776.96	100000	
59	Co	89	He	10.520	ppb	2.1	3885.28	1000	
60	Ni	89	He	11.621	ppb	2.2	1228.99	1000	
63	Cu	89	He	5.002	ppb	5.9	1869.08	2000	
66	Zn	89	He	174.260	ppb	1.6	6672.95	2000	
75	As	89	He	3.033	ppb	15.0	100.34	1000	
78	Se	89	H2	0.348	ppb	23.1	6.50	1000	
88	Sr	89	He	1140.602	ppb	1.1	172802.20	2000	
95	Mo	89	He	2.599	ppb	5.9	467.80	1000	
107	Ag	89	He	0.041	ppb	77.6	38.89	100	
111	Cd	89	He	0.099	ppb	31.7	8.15	1000	
118	Sn	159	He	1.621	ppb	6.2	337.79	1000	
121	Sb	159	No Gas	0.260	ppb	19.8	457.19	1000	
137	Ba	159	No Gas	123.788	ppb	6.3	73903.35	2000	
182	W	159	No Gas	0.290	ppb	44.9	363.74	1000	
205	Tl	209	No Gas	0.168	ppb	11.3	463.87	1000	
208	Pb	209	No Gas	5.113	ppb	3.4	17751.41	2000	
232	Th	209	No Gas	2.105	ppb	3.4	7497.39	1000	
238	U	209	No Gas	2.339	ppb	6.3	7677.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1689518.81	2.9	1826145.95	92.52	29.5	120.4	
Sc	45	No Gas	4143037.42	3.3	4103184.45	100.97	29.5	120.4	
Sc	45	H2	463734.48	1.2	476452.62	97.33	29.5	120.4	
Sc	45	He	92813.08	0.8	95435.38	97.25	29.5	120.4	
Ge	72	No Gas	922759.83	2.0	904931.62	101.97	29.5	120.4	
Ge	72	H2	166300.81	0.8	172351.67	96.49	29.5	120.4	
Ge	72	He	71447.28	0.3	72380.83	98.71	29.5	120.4	
Y	89	H2	2967424.77	0.9	2964265.2	100.11	29.5	120.4	
Y	89	He	608738.43	0.8	618281.42	98.46	29.5	120.4	
Tb	159	No Gas	9518000.07	3.1	8714728.06	109.22	29.5	120.4	
Tb	159	He	3281176.65	0.6	3206480.02	102.33	29.5	120.4	
Bi	209	No Gas	4847232.06	3.4	4440413.54	109.16	29.5	120.4	

Sample Report

Sample Name SN5772-002

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:24:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.130	ppb	46.7	56.67	100	
11	B	6	No Gas	589.133	ppb	4.5	103021.27	1000	
23	Na	45	He	130360.082	ppb	1.3	2936437.71	200000	
24	Mg	45	He	9060.550	ppb	0.9	113308.01	200000	
27	Al	45	He	387.629	ppb	3.1	1857.97	200000	
28	Si	45	H2	10565.812	ppb	0.9	92531.86	10000	
39	K	45	He	1012.504	ppb	1.2	22409.11	200000	
40	Ca	45	H2	76398.141	ppb	0.5	6311931.71	200000	
51	V	89	He	3.118	ppb	15.9	752.27	1000	
52	Cr	89	He	1.694	ppb	5.0	423.26	2000	
55	Mn	89	He	7.579	ppb	0.7	773.22	2000	
56	Fe	89	H2	426.411	ppb	0.4	147335.81	100000	
59	Co	89	He	0.158	ppb	36.9	71.12	1000	
60	Ni	89	He	0.988	ppb	15.0	160.00	1000	
63	Cu	89	He	0.390	ppb	14.9	542.25	2000	
66	Zn	89	He	4.675	ppb	26.6	241.12	2000	
75	As	89	He	0.294	ppb	43.9	15.33	1000	
78	Se	89	H2	1.453	ppb	21.7	24.33	1000	
88	Sr	89	He	1188.280	ppb	0.6	179416.36	2000	
95	Mo	89	He	0.458	ppb	25.6	95.56	1000	
107	Ag	89	He	0.000	ppb	1312.4	14.45	100	
111	Cd	89	He	0.030	ppb	103.6	2.96	1000	
118	Sn	159	He	0.843	ppb	13.5	204.45	1000	
121	Sb	159	No Gas	0.049	ppb	48.0	136.82	1000	
137	Ba	159	No Gas	41.960	ppb	1.5	25389.25	2000	
182	W	159	No Gas	0.080	ppb	72.0	120.14	1000	
205	Tl	209	No Gas	0.045	ppb	104.5	160.18	1000	
208	Pb	209	No Gas	0.233	ppb	16.3	987.80	2000	
232	Th	209	No Gas	0.223	ppb	20.0	904.39	1000	
238	U	209	No Gas	3.224	ppb	6.5	10659.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673953.91	2.3	1826145.95	91.67	29.5	120.4	
Sc	45	No Gas	4145001.78	2.4	4103184.45	101.02	29.5	120.4	
Sc	45	H2	461022.42	1.4	476452.62	96.76	29.5	120.4	
Sc	45	He	92898.95	0.7	95435.38	97.34	29.5	120.4	
Ge	72	No Gas	931470.11	0.4	904931.62	102.93	29.5	120.4	
Ge	72	H2	165056.85	1.4	172351.67	95.77	29.5	120.4	
Ge	72	He	71460.41	0.1	72380.83	98.73	29.5	120.4	
Y	89	H2	2953604.46	0.5	2964265.2	99.64	29.5	120.4	
Y	89	He	606646.29	0.3	618281.42	98.12	29.5	120.4	
Tb	159	No Gas	9629986.52	2.4	8714728.06	110.5	29.5	120.4	
Tb	159	He	3270614.46	0.5	3206480.02	102	29.5	120.4	
Bi	209	No Gas	4883270.81	2.7	4440413.54	109.97	29.5	120.4	

Sample Report

Sample Name SN5788-002

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:26:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.114	ppb	21.2	52.23	100	
11	B	6	No Gas	35.429	ppb	4.4	7927.98	1000	
23	Na	45	He	48500.376	ppb	0.8	1110160.71	200000	
24	Mg	45	He	9322.184	ppb	1.1	118222.55	200000	
27	Al	45	He	1897.831	ppb	2.3	9171.05	200000	
28	Si	45	H2	5435.315	ppb	2.7	47910.73	10000	
39	K	45	He	2078.006	ppb	1.0	34509.30	200000	
40	Ca	45	H2	24319.263	ppb	1.2	2012554.02	200000	
51	V	89	He	3.918	ppb	4.3	898.95	1000	
52	Cr	89	He	3.029	ppb	9.2	719.23	2000	
55	Mn	89	He	4412.096	ppb	0.2	447223.13	2000	
56	Fe	89	H2	19094.787	ppb	1.9	6527726.20	100000	
59	Co	89	He	14.030	ppb	4.8	5196.86	1000	
60	Ni	89	He	5.879	ppb	6.2	654.48	1000	
63	Cu	89	He	7.316	ppb	3.3	2542.54	2000	
66	Zn	89	He	13.391	ppb	4.0	574.48	2000	
75	As	89	He	19.142	ppb	6.1	602.41	1000	
78	Se	89	H2	0.185	ppb	36.7	3.83	1000	
88	Sr	89	He	141.158	ppb	1.0	21466.26	2000	
95	Mo	89	He	0.556	ppb	5.0	113.34	1000	
107	Ag	89	He	0.010	ppb	155.8	20.00	100	
111	Cd	89	He	0.152	ppb	24.9	12.22	1000	
118	Sn	159	He	0.969	ppb	12.8	227.79	1000	
121	Sb	159	No Gas	0.140	ppb	23.9	276.98	1000	
137	Ba	159	No Gas	17.104	ppb	5.7	10372.29	2000	
182	W	159	No Gas	0.581	ppb	9.3	707.48	1000	
205	Tl	209	No Gas	0.011	ppb	83.3	70.08	1000	
208	Pb	209	No Gas	2.493	ppb	6.1	8787.69	2000	
232	Th	209	No Gas	1.029	ppb	0.7	3741.50	1000	
238	U	209	No Gas	0.210	ppb	12.1	694.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1680187.95	2.6	1826145.95	92.01	29.5	120.4	
Sc	45	No Gas	4169116.05	2.9	4103184.45	101.61	29.5	120.4	
Sc	45	H2	461664.98	0.8	476452.62	96.9	29.5	120.4	
Sc	45	He	94230.13	1.5	95435.38	98.74	29.5	120.4	
Ge	72	No Gas	928064.74	1.0	904931.62	102.56	29.5	120.4	
Ge	72	H2	164884.73	0.7	172351.67	95.67	29.5	120.4	
Ge	72	He	71691.93	1.1	72380.83	99.05	29.5	120.4	
Y	89	H2	2965002.27	1.4	2964265.2	100.02	29.5	120.4	
Y	89	He	610928.97	0.9	618281.42	98.81	29.5	120.4	
Tb	159	No Gas	9643465.41	2.9	8714728.06	110.66	29.5	120.4	
Tb	159	He	3298542.31	0.6	3206480.02	102.87	29.5	120.4	
Bi	209	No Gas	4871750.48	3.6	4440413.54	109.71	29.5	120.4	

Sample Report

Sample Name SN5788-003

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:29:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	43.0	34.44	100	
11	B	6	No Gas	23.635	ppb	3.3	5896.96	1000	
23	Na	45	He	13291.336	ppb	1.9	308549.14	200000	
24	Mg	45	He	10434.768	ppb	1.6	133102.77	200000	
27	Al	45	He	13.726	ppb	15.4	81.12	200000	
28	Si	45	H2	4383.165	ppb	4.0	37176.62	10000	
39	K	45	He	578.353	ppb	5.3	18046.56	200000	
40	Ca	45	H2	16098.716	ppb	4.9	1278559.14	200000	
51	V	89	He	1.843	ppb	18.2	537.81	1000	
52	Cr	89	He	0.608	ppb	8.3	189.97	2000	
55	Mn	89	He	1196.622	ppb	0.8	122530.63	2000	
56	Fe	89	H2	19393.679	ppb	5.1	6411261.45	100000	
59	Co	89	He	17.609	ppb	1.4	6584.26	1000	
60	Ni	89	He	62.614	ppb	2.5	6441.73	1000	
63	Cu	89	He	-0.355	ppb	N/A	334.46	2000	
66	Zn	89	He	115.850	ppb	1.4	4519.78	2000	
75	As	89	He	5.530	ppb	2.6	180.35	1000	
78	Se	89	H2	0.064	ppb	23.8	1.83	1000	
88	Sr	89	He	62.772	ppb	0.3	9645.94	2000	
95	Mo	89	He	0.101	ppb	46.2	34.45	1000	
107	Ag	89	He	-0.004	ppb	N/A	12.22	100	
111	Cd	89	He	0.020	ppb	75.1	2.22	1000	
118	Sn	159	He	0.556	ppb	18.6	157.78	1000	
121	Sb	159	No Gas	0.050	ppb	75.8	136.82	1000	
137	Ba	159	No Gas	20.187	ppb	1.9	12269.49	2000	
182	W	159	No Gas	0.026	ppb	81.7	56.73	1000	
205	Tl	209	No Gas	0.001	ppb	829.0	46.72	1000	
208	Pb	209	No Gas	0.061	ppb	10.4	393.78	2000	
232	Th	209	No Gas	0.073	ppb	9.8	373.76	1000	
238	U	209	No Gas	0.010	ppb	18.0	36.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1680626.43	0.8	1826145.95	92.03	29.5	120.4	
Sc	45	No Gas	4173649.34	0.5	4103184.45	101.72	29.5	120.4	
Sc	45	H2	443542.53	4.4	476452.62	93.09	29.5	120.4	
Sc	45	He	94838.70	0.9	95435.38	99.37	29.5	120.4	
Ge	72	No Gas	933469.37	2.0	904931.62	103.15	29.5	120.4	
Ge	72	H2	160004.81	3.7	172351.67	92.84	29.5	120.4	
Ge	72	He	72701.60	0.6	72380.83	100.44	29.5	120.4	
Y	89	H2	2870734.05	4.1	2964265.2	96.84	29.5	120.4	
Y	89	He	617144.73	0.5	618281.42	99.82	29.5	120.4	
Tb	159	No Gas	9660733.61	0.3	8714728.06	110.86	29.5	120.4	
Tb	159	He	3315712.31	0.5	3206480.02	103.41	29.5	120.4	
Bi	209	No Gas	4897941.10	0.7	4440413.54	110.3	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	077_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:32:19 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.160	ppb	7.2	31222.33	25	92.64	89.8	110.2	
11	B	6	No Gas	23.340	ppb	8.7	22558.22	25	93.36	89.8	110.2	
23	Na	45	He	5134.802	ppb	0.4	596557.99	5000	102.7	89.8	110.2	
24	Mg	45	He	4951.702	ppb	0.5	316715.60	5000	99.03	89.8	110.2	
27	Al	45	He	483.150	ppb	1.9	11816.38	500	96.63	89.8	110.2	
28	Si	45	H2	472.338	ppb	3.6	21780.90	500	94.47	89.8	110.2	
39	K	45	He	4940.854	ppb	0.7	288205.11	5000	98.82	89.8	110.2	
40	Ca	45	H2	4894.989	ppb	2.0	2090275.87	5000	97.9	89.8	110.2	
51	V	89	He	24.737	ppb	1.4	22508.62	25	98.95	89.8	110.2	
52	Cr	89	He	25.023	ppb	1.3	28047.29	25	100.09	89.8	110.2	
55	Mn	89	He	25.019	ppb	0.9	12945.59	25	100.08	89.8	110.2	
56	Fe	89	H2	4822.351	ppb	1.3	8413941.35	5000	96.45	89.8	110.2	
59	Co	89	He	25.548	ppb	1.8	48145.34	25	102.19	89.8	110.2	
60	Ni	89	He	25.192	ppb	2.1	13020.97	25	100.77	89.8	110.2	
63	Cu	89	He	24.505	ppb	2.5	36476.25	25	98.02	89.8	110.2	
66	Zn	89	He	25.061	ppb	4.1	4931.05	25	100.24	89.8	110.2	
75	As	89	He	24.309	ppb	2.9	3868.63	25	97.24	89.8	110.2	
78	Se	89	H2	24.534	ppb	2.3	2033.56	25	98.14	89.8	110.2	
88	Sr	89	He	23.942	ppb	1.2	18572.03	25	95.77	89.8	110.2	
95	Mo	89	He	25.257	ppb	0.5	22465.77	25	101.03	89.8	110.2	
107	Ag	89	He	25.218	ppb	1.3	76770.55	25	100.87	89.8	110.2	
111	Cd	89	He	25.479	ppb	1.4	9808.83	25	101.92	89.8	110.2	
118	Sn	159	He	24.353	ppb	1.4	20854.51	25	97.41	89.8	110.2	
121	Sb	159	No Gas	22.870	ppb	8.8	177605.87	25	91.48	89.8	110.2	
137	Ba	159	No Gas	23.565	ppb	8.1	70898.24	25	94.26	89.8	110.2	
182	W	159	No Gas	22.631	ppb	10.1	131875.49	25	90.52	89.8	110.2	
205	Tl	209	No Gas	23.910	ppb	6.7	299809.02	25	95.64	89.8	110.2	
208	Pb	209	No Gas	23.412	ppb	8.1	404671.14	25	93.65	89.8	110.2	
232	Th	209	No Gas	22.438	ppb	9.3	395598.22	25	89.75	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.975	ppb	8.7	379153.00	25	91.9	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1728780.26	2.7	1826145.95	94.67	29.5	120.4	
Sc	45	No Gas	4263768.98	3.6	4103184.45	103.91	29.5	120.4	
Sc	45	H2	476470.72	0.9	476452.62	100	29.5	120.4	
Sc	45	He	95401.24	0.2	95435.38	99.96	29.5	120.4	
Ge	72	No Gas	932772.78	2.9	904931.62	103.08	29.5	120.4	
Ge	72	H2	170595.99	0.6	172351.67	98.98	29.5	120.4	
Ge	72	He	73295.77	0.8	72380.83	101.26	29.5	120.4	
Y	89	H2	3026342.57	0.4	2964265.2	102.09	29.5	120.4	
Y	89	He	623219.30	0.8	618281.42	100.8	29.5	120.4	
Tb	159	No Gas	9598169.93	3.5	8714728.06	110.14	29.5	120.4	
Tb	159	He	3287043.01	0.8	3206480.02	102.51	29.5	120.4	
Bi	209	No Gas	4878700.98	3.1	4440413.54	109.87	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	078_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:34:59 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.068	ppb	11.9	117.78	0.2	
11	B	6	No Gas	0.623	ppb	39.9	2486.96	4	
23	Na	45	He	20.888	ppb	35.0	5587.35	200	
24	Mg	45	He	1.135	ppb	201.2	784.52	20	
27	Al	45	He	0.940	ppb	74.8	36.67	20	
28	Si	45	H2	-0.559	ppb	N/A	497.23	100	
39	K	45	He	-0.357	ppb	N/A	11461.14	200	
40	Ca	45	H2	2.131	ppb	10.7	1989.10	20	
51	V	89	He	0.061	ppb	87.8	258.90	1	
52	Cr	89	He	0.007	ppb	138.4	61.99	1	
55	Mn	89	He	0.105	ppb	99.2	63.99	0.4	
56	Fe	89	H2	1.582	ppb	4.7	4953.05	20	
59	Co	89	He	0.017	ppb	115.6	44.45	0.2	
60	Ni	89	He	0.009	ppb	499.4	65.56	0.4	
63	Cu	89	He	-0.176	ppb	N/A	177.79	0.6	
66	Zn	89	He	0.081	ppb	70.3	80.01	2	
75	As	89	He	0.001	ppb	1649.4	6.33	1	
78	Se	89	H2	0.032	ppb	66.0	3.50	1	
88	Sr	89	He	0.045	ppb	98.6	38.89	1	
95	Mo	89	He	0.040	ppb	45.1	51.11	1	
107	Ag	89	He	0.008	ppb	56.3	37.78	0.2	
111	Cd	89	He	0.009	ppb	82.7	4.07	0.2	
118	Sn	159	He	0.051	ppb	50.7	103.34	1	
121	Sb	159	No Gas	0.022	ppb	25.5	223.59	0.2	
137	Ba	159	No Gas	0.027	ppb	19.6	103.45	0.4	
182	W	159	No Gas	0.051	ppb	8.9	317.02	1	
205	Tl	209	No Gas	0.017	ppb	17.5	256.95	0.2	
208	Pb	209	No Gas	0.017	ppb	17.4	467.20	0.2	
232	Th	209	No Gas	0.033	ppb	19.0	684.12	1	
238	U	209	No Gas	0.013	ppb	16.0	213.57	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1774669.09	2.9	1826145.95	97.18	29.5	120.4	
Sc	45	No Gas	4229923.94	4.2	4103184.45	103.09	29.5	120.4	
Sc	45	H2	474228.38	1.2	476452.62	99.53	29.5	120.4	
Sc	45	He	93839.78	3.6	95435.38	98.33	29.5	120.4	
Ge	72	No Gas	932969.01	2.7	904931.62	103.1	29.5	120.4	
Ge	72	H2	173020.29	1.2	172351.67	100.39	29.5	120.4	
Ge	72	He	71176.33	3.4	72380.83	98.34	29.5	120.4	
Y	89	H2	3021369.42	0.6	2964265.2	101.93	29.5	120.4	
Y	89	He	608642.38	3.6	618281.42	98.44	29.5	120.4	
Tb	159	No Gas	9394818.40	4.1	8714728.06	107.8	29.5	120.4	
Tb	159	He	3214440.30	2.9	3206480.02	100.25	29.5	120.4	
Bi	209	No Gas	4816792.35	3.7	4440413.54	108.48	29.5	120.4	

Sample Report

Sample Name SN5788-004

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:37:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	39.2	56.67	100	
11	B	6	No Gas	19.405	ppb	9.1	5383.41	1000	
23	Na	45	He	13693.272	ppb	0.5	315368.76	200000	
24	Mg	45	He	10764.248	ppb	0.6	136241.19	200000	
27	Al	45	He	13.624	ppb	27.9	80.00	200000	
28	Si	45	H2	4108.325	ppb	2.4	36892.05	10000	
39	K	45	He	639.014	ppb	3.3	18577.06	200000	
40	Ca	45	H2	15941.700	ppb	0.5	1339660.87	200000	
51	V	89	He	2.421	ppb	8.1	636.70	1000	
52	Cr	89	He	0.325	ppb	28.5	126.64	2000	
55	Mn	89	He	1177.965	ppb	1.3	119869.31	2000	
56	Fe	89	H2	16483.130	ppb	0.3	5731408.60	100000	
59	Co	89	He	16.885	ppb	1.1	6275.18	1000	
60	Ni	89	He	57.973	ppb	2.1	5931.45	1000	
63	Cu	89	He	-0.302	ppb	N/A	347.79	2000	
66	Zn	89	He	106.107	ppb	3.0	4118.54	2000	
75	As	89	He	5.674	ppb	5.9	183.69	1000	
78	Se	89	H2	0.069	ppb	76.0	2.00	1000	
88	Sr	89	He	65.759	ppb	3.4	10040.71	2000	
95	Mo	89	He	0.140	ppb	64.8	41.11	1000	
107	Ag	89	He	0.008	ppb	114.1	18.89	100	
111	Cd	89	He	0.015	ppb	206.9	1.85	1000	
118	Sn	159	He	1.037	ppb	16.5	237.79	1000	
121	Sb	159	No Gas	0.021	ppb	114.5	90.10	1000	
137	Ba	159	No Gas	21.000	ppb	6.1	12449.83	2000	
182	W	159	No Gas	0.062	ppb	33.3	96.77	1000	
205	Tl	209	No Gas	0.010	ppb	132.7	66.74	1000	
208	Pb	209	No Gas	0.052	ppb	30.7	353.73	2000	
232	Th	209	No Gas	0.131	ppb	28.5	563.98	1000	
238	U	209	No Gas	0.006	ppb	74.7	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752486.50	2.5	1826145.95	95.97	29.5	120.4	
Sc	45	No Gas	4165407.34	2.0	4103184.45	101.52	29.5	120.4	
Sc	45	H2	468647.41	0.3	476452.62	98.36	29.5	120.4	
Sc	45	He	94109.33	0.5	95435.38	98.61	29.5	120.4	
Ge	72	No Gas	939092.11	2.8	904931.62	103.77	29.5	120.4	
Ge	72	H2	167995.15	1.0	172351.67	97.47	29.5	120.4	
Ge	72	He	72190.39	1.3	72380.83	99.74	29.5	120.4	
Y	89	H2	3015143.06	0.1	2964265.2	101.72	29.5	120.4	
Y	89	He	613351.81	1.2	618281.42	99.2	29.5	120.4	
Tb	159	No Gas	9431133.96	2.1	8714728.06	108.22	29.5	120.4	
Tb	159	He	3274187.07	1.4	3206480.02	102.11	29.5	120.4	
Bi	209	No Gas	4789583.74	2.5	4440413.54	107.86	29.5	120.4	

Sample Report

Sample Name SN5788-004L

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:40:24 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.688	ppb	14.2	60.00	100	
11	B	6	No Gas	18.662	ppb	26.3	2524.76	1000	
23	Na	45	He	13745.622	ppb	2.3	67346.24	200000	
24	Mg	45	He	10494.774	ppb	0.9	27744.14	200000	
27	Al	45	He	52.824	ppb	2.3	66.67	200000	
28	Si	45	H2	4278.859	ppb	13.1	7994.53	10000	
39	K	45	He	514.708	ppb	46.0	12933.37	200000	
40	Ca	45	H2	16568.127	ppb	6.5	276329.27	200000	
51	V	89	He	4.748	ppb	17.7	382.24	1000	
52	Cr	89	He	0.703	ppb	49.4	87.32	2000	
55	Mn	89	He	1169.068	ppb	0.3	24208.99	2000	
56	Fe	89	H2	17276.481	ppb	6.4	1173908.53	100000	
59	Co	89	He	15.823	ppb	6.7	1206.81	1000	
60	Ni	89	He	56.092	ppb	4.3	1217.87	1000	
63	Cu	89	He	-3.440	ppb	N/A	240.01	2000	
66	Zn	89	He	106.304	ppb	5.7	892.29	2000	
75	As	89	He	5.804	ppb	10.3	43.34	1000	
78	Se	89	H2	0.359	ppb	125.7	2.00	1000	
88	Sr	89	He	65.398	ppb	6.5	2034.68	2000	
95	Mo	89	He	0.028	ppb	789.0	17.78	1000	
107	Ag	89	He	-0.001	ppb	N/A	14.44	100	
111	Cd	89	He	-0.024	ppb	N/A	0.37	1000	
118	Sn	159	He	2.474	ppb	12.9	146.67	1000	
121	Sb	159	No Gas	-0.015	ppb	N/A	53.39	1000	
137	Ba	159	No Gas	21.294	ppb	11.7	2543.08	2000	
182	W	159	No Gas	0.210	ppb	54.0	73.42	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.247	ppb	21.7	347.07	2000	
232	Th	209	No Gas	0.201	ppb	34.1	253.62	1000	
238	U	209	No Gas	0.050	ppb	57.2	36.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1725344.33	3.5	1826145.95	94.48	29.5	120.4	
Sc	45	No Gas	4192789.05	4.7	4103184.45	102.18	29.5	120.4	
Sc	45	H2	464518.77	4.8	476452.62	97.5	29.5	120.4	
Sc	45	He	96210.95	1.8	95435.38	100.81	29.5	120.4	
Ge	72	No Gas	933712.97	2.6	904931.62	103.18	29.5	120.4	
Ge	72	H2	169449.65	4.4	172351.67	98.32	29.5	120.4	
Ge	72	He	73703.06	0.4	72380.83	101.83	29.5	120.4	
Y	89	H2	2947281.92	4.5	2964265.2	99.43	29.5	120.4	
Y	89	He	623790.79	0.5	618281.42	100.89	29.5	120.4	
Tb	159	No Gas	9449962.50	5.0	8714728.06	108.44	29.5	120.4	
Tb	159	He	3304229.74	0.8	3206480.02	103.05	29.5	120.4	
Bi	209	No Gas	4810609.45	5.2	4440413.54	108.34	29.5	120.4	

Sample Report

Sample Name SN5788-004A

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:43:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.556	ppb	7.6	2851.49	100	
11	B	6	No Gas	226.952	ppb	6.2	41899.26	1000	
23	Na	45	He	24291.834	ppb	0.6	558662.86	200000	
24	Mg	45	He	11609.728	ppb	0.2	147329.62	200000	
27	Al	45	He	991.799	ppb	3.4	4808.76	200000	
28	Si	45	H2	9044.183	ppb	1.2	81506.12	10000	
39	K	45	He	11157.386	ppb	2.2	135128.07	200000	
40	Ca	45	H2	16715.528	ppb	1.2	1420396.19	200000	
51	V	89	He	56.069	ppb	1.7	10228.53	1000	
52	Cr	89	He	52.840	ppb	1.9	11774.10	2000	
55	Mn	89	He	1166.965	ppb	0.1	119610.78	2000	
56	Fe	89	H2	17242.489	ppb	0.9	6006279.45	100000	
59	Co	89	He	27.937	ppb	4.5	10449.05	1000	
60	Ni	89	He	80.570	ppb	2.5	8278.31	1000	
63	Cu	89	He	31.516	ppb	2.5	9626.97	2000	
66	Zn	89	He	210.976	ppb	1.6	8184.92	2000	
75	As	89	He	57.418	ppb	2.4	1814.98	1000	
78	Se	89	H2	50.565	ppb	2.9	837.16	1000	
88	Sr	89	He	116.934	ppb	0.8	17982.32	2000	
95	Mo	89	He	53.834	ppb	1.2	9502.50	1000	
107	Ag	89	He	11.318	ppb	1.1	6844.19	100	
111	Cd	89	He	11.177	ppb	1.3	853.74	1000	
118	Sn	159	He	51.517	ppb	2.3	8889.91	1000	
121	Sb	159	No Gas	10.788	ppb	11.7	16755.80	1000	
137	Ba	159	No Gas	41.085	ppb	7.3	24683.77	2000	
182	W	159	No Gas	50.562	ppb	7.5	58836.01	1000	
205	Tl	209	No Gas	10.766	ppb	6.4	26814.81	1000	
208	Pb	209	No Gas	10.559	ppb	7.6	36361.34	2000	
232	Th	209	No Gas	10.694	ppb	6.7	37518.03	1000	
238	U	209	No Gas	10.650	ppb	9.4	34847.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1720231.32	3.5	1826145.95	94.2	29.5	120.4	
Sc	45	No Gas	4226490.14	3.6	4103184.45	103.01	29.5	120.4	
Sc	45	H2	473941.47	1.2	476452.62	99.47	29.5	120.4	
Sc	45	He	94395.24	0.1	95435.38	98.91	29.5	120.4	
Ge	72	No Gas	939924.80	2.3	904931.62	103.87	29.5	120.4	
Ge	72	H2	167336.02	0.6	172351.67	97.09	29.5	120.4	
Ge	72	He	72705.59	0.8	72380.83	100.45	29.5	120.4	
Y	89	H2	3020659.41	0.2	2964265.2	101.9	29.5	120.4	
Y	89	He	617731.75	0.4	618281.42	99.91	29.5	120.4	
Tb	159	No Gas	9576675.13	3.7	8714728.06	109.89	29.5	120.4	
Tb	159	He	3298512.17	0.4	3206480.02	102.87	29.5	120.4	
Bi	209	No Gas	4839740.77	4.1	4440413.54	108.99	29.5	120.4	

Sample Report

Sample Name SN5788-004S

File Name 082SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:45:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.013	ppb	5.1	13507.87	100	
11	B	6	No Gas	523.962	ppb	7.2	94802.51	1000	
23	Na	45	He	20780.079	ppb	0.2	480654.22	200000	
24	Mg	45	He	15548.097	ppb	0.2	198007.65	200000	
27	Al	45	He	1880.390	ppb	2.0	9147.71	200000	
28	Si	45	H2	5099.960	ppb	1.8	45713.59	10000	
39	K	45	He	11017.821	ppb	1.4	134213.42	200000	
40	Ca	45	H2	18216.274	ppb	1.8	1531964.11	200000	
51	V	89	He	521.973	ppb	0.3	93554.37	1000	
52	Cr	89	He	211.780	ppb	0.7	47057.94	2000	
55	Mn	89	He	1666.256	ppb	0.6	170908.06	2000	
56	Fe	89	H2	17173.040	ppb	1.1	5985383.25	100000	
59	Co	89	He	556.731	ppb	0.7	208114.57	1000	
60	Ni	89	He	590.387	ppb	1.7	60312.70	1000	
63	Cu	89	He	260.740	ppb	2.0	76505.14	2000	
66	Zn	89	He	603.352	ppb	2.0	23300.17	2000	
75	As	89	He	110.573	ppb	0.3	3491.82	1000	
78	Se	89	H2	101.007	ppb	3.8	1672.36	1000	
88	Sr	89	He	574.246	ppb	0.7	88356.75	2000	
95	Mo	89	He	107.659	ppb	1.8	18999.29	1000	
107	Ag	89	He	53.467	ppb	0.3	32302.64	100	
111	Cd	89	He	264.118	ppb	0.7	20172.88	1000	
118	Sn	159	He	506.667	ppb	1.2	87088.65	1000	
121	Sb	159	No Gas	99.495	ppb	7.5	155592.85	1000	
137	Ba	159	No Gas	1982.934	ppb	6.3	1200992.37	2000	
182	W	159	No Gas	102.015	ppb	8.6	119704.69	1000	
205	Tl	209	No Gas	103.570	ppb	6.9	258364.72	1000	
208	Pb	209	No Gas	102.593	ppb	7.4	352842.90	2000	
232	Th	209	No Gas	100.822	ppb	8.1	353714.92	1000	
238	U	209	No Gas	100.680	ppb	7.7	330590.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1729843.25	3.4	1826145.95	94.73	29.5	120.4	
Sc	45	No Gas	4192324.73	3.6	4103184.45	102.17	29.5	120.4	
Sc	45	H2	469114.77	1.3	476452.62	98.46	29.5	120.4	
Sc	45	He	94847.41	0.9	95435.38	99.38	29.5	120.4	
Ge	72	No Gas	942171.37	2.0	904931.62	104.12	29.5	120.4	
Ge	72	H2	166797.69	1.1	172351.67	96.78	29.5	120.4	
Ge	72	He	72845.66	0.6	72380.83	100.64	29.5	120.4	
Y	89	H2	3022407.74	0.6	2964265.2	101.96	29.5	120.4	
Y	89	He	618209.87	0.9	618281.42	99.99	29.5	120.4	
Tb	159	No Gas	9661202.91	3.7	8714728.06	110.86	29.5	120.4	
Tb	159	He	3306301.93	0.8	3206480.02	103.11	29.5	120.4	
Bi	209	No Gas	4854407.26	3.9	4440413.54	109.32	29.5	120.4	

Sample Report

Sample Name SN5788-004P

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:48:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.413	ppb	6.0	13486.73	100	
11	B	6	No Gas	540.753	ppb	6.5	96889.64	1000	
23	Na	45	He	21358.690	ppb	3.5	490843.95	200000	
24	Mg	45	He	15927.294	ppb	3.7	201538.90	200000	
27	Al	45	He	1956.186	ppb	5.1	9453.44	200000	
28	Si	45	H2	5074.839	ppb	0.2	45767.41	10000	
39	K	45	He	11169.978	ppb	3.7	135064.05	200000	
40	Ca	45	H2	18350.079	ppb	1.1	1552774.96	200000	
51	V	89	He	537.214	ppb	4.1	95386.87	1000	
52	Cr	89	He	217.256	ppb	4.6	47821.65	2000	
55	Mn	89	He	1707.809	ppb	4.1	173545.97	2000	
56	Fe	89	H2	17465.942	ppb	1.4	6056009.86	100000	
59	Co	89	He	573.731	ppb	3.6	212505.27	1000	
60	Ni	89	He	610.647	ppb	4.1	61803.60	1000	
63	Cu	89	He	268.138	ppb	4.6	77932.91	2000	
66	Zn	89	He	626.953	ppb	6.3	23975.72	2000	
75	As	89	He	114.814	ppb	4.3	3591.86	1000	
78	Se	89	H2	103.127	ppb	4.4	1698.53	1000	
88	Sr	89	He	586.578	ppb	4.2	89414.96	2000	
95	Mo	89	He	109.772	ppb	6.0	19186.26	1000	
107	Ag	89	He	56.246	ppb	4.0	33667.05	100	
111	Cd	89	He	270.025	ppb	2.4	20439.59	1000	
118	Sn	159	He	517.003	ppb	4.3	88194.60	1000	
121	Sb	159	No Gas	100.733	ppb	6.1	159128.60	1000	
137	Ba	159	No Gas	1998.340	ppb	6.6	1222167.33	2000	
182	W	159	No Gas	100.474	ppb	8.0	119067.93	1000	
205	Tl	209	No Gas	103.198	ppb	6.9	260712.87	1000	
208	Pb	209	No Gas	102.539	ppb	6.3	357260.26	2000	
232	Th	209	No Gas	100.974	ppb	9.0	358669.63	1000	
238	U	209	No Gas	101.002	ppb	8.4	335812.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1714048.51	3.8	1826145.95	93.86	29.5	120.4	
Sc	45	No Gas	4263826.91	4.1	4103184.45	103.92	29.5	120.4	
Sc	45	H2	471926.35	1.1	476452.62	99.05	29.5	120.4	
Sc	45	He	94308.34	2.6	95435.38	98.82	29.5	120.4	
Ge	72	No Gas	954791.01	2.1	904931.62	105.51	29.5	120.4	
Ge	72	H2	169124.51	1.8	172351.67	98.13	29.5	120.4	
Ge	72	He	71850.56	3.0	72380.83	99.27	29.5	120.4	
Y	89	H2	3006777.74	0.7	2964265.2	101.43	29.5	120.4	
Y	89	He	612970.69	3.1	618281.42	99.14	29.5	120.4	
Tb	159	No Gas	9757187.49	3.9	8714728.06	111.96	29.5	120.4	
Tb	159	He	3284148.28	2.9	3206480.02	102.42	29.5	120.4	
Bi	209	No Gas	4917303.75	4.3	4440413.54	110.74	29.5	120.4	

Sample Report

Sample Name SN5788-005

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:51:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	7.8	64.45	100	
11	B	6	No Gas	29.188	ppb	7.3	6905.23	1000	
23	Na	45	He	14830.916	ppb	0.1	344983.62	200000	
24	Mg	45	He	9797.128	ppb	0.7	125400.87	200000	
27	Al	45	He	14.372	ppb	19.7	84.45	200000	
28	Si	45	H2	6277.269	ppb	1.5	57023.11	10000	
39	K	45	He	969.943	ppb	4.6	22469.21	200000	
40	Ca	45	H2	13522.718	ppb	1.3	1155329.83	200000	
51	V	89	He	2.117	ppb	7.9	587.81	1000	
52	Cr	89	He	0.459	ppb	11.2	157.30	2000	
55	Mn	89	He	1080.712	ppb	0.9	110864.19	2000	
56	Fe	89	H2	23852.794	ppb	0.6	8379957.48	100000	
59	Co	89	He	20.116	ppb	1.4	7533.69	1000	
60	Ni	89	He	77.060	ppb	2.7	7926.96	1000	
63	Cu	89	He	-0.323	ppb	N/A	344.46	2000	
66	Zn	89	He	118.495	ppb	2.9	4629.83	2000	
75	As	89	He	7.761	ppb	2.9	251.03	1000	
78	Se	89	H2	0.348	ppb	17.9	6.67	1000	
88	Sr	89	He	66.548	ppb	3.2	10245.31	2000	
95	Mo	89	He	0.220	ppb	46.3	55.56	1000	
107	Ag	89	He	0.011	ppb	103.5	21.11	100	
111	Cd	89	He	0.034	ppb	85.5	3.33	1000	
118	Sn	159	He	1.319	ppb	6.1	287.79	1000	
121	Sb	159	No Gas	0.085	ppb	14.0	193.55	1000	
137	Ba	159	No Gas	18.599	ppb	9.6	11307.41	2000	
182	W	159	No Gas	0.820	ppb	4.7	991.15	1000	
205	Tl	209	No Gas	0.098	ppb	38.4	290.33	1000	
208	Pb	209	No Gas	0.092	ppb	26.0	503.90	2000	
232	Th	209	No Gas	0.270	ppb	8.3	1077.92	1000	
238	U	209	No Gas	0.052	ppb	42.8	176.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1694413.83	2.9	1826145.95	92.79	29.5	120.4	
Sc	45	No Gas	4243125.58	4.4	4103184.45	103.41	29.5	120.4	
Sc	45	H2	476391.63	0.0	476452.62	99.99	29.5	120.4	
Sc	45	He	95124.03	0.5	95435.38	99.67	29.5	120.4	
Ge	72	No Gas	953576.33	2.6	904931.62	105.38	29.5	120.4	
Ge	72	H2	170231.59	0.5	172351.67	98.77	29.5	120.4	
Ge	72	He	73207.94	0.6	72380.83	101.14	29.5	120.4	
Y	89	H2	3046785.25	0.2	2964265.2	102.78	29.5	120.4	
Y	89	He	618248.58	0.8	618281.42	99.99	29.5	120.4	
Tb	159	No Gas	9680610.13	4.0	8714728.06	111.08	29.5	120.4	
Tb	159	He	3299425.23	0.7	3206480.02	102.9	29.5	120.4	
Bi	209	No Gas	4913369.71	4.0	4440413.54	110.65	29.5	120.4	

Sample Report

Sample Name SN5788-006

File Name 085SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:53:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.116	ppb	35.5	53.34	100	
11	B	6	No Gas	17.618	ppb	7.6	4876.55	1000	
23	Na	45	He	13515.810	ppb	1.5	317840.32	200000	
24	Mg	45	He	11662.168	ppb	0.8	150637.68	200000	
27	Al	45	He	17.809	ppb	6.3	102.23	200000	
28	Si	45	H2	5369.743	ppb	1.6	48214.77	10000	
39	K	45	He	752.068	ppb	1.6	20241.86	200000	
40	Ca	45	H2	18675.638	ppb	0.3	1574174.00	200000	
51	V	89	He	1.754	ppb	12.6	524.47	1000	
52	Cr	89	He	0.404	ppb	19.9	145.31	2000	
55	Mn	89	He	1180.905	ppb	0.6	121444.27	2000	
56	Fe	89	H2	22705.682	ppb	0.3	7917310.62	100000	
59	Co	89	He	19.235	ppb	1.8	7222.39	1000	
60	Ni	89	He	46.082	ppb	4.3	4776.55	1000	
63	Cu	89	He	-0.196	ppb	N/A	382.24	2000	
66	Zn	89	He	45.019	ppb	5.8	1803.51	2000	
75	As	89	He	7.888	ppb	9.2	255.70	1000	
78	Se	89	H2	0.139	ppb	32.4	3.17	1000	
88	Sr	89	He	76.790	ppb	2.2	11848.84	2000	
95	Mo	89	He	0.176	ppb	23.7	47.78	1000	
107	Ag	89	He	0.025	ppb	97.3	30.00	100	
111	Cd	89	He	0.072	ppb	56.7	6.29	1000	
118	Sn	159	He	1.251	ppb	25.0	276.68	1000	
121	Sb	159	No Gas	0.022	ppb	51.1	93.44	1000	
137	Ba	159	No Gas	36.131	ppb	12.6	21962.61	2000	
182	W	159	No Gas	1.066	ppb	9.4	1281.49	1000	
205	Tl	209	No Gas	0.013	ppb	25.9	76.75	1000	
208	Pb	209	No Gas	0.058	ppb	12.3	383.77	2000	
232	Th	209	No Gas	0.074	ppb	35.1	373.76	1000	
238	U	209	No Gas	0.030	ppb	18.5	103.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1688336.81	3.3	1826145.95	92.45	29.5	120.4	
Sc	45	No Gas	4242507.72	3.8	4103184.45	103.4	29.5	120.4	
Sc	45	H2	470115.78	0.9	476452.62	98.67	29.5	120.4	
Sc	45	He	96086.66	0.9	95435.38	100.68	29.5	120.4	
Ge	72	No Gas	948551.13	1.4	904931.62	104.82	29.5	120.4	
Ge	72	H2	168981.31	0.7	172351.67	98.04	29.5	120.4	
Ge	72	He	73365.01	0.1	72380.83	101.36	29.5	120.4	
Y	89	H2	3023967.12	0.6	2964265.2	102.01	29.5	120.4	
Y	89	He	619822.95	1.0	618281.42	100.25	29.5	120.4	
Tb	159	No Gas	9697297.43	3.3	8714728.06	111.27	29.5	120.4	
Tb	159	He	3303901.10	0.7	3206480.02	103.04	29.5	120.4	
Bi	209	No Gas	4904903.43	3.9	4440413.54	110.46	29.5	120.4	

Sample Report

Sample Name SN5788-007

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 7:56:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.077	ppb	95.3	43.34	100	
11	B	6	No Gas	31.073	ppb	12.1	7233.17	1000	
23	Na	45	He	47259.639	ppb	0.2	1089089.83	200000	
24	Mg	45	He	6342.903	ppb	0.5	81212.99	200000	
27	Al	45	He	167.082	ppb	8.3	825.61	200000	
28	Si	45	H2	3105.815	ppb	2.9	28155.59	10000	
39	K	45	He	1470.171	ppb	1.7	27973.12	200000	
40	Ca	45	H2	17127.517	ppb	1.1	1446463.82	200000	
51	V	89	He	2.165	ppb	4.9	595.59	1000	
52	Cr	89	He	0.628	ppb	1.4	194.64	2000	
55	Mn	89	He	8.407	ppb	8.4	871.87	2000	
56	Fe	89	H2	413.554	ppb	1.6	145945.86	100000	
59	Co	89	He	0.375	ppb	31.6	153.35	1000	
60	Ni	89	He	3.315	ppb	16.5	400.02	1000	
63	Cu	89	He	-0.051	ppb	N/A	423.35	2000	
66	Zn	89	He	6.960	ppb	12.1	333.35	2000	
75	As	89	He	0.889	ppb	19.4	34.33	1000	
78	Se	89	H2	0.170	ppb	41.6	3.67	1000	
88	Sr	89	He	91.325	ppb	3.3	14044.35	2000	
95	Mo	89	He	0.050	ppb	130.5	25.56	1000	
107	Ag	89	He	0.074	ppb	35.8	58.89	100	
111	Cd	89	He	0.078	ppb	82.0	6.66	1000	
118	Sn	159	He	0.814	ppb	23.0	202.23	1000	
121	Sb	159	No Gas	0.026	ppb	82.7	100.12	1000	
137	Ba	159	No Gas	2.850	ppb	4.0	1755.41	2000	
182	W	159	No Gas	0.046	ppb	22.2	80.09	1000	
205	Tl	209	No Gas	0.002	ppb	28.2	50.06	1000	
208	Pb	209	No Gas	0.161	ppb	6.1	737.50	2000	
232	Th	209	No Gas	0.064	ppb	30.7	337.05	1000	
238	U	209	No Gas	0.015	ppb	60.7	53.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1695687.97	2.9	1826145.95	92.86	29.5	120.4	
Sc	45	No Gas	4280084.67	3.5	4103184.45	104.31	29.5	120.4	
Sc	45	H2	471036.41	1.1	476452.62	98.86	29.5	120.4	
Sc	45	He	94855.38	1.0	95435.38	99.39	29.5	120.4	
Ge	72	No Gas	951547.19	1.5	904931.62	105.15	29.5	120.4	
Ge	72	H2	169008.68	2.0	172351.67	98.06	29.5	120.4	
Ge	72	He	73218.38	0.4	72380.83	101.16	29.5	120.4	
Y	89	H2	3015659.72	1.1	2964265.2	101.73	29.5	120.4	
Y	89	He	617628.97	0.5	618281.42	99.89	29.5	120.4	
Tb	159	No Gas	9670266.45	3.0	8714728.06	110.96	29.5	120.4	
Tb	159	He	3311832.90	1.0	3206480.02	103.29	29.5	120.4	
Bi	209	No Gas	4880546.68	3.5	4440413.54	109.91	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG17IMW1
File Name	087_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 7:59:01 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.114	ppb	21.2	52.22	0.5	
B	11	6	No Gas	3.438	ppb	13.4	2400.28	10	
Na	23	45	He	94.990	ppb	10.4	5450.46	500	
Mg	24	45	He	9.748	ppb	5.0	846.76	50	
Al	27	45	He	12.091	ppb	25.5	73.34	50	
Si	28	45	H2	8.563	ppb	147.6	590.67	250	
K	39	45	He	-13.323	ppb	N/A	11502.88	500	
Ca	40	45	H2	29.052	ppb	11.0	3496.12	50	
V	51	89	He	2.529	ppb	5.1	660.04	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.331	ppb	26.1	128.65	2.5	
Mn	55	89	He	0.678	ppb	12.4	79.99	1	
Fe	56	89	H2	7.606	ppb	18.6	4839.55	50	
Co	59	89	He	0.018	ppb	97.2	20.00	0.5	
Ni	60	89	He	-0.052	ppb	N/A	56.67	1	
Cu	63	89	He	-0.431	ppb	N/A	312.24	1.5	
Zn	66	89	He	1.472	ppb	75.4	122.23	5	
As	75	89	He	0.117	ppb	75.3	10.00	2.5	
Se	78	89	H2	0.059	ppb	77.5	1.83	2.5	
Sr	88	89	He	0.022	ppb	152.6	7.78	2.5	
Mo	95	89	He	-0.012	ppb	N/A	14.44	2.5	
Ag	107	89	He	-0.004	ppb	N/A	12.22	0.5	
Cd	111	89	He	0.015	ppb	116.4	1.85	0.5	
Sn	118	159	He	1.050	ppb	25.6	242.23	2.5	
Sb	121	159	No Gas	0.003	ppb	504.1	63.41	0.5	
Ba	137	159	No Gas	0.140	ppb	32.7	110.12	1	
W	182	159	No Gas	0.047	ppb	2.3	80.09	2.5	
Tl	205	209	No Gas	0.003	ppb	421.2	50.06	0.5	
Pb	208	209	No Gas	0.043	ppb	40.6	327.04	0.5	
Th	232	209	No Gas	0.044	ppb	27.6	266.97	2.5	
U	238	209	No Gas	0.002	ppb	159.1	10.01	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1672641.05	1.2	1826145.95	91.59	29.5	120.4	
Sc	45	No Gas	4191585.76	1.6	4103184.45	102.15	29.5	120.4	
Sc	45	H2	466573.67	2.0	476452.62	97.93	29.5	120.4	
Sc	45	He	95183.77	0.7	95435.38	99.74	29.5	120.4	
Ge	72	No Gas	941345.08	1.5	904931.62	104.02	29.5	120.4	
Ge	72	H2	164679.31	0.8	172351.67	95.55	29.5	120.4	
Ge	72	He	71964.53	0.5	72380.83	99.42	29.5	120.4	
Y	89	H2	3015459.08	0.9	2964265.2	101.73	29.5	120.4	
Y	89	He	616961.52	1.3	618281.42	99.79	29.5	120.4	
Tb	159	No Gas	9601744.58	1.6	8714728.06	110.18	29.5	120.4	
Tb	159	He	3310231.69	1.1	3206480.02	103.24	29.5	120.4	
Bi	209	No Gas	4862853.62	1.9	4440413.54	109.51	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG17IMW1
File Name	088LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 8:01:36 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.096	ppb	4.0	13741.45	50	20.84	79.5	120.4	
B	11	6	No Gas	529.776	ppb	3.3	93641.45	500	21.19	79.5	120.4	
Na	23	45	He	8001.817	ppb	0.8	188132.96	7500	21.34	79.5	120.4	
Mg	24	45	He	5427.625	ppb	0.6	69980.49	5000	21.71	79.5	120.4	
Al	27	45	He	1946.062	ppb	2.4	9519.03	2000	19.46	79.5	120.4	
Si	28	45	H2	1036.654	ppb	4.0	9767.48	1000	20.73	0	200	
K	39	45	He	10755.786	ppb	1.0	132047.85	10000	21.51	79.5	120.4	
Ca	40	45	H2	2736.228	ppb	1.0	232605.35	2500	21.89	79.5	120.4	
V	51	89	He	534.197	ppb	1.0	96447.07	500	21.37	79.5	120.4	
Cr	52	89	He	216.663	ppb	0.7	48496.48	200	21.67	79.5	120.4	
Mn	55	89	He	540.044	ppb	0.3	55811.35	500	21.6	79.5	120.4	
Fe	56	89	H2	1102.750	ppb	0.9	386177.15	1000	22.06	79.5	120.4	
Co	59	89	He	556.814	ppb	1.0	209687.56	500	22.27	79.5	120.4	
Ni	60	89	He	552.679	ppb	0.5	56884.04	500	22.11	79.5	120.4	
Cu	63	89	He	271.008	ppb	0.9	80096.17	250	21.68	79.5	120.4	
Zn	66	89	He	526.573	ppb	1.1	20495.69	500	21.06	79.5	120.4	
As	75	89	He	108.430	ppb	1.0	3449.47	100	21.69	79.5	120.4	
Se	78	89	H2	107.673	ppb	2.6	1781.70	100	21.54	79.5	120.4	
Sr	88	89	He	525.608	ppb	0.5	81475.62	500	21.02	79.5	120.4	
Mo	95	89	He	110.192	ppb	2.1	19591.26	100	22.04	79.5	120.4	
Ag	107	89	He	55.566	ppb	1.5	33816.25	50	22.23	79.5	120.4	
Cd	111	89	He	275.619	ppb	1.3	21208.92	250	22.05	79.5	120.4	
Sn	118	159	He	519.079	ppb	1.1	89434.97	500	20.76	79.5	120.4	
Sb	121	159	No Gas	105.432	ppb	3.1	164022.18	100	21.09	79.5	120.4	
Ba	137	159	No Gas	2056.101	ppb	2.4	1238575.41	2000	20.56	79.5	120.4	
W	182	159	No Gas	105.650	ppb	2.9	123365.29	100	21.13	79.5	120.4	
Tl	205	209	No Gas	108.729	ppb	2.1	271798.17	100	21.75	79.5	120.4	
[Pb]	206	209	No Gas	107.882	ppb	2.2	93553.98	100	21.58	79.5	120.4	
[Pb]	207	209	No Gas	106.891	ppb	1.3	80563.55	100	21.38	79.5	120.4	
Pb	208	209	No Gas	107.725	ppb	2.1	371325.60	100	21.54	79.5	120.4	
Th	232	209	No Gas	104.404	ppb	2.7	367167.48	100	20.88	79.5	120.4	
U	238	209	No Gas	104.078	ppb	3.1	342533.33	100	20.82	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1687815.54	0.9	1826145.95	92.43	29.5	120.4	
Sc	45	No Gas	4183181.31	0.7	4103184.45	101.95	29.5	120.4	
Sc	45	H2	472245.51	1.1	476452.62	99.12	29.5	120.4	
Sc	45	He	95380.67	0.6	95435.38	99.94	29.5	120.4	
Ge	72	No Gas	929045.70	0.8	904931.62	102.66	29.5	120.4	
Ge	72	H2	165607.40	1.3	172351.67	96.09	29.5	120.4	
Ge	72	He	72819.17	0.7	72380.83	100.61	29.5	120.4	
Y	89	H2	3020602.97	1.1	2964265.2	101.9	29.5	120.4	
Y	89	He	622782.59	0.8	618281.42	100.73	29.5	120.4	
Tb	159	No Gas	9594953.19	0.5	8714728.06	110.1	29.5	120.4	
Tb	159	He	3314335.06	0.5	3206480.02	103.36	29.5	120.4	
Bi	209	No Gas	4856629.22	0.7	4440413.54	109.37	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 8:04:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.926	ppb	2.1	33775.84	25	99.7	89.8	110.2	
11	B	6	No Gas	25.312	ppb	4.0	24433.53	25	101.25	89.8	110.2	
23	Na	45	He	5104.144	ppb	1.0	604561.21	5000	102.08	89.8	110.2	
24	Mg	45	He	4904.378	ppb	0.8	319814.93	5000	98.09	89.8	110.2	
27	Al	45	He	476.134	ppb	2.3	11870.91	500	95.23	89.8	110.2	
28	Si	45	H2	475.844	ppb	2.7	22235.39	500	95.17	89.8	110.2	
39	K	45	He	4913.380	ppb	0.3	292265.88	5000	98.27	89.8	110.2	
40	Ca	45	H2	4910.408	ppb	0.4	2125218.06	5000	98.21	89.8	110.2	
51	V	89	He	24.895	ppb	2.4	22943.68	25	99.58	89.8	110.2	
52	Cr	89	He	24.930	ppb	0.4	28310.44	25	99.72	89.8	110.2	
55	Mn	89	He	24.852	ppb	1.9	13025.67	25	99.41	89.8	110.2	
56	Fe	89	H2	4820.914	ppb	0.5	8540150.06	5000	96.42	89.8	110.2	
59	Co	89	He	25.440	ppb	2.2	48578.48	25	101.76	89.8	110.2	
60	Ni	89	He	25.205	ppb	1.1	13197.77	25	100.82	89.8	110.2	
63	Cu	89	He	24.723	ppb	0.3	37280.57	25	98.89	89.8	110.2	
66	Zn	89	He	24.555	ppb	3.3	4896.59	25	98.22	89.8	110.2	
75	As	89	He	25.129	ppb	2.1	4051.37	25	100.52	89.8	110.2	
78	Se	89	H2	24.132	ppb	2.9	2030.72	25	96.53	89.8	110.2	
88	Sr	89	He	23.834	ppb	0.1	18729.99	25	95.34	89.8	110.2	
95	Mo	89	He	25.074	ppb	0.3	22594.81	25	100.3	89.8	110.2	
107	Ag	89	He	25.112	ppb	0.5	77447.32	25	100.45	89.8	110.2	
111	Cd	89	He	24.910	ppb	1.0	9716.16	25	99.64	89.8	110.2	
118	Sn	159	He	23.774	ppb	0.9	20671.98	25	95.1	89.8	110.2	
121	Sb	159	No Gas	24.361	ppb	2.8	189728.37	25	97.44	89.8	110.2	
137	Ba	159	No Gas	24.959	ppb	2.7	75296.03	25	99.84	89.8	110.2	
182	W	159	No Gas	24.050	ppb	3.0	140582.28	25	96.2	89.8	110.2	
205	Tl	209	No Gas	24.280	ppb	2.2	304973.23	25	97.12	89.8	110.2	
208	Pb	209	No Gas	24.539	ppb	1.9	425005.17	25	98.16	89.8	110.2	
232	Th	209	No Gas	24.323	ppb	3.1	429730.26	25	97.29	89.8	110.2	
238	U	209	No Gas	24.347	ppb	3.5	402569.45	25	97.39	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1735884.42	1.2	1826145.95	95.06	29.5	120.4	
Sc	45	No Gas	4318330.63	2.1	4103184.45	105.24	29.5	120.4	
Sc	45	H2	482866.00	0.5	476452.62	101.35	29.5	120.4	
Sc	45	He	97266.53	1.2	95435.38	101.92	29.5	120.4	
Ge	72	No Gas	951681.61	0.7	904931.62	105.17	29.5	120.4	
Ge	72	H2	172166.02	0.6	172351.67	99.89	29.5	120.4	
Ge	72	He	74285.14	1.4	72380.83	102.63	29.5	120.4	
Y	89	H2	3072652.52	0.7	2964265.2	103.66	29.5	120.4	
Y	89	He	631338.70	1.0	618281.42	102.11	29.5	120.4	
Tb	159	No Gas	9610541.73	2.3	8714728.06	110.28	29.5	120.4	
Tb	159	He	3337521.10	1.0	3206480.02	104.09	29.5	120.4	
Bi	209	No Gas	4881560.56	2.0	4440413.54	109.93	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 8:06:57 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.069	ppb	19.7	120.00	0.2	
11	B	6	No Gas	0.653	ppb	9.9	2533.65	4	
23	Na	45	He	8.646	ppb	32.2	4312.13	200	
24	Mg	45	He	-0.016	ppb	N/A	731.18	20	
27	Al	45	He	0.081	ppb	289.5	16.66	20	
28	Si	45	H2	-1.644	ppb	N/A	453.84	100	
39	K	45	He	-3.619	ppb	N/A	11597.83	200	
40	Ca	45	H2	1.497	ppb	15.2	1740.17	20	
51	V	89	He	0.058	ppb	8.7	263.34	1	
52	Cr	89	He	0.018	ppb	12.9	76.66	1	
55	Mn	89	He	0.038	ppb	22.4	30.66	0.4	
56	Fe	89	H2	1.907	ppb	12.1	5537.24	20	
59	Co	89	He	0.013	ppb	69.7	37.78	0.2	
60	Ni	89	He	0.010	ppb	140.1	67.78	0.4	
63	Cu	89	He	-0.218	ppb	N/A	122.23	0.6	
66	Zn	89	He	0.007	ppb	1172.9	67.78	2	
75	As	89	He	0.004	ppb	337.7	7.00	1	
78	Se	89	H2	0.032	ppb	32.3	3.50	1	
88	Sr	89	He	0.010	ppb	99.7	12.22	1	
95	Mo	89	He	0.055	ppb	31.6	65.56	1	
107	Ag	89	He	0.003	ppb	50.6	24.44	0.2	
111	Cd	89	He	0.012	ppb	40.4	5.56	0.2	
118	Sn	159	He	0.046	ppb	78.0	101.12	1	
121	Sb	159	No Gas	0.023	ppb	37.3	236.93	0.2	
137	Ba	159	No Gas	0.043	ppb	25.6	150.17	0.4	
182	W	159	No Gas	0.066	ppb	24.9	403.79	1	
205	Tl	209	No Gas	0.025	ppb	20.8	347.06	0.2	
208	Pb	209	No Gas	0.034	ppb	8.6	760.86	0.2	
232	Th	209	No Gas	0.046	ppb	9.4	904.39	1	
238	U	209	No Gas	0.026	ppb	20.9	423.81	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1787908.73	2.8	1826145.95	97.91	29.5	120.4	
Sc	45	No Gas	4269344.35	4.0	4103184.45	104.05	29.5	120.4	
Sc	45	H2	480066.25	0.9	476452.62	100.76	29.5	120.4	
Sc	45	He	96411.12	0.5	95435.38	101.02	29.5	120.4	
Ge	72	No Gas	936404.48	2.7	904931.62	103.48	29.5	120.4	
Ge	72	H2	173207.04	0.8	172351.67	100.5	29.5	120.4	
Ge	72	He	73657.98	0.1	72380.83	101.76	29.5	120.4	
Y	89	H2	3031839.26	0.6	2964265.2	102.28	29.5	120.4	
Y	89	He	624290.77	0.5	618281.42	100.97	29.5	120.4	
Tb	159	No Gas	9426761.59	4.4	8714728.06	108.17	29.5	120.4	
Tb	159	He	3294500.82	0.2	3206480.02	102.75	29.5	120.4	
Bi	209	No Gas	4786606.44	3.7	4440413.54	107.8	29.5	120.4	

Sample Report

Sample Name SN5772-003R

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:09:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.116	ppb	58.8	60.00	100	
11	B	6	No Gas	-1.863	ppb	N/A	1772.42	1000	
23	Na	45	He	48.836	ppb	279.7	4315.40	200000	
24	Mg	45	He	53.228	ppb	177.0	1277.93	200000	
27	Al	45	He	1.364	ppb	87.3	26.67	200000	
28	Si	45	H2	-8.997	ppb	N/A	193.55	10000	
39	K	45	He	-571.751	ppb	N/A	5865.53	200000	
40	Ca	45	H2	13.454	ppb	235.1	958.97	200000	
51	V	89	He	-0.952	ppb	N/A	45.56	1000	
52	Cr	89	He	-0.030	ppb	N/A	47.32	2000	
55	Mn	89	He	0.117	ppb	106.9	24.00	2000	
56	Fe	89	H2	34.044	ppb	177.5	2976.99	100000	
59	Co	89	He	0.047	ppb	154.0	28.89	1000	
60	Ni	89	He	0.504	ppb	157.5	110.00	1000	
63	Cu	89	He	-1.178	ppb	N/A	95.56	2000	
66	Zn	89	He	-0.120	ppb	N/A	86.67	2000	
75	As	89	He	-0.088	ppb	N/A	3.33	1000	
78	Se	89	H2	-0.034	ppb	N/A	0.83	1000	
88	Sr	89	He	-0.017	ppb	N/A	4.44	2000	
95	Mo	89	He	-0.046	ppb	N/A	11.11	1000	
107	Ag	89	He	-0.004	ppb	N/A	15.56	100	
111	Cd	89	He	0.001	ppb	1939.9	1.11	1000	
118	Sn	159	He	-0.133	ppb	N/A	45.55	1000	
121	Sb	159	No Gas	0.031	ppb	125.5	103.45	1000	
137	Ba	159	No Gas	0.470	ppb	145.8	273.65	2000	
182	W	159	No Gas	0.117	ppb	23.3	170.19	1000	
205	Tl	209	No Gas	0.039	ppb	104.5	133.48	1000	
208	Pb	209	No Gas	0.056	ppb	156.8	343.72	2000	
232	Th	209	No Gas	0.214	ppb	22.5	904.39	1000	
238	U	209	No Gas	0.043	ppb	113.8	130.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1974388.00	20.0	1826145.95	108.12	29.5	120.4	
Sc	45	No Gas	4548381.71	22.1	4103184.45	110.85	29.5	120.4	
Sc	45	H2	838721.75	120.7	476452.62	176.03	29.5	120.4	6020/DoD□ EPA
Sc	45	He	136315.95	70.6	95435.38	142.84	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	970452.05	24.0	904931.62	107.24	29.5	120.4	
Ge	72	H2	322503.30	120.3	172351.67	187.12	29.5	120.4	6020/DoD□ EPA
Ge	72	He	102457.18	69.6	72380.83	141.55	29.5	120.4	6020/DoD□ EPA
Y	89	H2	5618291.59	120.3	2964265.2	189.53	29.5	120.4	6020/DoD□ EPA
Y	89	He	862188.57	71.1	618281.42	139.45	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	10074495.13	22.4	8714728.06	115.6	29.5	120.4	
Tb	159	He	4589857.80	69.3	3206480.02	143.14	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	5089014.04	23.8	4440413.54	114.61	29.5	120.4	

Sample Report

Sample Name SN5814-001

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:12:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.130	ppb	21.2	58.89	100	
11	B	6	No Gas	838.794	ppb	3.4	152417.26	1000	
23	Na	45	He	94772.704	ppb	0.3	2133771.09	200000	
24	Mg	45	He	23057.309	ppb	1.0	286986.61	200000	
27	Al	45	He	243.685	ppb	0.6	1172.31	200000	
28	Si	45	H2	5480.728	ppb	1.4	48509.64	10000	
39	K	45	He	13989.615	ppb	0.6	163701.00	200000	
40	Ca	45	H2	116509.380	ppb	0.4	9677470.55	200000	
51	V	89	He	2.670	ppb	12.8	671.15	1000	
52	Cr	89	He	1.891	ppb	7.4	464.59	2000	
55	Mn	89	He	659.504	ppb	1.0	66164.60	2000	
56	Fe	89	H2	1123.296	ppb	0.8	386922.60	100000	
59	Co	89	He	1.162	ppb	1.4	437.82	1000	
60	Ni	89	He	23.051	ppb	3.9	2361.39	1000	
63	Cu	89	He	0.689	ppb	22.3	625.59	2000	
66	Zn	89	He	6.023	ppb	6.0	291.13	2000	
75	As	89	He	6.479	ppb	7.9	206.02	1000	
78	Se	89	H2	0.490	ppb	33.4	8.83	1000	
88	Sr	89	He	708.683	ppb	0.5	106646.37	2000	
95	Mo	89	He	7.812	ppb	5.8	1363.46	1000	
107	Ag	89	He	0.008	ppb	144.2	18.89	100	
111	Cd	89	He	0.055	ppb	56.1	4.82	1000	
118	Sn	159	He	1.304	ppb	21.8	283.35	1000	
121	Sb	159	No Gas	0.172	ppb	2.6	317.02	1000	
137	Ba	159	No Gas	40.716	ppb	5.2	23867.89	2000	
182	W	159	No Gas	0.107	ppb	60.1	146.83	1000	
205	Tl	209	No Gas	0.012	ppb	68.4	70.08	1000	
208	Pb	209	No Gas	1.026	ppb	9.5	3564.17	2000	
232	Th	209	No Gas	0.154	ppb	37.8	627.39	1000	
238	U	209	No Gas	35.004	ppb	4.3	110563.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1747943.87	1.3	1826145.95	95.72	29.5	120.4	
Sc	45	No Gas	4135793.67	1.7	4103184.45	100.79	29.5	120.4	
Sc	45	H2	463535.95	0.2	476452.62	97.29	29.5	120.4	
Sc	45	He	92811.85	0.6	95435.38	97.25	29.5	120.4	
Ge	72	No Gas	927971.58	2.5	904931.62	102.55	29.5	120.4	
Ge	72	H2	166982.64	0.4	172351.67	96.88	29.5	120.4	
Ge	72	He	70788.46	0.7	72380.83	97.8	29.5	120.4	
Y	89	H2	2971454.32	0.9	2964265.2	100.24	29.5	120.4	
Y	89	He	604618.14	0.8	618281.42	97.79	29.5	120.4	
Tb	159	No Gas	9331712.15	1.5	8714728.06	107.08	29.5	120.4	
Tb	159	He	3280296.89	0.6	3206480.02	102.3	29.5	120.4	
Bi	209	No Gas	4662547.96	1.6	4440413.54	105	29.5	120.4	

Sample Report

Sample Name SN5814-002

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:15:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.191	ppb	32.0	72.22	100	
11	B	6	No Gas	47.946	ppb	3.6	10052.70	1000	
23	Na	45	He	3507.636	ppb	1.6	82921.68	200000	
24	Mg	45	He	3688.538	ppb	1.1	47006.20	200000	
27	Al	45	He	1772.685	ppb	2.9	8530.71	200000	
28	Si	45	H2	10063.017	ppb	3.7	88989.59	10000	
39	K	45	He	3992.617	ppb	1.6	55431.80	200000	
40	Ca	45	H2	28103.686	ppb	0.7	2344296.55	200000	
51	V	89	He	9.656	ppb	5.9	1929.10	1000	
52	Cr	89	He	4.452	ppb	3.7	1039.85	2000	
55	Mn	89	He	2517.800	ppb	0.5	257353.66	2000	
56	Fe	89	H2	43542.478	ppb	0.5	15102734.08	100000	
59	Co	89	He	6.123	ppb	5.7	2293.69	1000	
60	Ni	89	He	9.716	ppb	5.0	1050.08	1000	
63	Cu	89	He	10.870	ppb	3.6	3597.27	2000	
66	Zn	89	He	57.241	ppb	6.0	2262.49	2000	
75	As	89	He	68.388	ppb	2.7	2154.41	1000	
78	Se	89	H2	0.312	ppb	0.5	6.00	1000	
88	Sr	89	He	146.014	ppb	0.9	22392.30	2000	
95	Mo	89	He	1.050	ppb	15.5	201.12	1000	
107	Ag	89	He	0.020	ppb	71.3	26.67	100	
111	Cd	89	He	0.146	ppb	40.1	11.85	1000	
118	Sn	159	He	1.537	ppb	4.7	327.80	1000	
121	Sb	159	No Gas	0.244	ppb	20.4	437.16	1000	
137	Ba	159	No Gas	159.715	ppb	1.3	96162.21	2000	
182	W	159	No Gas	0.330	ppb	12.8	410.47	1000	
205	Tl	209	No Gas	0.064	ppb	9.6	206.90	1000	
208	Pb	209	No Gas	10.747	ppb	3.1	37597.46	2000	
232	Th	209	No Gas	0.409	ppb	12.1	1568.53	1000	
238	U	209	No Gas	0.791	ppb	6.5	2633.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673792.20	0.7	1826145.95	91.66	29.5	120.4	
Sc	45	No Gas	4121848.42	0.9	4103184.45	100.45	29.5	120.4	
Sc	45	H2	465359.53	0.5	476452.62	97.67	29.5	120.4	
Sc	45	He	93814.87	0.3	95435.38	98.3	29.5	120.4	
Ge	72	No Gas	924339.60	0.6	904931.62	102.14	29.5	120.4	
Ge	72	H2	164496.53	0.7	172351.67	95.44	29.5	120.4	
Ge	72	He	71637.62	0.4	72380.83	98.97	29.5	120.4	
Y	89	H2	3008405.36	0.4	2964265.2	101.49	29.5	120.4	
Y	89	He	616046.24	0.3	618281.42	99.64	29.5	120.4	
Tb	159	No Gas	9586720.97	0.6	8714728.06	110.01	29.5	120.4	
Tb	159	He	3326538.32	0.5	3206480.02	103.74	29.5	120.4	
Bi	209	No Gas	4906897.03	0.4	4440413.54	110.51	29.5	120.4	

Sample Report

Sample Name SN5814-003

File Name 094SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:17:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	16.1	64.45	100	
11	B	6	No Gas	9.282	ppb	17.3	3437.20	1000	
23	Na	45	He	2211.707	ppb	0.9	53700.03	200000	
24	Mg	45	He	1049.663	ppb	2.2	13947.76	200000	
27	Al	45	He	350.500	ppb	2.5	1705.72	200000	
28	Si	45	H2	5306.686	ppb	1.8	47029.58	10000	
39	K	45	He	1312.075	ppb	2.8	26035.35	200000	
40	Ca	45	H2	7247.594	ppb	1.5	603567.39	200000	
51	V	89	He	3.186	ppb	5.9	777.83	1000	
52	Cr	89	He	1.167	ppb	10.2	313.95	2000	
55	Mn	89	He	60.276	ppb	2.7	6183.58	2000	
56	Fe	89	H2	1008.420	ppb	1.3	351514.25	100000	
59	Co	89	He	0.643	ppb	7.7	253.35	1000	
60	Ni	89	He	1.811	ppb	15.5	246.68	1000	
63	Cu	89	He	1.666	ppb	10.6	923.40	2000	
66	Zn	89	He	14.652	ppb	10.5	628.93	2000	
75	As	89	He	2.024	ppb	14.1	70.01	1000	
78	Se	89	H2	0.211	ppb	36.0	4.33	1000	
88	Sr	89	He	38.113	ppb	1.6	5860.35	2000	
95	Mo	89	He	0.139	ppb	20.1	41.11	1000	
107	Ag	89	He	0.022	ppb	28.3	27.78	100	
111	Cd	89	He	0.073	ppb	69.8	6.30	1000	
118	Sn	159	He	1.370	ppb	6.2	298.91	1000	
121	Sb	159	No Gas	0.086	ppb	24.8	196.89	1000	
137	Ba	159	No Gas	15.405	ppb	8.1	9474.06	2000	
182	W	159	No Gas	0.057	ppb	48.4	93.44	1000	
205	Tl	209	No Gas	0.024	ppb	35.3	106.79	1000	
208	Pb	209	No Gas	2.177	ppb	5.5	7963.27	2000	
232	Th	209	No Gas	0.089	ppb	10.9	440.51	1000	
238	U	209	No Gas	0.117	ppb	12.3	403.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1691204.49	2.7	1826145.95	92.61	29.5	120.4	
Sc	45	No Gas	4211630.28	3.3	4103184.45	102.64	29.5	120.4	
Sc	45	H2	464004.85	1.1	476452.62	97.39	29.5	120.4	
Sc	45	He	94216.63	1.0	95435.38	98.72	29.5	120.4	
Ge	72	No Gas	938557.76	2.0	904931.62	103.72	29.5	120.4	
Ge	72	H2	162772.22	2.0	172351.67	94.44	29.5	120.4	
Ge	72	He	71816.99	0.2	72380.83	99.22	29.5	120.4	
Y	89	H2	3005058.34	0.3	2964265.2	101.38	29.5	120.4	
Y	89	He	617315.83	0.4	618281.42	99.84	29.5	120.4	
Tb	159	No Gas	9782107.28	3.3	8714728.06	112.25	29.5	120.4	
Tb	159	He	3326736.44	0.6	3206480.02	103.75	29.5	120.4	
Bi	209	No Gas	5040834.41	3.0	4440413.54	113.52	29.5	120.4	

Sample Report

Sample Name SN5827-001

File Name 095SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:20:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.155	ppb	4.9	62.23	100	
11	B	6	No Gas	6.638	ppb	11.4	2925.95	1000	
23	Na	45	He	803.829	ppb	2.3	21386.55	200000	
24	Mg	45	He	610.756	ppb	2.3	8340.80	200000	
27	Al	45	He	2309.427	ppb	2.3	11060.23	200000	
28	Si	45	H2	6593.032	ppb	0.9	58484.43	10000	
39	K	45	He	392.864	ppb	3.8	15739.96	200000	
40	Ca	45	H2	301.189	ppb	18.8	26186.73	200000	
51	V	89	He	9.724	ppb	3.4	1930.20	1000	
52	Cr	89	He	6.810	ppb	4.4	1552.48	2000	
55	Mn	89	He	424.686	ppb	1.5	43171.09	2000	
56	Fe	89	H2	2706.942	ppb	0.6	943616.45	100000	
59	Co	89	He	3.877	ppb	2.5	1449.07	1000	
60	Ni	89	He	10.214	ppb	0.7	1094.53	1000	
63	Cu	89	He	2.529	ppb	10.8	1165.65	2000	
66	Zn	89	He	13.553	ppb	4.8	582.26	2000	
75	As	89	He	1.806	ppb	20.2	62.68	1000	
78	Se	89	H2	0.160	ppb	82.2	3.50	1000	
88	Sr	89	He	3.841	ppb	5.7	590.04	2000	
95	Mo	89	He	0.675	ppb	14.8	134.45	1000	
107	Ag	89	He	0.011	ppb	241.5	21.11	100	
111	Cd	89	He	0.147	ppb	46.3	11.85	1000	
118	Sn	159	He	0.948	ppb	7.9	223.35	1000	
121	Sb	159	No Gas	0.305	ppb	25.5	533.94	1000	
137	Ba	159	No Gas	13.915	ppb	3.0	8402.01	2000	
182	W	159	No Gas	0.209	ppb	23.9	270.31	1000	
205	Tl	209	No Gas	0.113	ppb	6.4	327.04	1000	
208	Pb	209	No Gas	2.253	ppb	2.3	7959.91	2000	
232	Th	209	No Gas	0.934	ppb	11.6	3407.61	1000	
238	U	209	No Gas	0.541	ppb	4.1	1788.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659070.13	0.4	1826145.95	90.85	29.5	120.4	
Sc	45	No Gas	4105027.75	1.3	4103184.45	100.04	29.5	120.4	
Sc	45	H2	465392.92	0.4	476452.62	97.68	29.5	120.4	
Sc	45	He	93409.27	0.7	95435.38	97.88	29.5	120.4	
Ge	72	No Gas	926880.79	1.2	904931.62	102.43	29.5	120.4	
Ge	72	H2	164336.01	0.4	172351.67	95.35	29.5	120.4	
Ge	72	He	70867.37	0.5	72380.83	97.91	29.5	120.4	
Y	89	H2	3016838.84	0.3	2964265.2	101.77	29.5	120.4	
Y	89	He	612571.35	0.4	618281.42	99.08	29.5	120.4	
Tb	159	No Gas	9585528.81	1.3	8714728.06	109.99	29.5	120.4	
Tb	159	He	3287925.06	0.4	3206480.02	102.54	29.5	120.4	
Bi	209	No Gas	4867598.26	1.0	4440413.54	109.62	29.5	120.4	

Sample Report

Sample Name SN5827-002

File Name 096SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:22:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.085	ppb	42.0	44.45	100	
11	B	6	No Gas	4.517	ppb	12.5	2588.10	1000	
23	Na	45	He	885.838	ppb	1.8	22893.87	200000	
24	Mg	45	He	491.170	ppb	4.8	6744.30	200000	
27	Al	45	He	24.138	ppb	33.7	127.78	200000	
28	Si	45	H2	3830.681	ppb	2.2	33894.89	10000	
39	K	45	He	13.592	ppb	94.9	11409.50	200000	
40	Ca	45	H2	439.879	ppb	1.1	37411.35	200000	
51	V	89	He	2.911	ppb	2.8	713.38	1000	
52	Cr	89	He	0.522	ppb	24.6	167.31	2000	
55	Mn	89	He	69.008	ppb	2.3	6928.46	2000	
56	Fe	89	H2	7.492	ppb	12.9	4729.42	100000	
59	Co	89	He	0.858	ppb	12.7	326.70	1000	
60	Ni	89	He	1.143	ppb	51.8	174.45	1000	
63	Cu	89	He	1.402	ppb	20.4	828.95	2000	
66	Zn	89	He	5.206	ppb	16.3	260.01	2000	
75	As	89	He	0.276	ppb	60.8	14.67	1000	
78	Se	89	H2	0.050	ppb	33.8	1.67	1000	
88	Sr	89	He	3.827	ppb	6.3	580.03	2000	
95	Mo	89	He	0.009	ppb	337.8	17.78	1000	
107	Ag	89	He	-0.009	ppb	N/A	8.89	100	
111	Cd	89	He	0.035	ppb	112.3	3.33	1000	
118	Sn	159	He	0.926	ppb	24.3	218.90	1000	
121	Sb	159	No Gas	0.045	ppb	67.2	130.14	1000	
137	Ba	159	No Gas	4.066	ppb	6.8	2496.35	2000	
182	W	159	No Gas	0.046	ppb	117.0	80.09	1000	
205	Tl	209	No Gas	0.007	ppb	35.7	63.41	1000	
208	Pb	209	No Gas	0.094	ppb	17.1	510.58	2000	
232	Th	209	No Gas	0.041	ppb	21.6	260.30	1000	
238	U	209	No Gas	0.026	ppb	16.7	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1675133.37	2.7	1826145.95	91.73	29.5	120.4	
Sc	45	No Gas	4135261.10	3.2	4103184.45	100.78	29.5	120.4	
Sc	45	H2	461311.22	0.8	476452.62	96.82	29.5	120.4	
Sc	45	He	92010.03	0.8	95435.38	96.41	29.5	120.4	
Ge	72	No Gas	929342.92	1.4	904931.62	102.7	29.5	120.4	
Ge	72	H2	164917.03	0.3	172351.67	95.69	29.5	120.4	
Ge	72	He	70850.65	0.5	72380.83	97.89	29.5	120.4	
Y	89	H2	2971971.03	0.8	2964265.2	100.26	29.5	120.4	
Y	89	He	604314.96	0.8	618281.42	97.74	29.5	120.4	
Tb	159	No Gas	9688490.62	2.8	8714728.06	111.17	29.5	120.4	
Tb	159	He	3280851.20	0.8	3206480.02	102.32	29.5	120.4	
Bi	209	No Gas	4938433.78	3.1	4440413.54	111.22	29.5	120.4	

Sample Report

Sample Name SN5827-003

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:25:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.114	ppb	49.2	51.12	100	
11	B	6	No Gas	5.350	ppb	33.0	2684.79	1000	
23	Na	45	He	902.159	ppb	2.0	23408.19	200000	
24	Mg	45	He	7844.481	ppb	0.5	97886.26	200000	
27	Al	45	He	8.759	ppb	49.6	55.56	200000	
28	Si	45	H2	3492.091	ppb	4.6	30646.94	10000	
39	K	45	He	108.078	ppb	22.7	12509.90	200000	
40	Ca	45	H2	27668.457	ppb	0.2	2265530.61	200000	
51	V	89	He	2.036	ppb	3.8	562.25	1000	
52	Cr	89	He	0.498	ppb	15.8	162.64	2000	
55	Mn	89	He	0.625	ppb	24.9	73.32	2000	
56	Fe	89	H2	5.667	ppb	5.9	4075.15	100000	
59	Co	89	He	0.043	ppb	87.7	28.89	1000	
60	Ni	89	He	0.212	ppb	34.5	82.23	1000	
63	Cu	89	He	-0.059	ppb	N/A	413.36	2000	
66	Zn	89	He	3.089	ppb	12.4	181.12	2000	
75	As	89	He	0.090	ppb	129.9	9.00	1000	
78	Se	89	H2	0.134	ppb	47.3	3.00	1000	
88	Sr	89	He	26.039	ppb	1.6	3934.03	2000	
95	Mo	89	He	0.092	ppb	85.8	32.22	1000	
107	Ag	89	He	0.006	ppb	296.0	17.78	100	
111	Cd	89	He	0.010	ppb	85.4	1.48	1000	
118	Sn	159	He	0.928	ppb	16.3	220.01	1000	
121	Sb	159	No Gas	0.024	ppb	58.7	96.77	1000	
137	Ba	159	No Gas	4.444	ppb	17.5	2706.62	2000	
182	W	159	No Gas	0.018	ppb	264.0	46.72	1000	
205	Tl	209	No Gas	0.002	ppb	309.0	50.05	1000	
208	Pb	209	No Gas	0.026	ppb	28.0	273.64	2000	
232	Th	209	No Gas	0.039	ppb	59.0	253.62	1000	
238	U	209	No Gas	0.067	ppb	13.7	226.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1647923.44	2.1	1826145.95	90.24	29.5	120.4	
Sc	45	No Gas	4079881.35	1.9	4103184.45	99.43	29.5	120.4	
Sc	45	H2	456777.62	1.6	476452.62	95.87	29.5	120.4	
Sc	45	He	92603.95	0.5	95435.38	97.03	29.5	120.4	
Ge	72	No Gas	924456.42	0.8	904931.62	102.16	29.5	120.4	
Ge	72	H2	164157.18	1.4	172351.67	95.25	29.5	120.4	
Ge	72	He	71246.73	0.4	72380.83	98.43	29.5	120.4	
Y	89	H2	2951611.77	1.2	2964265.2	99.57	29.5	120.4	
Y	89	He	606338.62	0.6	618281.42	98.07	29.5	120.4	
Tb	159	No Gas	9623674.02	1.6	8714728.06	110.43	29.5	120.4	
Tb	159	He	3287118.22	0.7	3206480.02	102.51	29.5	120.4	
Bi	209	No Gas	4924515.49	1.2	4440413.54	110.9	29.5	120.4	

Sample Report

Sample Name SN5827-004

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:28:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.086	ppb	49.7	44.44	100	
11	B	6	No Gas	5.111	ppb	15.6	2651.46	1000	
23	Na	45	He	850.280	ppb	1.4	22392.15	200000	
24	Mg	45	He	7760.416	ppb	0.5	97481.38	200000	
27	Al	45	He	63.838	ppb	16.8	318.90	200000	
28	Si	45	H2	3486.374	ppb	2.3	30914.68	10000	
39	K	45	He	90.756	ppb	31.9	12403.15	200000	
40	Ca	45	H2	27005.138	ppb	1.0	2234090.02	200000	
51	V	89	He	1.960	ppb	16.8	552.25	1000	
52	Cr	89	He	0.544	ppb	17.6	173.97	2000	
55	Mn	89	He	12.665	ppb	7.1	1293.16	2000	
56	Fe	89	H2	57.486	ppb	1.7	21938.26	100000	
59	Co	89	He	0.223	ppb	12.6	95.56	1000	
60	Ni	89	He	0.945	ppb	38.8	156.67	1000	
63	Cu	89	He	1.108	ppb	19.4	752.27	2000	
66	Zn	89	He	5.369	ppb	14.1	268.90	2000	
75	As	89	He	0.109	ppb	73.6	9.67	1000	
78	Se	89	H2	0.071	ppb	76.0	2.00	1000	
88	Sr	89	He	26.120	ppb	1.7	3971.83	2000	
95	Mo	89	He	0.072	ppb	161.9	28.89	1000	
107	Ag	89	He	0.008	ppb	149.4	18.89	100	
111	Cd	89	He	0.079	ppb	37.7	6.67	1000	
118	Sn	159	He	1.077	ppb	6.5	246.68	1000	
121	Sb	159	No Gas	0.100	ppb	14.0	216.91	1000	
137	Ba	159	No Gas	4.201	ppb	5.6	2593.13	2000	
182	W	159	No Gas	0.020	ppb	43.9	50.06	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	30.03	1000	
208	Pb	209	No Gas	0.203	ppb	17.9	897.68	2000	
232	Th	209	No Gas	0.040	ppb	44.9	256.96	1000	
238	U	209	No Gas	0.073	ppb	18.3	250.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1650778.23	1.4	1826145.95	90.4	29.5	120.4	
Sc	45	No Gas	4107209.52	2.0	4103184.45	100.1	29.5	120.4	
Sc	45	H2	461528.32	1.4	476452.62	96.87	29.5	120.4	
Sc	45	He	93211.23	0.4	95435.38	97.67	29.5	120.4	
Ge	72	No Gas	940326.21	2.0	904931.62	103.91	29.5	120.4	
Ge	72	H2	164426.16	1.1	172351.67	95.4	29.5	120.4	
Ge	72	He	71375.14	0.6	72380.83	98.61	29.5	120.4	
Y	89	H2	2983180.42	0.8	2964265.2	100.64	29.5	120.4	
Y	89	He	610324.16	0.4	618281.42	98.71	29.5	120.4	
Tb	159	No Gas	9737103.54	1.4	8714728.06	111.73	29.5	120.4	
Tb	159	He	3304413.04	0.3	3206480.02	103.05	29.5	120.4	
Bi	209	No Gas	4960817.15	1.4	4440413.54	111.72	29.5	120.4	

Sample Report

Sample Name SN5827-005

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:30:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.582	ppb	31.7	175.56	100	
11	B	6	No Gas	7.655	ppb	23.4	3144.88	1000	
23	Na	45	He	1401.854	ppb	1.6	35292.39	200000	
24	Mg	45	He	2082.173	ppb	1.1	27015.86	200000	
27	Al	45	He	6009.363	ppb	1.5	29067.01	200000	
28	Si	45	H2	16217.461	ppb	1.4	143603.30	10000	
39	K	45	He	686.663	ppb	2.4	19164.19	200000	
40	Ca	45	H2	1615.402	ppb	0.2	136243.24	200000	
51	V	89	He	7.658	ppb	6.2	1613.48	1000	
52	Cr	89	He	2.612	ppb	3.5	649.23	2000	
55	Mn	89	He	675.294	ppb	1.2	70809.45	2000	
56	Fe	89	H2	3287.780	ppb	1.1	1173221.28	100000	
59	Co	89	He	4.041	ppb	6.6	1557.98	1000	
60	Ni	89	He	14.150	ppb	4.9	1540.15	1000	
63	Cu	89	He	6.444	ppb	1.7	2370.29	2000	
66	Zn	89	He	21.890	ppb	2.1	928.95	2000	
75	As	89	He	2.406	ppb	9.0	84.01	1000	
78	Se	89	H2	0.036	ppb	78.5	1.50	1000	
88	Sr	89	He	25.320	ppb	2.2	3987.39	2000	
95	Mo	89	He	0.380	ppb	29.1	85.56	1000	
107	Ag	89	He	0.016	ppb	121.9	24.44	100	
111	Cd	89	He	0.280	ppb	33.9	22.59	1000	
118	Sn	159	He	1.257	ppb	9.7	278.90	1000	
121	Sb	159	No Gas	0.211	ppb	50.2	393.78	1000	
137	Ba	159	No Gas	51.374	ppb	8.5	31696.56	2000	
182	W	159	No Gas	0.235	ppb	18.8	307.01	1000	
205	Tl	209	No Gas	0.115	ppb	5.0	347.06	1000	
208	Pb	209	No Gas	6.473	ppb	9.3	23488.31	2000	
232	Th	209	No Gas	7.719	ppb	7.0	28487.57	1000	
238	U	209	No Gas	1.821	ppb	12.1	6261.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686161.75	2.7	1826145.95	92.33	29.5	120.4	
Sc	45	No Gas	4181469.45	2.8	4103184.45	101.91	29.5	120.4	
Sc	45	H2	467036.09	1.0	476452.62	98.02	29.5	120.4	
Sc	45	He	94410.19	0.4	95435.38	98.93	29.5	120.4	
Ge	72	No Gas	937134.90	0.5	904931.62	103.56	29.5	120.4	
Ge	72	H2	163869.06	0.6	172351.67	95.08	29.5	120.4	
Ge	72	He	71435.12	0.9	72380.83	98.69	29.5	120.4	
Y	89	H2	3089787.96	1.1	2964265.2	104.23	29.5	120.4	
Y	89	He	631947.04	0.7	618281.42	102.21	29.5	120.4	
Tb	159	No Gas	9832219.51	2.6	8714728.06	112.82	29.5	120.4	
Tb	159	He	3318841.27	0.5	3206480.02	103.5	29.5	120.4	
Bi	209	No Gas	5080662.77	2.3	4440413.54	114.42	29.5	120.4	

Sample Report

Sample Name SN5827-005L

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:33:27 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.810	ppb	4.7	65.56	100	
11	B	6	No Gas	13.960	ppb	31.0	2321.38	1000	
23	Na	45	He	1668.661	ppb	5.4	10575.63	200000	
24	Mg	45	He	2073.415	ppb	4.9	5797.17	200000	
27	Al	45	He	6200.680	ppb	5.7	5846.95	200000	
28	Si	45	H2	16374.790	ppb	1.5	29701.74	10000	
39	K	45	He	448.279	ppb	35.8	12216.43	200000	
40	Ca	45	H2	1652.959	ppb	1.2	29020.48	200000	
51	V	89	He	21.035	ppb	3.0	940.07	1000	
52	Cr	89	He	3.747	ppb	9.4	216.63	2000	
55	Mn	89	He	710.213	ppb	2.2	14255.94	2000	
56	Fe	89	H2	3456.169	ppb	0.3	243344.78	100000	
59	Co	89	He	4.710	ppb	7.9	357.81	1000	
60	Ni	89	He	14.167	ppb	8.1	343.35	1000	
63	Cu	89	He	5.508	ppb	3.9	743.38	2000	
66	Zn	89	He	31.267	ppb	12.8	300.02	2000	
75	As	89	He	3.420	ppb	26.3	27.33	1000	
78	Se	89	H2	-0.058	ppb	N/A	0.67	1000	
88	Sr	89	He	24.817	ppb	0.8	751.16	2000	
95	Mo	89	He	0.651	ppb	44.3	38.89	1000	
107	Ag	89	He	-0.026	ppb	N/A	11.11	100	
111	Cd	89	He	0.324	ppb	45.8	5.56	1000	
118	Sn	159	He	3.699	ppb	9.5	185.56	1000	
121	Sb	159	No Gas	0.336	ppb	36.2	166.86	1000	
137	Ba	159	No Gas	54.435	ppb	4.0	6715.85	2000	
182	W	159	No Gas	0.241	ppb	28.8	83.43	1000	
205	Tl	209	No Gas	0.136	ppb	82.9	116.80	1000	
208	Pb	209	No Gas	6.963	ppb	8.9	5142.85	2000	
232	Th	209	No Gas	8.794	ppb	6.1	6509.04	1000	
238	U	209	No Gas	2.052	ppb	10.2	1401.66	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1696522.22	1.6	1826145.95	92.9	29.5	120.4	
Sc	45	No Gas	4143795.52	2.6	4103184.45	100.99	29.5	120.4	
Sc	45	H2	471720.34	2.1	476452.62	99.01	29.5	120.4	
Sc	45	He	91951.43	3.1	95435.38	96.35	29.5	120.4	
Ge	72	No Gas	937671.08	2.5	904931.62	103.62	29.5	120.4	
Ge	72	H2	165724.67	1.0	172351.67	96.15	29.5	120.4	
Ge	72	He	70280.26	2.0	72380.83	97.1	29.5	120.4	
Y	89	H2	3026303.33	1.5	2964265.2	102.09	29.5	120.4	
Y	89	He	604617.81	2.3	618281.42	97.79	29.5	120.4	
Tb	159	No Gas	9780916.73	2.5	8714728.06	112.23	29.5	120.4	
Tb	159	He	3252030.47	2.7	3206480.02	101.42	29.5	120.4	
Bi	209	No Gas	5025671.33	2.8	4440413.54	113.18	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 8:36:09 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.094	ppb	1.9	32357.94	25	96.38	89.8	110.2	
11	B	6	No Gas	23.459	ppb	3.2	22582.66	25	93.84	89.8	110.2	
23	Na	45	He	5237.886	ppb	1.5	591677.03	5000	104.76	89.8	110.2	
24	Mg	45	He	5030.873	ppb	2.3	312852.70	5000	100.62	89.8	110.2	
27	Al	45	He	495.067	ppb	2.6	11771.90	500	99.01	89.8	110.2	
28	Si	45	H2	470.006	ppb	2.6	21343.02	500	94	89.8	110.2	
39	K	45	He	5040.704	ppb	1.5	285692.84	5000	100.81	89.8	110.2	
40	Ca	45	H2	4882.588	ppb	2.1	2052914.02	5000	97.65	89.8	110.2	
51	V	89	He	25.402	ppb	3.1	22424.04	25	101.61	89.8	110.2	
52	Cr	89	He	25.385	ppb	3.0	27611.17	25	101.54	89.8	110.2	
55	Mn	89	He	25.383	ppb	2.8	12744.79	25	101.53	89.8	110.2	
56	Fe	89	H2	4804.801	ppb	1.6	8267550.80	5000	96.1	89.8	110.2	
59	Co	89	He	25.815	ppb	4.0	47204.24	25	103.26	89.8	110.2	
60	Ni	89	He	26.120	ppb	1.7	13103.23	25	104.48	89.8	110.2	
63	Cu	89	He	25.386	ppb	3.0	36656.75	25	101.54	89.8	110.2	
66	Zn	89	He	25.284	ppb	2.7	4828.77	25	101.14	89.8	110.2	
75	As	89	He	25.482	ppb	1.7	3935.99	25	101.93	89.8	110.2	
78	Se	89	H2	24.456	ppb	0.4	1999.22	25	97.82	89.8	110.2	
88	Sr	89	He	24.687	ppb	0.8	18589.79	25	98.75	89.8	110.2	
95	Mo	89	He	25.813	ppb	2.4	22282.13	25	103.25	89.8	110.2	
107	Ag	89	He	26.165	ppb	3.5	77294.76	25	104.66	89.8	110.2	
111	Cd	89	He	25.807	ppb	2.7	9642.04	25	103.23	89.8	110.2	
118	Sn	159	He	24.458	ppb	1.6	20688.70	25	97.83	89.8	110.2	
121	Sb	159	No Gas	23.629	ppb	3.4	183435.71	25	94.52	89.8	110.2	
137	Ba	159	No Gas	23.946	ppb	3.8	72004.38	25	95.78	89.8	110.2	
182	W	159	No Gas	23.294	ppb	3.9	135730.80	25	93.18	89.8	110.2	
205	Tl	209	No Gas	24.255	ppb	2.4	306193.95	25	97.02	89.8	110.2	
208	Pb	209	No Gas	23.994	ppb	2.4	417670.81	25	95.98	89.8	110.2	
232	Th	209	No Gas	23.459	ppb	3.4	416584.20	25	93.84	89.8	110.2	
238	U	209	No Gas	23.880	ppb	3.3	396885.82	25	95.52	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1720090.78	0.5	1826145.95	94.19	29.5	120.4	
Sc	45	No Gas	4125277.74	1.3	4103184.45	100.54	29.5	120.4	
Sc	45	H2	469177.30	1.4	476452.62	98.47	29.5	120.4	
Sc	45	He	92782.70	1.8	95435.38	97.22	29.5	120.4	
Ge	72	No Gas	921093.03	1.2	904931.62	101.79	29.5	120.4	
Ge	72	H2	167761.60	1.3	172351.67	97.34	29.5	120.4	
Ge	72	He	70533.35	2.8	72380.83	97.45	29.5	120.4	
Y	89	H2	2984735.36	0.9	2964265.2	100.69	29.5	120.4	
Y	89	He	605036.49	2.4	618281.42	97.86	29.5	120.4	
Tb	159	No Gas	9578152.85	1.3	8714728.06	109.91	29.5	120.4	
Tb	159	He	3247768.53	2.5	3206480.02	101.29	29.5	120.4	
Bi	209	No Gas	4906048.90	1.6	4440413.54	110.49	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 8:38:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.047	ppb	35.4	88.89	0.2	
11	B	6	No Gas	0.499	ppb	16.0	2369.17	4	
23	Na	45	He	10.086	ppb	92.6	4342.33	200	
24	Mg	45	He	1.069	ppb	417.1	775.65	20	
27	Al	45	He	1.029	ppb	54.0	38.89	20	
28	Si	45	H2	-0.661	ppb	N/A	493.89	100	
39	K	45	He	-5.321	ppb	N/A	11160.99	200	
40	Ca	45	H2	1.002	ppb	41.1	1512.36	20	
51	V	89	He	0.107	ppb	30.7	301.12	1	
52	Cr	89	He	0.021	ppb	56.6	77.99	1	
55	Mn	89	He	0.151	ppb	152.1	85.99	0.4	
56	Fe	89	H2	1.180	ppb	13.6	4265.38	20	
59	Co	89	He	0.030	ppb	114.4	68.90	0.2	
60	Ni	89	He	-0.022	ppb	N/A	50.00	0.4	
63	Cu	89	He	-0.179	ppb	N/A	174.45	0.6	
66	Zn	89	He	0.085	ppb	36.7	81.12	2	
75	As	89	He	0.000	ppb	3975.6	6.33	1	
78	Se	89	H2	0.028	ppb	33.1	3.17	1	
88	Sr	89	He	0.036	ppb	169.6	31.11	1	
95	Mo	89	He	0.067	ppb	2.8	74.45	1	
107	Ag	89	He	0.005	ppb	169.1	28.89	0.2	
111	Cd	89	He	0.017	ppb	108.6	7.04	0.2	
118	Sn	159	He	0.035	ppb	31.7	90.00	1	
121	Sb	159	No Gas	0.012	ppb	74.1	150.17	0.2	
137	Ba	159	No Gas	0.013	ppb	85.0	63.40	0.4	
182	W	159	No Gas	0.038	ppb	24.1	236.93	1	
205	Tl	209	No Gas	0.012	ppb	60.4	196.89	0.2	
208	Pb	209	No Gas	0.012	ppb	53.9	383.77	0.2	
232	Th	209	No Gas	0.034	ppb	13.1	704.15	1	
238	U	209	No Gas	0.010	ppb	37.1	160.18	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1770693.61	1.9	1826145.95	96.96	29.5	120.4	
Sc	45	No Gas	4126236.82	0.9	4103184.45	100.56	29.5	120.4	
Sc	45	H2	475484.93	0.9	476452.62	99.8	29.5	120.4	
Sc	45	He	93555.93	0.9	95435.38	98.03	29.5	120.4	
Ge	72	No Gas	919106.51	1.6	904931.62	101.57	29.5	120.4	
Ge	72	H2	171732.02	1.4	172351.67	99.64	29.5	120.4	
Ge	72	He	71858.94	0.8	72380.83	99.28	29.5	120.4	
Y	89	H2	3030304.89	0.9	2964265.2	102.23	29.5	120.4	
Y	89	He	610756.82	1.3	618281.42	98.78	29.5	120.4	
Tb	159	No Gas	9261115.97	1.1	8714728.06	106.27	29.5	120.4	
Tb	159	He	3245092.34	0.9	3206480.02	101.2	29.5	120.4	
Bi	209	No Gas	4767331.33	1.7	4440413.54	107.36	29.5	120.4	

Sample Report

Sample Name SN5827-005A

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:41:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.526	ppb	2.9	2910.40	100	
11	B	6	No Gas	208.607	ppb	7.1	39520.37	1000	
23	Na	45	He	12210.075	ppb	0.8	282603.08	200000	
24	Mg	45	He	3121.690	ppb	1.9	40163.01	200000	
27	Al	45	He	6937.054	ppb	2.4	33564.63	200000	
28	Si	45	H2	20931.346	ppb	1.5	186313.55	10000	
39	K	45	He	10972.884	ppb	1.7	133170.47	200000	
40	Ca	45	H2	2593.180	ppb	1.5	219359.05	200000	
51	V	89	He	62.992	ppb	3.3	11671.87	1000	
52	Cr	89	He	54.802	ppb	0.9	12429.21	2000	
55	Mn	89	He	687.102	ppb	1.4	71698.41	2000	
56	Fe	89	H2	4202.166	ppb	0.6	1501062.77	100000	
59	Co	89	He	14.993	ppb	7.8	5714.90	1000	
60	Ni	89	He	36.697	ppb	2.2	3872.91	1000	
63	Cu	89	He	37.839	ppb	2.5	11676.41	2000	
66	Zn	89	He	125.025	ppb	5.4	4964.40	2000	
75	As	89	He	52.706	ppb	3.9	1696.63	1000	
78	Se	89	H2	46.901	ppb	1.8	795.49	1000	
88	Sr	89	He	75.029	ppb	0.8	11747.62	2000	
95	Mo	89	He	52.266	ppb	0.9	9392.43	1000	
107	Ag	89	He	10.921	ppb	2.2	6723.04	100	
111	Cd	89	He	11.322	ppb	1.4	880.41	1000	
118	Sn	159	He	51.797	ppb	3.5	8868.79	1000	
121	Sb	159	No Gas	10.487	ppb	9.5	16308.18	1000	
137	Ba	159	No Gas	72.491	ppb	7.6	43543.08	2000	
182	W	159	No Gas	49.873	ppb	7.9	58047.68	1000	
205	Tl	209	No Gas	10.765	ppb	7.9	27139.10	1000	
208	Pb	209	No Gas	17.046	ppb	8.6	59310.16	2000	
232	Th	209	No Gas	18.670	ppb	9.0	66191.24	1000	
238	U	209	No Gas	12.318	ppb	9.6	40808.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1758678.28	3.3	1826145.95	96.31	29.5	120.4	
Sc	45	No Gas	4173679.84	3.8	4103184.45	101.72	29.5	120.4	
Sc	45	H2	469911.81	2.2	476452.62	98.63	29.5	120.4	
Sc	45	He	94453.76	0.9	95435.38	98.97	29.5	120.4	
Ge	72	No Gas	933325.88	3.5	904931.62	103.14	29.5	120.4	
Ge	72	H2	165601.15	1.6	172351.67	96.08	29.5	120.4	
Ge	72	He	70832.12	0.7	72380.83	97.86	29.5	120.4	
Y	89	H2	3094068.31	0.5	2964265.2	104.38	29.5	120.4	
Y	89	He	628870.20	0.3	618281.42	101.71	29.5	120.4	
Tb	159	No Gas	9579591.46	3.7	8714728.06	109.92	29.5	120.4	
Tb	159	He	3273302.21	0.2	3206480.02	102.08	29.5	120.4	
Bi	209	No Gas	4901141.44	4.2	4440413.54	110.38	29.5	120.4	

Sample Report

Sample Name SN5827-005S

File Name 104SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:44:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.245	ppb	3.2	13689.11	100	
11	B	6	No Gas	519.160	ppb	3.7	94806.82	1000	
23	Na	45	He	9528.399	ppb	4.3	220041.72	200000	
24	Mg	45	He	8016.097	ppb	5.0	101441.84	200000	
27	Al	45	He	10380.712	ppb	4.3	49953.72	200000	
28	Si	45	H2	21407.006	ppb	1.2	190945.76	10000	
39	K	45	He	11357.405	ppb	4.1	136707.20	200000	
40	Ca	45	H2	4314.245	ppb	1.6	365012.29	200000	
51	V	89	He	528.528	ppb	3.5	96331.96	1000	
52	Cr	89	He	212.787	ppb	4.3	48074.46	2000	
55	Mn	89	He	1220.378	ppb	3.7	127296.18	2000	
56	Fe	89	H2	4715.818	ppb	0.8	1700716.15	100000	
59	Co	89	He	544.593	ppb	4.4	206992.66	1000	
60	Ni	89	He	551.815	ppb	4.5	57325.02	1000	
63	Cu	89	He	267.592	ppb	4.5	79826.20	2000	
66	Zn	89	He	538.058	ppb	2.5	21144.39	2000	
75	As	89	He	108.840	ppb	3.5	3495.49	1000	
78	Se	89	H2	99.065	ppb	1.6	1695.86	1000	
88	Sr	89	He	527.648	ppb	4.5	82547.98	2000	
95	Mo	89	He	107.191	ppb	4.8	19234.14	1000	
107	Ag	89	He	53.354	ppb	2.0	32792.70	100	
111	Cd	89	He	267.346	ppb	4.4	20761.90	1000	
118	Sn	159	He	290.666	ppb	3.7	49314.46	1000	
121	Sb	159	No Gas	75.972	ppb	2.5	120016.07	1000	
137	Ba	159	No Gas	2031.896	ppb	2.9	1242657.50	2000	
182	W	159	No Gas	98.119	ppb	2.5	116326.18	1000	
205	Tl	209	No Gas	107.797	ppb	3.9	271869.84	1000	
208	Pb	209	No Gas	114.329	ppb	3.2	397603.19	2000	
232	Th	209	No Gas	112.257	ppb	4.3	398265.93	1000	
238	U	209	No Gas	105.228	ppb	3.6	349414.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1743474.36	1.6	1826145.95	95.47	29.5	120.4	
Sc	45	No Gas	4161693.47	0.7	4103184.45	101.43	29.5	120.4	
Sc	45	H2	470904.88	1.8	476452.62	98.84	29.5	120.4	
Sc	45	He	94042.10	3.7	95435.38	98.54	29.5	120.4	
Ge	72	No Gas	951738.09	1.6	904931.62	105.17	29.5	120.4	
Ge	72	H2	166025.02	1.1	172351.67	96.33	29.5	120.4	
Ge	72	He	71264.81	2.7	72380.83	98.46	29.5	120.4	
Y	89	H2	3124408.67	1.0	2964265.2	105.4	29.5	120.4	
Y	89	He	629127.27	3.1	618281.42	101.75	29.5	120.4	
Tb	159	No Gas	9742918.05	1.2	8714728.06	111.8	29.5	120.4	
Tb	159	He	3264456.76	3.3	3206480.02	101.81	29.5	120.4	
Bi	209	No Gas	4901166.10	1.5	4440413.54	110.38	29.5	120.4	

Sample Report

Sample Name SN5827-005P

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:46:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.302	ppb	8.2	13663.55	100	
11	B	6	No Gas	514.238	ppb	7.1	93679.85	1000	
23	Na	45	He	9479.203	ppb	0.9	224341.52	200000	
24	Mg	45	He	7947.979	ppb	1.0	103093.35	200000	
27	Al	45	He	10272.910	ppb	0.4	50659.38	200000	
28	Si	45	H2	21558.150	ppb	0.9	195310.97	10000	
39	K	45	He	11285.179	ppb	0.7	139255.35	200000	
40	Ca	45	H2	4340.985	ppb	0.6	373047.19	200000	
51	V	89	He	517.821	ppb	0.7	96902.63	1000	
52	Cr	89	He	212.214	ppb	1.8	49231.43	2000	
55	Mn	89	He	1218.530	ppb	1.2	130498.96	2000	
56	Fe	89	H2	4797.713	ppb	0.8	1743307.59	100000	
59	Co	89	He	534.274	ppb	0.6	208527.53	1000	
60	Ni	89	He	547.895	ppb	1.4	58446.18	1000	
63	Cu	89	He	265.755	ppb	0.6	81413.90	2000	
66	Zn	89	He	531.830	ppb	3.5	21452.68	2000	
75	As	89	He	106.726	ppb	1.5	3519.17	1000	
78	Se	89	H2	101.611	ppb	1.9	1752.20	1000	
88	Sr	89	He	528.479	ppb	1.1	84901.01	2000	
95	Mo	89	He	104.892	ppb	1.8	19328.72	1000	
107	Ag	89	He	53.084	ppb	1.1	33485.47	100	
111	Cd	89	He	264.283	ppb	0.4	21075.37	1000	
118	Sn	159	He	281.583	ppb	0.4	48867.06	1000	
121	Sb	159	No Gas	72.807	ppb	7.2	115410.64	1000	
137	Ba	159	No Gas	1988.257	ppb	7.6	1220150.08	2000	
182	W	159	No Gas	96.049	ppb	8.2	114251.88	1000	
205	Tl	209	No Gas	104.017	ppb	6.4	265736.22	1000	
208	Pb	209	No Gas	110.965	ppb	8.0	390788.43	2000	
232	Th	209	No Gas	107.890	ppb	8.3	387644.88	1000	
238	U	209	No Gas	100.775	ppb	7.8	338876.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1740368.63	2.8	1826145.95	95.3	29.5	120.4	
Sc	45	No Gas	4241435.66	2.6	4103184.45	103.37	29.5	120.4	
Sc	45	H2	478241.83	1.6	476452.62	100.38	29.5	120.4	
Sc	45	He	96269.10	0.3	95435.38	100.87	29.5	120.4	
Ge	72	No Gas	968690.28	2.2	904931.62	107.05	29.5	120.4	
Ge	72	H2	168458.94	1.8	172351.67	97.74	29.5	120.4	
Ge	72	He	72964.38	0.5	72380.83	100.81	29.5	120.4	
Y	89	H2	3147882.30	1.0	2964265.2	106.19	29.5	120.4	
Y	89	He	645449.55	0.2	618281.42	104.39	29.5	120.4	
Tb	159	No Gas	9784897.42	2.3	8714728.06	112.28	29.5	120.4	
Tb	159	He	3336258.39	0.7	3206480.02	104.05	29.5	120.4	
Bi	209	No Gas	4968235.30	2.6	4440413.54	111.89	29.5	120.4	

Sample Report

Sample Name SN5827-006

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:49:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.180	ppb	44.9	71.11	100	
11	B	6	No Gas	10.058	ppb	4.2	3608.37	1000	
23	Na	45	He	1263.191	ppb	0.6	32673.39	200000	
24	Mg	45	He	353.466	ppb	0.7	5270.23	200000	
27	Al	45	He	18.266	ppb	17.3	104.45	200000	
28	Si	45	H2	4010.745	ppb	3.1	35875.06	10000	
39	K	45	He	-4.030	ppb	N/A	11709.59	200000	
40	Ca	45	H2	400.155	ppb	3.5	34518.38	200000	
51	V	89	He	10.857	ppb	2.9	2169.14	1000	
52	Cr	89	He	0.605	ppb	15.4	191.30	2000	
55	Mn	89	He	108.701	ppb	1.4	11254.48	2000	
56	Fe	89	H2	7.931	ppb	11.2	4869.62	100000	
59	Co	89	He	0.548	ppb	10.9	220.02	1000	
60	Ni	89	He	2.122	ppb	4.9	281.13	1000	
63	Cu	89	He	0.660	ppb	25.8	636.70	2000	
66	Zn	89	He	4.643	ppb	23.5	246.68	2000	
75	As	89	He	0.459	ppb	24.1	21.00	1000	
78	Se	89	H2	0.192	ppb	87.4	4.00	1000	
88	Sr	89	He	3.559	ppb	2.2	556.70	2000	
95	Mo	89	He	0.130	ppb	24.4	40.00	1000	
107	Ag	89	He	0.007	ppb	246.7	18.89	100	
111	Cd	89	He	0.139	ppb	36.3	11.48	1000	
118	Sn	159	He	1.370	ppb	13.4	297.80	1000	
121	Sb	159	No Gas	0.271	ppb	15.7	490.55	1000	
137	Ba	159	No Gas	3.283	ppb	22.2	2049.12	2000	
182	W	159	No Gas	0.151	ppb	56.2	206.90	1000	
205	Tl	209	No Gas	0.148	ppb	18.4	423.81	1000	
208	Pb	209	No Gas	0.131	ppb	49.6	650.74	2000	
232	Th	209	No Gas	0.377	ppb	12.8	1478.41	1000	
238	U	209	No Gas	0.132	ppb	18.5	450.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1705791.05	2.9	1826145.95	93.41	29.5	120.4	
Sc	45	No Gas	4251846.59	2.6	4103184.45	103.62	29.5	120.4	
Sc	45	H2	466792.13	2.1	476452.62	97.97	29.5	120.4	
Sc	45	He	96031.38	0.6	95435.38	100.62	29.5	120.4	
Ge	72	No Gas	958289.69	1.8	904931.62	105.9	29.5	120.4	
Ge	72	H2	163841.91	2.5	172351.67	95.06	29.5	120.4	
Ge	72	He	72930.35	0.4	72380.83	100.76	29.5	120.4	
Y	89	H2	2964953.68	1.7	2964265.2	100.02	29.5	120.4	
Y	89	He	623476.03	0.4	618281.42	100.84	29.5	120.4	
Tb	159	No Gas	9784801.52	2.1	8714728.06	112.28	29.5	120.4	
Tb	159	He	3316157.03	0.8	3206480.02	103.42	29.5	120.4	
Bi	209	No Gas	4975437.92	2.9	4440413.54	112.05	29.5	120.4	

Sample Report

Sample Name SN5827-006L

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:52:03 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.457	ppb	24.0	46.67	100	
11	B	6	No Gas	18.525	ppb	8.0	2469.19	1000	
23	Na	45	He	1367.605	ppb	3.5	9650.59	200000	
24	Mg	45	He	360.816	ppb	10.3	1655.79	200000	
27	Al	45	He	91.345	ppb	14.7	104.45	200000	
28	Si	45	H2	4192.054	ppb	3.8	7981.09	10000	
39	K	45	He	-288.755	ppb	N/A	11102.71	200000	
40	Ca	45	H2	482.629	ppb	2.3	9223.33	200000	
51	V	89	He	41.432	ppb	2.3	1697.94	1000	
52	Cr	89	He	1.954	ppb	37.7	142.64	2000	
55	Mn	89	He	111.212	ppb	5.0	2301.11	2000	
56	Fe	89	H2	5.397	ppb	10.7	2579.77	100000	
59	Co	89	He	0.621	ppb	15.3	60.01	1000	
60	Ni	89	He	1.619	ppb	76.7	95.56	1000	
63	Cu	89	He	-1.774	ppb	N/A	336.69	2000	
66	Zn	89	He	4.138	ppb	105.7	97.78	2000	
75	As	89	He	1.257	ppb	50.1	14.33	1000	
78	Se	89	H2	0.242	ppb	95.1	1.67	1000	
88	Sr	89	He	3.128	ppb	14.2	101.11	2000	
95	Mo	89	He	-0.064	ppb	N/A	14.45	1000	
107	Ag	89	He	0.037	ppb	287.2	18.89	100	
111	Cd	89	He	0.194	ppb	57.5	3.70	1000	
118	Sn	159	He	3.052	ppb	22.8	166.68	1000	
121	Sb	159	No Gas	0.262	ppb	51.9	140.16	1000	
137	Ba	159	No Gas	4.587	ppb	16.5	577.33	2000	
182	W	159	No Gas	0.320	ppb	36.0	100.11	1000	
205	Tl	209	No Gas	0.124	ppb	131.7	106.78	1000	
208	Pb	209	No Gas	0.251	ppb	22.1	353.73	2000	
232	Th	209	No Gas	0.416	ppb	7.6	407.13	1000	
238	U	209	No Gas	0.166	ppb	26.1	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1688129.23	1.1	1826145.95	92.44	29.5	120.4	
Sc	45	No Gas	4172634.83	1.0	4103184.45	101.69	29.5	120.4	
Sc	45	H2	471011.99	1.1	476452.62	98.86	29.5	120.4	
Sc	45	He	96007.54	0.3	95435.38	100.6	29.5	120.4	
Ge	72	No Gas	944349.24	0.9	904931.62	104.36	29.5	120.4	
Ge	72	H2	168396.38	1.3	172351.67	97.71	29.5	120.4	
Ge	72	He	72450.29	0.1	72380.83	100.1	29.5	120.4	
Y	89	H2	3028434.92	0.2	2964265.2	102.16	29.5	120.4	
Y	89	He	620707.69	0.8	618281.42	100.39	29.5	120.4	
Tb	159	No Gas	9571036.52	0.9	8714728.06	109.83	29.5	120.4	
Tb	159	He	3306267.52	0.4	3206480.02	103.11	29.5	120.4	
Bi	209	No Gas	4877725.32	1.0	4440413.54	109.85	29.5	120.4	

Sample Report

Sample Name SN5827-006A

File Name 108SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:54:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.630	ppb	11.6	2594.76	100	
11	B	6	No Gas	193.210	ppb	11.9	35803.19	1000	
23	Na	45	He	12191.438	ppb	1.7	285157.91	200000	
24	Mg	45	He	1393.421	ppb	3.7	18515.38	200000	
27	Al	45	He	974.230	ppb	3.3	4776.52	200000	
28	Si	45	H2	8582.987	ppb	2.2	77387.73	10000	
39	K	45	He	10393.591	ppb	1.8	128093.14	200000	
40	Ca	45	H2	1423.944	ppb	0.4	122007.49	200000	
51	V	89	He	64.770	ppb	1.8	11808.69	1000	
52	Cr	89	He	54.632	ppb	1.5	12197.71	2000	
55	Mn	89	He	131.192	ppb	1.5	13485.32	2000	
56	Fe	89	H2	1071.697	ppb	1.2	375351.77	100000	
59	Co	89	He	11.745	ppb	1.5	4409.91	1000	
60	Ni	89	He	24.644	ppb	1.4	2581.44	1000	
63	Cu	89	He	32.970	ppb	0.8	10073.99	2000	
66	Zn	89	He	107.803	ppb	2.8	4223.00	2000	
75	As	89	He	51.127	ppb	2.0	1620.60	1000	
78	Se	89	H2	50.690	ppb	4.0	839.16	1000	
88	Sr	89	He	54.595	ppb	3.2	8415.07	2000	
95	Mo	89	He	54.849	ppb	3.3	9701.55	1000	
107	Ag	89	He	11.474	ppb	2.0	6953.14	100	
111	Cd	89	He	11.307	ppb	1.1	865.59	1000	
118	Sn	159	He	51.780	ppb	2.2	8952.15	1000	
121	Sb	159	No Gas	9.671	ppb	11.7	15218.80	1000	
137	Ba	159	No Gas	20.213	ppb	14.0	12289.46	2000	
182	W	159	No Gas	45.562	ppb	14.7	53601.77	1000	
205	Tl	209	No Gas	9.656	ppb	13.5	24758.49	1000	
208	Pb	209	No Gas	9.522	ppb	12.6	33778.93	2000	
232	Th	209	No Gas	9.349	ppb	11.2	33793.55	1000	
238	U	209	No Gas	9.411	ppb	14.0	31719.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1713621.91	2.1	1826145.95	93.84	29.5	120.4	
Sc	45	No Gas	4215641.85	2.4	4103184.45	102.74	29.5	120.4	
Sc	45	H2	473977.10	0.9	476452.62	99.48	29.5	120.4	
Sc	45	He	95474.15	1.8	95435.38	100.04	29.5	120.4	
Ge	72	No Gas	956529.71	1.4	904931.62	105.7	29.5	120.4	
Ge	72	H2	166465.68	0.7	172351.67	96.58	29.5	120.4	
Ge	72	He	72292.35	0.5	72380.83	99.88	29.5	120.4	
Y	89	H2	3020338.49	0.5	2964265.2	101.89	29.5	120.4	
Y	89	He	619132.97	1.1	618281.42	100.14	29.5	120.4	
Tb	159	No Gas	9688763.33	3.0	8714728.06	111.18	29.5	120.4	
Tb	159	He	3305101.65	0.4	3206480.02	103.08	29.5	120.4	
Bi	209	No Gas	4985510.80	3.0	4440413.54	112.28	29.5	120.4	

Sample Report

Sample Name SN5827-006S

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 8:57:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.826	ppb	4.5	13199.75	100	
11	B	6	No Gas	520.627	ppb	4.9	94342.92	1000	
23	Na	45	He	9424.308	ppb	3.6	213161.90	200000	
24	Mg	45	He	6012.582	ppb	3.6	74697.52	200000	
27	Al	45	He	2004.663	ppb	1.6	9461.27	200000	
28	Si	45	H2	4770.123	ppb	1.6	43243.52	10000	
39	K	45	He	10853.584	ppb	2.8	128436.04	200000	
40	Ca	45	H2	3019.584	ppb	1.1	257573.75	200000	
51	V	89	He	554.700	ppb	4.2	96158.95	1000	
52	Cr	89	He	222.577	ppb	4.1	47839.82	2000	
55	Mn	89	He	665.356	ppb	4.1	66025.40	2000	
56	Fe	89	H2	1068.448	ppb	0.3	374741.32	100000	
59	Co	89	He	568.046	ppb	4.3	205413.23	1000	
60	Ni	89	He	570.019	ppb	4.6	56328.57	1000	
63	Cu	89	He	275.186	ppb	3.9	78096.22	2000	
66	Zn	89	He	542.796	ppb	3.8	20287.61	2000	
75	As	89	He	109.668	ppb	4.7	3349.77	1000	
78	Se	89	H2	104.584	ppb	0.9	1732.86	1000	
88	Sr	89	He	543.011	ppb	3.8	80829.91	2000	
95	Mo	89	He	113.349	ppb	5.5	19345.46	1000	
107	Ag	89	He	56.307	ppb	4.6	32902.84	100	
111	Cd	89	He	277.122	ppb	4.3	20474.10	1000	
118	Sn	159	He	529.092	ppb	4.2	88199.46	1000	
121	Sb	159	No Gas	99.214	ppb	4.8	158376.31	1000	
137	Ba	159	No Gas	1961.447	ppb	4.7	1212343.82	2000	
182	W	159	No Gas	100.637	ppb	6.3	120545.77	1000	
205	Tl	209	No Gas	103.614	ppb	4.8	265722.66	1000	
208	Pb	209	No Gas	103.493	ppb	4.8	365985.94	2000	
232	Th	209	No Gas	100.997	ppb	6.5	364288.01	1000	
238	U	209	No Gas	100.231	ppb	5.9	338361.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1730432.60	1.8	1826145.95	94.76	29.5	120.4	
Sc	45	No Gas	4266236.40	2.7	4103184.45	103.97	29.5	120.4	
Sc	45	H2	474078.10	1.4	476452.62	99.5	29.5	120.4	
Sc	45	He	92051.96	2.7	95435.38	96.45	29.5	120.4	
Ge	72	No Gas	956307.44	2.7	904931.62	105.68	29.5	120.4	
Ge	72	H2	168132.48	0.5	172351.67	97.55	29.5	120.4	
Ge	72	He	70488.58	3.8	72380.83	97.39	29.5	120.4	
Y	89	H2	3024638.36	0.8	2964265.2	102.04	29.5	120.4	
Y	89	He	598590.51	3.5	618281.42	96.82	29.5	120.4	
Tb	159	No Gas	9851620.62	2.4	8714728.06	113.05	29.5	120.4	
Tb	159	He	3209844.43	3.6	3206480.02	100.1	29.5	120.4	
Bi	209	No Gas	4986233.92	2.7	4440413.54	112.29	29.5	120.4	

Sample Report

Sample Name SN5827-006P

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:00:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.061	ppb	2.0	13622.42	100	
11	B	6	No Gas	542.853	ppb	2.2	95157.24	1000	
23	Na	45	He	9038.311	ppb	1.4	214368.56	200000	
24	Mg	45	He	5715.982	ppb	1.8	74447.38	200000	
27	Al	45	He	1950.452	ppb	1.1	9644.68	200000	
28	Si	45	H2	4963.339	ppb	1.2	45241.88	10000	
39	K	45	He	10468.327	ppb	1.1	130211.61	200000	
40	Ca	45	H2	3036.359	ppb	0.4	260532.81	200000	
51	V	89	He	536.634	ppb	1.1	97049.04	1000	
52	Cr	89	He	215.703	ppb	0.7	48363.34	2000	
55	Mn	89	He	651.650	ppb	0.2	67458.42	2000	
56	Fe	89	H2	1077.927	ppb	0.5	379512.62	100000	
59	Co	89	He	554.164	ppb	1.6	209031.44	1000	
60	Ni	89	He	554.919	ppb	1.5	57211.01	1000	
63	Cu	89	He	271.041	ppb	1.2	80239.69	2000	
66	Zn	89	He	529.013	ppb	0.2	20625.87	2000	
75	As	89	He	106.412	ppb	1.9	3391.12	1000	
78	Se	89	H2	103.171	ppb	1.9	1716.36	1000	
88	Sr	89	He	525.637	ppb	0.9	81617.57	2000	
95	Mo	89	He	109.036	ppb	1.1	19418.84	1000	
107	Ag	89	He	54.489	ppb	1.7	33216.01	100	
111	Cd	89	He	267.901	ppb	1.2	20648.80	1000	
118	Sn	159	He	511.843	ppb	0.6	88718.99	1000	
121	Sb	159	No Gas	103.490	ppb	2.1	158240.22	1000	
137	Ba	159	No Gas	2070.187	ppb	2.2	1225469.96	2000	
182	W	159	No Gas	106.381	ppb	2.5	122071.25	1000	
205	Tl	209	No Gas	108.485	ppb	2.2	266374.34	1000	
208	Pb	209	No Gas	108.023	ppb	2.3	365714.79	2000	
232	Th	209	No Gas	106.433	ppb	1.9	367651.79	1000	
238	U	209	No Gas	105.938	ppb	2.1	342493.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1674322.43	2.2	1826145.95	91.69	29.5	120.4	
Sc	45	No Gas	4105975.88	4.0	4103184.45	100.07	29.5	120.4	
Sc	45	H2	476896.68	1.4	476452.62	100.09	29.5	120.4	
Sc	45	He	96416.95	1.8	95435.38	101.03	29.5	120.4	
Ge	72	No Gas	946252.78	3.2	904931.62	104.57	29.5	120.4	
Ge	72	H2	168148.07	2.0	172351.67	97.56	29.5	120.4	
Ge	72	He	73087.63	1.1	72380.83	100.98	29.5	120.4	
Y	89	H2	3036391.00	1.0	2964265.2	102.43	29.5	120.4	
Y	89	He	623840.18	1.1	618281.42	100.9	29.5	120.4	
Tb	159	No Gas	9432554.51	3.7	8714728.06	108.24	29.5	120.4	
Tb	159	He	3334227.45	0.8	3206480.02	103.98	29.5	120.4	
Bi	209	No Gas	4771723.38	3.3	4440413.54	107.46	29.5	120.4	

Sample Report

Sample Name SN5827-007

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:02:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.634	ppb	28.3	192.23	100	
11	B	6	No Gas	13.843	ppb	4.0	4285.21	1000	
23	Na	45	He	1342.462	ppb	4.6	34904.46	200000	
24	Mg	45	He	1809.387	ppb	0.6	24250.95	200000	
27	Al	45	He	4122.384	ppb	1.2	20518.66	200000	
28	Si	45	H2	11825.562	ppb	5.9	104384.48	10000	
39	K	45	He	602.893	ppb	7.7	18758.87	200000	
40	Ca	45	H2	1677.434	ppb	6.0	140754.68	200000	
51	V	89	He	14.498	ppb	0.5	2948.20	1000	
52	Cr	89	He	2.413	ppb	5.9	621.91	2000	
55	Mn	89	He	704.583	ppb	0.5	76054.70	2000	
56	Fe	89	H2	2985.763	ppb	5.5	1058620.33	100000	
59	Co	89	He	3.801	ppb	5.5	1509.08	1000	
60	Ni	89	He	14.260	ppb	3.3	1596.82	1000	
63	Cu	89	He	6.231	ppb	4.3	2374.72	2000	
66	Zn	89	He	19.710	ppb	8.1	867.84	2000	
75	As	89	He	2.582	ppb	12.2	92.34	1000	
78	Se	89	H2	0.341	ppb	34.6	6.67	1000	
88	Sr	89	He	23.399	ppb	4.9	3792.90	2000	
95	Mo	89	He	0.588	ppb	2.9	126.67	1000	
107	Ag	89	He	0.041	ppb	40.8	41.11	100	
111	Cd	89	He	0.378	ppb	26.7	31.11	1000	
118	Sn	159	He	1.703	ppb	9.1	356.69	1000	
121	Sb	159	No Gas	0.324	ppb	16.8	580.66	1000	
137	Ba	159	No Gas	50.407	ppb	5.1	31331.72	2000	
182	W	159	No Gas	0.443	ppb	27.2	560.64	1000	
205	Tl	209	No Gas	0.275	ppb	14.4	754.21	1000	
208	Pb	209	No Gas	6.458	ppb	7.9	23140.76	2000	
232	Th	209	No Gas	8.398	ppb	4.9	30584.87	1000	
238	U	209	No Gas	2.051	ppb	1.8	6973.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1711826.14	1.3	1826145.95	93.74	29.5	120.4	
Sc	45	No Gas	4284670.67	1.2	4103184.45	104.42	29.5	120.4	
Sc	45	H2	465741.03	5.2	476452.62	97.75	29.5	120.4	
Sc	45	He	97133.12	1.0	95435.38	101.78	29.5	120.4	
Ge	72	No Gas	964645.88	1.7	904931.62	106.6	29.5	120.4	
Ge	72	H2	165741.31	3.1	172351.67	96.16	29.5	120.4	
Ge	72	He	72998.32	0.7	72380.83	100.85	29.5	120.4	
Y	89	H2	3073846.86	4.3	2964265.2	103.7	29.5	120.4	
Y	89	He	650518.70	0.3	618281.42	105.21	29.5	120.4	
Tb	159	No Gas	9896271.73	1.3	8714728.06	113.56	29.5	120.4	
Tb	159	He	3328367.14	0.4	3206480.02	103.8	29.5	120.4	
Bi	209	No Gas	5013986.42	1.5	4440413.54	112.92	29.5	120.4	

Sample Report

Sample Name SN5827-008

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:05:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.164	ppb	31.5	66.67	100	
11	B	6	No Gas	5.760	ppb	10.5	2871.49	1000	
23	Na	45	He	1236.905	ppb	2.6	31934.57	200000	
24	Mg	45	He	347.819	ppb	3.9	5176.90	200000	
27	Al	45	He	14.287	ppb	33.1	84.45	200000	
28	Si	45	H2	3788.635	ppb	1.4	35028.83	10000	
39	K	45	He	12.510	ppb	160.0	11847.94	200000	
40	Ca	45	H2	360.952	ppb	0.5	32268.72	200000	
51	V	89	He	11.320	ppb	7.3	2252.48	1000	
52	Cr	89	He	0.581	ppb	24.6	185.97	2000	
55	Mn	89	He	104.683	ppb	0.4	10836.86	2000	
56	Fe	89	H2	5.992	ppb	11.6	4352.22	100000	
59	Co	89	He	0.578	ppb	7.6	231.13	1000	
60	Ni	89	He	1.853	ppb	8.0	253.34	1000	
63	Cu	89	He	0.241	ppb	64.1	513.36	2000	
66	Zn	89	He	3.387	ppb	8.0	197.79	2000	
75	As	89	He	0.533	ppb	14.8	23.33	1000	
78	Se	89	H2	0.116	ppb	38.1	2.83	1000	
88	Sr	89	He	3.009	ppb	12.4	471.14	2000	
95	Mo	89	He	-0.001	ppb	N/A	16.67	1000	
107	Ag	89	He	0.007	ppb	87.1	18.89	100	
111	Cd	89	He	0.082	ppb	74.3	7.04	1000	
118	Sn	159	He	1.118	ppb	24.4	254.46	1000	
121	Sb	159	No Gas	0.222	ppb	29.2	417.15	1000	
137	Ba	159	No Gas	3.095	ppb	23.2	1945.68	2000	
182	W	159	No Gas	0.062	ppb	75.9	100.11	1000	
205	Tl	209	No Gas	0.041	ppb	49.1	150.17	1000	
208	Pb	209	No Gas	0.059	ppb	65.6	397.11	2000	
232	Th	209	No Gas	0.207	ppb	25.2	871.01	1000	
238	U	209	No Gas	0.077	ppb	31.3	266.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1717034.19	2.9	1826145.95	94.03	29.5	120.4	
Sc	45	No Gas	4306748.16	3.9	4103184.45	104.96	29.5	120.4	
Sc	45	H2	481909.44	1.2	476452.62	101.15	29.5	120.4	
Sc	45	He	95643.63	0.5	95435.38	100.22	29.5	120.4	
Ge	72	No Gas	977220.15	2.2	904931.62	107.99	29.5	120.4	
Ge	72	H2	169818.31	1.5	172351.67	98.53	29.5	120.4	
Ge	72	He	72771.20	0.8	72380.83	100.54	29.5	120.4	
Y	89	H2	3069974.32	0.9	2964265.2	103.57	29.5	120.4	
Y	89	He	623353.80	0.8	618281.42	100.82	29.5	120.4	
Tb	159	No Gas	9932082.15	4.2	8714728.06	113.97	29.5	120.4	
Tb	159	He	3312542.28	0.8	3206480.02	103.31	29.5	120.4	
Bi	209	No Gas	5064199.39	4.6	4440413.54	114.05	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	113_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:07:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.556	ppb	7.5	31984.97	25	94.22	89.8	110.2	
11	B	6	No Gas	22.883	ppb	7.3	22317.89	25	91.53	89.8	110.2	
23	Na	45	He	5245.853	ppb	5.7	594413.77	5000	104.92	89.8	110.2	
24	Mg	45	He	5063.763	ppb	4.6	315990.30	5000	101.28	89.8	110.2	
27	Al	45	He	504.006	ppb	6.9	12019.92	500	100.8	89.8	110.2	
28	Si	45	H2	472.406	ppb	2.4	21854.50	500	94.48	89.8	110.2	
39	K	45	He	5022.073	ppb	5.1	285610.77	5000	100.44	89.8	110.2	
40	Ca	45	H2	4895.250	ppb	1.0	2097229.21	5000	97.9	89.8	110.2	
51	V	89	He	26.264	ppb	4.9	23086.30	25	105.06	89.8	110.2	
52	Cr	89	He	25.878	ppb	6.9	28021.31	25	103.51	89.8	110.2	
55	Mn	89	He	25.578	ppb	5.6	12789.49	25	102.31	89.8	110.2	
56	Fe	89	H2	4829.992	ppb	1.7	8468302.27	5000	96.6	89.8	110.2	
59	Co	89	He	26.225	ppb	4.5	47777.65	25	104.9	89.8	110.2	
60	Ni	89	He	25.924	ppb	3.2	12957.56	25	103.7	89.8	110.2	
63	Cu	89	He	25.618	ppb	6.1	36831.56	25	102.47	89.8	110.2	
66	Zn	89	He	25.979	ppb	6.4	4937.73	25	103.92	89.8	110.2	
75	As	89	He	25.346	ppb	5.8	3897.65	25	101.38	89.8	110.2	
78	Se	89	H2	24.411	ppb	2.2	2033.22	25	97.64	89.8	110.2	
88	Sr	89	He	24.562	ppb	4.1	18419.64	25	98.25	89.8	110.2	
95	Mo	89	He	25.771	ppb	3.1	22166.39	25	103.08	89.8	110.2	
107	Ag	89	He	26.483	ppb	5.2	77921.70	25	105.93	89.8	110.2	
111	Cd	89	He	25.942	ppb	4.6	9654.27	25	103.77	89.8	110.2	
118	Sn	159	He	24.442	ppb	5.2	20613.03	25	97.77	89.8	110.2	
121	Sb	159	No Gas	22.881	ppb	7.4	179696.33	25	91.52	89.8	110.2	
137	Ba	159	No Gas	23.225	ppb	7.1	70652.65	25	92.9	89.8	110.2	
182	W	159	No Gas	22.709	ppb	7.6	133856.34	25	90.84	89.8	110.2	
205	Tl	209	No Gas	23.947	ppb	4.9	304368.01	25	95.79	89.8	110.2	
208	Pb	209	No Gas	23.423	ppb	6.4	410407.51	25	93.69	89.8	110.2	
232	Th	209	No Gas	22.508	ppb	7.7	402288.96	25	90.03	89.8	110.2	
238	U	209	No Gas	23.013	ppb	7.4	384955.60	25	92.05	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1740489.82	1.6	1826145.95	95.31	29.5	120.4	
Sc	45	No Gas	4242402.98	2.4	4103184.45	103.39	29.5	120.4	
Sc	45	H2	477979.95	1.1	476452.62	100.32	29.5	120.4	
Sc	45	He	93186.24	3.7	95435.38	97.64	29.5	120.4	
Ge	72	No Gas	946341.99	0.8	904931.62	104.58	29.5	120.4	
Ge	72	H2	169764.99	1.0	172351.67	98.5	29.5	120.4	
Ge	72	He	70504.92	3.8	72380.83	97.41	29.5	120.4	
Y	89	H2	3041086.84	0.2	2964265.2	102.59	29.5	120.4	
Y	89	He	603142.04	4.0	618281.42	97.55	29.5	120.4	
Tb	159	No Gas	9696514.65	2.1	8714728.06	111.27	29.5	120.4	
Tb	159	He	3240815.54	3.3	3206480.02	101.07	29.5	120.4	
Bi	209	No Gas	4941632.40	2.2	4440413.54	111.29	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	114_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:10:29 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.054	ppb	12.2	98.89	0.2	
11	B	6	No Gas	0.483	ppb	34.9	2364.71	4	
23	Na	45	He	5.041	ppb	49.6	3801.40	200	
24	Mg	45	He	-2.358	ppb	N/A	566.72	20	
27	Al	45	He	0.188	ppb	234.8	18.89	20	
28	Si	45	H2	-0.556	ppb	N/A	497.23	100	
39	K	45	He	-4.972	ppb	N/A	11256.09	200	
40	Ca	45	H2	0.912	ppb	33.3	1471.24	20	
51	V	89	He	0.549	ppb	4.0	692.27	1	Failed DoD
52	Cr	89	He	0.014	ppb	68.7	70.66	1	
55	Mn	89	He	0.028	ppb	16.0	24.67	0.4	
56	Fe	89	H2	1.042	ppb	6.6	3974.96	20	
59	Co	89	He	0.005	ppb	85.6	22.22	0.2	
60	Ni	89	He	-0.036	ppb	N/A	43.34	0.4	
63	Cu	89	He	-0.177	ppb	N/A	178.90	0.6	
66	Zn	89	He	-0.026	ppb	N/A	60.00	2	
75	As	89	He	0.017	ppb	167.7	9.00	1	
78	Se	89	H2	0.032	ppb	99.7	3.50	1	
88	Sr	89	He	0.002	ppb	331.8	5.55	1	
95	Mo	89	He	0.056	ppb	20.7	65.56	1	
107	Ag	89	He	0.008	ppb	82.8	37.78	0.2	
111	Cd	89	He	0.005	ppb	124.0	2.59	0.2	
118	Sn	159	He	0.050	ppb	41.3	103.34	1	
121	Sb	159	No Gas	0.020	ppb	3.4	206.90	0.2	
137	Ba	159	No Gas	0.027	ppb	15.3	103.45	0.4	
182	W	159	No Gas	0.054	ppb	21.7	333.72	1	
205	Tl	209	No Gas	0.018	ppb	14.4	270.31	0.2	
208	Pb	209	No Gas	0.013	ppb	35.6	390.44	0.2	
232	Th	209	No Gas	0.057	ppb	19.0	1101.29	1	
238	U	209	No Gas	0.024	ppb	29.8	400.46	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778647.07	2.8	1826145.95	97.4	29.5	120.4	
Sc	45	No Gas	4145412.56	3.1	4103184.45	101.03	29.5	120.4	
Sc	45	H2	474267.81	1.1	476452.62	99.54	29.5	120.4	
Sc	45	He	94189.51	0.6	95435.38	98.69	29.5	120.4	
Ge	72	No Gas	924088.23	3.2	904931.62	102.12	29.5	120.4	
Ge	72	H2	170742.40	2.0	172351.67	99.07	29.5	120.4	
Ge	72	He	71786.10	0.6	72380.83	99.18	29.5	120.4	
Y	89	H2	2993179.66	0.4	2964265.2	100.98	29.5	120.4	
Y	89	He	611314.24	0.2	618281.42	98.87	29.5	120.4	
Tb	159	No Gas	9358508.19	3.2	8714728.06	107.39	29.5	120.4	
Tb	159	He	3269074.88	0.5	3206480.02	101.95	29.5	120.4	
Bi	209	No Gas	4802097.40	3.3	4440413.54	108.15	29.5	120.4	

Sample Report

Sample Name SN5827-009

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:13:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.153	ppb	26.4	65.56	100	
11	B	6	No Gas	2.940	ppb	13.8	2431.40	1000	
23	Na	45	He	94.643	ppb	10.3	5383.66	200000	
24	Mg	45	He	7.299	ppb	140.9	806.75	200000	
27	Al	45	He	12.945	ppb	25.0	76.67	200000	
28	Si	45	H2	29.118	ppb	14.4	770.88	10000	
39	K	45	He	-45.673	ppb	N/A	11019.32	200000	
40	Ca	45	H2	64.671	ppb	1.2	6477.26	200000	
51	V	89	He	7.063	ppb	4.8	1454.57	1000	
52	Cr	89	He	0.693	ppb	13.0	206.63	2000	
55	Mn	89	He	1.264	ppb	12.3	138.64	2000	
56	Fe	89	H2	9.361	ppb	13.2	5387.00	100000	
59	Co	89	He	0.036	ppb	148.7	26.67	1000	
60	Ni	89	He	0.394	ppb	56.2	101.11	1000	
63	Cu	89	He	0.246	ppb	35.0	504.47	2000	
66	Zn	89	He	3.930	ppb	25.6	214.45	2000	
75	As	89	He	0.366	ppb	62.4	17.67	1000	
78	Se	89	H2	0.111	ppb	42.0	2.67	1000	
88	Sr	89	He	0.300	ppb	51.3	50.00	2000	
95	Mo	89	He	0.097	ppb	19.8	33.33	1000	
107	Ag	89	He	0.023	ppb	191.5	27.78	100	
111	Cd	89	He	0.039	ppb	151.0	3.70	1000	
118	Sn	159	He	1.205	ppb	16.6	265.57	1000	
121	Sb	159	No Gas	0.087	ppb	70.9	190.22	1000	
137	Ba	159	No Gas	0.654	ppb	19.5	413.80	2000	
182	W	159	No Gas	0.062	ppb	34.5	96.78	1000	
205	Tl	209	No Gas	0.004	ppb	436.0	53.39	1000	
208	Pb	209	No Gas	0.005	ppb	305.3	196.89	2000	
232	Th	209	No Gas	0.189	ppb	24.6	774.23	1000	
238	U	209	No Gas	0.007	ppb	108.4	26.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1757559.01	2.2	1826145.95	96.24	29.5	120.4	
Sc	45	No Gas	4163857.20	2.7	4103184.45	101.48	29.5	120.4	
Sc	45	H2	466936.60	0.9	476452.62	98	29.5	120.4	
Sc	45	He	94130.70	0.4	95435.38	98.63	29.5	120.4	
Ge	72	No Gas	939409.05	2.4	904931.62	103.81	29.5	120.4	
Ge	72	H2	165330.49	0.1	172351.67	95.93	29.5	120.4	
Ge	72	He	71185.28	0.4	72380.83	98.35	29.5	120.4	
Y	89	H2	2981938.42	0.0	2964265.2	100.6	29.5	120.4	
Y	89	He	610850.69	0.1	618281.42	98.8	29.5	120.4	
Tb	159	No Gas	9487630.90	2.8	8714728.06	108.87	29.5	120.4	
Tb	159	He	3267024.01	0.2	3206480.02	101.89	29.5	120.4	
Bi	209	No Gas	4854722.26	2.2	4440413.54	109.33	29.5	120.4	

Sample Report

Sample Name SN5827-010

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:15:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.151	ppb	28.6	64.45	100	
11	B	6	No Gas	2.552	ppb	26.8	2336.93	1000	
23	Na	45	He	139.737	ppb	13.2	6411.89	200000	
24	Mg	45	He	23.564	ppb	23.1	1011.23	200000	
27	Al	45	He	13.170	ppb	8.9	77.78	200000	
28	Si	45	H2	19.210	ppb	26.1	687.45	10000	
39	K	45	He	-22.897	ppb	N/A	11271.14	200000	
40	Ca	45	H2	119.903	ppb	0.9	11155.88	200000	
51	V	89	He	6.449	ppb	3.1	1351.22	1000	
52	Cr	89	He	0.486	ppb	30.6	161.97	2000	
55	Mn	89	He	1.174	ppb	12.3	129.98	2000	
56	Fe	89	H2	5.024	ppb	13.0	3904.89	100000	
59	Co	89	He	0.018	ppb	261.4	20.00	1000	
60	Ni	89	He	0.214	ppb	54.9	83.34	1000	
63	Cu	89	He	0.977	ppb	14.6	717.82	2000	
66	Zn	89	He	7.169	ppb	7.5	338.91	2000	
75	As	89	He	0.246	ppb	34.3	14.00	1000	
78	Se	89	H2	0.060	ppb	107.4	1.83	1000	
88	Sr	89	He	0.292	ppb	26.7	48.89	2000	
95	Mo	89	He	0.020	ppb	97.7	20.00	1000	
107	Ag	89	He	0.006	ppb	148.3	17.78	100	
111	Cd	89	He	0.010	ppb	171.1	1.48	1000	
118	Sn	159	He	0.995	ppb	4.5	231.12	1000	
121	Sb	159	No Gas	0.014	ppb	103.9	80.09	1000	
137	Ba	159	No Gas	0.425	ppb	26.1	283.65	2000	
182	W	159	No Gas	0.041	ppb	36.3	73.42	1000	
205	Tl	209	No Gas	0.009	ppb	129.1	66.74	1000	
208	Pb	209	No Gas	0.117	ppb	34.4	590.67	2000	
232	Th	209	No Gas	0.073	ppb	10.9	377.09	1000	
238	U	209	No Gas	0.008	ppb	97.0	30.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1739710.77	3.3	1826145.95	95.27	29.5	120.4	
Sc	45	No Gas	4203440.95	3.6	4103184.45	102.44	29.5	120.4	
Sc	45	H2	469334.74	0.9	476452.62	98.51	29.5	120.4	
Sc	45	He	94142.97	0.8	95435.38	98.65	29.5	120.4	
Ge	72	No Gas	946098.88	2.5	904931.62	104.55	29.5	120.4	
Ge	72	H2	166576.99	0.9	172351.67	96.65	29.5	120.4	
Ge	72	He	71513.12	0.7	72380.83	98.8	29.5	120.4	
Y	89	H2	2988303.69	1.1	2964265.2	100.81	29.5	120.4	
Y	89	He	613185.67	0.4	618281.42	99.18	29.5	120.4	
Tb	159	No Gas	9670352.49	3.5	8714728.06	110.97	29.5	120.4	
Tb	159	He	3284276.27	0.6	3206480.02	102.43	29.5	120.4	
Bi	209	No Gas	4935859.07	3.6	4440413.54	111.16	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG17IMW2
File Name	117_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:18:30 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.109	ppb	34.9	52.22	0.5	
B	11	6	No Gas	2.667	ppb	46.8	2319.16	10	
Na	23	45	He	45.033	ppb	17.9	4282.07	500	
Mg	24	45	He	-6.913	ppb	N/A	631.17	50	
Al	27	45	He	11.687	ppb	10.8	71.11	50	
Si	28	45	H2	6.333	ppb	10.9	570.64	250	
K	39	45	He	-74.278	ppb	N/A	10780.90	500	
Ca	40	45	H2	24.491	ppb	1.7	3119.35	50	
V	51	89	He	6.407	ppb	6.5	1350.11	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	0.525	ppb	7.4	171.30	2.5	
Mn	55	89	He	0.384	ppb	29.6	49.99	1	
Fe	56	89	H2	2.138	ppb	12.2	2920.22	50	
Co	59	89	He	0.000	ppb	13135.4	13.33	0.5	
Ni	60	89	He	-0.106	ppb	N/A	51.11	1	
Cu	63	89	He	-0.395	ppb	N/A	322.24	1.5	
Zn	66	89	He	1.745	ppb	45.2	132.23	5	
As	75	89	He	0.213	ppb	90.0	13.00	2.5	
Se	78	89	H2	0.070	ppb	76.7	2.00	2.5	
Sr	88	89	He	0.051	ppb	107.3	12.22	2.5	
Mo	95	89	He	-0.050	ppb	N/A	7.78	2.5	
Ag	107	89	He	0.006	ppb	157.5	17.78	0.5	
Cd	111	89	He	0.029	ppb	30.4	2.96	0.5	
Sn	118	159	He	0.910	ppb	14.2	218.90	2.5	
Sb	121	159	No Gas	0.007	ppb	240.7	70.08	0.5	
Ba	137	159	No Gas	0.096	ppb	45.7	83.43	1	
W	182	159	No Gas	0.032	ppb	44.0	63.41	2.5	
Tl	205	209	No Gas	0.000	ppb	N/A	43.38	0.5	
Pb	208	209	No Gas	0.026	ppb	41.8	270.30	0.5	
Th	232	209	No Gas	0.032	ppb	47.9	226.92	2.5	
U	238	209	No Gas	0.010	ppb	47.1	36.71	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1711647.95	2.7	1826145.95	93.73	29.5	120.4	
Sc	45	No Gas	4180090.77	2.3	4103184.45	101.87	29.5	120.4	
Sc	45	H2	467420.80	1.1	476452.62	98.1	29.5	120.4	
Sc	45	He	94833.10	1.9	95435.38	99.37	29.5	120.4	
Ge	72	No Gas	944836.73	1.3	904931.62	104.41	29.5	120.4	
Ge	72	H2	164462.94	1.3	172351.67	95.42	29.5	120.4	
Ge	72	He	71772.03	0.7	72380.83	99.16	29.5	120.4	
Y	89	H2	2998254.90	0.7	2964265.2	101.15	29.5	120.4	
Y	89	He	616441.92	1.8	618281.42	99.7	29.5	120.4	
Tb	159	No Gas	9630566.80	2.5	8714728.06	110.51	29.5	120.4	
Tb	159	He	3321051.20	1.5	3206480.02	103.57	29.5	120.4	
Bi	209	No Gas	4916516.86	2.6	4440413.54	110.72	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG17IMW2
File Name	118LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:21:04 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.177	ppb	8.2	13317.64	50	19.67	79.5	120.4	
B	11	6	No Gas	495.053	ppb	8.1	89962.11	500	19.8	79.5	120.4	
Na	23	45	He	7837.798	ppb	1.2	184121.61	7500	20.9	79.5	120.4	
Mg	24	45	He	5323.800	ppb	0.3	68573.72	5000	21.3	79.5	120.4	
Al	27	45	He	1944.090	ppb	2.0	9497.92	2000	19.44	79.5	120.4	
Si	28	45	H2	1067.428	ppb	6.1	9997.98	1000	21.35	0	200	
K	39	45	He	10362.261	ppb	1.0	127479.16	10000	20.72	79.5	120.4	
Ca	40	45	H2	2691.425	ppb	0.9	227794.48	2500	21.53	79.5	120.4	
V	51	89	He	541.427	ppb	1.1	96675.24	500	21.66	79.5	120.4	
Cr	52	89	He	217.708	ppb	0.7	48195.54	200	21.77	79.5	120.4	
Mn	55	89	He	546.744	ppb	0.3	55881.85	500	21.87	79.5	120.4	
Fe	56	89	H2	1083.460	ppb	1.6	378802.06	1000	21.67	79.5	120.4	
Co	59	89	He	561.235	ppb	0.4	209034.08	500	22.45	79.5	120.4	
Ni	60	89	He	558.268	ppb	0.7	56829.43	500	22.33	79.5	120.4	
Cu	63	89	He	268.995	ppb	1.2	78634.72	250	21.52	79.5	120.4	
Zn	66	89	He	525.108	ppb	0.6	20214.17	500	21	79.5	120.4	
As	75	89	He	106.732	ppb	3.2	3358.11	100	21.35	79.5	120.4	
Se	78	89	H2	103.895	ppb	1.4	1716.20	100	20.78	79.5	120.4	
Sr	88	89	He	518.183	ppb	0.3	79440.46	500	20.73	79.5	120.4	
Mo	95	89	He	109.384	ppb	1.7	19234.11	100	21.88	79.5	120.4	
Ag	107	89	He	56.353	ppb	1.2	33921.95	50	22.54	79.5	120.4	
Cd	111	89	He	271.501	ppb	0.7	20660.65	250	21.72	79.5	120.4	
Sn	118	159	He	507.785	ppb	0.6	87569.74	500	20.31	79.5	120.4	
Sb	121	159	No Gas	97.097	ppb	8.4	152465.79	100	19.42	79.5	120.4	
Ba	137	159	No Gas	1950.573	ppb	9.1	1185778.64	2000	19.51	79.5	120.4	
W	182	159	No Gas	99.563	ppb	8.7	117341.76	100	19.91	79.5	120.4	
Tl	205	209	No Gas	102.051	ppb	8.7	258793.34	100	20.41	79.5	120.4	
[Pb]	206	209	No Gas	102.475	ppb	9.1	90149.01	100	20.5	79.5	120.4	
[Pb]	207	209	No Gas	102.553	ppb	8.2	78425.04	100	20.51	79.5	120.4	
Pb	208	209	No Gas	101.952	ppb	8.8	356524.68	100	20.39	79.5	120.4	
Th	232	209	No Gas	97.972	ppb	9.4	349514.15	100	19.59	79.5	120.4	
U	238	209	No Gas	98.953	ppb	9.6	330350.90	100	19.79	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1734953.76	2.6	1826145.95	95.01	29.5	120.4	
Sc	45	No Gas	4196270.44	2.9	4103184.45	102.27	29.5	120.4	
Sc	45	H2	470162.68	0.7	476452.62	98.68	29.5	120.4	
Sc	45	He	95263.62	0.7	95435.38	99.82	29.5	120.4	
Ge	72	No Gas	950150.68	1.4	904931.62	105	29.5	120.4	
Ge	72	H2	166516.99	0.8	172351.67	96.61	29.5	120.4	
Ge	72	He	71953.62	0.9	72380.83	99.41	29.5	120.4	
Y	89	H2	3015565.02	1.1	2964265.2	101.73	29.5	120.4	
Y	89	He	615935.45	0.5	618281.42	99.62	29.5	120.4	
Tb	159	No Gas	9699909.16	3.1	8714728.06	111.3	29.5	120.4	
Tb	159	He	3317291.58	1.0	3206480.02	103.46	29.5	120.4	
Bi	209	No Gas	4934896.91	3.1	4440413.54	111.14	29.5	120.4	

Sample Report

Sample Name SN5788-001

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:23:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.144	ppb	35.8	61.11	100	
11	B	6	No Gas	36.251	ppb	3.9	8164.80	1000	
23	Na	45	He	45879.121	ppb	0.7	1049035.69	200000	
24	Mg	45	He	6138.682	ppb	0.7	78001.88	200000	
27	Al	45	He	185.802	ppb	6.9	910.08	200000	
28	Si	45	H2	3017.454	ppb	1.3	26938.76	10000	
39	K	45	He	1388.345	ppb	2.3	26849.86	200000	
40	Ca	45	H2	16680.325	ppb	0.8	1386624.15	200000	
51	V	89	He	4.995	ppb	6.5	1091.19	1000	
52	Cr	89	He	0.827	ppb	8.0	236.63	2000	
55	Mn	89	He	9.256	ppb	3.8	950.53	2000	
56	Fe	89	H2	423.998	ppb	1.6	147386.17	100000	
59	Co	89	He	0.474	ppb	18.9	188.90	1000	
60	Ni	89	He	3.933	ppb	14.1	458.91	1000	
63	Cu	89	He	0.389	ppb	20.3	546.70	2000	
66	Zn	89	He	8.791	ppb	13.6	400.02	2000	
75	As	89	He	1.188	ppb	15.2	43.34	1000	
78	Se	89	H2	0.204	ppb	67.5	4.17	1000	
88	Sr	89	He	87.104	ppb	1.9	13272.43	2000	
95	Mo	89	He	0.103	ppb	38.2	34.45	1000	
107	Ag	89	He	0.086	ppb	55.1	65.56	100	
111	Cd	89	He	0.079	ppb	56.4	6.67	1000	
118	Sn	159	He	1.174	ppb	21.0	264.46	1000	
121	Sb	159	No Gas	0.105	ppb	19.9	226.92	1000	
137	Ba	159	No Gas	3.109	ppb	5.5	1945.65	2000	
182	W	159	No Gas	0.172	ppb	59.3	230.26	1000	
205	Tl	209	No Gas	0.101	ppb	9.3	307.02	1000	
208	Pb	209	No Gas	0.231	ppb	14.8	1004.48	2000	
232	Th	209	No Gas	0.377	ppb	8.5	1485.09	1000	
238	U	209	No Gas	0.061	ppb	19.5	210.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1700119.82	2.5	1826145.95	93.1	29.5	120.4	
Sc	45	No Gas	4223791.61	2.7	4103184.45	102.94	29.5	120.4	
Sc	45	H2	463624.67	1.4	476452.62	97.31	29.5	120.4	
Sc	45	He	94109.44	0.8	95435.38	98.61	29.5	120.4	
Ge	72	No Gas	964509.61	2.0	904931.62	106.58	29.5	120.4	
Ge	72	H2	165769.14	1.8	172351.67	96.18	29.5	120.4	
Ge	72	He	72195.24	1.2	72380.83	99.74	29.5	120.4	
Y	89	H2	2971214.88	0.7	2964265.2	100.23	29.5	120.4	
Y	89	He	612008.12	0.6	618281.42	98.99	29.5	120.4	
Tb	159	No Gas	9838221.10	3.1	8714728.06	112.89	29.5	120.4	
Tb	159	He	3315954.99	0.7	3206480.02	103.41	29.5	120.4	
Bi	209	No Gas	5018822.92	3.5	4440413.54	113.03	29.5	120.4	

Sample Report

Sample Name SN5788-008

File Name 120SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:26:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.143	ppb	18.4	61.11	100	
11	B	6	No Gas	3.488	ppb	7.9	2461.41	1000	
23	Na	45	He	55.744	ppb	5.1	4455.64	200000	
24	Mg	45	He	-1.540	ppb	N/A	688.96	200000	
27	Al	45	He	10.292	ppb	12.1	63.33	200000	
28	Si	45	H2	21.061	ppb	26.1	697.46	10000	
39	K	45	He	-73.328	ppb	N/A	10614.19	200000	
40	Ca	45	H2	31.224	ppb	1.7	3666.17	200000	
51	V	89	He	5.514	ppb	4.3	1180.10	1000	
52	Cr	89	He	0.498	ppb	15.0	163.97	2000	
55	Mn	89	He	0.752	ppb	11.2	86.65	2000	
56	Fe	89	H2	4.722	ppb	8.5	3824.76	100000	
59	Co	89	He	0.085	ppb	65.5	44.45	1000	
60	Ni	89	He	-0.058	ppb	N/A	55.56	1000	
63	Cu	89	He	-0.003	ppb	N/A	432.24	2000	
66	Zn	89	He	9.312	ppb	5.9	418.91	2000	
75	As	89	He	0.174	ppb	75.7	11.67	1000	
78	Se	89	H2	0.039	ppb	134.6	1.50	1000	
88	Sr	89	He	0.088	ppb	56.6	17.78	2000	
95	Mo	89	He	-0.018	ppb	N/A	13.33	1000	
107	Ag	89	He	0.010	ppb	208.6	20.00	100	
111	Cd	89	He	0.005	ppb	290.2	1.11	1000	
118	Sn	159	He	1.050	ppb	20.6	242.24	1000	
121	Sb	159	No Gas	0.041	ppb	65.0	126.81	1000	
137	Ba	159	No Gas	0.760	ppb	12.8	497.23	2000	
182	W	159	No Gas	0.089	ppb	30.4	133.49	1000	
205	Tl	209	No Gas	0.023	ppb	72.9	106.79	1000	
208	Pb	209	No Gas	0.109	ppb	3.6	577.32	2000	
232	Th	209	No Gas	0.074	ppb	52.1	387.11	1000	
238	U	209	No Gas	0.025	ppb	78.9	90.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1708775.60	2.7	1826145.95	93.57	29.5	120.4	
Sc	45	No Gas	4205010.75	2.6	4103184.45	102.48	29.5	120.4	
Sc	45	H2	465255.98	0.2	476452.62	97.65	29.5	120.4	
Sc	45	He	93272.75	0.8	95435.38	97.73	29.5	120.4	
Ge	72	No Gas	946327.72	0.7	904931.62	104.57	29.5	120.4	
Ge	72	H2	164218.20	0.8	172351.67	95.28	29.5	120.4	
Ge	72	He	71423.15	0.9	72380.83	98.68	29.5	120.4	
Y	89	H2	3007077.02	0.8	2964265.2	101.44	29.5	120.4	
Y	89	He	610475.62	0.6	618281.42	98.74	29.5	120.4	
Tb	159	No Gas	9859208.74	2.3	8714728.06	113.13	29.5	120.4	
Tb	159	He	3304362.45	0.6	3206480.02	103.05	29.5	120.4	
Bi	209	No Gas	5042579.85	1.5	4440413.54	113.56	29.5	120.4	

Sample Report

Sample Name SN5814-004

File Name 121SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:28:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.157	ppb	17.0	64.45	100	
11	B	6	No Gas	7.742	ppb	16.4	3186.00	1000	
23	Na	45	He	2202.541	ppb	1.6	53401.65	200000	
24	Mg	45	He	1062.759	ppb	0.1	14087.93	200000	
27	Al	45	He	389.702	ppb	1.8	1891.30	200000	
28	Si	45	H2	5299.744	ppb	3.5	47201.28	10000	
39	K	45	He	1305.541	ppb	1.7	25921.83	200000	
40	Ca	45	H2	7347.722	ppb	1.2	614924.02	200000	
51	V	89	He	7.694	ppb	4.3	1570.15	1000	
52	Cr	89	He	1.524	ppb	18.6	389.94	2000	
55	Mn	89	He	62.987	ppb	0.7	6410.29	2000	
56	Fe	89	H2	1020.724	ppb	1.1	357469.42	100000	
59	Co	89	He	0.630	ppb	21.5	246.69	1000	
60	Ni	89	He	2.436	ppb	17.0	307.79	1000	
63	Cu	89	He	1.745	ppb	12.1	938.96	2000	
66	Zn	89	He	13.966	ppb	5.7	597.82	2000	
75	As	89	He	2.180	ppb	11.7	74.34	1000	
78	Se	89	H2	0.291	ppb	24.7	5.67	1000	
88	Sr	89	He	38.973	ppb	2.1	5944.83	2000	
95	Mo	89	He	0.249	ppb	58.1	60.00	1000	
107	Ag	89	He	0.021	ppb	117.3	26.67	100	
111	Cd	89	He	0.039	ppb	86.1	3.70	1000	
118	Sn	159	He	1.388	ppb	14.7	300.01	1000	
121	Sb	159	No Gas	0.071	ppb	24.3	173.53	1000	
137	Ba	159	No Gas	15.131	ppb	18.1	9390.52	2000	
182	W	159	No Gas	0.034	ppb	79.4	66.74	1000	
205	Tl	209	No Gas	0.022	ppb	49.6	103.45	1000	
208	Pb	209	No Gas	2.188	ppb	8.4	8093.40	2000	
232	Th	209	No Gas	0.098	ppb	31.5	480.55	1000	
238	U	209	No Gas	0.109	ppb	35.9	377.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1699452.30	2.8	1826145.95	93.06	29.5	120.4	
Sc	45	No Gas	4217009.67	3.4	4103184.45	102.77	29.5	120.4	
Sc	45	H2	466290.46	0.3	476452.62	97.87	29.5	120.4	
Sc	45	He	94062.49	1.0	95435.38	98.56	29.5	120.4	
Ge	72	No Gas	956547.37	2.4	904931.62	105.7	29.5	120.4	
Ge	72	H2	166360.61	0.6	172351.67	96.52	29.5	120.4	
Ge	72	He	71283.17	0.2	72380.83	98.48	29.5	120.4	
Y	89	H2	3019443.92	0.9	2964265.2	101.86	29.5	120.4	
Y	89	He	612403.89	0.2	618281.42	99.05	29.5	120.4	
Tb	159	No Gas	9894387.01	3.3	8714728.06	113.54	29.5	120.4	
Tb	159	He	3303319.88	0.2	3206480.02	103.02	29.5	120.4	
Bi	209	No Gas	5102255.56	3.4	4440413.54	114.9	29.5	120.4	

Sample Report

Sample Name SN5814-004L

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:31:33 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.385	ppb	40.0	43.33	100	
11	B	6	No Gas	12.233	ppb	49.6	2268.03	1000	
23	Na	45	He	2243.024	ppb	2.6	13431.09	200000	
24	Mg	45	He	1045.145	ppb	6.9	3340.66	200000	
27	Al	45	He	599.219	ppb	7.8	591.14	200000	
28	Si	45	H2	5499.235	ppb	5.2	10165.28	10000	
39	K	45	He	836.842	ppb	22.1	13346.93	200000	
40	Ca	45	H2	7366.200	ppb	0.6	123695.90	200000	
51	V	89	He	25.488	ppb	9.1	1107.86	1000	
52	Cr	89	He	3.021	ppb	25.9	187.30	2000	
55	Mn	89	He	62.076	ppb	4.1	1269.16	2000	
56	Fe	89	H2	1016.657	ppb	1.0	72641.50	100000	
59	Co	89	He	0.964	ppb	28.5	84.45	1000	
60	Ni	89	He	2.020	ppb	11.5	102.23	1000	
63	Cu	89	He	-1.181	ppb	N/A	365.57	2000	
66	Zn	89	He	17.456	ppb	2.2	197.79	2000	
75	As	89	He	2.310	ppb	10.0	20.67	1000	
78	Se	89	H2	0.196	ppb	1.9	1.50	1000	
88	Sr	89	He	37.085	ppb	4.1	1132.31	2000	
95	Mo	89	He	-0.057	ppb	N/A	14.45	1000	
107	Ag	89	He	0.020	ppb	138.7	16.67	100	
111	Cd	89	He	0.025	ppb	503.5	1.11	1000	
118	Sn	159	He	2.492	ppb	11.1	147.78	1000	
121	Sb	159	No Gas	0.033	ppb	196.1	70.08	1000	
137	Ba	159	No Gas	15.904	ppb	4.7	1969.01	2000	
182	W	159	No Gas	0.073	ppb	91.1	43.38	1000	
205	Tl	209	No Gas	0.036	ppb	34.6	63.41	1000	
208	Pb	209	No Gas	2.258	ppb	13.6	1775.38	2000	
232	Th	209	No Gas	0.178	ppb	35.8	243.61	1000	
238	U	209	No Gas	0.118	ppb	16.7	83.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1703370.77	2.2	1826145.95	93.28	29.5	120.4	
Sc	45	No Gas	4153688.96	2.8	4103184.45	101.23	29.5	120.4	
Sc	45	H2	464590.06	0.5	476452.62	97.51	29.5	120.4	
Sc	45	He	93966.26	0.5	95435.38	98.46	29.5	120.4	
Ge	72	No Gas	934538.86	0.9	904931.62	103.27	29.5	120.4	
Ge	72	H2	165942.15	0.8	172351.67	96.28	29.5	120.4	
Ge	72	He	71366.50	0.5	72380.83	98.6	29.5	120.4	
Y	89	H2	3005751.69	0.8	2964265.2	101.4	29.5	120.4	
Y	89	He	611009.40	0.5	618281.42	98.82	29.5	120.4	
Tb	159	No Gas	9734763.26	1.9	8714728.06	111.7	29.5	120.4	
Tb	159	He	3314574.36	0.1	3206480.02	103.37	29.5	120.4	
Bi	209	No Gas	4977827.70	2.8	4440413.54	112.1	29.5	120.4	

Sample Report

Sample Name SN5814-004A

File Name 123SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:34:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.893	ppb	3.4	2697.01	100	
11	B	6	No Gas	202.355	ppb	7.1	37848.24	1000	
23	Na	45	He	12926.662	ppb	1.9	300841.95	200000	
24	Mg	45	He	2034.625	ppb	2.5	26588.75	200000	
27	Al	45	He	1283.711	ppb	3.9	6262.72	200000	
28	Si	45	H2	10026.344	ppb	2.9	87078.68	10000	
39	K	45	He	11524.511	ppb	1.8	140147.15	200000	
40	Ca	45	H2	8251.219	ppb	2.1	676738.28	200000	
51	V	89	He	61.729	ppb	0.8	11271.55	1000	
52	Cr	89	He	54.101	ppb	2.6	12084.31	2000	
55	Mn	89	He	82.163	ppb	2.0	8453.68	2000	
56	Fe	89	H2	2074.627	ppb	2.5	706096.42	100000	
59	Co	89	He	12.137	ppb	2.0	4558.85	1000	
60	Ni	89	He	24.226	ppb	2.1	2540.33	1000	
63	Cu	89	He	34.625	ppb	2.7	10559.88	2000	
66	Zn	89	He	117.743	ppb	2.3	4608.70	2000	
75	As	89	He	53.372	ppb	0.3	1692.29	1000	
78	Se	89	H2	52.626	ppb	3.9	848.99	1000	
88	Sr	89	He	87.641	ppb	0.9	13517.10	2000	
95	Mo	89	He	52.843	ppb	2.5	9352.41	1000	
107	Ag	89	He	11.280	ppb	0.3	6840.86	100	
111	Cd	89	He	11.308	ppb	3.1	865.97	1000	
118	Sn	159	He	49.807	ppb	3.1	8709.79	1000	
121	Sb	159	No Gas	10.109	ppb	7.7	16224.63	1000	
137	Ba	159	No Gas	34.365	ppb	9.6	21300.96	2000	
182	W	159	No Gas	48.579	ppb	7.1	58336.07	1000	
205	Tl	209	No Gas	10.068	ppb	7.6	26353.74	1000	
208	Pb	209	No Gas	12.165	ppb	6.3	44016.04	2000	
232	Th	209	No Gas	9.717	ppb	9.1	35824.70	1000	
238	U	209	No Gas	10.120	ppb	7.7	34827.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1732537.06	1.8	1826145.95	94.87	29.5	120.4	
Sc	45	No Gas	4226622.57	2.0	4103184.45	103.01	29.5	120.4	
Sc	45	H2	457081.46	0.6	476452.62	95.93	29.5	120.4	
Sc	45	He	95060.19	1.9	95435.38	99.61	29.5	120.4	
Ge	72	No Gas	945110.53	1.4	904931.62	104.44	29.5	120.4	
Ge	72	H2	163117.03	1.4	172351.67	94.64	29.5	120.4	
Ge	72	He	72436.27	1.4	72380.83	100.08	29.5	120.4	
Y	89	H2	2943850.98	0.9	2964265.2	99.31	29.5	120.4	
Y	89	He	619492.18	1.7	618281.42	100.2	29.5	120.4	
Tb	159	No Gas	9875606.31	2.4	8714728.06	113.32	29.5	120.4	
Tb	159	He	3342879.05	1.3	3206480.02	104.25	29.5	120.4	
Bi	209	No Gas	5083778.18	2.6	4440413.54	114.49	29.5	120.4	

Sample Report

Sample Name SN5814-004S

File Name 124SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:36:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	45.291	ppb	13.3	12255.60	100	
11	B	6	No Gas	472.724	ppb	12.7	85918.66	1000	
23	Na	45	He	9803.912	ppb	0.8	226287.51	200000	
24	Mg	45	He	6292.349	ppb	1.6	79783.42	200000	
27	Al	45	He	2246.964	ppb	2.1	10822.25	200000	
28	Si	45	H2	6593.679	ppb	1.3	58538.09	10000	
39	K	45	He	11526.217	ppb	1.0	138531.88	200000	
40	Ca	45	H2	9977.945	ppb	0.6	833714.48	200000	
51	V	89	He	531.510	ppb	1.3	93876.52	1000	
52	Cr	89	He	215.564	ppb	1.5	47201.64	2000	
55	Mn	89	He	593.581	ppb	1.7	60005.80	2000	
56	Fe	89	H2	2082.633	ppb	0.3	717827.81	100000	
59	Co	89	He	548.773	ppb	1.4	202163.98	1000	
60	Ni	89	He	544.432	ppb	1.5	54817.92	1000	
63	Cu	89	He	269.168	ppb	1.0	77826.90	2000	
66	Zn	89	He	533.466	ppb	0.7	20313.16	2000	
75	As	89	He	105.801	ppb	3.5	3292.42	1000	
78	Se	89	H2	100.118	ppb	0.8	1635.02	1000	
88	Sr	89	He	545.617	ppb	0.2	82740.15	2000	
95	Mo	89	He	107.701	ppb	1.5	18732.33	1000	
107	Ag	89	He	54.404	ppb	1.5	32390.54	100	
111	Cd	89	He	265.304	ppb	1.1	19969.63	1000	
118	Sn	159	He	495.897	ppb	0.1	85231.28	1000	
121	Sb	159	No Gas	89.515	ppb	11.8	143079.13	1000	
137	Ba	159	No Gas	1809.182	ppb	12.0	1119545.89	2000	
182	W	159	No Gas	92.883	ppb	12.7	111397.80	1000	
205	Tl	209	No Gas	94.815	ppb	12.4	245732.96	1000	
208	Pb	209	No Gas	95.816	ppb	11.7	342481.80	2000	
232	Th	209	No Gas	85.400	ppb	12.6	311375.60	1000	
238	U	209	No Gas	91.859	ppb	12.9	313402.91	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1736204.60	3.5	1826145.95	95.07	29.5	120.4	
Sc	45	No Gas	4201947.89	3.7	4103184.45	102.41	29.5	120.4	
Sc	45	H2	465743.61	1.4	476452.62	97.75	29.5	120.4	
Sc	45	He	93938.08	0.9	95435.38	98.43	29.5	120.4	
Ge	72	No Gas	961336.93	1.9	904931.62	106.23	29.5	120.4	
Ge	72	H2	165408.70	1.3	172351.67	95.97	29.5	120.4	
Ge	72	He	71332.34	0.4	72380.83	98.55	29.5	120.4	
Y	89	H2	2980860.36	0.8	2964265.2	100.56	29.5	120.4	
Y	89	He	609274.78	1.0	618281.42	98.54	29.5	120.4	
Tb	159	No Gas	9880089.71	3.1	8714728.06	113.37	29.5	120.4	
Tb	159	He	3306000.33	0.4	3206480.02	103.1	29.5	120.4	
Bi	209	No Gas	5048232.69	3.3	4440413.54	113.69	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	125_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:39:29 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.199	ppb	6.4	32611.92	25	96.8	89.8	110.2	
11	B	6	No Gas	24.458	ppb	4.4	23560.95	25	97.83	89.8	110.2	
23	Na	45	He	5127.783	ppb	1.4	583438.81	5000	102.56	89.8	110.2	
24	Mg	45	He	5006.684	ppb	0.4	313613.09	5000	100.13	89.8	110.2	
27	Al	45	He	480.186	ppb	1.2	11501.66	500	96.04	89.8	110.2	
28	Si	45	H2	462.379	ppb	3.1	20741.59	500	92.48	89.8	110.2	
39	K	45	He	4906.846	ppb	0.7	280388.70	5000	98.14	89.8	110.2	
40	Ca	45	H2	4952.363	ppb	2.3	2055743.17	5000	99.05	89.8	110.2	
51	V	89	He	25.048	ppb	1.0	22404.00	25	100.19	89.8	110.2	
52	Cr	89	He	25.341	ppb	0.6	27923.70	25	101.36	89.8	110.2	
55	Mn	89	He	24.669	ppb	0.3	12547.98	25	98.68	89.8	110.2	
56	Fe	89	H2	4860.083	ppb	1.2	8333678.07	5000	97.2	89.8	110.2	
59	Co	89	He	25.766	ppb	1.0	47737.24	25	103.06	89.8	110.2	
60	Ni	89	He	25.794	ppb	0.7	13105.41	25	103.18	89.8	110.2	
63	Cu	89	He	24.820	ppb	0.9	36318.02	25	99.28	89.8	110.2	
66	Zn	89	He	25.010	ppb	0.9	4837.68	25	100.04	89.8	110.2	
75	As	89	He	24.899	ppb	3.5	3895.64	25	99.6	89.8	110.2	
78	Se	89	H2	24.740	ppb	3.4	2015.06	25	98.96	89.8	110.2	
88	Sr	89	He	23.768	ppb	1.0	18124.77	25	95.07	89.8	110.2	
95	Mo	89	He	25.163	ppb	0.3	22003.87	25	100.65	89.8	110.2	
107	Ag	89	He	25.768	ppb	1.3	77119.34	25	103.07	89.8	110.2	
111	Cd	89	He	25.413	ppb	1.7	9619.06	25	101.65	89.8	110.2	
118	Sn	159	He	23.374	ppb	0.3	20196.89	25	93.5	89.8	110.2	
121	Sb	159	No Gas	23.263	ppb	6.5	182729.58	25	93.05	89.8	110.2	
137	Ba	159	No Gas	23.998	ppb	5.6	73034.23	25	95.99	89.8	110.2	
182	W	159	No Gas	23.527	ppb	7.0	138689.91	25	94.11	89.8	110.2	
205	Tl	209	No Gas	24.070	ppb	4.8	309541.00	25	96.28	89.8	110.2	
208	Pb	209	No Gas	24.013	ppb	5.5	425724.93	25	96.05	89.8	110.2	
232	Th	209	No Gas	23.648	ppb	7.6	427493.07	25	94.59	89.8	110.2	
238	U	209	No Gas	24.000	ppb	6.9	406109.80	25	96	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1728869.90	3.8	1826145.95	94.67	29.5	120.4	
Sc	45	No Gas	4148142.79	4.2	4103184.45	101.1	29.5	120.4	
Sc	45	H2	463218.20	1.4	476452.62	97.22	29.5	120.4	
Sc	45	He	93431.20	0.1	95435.38	97.9	29.5	120.4	
Ge	72	No Gas	929694.51	2.6	904931.62	102.74	29.5	120.4	
Ge	72	H2	167400.73	1.3	172351.67	97.13	29.5	120.4	
Ge	72	He	72016.50	0.5	72380.83	99.5	29.5	120.4	
Y	89	H2	2974279.25	0.7	2964265.2	100.34	29.5	120.4	
Y	89	He	612659.05	0.5	618281.42	99.09	29.5	120.4	
Tb	159	No Gas	9705501.87	4.0	8714728.06	111.37	29.5	120.4	
Tb	159	He	3316310.44	0.2	3206480.02	103.43	29.5	120.4	
Bi	209	No Gas	5003546.96	4.4	4440413.54	112.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	126_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 9:42:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.054	ppb	35.7	98.89	0.2	
11	B	6	No Gas	0.604	ppb	3.9	2481.41	4	
23	Na	45	He	2.541	ppb	49.2	3517.67	200	
24	Mg	45	He	-2.851	ppb	N/A	535.61	20	
27	Al	45	He	0.144	ppb	243.6	17.78	20	
28	Si	45	H2	1.716	ppb	106.3	597.35	100	
39	K	45	He	-15.413	ppb	N/A	10680.86	200	
40	Ca	45	H2	1.683	ppb	7.2	1792.40	20	
51	V	89	He	0.277	ppb	13.5	452.25	1	
52	Cr	89	He	0.016	ppb	44.7	71.99	1	
55	Mn	89	He	0.021	ppb	40.0	21.33	0.4	
56	Fe	89	H2	1.615	ppb	18.0	4983.11	20	
59	Co	89	He	0.001	ppb	616.1	15.56	0.2	
60	Ni	89	He	-0.021	ppb	N/A	51.11	0.4	
63	Cu	89	He	-0.185	ppb	N/A	166.68	0.6	
66	Zn	89	He	0.113	ppb	45.7	86.67	2	
75	As	89	He	0.005	ppb	7.4	7.00	1	
78	Se	89	H2	0.044	ppb	50.3	4.50	1	
88	Sr	89	He	0.007	ppb	59.4	10.00	1	
95	Mo	89	He	0.047	ppb	25.5	57.78	1	
107	Ag	89	He	0.006	ppb	120.2	31.11	0.2	
111	Cd	89	He	0.001	ppb	509.6	1.11	0.2	
118	Sn	159	He	0.050	ppb	41.6	104.45	1	
121	Sb	159	No Gas	0.028	ppb	16.2	270.30	0.2	
137	Ba	159	No Gas	0.062	ppb	16.5	210.24	0.4	
182	W	159	No Gas	0.056	ppb	19.9	347.06	1	
205	Tl	209	No Gas	0.025	ppb	4.3	360.41	0.2	
208	Pb	209	No Gas	0.022	ppb	18.2	560.64	0.2	
232	Th	209	No Gas	0.060	ppb	5.9	1171.37	1	
238	U	209	No Gas	0.025	ppb	21.4	413.81	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1781957.18	3.6	1826145.95	97.58	29.5	120.4	
Sc	45	No Gas	4135767.44	3.1	4103184.45	100.79	29.5	120.4	
Sc	45	H2	472536.29	0.7	476452.62	99.18	29.5	120.4	
Sc	45	He	94204.06	0.3	95435.38	98.71	29.5	120.4	
Ge	72	No Gas	918019.77	1.5	904931.62	101.45	29.5	120.4	
Ge	72	H2	169882.15	1.0	172351.67	98.57	29.5	120.4	
Ge	72	He	72102.15	0.3	72380.83	99.61	29.5	120.4	
Y	89	H2	3006344.91	0.9	2964265.2	101.42	29.5	120.4	
Y	89	He	612617.86	0.7	618281.42	99.08	29.5	120.4	
Tb	159	No Gas	9488678.68	3.5	8714728.06	108.88	29.5	120.4	
Tb	159	He	3288272.66	0.8	3206480.02	102.55	29.5	120.4	
Bi	209	No Gas	4875503.35	3.6	4440413.54	109.8	29.5	120.4	

Sample Report

Sample Name SN5814-004P

File Name 127SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:44:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.366	ppb	9.5	12957.37	100	
11	B	6	No Gas	475.672	ppb	8.6	89277.81	1000	
23	Na	45	He	9653.860	ppb	0.7	222956.34	200000	
24	Mg	45	He	6286.265	ppb	1.4	79745.43	200000	
27	Al	45	He	2242.928	ppb	3.2	10807.77	200000	
28	Si	45	H2	6344.700	ppb	2.2	57254.97	10000	
39	K	45	He	11325.378	ppb	1.6	136379.14	200000	
40	Ca	45	H2	9634.844	ppb	0.6	818073.38	200000	
51	V	89	He	516.981	ppb	0.6	91910.48	1000	
52	Cr	89	He	209.548	ppb	0.9	46185.26	2000	
55	Mn	89	He	580.594	ppb	0.3	59076.04	2000	
56	Fe	89	H2	2051.946	ppb	2.0	712356.13	100000	
59	Co	89	He	536.280	ppb	1.7	198850.03	1000	
60	Ni	89	He	527.440	ppb	1.1	53453.99	1000	
63	Cu	89	He	261.551	ppb	1.5	76128.38	2000	
66	Zn	89	He	521.121	ppb	1.1	19971.59	2000	
75	As	89	He	106.863	ppb	1.2	3347.44	1000	
78	Se	89	H2	98.231	ppb	3.9	1616.19	1000	
88	Sr	89	He	538.051	ppb	2.0	82120.84	2000	
95	Mo	89	He	107.753	ppb	1.4	18862.47	1000	
107	Ag	89	He	53.849	ppb	2.0	32269.18	100	
111	Cd	89	He	259.271	ppb	0.1	19642.12	1000	
118	Sn	159	He	487.396	ppb	1.2	83638.15	1000	
121	Sb	159	No Gas	93.652	ppb	6.6	144590.95	1000	
137	Ba	159	No Gas	1880.004	ppb	7.2	1123775.41	2000	
182	W	159	No Gas	95.210	ppb	6.2	110332.48	1000	
205	Tl	209	No Gas	97.096	ppb	7.7	243701.66	1000	
208	Pb	209	No Gas	99.168	ppb	6.7	343261.45	2000	
232	Th	209	No Gas	90.564	ppb	7.7	319804.02	1000	
238	U	209	No Gas	94.213	ppb	7.4	311334.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1790629.43	2.7	1826145.95	98.06	29.5	120.4	
Sc	45	No Gas	4137707.41	1.7	4103184.45	100.84	29.5	120.4	
Sc	45	H2	473271.22	1.1	476452.62	99.33	29.5	120.4	
Sc	45	He	93970.43	0.5	95435.38	98.46	29.5	120.4	
Ge	72	No Gas	934621.67	1.9	904931.62	103.28	29.5	120.4	
Ge	72	H2	167537.78	1.0	172351.67	97.21	29.5	120.4	
Ge	72	He	71269.74	0.2	72380.83	98.46	29.5	120.4	
Y	89	H2	3002652.00	1.4	2964265.2	101.29	29.5	120.4	
Y	89	He	613182.38	0.5	618281.42	99.18	29.5	120.4	
Tb	159	No Gas	9525811.59	1.2	8714728.06	109.31	29.5	120.4	
Tb	159	He	3300706.34	0.5	3206480.02	102.94	29.5	120.4	
Bi	209	No Gas	4879630.24	1.6	4440413.54	109.89	29.5	120.4	

Sample Report

Sample Name SN5814-005

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:47:18 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.245	ppb	40.7	87.78	100	
11	B	6	No Gas	78.339	ppb	3.0	15489.90	1000	
23	Na	45	He	28716.162	ppb	0.2	646418.05	200000	
24	Mg	45	He	7998.037	ppb	0.4	99653.67	200000	
27	Al	45	He	58.517	ppb	6.5	291.12	200000	
28	Si	45	H2	7089.785	ppb	0.6	61990.00	10000	
39	K	45	He	7289.762	ppb	0.5	90419.34	200000	
40	Ca	45	H2	62108.158	ppb	1.4	5108422.53	200000	
51	V	89	He	3.603	ppb	13.6	835.61	1000	
52	Cr	89	He	0.557	ppb	4.3	175.30	2000	
55	Mn	89	He	20.619	ppb	3.0	2081.78	2000	
56	Fe	89	H2	77.127	ppb	2.2	28377.81	100000	
59	Co	89	He	0.286	ppb	20.5	117.79	1000	
60	Ni	89	He	1.935	ppb	35.6	254.46	1000	
63	Cu	89	He	1.136	ppb	11.8	754.49	2000	
66	Zn	89	He	2.981	ppb	31.8	176.67	2000	
75	As	89	He	0.846	ppb	18.9	32.33	1000	
78	Se	89	H2	0.216	ppb	22.2	4.33	1000	
88	Sr	89	He	255.570	ppb	0.6	38517.15	2000	
95	Mo	89	He	0.388	ppb	4.7	83.34	1000	
107	Ag	89	He	0.031	ppb	136.2	32.22	100	
111	Cd	89	He	0.055	ppb	15.4	4.81	1000	
118	Sn	159	He	1.309	ppb	24.8	286.68	1000	
121	Sb	159	No Gas	0.211	ppb	34.0	393.78	1000	
137	Ba	159	No Gas	17.375	ppb	3.1	10639.41	2000	
182	W	159	No Gas	0.227	ppb	33.2	297.00	1000	
205	Tl	209	No Gas	0.146	ppb	38.3	420.48	1000	
208	Pb	209	No Gas	0.219	ppb	32.8	961.10	2000	
232	Th	209	No Gas	0.556	ppb	20.0	2125.91	1000	
238	U	209	No Gas	1.764	ppb	6.8	5938.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1697819.29	2.4	1826145.95	92.97	29.5	120.4	
Sc	45	No Gas	4117027.92	3.4	4103184.45	100.34	29.5	120.4	
Sc	45	H2	459001.88	0.9	476452.62	96.34	29.5	120.4	
Sc	45	He	92477.60	0.5	95435.38	96.9	29.5	120.4	
Ge	72	No Gas	938920.12	1.7	904931.62	103.76	29.5	120.4	
Ge	72	H2	164480.41	0.8	172351.67	95.43	29.5	120.4	
Ge	72	He	71233.34	0.5	72380.83	98.41	29.5	120.4	
Y	89	H2	2950262.40	0.9	2964265.2	99.53	29.5	120.4	
Y	89	He	605485.88	0.4	618281.42	97.93	29.5	120.4	
Tb	159	No Gas	9731831.73	2.8	8714728.06	111.67	29.5	120.4	
Tb	159	He	3304307.87	0.6	3206480.02	103.05	29.5	120.4	
Bi	209	No Gas	4970807.92	3.5	4440413.54	111.94	29.5	120.4	

Sample Report

Sample Name SN5814-006

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:49:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.100	ppb	29.8	48.89	100	
11	B	6	No Gas	14.337	ppb	8.9	4308.57	1000	
23	Na	45	He	4851.357	ppb	1.1	112447.76	200000	
24	Mg	45	He	6369.362	ppb	1.1	79930.84	200000	
27	Al	45	He	73.339	ppb	5.0	363.35	200000	
28	Si	45	H2	5553.730	ppb	1.5	48167.93	10000	
39	K	45	He	4390.477	ppb	2.9	59273.77	200000	
40	Ca	45	H2	58148.916	ppb	0.2	4733755.07	200000	
51	V	89	He	3.278	ppb	6.9	783.38	1000	
52	Cr	89	He	0.632	ppb	15.0	192.63	2000	
55	Mn	89	He	204.833	ppb	0.7	20705.40	2000	
56	Fe	89	H2	118.916	ppb	1.3	42672.54	100000	
59	Co	89	He	0.447	ppb	47.0	177.79	1000	
60	Ni	89	He	2.011	ppb	15.0	263.34	1000	
63	Cu	89	He	0.909	ppb	15.9	693.38	2000	
66	Zn	89	He	2.369	ppb	32.4	154.45	2000	
75	As	89	He	1.313	ppb	7.8	47.01	1000	
78	Se	89	H2	0.195	ppb	42.6	4.00	1000	
88	Sr	89	He	200.606	ppb	2.3	30406.69	2000	
95	Mo	89	He	0.564	ppb	12.4	114.45	1000	
107	Ag	89	He	0.017	ppb	49.1	24.44	100	
111	Cd	89	He	0.035	ppb	112.7	3.33	1000	
118	Sn	159	He	1.112	ppb	21.6	254.46	1000	
121	Sb	159	No Gas	0.111	ppb	24.4	236.93	1000	
137	Ba	159	No Gas	13.273	ppb	11.7	8235.12	2000	
182	W	159	No Gas	0.033	ppb	12.8	66.74	1000	
205	Tl	209	No Gas	0.039	ppb	32.5	150.17	1000	
208	Pb	209	No Gas	0.086	ppb	4.9	497.23	2000	
232	Th	209	No Gas	0.113	ppb	18.6	533.94	1000	
238	U	209	No Gas	0.798	ppb	15.7	2743.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1689028.02	3.8	1826145.95	92.49	29.5	120.4	
Sc	45	No Gas	4141909.32	3.8	4103184.45	100.94	29.5	120.4	
Sc	45	H2	454249.81	0.9	476452.62	95.34	29.5	120.4	
Sc	45	He	92980.94	0.9	95435.38	97.43	29.5	120.4	
Ge	72	No Gas	939461.11	2.0	904931.62	103.82	29.5	120.4	
Ge	72	H2	161036.36	1.2	172351.67	93.43	29.5	120.4	
Ge	72	He	71349.81	0.6	72380.83	98.58	29.5	120.4	
Y	89	H2	2956108.94	0.5	2964265.2	99.72	29.5	120.4	
Y	89	He	608967.75	0.5	618281.42	98.49	29.5	120.4	
Tb	159	No Gas	9879340.41	4.0	8714728.06	113.36	29.5	120.4	
Tb	159	He	3330526.17	0.7	3206480.02	103.87	29.5	120.4	
Bi	209	No Gas	5089642.90	4.6	4440413.54	114.62	29.5	120.4	

Sample Report

Sample Name SN5814-007

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:52:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.186	ppb	12.9	63.34	100	
11	B	6	No Gas	35.098	ppb	28.6	6882.97	1000	
23	Na	45	He	29887.821	ppb	0.5	676680.67	200000	
24	Mg	45	He	4461.768	ppb	0.7	56235.68	200000	
27	Al	45	He	148.624	ppb	0.4	722.26	200000	
28	Si	45	H2	5220.392	ppb	1.0	45503.63	10000	
39	K	45	He	4101.731	ppb	1.1	56157.58	200000	
40	Ca	45	H2	32304.232	ppb	0.8	2641766.02	200000	
51	V	89	He	3.367	ppb	10.1	798.94	1000	
52	Cr	89	He	0.869	ppb	9.4	244.63	2000	
55	Mn	89	He	207.396	ppb	0.8	20962.39	2000	
56	Fe	89	H2	315.758	ppb	0.2	110128.85	100000	
59	Co	89	He	0.387	ppb	17.0	155.57	1000	
60	Ni	89	He	1.989	ppb	27.2	261.12	1000	
63	Cu	89	He	0.692	ppb	21.3	631.15	2000	
66	Zn	89	He	4.332	ppb	27.8	228.90	2000	
75	As	89	He	2.248	ppb	15.6	76.01	1000	
78	Se	89	H2	0.225	ppb	46.7	4.50	1000	
88	Sr	89	He	146.600	ppb	0.8	22220.90	2000	
95	Mo	89	He	0.859	ppb	26.4	165.56	1000	
107	Ag	89	He	0.002	ppb	518.6	15.55	100	
111	Cd	89	He	0.035	ppb	43.1	3.33	1000	
118	Sn	159	He	1.047	ppb	7.4	244.46	1000	
121	Sb	159	No Gas	0.086	ppb	16.4	176.86	1000	
137	Ba	159	No Gas	13.518	ppb	21.0	7427.10	2000	
182	W	159	No Gas	0.091	ppb	57.8	116.80	1000	
205	Tl	209	No Gas	0.017	ppb	120.7	83.43	1000	
208	Pb	209	No Gas	0.239	ppb	27.7	914.38	2000	
232	Th	209	No Gas	0.107	ppb	11.9	453.85	1000	
238	U	209	No Gas	0.760	ppb	20.4	2292.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1505802.55	16.8	1826145.95	82.46	29.5	120.4	
Sc	45	No Gas	3754192.63	17.6	4103184.45	91.49	29.5	120.4	
Sc	45	H2	456251.16	1.1	476452.62	95.76	29.5	120.4	
Sc	45	He	93034.37	1.5	95435.38	97.48	29.5	120.4	
Ge	72	No Gas	852943.26	17.6	904931.62	94.25	29.5	120.4	
Ge	72	H2	165920.84	0.8	172351.67	96.27	29.5	120.4	
Ge	72	He	71059.79	1.0	72380.83	98.17	29.5	120.4	
Y	89	H2	2966227.01	0.6	2964265.2	100.07	29.5	120.4	
Y	89	He	608913.80	0.5	618281.42	98.48	29.5	120.4	
Tb	159	No Gas	8942671.05	17.7	8714728.06	102.62	29.5	120.4	
Tb	159	He	3345254.12	0.2	3206480.02	104.33	29.5	120.4	
Bi	209	No Gas	4555827.78	17.9	4440413.54	102.6	29.5	120.4	

Sample Report

Sample Name SN5814-008

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:55:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.193	ppb	27.0	72.23	100	
11	B	6	No Gas	18.882	ppb	10.1	5037.72	1000	
23	Na	45	He	13130.359	ppb	0.6	301247.00	200000	
24	Mg	45	He	2306.413	ppb	1.1	29625.67	200000	
27	Al	45	He	1935.143	ppb	4.1	9301.13	200000	
28	Si	45	H2	4183.022	ppb	2.2	37380.49	10000	
39	K	45	He	1312.646	ppb	1.2	25903.39	200000	
40	Ca	45	H2	11922.224	ppb	0.7	997602.50	200000	
51	V	89	He	7.834	ppb	2.3	1602.38	1000	
52	Cr	89	He	4.968	ppb	5.1	1152.51	2000	
55	Mn	89	He	1380.912	ppb	0.4	140964.25	2000	
56	Fe	89	H2	10406.405	ppb	0.9	3634311.71	100000	
59	Co	89	He	3.166	ppb	5.0	1191.25	1000	
60	Ni	89	He	4.675	ppb	9.0	536.70	1000	
63	Cu	89	He	3.601	ppb	8.4	1482.35	2000	
66	Zn	89	He	18.122	ppb	8.7	760.05	2000	
75	As	89	He	24.593	ppb	2.8	777.77	1000	
78	Se	89	H2	0.209	ppb	45.9	4.33	1000	
88	Sr	89	He	63.184	ppb	0.3	9679.29	2000	
95	Mo	89	He	0.253	ppb	59.9	61.11	1000	
107	Ag	89	He	0.017	ppb	19.1	24.44	100	
111	Cd	89	He	0.068	ppb	32.2	5.93	1000	
118	Sn	159	He	1.323	ppb	11.1	293.35	1000	
121	Sb	159	No Gas	0.079	ppb	53.9	190.21	1000	
137	Ba	159	No Gas	28.121	ppb	8.6	17667.97	2000	
182	W	159	No Gas	0.321	ppb	17.9	417.14	1000	
205	Tl	209	No Gas	0.053	ppb	7.4	183.54	1000	
208	Pb	209	No Gas	6.422	ppb	8.0	23334.62	2000	
232	Th	209	No Gas	0.472	ppb	8.7	1855.56	1000	
238	U	209	No Gas	1.046	ppb	5.8	3607.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1668997.18	3.0	1826145.95	91.39	29.5	120.4	
Sc	45	No Gas	4208673.78	3.0	4103184.45	102.57	29.5	120.4	
Sc	45	H2	466528.77	0.6	476452.62	97.92	29.5	120.4	
Sc	45	He	93707.33	0.3	95435.38	98.19	29.5	120.4	
Ge	72	No Gas	951595.49	2.1	904931.62	105.16	29.5	120.4	
Ge	72	H2	165171.97	0.8	172351.67	95.83	29.5	120.4	
Ge	72	He	71938.79	0.8	72380.83	99.39	29.5	120.4	
Y	89	H2	3027731.71	0.5	2964265.2	102.14	29.5	120.4	
Y	89	He	615237.95	0.5	618281.42	99.51	29.5	120.4	
Tb	159	No Gas	10007759.29	2.9	8714728.06	114.84	29.5	120.4	
Tb	159	He	3357066.37	0.8	3206480.02	104.7	29.5	120.4	
Bi	209	No Gas	5088071.80	3.0	4440413.54	114.59	29.5	120.4	

Sample Report

Sample Name SN5830-001

File Name 132SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 9:57:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.129	ppb	49.2	54.45	100	
11	B	6	No Gas	1099.647	ppb	5.3	184466.57	1000	
23	Na	45	He	373311.788	ppb	1.4	8296115.62	200000	
24	Mg	45	He	14827.030	ppb	1.1	182616.12	200000	
27	Al	45	He	18.547	ppb	15.2	101.11	200000	
28	Si	45	H2	9533.611	ppb	3.1	83810.64	10000	
39	K	45	He	1227.872	ppb	5.6	24438.28	200000	
40	Ca	45	H2	91327.435	ppb	1.5	7568335.17	200000	
51	V	89	He	2.491	ppb	13.1	640.04	1000	
52	Cr	89	He	1.234	ppb	7.0	321.95	2000	
55	Mn	89	He	2.899	ppb	2.6	301.28	2000	
56	Fe	89	H2	68.057	ppb	1.1	25789.18	100000	
59	Co	89	He	0.092	ppb	34.3	46.67	1000	
60	Ni	89	He	2.062	ppb	5.4	266.68	1000	
63	Cu	89	He	0.676	ppb	48.5	622.26	2000	
66	Zn	89	He	9.506	ppb	7.4	422.25	2000	
75	As	89	He	0.318	ppb	92.3	16.00	1000	
78	Se	89	H2	3.347	ppb	7.9	56.00	1000	
88	Sr	89	He	1441.483	ppb	1.4	216935.60	2000	
95	Mo	89	He	1.413	ppb	7.4	260.01	1000	
107	Ag	89	He	0.021	ppb	70.2	26.67	100	
111	Cd	89	He	0.000	ppb	5382.9	0.74	1000	
118	Sn	159	He	0.926	ppb	36.9	221.12	1000	
121	Sb	159	No Gas	0.116	ppb	28.4	243.60	1000	
137	Ba	159	No Gas	12.109	ppb	7.3	7450.47	2000	
182	W	159	No Gas	0.031	ppb	68.2	63.40	1000	
205	Tl	209	No Gas	0.006	ppb	235.3	60.07	1000	
208	Pb	209	No Gas	0.126	ppb	20.9	624.04	2000	
232	Th	209	No Gas	0.047	ppb	6.5	283.66	1000	
238	U	209	No Gas	4.445	ppb	3.5	14935.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1618760.40	1.5	1826145.95	88.64	29.5	120.4	
Sc	45	No Gas	4089500.29	1.8	4103184.45	99.67	29.5	120.4	
Sc	45	H2	462455.36	1.1	476452.62	97.06	29.5	120.4	
Sc	45	He	91716.06	0.6	95435.38	96.1	29.5	120.4	
Ge	72	No Gas	935305.80	1.6	904931.62	103.36	29.5	120.4	
Ge	72	H2	165445.25	0.6	172351.67	95.99	29.5	120.4	
Ge	72	He	70546.12	0.7	72380.83	97.47	29.5	120.4	
Y	89	H2	3008070.72	0.8	2964265.2	101.48	29.5	120.4	
Y	89	He	604679.78	0.4	618281.42	97.8	29.5	120.4	
Tb	159	No Gas	9770713.19	1.2	8714728.06	112.12	29.5	120.4	
Tb	159	He	3309090.02	0.5	3206480.02	103.2	29.5	120.4	
Bi	209	No Gas	4957816.86	1.5	4440413.54	111.65	29.5	120.4	

Sample Report

Sample Name SN5858-001

File Name 133SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:00:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.063	ppb	26.9	38.89	100	
11	B	6	No Gas	47.749	ppb	5.7	10028.29	1000	
23	Na	45	He	31498.104	ppb	3.9	709994.92	200000	
24	Mg	45	He	15325.665	ppb	2.5	190679.41	200000	
27	Al	45	He	14.100	ppb	19.1	81.11	200000	
28	Si	45	H2	2800.746	ppb	1.3	25364.02	10000	
39	K	45	He	1523.363	ppb	3.8	27904.63	200000	
40	Ca	45	H2	19585.426	ppb	0.6	1648879.35	200000	
51	V	89	He	2.399	ppb	12.5	627.82	1000	
52	Cr	89	He	0.440	ppb	3.2	150.64	2000	
55	Mn	89	He	1034.383	ppb	2.5	104445.07	2000	
56	Fe	89	H2	19143.444	ppb	0.9	6709576.06	100000	
59	Co	89	He	13.460	ppb	4.7	4967.91	1000	
60	Ni	89	He	33.142	ppb	1.4	3391.64	1000	
63	Cu	89	He	0.266	ppb	56.3	507.80	2000	
66	Zn	89	He	44.755	ppb	3.1	1762.40	2000	
75	As	89	He	10.946	ppb	4.5	346.04	1000	
78	Se	89	H2	0.098	ppb	104.9	2.50	1000	
88	Sr	89	He	78.232	ppb	2.4	11853.29	2000	
95	Mo	89	He	0.072	ppb	12.3	28.89	1000	
107	Ag	89	He	0.004	ppb	139.9	16.67	100	
111	Cd	89	He	0.010	ppb	87.7	1.48	1000	
118	Sn	159	He	1.170	ppb	17.9	264.46	1000	
121	Sb	159	No Gas	0.018	ppb	76.1	90.10	1000	
137	Ba	159	No Gas	29.630	ppb	8.8	18583.85	2000	
182	W	159	No Gas	0.025	ppb	104.1	56.73	1000	
205	Tl	209	No Gas	0.000	ppb	1730.9	46.72	1000	
208	Pb	209	No Gas	0.220	ppb	10.5	984.45	2000	
232	Th	209	No Gas	0.053	ppb	7.3	313.69	1000	
238	U	209	No Gas	0.032	ppb	18.9	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1676369.50	2.0	1826145.95	91.8	29.5	120.4	
Sc	45	No Gas	4185731.36	3.0	4103184.45	102.01	29.5	120.4	
Sc	45	H2	469577.94	0.7	476452.62	98.56	29.5	120.4	
Sc	45	He	92685.63	1.9	95435.38	97.12	29.5	120.4	
Ge	72	No Gas	947862.65	1.3	904931.62	104.74	29.5	120.4	
Ge	72	H2	169019.46	0.5	172351.67	98.07	29.5	120.4	
Ge	72	He	71901.04	1.0	72380.83	99.34	29.5	120.4	
Y	89	H2	3039505.36	1.1	2964265.2	102.54	29.5	120.4	
Y	89	He	608712.25	1.8	618281.42	98.45	29.5	120.4	
Tb	159	No Gas	9991310.75	3.0	8714728.06	114.65	29.5	120.4	
Tb	159	He	3325277.52	1.8	3206480.02	103.7	29.5	120.4	
Bi	209	No Gas	5109154.44	2.8	4440413.54	115.06	29.5	120.4	

Sample Report

Sample Name SN5858-002

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:02:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	97.3	35.55	100	
11	B	6	No Gas	20.120	ppb	6.7	5235.58	1000	
23	Na	45	He	18842.199	ppb	0.7	432283.65	200000	
24	Mg	45	He	12478.456	ppb	0.4	157654.52	200000	
27	Al	45	He	20.801	ppb	6.7	114.45	200000	
28	Si	45	H2	3704.200	ppb	1.3	33125.16	10000	
39	K	45	He	681.647	ppb	6.8	19025.85	200000	
40	Ca	45	H2	24630.401	ppb	1.6	2057587.78	200000	
51	V	89	He	2.048	ppb	12.6	575.59	1000	
52	Cr	89	He	0.534	ppb	34.4	173.97	2000	
55	Mn	89	He	963.845	ppb	0.4	98915.49	2000	
56	Fe	89	H2	12818.597	ppb	0.6	4471092.70	100000	
59	Co	89	He	13.479	ppb	4.7	5054.62	1000	
60	Ni	89	He	26.121	ppb	2.0	2729.27	1000	
63	Cu	89	He	0.247	ppb	75.8	511.14	2000	
66	Zn	89	He	39.252	ppb	7.6	1577.93	2000	
75	As	89	He	10.718	ppb	3.9	344.38	1000	
78	Se	89	H2	0.029	ppb	162.9	1.33	1000	
88	Sr	89	He	96.461	ppb	0.3	14852.97	2000	
95	Mo	89	He	0.069	ppb	16.3	28.89	1000	
107	Ag	89	He	0.006	ppb	151.4	17.78	100	
111	Cd	89	He	0.015	ppb	57.2	1.85	1000	
118	Sn	159	He	2.302	ppb	11.6	464.47	1000	
121	Sb	159	No Gas	0.033	ppb	90.3	113.46	1000	
137	Ba	159	No Gas	38.970	ppb	8.5	24135.54	2000	
182	W	159	No Gas	0.036	ppb	61.6	70.08	1000	
205	Tl	209	No Gas	0.007	ppb	182.2	63.40	1000	
208	Pb	209	No Gas	0.103	ppb	19.7	553.96	2000	
232	Th	209	No Gas	0.034	ppb	25.7	240.28	1000	
238	U	209	No Gas	0.016	ppb	45.0	60.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1663569.03	1.9	1826145.95	91.1	29.5	120.4	
Sc	45	No Gas	4186975.32	1.4	4103184.45	102.04	29.5	120.4	
Sc	45	H2	465998.98	0.9	476452.62	97.81	29.5	120.4	
Sc	45	He	94010.98	0.4	95435.38	98.51	29.5	120.4	
Ge	72	No Gas	952634.50	1.9	904931.62	105.27	29.5	120.4	
Ge	72	H2	167341.97	0.5	172351.67	97.09	29.5	120.4	
Ge	72	He	73066.39	0.5	72380.83	100.95	29.5	120.4	
Y	89	H2	3024220.83	1.0	2964265.2	102.02	29.5	120.4	
Y	89	He	618496.91	0.3	618281.42	100.03	29.5	120.4	
Tb	159	No Gas	9858697.63	1.1	8714728.06	113.13	29.5	120.4	
Tb	159	He	3357829.85	0.2	3206480.02	104.72	29.5	120.4	
Bi	209	No Gas	5042940.94	1.8	4440413.54	113.57	29.5	120.4	

Sample Report

Sample Name SN5858-003

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:05:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	85.7	33.33	100	
11	B	6	No Gas	29.762	ppb	8.6	6882.97	1000	
23	Na	45	He	30667.583	ppb	2.4	713946.96	200000	
24	Mg	45	He	14179.697	ppb	0.6	182212.97	200000	
27	Al	45	He	15.392	ppb	18.7	90.00	200000	
28	Si	45	H2	3480.511	ppb	0.9	31530.05	10000	
39	K	45	He	1534.165	ppb	1.3	28932.78	200000	
40	Ca	45	H2	17340.209	ppb	0.9	1466259.61	200000	
51	V	89	He	2.140	ppb	15.0	597.81	1000	
52	Cr	89	He	0.517	ppb	5.4	171.97	2000	
55	Mn	89	He	592.838	ppb	0.5	61428.83	2000	
56	Fe	89	H2	11984.034	ppb	1.2	4208968.35	100000	
59	Co	89	He	3.303	ppb	7.0	1260.15	1000	
60	Ni	89	He	4.380	ppb	9.9	514.47	1000	
63	Cu	89	He	-0.037	ppb	N/A	432.25	2000	
66	Zn	89	He	5.181	ppb	14.0	267.79	2000	
75	As	89	He	13.986	ppb	1.0	451.73	1000	
78	Se	89	H2	0.077	ppb	174.2	2.17	1000	
88	Sr	89	He	83.222	ppb	2.2	12937.65	2000	
95	Mo	89	He	0.093	ppb	19.2	33.33	1000	
107	Ag	89	He	-0.015	ppb	N/A	5.56	100	
111	Cd	89	He	0.010	ppb	173.5	1.48	1000	
118	Sn	159	He	0.910	ppb	22.0	222.24	1000	
121	Sb	159	No Gas	0.006	ppb	273.8	70.08	1000	
137	Ba	159	No Gas	23.961	ppb	5.6	14834.92	2000	
182	W	159	No Gas	0.009	ppb	220.3	36.71	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	40.04	1000	
208	Pb	209	No Gas	0.044	ppb	49.0	343.72	2000	
232	Th	209	No Gas	0.030	ppb	22.9	223.59	1000	
238	U	209	No Gas	0.010	ppb	48.7	36.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1664791.88	2.8	1826145.95	91.16	29.5	120.4	
Sc	45	No Gas	4194071.22	4.2	4103184.45	102.22	29.5	120.4	
Sc	45	H2	471604.35	0.6	476452.62	98.98	29.5	120.4	
Sc	45	He	95671.96	0.4	95435.38	100.25	29.5	120.4	
Ge	72	No Gas	936056.35	3.9	904931.62	103.44	29.5	120.4	
Ge	72	H2	168664.67	0.9	172351.67	97.86	29.5	120.4	
Ge	72	He	73555.65	1.2	72380.83	101.62	29.5	120.4	
Y	89	H2	3045202.31	0.7	2964265.2	102.73	29.5	120.4	
Y	89	He	624445.88	0.6	618281.42	101	29.5	120.4	
Tb	159	No Gas	9858061.24	3.9	8714728.06	113.12	29.5	120.4	
Tb	159	He	3364915.51	0.9	3206480.02	104.94	29.5	120.4	
Bi	209	No Gas	5021422.34	4.4	4440413.54	113.08	29.5	120.4	

Sample Report

Sample Name SN5858-004

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:08:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.148	ppb	7.8	61.11	100	
11	B	6	No Gas	17.018	ppb	15.6	4733.16	1000	
23	Na	45	He	22934.932	ppb	1.8	533385.56	200000	
24	Mg	45	He	5984.512	ppb	1.2	77133.14	200000	
27	Al	45	He	52.658	ppb	23.4	271.13	200000	
28	Si	45	H2	3277.911	ppb	2.5	29730.76	10000	
39	K	45	He	655.792	ppb	14.3	19014.15	200000	
40	Ca	45	H2	11045.148	ppb	1.8	934469.19	200000	
51	V	89	He	2.493	ppb	10.3	658.93	1000	
52	Cr	89	He	0.541	ppb	17.1	176.64	2000	
55	Mn	89	He	765.535	ppb	1.2	79044.40	2000	
56	Fe	89	H2	2611.239	ppb	0.8	915871.05	100000	
59	Co	89	He	43.704	ppb	3.6	16455.22	1000	
60	Ni	89	He	80.121	ppb	1.3	8292.76	1000	
63	Cu	89	He	1.008	ppb	19.0	737.82	2000	
66	Zn	89	He	55.158	ppb	5.8	2204.70	2000	
75	As	89	He	0.881	ppb	11.0	34.33	1000	
78	Se	89	H2	0.048	ppb	72.7	1.67	1000	
88	Sr	89	He	64.975	ppb	2.6	10067.38	2000	
95	Mo	89	He	0.112	ppb	51.5	36.67	1000	
107	Ag	89	He	0.027	ppb	84.9	31.11	100	
111	Cd	89	He	0.275	ppb	16.0	21.85	1000	
118	Sn	159	He	1.001	ppb	6.5	237.79	1000	
121	Sb	159	No Gas	0.036	ppb	63.4	120.14	1000	
137	Ba	159	No Gas	6.769	ppb	12.9	4285.51	2000	
182	W	159	No Gas	0.082	ppb	31.4	126.81	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	36.71	1000	
208	Pb	209	No Gas	0.076	ppb	5.5	463.87	2000	
232	Th	209	No Gas	0.028	ppb	58.8	223.58	1000	
238	U	209	No Gas	0.064	ppb	45.6	223.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1675560.72	2.8	1826145.95	91.75	29.5	120.4	
Sc	45	No Gas	4283734.57	3.3	4103184.45	104.4	29.5	120.4	
Sc	45	H2	471694.48	1.1	476452.62	99	29.5	120.4	
Sc	45	He	95444.92	2.0	95435.38	100.01	29.5	120.4	
Ge	72	No Gas	960971.59	2.3	904931.62	106.19	29.5	120.4	
Ge	72	H2	168911.17	1.0	172351.67	98	29.5	120.4	
Ge	72	He	73280.81	0.8	72380.83	101.24	29.5	120.4	
Y	89	H2	3035317.32	0.6	2964265.2	102.4	29.5	120.4	
Y	89	He	622261.48	0.7	618281.42	100.64	29.5	120.4	
Tb	159	No Gas	10043373.67	3.0	8714728.06	115.25	29.5	120.4	
Tb	159	He	3363647.69	0.9	3206480.02	104.9	29.5	120.4	
Bi	209	No Gas	5130358.04	3.8	4440413.54	115.54	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:10:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.181	ppb	9.6	31231.25	25	92.72	89.8	110.2	
11	B	6	No Gas	22.906	ppb	10.0	22164.23	25	91.62	89.8	110.2	
23	Na	45	He	5089.159	ppb	0.9	600766.12	5000	101.78	89.8	110.2	
24	Mg	45	He	4934.049	ppb	1.3	320646.49	5000	98.68	89.8	110.2	
27	Al	45	He	475.608	ppb	1.7	11818.60	500	95.12	89.8	110.2	
28	Si	45	H2	465.416	ppb	5.2	21834.48	500	93.08	89.8	110.2	
39	K	45	He	4930.225	ppb	1.6	292220.57	5000	98.6	89.8	110.2	
40	Ca	45	H2	4873.008	ppb	2.2	2116665.02	5000	97.46	89.8	110.2	
51	V	89	He	25.333	ppb	1.2	23194.15	25	101.33	89.8	110.2	
52	Cr	89	He	25.065	ppb	1.1	28276.40	25	100.26	89.8	110.2	
55	Mn	89	He	25.403	ppb	2.2	13228.47	25	101.61	89.8	110.2	
56	Fe	89	H2	4834.684	ppb	1.9	8621051.37	5000	96.69	89.8	110.2	
59	Co	89	He	26.109	ppb	2.5	49521.40	25	104.44	89.8	110.2	
60	Ni	89	He	25.862	ppb	1.4	13453.60	25	103.45	89.8	110.2	
63	Cu	89	He	24.984	ppb	0.6	37424.36	25	99.94	89.8	110.2	
66	Zn	89	He	25.444	ppb	0.8	5037.76	25	101.78	89.8	110.2	
75	As	89	He	24.704	ppb	2.3	3956.67	25	98.82	89.8	110.2	
78	Se	89	H2	24.199	ppb	2.0	2049.89	25	96.8	89.8	110.2	
88	Sr	89	He	24.224	ppb	1.4	18911.31	25	96.9	89.8	110.2	
95	Mo	89	He	25.324	ppb	0.9	22670.62	25	101.3	89.8	110.2	
107	Ag	89	He	25.856	ppb	0.4	79224.56	25	103.42	89.8	110.2	
111	Cd	89	He	25.516	ppb	1.7	9887.02	25	102.06	89.8	110.2	
118	Sn	159	He	24.076	ppb	2.8	21134.92	25	96.3	89.8	110.2	
121	Sb	159	No Gas	22.432	ppb	9.8	180531.77	25	89.73	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.892	ppb	9.6	71363.77	25	91.57	89.8	110.2	
182	W	159	No Gas	22.657	ppb	9.0	136888.99	25	90.63	89.8	110.2	
205	Tl	209	No Gas	23.541	ppb	9.0	306291.48	25	94.16	89.8	110.2	
208	Pb	209	No Gas	23.240	ppb	10.0	416815.50	25	92.96	89.8	110.2	
232	Th	209	No Gas	22.242	ppb	10.5	406967.72	25	88.97	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.839	ppb	10.2	391106.79	25	91.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1728982.81	3.2	1826145.95	94.68	29.5	120.4	
Sc	45	No Gas	4324881.50	4.0	4103184.45	105.4	29.5	120.4	
Sc	45	H2	484638.75	1.4	476452.62	101.72	29.5	120.4	
Sc	45	He	96935.92	0.8	95435.38	101.57	29.5	120.4	
Ge	72	No Gas	961099.82	2.7	904931.62	106.21	29.5	120.4	
Ge	72	H2	172423.18	0.7	172351.67	100.04	29.5	120.4	
Ge	72	He	73809.51	0.8	72380.83	101.97	29.5	120.4	
Y	89	H2	3093097.21	0.8	2964265.2	104.35	29.5	120.4	
Y	89	He	627226.88	0.5	618281.42	101.45	29.5	120.4	
Tb	159	No Gas	9950471.17	3.7	8714728.06	114.18	29.5	120.4	
Tb	159	He	3369718.80	0.6	3206480.02	105.09	29.5	120.4	
Bi	209	No Gas	5067394.82	4.1	4440413.54	114.12	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	138_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:13:30 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.035	ppb	47.9	72.23	0.2	
11	B	6	No Gas	0.468	ppb	59.6	2349.16	4	
23	Na	45	He	11.321	ppb	17.8	4569.14	200	
24	Mg	45	He	-3.219	ppb	N/A	517.82	20	
27	Al	45	He	0.317	ppb	64.2	22.22	20	
28	Si	45	H2	2.024	ppb	132.2	600.70	100	
39	K	45	He	-12.994	ppb	N/A	10929.34	200	
40	Ca	45	H2	0.937	ppb	45.4	1450.13	20	
51	V	89	He	0.011	ppb	347.0	221.12	1	
52	Cr	89	He	0.005	ppb	34.3	61.99	1	
55	Mn	89	He	0.032	ppb	48.9	27.33	0.4	
56	Fe	89	H2	1.352	ppb	34.7	4439.01	20	
59	Co	89	He	-0.002	ppb	N/A	8.89	0.2	
60	Ni	89	He	-0.047	ppb	N/A	38.89	0.4	
63	Cu	89	He	-0.174	ppb	N/A	186.68	0.6	
66	Zn	89	He	0.030	ppb	232.4	72.22	2	
75	As	89	He	-0.005	ppb	N/A	5.67	1	
78	Se	89	H2	0.023	ppb	59.2	2.67	1	
88	Sr	89	He	0.010	ppb	99.6	12.22	1	
95	Mo	89	He	0.043	ppb	4.8	55.56	1	
107	Ag	89	He	0.005	ppb	30.6	31.11	0.2	
111	Cd	89	He	0.002	ppb	87.0	1.48	0.2	
118	Sn	159	He	0.049	ppb	51.0	104.45	1	
121	Sb	159	No Gas	0.014	ppb	53.0	166.86	0.2	
137	Ba	159	No Gas	0.015	ppb	82.9	70.08	0.4	
182	W	159	No Gas	0.042	ppb	32.1	270.30	1	
205	Tl	209	No Gas	0.009	ppb	13.9	163.52	0.2	
208	Pb	209	No Gas	0.009	ppb	51.4	340.39	0.2	
232	Th	209	No Gas	0.040	ppb	2.8	827.63	1	
238	U	209	No Gas	0.016	ppb	31.2	266.97	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1780364.68	3.2	1826145.95	97.49	29.5	120.4	
Sc	45	No Gas	4217785.81	3.5	4103184.45	102.79	29.5	120.4	
Sc	45	H2	465536.60	4.1	476452.62	97.71	29.5	120.4	
Sc	45	He	95217.83	0.8	95435.38	99.77	29.5	120.4	
Ge	72	No Gas	929288.30	2.3	904931.62	102.69	29.5	120.4	
Ge	72	H2	165529.90	4.6	172351.67	96.04	29.5	120.4	
Ge	72	He	73593.64	0.6	72380.83	101.68	29.5	120.4	
Y	89	H2	2958234.12	4.2	2964265.2	99.8	29.5	120.4	
Y	89	He	625257.28	0.1	618281.42	101.13	29.5	120.4	
Tb	159	No Gas	9553696.94	4.0	8714728.06	109.63	29.5	120.4	
Tb	159	He	3336351.51	0.3	3206480.02	104.05	29.5	120.4	
Bi	209	No Gas	4915316.03	3.9	4440413.54	110.7	29.5	120.4	

Prep Blank (PB) Report

Sample Name	LCSONG20IMS1
File Name	139_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:16:11 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	45.330	ppb	7.0	12619.25	60.2	
B	11	6	No Gas	463.050	ppb	5.3	86634.96	602	
Na	23	45	He	7358.770	ppb	1.2	174471.13	9030	
Mg	24	45	He	5005.411	ppb	2.1	65032.99	6020	
Al	27	45	He	1835.399	ppb	1.6	9040.96	2408	
Si	28	45	H2	913.217	ppb	3.4	8772.54	1204	
K	39	45	He	9738.875	ppb	1.1	121498.28	12040	
Ca	40	45	H2	2510.390	ppb	1.5	216022.10	3010	
V	51	89	He	492.366	ppb	1.0	89496.49	602	
Cr	52	89	He	203.433	ppb	0.7	45840.12	240.8	
Mn	55	89	He	501.333	ppb	1.1	52150.82	602	
Fe	56	89	H2	1016.936	ppb	0.9	360812.20	1204	
Co	59	89	He	519.405	ppb	1.4	196880.15	602	
Ni	60	89	He	516.345	ppb	0.8	53500.58	602	
Cu	63	89	He	249.672	ppb	0.9	74311.57	301	
Zn	66	89	He	490.500	ppb	0.7	19222.74	602	
As	75	89	He	101.120	ppb	1.6	3238.40	120.4	
Se	78	89	H2	95.154	ppb	2.3	1594.52	120.4	
Sr	88	89	He	486.553	ppb	1.9	75916.71	602	
Mo	95	89	He	104.406	ppb	2.1	18684.46	120.4	
Ag	107	89	He	52.267	ppb	1.3	32023.03	60.2	
Cd	111	89	He	252.089	ppb	1.5	19523.79	301	
Sn	118	159	He	517.485	ppb	0.5	90969.69	602	
Sb	121	159	No Gas	92.999	ppb	6.9	148849.78	120.4	
Ba	137	159	No Gas	1844.952	ppb	6.2	1143445.20	2408	
W	182	159	No Gas	94.655	ppb	6.7	113710.16	120.4	
Tl	205	209	No Gas	97.296	ppb	5.5	251280.08	120.4	
[Pb]	206	209	No Gas	96.278	ppb	5.9	86259.14	120.4	
[Pb]	207	209	No Gas	96.658	ppb	5.1	75271.71	120.4	
Pb	208	209	No Gas	96.955	ppb	5.8	345265.47	120.4	
Th	232	209	No Gas	95.234	ppb	6.8	345935.74	120.4	
U	238	209	No Gas	95.502	ppb	6.8	324647.64	120.4	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1782989.30	2.8	1826145.95	97.64	29.5	120.4	
Sc	45	No Gas	4267046.01	2.8	4103184.45	103.99	29.5	120.4	
Sc	45	H2	477899.76	1.2	476452.62	100.3	29.5	120.4	
Sc	45	He	96048.96	1.9	95435.38	100.64	29.5	120.4	
Ge	72	No Gas	938559.89	2.2	904931.62	103.72	29.5	120.4	
Ge	72	H2	169957.32	0.5	172351.67	98.61	29.5	120.4	
Ge	72	He	73429.01	0.6	72380.83	101.45	29.5	120.4	
Y	89	H2	3058896.50	0.6	2964265.2	103.19	29.5	120.4	
Y	89	He	626921.86	1.4	618281.42	101.4	29.5	120.4	
Tb	159	No Gas	9882252.42	2.7	8714728.06	113.4	29.5	120.4	
Tb	159	He	3381563.25	0.7	3206480.02	105.46	29.5	120.4	
Bi	209	No Gas	5022392.01	3.0	4440413.54	113.11	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS1
File Name	140LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:18:53 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.130	ppb	53.0	56.67	0.5	
B	11	6	No Gas	8.458	ppb	12.7	3273.81	10	
Na	23	45	He	110.262	ppb	9.1	5807.61	500	
Mg	24	45	He	-2.849	ppb	N/A	686.73	50	
Al	27	45	He	14.781	ppb	35.9	86.67	50	
Si	28	45	H2	9.674	ppb	84.3	610.69	250	
K	39	45	He	-53.023	ppb	N/A	11066.03	500	
Ca	40	45	H2	42.262	ppb	3.6	4688.71	50	
V	51	89	He	2.307	ppb	25.1	626.70	2.5	
Cr	52	89	He	0.990	ppb	2.5	277.28	2.5	
Mn	55	89	He	1.263	ppb	12.9	141.31	1	PB 6020 Fails DoD
Fe	56	89	H2	27.228	ppb	3.6	11784.83	50	
Co	59	89	He	0.123	ppb	62.0	60.00	0.5	
Ni	60	89	He	0.492	ppb	46.8	113.34	1	
Cu	63	89	He	0.091	ppb	257.9	468.91	1.5	
Zn	66	89	He	3.763	ppb	17.9	212.23	5	
As	75	89	He	0.208	ppb	66.6	13.00	2.5	
Se	78	89	H2	0.167	ppb	36.5	3.67	2.5	
Sr	88	89	He	0.165	ppb	12.9	30.00	2.5	
Mo	95	89	He	0.206	ppb	48.7	53.34	2.5	
Ag	107	89	He	0.011	ppb	211.0	21.11	0.5	
Cd	111	89	He	0.077	ppb	37.7	6.67	0.5	
Sn	118	159	He	41.645	ppb	1.4	7332.27	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.115	ppb	43.8	243.60	0.5	
Ba	137	159	No Gas	1.217	ppb	23.5	774.22	1	PB 6020 Fails DoD
W	182	159	No Gas	0.201	ppb	27.1	263.63	2.5	
Tl	205	209	No Gas	0.080	ppb	65.9	253.62	0.5	
Pb	208	209	No Gas	0.244	ppb	8.4	1044.52	0.5	
Th	232	209	No Gas	0.406	ppb	13.3	1581.89	2.5	
U	238	209	No Gas	0.059	ppb	55.0	206.90	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1680052.41	3.2	1826145.95	92	29.5	120.4	
Sc	45	No Gas	4161278.79	5.1	4103184.45	101.42	29.5	120.4	
Sc	45	H2	475663.06	0.2	476452.62	99.83	29.5	120.4	
Sc	45	He	95239.93	0.5	95435.38	99.8	29.5	120.4	
Ge	72	No Gas	922220.94	3.0	904931.62	101.91	29.5	120.4	
Ge	72	H2	168457.26	1.9	172351.67	97.74	29.5	120.4	
Ge	72	He	72775.71	0.3	72380.83	100.55	29.5	120.4	
Y	89	H2	3048357.91	0.7	2964265.2	102.84	29.5	120.4	
Y	89	He	623076.08	0.4	618281.42	100.78	29.5	120.4	
Tb	159	No Gas	9744361.94	4.9	8714728.06	111.81	29.5	120.4	
Tb	159	He	3360120.02	0.3	3206480.02	104.79	29.5	120.4	
Bi	209	No Gas	4963798.21	5.1	4440413.54	111.79	29.5	120.4	

Sample Report

Sample Name SN5719-001

File Name 141SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:21:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.893	ppb	6.4	1306.77	100	
11	B	6	No Gas	65.775	ppb	3.5	13185.33	1000	
23	Na	45	He	527.465	ppb	4.3	16116.97	200000	
24	Mg	45	He	37095.124	ppb	0.7	494446.14	200000	
27	Al	45	He	97841.797	ppb	0.9	498468.41	200000	
28	Si	45	H2	1776.307	ppb	2.5	17077.25	10000	
39	K	45	He	13172.838	ppb	0.7	165937.90	200000	
40	Ca	45	H2	47307.015	ppb	1.1	4178331.71	200000	
51	V	89	He	186.751	ppb	1.6	36891.35	1000	
52	Cr	89	He	155.156	ppb	1.0	37864.88	2000	
55	Mn	89	He	4845.368	ppb	0.4	545629.14	2000	
56	Fe	89	H2	197871.147	ppb	0.8	75789825.49	100000	
59	Co	89	He	82.249	ppb	1.3	33769.43	1000	
60	Ni	89	He	211.646	ppb	1.2	23780.92	1000	
63	Cu	89	He	314.489	ppb	0.7	101217.37	2000	
66	Zn	89	He	951.189	ppb	0.9	40287.83	2000	
75	As	89	He	75.946	ppb	1.4	2635.21	1000	
78	Se	89	H2	3.557	ppb	6.7	65.67	1000	
88	Sr	89	He	94.045	ppb	1.9	15889.71	2000	
95	Mo	89	He	20.431	ppb	3.6	3972.93	1000	
107	Ag	89	He	0.561	ppb	3.1	387.80	100	
111	Cd	89	He	3.243	ppb	6.9	272.60	1000	
118	Sn	159	He	52.642	ppb	1.5	9310.21	1000	
121	Sb	159	No Gas	2.298	ppb	8.9	3711.33	1000	
137	Ba	159	No Gas	470.467	ppb	2.8	289722.54	2000	
182	W	159	No Gas	0.631	ppb	14.7	777.56	1000	
205	Tl	209	No Gas	3.039	ppb	7.1	7847.92	1000	
208	Pb	209	No Gas	572.108	ppb	2.5	2024168.02	2000	
232	Th	209	No Gas	24.729	ppb	3.6	89387.09	1000	
238	U	209	No Gas	5.946	ppb	5.5	20102.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682477.39	0.8	1826145.95	92.13	29.5	120.4	
Sc	45	No Gas	4295760.92	2.3	4103184.45	104.69	29.5	120.4	
Sc	45	H2	492796.85	1.4	476452.62	103.43	29.5	120.4	
Sc	45	He	99485.71	1.1	95435.38	104.24	29.5	120.4	
Ge	72	No Gas	945720.96	0.8	904931.62	104.51	29.5	120.4	
Ge	72	H2	169245.59	2.2	172351.67	98.2	29.5	120.4	
Ge	72	He	74397.94	1.4	72380.83	102.79	29.5	120.4	
Y	89	H2	3322394.75	0.6	2964265.2	112.08	29.5	120.4	
Y	89	He	678717.11	1.1	618281.42	109.77	29.5	120.4	
Tb	159	No Gas	9804389.44	2.0	8714728.06	112.5	29.5	120.4	
Tb	159	He	3381523.07	0.9	3206480.02	105.46	29.5	120.4	
Bi	209	No Gas	4985675.87	1.8	4440413.54	112.28	29.5	120.4	

Sample Report

Sample Name SN5719-001L

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:24:09 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.104	ppb	4.5	291.12	100	
11	B	6	No Gas	77.819	ppb	4.5	4517.53	1000	
23	Na	45	He	665.203	ppb	12.6	6612.28	200000	
24	Mg	45	He	37280.731	ppb	1.2	99984.94	200000	
27	Al	45	He	98224.369	ppb	2.4	100080.77	200000	
28	Si	45	H2	1660.641	ppb	6.3	3688.00	10000	
39	K	45	He	12994.793	ppb	1.7	42512.12	200000	
40	Ca	45	H2	46722.533	ppb	0.5	838086.15	200000	
51	V	89	He	196.765	ppb	2.5	7592.29	1000	
52	Cr	89	He	158.588	ppb	2.1	7433.30	2000	
55	Mn	89	He	5119.536	ppb	1.8	110045.44	2000	
56	Fe	89	H2	203259.498	ppb	1.2	15120489.02	100000	
59	Co	89	He	86.647	ppb	2.9	6802.14	1000	
60	Ni	89	He	219.871	ppb	1.7	4767.67	1000	
63	Cu	89	He	330.552	ppb	2.0	20670.43	2000	
66	Zn	89	He	1008.744	ppb	1.5	8210.47	2000	
75	As	89	He	76.672	ppb	6.3	513.40	1000	
78	Se	89	H2	3.892	ppb	13.9	14.67	1000	
88	Sr	89	He	98.544	ppb	3.2	3182.71	2000	
95	Mo	89	He	20.134	ppb	11.0	761.16	1000	
107	Ag	89	He	0.575	ppb	33.1	87.78	100	
111	Cd	89	He	3.977	ppb	8.0	64.45	1000	
118	Sn	159	He	51.685	ppb	2.9	1875.76	1000	
121	Sb	159	No Gas	2.452	ppb	21.2	827.62	1000	
137	Ba	159	No Gas	493.856	ppb	3.1	60031.67	2000	
182	W	159	No Gas	0.825	ppb	4.5	220.25	1000	
205	Tl	209	No Gas	3.184	ppb	4.2	1668.65	1000	
208	Pb	209	No Gas	604.599	ppb	2.1	424959.07	2000	
232	Th	209	No Gas	25.891	ppb	3.1	18678.23	1000	
238	U	209	No Gas	6.073	ppb	7.6	4075.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686011.17	2.3	1826145.95	92.33	29.5	120.4	
Sc	45	No Gas	4277995.55	4.3	4103184.45	104.26	29.5	120.4	
Sc	45	H2	499875.68	0.6	476452.62	104.92	29.5	120.4	
Sc	45	He	99488.81	1.5	95435.38	104.25	29.5	120.4	
Ge	72	No Gas	939419.92	1.3	904931.62	103.81	29.5	120.4	
Ge	72	H2	175196.61	0.5	172351.67	101.65	29.5	120.4	
Ge	72	He	75052.91	0.9	72380.83	103.69	29.5	120.4	
Y	89	H2	3226102.94	0.4	2964265.2	108.83	29.5	120.4	
Y	89	He	647804.53	1.3	618281.42	104.78	29.5	120.4	
Tb	159	No Gas	9683857.15	3.9	8714728.06	111.12	29.5	120.4	
Tb	159	He	3376285.47	1.3	3206480.02	105.3	29.5	120.4	
Bi	209	No Gas	4953135.67	2.9	4440413.54	111.55	29.5	120.4	

Sample Report

Sample Name SN5719-001A

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:26:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	14.841	ppb	6.5	3995.15	100	
11	B	6	No Gas	268.333	ppb	6.6	49117.73	1000	
23	Na	45	He	11066.948	ppb	0.7	273122.79	200000	
24	Mg	45	He	37290.728	ppb	0.8	502640.40	200000	
27	Al	45	He	96418.340	ppb	1.3	496714.54	200000	
28	Si	45	H2	6522.300	ppb	2.2	61882.94	10000	
39	K	45	He	23039.418	ppb	1.3	284248.36	200000	
40	Ca	45	H2	48048.898	ppb	2.3	4286233.55	200000	
51	V	89	He	235.425	ppb	1.0	46329.29	1000	
52	Cr	89	He	204.363	ppb	1.0	49723.79	2000	
55	Mn	89	He	4820.681	ppb	0.7	541400.88	2000	
56	Fe	89	H2	196589.267	ppb	1.0	75818679.34	100000	
59	Co	89	He	90.878	ppb	1.1	37211.86	1000	
60	Ni	89	He	233.127	ppb	1.2	26119.51	1000	
63	Cu	89	He	342.769	ppb	0.8	109984.23	2000	
66	Zn	89	He	1046.390	ppb	0.8	44197.52	2000	
75	As	89	He	125.351	ppb	0.7	4333.48	1000	
78	Se	89	H2	50.753	ppb	3.3	930.49	1000	
88	Sr	89	He	140.123	ppb	2.2	23610.90	2000	
95	Mo	89	He	70.419	ppb	2.6	13615.01	1000	
107	Ag	89	He	10.755	ppb	0.6	7127.68	100	
111	Cd	89	He	13.267	ppb	4.0	1110.43	1000	
118	Sn	159	He	103.683	ppb	0.2	18254.10	1000	
121	Sb	159	No Gas	12.680	ppb	9.6	20311.47	1000	
137	Ba	159	No Gas	485.856	ppb	7.3	300655.14	2000	
182	W	159	No Gas	49.895	ppb	6.7	59868.37	1000	
205	Tl	209	No Gas	13.463	ppb	7.9	34271.07	1000	
208	Pb	209	No Gas	573.979	ppb	7.4	2011778.50	2000	
232	Th	209	No Gas	34.745	ppb	7.1	124383.07	1000	
238	U	209	No Gas	15.871	ppb	9.1	53122.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1716639.08	2.2	1826145.95	94	29.5	120.4	
Sc	45	No Gas	4408551.99	2.3	4103184.45	107.44	29.5	120.4	
Sc	45	H2	497847.71	1.5	476452.62	104.49	29.5	120.4	
Sc	45	He	100601.49	0.7	95435.38	105.41	29.5	120.4	
Ge	72	No Gas	956409.73	1.9	904931.62	105.69	29.5	120.4	
Ge	72	H2	172701.16	1.2	172351.67	100.2	29.5	120.4	
Ge	72	He	74868.52	0.6	72380.83	103.44	29.5	120.4	
Y	89	H2	3345453.77	1.0	2964265.2	112.86	29.5	120.4	
Y	89	He	676912.93	0.3	618281.42	109.48	29.5	120.4	
Tb	159	No Gas	9866506.66	2.3	8714728.06	113.22	29.5	120.4	
Tb	159	He	3377248.63	0.8	3206480.02	105.33	29.5	120.4	
Bi	209	No Gas	4946540.95	2.8	4440413.54	111.4	29.5	120.4	

Sample Report

Sample Name SN5719-001S

File Name 144SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:29:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.418	ppb	9.0	13495.60	100	
11	B	6	No Gas	514.813	ppb	7.5	92419.53	1000	
23	Na	45	He	7450.521	ppb	0.3	187703.75	200000	
24	Mg	45	He	43096.394	ppb	0.5	589267.80	200000	
27	Al	45	He	114338.373	ppb	0.4	597670.25	200000	
28	Si	45	H2	2216.200	ppb	3.3	21644.14	10000	
39	K	45	He	25549.427	ppb	0.7	318478.52	200000	
40	Ca	45	H2	52056.589	ppb	0.3	4699051.56	200000	
51	V	89	He	665.736	ppb	0.9	132815.31	1000	
52	Cr	89	He	346.248	ppb	0.5	85639.39	2000	
55	Mn	89	He	5241.769	ppb	0.3	598727.89	2000	
56	Fe	89	H2	201354.598	ppb	0.4	78397132.70	100000	
59	Co	89	He	551.665	ppb	0.4	229658.54	1000	
60	Ni	89	He	681.547	ppb	0.5	77528.13	1000	
63	Cu	89	He	535.229	ppb	0.2	174392.05	2000	
66	Zn	89	He	1413.868	ppb	0.6	60711.59	2000	
75	As	89	He	170.368	ppb	2.2	5987.61	1000	
78	Se	89	H2	88.730	ppb	0.3	1641.86	1000	
88	Sr	89	He	557.667	ppb	0.2	95558.09	2000	
95	Mo	89	He	108.123	ppb	0.9	21251.58	1000	
107	Ag	89	He	46.669	ppb	1.4	31402.67	100	
111	Cd	89	He	225.403	ppb	0.7	19172.93	1000	
118	Sn	159	He	481.491	ppb	1.1	85376.89	1000	
121	Sb	159	No Gas	26.574	ppb	10.5	42397.40	1000	
137	Ba	159	No Gas	2257.779	ppb	8.1	1393893.31	2000	
182	W	159	No Gas	56.803	ppb	8.9	67980.83	1000	
205	Tl	209	No Gas	95.495	ppb	9.0	241798.53	1000	
208	Pb	209	No Gas	644.255	ppb	8.2	2248838.93	2000	
232	Th	209	No Gas	83.111	ppb	9.7	296041.86	1000	
238	U	209	No Gas	95.378	ppb	9.1	317943.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1715335.55	2.8	1826145.95	93.93	29.5	120.4	
Sc	45	No Gas	4451112.10	2.6	4103184.45	108.48	29.5	120.4	
Sc	45	H2	503686.44	0.9	476452.62	105.72	29.5	120.4	
Sc	45	He	102070.53	0.3	95435.38	106.95	29.5	120.4	
Ge	72	No Gas	979788.42	1.9	904931.62	108.27	29.5	120.4	
Ge	72	H2	173106.63	1.0	172351.67	100.44	29.5	120.4	
Ge	72	He	75369.67	0.3	72380.83	104.13	29.5	120.4	
Y	89	H2	3377351.69	0.4	2964265.2	113.94	29.5	120.4	
Y	89	He	688447.34	0.6	618281.42	111.35	29.5	120.4	
Tb	159	No Gas	9847701.17	2.8	8714728.06	113	29.5	120.4	
Tb	159	He	3410583.39	0.3	3206480.02	106.37	29.5	120.4	
Bi	209	No Gas	4928601.13	3.3	4440413.54	110.99	29.5	120.4	

Sample Report

Sample Name SN5719-001P

File Name 145SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:31:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.067	ppb	8.8	13734.78	100	
11	B	6	No Gas	514.940	ppb	7.2	92879.47	1000	
23	Na	45	He	7534.659	ppb	1.5	189511.56	200000	
24	Mg	45	He	44163.841	ppb	1.2	602996.80	200000	
27	Al	45	He	116420.099	ppb	1.6	607694.82	200000	
28	Si	45	H2	2266.907	ppb	2.5	22344.32	10000	
39	K	45	He	25762.823	ppb	1.2	320585.03	200000	
40	Ca	45	H2	51725.065	ppb	1.1	4715169.41	200000	
51	V	89	He	670.159	ppb	1.7	134418.23	1000	
52	Cr	89	He	348.285	ppb	1.9	86607.96	2000	
55	Mn	89	He	5772.486	ppb	1.6	662909.44	2000	
56	Fe	89	H2	208991.745	ppb	1.3	82114950.39	100000	
59	Co	89	He	558.385	ppb	1.9	233709.68	1000	
60	Ni	89	He	687.953	ppb	1.6	78680.09	1000	
63	Cu	89	He	525.870	ppb	2.2	172279.45	2000	
66	Zn	89	He	1464.478	ppb	1.3	63222.77	2000	
75	As	89	He	174.195	ppb	2.6	6154.71	1000	
78	Se	89	H2	88.709	ppb	2.8	1656.36	1000	
88	Sr	89	He	559.447	ppb	1.8	96382.55	2000	
95	Mo	89	He	110.778	ppb	1.3	21890.39	1000	
107	Ag	89	He	46.998	ppb	2.3	31794.79	100	
111	Cd	89	He	228.668	ppb	2.2	19555.30	1000	
118	Sn	159	He	487.297	ppb	2.2	86179.78	1000	
121	Sb	159	No Gas	25.990	ppb	9.1	42464.58	1000	
137	Ba	159	No Gas	2250.453	ppb	7.0	1422518.71	2000	
182	W	159	No Gas	55.847	ppb	8.0	68433.41	1000	
205	Tl	209	No Gas	94.309	ppb	6.8	243476.22	1000	
208	Pb	209	No Gas	667.410	ppb	7.3	2374742.05	2000	
232	Th	209	No Gas	84.772	ppb	7.5	307883.22	1000	
238	U	209	No Gas	95.343	ppb	7.9	324028.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1722525.07	1.8	1826145.95	94.33	29.5	120.4	
Sc	45	No Gas	4522535.13	1.6	4103184.45	110.22	29.5	120.4	
Sc	45	H2	508661.76	0.4	476452.62	106.76	29.5	120.4	
Sc	45	He	101931.75	0.8	95435.38	106.81	29.5	120.4	
Ge	72	No Gas	973286.97	2.4	904931.62	107.55	29.5	120.4	
Ge	72	H2	173214.05	0.3	172351.67	100.5	29.5	120.4	
Ge	72	He	75616.69	1.2	72380.83	104.47	29.5	120.4	
Y	89	H2	3408320.21	0.5	2964265.2	114.98	29.5	120.4	
Y	89	He	692220.30	0.8	618281.42	111.96	29.5	120.4	
Tb	159	No Gas	10073957.70	1.6	8714728.06	115.6	29.5	120.4	
Tb	159	He	3402212.94	1.1	3206480.02	106.1	29.5	120.4	
Bi	209	No Gas	5019652.86	2.0	4440413.54	113.04	29.5	120.4	

Sample Report

Sample Name SN5719-002

File Name 146SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:34:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.914	ppb	9.0	1345.66	100	
11	B	6	No Gas	84.379	ppb	5.1	16822.57	1000	
23	Na	45	He	545.184	ppb	3.2	17025.74	200000	
24	Mg	45	He	38387.727	ppb	0.9	526448.93	200000	
27	Al	45	He	102097.822	ppb	1.0	535186.59	200000	
28	Si	45	H2	1841.987	ppb	3.2	18346.34	10000	
39	K	45	He	15244.457	ppb	0.6	195616.41	200000	
40	Ca	45	H2	49400.172	ppb	1.2	4524552.92	200000	
51	V	89	He	191.471	ppb	1.0	38728.57	1000	
52	Cr	89	He	136.531	ppb	0.6	34129.47	2000	
55	Mn	89	He	4602.503	ppb	0.5	530708.62	2000	
56	Fe	89	H2	187356.950	ppb	0.5	73831931.83	100000	
59	Co	89	He	78.207	ppb	1.4	32878.47	1000	
60	Ni	89	He	197.714	ppb	0.4	22754.65	1000	
63	Cu	89	He	282.086	ppb	1.1	93015.93	2000	
66	Zn	89	He	945.448	ppb	1.0	41007.76	2000	
75	As	89	He	72.901	ppb	1.9	2590.52	1000	
78	Se	89	H2	3.305	ppb	7.0	62.83	1000	
88	Sr	89	He	97.215	ppb	0.6	16820.77	2000	
95	Mo	89	He	18.001	ppb	1.4	3587.27	1000	
107	Ag	89	He	0.564	ppb	9.2	398.91	100	
111	Cd	89	He	3.242	ppb	5.3	279.27	1000	
118	Sn	159	He	43.720	ppb	0.7	7803.62	1000	
121	Sb	159	No Gas	2.803	ppb	9.9	4649.35	1000	
137	Ba	159	No Gas	466.161	ppb	7.5	295658.28	2000	
182	W	159	No Gas	0.586	ppb	13.4	747.53	1000	
205	Tl	209	No Gas	3.148	ppb	6.6	8225.30	1000	
208	Pb	209	No Gas	619.042	ppb	7.1	2217060.62	2000	
232	Th	209	No Gas	25.126	ppb	7.2	91936.46	1000	
238	U	209	No Gas	5.730	ppb	7.5	19607.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1726828.19	2.0	1826145.95	94.56	29.5	120.4	
Sc	45	No Gas	4601720.31	2.5	4103184.45	112.15	29.5	120.4	
Sc	45	H2	511062.00	1.0	476452.62	107.26	29.5	120.4	
Sc	45	He	102361.76	0.6	95435.38	107.26	29.5	120.4	
Ge	72	No Gas	986374.10	2.8	904931.62	109	29.5	120.4	
Ge	72	H2	175030.79	1.1	172351.67	101.55	29.5	120.4	
Ge	72	He	76304.67	0.6	72380.83	105.42	29.5	120.4	
Y	89	H2	3418361.68	0.6	2964265.2	115.32	29.5	120.4	
Y	89	He	695005.76	0.7	618281.42	112.41	29.5	120.4	
Tb	159	No Gas	10113357.63	2.5	8714728.06	116.05	29.5	120.4	
Tb	159	He	3407663.49	0.4	3206480.02	106.27	29.5	120.4	
Bi	209	No Gas	5054253.92	2.8	4440413.54	113.82	29.5	120.4	

Sample Report

Sample Name SN5719-003

File Name 147SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:37:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.110	ppb	3.8	1384.56	100	
11	B	6	No Gas	69.690	ppb	9.3	14059.53	1000	
23	Na	45	He	563.632	ppb	5.3	17356.49	200000	
24	Mg	45	He	34349.583	ppb	3.3	467827.26	200000	
27	Al	45	He	95974.021	ppb	3.6	499523.56	200000	
28	Si	45	H2	1825.155	ppb	7.1	18159.34	10000	
39	K	45	He	13260.497	ppb	3.0	170581.72	200000	
40	Ca	45	H2	43697.474	ppb	1.2	3996841.85	200000	
51	V	89	He	182.523	ppb	4.0	36624.05	1000	
52	Cr	89	He	131.714	ppb	3.6	32654.31	2000	
55	Mn	89	He	4408.408	ppb	3.6	504131.06	2000	
56	Fe	89	H2	181317.271	ppb	0.3	71590326.97	100000	
59	Co	89	He	78.578	ppb	2.7	32766.94	1000	
60	Ni	89	He	195.401	ppb	2.9	22305.13	1000	
63	Cu	89	He	283.505	ppb	3.1	92719.71	2000	
66	Zn	89	He	927.731	ppb	2.4	39914.79	2000	
75	As	89	He	72.172	ppb	5.6	2542.85	1000	
78	Se	89	H2	3.405	ppb	4.8	64.83	1000	
88	Sr	89	He	92.581	ppb	3.1	15888.59	2000	
95	Mo	89	He	17.481	ppb	2.8	3456.12	1000	
107	Ag	89	He	0.587	ppb	15.1	411.13	100	
111	Cd	89	He	3.184	ppb	5.1	272.23	1000	
118	Sn	159	He	43.358	ppb	5.2	7694.70	1000	
121	Sb	159	No Gas	1.866	ppb	10.4	3057.09	1000	
137	Ba	159	No Gas	451.217	ppb	7.5	280781.06	2000	
182	W	159	No Gas	0.450	ppb	21.3	570.65	1000	
205	Tl	209	No Gas	2.796	ppb	7.2	7176.67	1000	
208	Pb	209	No Gas	374.131	ppb	7.3	1315535.64	2000	
232	Th	209	No Gas	22.945	ppb	7.8	82426.59	1000	
238	U	209	No Gas	5.492	ppb	6.4	18450.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1708584.88	2.3	1826145.95	93.56	29.5	120.4	
Sc	45	No Gas	4507685.96	2.3	4103184.45	109.86	29.5	120.4	
Sc	45	H2	510361.61	0.4	476452.62	107.12	29.5	120.4	
Sc	45	He	101675.44	1.9	95435.38	106.54	29.5	120.4	
Ge	72	No Gas	975177.43	2.4	904931.62	107.76	29.5	120.4	
Ge	72	H2	175294.64	1.2	172351.67	101.71	29.5	120.4	
Ge	72	He	76390.73	1.8	72380.83	105.54	29.5	120.4	
Y	89	H2	3424930.04	0.3	2964265.2	115.54	29.5	120.4	
Y	89	He	689575.55	2.0	618281.42	111.53	29.5	120.4	
Tb	159	No Gas	9920855.62	2.2	8714728.06	113.84	29.5	120.4	
Tb	159	He	3390616.79	2.4	3206480.02	105.74	29.5	120.4	
Bi	209	No Gas	4960678.47	2.2	4440413.54	111.72	29.5	120.4	

Sample Report

Sample Name SN5719-004

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:39:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.412	ppb	6.3	1198.98	100	
11	B	6	No Gas	83.757	ppb	9.8	16528.89	1000	
23	Na	45	He	832.659	ppb	0.0	23859.69	200000	
24	Mg	45	He	66464.117	ppb	1.2	899859.00	200000	
27	Al	45	He	84304.712	ppb	1.4	436549.64	200000	
28	Si	45	H2	1992.702	ppb	5.9	18813.85	10000	
39	K	45	He	14580.746	ppb	0.8	185365.51	200000	
40	Ca	45	H2	111768.685	ppb	5.1	9723952.98	200000	
51	V	89	He	175.205	ppb	2.1	34808.19	1000	
52	Cr	89	He	132.855	ppb	0.3	32604.14	2000	
55	Mn	89	He	3412.284	ppb	2.0	386236.43	2000	
56	Fe	89	H2	190461.914	ppb	4.6	72080047.51	100000	
59	Co	89	He	80.128	ppb	0.0	33072.29	1000	
60	Ni	89	He	219.079	ppb	2.0	24742.58	1000	
63	Cu	89	He	340.671	ppb	1.3	110177.01	2000	
66	Zn	89	He	925.880	ppb	2.4	39422.10	2000	
75	As	89	He	73.462	ppb	3.1	2562.52	1000	
78	Se	89	H2	3.239	ppb	4.5	59.17	1000	
88	Sr	89	He	146.826	ppb	1.7	24935.56	2000	
95	Mo	89	He	13.704	ppb	6.1	2684.81	1000	
107	Ag	89	He	0.535	ppb	3.5	372.24	100	
111	Cd	89	He	2.811	ppb	2.4	237.78	1000	
118	Sn	159	He	46.164	ppb	0.4	8245.04	1000	
121	Sb	159	No Gas	2.977	ppb	9.5	5006.51	1000	
137	Ba	159	No Gas	371.285	ppb	8.2	238849.14	2000	
182	W	159	No Gas	0.350	ppb	12.1	463.86	1000	
205	Tl	209	No Gas	2.752	ppb	3.5	7246.82	1000	
208	Pb	209	No Gas	841.177	ppb	8.9	3029925.62	2000	
232	Th	209	No Gas	32.052	ppb	9.7	117887.27	1000	
238	U	209	No Gas	5.359	ppb	6.9	18454.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710087.02	3.6	1826145.95	93.64	29.5	120.4	
Sc	45	No Gas	4654257.06	4.9	4103184.45	113.43	29.5	120.4	
Sc	45	H2	486071.36	3.3	476452.62	102.02	29.5	120.4	
Sc	45	He	101119.72	0.7	95435.38	105.96	29.5	120.4	
Ge	72	No Gas	1007779.52	2.8	904931.62	111.37	29.5	120.4	
Ge	72	H2	167360.18	3.6	172351.67	97.1	29.5	120.4	
Ge	72	He	75678.39	0.6	72380.83	104.56	29.5	120.4	
Y	89	H2	3285561.49	2.8	2964265.2	110.84	29.5	120.4	
Y	89	He	682303.64	1.0	618281.42	110.35	29.5	120.4	
Tb	159	No Gas	10263591.86	4.6	8714728.06	117.77	29.5	120.4	
Tb	159	He	3411398.74	0.9	3206480.02	106.39	29.5	120.4	
Bi	209	No Gas	5088637.78	5.4	4440413.54	114.6	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	149_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:42:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.136	ppb	3.7	33069.71	25	100.54	89.8	110.2	
11	B	6	No Gas	25.217	ppb	3.8	23643.34	25	100.87	89.8	110.2	
23	Na	45	He	5035.193	ppb	2.4	611566.97	5000	100.7	89.8	110.2	
24	Mg	45	He	4843.451	ppb	3.0	323848.52	5000	96.87	89.8	110.2	
27	Al	45	He	482.011	ppb	1.8	12323.53	500	96.4	89.8	110.2	
28	Si	45	H2	463.233	ppb	3.3	22409.12	500	92.65	89.8	110.2	
39	K	45	He	4815.055	ppb	2.4	293911.58	5000	96.3	89.8	110.2	
40	Ca	45	H2	4854.178	ppb	1.4	2173536.13	5000	97.08	89.8	110.2	
51	V	89	He	25.089	ppb	5.8	23521.57	25	100.36	89.8	110.2	
52	Cr	89	He	25.991	ppb	3.0	30022.54	25	103.96	89.8	110.2	
55	Mn	89	He	28.749	ppb	3.9	15327.65	25	115	89.8	110.2	> +/- 10%
56	Fe	89	H2	4839.779	ppb	2.2	8856051.99	5000	96.8	89.8	110.2	
59	Co	89	He	25.710	ppb	3.1	49936.84	25	102.84	89.8	110.2	
60	Ni	89	He	26.409	ppb	2.8	14065.34	25	105.64	89.8	110.2	
63	Cu	89	He	25.205	ppb	2.1	38657.88	25	100.82	89.8	110.2	
66	Zn	89	He	25.164	ppb	3.6	5102.25	25	100.66	89.8	110.2	
75	As	89	He	24.459	ppb	2.8	4011.69	25	97.84	89.8	110.2	
78	Se	89	H2	24.227	ppb	2.9	2105.90	25	96.91	89.8	110.2	
88	Sr	89	He	23.318	ppb	0.6	18643.24	25	93.27	89.8	110.2	
95	Mo	89	He	24.915	ppb	2.3	22840.94	25	99.66	89.8	110.2	
107	Ag	89	He	25.447	ppb	2.3	79847.35	25	101.79	89.8	110.2	
111	Cd	89	He	24.702	ppb	2.6	9801.44	25	98.81	89.8	110.2	
118	Sn	159	He	23.573	ppb	1.1	20835.72	25	94.29	89.8	110.2	
121	Sb	159	No Gas	24.119	ppb	2.2	189143.07	25	96.48	89.8	110.2	
137	Ba	159	No Gas	24.887	ppb	2.7	75594.58	25	99.55	89.8	110.2	
182	W	159	No Gas	23.762	ppb	2.8	139878.41	25	95.05	89.8	110.2	
205	Tl	209	No Gas	24.771	ppb	1.9	310650.25	25	99.08	89.8	110.2	
208	Pb	209	No Gas	24.822	ppb	2.4	429233.17	25	99.29	89.8	110.2	
232	Th	209	No Gas	23.985	ppb	3.4	423180.70	25	95.94	89.8	110.2	
238	U	209	No Gas	24.186	ppb	2.9	399372.39	25	96.74	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1684960.04	0.8	1826145.95	92.27	29.5	120.4	
Sc	45	No Gas	4352595.10	0.4	4103184.45	106.08	29.5	120.4	
Sc	45	H2	499585.45	0.8	476452.62	104.86	29.5	120.4	
Sc	45	He	99735.28	0.6	95435.38	104.51	29.5	120.4	
Ge	72	No Gas	956688.08	1.8	904931.62	105.72	29.5	120.4	
Ge	72	H2	178255.85	0.3	172351.67	103.43	29.5	120.4	
Ge	72	He	75629.57	0.3	72380.83	104.49	29.5	120.4	
Y	89	H2	3174488.65	1.4	2964265.2	107.09	29.5	120.4	
Y	89	He	642339.70	0.6	618281.42	103.89	29.5	120.4	
Tb	159	No Gas	9672315.90	0.7	8714728.06	110.99	29.5	120.4	
Tb	159	He	3392484.71	0.5	3206480.02	105.8	29.5	120.4	
Bi	209	No Gas	4872679.80	0.3	4440413.54	109.73	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	150_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 10:44:56 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.083	ppb	13.4	138.89	0.2	
11	B	6	No Gas	0.664	ppb	21.0	2536.99	4	
23	Na	45	He	0.690	ppb	91.9	3477.63	200	
24	Mg	45	He	-3.941	ppb	N/A	491.16	20	
27	Al	45	He	3.955	ppb	36.6	115.56	20	
28	Si	45	H2	0.943	ppb	92.8	590.68	100	
39	K	45	He	-14.608	ppb	N/A	11281.11	200	
40	Ca	45	H2	3.803	ppb	6.0	2825.94	20	
51	V	89	He	0.118	ppb	26.8	327.79	1	
52	Cr	89	He	0.053	ppb	15.7	119.31	1	
55	Mn	89	He	0.330	ppb	6.5	187.30	0.4	Failed DoD
56	Fe	89	H2	12.189	ppb	3.7	24522.09	20	Failed DoD
59	Co	89	He	0.005	ppb	73.2	24.45	0.2	
60	Ni	89	He	0.018	ppb	163.0	74.45	0.4	
63	Cu	89	He	-0.155	ppb	N/A	221.12	0.6	
66	Zn	89	He	0.197	ppb	38.4	107.78	2	
75	As	89	He	0.009	ppb	70.7	8.00	1	
78	Se	89	H2	0.036	ppb	89.7	4.00	1	
88	Sr	89	He	0.025	ppb	86.5	24.45	1	
95	Mo	89	He	0.060	ppb	52.5	72.23	1	
107	Ag	89	He	0.003	ppb	79.8	25.56	0.2	
111	Cd	89	He	0.007	ppb	57.9	3.70	0.2	
118	Sn	159	He	0.048	ppb	72.2	104.45	1	
121	Sb	159	No Gas	0.048	ppb	44.5	437.17	0.2	
137	Ba	159	No Gas	0.070	ppb	46.4	236.93	0.4	
182	W	159	No Gas	0.077	ppb	24.6	477.21	1	
205	Tl	209	No Gas	0.030	ppb	49.1	420.48	0.2	
208	Pb	209	No Gas	0.112	ppb	25.0	2122.46	0.2	Failed DoD
232	Th	209	No Gas	0.102	ppb	34.7	1925.66	1	
238	U	209	No Gas	0.054	ppb	68.5	897.72	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1783470.41	1.5	1826145.95	97.66	29.5	120.4	
Sc	45	No Gas	4396945.18	1.2	4103184.45	107.16	29.5	120.4	
Sc	45	H2	496393.65	0.8	476452.62	104.19	29.5	120.4	
Sc	45	He	99088.25	0.7	95435.38	103.83	29.5	120.4	
Ge	72	No Gas	952272.11	1.5	904931.62	105.23	29.5	120.4	
Ge	72	H2	179172.31	1.0	172351.67	103.96	29.5	120.4	
Ge	72	He	75090.85	0.2	72380.83	103.74	29.5	120.4	
Y	89	H2	3162681.58	0.4	2964265.2	106.69	29.5	120.4	
Y	89	He	643424.14	0.3	618281.42	104.07	29.5	120.4	
Tb	159	No Gas	9636361.94	0.9	8714728.06	110.58	29.5	120.4	
Tb	159	He	3363650.61	0.3	3206480.02	104.9	29.5	120.4	
Bi	209	No Gas	4903496.76	0.8	4440413.54	110.43	29.5	120.4	

Sample Report

Sample Name SN5719-005

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:47:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.764	ppb	4.1	1316.78	100	
11	B	6	No Gas	85.243	ppb	8.5	17099.57	1000	
23	Na	45	He	795.632	ppb	0.9	22375.74	200000	
24	Mg	45	He	69369.898	ppb	1.5	915533.09	200000	
27	Al	45	He	91656.358	ppb	1.5	462673.77	200000	
28	Si	45	H2	2025.921	ppb	19.9	19332.53	10000	
39	K	45	He	15470.517	ppb	0.5	190999.61	200000	
40	Ca	45	H2	135009.721	ppb	1.6	11908131.63	200000	
51	V	89	He	182.732	ppb	1.4	35960.05	1000	
52	Cr	89	He	140.532	ppb	0.6	34164.14	2000	
55	Mn	89	He	4070.201	ppb	0.7	456478.14	2000	
56	Fe	89	H2	201269.840	ppb	1.5	76932216.17	100000	
59	Co	89	He	87.127	ppb	0.8	35627.59	1000	
60	Ni	89	He	236.884	ppb	1.3	26501.32	1000	
63	Cu	89	He	339.197	ppb	1.0	108688.17	2000	
66	Zn	89	He	988.976	ppb	1.8	41717.71	2000	
75	As	89	He	75.900	ppb	1.8	2622.87	1000	
78	Se	89	H2	3.262	ppb	5.7	60.17	1000	
88	Sr	89	He	168.484	ppb	1.5	28349.99	2000	
95	Mo	89	He	14.146	ppb	1.5	2745.94	1000	
107	Ag	89	He	0.575	ppb	8.7	395.58	100	
111	Cd	89	He	3.051	ppb	5.0	255.56	1000	
118	Sn	159	He	43.989	ppb	1.2	7766.95	1000	
121	Sb	159	No Gas	3.473	ppb	11.3	5524.02	1000	
137	Ba	159	No Gas	412.431	ppb	8.1	251392.80	2000	
182	W	159	No Gas	0.414	ppb	23.9	513.92	1000	
205	Tl	209	No Gas	3.038	ppb	3.8	7644.18	1000	
208	Pb	209	No Gas	1048.726	ppb	7.9	3614330.58	2000	
232	Th	209	No Gas	36.115	ppb	9.5	127091.47	1000	
238	U	209	No Gas	6.218	ppb	9.6	20466.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1740544.30	2.5	1826145.95	95.31	29.5	120.4	
Sc	45	No Gas	4395628.23	2.6	4103184.45	107.13	29.5	120.4	
Sc	45	H2	492253.77	2.1	476452.62	103.32	29.5	120.4	
Sc	45	He	98578.83	1.0	95435.38	103.29	29.5	120.4	
Ge	72	No Gas	957491.21	1.3	904931.62	105.81	29.5	120.4	
Ge	72	H2	169884.49	1.6	172351.67	98.57	29.5	120.4	
Ge	72	He	73377.74	0.5	72380.83	101.38	29.5	120.4	
Y	89	H2	3315777.77	1.7	2964265.2	111.86	29.5	120.4	
Y	89	He	675973.24	0.7	618281.42	109.33	29.5	120.4	
Tb	159	No Gas	9717266.24	2.0	8714728.06	111.5	29.5	120.4	
Tb	159	He	3371174.60	0.4	3206480.02	105.14	29.5	120.4	
Bi	209	No Gas	4863642.12	2.5	4440413.54	109.53	29.5	120.4	

Sample Report

Sample Name SN5719-005L

File Name 152SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:50:05 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.731	ppb	0.7	320.02	100	
11	B	6	No Gas	104.906	ppb	9.8	5376.73	1000	
23	Na	45	He	849.044	ppb	7.8	7463.50	200000	
24	Mg	45	He	71277.703	ppb	1.6	189514.36	200000	
27	Al	45	He	95416.642	ppb	1.2	96739.41	200000	
28	Si	45	H2	1731.125	ppb	2.7	3808.15	10000	
39	K	45	He	15235.258	ppb	3.2	47495.57	200000	
40	Ca	45	H2	136002.836	ppb	2.0	2429526.07	200000	
51	V	89	He	195.594	ppb	2.5	7523.39	1000	
52	Cr	89	He	150.564	ppb	2.6	7035.81	2000	
55	Mn	89	He	4437.195	ppb	0.9	95043.03	2000	
56	Fe	89	H2	212428.947	ppb	1.2	15729067.05	100000	
59	Co	89	He	97.542	ppb	2.7	7629.25	1000	
60	Ni	89	He	261.462	ppb	3.9	5639.12	1000	
63	Cu	89	He	372.469	ppb	1.6	23148.68	2000	
66	Zn	89	He	1085.790	ppb	1.6	8799.71	2000	
75	As	89	He	83.229	ppb	1.9	554.40	1000	
78	Se	89	H2	3.670	ppb	20.5	13.83	1000	
88	Sr	89	He	184.752	ppb	1.8	5941.48	2000	
95	Mo	89	He	14.946	ppb	3.1	567.81	1000	
107	Ag	89	He	0.648	ppb	22.7	96.67	100	
111	Cd	89	He	3.435	ppb	1.8	55.56	1000	
118	Sn	159	He	44.957	ppb	3.1	1644.61	1000	
121	Sb	159	No Gas	4.045	ppb	5.1	1311.54	1000	
137	Ba	159	No Gas	461.010	ppb	9.4	55158.69	2000	
182	W	159	No Gas	0.665	ppb	1.0	180.20	1000	
205	Tl	209	No Gas	3.399	ppb	3.7	1742.08	1000	
208	Pb	209	No Gas	1188.685	ppb	9.7	815468.66	2000	
232	Th	209	No Gas	41.678	ppb	11.8	29257.63	1000	
238	U	209	No Gas	6.180	ppb	10.4	4051.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1664638.46	4.8	1826145.95	91.16	29.5	120.4	
Sc	45	No Gas	4233344.11	6.1	4103184.45	103.17	29.5	120.4	
Sc	45	H2	498343.02	1.4	476452.62	104.59	29.5	120.4	
Sc	45	He	98986.66	1.6	95435.38	103.72	29.5	120.4	
Ge	72	No Gas	942484.28	4.1	904931.62	104.15	29.5	120.4	
Ge	72	H2	175969.28	1.4	172351.67	102.1	29.5	120.4	
Ge	72	He	75061.02	1.5	72380.83	103.7	29.5	120.4	
Y	89	H2	3211122.15	0.8	2964265.2	108.33	29.5	120.4	
Y	89	He	645484.53	1.3	618281.42	104.4	29.5	120.4	
Tb	159	No Gas	9557112.50	5.5	8714728.06	109.67	29.5	120.4	
Tb	159	He	3385038.66	0.9	3206480.02	105.57	29.5	120.4	
Bi	209	No Gas	4851192.95	5.7	4440413.54	109.25	29.5	120.4	

Sample Report

Sample Name SN5719-005A

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:52:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	14.835	ppb	10.1	3901.77	100	
11	B	6	No Gas	285.327	ppb	8.6	50940.68	1000	
23	Na	45	He	11504.193	ppb	1.5	276672.41	200000	
24	Mg	45	He	70229.696	ppb	1.6	922263.65	200000	
27	Al	45	He	92682.163	ppb	1.6	465533.27	200000	
28	Si	45	H2	6447.724	ppb	0.4	60156.57	10000	
39	K	45	He	25693.706	ppb	1.3	307692.13	200000	
40	Ca	45	H2	133578.326	ppb	0.6	11713797.60	200000	
51	V	89	He	234.081	ppb	1.0	45571.22	1000	
52	Cr	89	He	192.706	ppb	1.3	46387.86	2000	
55	Mn	89	He	4103.887	ppb	1.4	455945.68	2000	
56	Fe	89	H2	197999.381	ppb	0.5	75895338.50	100000	
59	Co	89	He	98.200	ppb	1.0	39776.48	1000	
60	Ni	89	He	260.152	ppb	2.5	28823.75	1000	
63	Cu	89	He	370.411	ppb	2.0	117532.02	2000	
66	Zn	89	He	1084.949	ppb	1.6	45330.16	2000	
75	As	89	He	127.560	ppb	3.7	4361.83	1000	
78	Se	89	H2	49.703	ppb	3.8	905.82	1000	
88	Sr	89	He	218.040	ppb	1.0	36344.39	2000	
95	Mo	89	He	65.311	ppb	0.8	12493.89	1000	
107	Ag	89	He	10.983	ppb	5.1	7197.73	100	
111	Cd	89	He	13.562	ppb	2.8	1123.02	1000	
118	Sn	159	He	94.560	ppb	1.2	16458.32	1000	
121	Sb	159	No Gas	13.784	ppb	8.4	22136.17	1000	
137	Ba	159	No Gas	430.656	ppb	8.6	267192.48	2000	
182	W	159	No Gas	48.739	ppb	9.4	58621.30	1000	
205	Tl	209	No Gas	13.306	ppb	9.2	33575.27	1000	
208	Pb	209	No Gas	1056.942	ppb	8.5	3672220.81	2000	
232	Th	209	No Gas	46.064	ppb	8.9	163413.22	1000	
238	U	209	No Gas	16.416	ppb	11.3	54449.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1679535.45	3.3	1826145.95	91.97	29.5	120.4	
Sc	45	No Gas	4424935.30	3.4	4103184.45	107.84	29.5	120.4	
Sc	45	H2	489400.23	1.1	476452.62	102.72	29.5	120.4	
Sc	45	He	98093.26	1.3	95435.38	102.79	29.5	120.4	
Ge	72	No Gas	970790.90	1.5	904931.62	107.28	29.5	120.4	
Ge	72	H2	167581.76	1.7	172351.67	97.23	29.5	120.4	
Ge	72	He	73582.23	1.1	72380.83	101.66	29.5	120.4	
Y	89	H2	3324930.62	0.7	2964265.2	112.17	29.5	120.4	
Y	89	He	669696.11	1.2	618281.42	108.32	29.5	120.4	
Tb	159	No Gas	9897940.69	3.4	8714728.06	113.58	29.5	120.4	
Tb	159	He	3337995.85	1.4	3206480.02	104.1	29.5	120.4	
Bi	209	No Gas	4905936.49	3.4	4440413.54	110.48	29.5	120.4	

Sample Report

Sample Name SN5719-005S

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:55:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.031	ppb	8.5	13190.92	100	
11	B	6	No Gas	542.902	ppb	6.3	95879.78	1000	
23	Na	45	He	7916.266	ppb	1.0	193471.92	200000	
24	Mg	45	He	76436.540	ppb	1.3	1014384.09	200000	
27	Al	45	He	109333.123	ppb	2.0	554984.23	200000	
28	Si	45	H2	2207.157	ppb	2.8	21193.43	10000	
39	K	45	He	28740.952	ppb	1.3	346400.03	200000	
40	Ca	45	H2	127462.523	ppb	0.6	11310378.86	200000	
51	V	89	He	667.960	ppb	1.8	130450.16	1000	
52	Cr	89	He	350.914	ppb	1.6	84964.25	2000	
55	Mn	89	He	4504.617	ppb	1.2	503698.39	2000	
56	Fe	89	H2	206585.689	ppb	0.6	80011742.26	100000	
59	Co	89	He	562.788	ppb	1.6	229352.59	1000	
60	Ni	89	He	715.808	ppb	1.1	79710.18	1000	
63	Cu	89	He	568.701	ppb	1.7	181363.87	2000	
66	Zn	89	He	1466.177	ppb	1.5	61629.29	2000	
75	As	89	He	173.305	ppb	3.0	5961.94	1000	
78	Se	89	H2	90.087	ppb	3.1	1658.19	1000	
88	Sr	89	He	650.833	ppb	1.9	109169.55	2000	
95	Mo	89	He	107.137	ppb	2.8	20612.82	1000	
107	Ag	89	He	47.511	ppb	1.2	31294.67	100	
111	Cd	89	He	228.724	ppb	0.7	19046.08	1000	
118	Sn	159	He	492.195	ppb	1.9	85753.63	1000	
121	Sb	159	No Gas	25.122	ppb	7.0	41302.94	1000	
137	Ba	159	No Gas	2147.348	ppb	8.1	1365271.02	2000	
182	W	159	No Gas	49.643	ppb	6.8	61206.05	1000	
205	Tl	209	No Gas	92.700	ppb	7.5	240686.28	1000	
208	Pb	209	No Gas	1105.681	ppb	6.9	3956952.61	2000	
232	Th	209	No Gas	125.501	ppb	8.3	458321.30	1000	
238	U	209	No Gas	94.883	ppb	8.5	324294.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1687517.27	0.9	1826145.95	92.41	29.5	120.4	
Sc	45	No Gas	4473094.29	2.1	4103184.45	109.02	29.5	120.4	
Sc	45	H2	495212.01	0.7	476452.62	103.94	29.5	120.4	
Sc	45	He	99130.94	0.8	95435.38	103.87	29.5	120.4	
Ge	72	No Gas	970448.48	2.3	904931.62	107.24	29.5	120.4	
Ge	72	H2	170623.59	0.5	172351.67	99	29.5	120.4	
Ge	72	He	73802.98	0.6	72380.83	101.96	29.5	120.4	
Y	89	H2	3359623.46	0.3	2964265.2	113.34	29.5	120.4	
Y	89	He	673992.25	0.7	618281.42	109.01	29.5	120.4	
Tb	159	No Gas	10136439.22	1.9	8714728.06	116.31	29.5	120.4	
Tb	159	He	3351714.95	1.1	3206480.02	104.53	29.5	120.4	
Bi	209	No Gas	5048957.84	2.1	4440413.54	113.7	29.5	120.4	

Sample Report

Sample Name SN5719-005P

File Name 155SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 10:58:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.170	ppb	2.6	13796.97	100	
11	B	6	No Gas	583.605	ppb	2.4	101302.63	1000	
23	Na	45	He	7771.232	ppb	1.0	191540.49	200000	
24	Mg	45	He	74186.216	ppb	0.6	992593.02	200000	
27	Al	45	He	106323.384	ppb	0.6	544143.89	200000	
28	Si	45	H2	2728.412	ppb	8.1	25741.43	10000	
39	K	45	He	28544.814	ppb	1.5	346911.22	200000	
40	Ca	45	H2	121165.127	ppb	1.3	10608194.22	200000	
51	V	89	He	654.987	ppb	0.4	129324.84	1000	
52	Cr	89	He	337.714	ppb	0.3	82668.34	2000	
55	Mn	89	He	4065.573	ppb	0.7	459578.42	2000	
56	Fe	89	H2	207461.463	ppb	2.2	79441105.81	100000	
59	Co	89	He	549.154	ppb	0.6	226255.31	1000	
60	Ni	89	He	696.243	ppb	0.9	78379.52	1000	
63	Cu	89	He	540.795	ppb	1.2	174374.59	2000	
66	Zn	89	He	1470.525	ppb	0.7	62488.38	2000	
75	As	89	He	167.338	ppb	1.3	5820.86	1000	
78	Se	89	H2	90.248	ppb	1.1	1642.52	1000	
88	Sr	89	He	623.020	ppb	0.8	105650.46	2000	
95	Mo	89	He	104.074	ppb	0.7	20244.50	1000	
107	Ag	89	He	45.764	ppb	1.0	30473.81	100	
111	Cd	89	He	225.997	ppb	0.5	19025.32	1000	
118	Sn	159	He	490.323	ppb	0.4	86143.57	1000	
121	Sb	159	No Gas	27.661	ppb	3.5	44904.97	1000	
137	Ba	159	No Gas	2253.467	ppb	1.9	1415088.98	2000	
182	W	159	No Gas	54.894	ppb	2.6	66833.66	1000	
205	Tl	209	No Gas	98.742	ppb	1.8	251352.12	1000	
208	Pb	209	No Gas	1086.218	ppb	2.1	3810944.74	2000	
232	Th	209	No Gas	137.988	ppb	1.6	494111.87	1000	
238	U	209	No Gas	101.988	ppb	1.9	341794.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1660403.05	0.7	1826145.95	90.92	29.5	120.4	
Sc	45	No Gas	4428030.43	0.4	4103184.45	107.92	29.5	120.4	
Sc	45	H2	488654.66	1.5	476452.62	102.56	29.5	120.4	
Sc	45	He	99939.13	1.2	95435.38	104.72	29.5	120.4	
Ge	72	No Gas	955840.82	1.0	904931.62	105.63	29.5	120.4	
Ge	72	H2	167727.78	1.9	172351.67	97.32	29.5	120.4	
Ge	72	He	74617.94	0.9	72380.83	103.09	29.5	120.4	
Y	89	H2	3322328.98	1.5	2964265.2	112.08	29.5	120.4	
Y	89	He	681350.60	0.8	618281.42	110.2	29.5	120.4	
Tb	159	No Gas	10001784.71	0.1	8714728.06	114.77	29.5	120.4	
Tb	159	He	3379393.60	0.5	3206480.02	105.39	29.5	120.4	
Bi	209	No Gas	4945170.93	0.5	4440413.54	111.37	29.5	120.4	

Sample Report

Sample Name SN5719-006

File Name 156SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:00:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.309	ppb	5.0	1375.67	100	
11	B	6	No Gas	103.196	ppb	6.4	19067.56	1000	
23	Na	45	He	880.514	ppb	1.4	24404.38	200000	
24	Mg	45	He	72848.229	ppb	0.3	961582.31	200000	
27	Al	45	He	95148.145	ppb	0.6	480392.80	200000	
28	Si	45	H2	2213.449	ppb	4.3	21093.55	10000	
39	K	45	He	17163.248	ppb	0.2	210604.56	200000	
40	Ca	45	H2	127407.146	ppb	2.3	11221767.61	200000	
51	V	89	He	192.573	ppb	1.2	37527.47	1000	
52	Cr	89	He	149.022	ppb	0.9	35884.20	2000	
55	Mn	89	He	3500.055	ppb	0.1	388842.65	2000	
56	Fe	89	H2	199297.596	ppb	1.5	76573224.70	100000	
59	Co	89	He	90.993	ppb	0.6	36855.25	1000	
60	Ni	89	He	242.625	ppb	0.2	26887.70	1000	
63	Cu	89	He	424.472	ppb	0.4	134617.42	2000	
66	Zn	89	He	1046.767	ppb	0.9	43737.31	2000	
75	As	89	He	79.410	ppb	1.5	2718.23	1000	
78	Se	89	H2	3.318	ppb	10.5	61.50	1000	
88	Sr	89	He	183.274	ppb	0.7	30548.15	2000	
95	Mo	89	He	13.917	ppb	4.0	2675.91	1000	
107	Ag	89	He	0.652	ppb	7.2	442.25	100	
111	Cd	89	He	2.919	ppb	9.8	242.23	1000	
118	Sn	159	He	45.777	ppb	1.4	8029.34	1000	
121	Sb	159	No Gas	3.121	ppb	2.3	5190.14	1000	
137	Ba	159	No Gas	437.936	ppb	5.4	278591.39	2000	
182	W	159	No Gas	0.484	ppb	13.4	624.05	1000	
205	Tl	209	No Gas	3.345	ppb	4.7	8702.75	1000	
208	Pb	209	No Gas	767.301	ppb	5.2	2737380.50	2000	
232	Th	209	No Gas	41.077	ppb	6.7	149605.73	1000	
238	U	209	No Gas	6.279	ppb	4.5	21405.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1633753.85	2.0	1826145.95	89.46	29.5	120.4	
Sc	45	No Gas	4471206.31	2.4	4103184.45	108.97	29.5	120.4	
Sc	45	H2	491613.28	1.2	476452.62	103.18	29.5	120.4	
Sc	45	He	98588.43	0.4	95435.38	103.3	29.5	120.4	
Ge	72	No Gas	978342.67	2.8	904931.62	108.11	29.5	120.4	
Ge	72	H2	170575.92	0.4	172351.67	98.97	29.5	120.4	
Ge	72	He	73770.45	0.4	72380.83	101.92	29.5	120.4	
Y	89	H2	3332887.20	0.3	2964265.2	112.44	29.5	120.4	
Y	89	He	669596.07	0.4	618281.42	108.3	29.5	120.4	
Tb	159	No Gas	10140387.70	2.5	8714728.06	116.36	29.5	120.4	
Tb	159	He	3349921.20	0.7	3206480.02	104.47	29.5	120.4	
Bi	209	No Gas	5032477.87	2.6	4440413.54	113.33	29.5	120.4	

Sample Report

Sample Name SN5719-007

File Name 157SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:03:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.027	ppb	9.0	1323.44	100	
11	B	6	No Gas	55.051	ppb	3.5	11176.92	1000	
23	Na	45	He	455.268	ppb	2.0	15224.98	200000	
24	Mg	45	He	20729.622	ppb	1.3	292908.02	200000	
27	Al	45	He	126630.868	ppb	0.9	683070.66	200000	
28	Si	45	H2	2482.805	ppb	3.5	24562.72	10000	
39	K	45	He	9479.904	ppb	0.9	130055.56	200000	
40	Ca	45	H2	14200.241	ppb	2.0	1303023.83	200000	
51	V	89	He	248.464	ppb	0.5	50073.07	1000	
52	Cr	89	He	149.748	ppb	0.4	37340.28	2000	
55	Mn	89	He	4140.920	ppb	1.0	476396.64	2000	
56	Fe	89	H2	176552.447	ppb	2.6	68510326.25	100000	
59	Co	89	He	60.702	ppb	1.3	25466.96	1000	
60	Ni	89	He	138.536	ppb	2.5	15927.34	1000	
63	Cu	89	He	240.328	ppb	0.6	79140.97	2000	
66	Zn	89	He	1148.065	ppb	2.5	49663.66	2000	
75	As	89	He	69.218	ppb	0.6	2454.49	1000	
78	Se	89	H2	5.268	ppb	7.6	98.00	1000	
88	Sr	89	He	60.046	ppb	0.9	10367.66	2000	
95	Mo	89	He	17.817	ppb	3.6	3542.81	1000	
107	Ag	89	He	0.739	ppb	3.1	516.69	100	
111	Cd	89	He	3.164	ppb	2.6	271.86	1000	
118	Sn	159	He	48.704	ppb	2.1	8830.99	1000	
121	Sb	159	No Gas	4.103	ppb	4.5	6765.86	1000	
137	Ba	159	No Gas	475.781	ppb	2.3	301136.56	2000	
182	W	159	No Gas	0.590	ppb	4.6	750.87	1000	
205	Tl	209	No Gas	2.886	ppb	3.4	7510.60	1000	
208	Pb	209	No Gas	1583.760	ppb	2.2	5647509.94	2000	
232	Th	209	No Gas	19.517	ppb	3.4	71128.91	1000	
238	U	209	No Gas	6.478	ppb	0.5	22074.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659825.50	1.4	1826145.95	90.89	29.5	120.4	
Sc	45	No Gas	4550153.12	0.4	4103184.45	110.89	29.5	120.4	
Sc	45	H2	511818.99	2.1	476452.62	107.42	29.5	120.4	
Sc	45	He	105335.76	0.7	95435.38	110.37	29.5	120.4	
Ge	72	No Gas	981702.17	1.1	904931.62	108.48	29.5	120.4	
Ge	72	H2	176153.03	3.7	172351.67	102.21	29.5	120.4	
Ge	72	He	78261.55	0.2	72380.83	108.12	29.5	120.4	
Y	89	H2	3367077.58	1.9	2964265.2	113.59	29.5	120.4	
Y	89	He	693412.19	0.5	618281.42	112.15	29.5	120.4	
Tb	159	No Gas	10080837.49	0.5	8714728.06	115.68	29.5	120.4	
Tb	159	He	3464733.42	0.2	3206480.02	108.05	29.5	120.4	
Bi	209	No Gas	5026600.70	0.9	4440413.54	113.2	29.5	120.4	

Sample Report

Sample Name SN5719-008

File Name 158SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:05:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.069	ppb	8.5	1345.66	100	
11	B	6	No Gas	54.613	ppb	2.7	11194.72	1000	
23	Na	45	He	341.969	ppb	0.8	12442.46	200000	
24	Mg	45	He	20663.114	ppb	0.1	294532.85	200000	
27	Al	45	He	126967.227	ppb	0.2	690885.93	200000	
28	Si	45	H2	2650.273	ppb	3.0	26659.05	10000	
39	K	45	He	9574.803	ppb	0.9	132379.73	200000	
40	Ca	45	H2	14499.236	ppb	3.1	1354169.15	200000	
51	V	89	He	251.998	ppb	0.2	50972.02	1000	
52	Cr	89	He	144.467	ppb	0.9	36160.10	2000	
55	Mn	89	He	4705.538	ppb	0.2	543374.82	2000	
56	Fe	89	H2	182070.203	ppb	3.0	71379632.12	100000	
59	Co	89	He	64.184	ppb	1.1	27025.51	1000	
60	Ni	89	He	137.602	ppb	0.4	15880.63	1000	
63	Cu	89	He	398.481	ppb	0.6	131386.55	2000	
66	Zn	89	He	792.778	ppb	1.2	34446.69	2000	
75	As	89	He	67.403	ppb	2.6	2399.14	1000	
78	Se	89	H2	5.465	ppb	10.4	102.67	1000	
88	Sr	89	He	62.835	ppb	1.1	10889.17	2000	
95	Mo	89	He	18.483	ppb	4.7	3688.41	1000	
107	Ag	89	He	1.176	ppb	6.8	815.61	100	
111	Cd	89	He	3.194	ppb	8.5	275.56	1000	
118	Sn	159	He	45.043	ppb	1.8	8147.21	1000	
121	Sb	159	No Gas	6.965	ppb	5.2	11297.34	1000	
137	Ba	159	No Gas	516.168	ppb	4.4	322539.24	2000	
182	W	159	No Gas	0.548	ppb	3.4	690.79	1000	
205	Tl	209	No Gas	2.799	ppb	7.4	7140.02	1000	
208	Pb	209	No Gas	1718.349	ppb	3.9	6008914.29	2000	
232	Th	209	No Gas	18.786	ppb	4.4	67144.36	1000	
238	U	209	No Gas	6.426	ppb	2.0	21475.91	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673637.33	1.7	1826145.95	91.65	29.5	120.4	
Sc	45	No Gas	4602436.44	2.6	4103184.45	112.17	29.5	120.4	
Sc	45	H2	521089.73	2.9	476452.62	109.37	29.5	120.4	
Sc	45	He	106254.84	0.6	95435.38	111.34	29.5	120.4	
Ge	72	No Gas	991243.52	1.9	904931.62	109.54	29.5	120.4	
Ge	72	H2	180512.25	2.2	172351.67	104.73	29.5	120.4	
Ge	72	He	78932.62	0.3	72380.83	109.05	29.5	120.4	
Y	89	H2	3402282.21	2.5	2964265.2	114.78	29.5	120.4	
Y	89	He	695996.90	0.4	618281.42	112.57	29.5	120.4	
Tb	159	No Gas	9958636.38	2.6	8714728.06	114.27	29.5	120.4	
Tb	159	He	3454188.00	0.2	3206480.02	107.73	29.5	120.4	
Bi	209	No Gas	4931804.13	2.5	4440413.54	111.07	29.5	120.4	

Sample Report

Sample Name SN5719-009

File Name 159SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:08:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.596	ppb	11.3	1234.54	100	
11	B	6	No Gas	42.316	ppb	2.5	9182.13	1000	
23	Na	45	He	310.612	ppb	5.9	11641.06	200000	
24	Mg	45	He	20074.795	ppb	2.9	286366.43	200000	
27	Al	45	He	115750.785	ppb	2.6	630314.97	200000	
28	Si	45	H2	2011.219	ppb	1.9	20643.48	10000	
39	K	45	He	8497.168	ppb	2.0	119046.04	200000	
40	Ca	45	H2	15987.966	ppb	3.2	1513406.52	200000	
51	V	89	He	231.509	ppb	2.5	46480.84	1000	
52	Cr	89	He	137.017	ppb	3.8	34025.93	2000	
55	Mn	89	He	5360.083	ppb	2.6	614122.21	2000	
56	Fe	89	H2	174007.842	ppb	3.0	69362424.98	100000	
59	Co	89	He	63.329	ppb	1.3	26462.36	1000	
60	Ni	89	He	135.725	ppb	3.2	15543.54	1000	
63	Cu	89	He	339.235	ppb	3.0	111044.76	2000	
66	Zn	89	He	795.480	ppb	3.0	34294.14	2000	
75	As	89	He	67.703	ppb	3.6	2390.81	1000	
78	Se	89	H2	5.043	ppb	0.2	96.50	1000	
88	Sr	89	He	63.920	ppb	3.5	10991.47	2000	
95	Mo	89	He	18.157	ppb	4.4	3596.15	1000	
107	Ag	89	He	0.720	ppb	6.7	502.25	100	
111	Cd	89	He	3.703	ppb	7.6	316.68	1000	
118	Sn	159	He	48.004	ppb	4.2	8647.52	1000	
121	Sb	159	No Gas	4.041	ppb	6.2	6699.16	1000	
137	Ba	159	No Gas	513.373	ppb	6.1	326552.76	2000	
182	W	159	No Gas	0.676	ppb	7.3	860.99	1000	
205	Tl	209	No Gas	2.466	ppb	3.8	6415.44	1000	
208	Pb	209	No Gas	2338.364	ppb	4.9	8326044.68	2000	
232	Th	209	No Gas	16.466	ppb	5.7	59938.68	1000	
238	U	209	No Gas	5.575	ppb	3.3	18972.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1692032.30	1.7	1826145.95	92.66	29.5	120.4	
Sc	45	No Gas	4692971.24	2.2	4103184.45	114.37	29.5	120.4	
Sc	45	H2	528095.00	2.2	476452.62	110.84	29.5	120.4	
Sc	45	He	106372.48	2.2	95435.38	111.46	29.5	120.4	
Ge	72	No Gas	1011492.03	2.5	904931.62	111.78	29.5	120.4	
Ge	72	H2	182595.92	1.3	172351.67	105.94	29.5	120.4	
Ge	72	He	78820.55	1.6	72380.83	108.9	29.5	120.4	
Y	89	H2	3458926.67	1.9	2964265.2	116.69	29.5	120.4	
Y	89	He	690791.74	2.0	618281.42	111.73	29.5	120.4	
Tb	159	No Gas	10138251.86	1.9	8714728.06	116.33	29.5	120.4	
Tb	159	He	3443515.96	1.8	3206480.02	107.39	29.5	120.4	
Bi	209	No Gas	5021514.83	1.8	4440413.54	113.09	29.5	120.4	

Sample Report

Sample Name SN5719-009L

File Name 160SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:11:17 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.519	ppb	18.7	262.23	100	
11	B	6	No Gas	54.174	ppb	3.6	3735.06	1000	
23	Na	45	He	237.535	ppb	12.1	4736.01	200000	
24	Mg	45	He	20617.542	ppb	6.7	57793.23	200000	
27	Al	45	He	119696.957	ppb	6.0	126732.91	200000	
28	Si	45	H2	2037.381	ppb	3.3	4599.84	10000	
39	K	45	He	8537.388	ppb	7.2	33378.79	200000	
40	Ca	45	H2	16458.113	ppb	1.5	309473.11	200000	
51	V	89	He	246.735	ppb	5.0	9646.96	1000	
52	Cr	89	He	141.677	ppb	5.4	6773.74	2000	
55	Mn	89	He	5601.217	ppb	6.4	122635.38	2000	
56	Fe	89	H2	181163.938	ppb	0.8	13912626.09	100000	
59	Co	89	He	66.083	ppb	8.2	5283.62	1000	
60	Ni	89	He	144.548	ppb	6.9	3214.94	1000	
63	Cu	89	He	357.282	ppb	6.2	22721.39	2000	
66	Zn	89	He	818.706	ppb	6.8	6799.68	2000	
75	As	89	He	72.151	ppb	7.6	492.06	1000	
78	Se	89	H2	5.722	ppb	11.0	21.83	1000	
88	Sr	89	He	65.664	ppb	10.5	2158.04	2000	
95	Mo	89	He	17.592	ppb	6.3	680.04	1000	
107	Ag	89	He	0.809	ppb	11.9	120.00	100	
111	Cd	89	He	3.358	ppb	16.6	55.93	1000	
118	Sn	159	He	51.499	ppb	2.7	1857.98	1000	
121	Sb	159	No Gas	3.691	ppb	15.7	1241.44	1000	
137	Ba	159	No Gas	531.081	ppb	5.5	65544.44	2000	
182	W	159	No Gas	0.759	ppb	34.6	206.90	1000	
205	Tl	209	No Gas	2.383	ppb	11.6	1254.80	1000	
208	Pb	209	No Gas	2512.054	ppb	4.8	1760854.39	2000	
232	Th	209	No Gas	16.838	ppb	5.4	12156.25	1000	
238	U	209	No Gas	5.777	ppb	4.8	3871.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1702173.73	2.5	1826145.95	93.21	29.5	120.4	
Sc	45	No Gas	4565877.75	3.7	4103184.45	111.28	29.5	120.4	
Sc	45	H2	522779.16	1.3	476452.62	109.72	29.5	120.4	
Sc	45	He	103575.18	5.2	95435.38	108.53	29.5	120.4	
Ge	72	No Gas	991675.03	2.3	904931.62	109.59	29.5	120.4	
Ge	72	H2	184550.66	1.5	172351.67	107.08	29.5	120.4	
Ge	72	He	77054.57	5.5	72380.83	106.46	29.5	120.4	
Y	89	H2	3330378.78	1.0	2964265.2	112.35	29.5	120.4	
Y	89	He	661285.24	5.4	618281.42	106.96	29.5	120.4	
Tb	159	No Gas	9836945.97	3.5	8714728.06	112.88	29.5	120.4	
Tb	159	He	3354046.30	5.5	3206480.02	104.6	29.5	120.4	
Bi	209	No Gas	4944459.75	3.2	4440413.54	111.35	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 161_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:14:00 PM

Sample Type CCV

Total Dilution 1.0000

Comment ---

ISTD Ref FileName 006CALB.d

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

Operator **admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.230	ppb	4.4	34418.44	25	100.92	89.8	110.2	
11	B	6	No Gas	24.866	ppb	7.0	24192.04	25	99.46	89.8	110.2	
23	Na	45	He	5069.437	ppb	0.9	643879.79	5000	101.39	89.8	110.2	
24	Mg	45	He	4923.199	ppb	1.1	344234.38	5000	98.46	89.8	110.2	
27	Al	45	He	494.008	ppb	1.3	13207.67	500	98.8	89.8	110.2	
28	Si	45	H2	476.166	ppb	1.5	23906.66	500	95.23	89.8	110.2	
39	K	45	He	4913.838	ppb	1.9	313396.74	5000	98.28	89.8	110.2	
40	Ca	45	H2	4955.397	ppb	0.8	2304341.77	5000	99.11	89.8	110.2	
51	V	89	He	26.018	ppb	1.5	25229.96	25	104.07	89.8	110.2	
52	Cr	89	He	25.867	ppb	0.4	30914.70	25	103.47	89.8	110.2	
55	Mn	89	He	27.831	ppb	1.0	15352.89	25	111.32	89.8	110.2	> +/- 10%
56	Fe	89	H2	4939.660	ppb	0.5	9340820.49	5000	98.79	89.8	110.2	
59	Co	89	He	26.481	ppb	2.5	53210.38	25	105.92	89.8	110.2	
60	Ni	89	He	26.661	ppb	1.7	14690.42	25	106.64	89.8	110.2	
63	Cu	89	He	27.043	ppb	0.5	42875.62	25	108.17	89.8	110.2	
66	Zn	89	He	25.684	ppb	0.1	5386.79	25	102.74	89.8	110.2	
75	As	89	He	25.357	ppb	1.0	4302.47	25	101.43	89.8	110.2	
78	Se	89	H2	24.874	ppb	1.7	2234.58	25	99.5	89.8	110.2	
88	Sr	89	He	24.206	ppb	2.4	20019.69	25	96.82	89.8	110.2	
95	Mo	89	He	25.262	ppb	2.2	23958.37	25	101.05	89.8	110.2	
107	Ag	89	He	25.472	ppb	1.6	82684.73	25	101.89	89.8	110.2	
111	Cd	89	He	25.217	ppb	2.3	10351.08	25	100.87	89.8	110.2	
118	Sn	159	He	24.244	ppb	1.0	21737.09	25	96.98	89.8	110.2	
121	Sb	159	No Gas	24.441	ppb	3.5	193972.91	25	97.76	89.8	110.2	
137	Ba	159	No Gas	25.096	ppb	3.3	77153.10	25	100.38	89.8	110.2	
182	W	159	No Gas	23.760	ppb	3.7	141528.15	25	95.04	89.8	110.2	
205	Tl	209	No Gas	24.280	ppb	3.9	306387.77	25	97.12	89.8	110.2	
208	Pb	209	No Gas	24.676	ppb	3.0	429411.72	25	98.7	89.8	110.2	
232	Th	209	No Gas	23.899	ppb	5.1	424204.93	25	95.6	89.8	110.2	
238	U	209	No Gas	23.716	ppb	5.5	393943.73	25	94.86	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1748500.61	2.9	1826145.95	95.75	29.5	120.4	
Sc	45	No Gas	4594600.01	2.5	4103184.45	111.98	29.5	120.4	
Sc	45	H2	518838.03	1.2	476452.62	108.9	29.5	120.4	
Sc	45	He	104292.45	0.5	95435.38	109.28	29.5	120.4	
Ge	72	No Gas	989719.45	2.1	904931.62	109.37	29.5	120.4	
Ge	72	H2	187033.03	0.8	172351.67	108.52	29.5	120.4	
Ge	72	He	78699.18	0.4	72380.83	108.73	29.5	120.4	
Y	89	H2	3279955.34	0.6	2964265.2	110.65	29.5	120.4	
Y	89	He	664501.92	0.5	618281.42	107.48	29.5	120.4	
Tb	159	No Gas	9792881.17	1.7	8714728.06	112.37	29.5	120.4	
Tb	159	He	3441528.22	0.5	3206480.02	107.33	29.5	120.4	
Bi	209	No Gas	4905503.77	2.1	4440413.54	110.47	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	162_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:16:37 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	40.2	108.89	0.2	
11	B	6	No Gas	0.557	ppb	21.3	2419.19	4	
23	Na	45	He	-3.139	ppb	N/A	3137.18	200	
24	Mg	45	He	-3.894	ppb	N/A	513.38	20	
27	Al	45	He	2.773	ppb	36.0	88.89	20	
28	Si	45	H2	-0.308	ppb	N/A	553.96	100	
39	K	45	He	-14.700	ppb	N/A	11719.59	200	
40	Ca	45	H2	2.317	ppb	3.3	2254.72	20	
51	V	89	He	0.193	ppb	14.8	407.80	1	
52	Cr	89	He	0.093	ppb	16.5	169.97	1	
55	Mn	89	He	0.349	ppb	9.4	202.63	0.4	Failed DoD
56	Fe	89	H2	9.395	ppb	1.2	19929.63	20	
59	Co	89	He	0.011	ppb	17.3	35.56	0.2	
60	Ni	89	He	0.096	ppb	79.1	118.89	0.4	
63	Cu	89	He	-0.135	ppb	N/A	257.79	0.6	
66	Zn	89	He	0.173	ppb	46.3	105.56	2	
75	As	89	He	0.009	ppb	194.5	8.33	1	
78	Se	89	H2	0.044	ppb	14.3	4.83	1	
88	Sr	89	He	0.013	ppb	65.5	15.55	1	
95	Mo	89	He	0.084	ppb	36.7	96.67	1	
107	Ag	89	He	0.007	ppb	17.1	36.67	0.2	
111	Cd	89	He	0.004	ppb	76.6	2.22	0.2	
118	Sn	159	He	0.058	ppb	39.6	115.56	1	
121	Sb	159	No Gas	0.038	ppb	34.7	350.40	0.2	
137	Ba	159	No Gas	0.043	ppb	20.0	153.51	0.4	
182	W	159	No Gas	0.080	ppb	19.7	490.56	1	
205	Tl	209	No Gas	0.023	ppb	29.7	327.04	0.2	
208	Pb	209	No Gas	0.184	ppb	1.7	3310.56	0.2	Failed DoD
232	Th	209	No Gas	0.048	ppb	4.5	951.11	1	
238	U	209	No Gas	0.018	ppb	24.0	290.33	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1768039.57	1.2	1826145.95	96.82	29.5	120.4	
Sc	45	No Gas	4477299.59	2.6	4103184.45	109.12	29.5	120.4	
Sc	45	H2	517078.06	2.0	476452.62	108.53	29.5	120.4	
Sc	45	He	103007.17	0.8	95435.38	107.93	29.5	120.4	
Ge	72	No Gas	970331.32	2.0	904931.62	107.23	29.5	120.4	
Ge	72	H2	184691.52	1.2	172351.67	107.16	29.5	120.4	
Ge	72	He	78260.64	0.8	72380.83	108.12	29.5	120.4	
Y	89	H2	3244575.50	1.2	2964265.2	109.46	29.5	120.4	
Y	89	He	660176.46	0.9	618281.42	106.78	29.5	120.4	
Tb	159	No Gas	9581793.40	2.7	8714728.06	109.95	29.5	120.4	
Tb	159	He	3413324.01	0.3	3206480.02	106.45	29.5	120.4	
Bi	209	No Gas	4792434.14	2.0	4440413.54	107.93	29.5	120.4	

Sample Report

Sample Name SN5719-009A

File Name 163SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:19:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	14.818	ppb	5.9	4127.40	100	
11	B	6	No Gas	248.889	ppb	5.3	47291.58	1000	
23	Na	45	He	10761.772	ppb	1.0	280122.16	200000	
24	Mg	45	He	20223.168	ppb	0.9	287767.38	200000	
27	Al	45	He	113116.595	ppb	1.3	614417.58	200000	
28	Si	45	H2	6861.041	ppb	11.3	68531.20	10000	
39	K	45	He	18428.220	ppb	1.3	242316.28	200000	
40	Ca	45	H2	16763.173	ppb	12.4	1574501.89	200000	
51	V	89	He	273.715	ppb	0.3	55117.68	1000	
52	Cr	89	He	180.892	ppb	1.8	45074.59	2000	
55	Mn	89	He	5131.937	ppb	1.1	590153.58	2000	
56	Fe	89	H2	173685.360	ppb	12.8	67666150.43	100000	
59	Co	89	He	70.871	ppb	2.6	29713.41	1000	
60	Ni	89	He	152.862	ppb	1.4	17560.48	1000	
63	Cu	89	He	355.145	ppb	1.3	116662.53	2000	
66	Zn	89	He	860.653	ppb	3.1	37234.95	2000	
75	As	89	He	114.751	ppb	0.4	4062.71	1000	
78	Se	89	H2	54.933	ppb	10.7	1019.16	1000	
88	Sr	89	He	108.238	ppb	3.6	18674.47	2000	
95	Mo	89	He	68.880	ppb	2.9	13636.14	1000	
107	Ag	89	He	11.333	ppb	0.4	7690.25	100	
111	Cd	89	He	13.668	ppb	4.2	1171.55	1000	
118	Sn	159	He	98.273	ppb	1.9	17600.91	1000	
121	Sb	159	No Gas	15.051	ppb	5.4	23800.76	1000	
137	Ba	159	No Gas	525.763	ppb	6.4	321198.64	2000	
182	W	159	No Gas	51.196	ppb	4.5	60656.54	1000	
205	Tl	209	No Gas	13.215	ppb	7.6	32918.89	1000	
208	Pb	209	No Gas	2312.175	ppb	5.7	7932032.34	2000	
232	Th	209	No Gas	27.196	ppb	6.3	95304.79	1000	
238	U	209	No Gas	16.086	ppb	7.4	52699.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1776684.97	2.7	1826145.95	97.29	29.5	120.4	
Sc	45	No Gas	4640356.86	3.1	4103184.45	113.09	29.5	120.4	
Sc	45	H2	527950.88	9.4	476452.62	110.81	29.5	120.4	
Sc	45	He	106067.81	0.4	95435.38	111.14	29.5	120.4	
Ge	72	No Gas	992975.19	2.9	904931.62	109.73	29.5	120.4	
Ge	72	H2	181353.89	10.0	172351.67	105.22	29.5	120.4	
Ge	72	He	78518.40	1.0	72380.83	108.48	29.5	120.4	
Y	89	H2	3406867.71	9.4	2964265.2	114.93	29.5	120.4	
Y	89	He	693146.00	1.0	618281.42	112.11	29.5	120.4	
Tb	159	No Gas	9740453.12	2.7	8714728.06	111.77	29.5	120.4	
Tb	159	He	3435316.89	0.9	3206480.02	107.14	29.5	120.4	
Bi	209	No Gas	4840739.47	3.0	4440413.54	109.02	29.5	120.4	

Sample Report

Sample Name SN5719-009S

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:22:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	54.696	ppb	1.8	14914.86	100	
11	B	6	No Gas	494.853	ppb	2.1	90563.29	1000	
23	Na	45	He	7688.390	ppb	3.0	199771.46	200000	
24	Mg	45	He	28684.903	ppb	3.0	405017.33	200000	
27	Al	45	He	145473.665	ppb	4.4	784526.84	200000	
28	Si	45	H2	2561.543	ppb	5.9	26661.34	10000	
39	K	45	He	22420.896	ppb	3.2	289986.75	200000	
40	Ca	45	H2	18839.886	ppb	3.6	1819521.31	200000	
51	V	89	He	779.312	ppb	3.0	156930.88	1000	
52	Cr	89	He	364.134	ppb	2.6	90932.52	2000	
55	Mn	89	He	5614.801	ppb	2.6	647537.12	2000	
56	Fe	89	H2	185662.318	ppb	2.9	74998922.95	100000	
59	Co	89	He	580.108	ppb	2.3	243852.12	1000	
60	Ni	89	He	658.509	ppb	2.2	75640.27	1000	
63	Cu	89	He	618.307	ppb	2.3	203341.05	2000	
66	Zn	89	He	1331.039	ppb	2.5	57713.61	2000	
75	As	89	He	171.528	ppb	1.9	6087.33	1000	
78	Se	89	H2	95.412	ppb	2.1	1831.87	1000	
88	Sr	89	He	574.518	ppb	2.2	99401.98	2000	
95	Mo	89	He	112.942	ppb	3.4	22410.10	1000	
107	Ag	89	He	49.625	ppb	1.8	33716.05	100	
111	Cd	89	He	241.966	ppb	2.8	20781.19	1000	
118	Sn	159	He	488.399	ppb	2.7	87202.47	1000	
121	Sb	159	No Gas	35.368	ppb	2.1	56229.25	1000	
137	Ba	159	No Gas	2521.025	ppb	2.7	1550755.70	2000	
182	W	159	No Gas	52.296	ppb	3.7	62366.52	1000	
205	Tl	209	No Gas	102.956	ppb	1.8	255795.52	1000	
208	Pb	209	No Gas	2575.883	ppb	2.3	8820291.88	2000	
232	Th	209	No Gas	79.079	ppb	1.1	276433.44	1000	
238	U	209	No Gas	104.085	ppb	2.2	340457.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744977.22	0.7	1826145.95	95.56	29.5	120.4	
Sc	45	No Gas	4640176.73	1.2	4103184.45	113.09	29.5	120.4	
Sc	45	H2	538929.00	2.3	476452.62	113.11	29.5	120.4	
Sc	45	He	105390.26	2.8	95435.38	110.43	29.5	120.4	
Ge	72	No Gas	995416.75	1.6	904931.62	110	29.5	120.4	
Ge	72	H2	184931.87	2.0	172351.67	107.3	29.5	120.4	
Ge	72	He	78462.36	2.1	72380.83	108.4	29.5	120.4	
Y	89	H2	3505405.39	2.1	2964265.2	118.26	29.5	120.4	
Y	89	He	695330.32	1.9	618281.42	112.46	29.5	120.4	
Tb	159	No Gas	9799178.32	1.1	8714728.06	112.44	29.5	120.4	
Tb	159	He	3435711.30	2.2	3206480.02	107.15	29.5	120.4	
Bi	209	No Gas	4826814.77	0.8	4440413.54	108.7	29.5	120.4	

Sample Report

Sample Name SN5719-009P

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:24:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.112	ppb	9.2	14422.08	100	
11	B	6	No Gas	489.166	ppb	7.0	89185.10	1000	
23	Na	45	He	7396.003	ppb	0.8	194455.19	200000	
24	Mg	45	He	28116.062	ppb	0.6	401430.84	200000	
27	Al	45	He	142830.038	ppb	0.9	779036.83	200000	
28	Si	45	H2	2896.532	ppb	3.8	29651.09	10000	
39	K	45	He	22393.551	ppb	1.1	292875.97	200000	
40	Ca	45	H2	18579.405	ppb	1.0	1768529.52	200000	
51	V	89	He	766.634	ppb	0.3	155218.00	1000	
52	Cr	89	He	355.541	ppb	0.6	89263.60	2000	
55	Mn	89	He	6095.098	ppb	0.2	706700.76	2000	
56	Fe	89	H2	185324.864	ppb	0.2	73675931.67	100000	
59	Co	89	He	564.826	ppb	0.1	238684.32	1000	
60	Ni	89	He	644.650	ppb	0.5	74441.60	1000	
63	Cu	89	He	531.743	ppb	0.5	175876.70	2000	
66	Zn	89	He	1310.042	ppb	0.8	57107.65	2000	
75	As	89	He	165.537	ppb	1.1	5905.91	1000	
78	Se	89	H2	94.642	ppb	1.2	1788.03	1000	
88	Sr	89	He	547.653	ppb	0.6	95259.52	2000	
95	Mo	89	He	113.571	ppb	1.3	22657.20	1000	
107	Ag	89	He	48.988	ppb	1.0	33458.66	100	
111	Cd	89	He	237.396	ppb	1.1	20497.83	1000	
118	Sn	159	He	483.213	ppb	0.4	86939.83	1000	
121	Sb	159	No Gas	36.912	ppb	10.2	59193.19	1000	
137	Ba	159	No Gas	2412.961	ppb	8.5	1497584.43	2000	
182	W	159	No Gas	52.896	ppb	8.1	63657.43	1000	
205	Tl	209	No Gas	97.114	ppb	7.7	243237.66	1000	
208	Pb	209	No Gas	2135.990	ppb	7.5	7373639.62	2000	
232	Th	209	No Gas	68.520	ppb	8.4	241458.87	1000	
238	U	209	No Gas	97.706	ppb	8.6	322164.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1739342.22	1.8	1826145.95	95.25	29.5	120.4	
Sc	45	No Gas	4643074.21	1.7	4103184.45	113.16	29.5	120.4	
Sc	45	H2	530969.43	2.1	476452.62	111.44	29.5	120.4	
Sc	45	He	106510.78	0.8	95435.38	111.61	29.5	120.4	
Ge	72	No Gas	993570.08	1.7	904931.62	109.8	29.5	120.4	
Ge	72	H2	183144.53	2.0	172351.67	106.26	29.5	120.4	
Ge	72	He	78777.27	0.5	72380.83	108.84	29.5	120.4	
Y	89	H2	3448508.73	0.6	2964265.2	116.34	29.5	120.4	
Y	89	He	698833.34	0.4	618281.42	113.03	29.5	120.4	
Tb	159	No Gas	9896963.88	2.1	8714728.06	113.57	29.5	120.4	
Tb	159	He	3460736.86	0.6	3206480.02	107.93	29.5	120.4	
Bi	209	No Gas	4869421.96	1.6	4440413.54	109.66	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG20IMW1
File Name	166_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:27:13 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.302	ppb	3.7	103.34	0.5	
B	11	6	No Gas	9.777	ppb	5.9	3563.89	10	
Na	23	45	He	10.796	ppb	37.3	3834.77	500	
Mg	24	45	He	-13.475	ppb	N/A	602.28	50	
Al	27	45	He	64.636	ppb	15.6	360.02	50	PB 6020 Fails DoD
Si	28	45	H2	20.247	ppb	19.9	804.26	250	
K	39	45	He	-60.680	ppb	N/A	11984.67	500	
Ca	40	45	H2	37.395	ppb	9.9	4866.57	50	
V	51	89	He	3.081	ppb	9.0	817.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.479	ppb	3.7	173.97	2.5	
Mn	55	89	He	3.719	ppb	6.0	421.93	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	135.224	ppb	8.1	55813.00	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Co	59	89	He	0.262	ppb	22.0	120.01	0.5	
Ni	60	89	He	0.524	ppb	34.1	124.45	1	
Cu	63	89	He	0.008	ppb	1709.7	474.47	1.5	
Zn	66	89	He	2.373	ppb	18.9	168.90	5	
As	75	89	He	0.475	ppb	42.2	23.00	2.5	
Se	78	89	H2	0.244	ppb	81.6	5.67	2.5	
Sr	88	89	He	0.219	ppb	55.2	41.11	2.5	
Mo	95	89	He	0.239	ppb	15.7	63.34	2.5	
Ag	107	89	He	0.019	ppb	85.5	27.78	0.5	
Cd	111	89	He	0.062	ppb	33.2	5.93	0.5	
Sn	118	159	He	1.246	ppb	10.8	284.46	2.5	
Sb	121	159	No Gas	0.074	ppb	44.9	180.20	0.5	
Ba	137	159	No Gas	2.358	ppb	21.2	1498.44	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
W	182	159	No Gas	0.105	ppb	18.8	153.51	2.5	
Tl	205	209	No Gas	0.176	ppb	23.6	493.90	0.5	
Pb	208	209	No Gas	3.463	ppb	10.6	12319.51	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.196	ppb	11.9	817.62	2.5	
U	238	209	No Gas	0.082	ppb	13.6	276.99	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1709420.57	2.9	1826145.95	93.61	29.5	120.4	
Sc	45	No Gas	4630420.99	2.7	4103184.45	112.85	29.5	120.4	
Sc	45	H2	543170.07	6.2	476452.62	114	29.5	120.4	
Sc	45	He	103993.17	1.3	95435.38	108.97	29.5	120.4	
Ge	72	No Gas	1003593.31	2.3	904931.62	110.9	29.5	120.4	
Ge	72	H2	189696.47	5.3	172351.67	110.06	29.5	120.4	
Ge	72	He	78212.98	0.9	72380.83	108.06	29.5	120.4	
Y	89	H2	3429827.18	5.3	2964265.2	115.71	29.5	120.4	
Y	89	He	665454.77	1.1	618281.42	107.63	29.5	120.4	
Tb	159	No Gas	9923833.95	2.5	8714728.06	113.87	29.5	120.4	
Tb	159	He	3409444.36	1.1	3206480.02	106.33	29.5	120.4	
Bi	209	No Gas	4934012.64	3.1	4440413.54	111.12	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG20IMW1
File Name	167LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:29:52 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.346	ppb	9.3	13681.34	50	20.14	79.5	120.4	
B	11	6	No Gas	512.124	ppb	9.6	93314.64	500	20.48	79.5	120.4	
Na	23	45	He	7586.548	ppb	0.8	197645.59	7500	20.23	79.5	120.4	
Mg	24	45	He	5213.723	ppb	1.2	74449.32	5000	20.85	79.5	120.4	
Al	27	45	He	2037.401	ppb	1.9	11032.44	2000	20.37	79.5	120.4	
Si	28	45	H2	1068.452	ppb	3.4	11160.07	1000	21.37	0	200	
K	39	45	He	10332.710	ppb	1.5	140927.39	10000	20.67	79.5	120.4	
Ca	40	45	H2	2668.032	ppb	1.3	251829.95	2500	21.34	79.5	120.4	
V	51	89	He	547.416	ppb	1.1	106475.52	500	21.9	79.5	120.4	
Cr	52	89	He	221.385	ppb	0.9	53388.41	200	22.14	79.5	120.4	
Mn	55	89	He	553.396	ppb	0.8	61614.97	500	22.14	79.5	120.4	
Fe	56	89	H2	1179.913	ppb	2.8	451595.52	1000	23.6	79.5	120.4	
Co	59	89	He	564.096	ppb	0.1	228869.81	500	22.56	79.5	120.4	
Ni	60	89	He	560.100	ppb	1.4	62107.40	500	22.4	79.5	120.4	
Cu	63	89	He	274.845	ppb	1.1	87508.25	250	21.99	79.5	120.4	
Zn	66	89	He	534.022	ppb	0.4	22393.12	500	21.36	79.5	120.4	
As	75	89	He	108.746	ppb	1.7	3727.25	100	21.75	79.5	120.4	
Se	78	89	H2	102.038	ppb	0.9	1846.21	100	20.41	79.5	120.4	
Sr	88	89	He	518.309	ppb	0.3	86558.02	500	20.73	79.5	120.4	
Mo	95	89	He	111.370	ppb	1.9	21332.86	100	22.27	79.5	120.4	
Ag	107	89	He	55.125	ppb	0.7	36146.73	50	22.05	79.5	120.4	
Cd	111	89	He	263.589	ppb	2.0	21850.29	250	21.09	79.5	120.4	
Sn	118	159	He	519.410	ppb	0.7	93316.72	500	20.78	79.5	120.4	
Sb	121	159	No Gas	99.322	ppb	9.4	160244.82	100	19.86	79.5	120.4	
Ba	137	159	No Gas	1987.687	ppb	9.7	1241606.98	2000	19.88	79.5	120.4	
W	182	159	No Gas	97.305	ppb	8.9	117846.00	100	19.46	79.5	120.4	
Tl	205	209	No Gas	100.824	ppb	9.9	255231.35	100	20.16	79.5	120.4	
[Pb]	206	209	No Gas	101.370	ppb	10.0	89018.87	100	20.27	79.5	120.4	
[Pb]	207	209	No Gas	102.317	ppb	8.6	78116.79	100	20.46	79.5	120.4	
Pb	208	209	No Gas	102.101	ppb	9.5	356431.97	100	20.42	79.5	120.4	
Th	232	209	No Gas	96.566	ppb	10.5	343852.11	100	19.31	79.5	120.4	
U	238	209	No Gas	96.019	ppb	10.4	319978.98	100	19.2	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1741924.19	3.2	1826145.95	95.39	29.5	120.4	
Sc	45	No Gas	4637909.20	3.4	4103184.45	113.03	29.5	120.4	
Sc	45	H2	524291.09	0.5	476452.62	110.04	29.5	120.4	
Sc	45	He	105588.12	0.6	95435.38	110.64	29.5	120.4	
Ge	72	No Gas	1004860.92	3.6	904931.62	111.04	29.5	120.4	
Ge	72	H2	184825.72	1.1	172351.67	107.24	29.5	120.4	
Ge	72	He	79245.73	0.5	72380.83	109.48	29.5	120.4	
Y	89	H2	3302741.09	0.9	2964265.2	111.42	29.5	120.4	
Y	89	He	670962.91	0.3	618281.42	108.52	29.5	120.4	
Tb	159	No Gas	9974539.16	4.0	8714728.06	114.46	29.5	120.4	
Tb	159	He	3455972.45	0.5	3206480.02	107.78	29.5	120.4	
Bi	209	No Gas	4930504.44	4.0	4440413.54	111.04	29.5	120.4	

Sample Report

Sample Name SN5920-001

File Name 168SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:32:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.269	ppb	23.9	93.34	100	
11	B	6	No Gas	16.864	ppb	0.8	4744.28	1000	
23	Na	45	He	11189.897	ppb	2.0	281878.80	200000	
24	Mg	45	He	5323.721	ppb	1.6	73931.34	200000	
27	Al	45	He	32.773	ppb	31.3	187.79	200000	
28	Si	45	H2	11465.032	ppb	0.7	112412.47	10000	
39	K	45	He	1547.600	ppb	3.1	31219.98	200000	
40	Ca	45	H2	6691.362	ppb	0.9	620211.00	200000	
51	V	89	He	3.793	ppb	10.3	948.96	1000	
52	Cr	89	He	0.654	ppb	7.5	214.63	2000	
55	Mn	89	He	2125.260	ppb	1.3	233264.97	2000	
56	Fe	89	H2	8497.345	ppb	0.5	3201644.60	100000	
59	Co	89	He	14.111	ppb	6.0	5657.16	1000	
60	Ni	89	He	10.839	ppb	11.9	1249.00	1000	
63	Cu	89	He	0.095	ppb	137.9	498.92	2000	
66	Zn	89	He	5.989	ppb	16.7	316.68	2000	
75	As	89	He	5.887	ppb	9.7	205.36	1000	
78	Se	89	H2	0.237	ppb	47.7	5.17	1000	
88	Sr	89	He	40.644	ppb	0.7	6697.43	2000	
95	Mo	89	He	0.635	ppb	9.8	137.79	1000	
107	Ag	89	He	0.029	ppb	29.5	34.44	100	
111	Cd	89	He	0.108	ppb	17.8	9.63	1000	
118	Sn	159	He	1.548	ppb	10.9	338.91	1000	
121	Sb	159	No Gas	0.136	ppb	3.0	280.32	1000	
137	Ba	159	No Gas	15.950	ppb	2.8	10002.01	2000	
182	W	159	No Gas	0.248	ppb	39.5	327.03	1000	
205	Tl	209	No Gas	0.118	ppb	39.3	347.06	1000	
208	Pb	209	No Gas	0.859	ppb	5.0	3213.79	2000	
232	Th	209	No Gas	0.386	ppb	5.4	1505.12	1000	
238	U	209	No Gas	0.104	ppb	12.4	353.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1685983.93	1.4	1826145.95	92.32	29.5	120.4	
Sc	45	No Gas	4592444.83	1.8	4103184.45	111.92	29.5	120.4	
Sc	45	H2	516343.90	0.9	476452.62	108.37	29.5	120.4	
Sc	45	He	102717.23	1.6	95435.38	107.63	29.5	120.4	
Ge	72	No Gas	1000295.84	1.9	904931.62	110.54	29.5	120.4	
Ge	72	H2	181832.73	0.9	172351.67	105.5	29.5	120.4	
Ge	72	He	78100.58	0.5	72380.83	107.9	29.5	120.4	
Y	89	H2	3266005.97	0.1	2964265.2	110.18	29.5	120.4	
Y	89	He	661603.47	1.5	618281.42	107.01	29.5	120.4	
Tb	159	No Gas	9961944.43	1.3	8714728.06	114.31	29.5	120.4	
Tb	159	He	3420160.61	0.9	3206480.02	106.66	29.5	120.4	
Bi	209	No Gas	4974305.38	1.8	4440413.54	112.02	29.5	120.4	

Sample Report

Sample Name SN5920-002

File Name 169SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b

Acq Time 7/22/2020 11:35:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.160	ppb	33.7	64.45	100	
11	B	6	No Gas	10.860	ppb	20.1	3707.27	1000	
23	Na	45	He	9741.706	ppb	1.4	242937.65	200000	
24	Mg	45	He	5559.917	ppb	1.3	76254.79	200000	
27	Al	45	He	39.788	ppb	7.7	222.23	200000	
28	Si	45	H2	5510.428	ppb	2.1	54725.49	10000	
39	K	45	He	2264.216	ppb	3.5	39376.34	200000	
40	Ca	45	H2	13158.042	ppb	4.3	1226821.43	200000	
51	V	89	He	5.464	ppb	10.4	1247.89	1000	
52	Cr	89	He	0.487	ppb	16.9	171.97	2000	
55	Mn	89	He	866.457	ppb	1.6	93473.08	2000	
56	Fe	89	H2	4402.559	ppb	4.5	1667750.48	100000	
59	Co	89	He	2.798	ppb	14.0	1113.46	1000	
60	Ni	89	He	4.086	ppb	14.8	504.47	1000	
63	Cu	89	He	0.105	ppb	98.1	493.36	2000	
66	Zn	89	He	7.920	ppb	6.2	390.02	2000	
75	As	89	He	4.795	ppb	1.8	165.69	1000	
78	Se	89	H2	0.115	ppb	65.7	3.00	1000	
88	Sr	89	He	50.467	ppb	2.0	8170.51	2000	
95	Mo	89	He	0.750	ppb	8.0	156.67	1000	
107	Ag	89	He	-0.010	ppb	N/A	8.89	100	
111	Cd	89	He	0.032	ppb	44.8	3.33	1000	
118	Sn	159	He	0.964	ppb	8.4	233.34	1000	
121	Sb	159	No Gas	0.076	ppb	43.0	183.54	1000	
137	Ba	159	No Gas	7.272	ppb	17.2	4565.92	2000	
182	W	159	No Gas	0.535	ppb	11.6	674.10	1000	
205	Tl	209	No Gas	0.048	ppb	54.2	166.86	1000	
208	Pb	209	No Gas	0.858	ppb	40.2	3200.46	2000	
232	Th	209	No Gas	0.119	ppb	42.1	540.62	1000	
238	U	209	No Gas	0.039	ppb	93.2	133.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1690532.31	2.9	1826145.95	92.57	29.5	120.4	
Sc	45	No Gas	4567984.13	2.5	4103184.45	111.33	29.5	120.4	
Sc	45	H2	520393.47	3.5	476452.62	109.22	29.5	120.4	
Sc	45	He	101488.95	1.5	95435.38	106.34	29.5	120.4	
Ge	72	No Gas	1006642.99	2.6	904931.62	111.24	29.5	120.4	
Ge	72	H2	182319.07	2.2	172351.67	105.78	29.5	120.4	
Ge	72	He	77315.06	0.5	72380.83	106.82	29.5	120.4	
Y	89	H2	3284553.11	3.3	2964265.2	110.8	29.5	120.4	
Y	89	He	650222.49	1.3	618281.42	105.17	29.5	120.4	
Tb	159	No Gas	9961179.92	2.0	8714728.06	114.3	29.5	120.4	
Tb	159	He	3391631.37	1.6	3206480.02	105.77	29.5	120.4	
Bi	209	No Gas	4972227.99	2.1	4440413.54	111.98	29.5	120.4	

Sample Report

Sample Name	SN5920-003
File Name	170SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:37:34 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.110	ppb	54.1	51.11	100	
11	B	6	No Gas	30.616	ppb	7.3	7043.08	1000	
23	Na	45	He	14547.235	ppb	2.5	366247.88	200000	
24	Mg	45	He	6477.378	ppb	2.0	89985.73	200000	
27	Al	45	He	41.219	ppb	25.0	233.35	200000	
28	Si	45	H2	4209.529	ppb	3.7	40465.82	10000	
39	K	45	He	790.895	ppb	7.1	22153.88	200000	
40	Ca	45	H2	10748.641	ppb	1.9	967658.26	200000	
51	V	89	He	5.352	ppb	4.6	1241.21	1000	
52	Cr	89	He	0.528	ppb	23.3	183.30	2000	
55	Mn	89	He	1055.042	ppb	2.6	115104.29	2000	
56	Fe	89	H2	15862.972	ppb	1.9	5864484.59	100000	
59	Co	89	He	27.211	ppb	2.3	10833.88	1000	
60	Ni	89	He	66.364	ppb	2.7	7269.90	1000	
63	Cu	89	He	-0.168	ppb	N/A	414.47	2000	
66	Zn	89	He	77.899	ppb	1.5	3261.61	2000	
75	As	89	He	3.281	ppb	21.0	117.01	1000	
78	Se	89	H2	0.081	ppb	81.5	2.33	1000	
88	Sr	89	He	45.651	ppb	4.1	7474.52	2000	
95	Mo	89	He	0.048	ppb	101.3	26.67	1000	
107	Ag	89	He	0.006	ppb	111.7	18.89	100	
111	Cd	89	He	0.045	ppb	81.5	4.44	1000	
118	Sn	159	He	1.622	ppb	8.1	353.36	1000	
121	Sb	159	No Gas	0.043	ppb	37.3	130.15	1000	
137	Ba	159	No Gas	12.405	ppb	1.9	7784.32	2000	
182	W	159	No Gas	0.141	ppb	33.8	196.89	1000	
205	Tl	209	No Gas	0.020	ppb	88.1	96.78	1000	
208	Pb	209	No Gas	0.720	ppb	7.5	2746.53	2000	
232	Th	209	No Gas	0.055	ppb	30.2	317.03	1000	
238	U	209	No Gas	0.024	ppb	60.9	86.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1667336.91	1.8	1826145.95	91.3	29.5	120.4	
Sc	45	No Gas	4517532.22	1.8	4103184.45	110.1	29.5	120.4	
Sc	45	H2	501882.48	0.4	476452.62	105.34	29.5	120.4	
Sc	45	He	102957.64	1.3	95435.38	107.88	29.5	120.4	
Ge	72	No Gas	997678.19	2.2	904931.62	110.25	29.5	120.4	
Ge	72	H2	179338.86	0.7	172351.67	104.05	29.5	120.4	
Ge	72	He	77882.20	1.1	72380.83	107.6	29.5	120.4	
Y	89	H2	3205986.55	1.0	2964265.2	108.15	29.5	120.4	
Y	89	He	657688.20	1.6	618281.42	106.37	29.5	120.4	
Tb	159	No Gas	9962368.26	1.9	8714728.06	114.32	29.5	120.4	
Tb	159	He	3430992.76	1.2	3206480.02	107	29.5	120.4	
Bi	209	No Gas	5014042.35	1.9	4440413.54	112.92	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	171_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:40:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.020	ppb	8.3	32223.39	25	96.08	89.8	110.2	
11	B	6	No Gas	24.267	ppb	7.2	23274.92	25	97.07	89.8	110.2	
23	Na	45	He	4998.339	ppb	2.3	627497.20	5000	99.97	89.8	110.2	
24	Mg	45	He	4858.659	ppb	1.0	335816.94	5000	97.17	89.8	110.2	
27	Al	45	He	473.968	ppb	2.0	12525.92	500	94.79	89.8	110.2	
28	Si	45	H2	459.355	ppb	1.9	22656.77	500	91.87	89.8	110.2	
39	K	45	He	4874.498	ppb	1.6	307395.23	5000	97.49	89.8	110.2	
40	Ca	45	H2	4917.076	ppb	1.0	2244329.55	5000	98.34	89.8	110.2	
51	V	89	He	25.874	ppb	2.6	24960.55	25	103.5	89.8	110.2	
52	Cr	89	He	25.145	ppb	0.4	29899.32	25	100.58	89.8	110.2	
55	Mn	89	He	25.672	ppb	1.1	14089.83	25	102.69	89.8	110.2	
56	Fe	89	H2	4880.624	ppb	1.2	9123375.34	5000	97.61	89.8	110.2	
59	Co	89	He	25.891	ppb	0.2	51762.86	25	103.56	89.8	110.2	
60	Ni	89	He	26.728	ppb	1.1	14651.47	25	106.91	89.8	110.2	
63	Cu	89	He	25.256	ppb	0.9	39872.33	25	101.02	89.8	110.2	
66	Zn	89	He	24.902	ppb	1.2	5197.84	25	99.61	89.8	110.2	
75	As	89	He	24.796	ppb	1.3	4185.76	25	99.18	89.8	110.2	
78	Se	89	H2	24.257	ppb	0.9	2154.24	25	97.03	89.8	110.2	
88	Sr	89	He	24.050	ppb	1.2	19789.26	25	96.2	89.8	110.2	
95	Mo	89	He	25.471	ppb	0.6	24033.00	25	101.88	89.8	110.2	
107	Ag	89	He	18.563	ppb	1.3	59951.89	25	74.25	89.8	110.2	> +/- 10%
111	Cd	89	He	24.968	ppb	2.3	10195.79	25	99.87	89.8	110.2	
118	Sn	159	He	24.338	ppb	1.6	21979.67	25	97.35	89.8	110.2	
121	Sb	159	No Gas	23.119	ppb	6.9	186726.92	25	92.48	89.8	110.2	
137	Ba	159	No Gas	24.004	ppb	7.0	75095.20	25	96.02	89.8	110.2	
182	W	159	No Gas	23.048	ppb	7.0	139722.06	25	92.19	89.8	110.2	
205	Tl	209	No Gas	23.551	ppb	7.7	301913.98	25	94.2	89.8	110.2	
208	Pb	209	No Gas	23.574	ppb	7.1	416765.50	25	94.3	89.8	110.2	
232	Th	209	No Gas	23.012	ppb	7.8	415014.76	25	92.05	89.8	110.2	
238	U	209	No Gas	22.986	ppb	8.3	387921.47	25	91.94	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1720619.23	2.6	1826145.95	94.22	29.5	120.4	
Sc	45	No Gas	4529854.80	2.3	4103184.45	110.4	29.5	120.4	
Sc	45	H2	509232.60	0.5	476452.62	106.88	29.5	120.4	
Sc	45	He	103097.45	1.7	95435.38	108.03	29.5	120.4	
Ge	72	No Gas	985529.40	3.2	904931.62	108.91	29.5	120.4	
Ge	72	H2	180819.14	0.4	172351.67	104.91	29.5	120.4	
Ge	72	He	78117.28	1.3	72380.83	107.93	29.5	120.4	
Y	89	H2	3242312.46	0.4	2964265.2	109.38	29.5	120.4	
Y	89	He	661108.06	1.1	618281.42	106.93	29.5	120.4	
Tb	159	No Gas	9975297.00	2.9	8714728.06	114.46	29.5	120.4	
Tb	159	He	3466878.63	1.0	3206480.02	108.12	29.5	120.4	
Bi	209	No Gas	4989026.66	3.2	4440413.54	112.36	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	172_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG22B.b
Acq Time	7/22/2020 11:42:50 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.061	ppb	4.4	107.78	0.2	
11	B	6	No Gas	0.570	ppb	24.4	2416.96	4	
23	Na	45	He	-2.090	ppb	N/A	3237.33	200	
24	Mg	45	He	-2.488	ppb	N/A	604.50	20	
27	Al	45	He	1.870	ppb	29.6	64.45	20	
28	Si	45	H2	0.778	ppb	285.3	597.34	100	
39	K	45	He	-20.983	ppb	N/A	11231.06	200	
40	Ca	45	H2	2.760	ppb	10.1	2419.18	20	
51	V	89	He	0.310	ppb	11.3	515.59	1	
52	Cr	89	He	0.029	ppb	66.1	93.32	1	
55	Mn	89	He	0.162	ppb	26.9	99.32	0.4	
56	Fe	89	H2	6.299	ppb	5.0	13995.75	20	
59	Co	89	He	0.022	ppb	53.5	57.78	0.2	
60	Ni	89	He	0.004	ppb	266.0	67.78	0.4	
63	Cu	89	He	-0.162	ppb	N/A	214.45	0.6	
66	Zn	89	He	0.138	ppb	95.0	97.78	2	
75	As	89	He	0.042	ppb	84.6	13.67	1	
78	Se	89	H2	0.067	ppb	12.5	6.83	1	
88	Sr	89	He	0.019	ppb	37.9	20.00	1	
95	Mo	89	He	0.069	ppb	3.1	82.23	1	
107	Ag	89	He	0.008	ppb	26.1	42.22	0.2	
111	Cd	89	He	0.010	ppb	31.7	4.82	0.2	
118	Sn	159	He	0.071	ppb	64.2	126.67	1	
121	Sb	159	No Gas	0.032	ppb	40.5	310.35	0.2	
137	Ba	159	No Gas	0.063	ppb	34.8	216.91	0.4	
182	W	159	No Gas	0.064	ppb	12.8	407.13	1	
205	Tl	209	No Gas	0.037	ppb	25.4	510.59	0.2	
208	Pb	209	No Gas	0.130	ppb	14.8	2446.17	0.2	Failed DoD
232	Th	209	No Gas	0.052	ppb	11.9	1044.55	1	
238	U	209	No Gas	0.021	ppb	25.7	350.40	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1757557.22	1.8	1826145.95	96.24	29.5	120.4	
Sc	45	No Gas	4476806.91	2.6	4103184.45	109.11	29.5	120.4	
Sc	45	H2	508438.69	0.1	476452.62	106.71	29.5	120.4	
Sc	45	He	102008.51	0.9	95435.38	106.89	29.5	120.4	
Ge	72	No Gas	972543.50	3.5	904931.62	107.47	29.5	120.4	
Ge	72	H2	181766.45	0.3	172351.67	105.46	29.5	120.4	
Ge	72	He	77258.20	0.9	72380.83	106.74	29.5	120.4	
Y	89	H2	3211661.44	0.7	2964265.2	108.35	29.5	120.4	
Y	89	He	654994.52	0.2	618281.42	105.94	29.5	120.4	
Tb	159	No Gas	9730934.02	2.4	8714728.06	111.66	29.5	120.4	
Tb	159	He	3405687.45	0.2	3206480.02	106.21	29.5	120.4	
Bi	209	No Gas	4914109.77	2.5	4440413.54	110.67	29.5	120.4	

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSR187 HCL: MSR185 Digestion Vessels: MLD026000021 Filter Paper: 17631561

1:1 HNO3: MR2718 H2O2: MSR184 Boiling Stones: MSR174

Pipet	LCS / Spike	LCS/Spiking Information:
M11	☑ ☑	CLPP-SPK-1 (ID/Vol): MS2225 / 0.100 mL
M21	☑ ☑	CLPP-SPK-INT1 (ID/Vol): MW19476 / 1.00 mL
M21	☑ ☑	CLPP-SPK-INT2 (ID/Vol): MW19477 / 1.00 mL
—	☐ ☐	— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: Bal09

Heat Source ID: D

Start Time: 6:10 /Temp. 90 °C

End Time: 15:58 /Temp. 95 °C

Thermometer ID/Pos: ALC30 / 3:5

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONG20IMS1	NG20IMS1	1.0	g	0.1	L	SL	IM	MC	07/20/2020	—
PBSNG20IMS1	NG20IMS1	1.0	g		L	SL	IM	MC	07/20/2020	—
SN5515-001R	NG20IMS1	2.07	g		L	SL	IM	MC	07/20/2020	A
SN5719-001	NG20IMS1	1.06	g		L	SL	IM	MC	07/20/2020	—
SN5719-001P	NG20IMS1	1.05	g		L	SL	IM	MC	07/20/2020	—
SN5719-001S	NG20IMS1	1.07	g		L	SL	IM	MC	07/20/2020	—
SN5719-002	NG20IMS1	1.02	g		L	SL	IM	MC	07/20/2020	—
SN5719-003	NG20IMS1	1.01	g		L	SL	IM	MC	07/20/2020	—
SN5719-004	NG20IMS1	1.04	g		L	SL	IM	MC	07/20/2020	—
SN5719-005	NG20IMS1	1.09	g		L	SL	IM	MC	07/20/2020	—
SN5719-005P	NG20IMS1	1.10	g		L	SL	IM	MC	07/20/2020	—
SN5719-005S	NG20IMS1	1.11	g		L	SL	IM	MC	07/20/2020	—
SN5719-006	NG20IMS1	1.09	g		L	SL	IM	MC	07/20/2020	—
SN5719-007	NG20IMS1	1.01	g		L	SL	IM	MC	07/20/2020	—
SN5719-008	NG20IMS1	1.01	g		L	SL	IM	MC	07/20/2020	—
SN5719-009	NG20IMS1	1.01	g		L	SL	IM	MC	07/20/2020	—
SN5719-009P	NG20IMS1	1.02	g		L	SL	IM	MC	07/20/2020	—
SN5719-009S	NG20IMS1	1.01	g		L	SL	IM	MC	07/20/2020	—

REVIEWED

CD 7.23.20

KATAHDIN ANALYTICAL METALS SECTION

 Digestion performed by: EJGF On: 7/20/20

Katahdin Analytical Services 4000266

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282141	SW3540C	20-JUL-20	17-JUL-20	100 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282141-2	LCS	WG282141	20-JUL-20	17-JUL-20	%	90	90.	100	90-110	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282141-3	SN5719-1	WG282141	20-JUL-20	%	96.	96.	0	20
WG282141-4	SN5719-5	WG282141	20-JUL-20	%	97.	97.	0	20
WG282141-5	SN5719-9	WG282141	20-JUL-20	%	93.	94.	0	20

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-1
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS01	SL	07-JUL-20 12:20:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000008

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-2
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS02	SL	07-JUL-20 12:30:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000009

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-3
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR01IS03	SL	07-JUL-20 12:40:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000010

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-4
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS01	SL	08-JUL-20 07:50:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	98. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000011

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-5
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS02	SL	08-JUL-20 07:30:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	97. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000012

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-6
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR02IS03	SL	08-JUL-20 07:40:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	98. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000013

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-7
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS01	SL	10-JUL-20 08:10:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	96. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000014

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-8
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS02	SL	10-JUL-20 08:20:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	95. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 5000015

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Joe Witte
AECOM
12420 Milestone Center Drive
Germantown,MD 20876

Lab Sample ID: SN5719-9
Report Date: 28-JUL-20
Project: Former Small Arms Ranges - Camp O'Ryan
SDG: SN5719

Sample Description	Matrix	Date Sampled	Date Received
COR03IS03	SL	10-JUL-20 08:00:00	14-JUL-20

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	93. %	1		SW3540C	WG282141	20-JUL-20 08:54:00	SW3540C	17-JUL-20	JG		

Katahdin Analytical Services 500016

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jul 20 2020, 09:28 am
Batch: WG282141

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SN5719-1	SL	SAMP	17-JUL-20	1.3 g	20.0438 g	19.3303 g	19.3303 g	JG	20-JUL-20	96.1930	96. %		
SN5719-2	SL	SAMP	17-JUL-20	1.3 g	20.1065 g	19.4068 g	19.4068 g	JG	20-JUL-20	96.2790	96. %		
SN5719-3	SL	SAMP	17-JUL-20	1.3 g	20.136 g	19.403 g	19.403 g	JG	20-JUL-20	96.1080	96. %		
SN5719-4	SL	SAMP	17-JUL-20	1.3 g	22.355 g	21.8391 g	21.8391 g	JG	20-JUL-20	97.5500	98. %		
SN5719-5	SL	SAMP	17-JUL-20	1.3 g	20.0284 g	19.5588 g	19.5588 g	JG	20-JUL-20	97.4920	97. %		
SN5719-6	SL	SAMP	17-JUL-20	1.3 g	20.1327 g	19.695 g	19.695 g	JG	20-JUL-20	97.6760	98. %		
SN5719-7	SL	SAMP	17-JUL-20	1.3 g	19.2165 g	18.4375 g	18.4375 g	JG	20-JUL-20	95.6520	96. %		
SN5719-8	SL	SAMP	17-JUL-20	1.3 g	20.7213 g	19.7823 g	19.7823 g	JG	20-JUL-20	95.1650	95. %		
SN5719-9	SL	SAMP	17-JUL-20	1.3 g	17.914 g	16.792 g	16.792 g	JG	20-JUL-20	93.2470	93. %		
SN5835-1	SL	SAMP	17-JUL-20	1.3 g	14.3084 g	8.4141 g	8.4141 g	JG	20-JUL-20	54.6880	55. %		
WG282141-1	SL	MBLANK	17-JUL-20	1.3 g	5.8097 g	5.8085 g	5.8085 g	JG	20-JUL-20	99.9730	100 %		
WG282141-2	SL	LCS	17-JUL-20	1.3 g	6.2933 g	5.7933 g	5.7933 g	JG	20-JUL-20	89.9860	90. %	100	
WG282141-3	SL	DUP	17-JUL-20	1.3 g	20.2203 g	19.5176 g	19.5176 g	JG	20-JUL-20	96.2860	96. %		0
WG282141-4	SL	DUP	17-JUL-20	1.3 g	20.781 g	20.2877 g	20.2877 g	JG	20-JUL-20	97.4680	97. %		0
WG282141-5	SL	DUP	17-JUL-20	1.3 g	18.7597 g	17.6284 g	17.6284 g	JG	20-JUL-20	93.5200	94. %		0

Comments:

SN5719-1	MS/MSD
SN5719-5	MS/MSD
SN5719-9	MS/MSD
WG282141-1	SN5719-1
WG282141-2	SN5719-1
WG282141-3	SN5719-1
WG282141-4	SN5719-5
WG282141-5	SN5719-9

Entered by: JG Date: 7/20/20 Accepted by: Date: 07/20/20

Katahdin Analytical Services 5000018

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

20-JUL-20 09:12 AM

Work Group: WG282141 **Created:** 17-JUL-20
Department: 100 Wetlab Prep **Operator:** **Due:**

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR	Location
3	SN5719-1	[redacted]	TS	Solid	ENT	U	21-JUL-20		
5	SN5719-2		TS	Solid	ENT	U	21-JUL-20		
6	SN5719-3		TS	Solid	ENT	U	21-JUL-20		
7	SN5719-4		TS	Solid	ENT	U	22-JUL-20		
8	SN5719-5		TS	Solid	ENT	U	22-JUL-20		
10	SN5719-6		TS	Solid	ENT	U	22-JUL-20		
11	SN5719-7		TS	Solid	ENT	U	24-JUL-20		
12	SN5719-8		TS	Solid	ENT	U	24-JUL-20		
13	SN5719-9		TS	Solid	ENT	U	24-JUL-20		
15	SN5835-1		TS	Solid	ENT	U	28-JUL-20		100g Glass
1	WG282141-1	MBLANK	TS	Solid	ENT	U	17-JUL-20		
2	WG282141-2	LCS	TS	Solid	ENT	U	17-JUL-20		
4	WG282141-3	DUP	TS	Solid	ENT	U	17-JUL-20		
9	WG282141-4	DUP	TS	Solid	ENT	U	17-JUL-20		
14	WG282141-5	DUP	TS	Solid	ENT	U	17-JUL-20		

Comments:

SN5719-1	MS/MSD
SN5719-5	MS/MSD
SN5719-9	MS/MSD
WG282141-1	SN5719-1
WG282141-2	SN5719-1
WG282141-3	SN5719-1
WG282141-4	SN5719-5
WG282141-5	SN5719-9

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	Y / N
ANALYST IN:	JG		ANALYST OUT:	CD		In: ✓
DATE IN:	7/17/20		DATE OUT:	7/20/20		Out (TS): ✓
TIME IN:	11:15		TIME OUT:	7:15		Balance ID: Bal. 01
TEMP IN:	104°		TEMP OUT:	104°		S/N 1124016031

AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES
CAMP O'RYAN
SN6056

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

TABLE OF CONTENTS

Total number of pages: 1714

SAMPLE DATA PACKAGE		0000001		
Narrative	----------	0000002	to	0000007
Supporting Documents	----------	0000008	to	0000012
Chain of Custody Record	----------	0000013	to	0000014
Login Report	----------	0000015	to	0000020
SAMPLE DATA SUMMARY				
Report of Analytical Results	----------	A0000001	to	A0000249
GRAIN SIZE DATA		1000001		
Sample Data	----------	1000002	to	1000006
Raw Data	----------	1000007	to	1000009
METALS DATA		4000001		
Sample Data	----------	4000002	to	4000029
QC Summary Section	----------	4000030	to	4000222
Raw Data	----------	4000223	to	4001371
Logbooks and Supporting Documents	----------	4001372	to	4001379
CONVENTIONAL AND PHYSICAL DATA		5000001		
QC Summary	----------	5000002	to	5000005
Sample Data	----------	5000006	to	5000030
Raw Data	----------	5000031	to	5000057

SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
AECOM ENVIRONMENT
FORMER SMALL ARMS RANGES – CAMP O'RYAN
SN6056

Sample Receipt

The following samples were received on July 22, 2020 and were logged in under Katahdin Analytical Services work order number SN6056 for a hardcopy due date of August 17, 2020.

KATAHDIN Sample No.	AECOM Sample Identification
SN6056-1	COR04IS01
SN6056-2	COR04IS02
SN6056-3	COR04IS03
SN6056-4	COR04IS00
SN6056-5	COR05SED01A
SN6056-6	COR05SED02A
SN6056-7	COR05SED02B
SN6056-8	COR05SED03A
SN6056-9	COR05SED04A
SN6056-10	COR05SED05A
SN6056-11	COR05SED06A
SN6056-12	COR05SED07A
SN6056-13	COR05SED08A
SN6056-14	COR06SED01A
SN6056-15	COR06SED02A
SN6056-16	COR06SED02B
SN6056-17	COR06SED03A
SN6056-18	COR06SED04A
SN6056-19	COR06SED05A
SN6056-20	COR06SED06A
SN6056-21	COR06SED07A
SN6056-22	COR06SED08A
SN6056-24	COR05SED07A
SN6056-26	COR06SED07A

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Grain Size Analysis

The samples of Work Order SN6056 were analyzed in accordance with ASTM D422 version 63, (reapproved 2007) "Standard Test Method for Particle-Size Analysis of Soils", ASTM D2217 version 85 (reapproved 1998) "Standard Practice for Wet Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants", and/or for the specific methods listed below or on the Report of Analysis.

There were no protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples associated with Katahdin Work Order SN6056 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

ISM Soil Preparation (EPA Method 8330B)

Katahdin Sample Numbers SN6056-(1-3) are solid samples that were dried to a constant weight, sieved, then sub-sampled in accordance with the SW846 8330B preparation method prior to acid digestion.

Inductively-Coupled Plasma Mass Spectrometric Analysis (ICP-MS)

Solid-matrix Katahdin Sample Numbers SN6056-(5-17) were digested for ICP-MS analysis on 07/23/20 (QC Batch NG23IMS1) in accordance with USEPA Method 3050B. Per client request, SN6056-009 was prepared with duplicate matrix-spiked aliquots. This batch was also prepared with duplicate laboratory control samples.

Solid-matrix Katahdin Sample Numbers SN6056-(18-22) were digested for ICP-MS analysis on 07/27/20 (QC Batch NG27IMS1) in accordance with USEPA Method 3050B. Per client request, SN6056-018 was prepared with duplicate matrix spiked aliquots.

Solid-matrix Katahdin Sample Numbers SN6056-(1-3) were digested for ICP-MS analysis on 07/28/20 (QC Batch NG28IMS1) in accordance with USEPA Method 3050B.

Aqueous-matrix Katahdin Sample Number SN6056-4 was digested for ICP-MS analysis on 07/29/20 (QC Batch NG29IMW2) in accordance with USEPA Method 3010A.

ICP-MS analyses of Katahdin Work Order SN6056 sample digestates were performed using an Agilent 7800 ICP-MS spectrometer in accordance with USEPA Method 6020A. Results for all standards and samples are reported using the mean of 3 replicate measurements. All sample digestates were diluted by a factor of 5 during analysis to reduce mass interferences from chlorine, which is present in the digestates from the hydrochloric acid used in digesting the samples. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following exceptions:

The PQL run in analytical batch LNG24A was outside of laboratory acceptance criteria for copper. All associated samples were greater than ten times the failed value or less than one half the LOQ, so were accepted without corrective action.

The PQL run in analytical batch LNH03A was outside of laboratory acceptance criteria for zinc. All associated samples were greater than ten times the failed value, so were accepted without corrective action.

The CCBs at 21:26, 21:58, and 22:11 in analytical batch LNG24A were outside of laboratory acceptance criteria for lead. All associated samples were greater than ten times the failed value, so were accepted without corrective action.

The CCB at 15:45 in analytical batch LNG28B was outside of laboratory acceptance criteria for lead. All associated samples were greater than ten times the failed value, so were accepted without corrective action.

The ICSA in analytical batch LNG24A was outside of laboratory acceptance criteria for copper. All associated samples were greater than ten times the failed value, so were accepted without corrective action.

Internal standard recoveries for ICP-MS analyses can be found in the raw data section of the accompanying data package. The following table indicates which analytes are associated with each internal standard element.

Internal Standard Element	**Associated Analytes**
Lithium	Beryllium, Boron
Scandium	Sodium, Magnesium, Aluminum, Potassium, Calcium
Germanium or Yttrium	Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Zinc, Arsenic, Selenium, Silver, Cadmium, Strontium, Molybdenum
Terbium	Antimony, Barium, Tin, Tungsten
Bismuth	Lead, Thallium, Thorium, Uranium

Instrument tuning information can also be found in the raw data section in the reports labeled "USEPA Method Tune Report". For Method 6020A, the relative standard deviation was determined from 5 replicate measurements and the peak width was measured at 10% of the peak height.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Solid-matrix Katahdin Sample Number SN6056-(24, 26) were prepared for ICP analysis on 08/03/2020 (QC Batch NH03ICS2) in accordance with USEPA Draft Method 821/R-91-100 (Acid Volatile Sulfide / Simultaneously Extractable Metals).

ICP analyses of Katahdin Work Order SN6056 samples were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all applicable analytical run QC criteria were met.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Solid-matrix Katahdin Sample Number SN6056-(24, 26) were prepared for ICP analysis on 08/03/2020 (QC Batch NH03ICS2) in accordance with USEPA Draft Method 821/R-91-100 (Acid Volatile Sulfide / Simultaneously Extractable Metals). These aqueous-matrix aliquots of Katahdin Sample Numbers SN6056-(24, 26) were digested for mercury analysis on 08/13/20 (QC Batch NH13HGW1) in accordance with USEPA Method 7470A. The preparation blank associated with this batch, PBSNH03ICS2, was outside of laboratory acceptance criteria for mercury. Because all associated samples were less than one half the PQL, they were accepted without corrective action.

Mercury analyses of the Katahdin Work Order SN6056 sample digestates were performed using a Cetac M6100 automated mercury analyzer in accordance with USEPA Methods 7470A and 7471B. All samples were analyzed within holding times and all analytical run QC criteria were met.

Matrix QC Summary

The measured recovery of lead and antimony in one or both the matrix-spiked aliquots of Katahdin Sample Numbers SN6056-9 are outside laboratory acceptance criteria. For lead, this could be because the concentration in the sample is significantly higher than the spike added. Because the laboratory control sample was acceptable, no action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN6056-9 is outside project acceptance criteria for lead. Because the laboratory control sample is acceptable, no action was taken.

The measured recovery of copper, lead, and zinc in the post-digestion spiked aliquot of Katahdin Sample Number SN6056-9 is outside project acceptance criteria. For lead, copper, and zinc, this could be because the concentration in the sample is significantly higher than the spike added. Because the laboratory control sample is acceptable, no action was taken.

The serial dilution analyses of Katahdin Sample Numbers SN6056-9 are outside project acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for zinc. Because the laboratory control sample was acceptable, no action was taken.

The measured recovery of lead in both the matrix-spiked aliquots of Katahdin Sample Numbers SN6056-18 are outside laboratory acceptance criteria. For lead, this could be because the concentration in the sample is significantly higher than the spike added. Because the laboratory control sample was acceptable, no action was taken.

The relative percent difference between the matrix-spike duplicate analyses of Katahdin Sample Number SN6056-18 is within project acceptance criteria for all analytes.

The measured recovery of copper, lead, and zinc in the post-digestion spiked aliquot of Katahdin Sample Number SN6056-9 is outside project acceptance criteria. For lead, this could be because the concentration in the sample is significantly higher than the spike added. Because the serial dilution analyses were acceptable, no action was taken.

The serial dilution analyses of Katahdin Sample Numbers SN6056-18 are within project acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for all analytes.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted LOD is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SN6056 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

Analyses for acid volatile sulfide were performed according to "Draft Analytical Method for Determination of Acid Volatile Sulfide in Sediment", EPA 821/R-91-100, December 1991.

Analyses for total organic carbon in soil were performed according to "Determination of Total Organic Carbon in Sediment", Lloyd Kahn, USEPA Region II, 7/88.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met, with the following exceptions:

The relative percent difference (32%) between duplicate analyses of Katahdin Sample No. SN6056-9 for total solids is greater than the laboratory's acceptance limit of 20%.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond
082420

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client:	AECOM	KAS PM:	MM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Fedex
KAS Work Order#:	580560	KIMS Review By:	MM	Received By:	JCB
SDG #:		Cooler: 1 of 1		Date/Time Rec.:	7.22.20 1015

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 3.4 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Heather Manz

From: Witte, Joe <joe.witte@aecom.com>
Sent: Monday, August 3, 2020 1:03 PM
To: Heather Manz; Salvatore, Amibeth; Wallace, Meagen
Cc: Mike Flanders; Leslie Dimond; Greg Lull; Sara Colby
Subject: RE: SN6056-23 & 25 ignitability

Follow Up Flag: Follow up
Flag Status: Flagged

I'm sorry,

You are correct. We do not need the TCLP analysis for either COR05SED04A or COR06SED04A.

Joe Witte
Environmental Scientist, Remediation, DC Metro Region
D +1-301-944-3617 **(NEW)**
M +1-301-300-9873
joe.witte@aecom.com

AECOM
12420 Milestone Center Drive
Suite 150
Germantown, MD 20876, USA
T +1-301-250-2934 **(NEW)**
aecom.com

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From: Heather Manz <hmanz@katahdinlab.com>
Sent: Monday, August 3, 2020 12:55 PM
To: Witte, Joe <joe.witte@aecom.com>; Salvatore, Amibeth <amibeth.salvatore@aecom.com>; Wallace, Meagen <Meagen.Wallace@aecom.com>
Cc: Mike Flanders <mflanders@katahdinlab.com>; Leslie Dimond <ldimond@katahdinlab.com>; Greg Lull <glull@katahdinlab.com>; Sara Colby <scolby@katahdinlab.com>
Subject: [EXTERNAL] RE: SN6056-23 & 25 ignitability

Hi Joe,

In addition to COR01X39E, COR02X01TCLP, & COR03X01TCLP; samples COR05SED04A and COR06SED04A requested TCLP metals on the attached COC.

COR05SED04A requested TCLP metals and RCI, we are not able to perform the ignitability.

COR06SED04A requested just TCLP metals. This accidentally also got logged in for RCI. I will remove that and we will not report it.

Thanks

Heather

From: Witte, Joe <joe.witte@aecom.com>
Sent: Monday, August 3, 2020 12:46 PM
To: Heather Manz <hmanz@katahdinlab.com>; Salvatore, Amibeth <amibeth.salvatore@aecom.com>; Wallace, Meagen <Meagen.Wallace@aecom.com>
Cc: Mike Flanders <mflanders@katahdinlab.com>; Leslie Dimond <ldimond@katahdinlab.com>; Greg Lull <glull@katahdinlab.com>; Sara Colby <scolby@katahdinlab.com>
Subject: RE: SN6056-23 & 25 ignitability

Hi Heather,

That is fine. Per my email on July 28th, we do not want samples COR01X39E, COR02X01TCLP or COR03X01TCLP analyzed. Those are the only samples that would have received TCLP analysis.

Joe Witte
Environmental Scientist, Remediation, DC Metro Region
D +1-301-944-3617 **(NEW)**
M +1-301-300-9873
joe.witte@aecom.com

AECOM
12420 Milestone Center Drive
Suite 150
Germantown, MD 20876, USA
T +1-301-250-2934 **(NEW)**
aecom.com

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From: Heather Manz <hmanz@katahdinlab.com>
Sent: Monday, August 3, 2020 12:43 PM
To: Witte, Joe <joe.witte@aecom.com>; Salvatore, Amibeth <amibeth.salvatore@aecom.com>; Wallace, Meagen <Meagen.Wallace@aecom.com>
Cc: Mike Flanders <mflanders@katahdinlab.com>; Leslie Dimond <ldimond@katahdinlab.com>; Greg Lull <glull@katahdinlab.com>; Sara Colby <scolby@katahdinlab.com>
Subject: [EXTERNAL] SN6056-23 & 25 ignitability

Hi Joe,

The lab let me know that we do not have enough sample volume left to perform ignitability on samples SN6056-23 (COR05SED04A) and SN6056-25 (COR06SED04A).

Thank You,
Heather Manz

Project Manager
Katahdin Analytical Services
A Small Business Enterprise
DoD ELAP Accredited
600 Technology Way
Scarborough, Maine 04074

Heather Manz

Subject: FW: Camp O'Ryan SN5717 prelim data

From: Witte, Joe <joe.witte@aecom.com>
Sent: Tuesday, July 28, 2020 11:49 AM
To: Heather Manz <hmanz@katahdinlab.com>; Salvatore, Amibeth <amibeth.salvatore@aecom.com>
Cc: Mike Flanders <mflanders@katahdinlab.com>; Leslie Dimond <ldimond@katahdinlab.com>; Greg Lull <glull@katahdinlab.com>; Sara Colby <scolby@katahdinlab.com>; Li, Jennifer J (Germantown) <jennifer.j.li@aecom.com>
Subject: RE: Camp O'Ryan SN5717 prelim data

Hi Heather,

I have instructions for which Camp O'Ryan samples to analyze and which samples can be discarded. Sorry it took me a few days to get back to you, I just needed to make sure our whole team agreed.

- **COR01X39E** –SN5717-6 Do not analyze; you may discard. Please do not perform any further analysis, and please do not include any data you may have for this sample in our lab report.
- **COR02X01TCLP** – SN5717-11 Do not analyze; you may discard. Please do not perform any further analysis, and please do not include any data you may have for this sample in our lab report.
- **COR03X01TCLP** – SN5717-19 Do not analyze; you may discard. Please do not perform any further analysis, and please do not include any data you may have for this sample in our lab report.
- **COR01DB01A** – SN5717-3 Do not analyze; you may discard.
- **COR01DB01B** – SN5717-2 Do not analyze; you may discard.
- **COR03DB02A** – SN5717-16 Do not analyze; you may discard.
- **COR01DB02A** – SN5717-4 Please analyze for target metals.
- **COR02DB02A** – SN5717-10 Please analyze for target metals.
- **COR03DB01A** – SN5717-13 Please analyze for target metals.
- **COR03DB03A** – SN5717-17 Please analyze for target metals.

So that is 6 total samples we are asking not to be analyzed, and four total samples we are asking to be analyzed. Please let me know if you have any questions. I believe this takes care of all of our samples on hold, but if I am missing any, please let me know.

Thanks Heather,

Joe Witte
Environmental Scientist, Remediation, DC Metro Region
D +1-301-944-3617 **(NEW)**
M +1-301-300-9873
joe.witte@aecom.com

AECOM
12420 Milestone Center Drive
Suite 150
Germantown, MD 20876, USA
T +1-301-250-2934 **(NEW)**
aecom.com

Built to deliver a better world

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 2

Client: AECOM
Contact: Joe Witte Phone # 301-944-3617 Fax #
Amibeth Salvatore (703) 307-0558 ( )
Address: 12420 Milestone Center Dr City: Germantown State: MD Zip Code: 20876
Purchase Order # 60519685 Proj. Name / No.: SARs 6 Camp O'Ryan Katahdin Quote #
Bill (if different than above): same as above Address
Sampler (Print / Sign): Antonio Zarrelli / Antonio Zarrelli
Copies To: Joe.Witte@aecom.com Amibeth.Salvatore@aecom.com

LAB USE ONLY
WORK ORDER #: ~~SNS717~~ SN60560
KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ❒ FED EX ❒ UPS ❒ CLIENT
AIRBILL NO:
TEMP°C ❒ TEMP BLANK ❒ INTACT ❒ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. EPA 6020A Target Metals (Cu, Sb, Pb, Zn)	Filt. AVS/SEM	Filt. TOC & Total Solids	Filt. Grain Size	Filt. TCLP Metals reactivity, corrosivity, & flash point	Filt.	Filt.	Filt.	Filt.	Filt.	Notes
*	COR04IS01	7/20/20/0930	Soil	1	X										
*	COR04IS02	7/20/20/1000	Soil	1	X										
*	COR04IS03	7/20/20/1030	Soil	1	X										
	COR04IS00	7/21/20/1245	Water	1	X										Equipment Blank
	COR05SED01A	7/20/20/1238	Soil	1	X										
	COR05SED02A	7/20/20/1244	Soil	1	X										
	COR05SED02B	7/20/20/1245	Soil	1	X										
	COR05SED03A	7/20/20/1250	Soil	1	X										
■	COR05SED04A	7/20/20/1310	Soil	3	X				X						
	COR05SED05A	7/20/20/1315	Soil	1	X										
	COR05SED06A	7/20/20/1320	Soil	1	X										
	COR05SED07A	7/20/20/1325	Soil	3	X	X	X	X							
	COR05SED08A	7/20/20/1334	Soil	1	X										
		/													
		/													
		/													

COMMENTS
★ Do not Grind ISM Samples
■ Collect MS/~~MSD~~

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Antonio Zarrelli	7/21/20 1300	7.22.20 1015			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

0000013

Katahdin ANALYTICAL SERVICES

600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 2 of 2

Client	AECOM	Contact	Joe Witte / Amibeth Salvatore	Phone #	301-944-3617 / (703) 307-0358
Address	12420 Milestone Center	City	Germantown	State	MD
Zip Code	20876	Purchase Order #	60519685	Proj. Name / No.	SARs6 Camp O'Ryan
Katahdin Quote #		Bill (if different than above)	same as above	Address	
Sampler (Print / Sign)	Antonio Zarrelli	Copies To:	Joe.Witte@aecom.com; Amibeth.Salvatore@aecom.com		

LAB USE ONLY

WORK ORDER #: ~~SN5717~~ SN6056

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ❒ FED EX ❒ UPS ❒ CLIENT

AIRBILL NO:

TEMP°C ❒ TEMP BLANK ❒ INTACT ❒ NOT INTACT

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: EPA 6020A Target Metals (Cu,Sb,Pb,Zn) Filt. ❒Y ❒N	AVS/SEM Filt. ❒Y ❒N	TOC & Total Solids Filt. ❒Y ❒N	Grain Size Filt. ❒Y ❒N	TCLP Metals Filt. ❒Y ❒N
	COR06SED01A	7/20/20/1457	Soil	1	X				
	COR06SED02A	7/20/20/1501	Soil	1	X				
	COR06SED02B	7/20/20/1502	Soil	1	X				
	COR06SED03A	7/20/20/1506	Soil	1	X				
■	COR06SED04A	7/20/20/1510	Soil	3	X				X
	COR06SED05A	7/20/20/1518	Soil	1	X				
	COR06SED06A	7/20/20/1522	Soil	1	X				
	COR06SED07A	7/20/20/1525	Soil	3	X	X	X	X	
	COR06SED08A	7/20/20/1532	Soil	1	X				
		/							
		/							
		/							
		/							
		/							
		/							
		/							

COMMENTS

■ collect MS/MSD

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Antonio Zarrelli	7/21/20 1300	[signature] 7.22.20 1015			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

0000014

Login Number: SN6056

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Quote/Incoming: SMALLARMS-NGB

Primary Report Address:

Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Suite 400
Morrisville,NC 27560
naoum.tavantzis@aecom.com

Primary Invoice Address:

Accounts Payable
AECOM
PO Box 5604

Glen Allen,VA 23058-5604

Report CC Addresses:

Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	DoD QSM 5.1. "U" LOD. "J" flag between MDL and LOQ. SN6056-1, 2, 3 dry, sieve, & subsample, no grinding. Must report soils in mg/kg.
CHECK NO.	:	
CLIENT PO#	:	97532, Proj 60519685
CLIENT PROJECT MANAGE	:	Naoum Tavantzis
CONTRACT	:	W9133L-14-D-0001/006
COOLER TEMPERATURE	:	3.4
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	ERIS EDD & KAS153
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Former Small Arms Ranges - Camp O'Ryan
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	SDS needs all forms. Email final PDF & EDD to joe.witte@aecom.com, amibeth.salvatore@aecom.com, & Meagen.Wallace@aecom.com. Email invoice to USAPImaging@aecom.com & joe.witte@aecom.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	1

Login Number: SN6056

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN6056-1	COR04IS01	20-JUL-20 09:30	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MSISM-PREP	16-JAN-21			**Sample needs ISM prior to TS & metals.**
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	03-AUG-20	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-2	COR04IS02	20-JUL-20 10:00	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MSISM-PREP	16-JAN-21			**Sample needs ISM prior to TS & metals.**
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	03-AUG-20	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-3	COR04IS03	20-JUL-20 10:30	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MSISM-PREP	16-JAN-21			**Sample needs ISM prior to TS & metals.**
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	SW8330B-PREP	03-AUG-20	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-4	COR04IS00	21-JUL-20 12:45	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW3010MS-PREP	17-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-ANTIMONY	17-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-COPPER	17-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-LEAD	17-JAN-21	250mL Plastic+HNO3		
Aqueous	S	SW6020-ZINC	17-JAN-21	250mL Plastic+HNO3		

SN6056-5	COR05SED01A	20-JUL-20 12:38	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-6	COR05SED02A	20-JUL-20 12:44	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

Login Number: SN6056

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN6056-7	COR05SED02B	20-JUL-20 12:45	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-8	COR05SED03A	20-JUL-20 12:50	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-9	COR05SED04A	20-JUL-20 13:10	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-10	COR05SED05A	20-JUL-20 13:15	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-11	COR05SED06A	20-JUL-20 13:20	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-12	COR05SED07A	20-JUL-20 13:25	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	GRAINSIZE-SIEVE+HYD	17-AUG-20	8oz Glass		
Solid	S	LLOYDKAHN-TOCSOIL	03-AUG-20			
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

Login Number: SN6056

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN6056-13	COR05SED08A	20-JUL-20 13:34	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-14	COR06SED01A	20-JUL-20 14:57	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-15	COR06SED02A	20-JUL-20 15:01	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-16	COR06SED02B	20-JUL-20 15:02	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-17	COR06SED03A	20-JUL-20 15:06	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-18	COR06SED04A	20-JUL-20 15:10	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			**MS/MSD**
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

2:18 pm, Aug 03, 2020

Login Number: SN6056

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN6056-19	COR06SED05A	20-JUL-20 15:18	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-20	COR06SED06A	20-JUL-20 15:22	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-21	COR06SED07A	20-JUL-20 15:25	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	GRAINSIZE-SIEVE+HYD	17-AUG-20	8oz Glass		
Solid	S	LLOYDKAHN-TOCSOIL	03-AUG-20			
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-22	COR06SED08A	20-JUL-20 15:32	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW3050MS-PREP	16-JAN-21			
Solid	S	SW6020-ANTIMONY	16-JAN-21	4oz Glass		
Solid	S	SW6020-COPPER	16-JAN-21	4oz Glass		
Solid	S	SW6020-LEAD	16-JAN-21	4oz Glass		
Solid	S	SW6020-ZINC	16-JAN-21	4oz Glass		
Solid	S	TS	03-AUG-20			

SN6056-23	COR05SED04A	20-JUL-20 13:10	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW7.3.4-REAC CYANIDE	03-AUG-20	500mL P+ZnAc/NaOH		**Sample cancelled by client on 08/03/20, do not report. Not enough soil volume for IGN, did not perform.**
Solid	S	SW7.3.4-REAC SULFIDE	27-JUL-20	100g Glass		
Solid	S	SW9045C-PH SOIL	22-JUL-20	100g Glass		
Solid	P	TCLP-METALS				

SN6056-24	COR05SED07A	20-JUL-20 13:25	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	E821-AVS	03-AUG-20			**Use TS from SN6056-12**
Solid	P	E821-SEM				

E821-SEM -EXT SEM-ANTIMONY SEM-CADMIUM
SEM-COPPER SEM-LEAD SEM-MERCURY
SEM-NICKEL SEM-ZINC

2:18 pm, Aug 03, 2020

Solid	S	TS	03-AUG-20			

SN6056-25	COR06SED04A	20-JUL-20 15:10	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	TCLP-METALS				**Sample cancelled by client on 08/03/20, do not report.**

Login Number: SN6056

Quote/Incoming: SMALLARMS-NGB

Account: METCAL001 Web
AECOM Environment

Project: SMALLARMS-NGB

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SN6056-26	COR06SED07A	20-JUL-20 15:25	22-JUL-20			17-AUG-20	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	E821-AVS	03-AUG-20			**Use TS from SN6056-21**
Solid	P	E821-SEM				

E821-SEM -EXT, SEM-ANTIMONY, SEM-CADMIUM, SEM-COPPER, SEM-LEAD, SEM-MERCURY, SEM-NICKEL, SEM-ZINC

Solid	S	TS	03-AUG-20			

Total Samples: 26 ***Total Analyses: 149***

2:18 pm, Aug 03, 2020

SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR05SED07A
Lab Sample ID	SN6056-12

Date Received	07/22/20
Start Date/Time	07/24/20: 9:08
End Date/Time	07/30/20: 9:00

Sample Weight	Sample (g)
Sample Weight (wet)	131.7
Sample Weight (oven dried)	50.74

Date/Time in oven	07/28/20: 9:05
Date/Time out of oven	07/30/20: 8:15

% Moisture	61.47

Hydrometer Data

Serial Number	742340
Cal Date:	07/27/20
Low Temp C	19.30
Low Temp Reading	1.00300
High Temp	22.70
High Temp Reading	1.0025
Hyd Cal Slope	-0.000147
Hyd Cal Intercept	0.005838
Soil Gravity	2.650000

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	4.4
Sample <=#10	46.34
%Passing #10	91.33

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare	Pan+Sample	Sample	%Finer	Classification	Subclass
3”	75000	0.0	0.0	0.0	100	Gravel	
2”	50000	0.0	0.0	0.0	100	Gravel	
1.5”	37500	0.0	0.0	0.0	100	Gravel	
1”	25000	0.0	0.0	0.0	100	Gravel	
3/4”	19000	0.0	0.0	0.0	100	Gravel	
1/4”	6300	404.0	405.0	1.0	98.03	Gravel	
#4	4750	405.2	406.8	1.6	94.88	Gravel	
#10	2000	368.7	370.5	1.8	91.33	Sand	Coarse
#20	850	303.7	305.5	1.8	87.78	Sand	Medium
#40	425	269.8	272.2	2.4	83.05	Sand	Medium
#60	250	245.5	248.1	2.6	77.93	Sand	Fine
#80	180	246.0	248.1	2.1	73.79	Sand	Fine
#100	150	234.6	236.0	1.4	71.03	Sand	Fine
#200	75	226.0	231.5	5.5	60.19	Sand	Fine

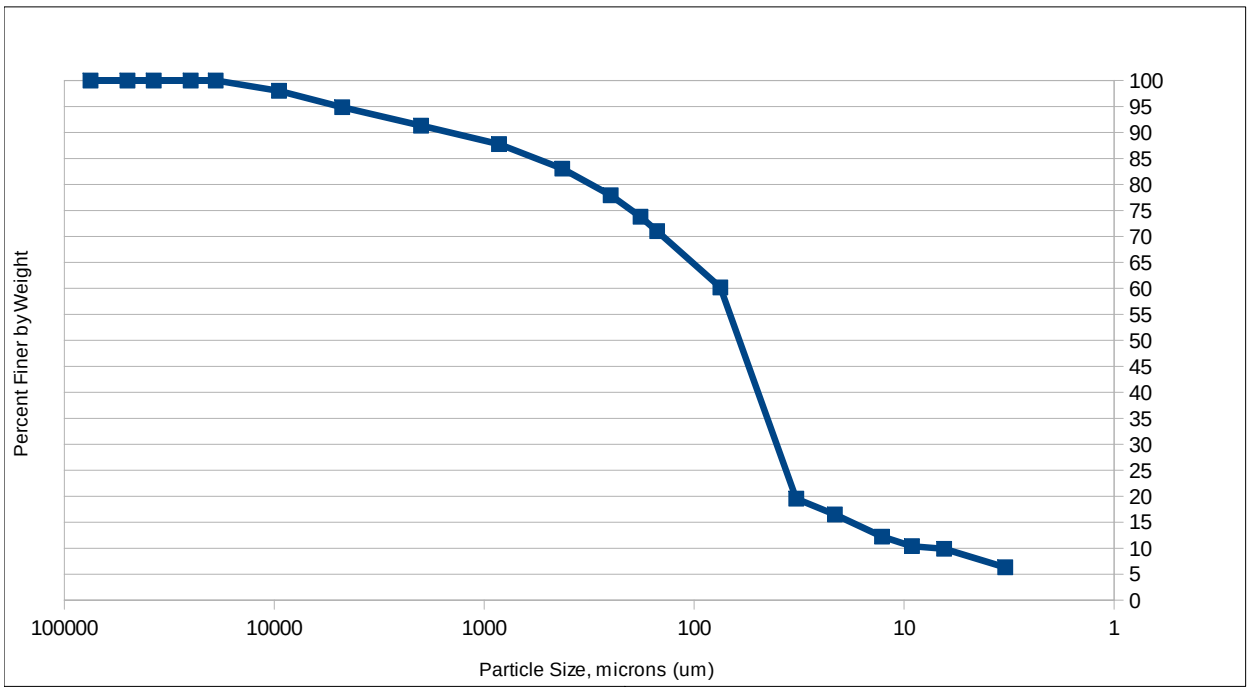
Silt/Clay Fraction (Hydrometer Test)

Time (min)	Actual Time	Spec. Gravity	Temp C	% Finer	Particle Size	Classification
2	2	1.0190	19.5	19.55	32.65	Silt
5	5	1.0165	19.5	16.50	21.37	Silt
15	15	1.0130	19.5	12.23	12.74	Silt
30	30	1.0115	19.5	10.40	9.18	Silt
60	60	1.0110	20	9.88	6.45	Silt
240	240	1.0080	20.5	6.31	3.30	Clay
1440	1440	1.0060	19.5	3.69	1.39	Clay

Gravel	5.12
Sand Coarse	3.55
Sand Medium	8.28
Sand Fine	22.86
Silt	52.53
Clay	7.66
Total =	100

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR05SED07A
Lab Sample ID	SN6056-12



Data		
Sample Fraction	Particle Size	%Passing
3”	75000	100
2”	50000	100
1.5”	37500	100
1”	25000	100
3/4”	19000	100
3/8”	9500	98.03
#4	4750	94.88
#10	2000	91.33
#20	850	87.78
#40	425	83.05
#60	250	77.93
#80	180	73.79
#100	150	71.03
#200	75	60.19
2	32.65	19.55
5	21.37	16.50
15	12.74	12.23
30	9.18	10.40
60	6.45	9.88
240	3.30	6.31
1440	1.39	3.69

Gravel	5.12
Sand Coarse	3.55
Sand Medium	8.28
Sand Fine	22.86
Silt	52.53
Clay	7.66

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR06SED07A
Lab Sample ID	SN6056-21

Date Received	07/22/20
Start Date/Time	07/24/20: 9:10
End Date/Time	07/30/20: 9:05

Sample Weight	Sample (g)
Sample Weight (wet)	141.4
Sample Weight (oven dried)	68.73

Date/Time in oven	07/28/20: 9:05
Date/Time out of oven	07/30/20: 8:15

% Moisture	51.4

Hydrometer Data

Serial Number	742340
Cal Date:	07/27/20
Low Temp C	19.30
Low Temp Reading	1.00300
High Temp	22.70
High Temp Reading	1.0025
Hyd Cal Slope	-0.000147
Hyd Cal Intercept	0.005838
Soil Gravity	2.650000

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	0
Sample <=#10	68.73
%Passing #10	100.00

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare	Pan+Sample	Sample	%Finer	Classification	Subclass
3”	75000	0.0	0.0	0.0	100	Gravel	
2”	50000	0.0	0.0	0.0	100	Gravel	
1.5”	37500	0.0	0.0	0.0	100	Gravel	
1”	25000	0.0	0.0	0.0	100	Gravel	
3/4”	19000	0.0	0.0	0.0	100	Gravel	
1/4”	6300	404.0	404.0	0.0	100.00	Gravel	
#4	4750	405.2	405.2	0.0	100.00	Gravel	
#10	2000	368.7	368.7	0.0	100.00	Sand	Coarse
#20	850	303.7	305.7	2.0	97.09	Sand	Medium
#40	425	269.8	271.4	1.6	94.76	Sand	Medium
#60	250	245.5	246.6	1.1	93.16	Sand	Fine
#80	180	246.0	246.8	0.8	92.00	Sand	Fine
#100	150	234.6	235.0	0.4	91.42	Sand	Fine
#200	75	226.0	228.0	2.0	88.51	Sand	Fine

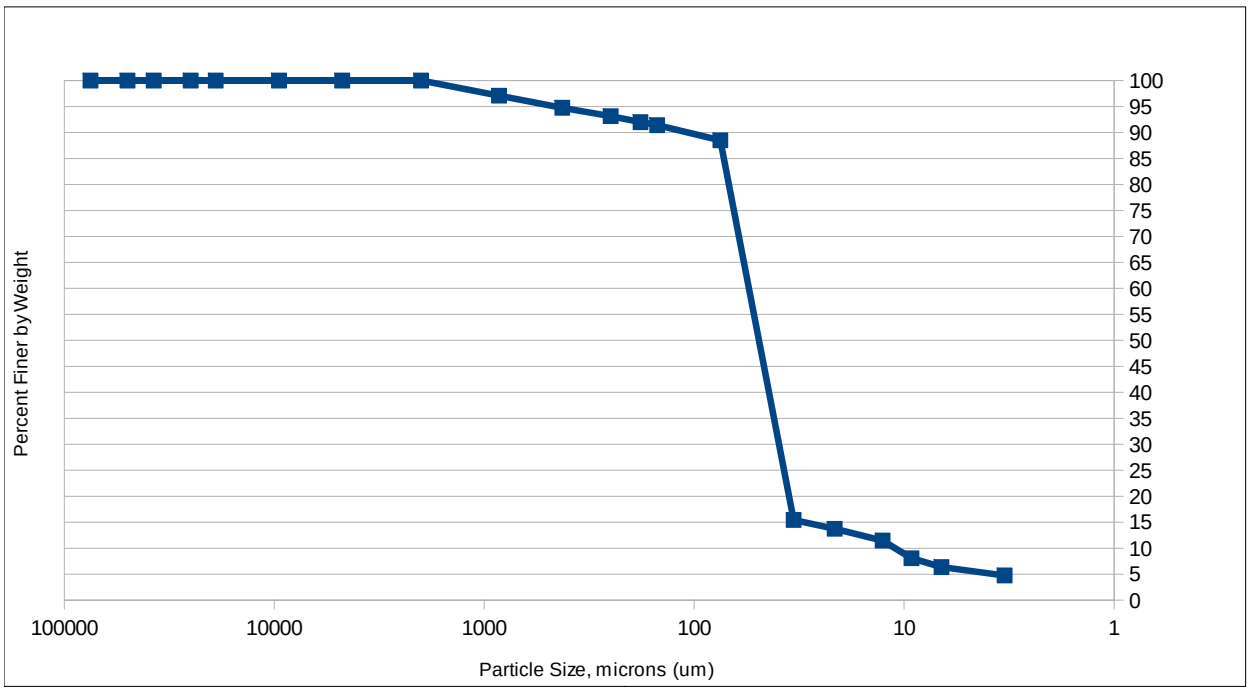
Silt/Clay Fraction (Hydrometer Test)

Time (min)	Actual Time	Spec. Gravity	Temp C	% Finer	Particle Size	Classification
2	2	1.0165	20	15.45	33.57	Silt
5	5	1.0150	20	13.75	21.41	Silt
15	15	1.0130	20	11.48	12.66	Silt
30	30	1.0100	20	8.07	9.22	Silt
60	60	1.0085	20	6.36	6.64	Silt
240	240	1.0070	20.5	4.74	3.32	Clay
1440	1440	1.0055	19.5	2.87	1.40	Clay

Gravel	0.00
Sand Coarse	0.00
Sand Medium	5.24
Sand Fine	6.26
Silt	82.53
Clay	5.98
Total =	100

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR06SED07A
Lab Sample ID	SN6056-21



Data		
Sample Fraction	Particle Size	%Passing
3”	75000	100
2”	50000	100
1.5”	37500	100
1”	25000	100
3/4”	19000	100
3/8”	9500	100.00
#4	4750	100.00
#10	2000	100.00
#20	850	97.09
#40	425	94.76
#60	250	93.16
#80	180	92.00
#100	150	91.42
#200	75	88.51
2	33.57	15.45
5	21.41	13.75
15	12.66	11.48
30	9.22	8.07
60	6.64	6.36
240	3.32	4.74
1440	1.40	2.87

Gravel	0.00
Sand Coarse	0.00
Sand Medium	5.24
Sand Fine	6.26
Silt	82.53
Clay	5.98

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS01

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 96.4 **Lab Sample ID:** SN6056-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.14			MS	5	0.10	0.021	0.051
7440-50-8	COPPER, TOTAL	17.0			MS	5	0.31	0.072	0.20
7439-92-1	LEAD, TOTAL	28.1			MS	5	0.10	0.0072	0.051
7440-66-6	ZINC, TOTAL	86.1			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS02

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 95.9 **Lab Sample ID:** SN6056-002

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	19.1			MS	5	0.30	0.069	0.20
7439-92-1	LEAD, TOTAL	21.1			MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	97.8			MS	5	0.98	0.13	0.79

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS03

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 96.1 **Lab Sample ID:** SN6056-003

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	16.0			MS	5	0.31	0.071	0.20
7439-92-1	LEAD, TOTAL	21.0			MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	87.2			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS00

Matrix: WATER **SDG Name:** SN6056

Percent Solids: 0.00 **Lab Sample ID:** SN6056-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.50	U		MS	5	1.0	0.055	0.50
7440-50-8	COPPER, TOTAL	0.95	J		MS	5	3.0	0.19	2.0
7439-92-1	LEAD, TOTAL	0.41	J		MS	5	1.0	0.075	0.50
7440-66-6	ZINC, TOTAL	8.0	U		MS	5	10	3.9	8.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED01A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 41.1 **Lab Sample ID:** SN6056-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.29			MS	5	0.24	0.047	0.12
7440-50-8	COPPER, TOTAL	20.0			MS	5	0.71	0.17	0.47
7439-92-1	LEAD, TOTAL	109			MS	5	0.24	0.017	0.12
7440-66-6	ZINC, TOTAL	76.0			MS	5	2.4	0.31	1.9

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED02A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 53.0 **Lab Sample ID:** SN6056-006

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	1.53			MS	5	0.18	0.036	0.091
7440-50-8	COPPER, TOTAL	26.8			MS	5	0.54	0.13	0.36
7439-92-1	LEAD, TOTAL	177			MS	5	0.18	0.013	0.091
7440-66-6	ZINC, TOTAL	176			MS	5	1.8	0.24	1.4

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED02B

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 58.4 **Lab Sample ID:** SN6056-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.31			MS	5	0.12	0.024	0.061
7440-50-8	COPPER, TOTAL	33.6			MS	5	0.37	0.086	0.24
7439-92-1	LEAD, TOTAL	234			MS	5	0.12	0.0086	0.061
7440-66-6	ZINC, TOTAL	115			MS	5	1.2	0.16	0.98

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED03A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 18.4 **Lab Sample ID:** SN6056-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	6.38			MS	5	0.53	0.11	0.27
7440-50-8	COPPER, TOTAL	30.0			MS	5	1.6	0.37	1.1
7439-92-1	LEAD, TOTAL	918			MS	5	0.53	0.037	0.27
7440-66-6	ZINC, TOTAL	337			MS	5	5.3	0.69	4.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.47		N	MS	5	0.29	0.058	0.14
7440-50-8	COPPER, TOTAL	45.2		A	MS	5	0.87	0.20	0.58
7439-92-1	LEAD, TOTAL	686		N*A	MS	5	0.29	0.020	0.14
7440-66-6	ZINC, TOTAL	301		EA	MS	5	2.9	0.38	2.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED05A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.3 **Lab Sample ID:** SN6056-010

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	4.94			MS	5	0.65	0.13	0.32
7440-50-8	COPPER, TOTAL	67.5			MS	5	2.0	0.46	1.3
7439-92-1	LEAD, TOTAL	690			MS	5	0.65	0.046	0.32
7440-66-6	ZINC, TOTAL	314			MS	5	6.5	0.85	5.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED06A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 65.2 **Lab Sample ID:** SN6056-011

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.22			MS	5	0.15	0.030	0.076
7440-50-8	COPPER, TOTAL	32.7			MS	5	0.46	0.11	0.30
7439-92-1	LEAD, TOTAL	431			MS	5	0.15	0.011	0.076
7440-66-6	ZINC, TOTAL	61.8			MS	5	1.5	0.20	1.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 38.5 **Lab Sample ID:** SN6056-012

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	19.8			MS	5	0.24	0.049	0.12
7440-50-8	COPPER, TOTAL	124			MS	5	0.73	0.17	0.48
7439-92-1	LEAD, TOTAL	2780			MS	50	2.4	0.17	1.2
7440-66-6	ZINC, TOTAL	224			MS	5	2.4	0.32	1.9

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED08A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 20.6 **Lab Sample ID:** SN6056-013

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	11.2			MS	5	0.48	0.096	0.24
7440-50-8	COPPER, TOTAL	80.1			MS	5	1.4	0.34	0.96
7439-92-1	LEAD, TOTAL	412			MS	5	0.48	0.034	0.24
7440-66-6	ZINC, TOTAL	348			MS	5	4.8	0.63	3.8

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED01A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 45.7 **Lab Sample ID:** SN6056-014

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.14	J		MS	5	0.18	0.036	0.089
7440-50-8	COPPER, TOTAL	7.67			MS	5	0.53	0.12	0.36
7439-92-1	LEAD, TOTAL	25.5			MS	5	0.18	0.012	0.089
7440-66-6	ZINC, TOTAL	36.3			MS	5	1.8	0.23	1.4

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED02A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.3 **Lab Sample ID:** SN6056-015

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.80	J		MS	5	0.82	0.16	0.41
7440-50-8	COPPER, TOTAL	35.0			MS	5	2.5	0.58	1.6
7439-92-1	LEAD, TOTAL	153			MS	5	0.82	0.058	0.41
7440-66-6	ZINC, TOTAL	80.4			MS	5	8.2	1.1	6.6

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED02B

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 7.89 **Lab Sample ID:** SN6056-016

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	1.2			MS	5	1.2	0.24	0.60
7440-50-8	COPPER, TOTAL	41.3			MS	5	3.6	0.85	2.4
7439-92-1	LEAD, TOTAL	153			MS	5	1.2	0.085	0.60
7440-66-6	ZINC, TOTAL	209			MS	5	12	1.6	9.7

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED03A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 7.90 **Lab Sample ID:** SN6056-017

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.81	J		MS	5	1.2	0.25	0.63
7440-50-8	COPPER, TOTAL	34.2			MS	5	3.8	0.88	2.5
7439-92-1	LEAD, TOTAL	119			MS	5	1.2	0.088	0.63
7440-66-6	ZINC, TOTAL	180			MS	5	12	1.6	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	1.70			MS	5	0.66	0.13	0.33
7440-50-8	COPPER, TOTAL	39.6		A	MS	5	2.0	0.46	1.3
7439-92-1	LEAD, TOTAL	154		N*A	MS	5	0.66	0.046	0.33
7440-66-6	ZINC, TOTAL	111		A	MS	5	6.6	0.86	5.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED05A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 21.0 **Lab Sample ID:** SN6056-019

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.37			MS	5	0.37	0.074	0.18
7440-50-8	COPPER, TOTAL	19.6			MS	5	1.1	0.26	0.74
7439-92-1	LEAD, TOTAL	36.0			MS	5	0.37	0.026	0.18
7440-66-6	ZINC, TOTAL	211			MS	5	3.7	0.48	3.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED06A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.8 **Lab Sample ID:** SN6056-020

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.38	J		MS	5	0.64	0.13	0.32
7440-50-8	COPPER, TOTAL	23.9			MS	5	1.9	0.45	1.3
7439-92-1	LEAD, TOTAL	73.2			MS	5	0.64	0.045	0.32
7440-66-6	ZINC, TOTAL	120			MS	5	6.4	0.83	5.1

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 48.6 **Lab Sample ID:** SN6056-021

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.17			MS	5	0.15	0.030	0.074
7440-50-8	COPPER, TOTAL	8.75			MS	5	0.45	0.10	0.30
7439-92-1	LEAD, TOTAL	27.0			MS	5	0.15	0.010	0.074
7440-66-6	ZINC, TOTAL	72.4			MS	5	1.5	0.19	1.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED08A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 65.2 **Lab Sample ID:** SN6056-022

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.14			MS	5	0.12	0.025	0.061
7440-50-8	COPPER, TOTAL	10.4			MS	5	0.37	0.086	0.24
7439-92-1	LEAD, TOTAL	32.3			MS	5	0.12	0.0086	0.061
7440-66-6	ZINC, TOTAL	60.8			MS	5	1.2	0.16	0.98

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 38.5 **Lab Sample ID:** SN6056-024

Concentration Units : umole/g drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, SEM	0.00549			P	1	0.0027	0.00024	0.0016
7440-43-9	CADMIUM, SEM	0.00199			P	1	0.0018	0.000029	0.0011
7440-50-8	COPPER, SEM	0.203			P	1	0.016	0.0010	0.0064
7439-92-1	LEAD, SEM	1.02			P	1	0.00096	0.00017	0.00077
7439-97-6	MERCURY, SEM	0.000021	U	B	CV	1	0.000041	0.0000065	0.000021
7440-02-0	NICKEL, SEM	0.0296			P	1	0.0070	0.00031	0.0027
7440-66-6	ZINC, SEM	1.38			P	1	0.012	0.0011	0.0063

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 48.6 **Lab Sample ID:** SN6056-026

Concentration Units : umole/g drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, SEM	0.00045	J		P	1	0.0026	0.00023	0.0016
7440-43-9	CADMIUM, SEM	0.00312			P	1	0.0018	0.000028	0.0011
7440-50-8	COPPER, SEM	0.0736			P	1	0.016	0.0010	0.0063
7439-92-1	LEAD, SEM	0.114			P	1	0.00096	0.00017	0.00077
7439-97-6	MERCURY, SEM	0.0000074	J	B	CV	1	0.000040	0.0000060	0.000020
7440-02-0	NICKEL, SEM	0.0369			P	1	0.0068	0.00031	0.0027
7440-66-6	ZINC, SEM	0.577			P	1	0.012	0.0010	0.0061

Comments:

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: HNH13C Aug 13, 2020 14:23

Analyte	True	Found	%R (1)
MERCURY	6.0	5.85	97.5

SAMPLE: CCV

File: HNH13C Aug 13, 2020 14:30

Analyte	True	Found	%R (1)
MERCURY	5.0	4.96	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: HNH13C Aug 13, 2020 15:21

Analyte	True	Found	%R (1)
MERCURY	5.0	5.18	103.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: INH06A Aug 06, 2020 12:47

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10580.00	105.8
ANTIMONY	400.0	405.20	101.3
CADMIUM	400.0	407.10	101.8
CALCIUM	10000.0	10540.00	105.4
COPPER	400.0	408.70	102.2
IRON	10000.0	10510.00	105.1
LEAD	400.0	410.40	102.6
MAGNESIUM	10000.0	10350.00	103.5
NICKEL	400.0	412.10	103.0
ZINC	400.0	408.00	102.0

SAMPLE: CCV

File: INH06A Aug 06, 2020 13:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13270.00	106.2
ANTIMONY	500.0	513.00	102.6
CADMIUM	500.0	513.30	102.7
CALCIUM	12500.0	13280.00	106.2
COPPER	500.0	524.90	105.0
IRON	12500.0	13320.00	106.6
LEAD	500.0	519.10	103.8
MAGNESIUM	12500.0	12790.00	102.3
NICKEL	500.0	516.00	103.2
ZINC	500.0	513.40	102.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH06A Aug 06, 2020 13:34

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12950.00	103.6
ANTIMONY	500.0	511.20	102.2
CADMIUM	500.0	512.30	102.5
CALCIUM	12500.0	12960.00	103.7
COPPER	500.0	520.50	104.1
IRON	12500.0	13070.00	104.6
LEAD	500.0	518.00	103.6
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	514.80	103.0
ZINC	500.0	512.00	102.4

SAMPLE: CCV

File: INH06A Aug 06, 2020 14:26

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13090.00	104.7
ANTIMONY	500.0	508.60	101.7
CADMIUM	500.0	512.40	102.5
CALCIUM	12500.0	13070.00	104.6
COPPER	500.0	521.00	104.2
IRON	12500.0	13170.00	105.4
LEAD	500.0	518.10	103.6
MAGNESIUM	12500.0	12760.00	102.1
NICKEL	500.0	515.40	103.1
ZINC	500.0	511.70	102.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH06A Aug 06, 2020 15:19

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13050.00	104.4
ANTIMONY	500.0	515.00	103.0
CADMIUM	500.0	516.30	103.3
CALCIUM	12500.0	13000.00	104.0
COPPER	500.0	521.30	104.3
IRON	12500.0	13080.00	104.6
LEAD	500.0	521.50	104.3
MAGNESIUM	12500.0	12850.00	102.8
NICKEL	500.0	518.80	103.8
ZINC	500.0	514.30	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: INH07A Aug 07, 2020 17:20

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10070.00	100.7
ANTIMONY	400.0	399.00	99.8
CADMIUM	400.0	401.60	100.4
CALCIUM	10000.0	10160.00	101.6
COPPER	400.0	398.20	99.5
IRON	10000.0	10080.00	100.8
LEAD	400.0	406.20	101.6
MAGNESIUM	10000.0	10240.00	102.4
NICKEL	400.0	406.40	101.6
ZINC	400.0	402.50	100.6

SAMPLE: CCV

File: INH07A Aug 07, 2020 17:44

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12510.00	100.1
ANTIMONY	500.0	499.70	99.9
CADMIUM	500.0	499.60	99.9
CALCIUM	12500.0	12570.00	100.6
COPPER	500.0	503.30	100.7
IRON	12500.0	12620.00	101.0
LEAD	500.0	505.10	101.0
MAGNESIUM	12500.0	12510.00	100.1
NICKEL	500.0	503.10	100.6
ZINC	500.0	498.70	99.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH07A Aug 07, 2020 18:07

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11940.00	95.5
ANTIMONY	500.0	480.50	96.1
CADMIUM	500.0	483.70	96.7
CALCIUM	12500.0	11960.00	95.7
COPPER	500.0	481.00	96.2
IRON	12500.0	12020.00	96.2
LEAD	500.0	490.00	98.0
MAGNESIUM	12500.0	12240.00	97.9
NICKEL	500.0	487.90	97.6
ZINC	500.0	482.30	96.5

SAMPLE: CCV

File: INH07A Aug 07, 2020 19:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12250.00	98.0
ANTIMONY	500.0	482.50	96.5
CADMIUM	500.0	485.60	97.1
CALCIUM	12500.0	12220.00	97.8
COPPER	500.0	479.90	96.0
IRON	12500.0	12190.00	97.5
LEAD	500.0	493.80	98.8
MAGNESIUM	12500.0	12510.00	100.1
NICKEL	500.0	492.40	98.5
ZINC	500.0	485.70	97.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH07A Aug 07, 2020 20:01

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11970.00	95.8
ANTIMONY	500.0	469.20	93.8
CADMIUM	500.0	473.00	94.6
CALCIUM	12500.0	11960.00	95.7
COPPER	500.0	468.30	93.7
IRON	12500.0	11900.00	95.2
LEAD	500.0	482.30	96.5
MAGNESIUM	12500.0	12360.00	98.9
NICKEL	500.0	481.20	96.2
ZINC	500.0	473.00	94.6

SAMPLE: CCV

File: INH07A Aug 07, 2020 20:54

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11880.00	95.0
ANTIMONY	500.0	464.10	92.8
CADMIUM	500.0	468.80	93.8
CALCIUM	12500.0	11890.00	95.1
COPPER	500.0	457.80	91.6
IRON	12500.0	11870.00	95.0
LEAD	500.0	478.60	95.7
MAGNESIUM	12500.0	12380.00	99.0
NICKEL	500.0	476.80	95.4
ZINC	500.0	468.40	93.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG24A Jul 24, 2020 17:19

Analyte	True	Found	%R (1)
ALUMINUM	400.0	391.94	98.0
ANTIMONY	20.0	19.69	98.5
CALCIUM	4000.0	3973.95	99.3
COPPER	20.0	20.52	102.6
IRON	4000.0	3948.94	98.7
LEAD	20.0	19.83	99.1
MAGNESIUM	4000.0	4025.92	100.6
MOLYBDENUM	40.0	40.06	100.2
POTASSIUM	4000.0	4014.47	100.4
SODIUM	4000.0	4100.39	102.5
ZINC	20.0	20.16	100.8

SAMPLE: CCV

File: LNG24A Jul 24, 2020 17:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.29	97.1
ANTIMONY	25.0	24.33	97.3
CALCIUM	5000.0	4787.56	95.8
COPPER	25.0	25.10	100.4
IRON	5000.0	4840.93	96.8
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4793.15	95.9
MOLYBDENUM	25.0	24.88	99.5
POTASSIUM	5000.0	4782.74	95.7
SODIUM	5000.0	4958.05	99.2
ZINC	25.0	24.53	98.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.70	95.9
ANTIMONY	25.0	23.34	93.4
CALCIUM	5000.0	4880.97	97.6
COPPER	25.0	25.10	100.4
IRON	5000.0	4863.52	97.3
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4976.93	99.5
MOLYBDENUM	25.0	25.20	100.8
POTASSIUM	5000.0	4813.51	96.3
SODIUM	5000.0	5152.45	103.0
ZINC	25.0	25.28	101.1

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.85	96.6
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4826.83	96.5
COPPER	25.0	24.80	99.2
IRON	5000.0	4765.73	95.3
LEAD	25.0	23.77	95.1
MAGNESIUM	5000.0	4900.34	98.0
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4796.74	95.9
SODIUM	5000.0	5095.64	101.9
ZINC	25.0	25.29	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.79	94.2
ANTIMONY	25.0	23.20	92.8
CALCIUM	5000.0	4835.68	96.7
COPPER	25.0	25.13	100.5
IRON	5000.0	4804.85	96.1
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4970.75	99.4
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4840.66	96.8
SODIUM	5000.0	5169.95	103.4
ZINC	25.0	25.59	102.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.02	94.6
ANTIMONY	25.0	23.73	94.9
CALCIUM	5000.0	4870.24	97.4
COPPER	25.0	24.95	99.8
IRON	5000.0	4816.00	96.3
LEAD	25.0	24.93	99.7
MAGNESIUM	5000.0	5018.00	100.4
MOLYBDENUM	25.0	25.48	101.9
POTASSIUM	5000.0	4786.29	95.7
SODIUM	5000.0	5237.15	104.7
ZINC	25.0	25.63	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 20:19

Analyte	True	Found	%R (1)
ALUMINUM	500.0	489.04	97.8
ANTIMONY	25.0	22.67	90.7
CALCIUM	5000.0	4939.48	98.8
COPPER	25.0	25.23	100.9
IRON	5000.0	4827.54	96.6
LEAD	25.0	23.61	94.4
MAGNESIUM	5000.0	5079.92	101.6
MOLYBDENUM	25.0	25.55	102.2
POTASSIUM	5000.0	4879.18	97.6
SODIUM	5000.0	5248.51	105.0
ZINC	25.0	26.60	106.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 20:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.11	97.2
ANTIMONY	25.0	24.10	96.4
CALCIUM	5000.0	4844.79	96.9
COPPER	25.0	25.04	100.2
IRON	5000.0	4770.77	95.4
LEAD	25.0	25.00	100.0
MAGNESIUM	5000.0	5063.72	101.3
MOLYBDENUM	25.0	25.42	101.7
POTASSIUM	5000.0	4853.43	97.1
SODIUM	5000.0	5207.42	104.1
ZINC	25.0	26.43	105.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 21:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.01	96.2
ANTIMONY	25.0	23.93	95.7
CALCIUM	5000.0	4905.80	98.1
COPPER	25.0	25.50	102.0
IRON	5000.0	4861.83	97.2
LEAD	25.0	25.11	100.4
MAGNESIUM	5000.0	4990.29	99.8
MOLYBDENUM	25.0	26.00	104.0
POTASSIUM	5000.0	4812.53	96.3
SODIUM	5000.0	5139.96	102.8
ZINC	25.0	25.58	102.3

SAMPLE: CCV

File: LNG24A Jul 24, 2020 21:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.19	98.4
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4872.73	97.5
COPPER	25.0	24.95	99.8
IRON	5000.0	4825.81	96.5
LEAD	25.0	25.07	100.3
MAGNESIUM	5000.0	4955.76	99.1
MOLYBDENUM	25.0	25.62	102.5
POTASSIUM	5000.0	4826.96	96.5
SODIUM	5000.0	5093.96	101.9
ZINC	25.0	24.85	99.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 22:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.60	96.3
ANTIMONY	25.0	23.03	92.1
CALCIUM	5000.0	4843.11	96.9
COPPER	25.0	25.27	101.1
IRON	5000.0	4787.07	95.7
LEAD	25.0	24.07	96.3
MAGNESIUM	5000.0	4978.36	99.6
MOLYBDENUM	25.0	25.69	102.8
POTASSIUM	5000.0	4807.82	96.2
SODIUM	5000.0	5137.39	102.7
ZINC	25.0	25.47	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG27A Jul 27, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.37	92.8
CALCIUM	4000.0	4024.59	100.6
COPPER	20.0	20.22	101.1
IRON	4000.0	4035.38	100.9
LEAD	20.0	20.32	101.6
MAGNESIUM	4000.0	3955.83	98.9
MOLYBDENUM	40.0	39.82	99.6
POTASSIUM	4000.0	3935.04	98.4
SODIUM	4000.0	4031.58	100.8
ZINC	20.0	20.85	104.3

SAMPLE: CCV

File: LNG27A Jul 27, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.45	95.7
CALCIUM	5000.0	4897.84	98.0
COPPER	25.0	25.06	100.2
IRON	5000.0	4949.13	99.0
LEAD	25.0	23.90	95.6
MAGNESIUM	5000.0	4844.99	96.9
MOLYBDENUM	25.0	25.00	100.0
POTASSIUM	5000.0	4849.53	97.0
SODIUM	5000.0	5007.64	100.2
ZINC	25.0	25.21	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.68	93.7
CALCIUM	5000.0	4911.47	98.2
COPPER	25.0	24.77	99.1
IRON	5000.0	4893.39	97.9
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4923.79	98.5
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	4803.62	96.1
SODIUM	5000.0	5086.07	101.7
ZINC	25.0	24.92	99.7

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.15	93.2
CALCIUM	5000.0	4947.54	99.0
COPPER	25.0	24.86	99.4
IRON	5000.0	4931.12	98.6
LEAD	25.0	24.61	98.4
MAGNESIUM	5000.0	4938.59	98.8
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4770.07	95.4
SODIUM	5000.0	5097.36	101.9
ZINC	25.0	24.48	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.32	93.3
CALCIUM	5000.0	4903.88	98.1
COPPER	25.0	24.84	99.4
IRON	5000.0	4828.46	96.6
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	5000.00	100.0
MOLYBDENUM	25.0	24.94	99.8
POTASSIUM	5000.0	4801.27	96.0
SODIUM	5000.0	5288.90	105.8
ZINC	25.0	24.78	99.1

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.85	96.2
CALCIUM	5000.0	4883.23	97.7
COPPER	25.0	25.07	100.3
IRON	5000.0	4889.59	97.8
LEAD	25.0	23.71	94.8
MAGNESIUM	5000.0	4992.98	99.9
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	4795.56	95.9
SODIUM	5000.0	5076.79	101.5
ZINC	25.0	24.64	98.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 19:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.33	93.3
CALCIUM	5000.0	4964.32	99.3
COPPER	25.0	24.79	99.2
IRON	5000.0	4901.98	98.0
LEAD	25.0	24.73	98.9
MAGNESIUM	5000.0	4881.66	97.6
MOLYBDENUM	25.0	25.15	100.6
POTASSIUM	5000.0	4822.52	96.5
SODIUM	5000.0	4992.11	99.8
ZINC	25.0	25.32	101.3

SAMPLE: CCV

File: LNG27A Jul 27, 2020 20:02

Analyte	True	Found	%R (1)
ALUMINUM	500.0	469.51	93.9
CALCIUM	5000.0	4919.82	98.4
COPPER	25.0	24.84	99.4
IRON	5000.0	4847.04	96.9
LEAD	25.0	23.34	93.4
MAGNESIUM	5000.0	4912.16	98.2
MOLYBDENUM	25.0	24.72	98.9
POTASSIUM	5000.0	4819.57	96.4
SODIUM	5000.0	5013.31	100.3
ZINC	25.0	24.79	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 20:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.40	96.3
CALCIUM	5000.0	5007.88	100.2
COPPER	25.0	25.71	102.8
IRON	5000.0	5163.22	103.3
LEAD	25.0	22.96	91.8
MAGNESIUM	5000.0	4999.88	100.0
MOLYBDENUM	25.0	24.70	98.8
POTASSIUM	5000.0	4960.86	99.2
SODIUM	5000.0	9817.94	196.4•
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNG27A Jul 27, 2020 21:06

Analyte	True	Found	%R (1)
ALUMINUM	500.0	467.18	93.4
CALCIUM	5000.0	4969.81	99.4
COPPER	25.0	25.60	102.4
IRON	5000.0	5035.28	100.7
LEAD	25.0	24.20	96.8
MAGNESIUM	5000.0	5016.51	100.3
MOLYBDENUM	25.0	24.97	99.9
POTASSIUM	5000.0	4866.99	97.3
SODIUM	5000.0	6082.59	121.7•
ZINC	25.0	25.88	103.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 21:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.14	97.2
CALCIUM	5000.0	5070.19	101.4
COPPER	25.0	26.20	104.8
IRON	5000.0	5119.47	102.4
LEAD	25.0	23.65	94.6
MAGNESIUM	5000.0	5133.71	102.7
MOLYBDENUM	25.0	25.61	102.4
POTASSIUM	5000.0	4938.55	98.8
SODIUM	5000.0	5693.69	113.9•
ZINC	25.0	26.11	104.4

SAMPLE: CCV

File: LNG27A Jul 27, 2020 22:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	464.71	92.9
CALCIUM	5000.0	4992.92	99.9
COPPER	25.0	25.58	102.3
IRON	5000.0	4998.53	100.0
LEAD	25.0	24.19	96.8
MAGNESIUM	5000.0	5012.14	100.2
MOLYBDENUM	25.0	25.27	101.1
POTASSIUM	5000.0	4838.53	96.8
SODIUM	5000.0	5441.27	108.8
ZINC	25.0	24.58	98.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 22:41

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.10	95.6
CALCIUM	5000.0	4911.27	98.2
COPPER	25.0	25.69	102.8
IRON	5000.0	4912.43	98.2
LEAD	25.0	23.35	93.4
MAGNESIUM	5000.0	5028.30	100.6
MOLYBDENUM	25.0	25.22	100.9
POTASSIUM	5000.0	4925.58	98.5
SODIUM	5000.0	5378.06	107.6
ZINC	25.0	25.29	101.2

SAMPLE: CCV

File: LNG27A Jul 27, 2020 23:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.50	95.1
CALCIUM	5000.0	4970.59	99.4
COPPER	25.0	25.92	103.7
IRON	5000.0	4978.15	99.6
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	5037.72	100.8
MOLYBDENUM	25.0	25.68	102.7
POTASSIUM	5000.0	4894.48	97.9
SODIUM	5000.0	5336.70	106.7
ZINC	25.0	25.65	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 23:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.21	95.0
CALCIUM	5000.0	4903.02	98.1
COPPER	25.0	25.37	101.5
IRON	5000.0	4867.97	97.4
LEAD	25.0	24.00	96.0
MAGNESIUM	5000.0	4975.55	99.5
MOLYBDENUM	25.0	25.53	102.1
POTASSIUM	5000.0	4852.74	97.1
SODIUM	5000.0	5263.36	105.3
ZINC	25.0	25.68	102.7

SAMPLE: CCV

File: LNG27A Jul 28, 2020 00:17

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.38	95.3
CALCIUM	5000.0	4884.36	97.7
COPPER	25.0	26.20	104.8
IRON	5000.0	4892.67	97.9
LEAD	25.0	24.62	98.5
MAGNESIUM	5000.0	5011.80	100.2
MOLYBDENUM	25.0	26.29	105.2
POTASSIUM	5000.0	4889.40	97.8
SODIUM	5000.0	5251.65	105.0
ZINC	25.0	26.17	104.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 28, 2020 00:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.67	93.3
CALCIUM	5000.0	4966.44	99.3
COPPER	25.0	25.71	102.8
IRON	5000.0	4916.18	98.3
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4971.58	99.4
MOLYBDENUM	25.0	25.62	102.5
POTASSIUM	5000.0	4844.04	96.9
SODIUM	5000.0	5204.01	104.1
ZINC	25.0	26.06	104.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG28B Jul 28, 2020 12:39

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.24	95.3
ANTIMONY	20.0	19.98	99.9
CALCIUM	4000.0	3955.47	98.9
IRON	4000.0	3968.37	99.2
LEAD	20.0	20.08	100.4
MAGNESIUM	4000.0	3977.05	99.4
MOLYBDENUM	40.0	39.58	98.9
POTASSIUM	4000.0	3955.18	98.9
SODIUM	4000.0	4043.30	101.1
ZINC	20.0	20.55	102.8

SAMPLE: CCV

File: LNG28B Jul 28, 2020 13:03

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.70	96.1
ANTIMONY	25.0	24.14	96.6
CALCIUM	5000.0	4838.41	96.8
IRON	5000.0	4873.09	97.5
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	4839.40	96.8
MOLYBDENUM	25.0	24.52	98.1
POTASSIUM	5000.0	4815.58	96.3
SODIUM	5000.0	4985.44	99.7
ZINC	25.0	25.07	100.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 13:35

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.03	96.4
ANTIMONY	25.0	24.23	96.9
CALCIUM	5000.0	4771.68	95.4
IRON	5000.0	4709.55	94.2
LEAD	25.0	24.66	98.6
MAGNESIUM	5000.0	4944.06	98.9
MOLYBDENUM	25.0	24.90	99.6
POTASSIUM	5000.0	4781.94	95.6
SODIUM	5000.0	4993.75	99.9
ZINC	25.0	25.15	100.6

SAMPLE: CCV

File: LNG28B Jul 28, 2020 14:07

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.47	96.5
ANTIMONY	25.0	22.97	91.9
CALCIUM	5000.0	4849.51	97.0
IRON	5000.0	4804.58	96.1
LEAD	25.0	24.18	96.7
MAGNESIUM	5000.0	5070.10	101.4
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4804.42	96.1
SODIUM	5000.0	5214.80	104.3
ZINC	25.0	25.82	103.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 14:39

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.32	98.5
ANTIMONY	25.0	23.83	95.3
CALCIUM	5000.0	4964.11	99.3
IRON	5000.0	4808.13	96.2
LEAD	25.0	25.09	100.4
MAGNESIUM	5000.0	5059.40	101.2
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4850.97	97.0
SODIUM	5000.0	5141.28	102.8
ZINC	25.0	25.43	101.7

SAMPLE: CCV

File: LNG28B Jul 28, 2020 15:11

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.69	93.7
ANTIMONY	25.0	23.47	93.9
CALCIUM	5000.0	4763.40	95.3
IRON	5000.0	4732.67	94.7
LEAD	25.0	25.20	100.8
MAGNESIUM	5000.0	4938.78	98.8
MOLYBDENUM	25.0	24.75	99.0
POTASSIUM	5000.0	4850.60	97.0
SODIUM	5000.0	5034.86	100.7
ZINC	25.0	25.34	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 15:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.60	97.7
ANTIMONY	25.0	23.57	94.3
CALCIUM	5000.0	4908.41	98.2
IRON	5000.0	4850.73	97.0
LEAD	25.0	24.44	97.8
MAGNESIUM	5000.0	4988.04	99.8
MOLYBDENUM	25.0	25.34	101.4
POTASSIUM	5000.0	4851.12	97.0
SODIUM	5000.0	5082.60	101.7
ZINC	25.0	25.59	102.4

SAMPLE: CCV

File: LNG28B Jul 28, 2020 16:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.79	97.0
ANTIMONY	25.0	23.64	94.6
CALCIUM	5000.0	4877.71	97.6
IRON	5000.0	4788.42	95.8
LEAD	25.0	24.31	97.2
MAGNESIUM	5000.0	5032.95	100.7
MOLYBDENUM	25.0	25.17	100.7
POTASSIUM	5000.0	4859.22	97.2
SODIUM	5000.0	5139.61	102.8
ZINC	25.0	25.52	102.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 16:46

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.77	97.0
ANTIMONY	25.0	23.25	93.0
CALCIUM	5000.0	4851.14	97.0
IRON	5000.0	4771.88	95.4
LEAD	25.0	23.92	95.7
MAGNESIUM	5000.0	4992.14	99.8
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4816.75	96.3
SODIUM	5000.0	5092.01	101.8
ZINC	25.0	25.53	102.1

SAMPLE: CCV

File: LNG28B Jul 28, 2020 17:18

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.95	96.6
ANTIMONY	25.0	23.65	94.6
CALCIUM	5000.0	4849.92	97.0
IRON	5000.0	4778.01	95.6
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	5005.48	100.1
MOLYBDENUM	25.0	24.83	99.3
POTASSIUM	5000.0	4842.42	96.8
SODIUM	5000.0	5134.06	102.7
ZINC	25.0	25.60	102.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 17:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.61	96.5
ANTIMONY	25.0	23.52	94.1
CALCIUM	5000.0	4892.29	97.8
IRON	5000.0	4850.11	97.0
LEAD	25.0	24.23	96.9
MAGNESIUM	5000.0	4991.37	99.8
MOLYBDENUM	25.0	25.04	100.2
POTASSIUM	5000.0	4821.63	96.4
SODIUM	5000.0	5101.34	102.0
ZINC	25.0	24.94	99.8

SAMPLE: CCV

File: LNG28B Jul 28, 2020 18:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.24	97.2
ANTIMONY	25.0	23.43	93.7
CALCIUM	5000.0	4931.73	98.6
IRON	5000.0	4875.74	97.5
LEAD	25.0	24.21	96.8
MAGNESIUM	5000.0	5044.27	100.9
MOLYBDENUM	25.0	25.06	100.2
POTASSIUM	5000.0	4897.00	97.9
SODIUM	5000.0	5137.34	102.7
ZINC	25.0	25.69	102.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 18:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	489.24	97.8
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4911.20	98.2
IRON	5000.0	4836.70	96.7
LEAD	25.0	24.16	96.6
MAGNESIUM	5000.0	4951.36	99.0
MOLYBDENUM	25.0	24.53	98.1
POTASSIUM	5000.0	4802.75	96.1
SODIUM	5000.0	5007.12	100.1
ZINC	25.0	25.09	100.4

SAMPLE: CCV

File: LNG28B Jul 28, 2020 19:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.03	95.6
ANTIMONY	25.0	25.48	101.9
CALCIUM	5000.0	4854.78	97.1
IRON	5000.0	4773.76	95.5
LEAD	25.0	26.19	104.8
MAGNESIUM	5000.0	4914.64	98.3
MOLYBDENUM	25.0	24.44	97.8
POTASSIUM	5000.0	4816.53	96.3
SODIUM	5000.0	5001.60	100.0
ZINC	25.0	25.59	102.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 19:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.56	98.1
ANTIMONY	25.0	23.79	95.2
CALCIUM	5000.0	5070.84	101.4
IRON	5000.0	4988.25	99.8
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	4991.21	99.8
MOLYBDENUM	25.0	24.77	99.1
POTASSIUM	5000.0	4870.73	97.4
SODIUM	5000.0	5075.15	101.5
ZINC	25.0	24.92	99.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG29A Jul 29, 2020 17:10

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.88	93.0
CALCIUM	4000.0	3901.81	97.5
COPPER	20.0	20.22	101.1
IRON	4000.0	3883.70	97.1
LEAD	20.0	19.93	99.6
MAGNESIUM	4000.0	3928.10	98.2
MOLYBDENUM	40.0	38.80	97.0
POTASSIUM	4000.0	3914.25	97.9
SODIUM	4000.0	4004.40	100.1

SAMPLE: CCV

File: LNG29A Jul 29, 2020 17:58

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.05	96.0
CALCIUM	5000.0	4857.08	97.1
COPPER	25.0	25.11	100.4
IRON	5000.0	4844.89	96.9
LEAD	25.0	24.04	96.2
MAGNESIUM	5000.0	4891.21	97.8
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	4874.36	97.5
SODIUM	5000.0	5081.64	101.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 18:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.53	96.3
CALCIUM	5000.0	4843.02	96.9
COPPER	25.0	25.43	101.7
IRON	5000.0	4735.12	94.7
LEAD	25.0	24.06	96.2
MAGNESIUM	5000.0	4928.24	98.6
MOLYBDENUM	25.0	24.73	98.9
POTASSIUM	5000.0	4950.67	99.0
SODIUM	5000.0	5063.54	101.3

SAMPLE: CCV

File: LNG29A Jul 29, 2020 19:02

Analyte	True	Found	%R (1)
ALUMINUM	500.0	491.49	98.3
CALCIUM	5000.0	4865.27	97.3
COPPER	25.0	24.88	99.5
IRON	5000.0	4860.59	97.2
LEAD	25.0	23.87	95.5
MAGNESIUM	5000.0	4985.04	99.7
MOLYBDENUM	25.0	24.38	97.5
POTASSIUM	5000.0	4925.52	98.5
SODIUM	5000.0	5833.82	116.7•

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 19:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.41	97.3
CALCIUM	5000.0	4942.57	98.9
COPPER	25.0	24.97	99.9
IRON	5000.0	4716.29	94.3
LEAD	25.0	24.17	96.7
MAGNESIUM	5000.0	4986.11	99.7
MOLYBDENUM	25.0	24.76	99.0
POTASSIUM	5000.0	4922.01	98.4
SODIUM	5000.0	5439.96	108.8

SAMPLE: CCV

File: LNG29A Jul 29, 2020 20:05

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.86	98.2
CALCIUM	5000.0	4816.62	96.3
COPPER	25.0	25.40	101.6
IRON	5000.0	4665.09	93.3
LEAD	25.0	23.34	93.4
MAGNESIUM	5000.0	5131.40	102.6
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	5047.66	101.0
SODIUM	5000.0	5393.38	107.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 20:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.87	94.2
CALCIUM	5000.0	4804.48	96.1
COPPER	25.0	25.00	100.0
IRON	5000.0	4717.02	94.3
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4994.58	99.9
MOLYBDENUM	25.0	24.56	98.2
POTASSIUM	5000.0	4891.05	97.8
SODIUM	5000.0	5230.72	104.6

SAMPLE: CCV

File: LNG29A Jul 29, 2020 21:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	465.43	93.1
CALCIUM	5000.0	4816.44	96.3
COPPER	25.0	24.84	99.4
IRON	5000.0	4690.70	93.8
LEAD	25.0	23.02	92.1
MAGNESIUM	5000.0	4904.69	98.1
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4819.78	96.4
SODIUM	5000.0	5122.73	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 21:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.14	94.2
CALCIUM	5000.0	4848.00	97.0
COPPER	25.0	24.56	98.2
IRON	5000.0	4697.19	93.9
LEAD	25.0	23.07	92.3
MAGNESIUM	5000.0	4912.89	98.3
MOLYBDENUM	25.0	24.44	97.8
POTASSIUM	5000.0	4814.63	96.3
SODIUM	5000.0	5077.72	101.6

SAMPLE: CCV

File: LNG29A Jul 29, 2020 22:12

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.47	93.3
CALCIUM	5000.0	4767.18	95.3
COPPER	25.0	24.57	98.3
IRON	5000.0	4591.14	91.8
LEAD	25.0	23.66	94.6
MAGNESIUM	5000.0	4943.18	98.9
MOLYBDENUM	25.0	24.55	98.2
POTASSIUM	5000.0	4854.82	97.1
SODIUM	5000.0	5125.39	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 22:43

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.10	96.8
CALCIUM	5000.0	4790.30	95.8
COPPER	25.0	25.32	101.3
IRON	5000.0	4634.08	92.7
LEAD	25.0	23.68	94.7
MAGNESIUM	5000.0	5065.30	101.3
MOLYBDENUM	25.0	25.08	100.3
POTASSIUM	5000.0	4977.66	99.6
SODIUM	5000.0	5242.33	104.8

SAMPLE: CCV

File: LNG29A Jul 29, 2020 23:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	460.83	92.2
CALCIUM	5000.0	4850.34	97.0
COPPER	25.0	24.73	98.9
IRON	5000.0	4676.84	93.5
LEAD	25.0	22.94	91.8
MAGNESIUM	5000.0	4917.51	98.4
MOLYBDENUM	25.0	24.65	98.6
POTASSIUM	5000.0	4764.92	95.3
SODIUM	5000.0	5087.17	101.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 23:46

Analyte	True	Found	%R (1)
ALUMINUM	500.0	464.49	92.9
CALCIUM	5000.0	4821.74	96.4
COPPER	25.0	24.32	97.3
IRON	5000.0	4685.99	93.7
LEAD	25.0	22.79	91.2
MAGNESIUM	5000.0	4922.09	98.4
MOLYBDENUM	25.0	24.46	97.8
POTASSIUM	5000.0	4830.04	96.6
SODIUM	5000.0	5135.04	102.7

SAMPLE: CCV

File: LNG29A Jul 30, 2020 00:17

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.13	95.8
CALCIUM	5000.0	4822.46	96.4
COPPER	25.0	24.43	97.7
IRON	5000.0	4720.14	94.4
LEAD	25.0	22.98	91.9
MAGNESIUM	5000.0	4900.53	98.0
MOLYBDENUM	25.0	24.04	96.2
POTASSIUM	5000.0	4820.88	96.4
SODIUM	5000.0	5239.43	104.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 00:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.94	95.8
CALCIUM	5000.0	4757.72	95.2
COPPER	25.0	25.14	100.6
IRON	5000.0	4657.56	93.2
LEAD	25.0	23.23	92.9
MAGNESIUM	5000.0	5011.33	100.2
MOLYBDENUM	25.0	24.54	98.2
POTASSIUM	5000.0	4904.01	98.1
SODIUM	5000.0	5299.22	106.0

SAMPLE: CCV

File: LNG29A Jul 30, 2020 01:19

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.56	94.7
CALCIUM	5000.0	4654.12	93.1
COPPER	25.0	24.69	98.8
IRON	5000.0	4552.53	91.1
LEAD	25.0	23.17	92.7
MAGNESIUM	5000.0	4935.05	98.7
MOLYBDENUM	25.0	24.56	98.2
POTASSIUM	5000.0	4837.84	96.8
SODIUM	5000.0	5143.17	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 01:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.52	96.9
CALCIUM	5000.0	4688.28	93.8
COPPER	25.0	24.60	98.4
IRON	5000.0	4607.09	92.1
LEAD	25.0	22.82	91.3
MAGNESIUM	5000.0	4946.66	98.9
MOLYBDENUM	25.0	24.03	96.1
POTASSIUM	5000.0	4844.26	96.9
SODIUM	5000.0	5163.48	103.3

SAMPLE: CCV

File: LNG29A Jul 30, 2020 02:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.21	96.0
CALCIUM	5000.0	4728.60	94.6
COPPER	25.0	24.82	99.3
IRON	5000.0	4611.30	92.2
LEAD	25.0	22.94	91.8
MAGNESIUM	5000.0	5005.48	100.1
MOLYBDENUM	25.0	24.74	99.0
POTASSIUM	5000.0	4840.25	96.8
SODIUM	5000.0	5148.17	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 02:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.76	97.8
CALCIUM	5000.0	4838.65	96.8
COPPER	25.0	25.33	101.3
IRON	5000.0	4635.77	92.7
LEAD	25.0	24.47	97.9
MAGNESIUM	5000.0	5080.68	101.6
MOLYBDENUM	25.0	25.10	100.4
POTASSIUM	5000.0	4868.75	97.4
SODIUM	5000.0	5405.86	108.1

SAMPLE: CCV

File: LNG29A Jul 30, 2020 03:25

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.04	94.2
CALCIUM	5000.0	4770.94	95.4
COPPER	25.0	24.24	97.0
IRON	5000.0	4596.94	91.9
LEAD	25.0	23.97	95.9
MAGNESIUM	5000.0	4937.13	98.7
MOLYBDENUM	25.0	24.41	97.6
POTASSIUM	5000.0	4751.88	95.0
SODIUM	5000.0	5130.08	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG30A Jul 30, 2020 16:30

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.15	95.3
CALCIUM	4000.0	3952.14	98.8
COPPER	20.0	20.99	104.9
IRON	4000.0	3914.76	97.9
LEAD	20.0	20.85	104.3
MAGNESIUM	4000.0	4031.24	100.8
MOLYBDENUM	40.0	41.41	103.5
POTASSIUM	4000.0	3996.98	99.9
SODIUM	4000.0	4111.21	102.8

SAMPLE: CCV

File: LNG30A Jul 30, 2020 16:54

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.46	98.1
CALCIUM	5000.0	5002.81	100.1
COPPER	25.0	25.38	101.5
IRON	5000.0	5023.18	100.5
LEAD	25.0	24.44	97.8
MAGNESIUM	5000.0	4964.06	99.3
MOLYBDENUM	25.0	25.19	100.8
POTASSIUM	5000.0	4984.14	99.7
SODIUM	5000.0	5130.73	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 17:26

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.95	94.2
CALCIUM	5000.0	5027.57	100.6
COPPER	25.0	25.21	100.8
IRON	5000.0	5012.66	100.3
LEAD	25.0	26.66	106.6
MAGNESIUM	5000.0	4852.01	97.0
MOLYBDENUM	25.0	24.50	98.0
POTASSIUM	5000.0	4851.36	97.0
SODIUM	5000.0	4998.42	100.0

SAMPLE: CCV

File: LNG30A Jul 30, 2020 17:57

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.90	98.6
CALCIUM	5000.0	5047.29	100.9
COPPER	25.0	25.37	101.5
IRON	5000.0	5011.21	100.2
LEAD	25.0	24.34	97.4
MAGNESIUM	5000.0	5060.46	101.2
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4941.18	98.8
SODIUM	5000.0	5284.85	105.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 18:29

Analyte	True	Found	%R (1)
ALUMINUM	500.0	515.93	103.2
CALCIUM	5000.0	4969.83	99.4
COPPER	25.0	26.57	106.3
IRON	5000.0	4880.89	97.6
LEAD	25.0	25.89	103.6
MAGNESIUM	5000.0	5329.84	106.6
MOLYBDENUM	25.0	26.48	105.9
POTASSIUM	5000.0	5156.18	103.1
SODIUM	5000.0	5634.78	112.7•

SAMPLE: CCV

File: LNG30A Jul 30, 2020 19:00

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.76	97.2
CALCIUM	5000.0	5052.46	101.0
COPPER	25.0	25.15	100.6
IRON	5000.0	5004.63	100.1
LEAD	25.0	25.43	101.7
MAGNESIUM	5000.0	5072.05	101.4
MOLYBDENUM	25.0	24.99	100.0
POTASSIUM	5000.0	4932.44	98.6
SODIUM	5000.0	5310.34	106.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 19:32

Analyte	True	Found	%R (1)
ALUMINUM	500.0	494.22	98.8
CALCIUM	5000.0	5048.70	101.0
COPPER	25.0	25.48	101.9
IRON	5000.0	4931.25	98.6
LEAD	25.0	24.07	96.3
MAGNESIUM	5000.0	5109.76	102.2
MOLYBDENUM	25.0	25.40	101.6
POTASSIUM	5000.0	4942.16	98.8
SODIUM	5000.0	5307.62	106.2

SAMPLE: CCV

File: LNG30A Jul 30, 2020 20:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.27	96.7
CALCIUM	5000.0	4947.77	99.0
COPPER	25.0	25.62	102.5
IRON	5000.0	4891.12	97.8
LEAD	25.0	24.76	99.0
MAGNESIUM	5000.0	5059.09	101.2
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4902.85	98.1
SODIUM	5000.0	5243.94	104.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 20:36

Analyte	True	Found	%R (1)
ALUMINUM	500.0	477.64	95.5
CALCIUM	5000.0	5049.54	101.0
COPPER	25.0	25.18	100.7
IRON	5000.0	5010.00	100.2
LEAD	25.0	24.09	96.4
MAGNESIUM	5000.0	5060.19	101.2
MOLYBDENUM	25.0	24.76	99.0
POTASSIUM	5000.0	4945.52	98.9
SODIUM	5000.0	5305.00	106.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNH03A Aug 03, 2020 18:01

Analyte	True	Found	%R (1)
ALUMINUM	400.0	377.96	94.5
ANTIMONY	20.0	21.15	105.7
CALCIUM	4000.0	3926.52	98.2
IRON	4000.0	3987.15	99.7
MAGNESIUM	4000.0	3978.05	99.5
MOLYBDENUM	40.0	41.07	102.7
POTASSIUM	4000.0	3938.00	98.5
SODIUM	4000.0	3938.39	98.5
ZINC	20.0	20.73	103.6

SAMPLE: CCV

File: LNH03A Aug 03, 2020 18:25

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.47	96.9
ANTIMONY	25.0	26.71	106.8
CALCIUM	5000.0	4842.39	96.8
IRON	5000.0	4920.50	98.4
MAGNESIUM	5000.0	4945.31	98.9
MOLYBDENUM	25.0	25.59	102.4
POTASSIUM	5000.0	4983.75	99.7
SODIUM	5000.0	5001.87	100.0
ZINC	25.0	25.52	102.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH03A Aug 03, 2020 18:57

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.40	94.3
ANTIMONY	25.0	26.27	105.1
CALCIUM	5000.0	4855.45	97.1
IRON	5000.0	4865.38	97.3
MAGNESIUM	5000.0	4962.76	99.3
MOLYBDENUM	25.0	25.23	100.9
POTASSIUM	5000.0	4935.66	98.7
SODIUM	5000.0	5082.05	101.6
ZINC	25.0	25.38	101.5

SAMPLE: CCV

File: LNH03A Aug 03, 2020 19:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.54	95.7
ANTIMONY	25.0	25.45	101.8
CALCIUM	5000.0	4861.36	97.2
IRON	5000.0	4909.16	98.2
MAGNESIUM	5000.0	5020.75	100.4
MOLYBDENUM	25.0	25.33	101.3
POTASSIUM	5000.0	4938.59	98.8
SODIUM	5000.0	5007.87	100.2
ZINC	25.0	25.46	101.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH03A Aug 03, 2020 19:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	477.44	95.5
ANTIMONY	25.0	25.83	103.3
CALCIUM	5000.0	4919.56	98.4
IRON	5000.0	4911.31	98.2
MAGNESIUM	5000.0	4989.59	99.8
MOLYBDENUM	25.0	25.25	101.0
POTASSIUM	5000.0	4982.18	99.6
SODIUM	5000.0	5100.48	102.0
ZINC	25.0	25.14	100.6

SAMPLE: CCV

File: LNH03A Aug 03, 2020 20:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.54	96.3
ANTIMONY	25.0	24.82	99.3
CALCIUM	5000.0	4804.29	96.1
IRON	5000.0	4877.87	97.6
MAGNESIUM	5000.0	5029.99	100.6
MOLYBDENUM	25.0	25.24	101.0
POTASSIUM	5000.0	4918.97	98.4
SODIUM	5000.0	5086.34	101.7
ZINC	25.0	24.80	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNH04A Aug 04, 2020 14:43

Analyte	True	Found	%R (1)
ALUMINUM	400.0	373.02	93.3
ANTIMONY	20.0	20.67	103.4
CALCIUM	4000.0	3927.75	98.2
IRON	4000.0	3950.74	98.8
MAGNESIUM	4000.0	3933.84	98.3
MOLYBDENUM	40.0	40.32	100.8
POTASSIUM	4000.0	3913.14	97.8
SODIUM	4000.0	3928.25	98.2
ZINC	20.0	20.52	102.6

SAMPLE: CCV

File: LNH04A Aug 04, 2020 15:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.80	94.2
ANTIMONY	25.0	26.00	104.0
CALCIUM	5000.0	4727.91	94.6
IRON	5000.0	4823.39	96.5
MAGNESIUM	5000.0	4962.06	99.2
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4903.58	98.1
SODIUM	5000.0	5065.87	101.3
ZINC	25.0	25.20	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH04A Aug 04, 2020 17:38

Analyte	True	Found	%R (1)
ALUMINUM	500.0	472.80	94.6
ANTIMONY	25.0	24.95	99.8
CALCIUM	5000.0	4777.77	95.6
IRON	5000.0	4810.93	96.2
MAGNESIUM	5000.0	4919.33	98.4
MOLYBDENUM	25.0	24.93	99.7
POTASSIUM	5000.0	4781.17	95.6
SODIUM	5000.0	4936.34	98.7
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNH04A Aug 04, 2020 18:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.84	96.2
ANTIMONY	25.0	24.78	99.1
CALCIUM	5000.0	4831.78	96.6
IRON	5000.0	4866.36	97.3
MAGNESIUM	5000.0	5027.15	100.5
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4857.49	97.1
SODIUM	5000.0	5122.39	102.4
ZINC	25.0	25.15	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: HNH13C Aug 13, 2020 14:28

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.17	85.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: INH06A Aug 06, 2020 12:56

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	327.60	109.2
ANTIMONY	8.0	8.18	102.3
CADMIUM	5.0	5.22	104.4
CALCIUM	100.0	99.03	99.0
COPPER	25.0	26.45	105.8
IRON	100.0	107.30	107.3
LEAD	5.0	5.66	113.2
MAGNESIUM	100.0	111.60	111.6
NICKEL	10.0	10.51	105.1
ZINC	20.0	20.84	104.2

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: INH07A Aug 07, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	322.10	107.4
ANTIMONY	8.0	8.89	111.1
CADMIUM	5.0	5.12	102.4
CALCIUM	100.0	106.40	106.4
COPPER	25.0	25.77	103.1
IRON	100.0	102.90	102.9
LEAD	5.0	5.21	104.2
MAGNESIUM	100.0	109.60	109.6
NICKEL	10.0	10.65	106.5
ZINC	20.0	20.39	102.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG24A Jul 24, 2020 17:24

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.94	109.7
COPPER	0.6	0.93	155.0 •
IRON	20.0	23.11	115.6
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	19.22	96.1
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.16	104.6
SODIUM	200.0	228.92	114.5
ZINC	2.0	2.10	105.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG27A Jul 27, 2020 16:32

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.77	93.8
CALCIUM	20.0	22.19	111.0
COPPER	0.6	0.71	118.3
IRON	20.0	21.68	108.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	20.50	102.5
MOLYBDENUM	1.0	1.06	106.0
POTASSIUM	200.0	201.86	100.9
SODIUM	200.0	218.83	109.4
ZINC	2.0	2.19	109.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG28B Jul 28, 2020 12:44

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.55	92.8
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	22.04	110.2
IRON	20.0	23.62	118.1
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	18.30	91.5
MOLYBDENUM	1.0	1.01	101.0
POTASSIUM	200.0	206.38	103.2
SODIUM	200.0	204.37	102.2
ZINC	2.0	2.05	102.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG29A Jul 29, 2020 17:45

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.93	104.7
CALCIUM	20.0	22.87	114.3
COPPER	0.6	0.63	105.0
IRON	20.0	25.18	125.9•
LEAD	0.2	0.21	105.0
MAGNESIUM	20.0	19.26	96.3
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.00	104.0
SODIUM	200.0	208.66	104.3

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG30A Jul 30, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	19.97	99.8
CALCIUM	20.0	22.96	114.8
COPPER	0.6	0.62	103.3
IRON	20.0	23.68	118.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	22.50	112.5
MOLYBDENUM	1.0	1.07	107.0
POTASSIUM	200.0	199.86	99.9
SODIUM	200.0	207.92	104.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNH03A Aug 03, 2020 18:06

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.53	102.6
ANTIMONY	0.2	0.24	120.0
CALCIUM	20.0	21.81	109.1
IRON	20.0	21.27	106.3
MAGNESIUM	20.0	21.43	107.1
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.97	104.5
SODIUM	200.0	211.50	105.8
ZINC	2.0	2.73	136.5 •

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNH04A Aug 04, 2020 14:49

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.59	93.0
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	19.77	98.8
IRON	20.0	21.55	107.8
MAGNESIUM	20.0	21.01	105.1
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	204.83	102.4
SODIUM	200.0	208.69	104.3
ZINC	2.0	1.97	98.5

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: HNH13C Aug 13, 2020 14:25

Analyte	Result	C
MERCURY	0.016	U

SAMPLE: CCB

File: HNH13C Aug 13, 2020 14:32

Analyte	Result	C
MERCURY	0.016	J

SAMPLE: CCB

File: HNH13C Aug 13, 2020 15:23

Analyte	Result	C
MERCURY	0.017	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: INH06A Aug 06, 2020 12:51

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	3.600	U
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 13:15

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.379	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 13:38

Analyte	Result	C
ALUMINUM	18.170	J
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.014	J
LEAD	1.000	U
MAGNESIUM	4.787	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: INH06A Aug 06, 2020 14:31

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	3.600	U
LEAD	1.000	U
MAGNESIUM	3.711	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 15:23

Analyte	Result	C
ALUMINUM	14.150	J
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	6.329	J
LEAD	1.000	U
MAGNESIUM	2.937	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: INH07A Aug 07, 2020 17:25

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	4.910	J
LEAD	1.000	U
MAGNESIUM	3.451	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH07A Aug 07, 2020 17:48

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.741	J
LEAD	1.000	U
MAGNESIUM	3.667	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH07A Aug 07, 2020 18:11

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	6.381	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: INH07A Aug 07, 2020 19:09

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	13.280	J
COPPER	0.550	U
IRON	4.541	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB
File: INH07A Aug 07, 2020 20:06

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	14.770	J
COPPER	0.929	J
IRON	4.953	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB
File: INH07A Aug 07, 2020 20:58

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	12.000	J
COPPER	0.550	U
IRON	6.784	J
LEAD	1.000	U
MAGNESIUM	2.980	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG24A Jul 24, 2020 17:21

Analyte	Result	C
ALUMINUM	0.479	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.210	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 17:45

Analyte	Result	C
ALUMINUM	3.295	J
ANTIMONY	0.070	J
CALCIUM	6.800	U
COPPER	0.341	B
IRON	6.436	J
LEAD	0.113	B
MAGNESIUM	1.431	J
MOLYBDENUM	0.158	J
POTASSIUM	12.000	U
SODIUM	24.662	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 18:16

Analyte	Result	C
ALUMINUM	0.368	J
ANTIMONY	0.061	U
CALCIUM	8.450	J
COPPER	0.217	J
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-1.125	U
MOLYBDENUM	0.088	J
POTASSIUM	12.000	U
SODIUM	39.932	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 18:47

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-2.104	U
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:19

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	-2.495	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-10.409	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:51

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-0.804	U
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	51.319	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 20:21

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.140	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	-1.768	U
MOLYBDENUM	0.073	J
POTASSIUM	-13.035	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 20:53

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	12.785	B
COPPER	0.087	U
IRON	6.400	U
LEAD	0.032	J
MAGNESIUM	-3.044	U
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	10.403	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 21:26

Analyte	Result	C
ALUMINUM	1.081	J
ANTIMONY	0.061	U
CALCIUM	28.158	B
COPPER	-0.094	U
IRON	10.360	B
LEAD	0.132	B
MAGNESIUM	-4.311	U
MOLYBDENUM	0.079	J
POTASSIUM	-13.054	U
SODIUM	-24.951	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG24A Jul 24, 2020 21:58

Analyte	Result	C
ALUMINUM	0.754	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.164	U
IRON	6.400	U
LEAD	0.188	B
MAGNESIUM	-4.856	U
MOLYBDENUM	0.074	J
POTASSIUM	-14.023	U
SODIUM	-27.904	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 22:11

Analyte	Result	C
ALUMINUM	0.862	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.186	U
IRON	6.400	U
LEAD	0.113	B
MAGNESIUM	-3.766	U
MOLYBDENUM	0.055	J
POTASSIUM	-17.120	U
SODIUM	-33.968	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG27A Jul 27, 2020 16:30

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.025	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.196	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 16:54

Analyte	Result	C
ALUMINUM	1.453	J
CALCIUM	6.800	U
COPPER	0.158	J
IRON	6.400	U
LEAD	0.060	J
MAGNESIUM	0.595	J
MOLYBDENUM	0.147	J
POTASSIUM	12.000	U
SODIUM	18.722	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:26

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	2.573	J
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 17:57

Analyte	Result	C
ALUMINUM	-0.586	U
CALCIUM	7.385	J
COPPER	0.088	J
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	1.243	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	27.633	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 18:29

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	3.305	J
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	97.453	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 19:01

Analyte	Result	C
ALUMINUM	0.762	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.010	J
MAGNESIUM	2.600	J
MOLYBDENUM	0.070	J
POTASSIUM	12.000	U
SODIUM	16.886	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 19:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.068	J
MAGNESIUM	-3.531	U
MOLYBDENUM	0.060	J
POTASSIUM	-14.398	U
SODIUM	-9.468	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 20:05

Analyte	Result	C
ALUMINUM	1.347	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.179	B
MAGNESIUM	-2.460	U
MOLYBDENUM	0.068	J
POTASSIUM	-21.834	U
SODIUM	-21.297	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 20:36

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	-3.869	U
MOLYBDENUM	0.064	J
POTASSIUM	38.814	J
SODIUM	3642.513	B
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 21:08

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.863	J
COPPER	0.087	U
IRON	6.400	U
LEAD	0.038	J
MAGNESIUM	2.473	J
MOLYBDENUM	0.054	J
POTASSIUM	12.000	U
SODIUM	829.802	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 21:40

Analyte	Result	C
ALUMINUM	-0.354	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.678	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	361.921	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 22:12

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.782	J
MOLYBDENUM	0.078	J
POTASSIUM	12.000	U
SODIUM	234.444	B
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 22:43

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-0.793	U
MOLYBDENUM	0.040	J
POTASSIUM	12.000	U
SODIUM	162.167	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 23:16

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	-1.581	U
MOLYBDENUM	0.035	J
POTASSIUM	12.000	U
SODIUM	121.164	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 23:48

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	-2.897	U
MOLYBDENUM	0.079	J
POTASSIUM	-15.259	U
SODIUM	84.462	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG27A Jul 28, 2020 00:20

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	-3.887	U
MOLYBDENUM	0.077	J
POTASSIUM	-16.263	U
SODIUM	61.197	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 28, 2020 00:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-3.586	U
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	54.699	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG28B Jul 28, 2020 12:42

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	-3.775	U
MOLYBDENUM	0.203	J
POTASSIUM	12.000	U
SODIUM	-15.582	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG28B Jul 28, 2020 13:06

Analyte	Result	C
ALUMINUM	1.561	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	7.659	J
LEAD	0.040	J
MAGNESIUM	-1.935	U
MOLYBDENUM	0.155	J
POTASSIUM	12.000	U
SODIUM	-12.824	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG28B Jul 28, 2020 13:38

Analyte	Result	C
ALUMINUM	0.476	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.703	J
MOLYBDENUM	0.085	J
POTASSIUM	12.000	U
SODIUM	-44.417	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 14:09

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	-0.552	U
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	-19.173	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 14:41

Analyte	Result	C
ALUMINUM	0.960	J
ANTIMONY	0.061	U
CALCIUM	13.764	B
IRON	6.964	J
LEAD	0.056	J
MAGNESIUM	-1.285	U
MOLYBDENUM	0.080	J
POTASSIUM	12.000	U
SODIUM	-51.392	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 15:13

Analyte	Result	C
ALUMINUM	1.440	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	7.715	J
LEAD	0.820	B
MAGNESIUM	-2.022	U
MOLYBDENUM	0.064	J
POTASSIUM	12.000	U
SODIUM	-78.934	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 15:45

Analyte	Result	C
ALUMINUM	0.682	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.101	B
MAGNESIUM	-3.741	U
MOLYBDENUM	0.098	J
POTASSIUM	12.000	U
SODIUM	-88.467	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 16:17

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.030	J
MAGNESIUM	-4.472	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-65.692	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 16:49

Analyte	Result	C
ALUMINUM	-0.427	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.028	J
MAGNESIUM	-5.377	U
MOLYBDENUM	0.101	J
POTASSIUM	12.000	U
SODIUM	-63.464	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG28B Jul 28, 2020 17:21

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-4.808	U
MOLYBDENUM	0.072	J
POTASSIUM	12.000	U
SODIUM	-45.773	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG28B Jul 28, 2020 17:54

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-3.890	U
MOLYBDENUM	0.053	J
POTASSIUM	12.000	U
SODIUM	-79.708	U
ZINC	0.706	J

SAMPLE: CCB

File: LNG28B Jul 28, 2020 18:26

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	-4.457	U
MOLYBDENUM	0.081	J
POTASSIUM	12.000	U
SODIUM	-79.344	U
ZINC	0.557	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 18:58

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-4.960	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-98.725	U
ZINC	0.423	J

SAMPLE: CCB
File: LNG28B Jul 28, 2020 19:29

Analyte	Result	C
ALUMINUM	0.638	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-6.354	U
MOLYBDENUM	0.074	J
POTASSIUM	12.000	U
SODIUM	-104.211	B
ZINC	0.583	J

SAMPLE: CCB
File: LNG28B Jul 28, 2020 20:01

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	-5.105	U
MOLYBDENUM	0.078	J
POTASSIUM	12.000	U
SODIUM	-95.563	U
ZINC	0.745	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG29A Jul 29, 2020 17:13

Analyte	Result	C
ALUMINUM	-0.339	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.189	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG29A Jul 29, 2020 18:01

Analyte	Result	C
ALUMINUM	3.771	J
CALCIUM	20.526	B
COPPER	0.087	U
IRON	17.608	B
LEAD	0.048	J
MAGNESIUM	3.711	J
MOLYBDENUM	0.122	J
POTASSIUM	12.000	U
SODIUM	27.289	J

SAMPLE: CCB

File: LNG29A Jul 29, 2020 18:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.025	J
MAGNESIUM	1.661	J
MOLYBDENUM	0.104	J
POTASSIUM	12.000	U
SODIUM	-10.194	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 19:05

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.024	J
MAGNESIUM	1.052	J
MOLYBDENUM	0.107	J
POTASSIUM	12.000	U
SODIUM	560.236	B

SAMPLE: CCB
File: LNG29A Jul 29, 2020 19:37

Analyte	Result	C
ALUMINUM	-0.684	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-0.540	U
MOLYBDENUM	0.129	J
POTASSIUM	12.000	U
SODIUM	240.258	B

SAMPLE: CCB
File: LNG29A Jul 29, 2020 20:08

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	1.029	J
MOLYBDENUM	0.107	J
POTASSIUM	12.000	U
SODIUM	127.157	B

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 20:40

Analyte	Result	C
ALUMINUM	-0.470	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.700	J
MOLYBDENUM	0.113	J
POTASSIUM	12.000	U
SODIUM	76.885	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 21:11

Analyte	Result	C
ALUMINUM	-0.349	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.027	J
MAGNESIUM	2.886	J
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	40.542	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 21:43

Analyte	Result	C
ALUMINUM	-0.841	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	3.197	J
MOLYBDENUM	0.098	J
POTASSIUM	12.000	U
SODIUM	25.574	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 22:14

Analyte	Result	C
ALUMINUM	-0.648	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	3.126	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	7.009	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 22:45

Analyte	Result	C
ALUMINUM	-0.940	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	2.957	J
MOLYBDENUM	0.111	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNG29A Jul 29, 2020 23:17

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	5.069	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	-9.904	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 23:49

Analyte	Result	C
ALUMINUM	-0.583	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	2.253	J
MOLYBDENUM	0.109	J
POTASSIUM	12.000	U
SODIUM	38.960	J

SAMPLE: CCB
File: LNG29A Jul 30, 2020 00:19

Analyte	Result	C
ALUMINUM	-0.668	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	1.887	J
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	92.251	J

SAMPLE: CCB
File: LNG29A Jul 30, 2020 00:51

Analyte	Result	C
ALUMINUM	-0.480	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.024	J
MAGNESIUM	1.449	J
MOLYBDENUM	0.116	J
POTASSIUM	13.055	J
SODIUM	89.372	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG29A Jul 30, 2020 01:22

Analyte	Result	C
ALUMINUM	-0.693	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	-2.067	U
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	45.820	J

SAMPLE: CCB

File: LNG29A Jul 30, 2020 01:54

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.382	J
MOLYBDENUM	0.090	J
POTASSIUM	12.000	U
SODIUM	25.009	J

SAMPLE: CCB

File: LNG29A Jul 30, 2020 02:26

Analyte	Result	C
ALUMINUM	-0.619	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	-2.450	U
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG29A Jul 30, 2020 02:57

Analyte	Result	C
ALUMINUM	-0.771	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-1.995	U
MOLYBDENUM	0.072	J
POTASSIUM	12.000	U
SODIUM	108.160	B

SAMPLE: CCB

File: LNG29A Jul 30, 2020 03:28

Analyte	Result	C
ALUMINUM	-0.618	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.037	J
MAGNESIUM	-4.809	U
MOLYBDENUM	0.104	J
POTASSIUM	12.000	U
SODIUM	11.177	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG30A Jul 30, 2020 16:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.010	J
MAGNESIUM	-1.388	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG30A Jul 30, 2020 16:57

Analyte	Result	C
ALUMINUM	1.628	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	9.577	J
LEAD	0.039	J
MAGNESIUM	3.781	J
MOLYBDENUM	0.221	J
POTASSIUM	12.000	U
SODIUM	38.253	J

SAMPLE: CCB

File: LNG30A Jul 30, 2020 17:28

Analyte	Result	C
ALUMINUM	1.102	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	7.742	J
LEAD	0.032	J
MAGNESIUM	1.312	J
MOLYBDENUM	0.126	J
POTASSIUM	12.000	U
SODIUM	-6.796	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG30A Jul 30, 2020 18:00

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	3.937	J
MOLYBDENUM	0.113	J
POTASSIUM	12.000	U
SODIUM	73.935	J

SAMPLE: CCB
File: LNG30A Jul 30, 2020 18:31

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	10.278	B
COPPER	0.087	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	3.007	J
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	121.005	B

SAMPLE: CCB
File: LNG30A Jul 30, 2020 19:03

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.274	J
MOLYBDENUM	0.120	J
POTASSIUM	12.000	U
SODIUM	60.138	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG30A Jul 30, 2020 19:34

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	1.121	J
MOLYBDENUM	0.109	J
POTASSIUM	12.000	U
SODIUM	65.279	J

SAMPLE: CCB
File: LNG30A Jul 30, 2020 20:07

Analyte	Result	C
ALUMINUM	0.432	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-0.504	U
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	17.422	J

SAMPLE: CCB
File: LNG30A Jul 30, 2020 20:38

Analyte	Result	C
ALUMINUM	0.354	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.005	J
MAGNESIUM	4.682	J
MOLYBDENUM	0.110	J
POTASSIUM	12.000	U
SODIUM	86.995	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNH03A Aug 03, 2020 18:04

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.667	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH03A Aug 03, 2020 18:28

Analyte	Result	C
ALUMINUM	2.166	J
ANTIMONY	0.071	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	3.514	J
MOLYBDENUM	0.125	J
POTASSIUM	12.000	U
SODIUM	15.841	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH03A Aug 03, 2020 18:59

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.288	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	45.212	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNH03A Aug 03, 2020 19:30

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	1.913	J
MOLYBDENUM	0.070	J
POTASSIUM	12.000	U
SODIUM	15.664	J
ZINC	0.220	U

SAMPLE: CCB
File: LNH03A Aug 03, 2020 20:02

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.151	J
MOLYBDENUM	0.060	J
POTASSIUM	12.000	U
SODIUM	43.702	J
ZINC	0.220	U

SAMPLE: CCB
File: LNH03A Aug 03, 2020 20:33

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	3.174	J
MOLYBDENUM	0.064	J
POTASSIUM	12.000	U
SODIUM	38.281	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNH04A Aug 04, 2020 14:46

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.904	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 15:10

Analyte	Result	C
ALUMINUM	1.292	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.691	J
MOLYBDENUM	0.116	J
POTASSIUM	12.000	U
SODIUM	7.248	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 17:40

Analyte	Result	C
ALUMINUM	0.897	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.807	J
MOLYBDENUM	0.050	J
POTASSIUM	12.000	U
SODIUM	-11.487	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNH04A Aug 04, 2020 18:13

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.883	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	11.016	J
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.084	J
LEAD	0.036	J
ZINC	0.89	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG27IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG27IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.0088	J
ZINC	0.21	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG28IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG28IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.097	J
LEAD	0.023	J
ZINC	0.30	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNH03ICS2

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NH03ICS2

Concentration Units : umole/g drywt

Analyte	RESULT	C
ANTIMONY	0.00082	U
CADMIUM	0.00053	U
COPPER	0.00058	J
LEAD	0.000083	J
MERCURY	0.0000142	B
NICKEL	0.00152	J
ZINC	0.00264	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG29IMW2

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ANTIMONY	0.50	U
COPPER	0.54	J
LEAD	0.20	J
ZINC	8.0	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNH13HGW1

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NH13HGW1

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: INH06A Aug 06, 2020 13:00

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	515900.00	103.2
ANTIMONY	0	0.11	
CADMIUM	0	-0.87	
CALCIUM	500000.00	482400.00	96.5
COPPER	0	0.64	
IRON	200000.00	192400.00	96.2
LEAD	0	-0.32	
MAGNESIUM	500000.00	442100.00	88.4
NICKEL	0	0.20	
ZINC	0	0.80	

SAMPLE: ICSAB

File: INH06A Aug 06, 2020 13:06

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	505600.00	101.1
ANTIMONY	600.00	573.00	95.5
CADMIUM	1000.00	912.40	91.2
CALCIUM	500000.00	475500.00	95.1
COPPER	500.00	511.10	102.2
IRON	200000.00	191600.00	95.8
LEAD	50.00	45.18	90.0
MAGNESIUM	500000.00	437200.00	87.4
NICKEL	1000.00	894.00	89.4
ZINC	1000.00	907.00	90.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: INH07A Aug 07, 2020 17:33

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	505900.00	101.2
ANTIMONY	0	1.31	
CADMIUM	0	-0.12	
CALCIUM	500000.00	476700.00	95.3
COPPER	0	0.55	
IRON	200000.00	193400.00	96.7
LEAD	0	-0.01	
MAGNESIUM	500000.00	454600.00	90.9
NICKEL	0	0.21	
ZINC	0	0.63	

SAMPLE: ICSAB

File: INH07A Aug 07, 2020 17:39

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	481900.00	96.4
ANTIMONY	600.00	575.00	95.8
CADMIUM	1000.00	911.30	91.1
CALCIUM	500000.00	454900.00	91.0
COPPER	500.00	502.20	100.4
IRON	200000.00	185700.00	92.8
LEAD	50.00	43.69	88.0
MAGNESIUM	500000.00	436700.00	87.3
NICKEL	1000.00	892.00	89.2
ZINC	1000.00	903.80	90.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG24A Jul 24, 2020 17:26

Analyte	TRUE	FOUND	% R	
ALUMINUM	100000.00	97196.56	97.2	
ANTIMONY	0.19	0.17		
CALCIUM	100000.00	97945.29	97.9	
COPPER	0.26	0.75		•
IRON	100000.00	96464.18	96.5	
LEAD	0.13	0.09		
MAGNESIUM	100000.00	101202.85	101.2	
MOLYBDENUM	2000.00	2114.34	105.7	
POTASSIUM	100000.00	97416.54	97.4	
SODIUM	100000.00	101176.76	101.2	
ZINC	0.24	0.53		

SAMPLE: ICSAB

File: LNG24A Jul 24, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92943.98	92.9
ANTIMONY	20.00	19.66	100.0
CALCIUM	100000.00	97685.99	97.7
COPPER	20.47	19.60	100.0
IRON	100000.00	95228.33	95.2
LEAD	20.13	20.51	105.0
MAGNESIUM	100000.00	96860.91	96.9
MOLYBDENUM	2000.00	2054.76	102.8
POTASSIUM	100000.00	93389.44	93.4
SODIUM	100000.00	97298.41	97.3
ZINC	20.40	20.08	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG27A Jul 27, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93327.61	93.3
CALCIUM	100000.00	101196.79	101.2
COPPER	0.26	0.55	
IRON	100000.00	98471.88	98.5
LEAD	0.13	0.09	
MAGNESIUM	100000.00	101869.86	101.9
MOLYBDENUM	2000.00	2077.93	103.9
POTASSIUM	100000.00	96134.05	96.1
SODIUM	100000.00	98444.57	98.4
ZINC	0.24	0.46	

SAMPLE: ICSAB

File: LNG27A Jul 27, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90492.65	90.5
CALCIUM	100000.00	96094.68	96.1
COPPER	20.47	19.03	95.0
IRON	100000.00	93815.11	93.8
LEAD	20.13	20.04	100.0
MAGNESIUM	100000.00	99295.07	99.3
MOLYBDENUM	2000.00	2048.57	102.5
POTASSIUM	100000.00	93391.14	93.4
SODIUM	100000.00	96442.34	96.4
ZINC	20.40	20.13	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG28B Jul 28, 2020 12:47

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	95079.39	95.1
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	98439.82	98.4
IRON	100000.00	96748.49	96.7
LEAD	0.13	0.10	
MAGNESIUM	100000.00	99189.40	99.2
MOLYBDENUM	2000.00	2046.83	102.4
POTASSIUM	100000.00	96004.63	96.0
SODIUM	100000.00	99437.43	99.4
ZINC	0.24	0.42	

SAMPLE: ICSAB

File: LNG28B Jul 28, 2020 12:50

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93668.59	93.7
ANTIMONY	20.00	19.04	95.0
CALCIUM	100000.00	97020.86	97.0
IRON	100000.00	95582.53	95.6
LEAD	20.13	20.05	100.0
MAGNESIUM	100000.00	98090.79	98.1
MOLYBDENUM	2000.00	2056.45	102.8
POTASSIUM	100000.00	95042.43	95.0
SODIUM	100000.00	98453.34	98.5
ZINC	20.40	20.38	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG29A Jul 29, 2020 17:18

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91972.15	92.0
CALCIUM	100000.00	101214.55	101.2
COPPER	0.26	0.42	
IRON	100000.00	98144.43	98.1
LEAD	0.13	0.12	
MAGNESIUM	100000.00	97242.51	97.2
MOLYBDENUM	2000.00	2039.95	102.0
POTASSIUM	100000.00	94755.69	94.8
SODIUM	100000.00	97496.03	97.5

SAMPLE: ICSAB

File: LNG29A Jul 29, 2020 17:21

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91991.97	92.0
CALCIUM	100000.00	99655.02	99.7
COPPER	20.47	19.39	95.0
IRON	100000.00	96185.52	96.2
LEAD	20.13	20.39	100.0
MAGNESIUM	100000.00	97258.87	97.3
MOLYBDENUM	2000.00	2063.44	103.2
POTASSIUM	100000.00	95022.34	95.0
SODIUM	100000.00	97572.81	97.6

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG30A Jul 30, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91086.77	91.1
CALCIUM	100000.00	102707.34	102.7
COPPER	0.26	0.29	
IRON	100000.00	100408.06	100.4
LEAD	0.13	0.08	
MAGNESIUM	100000.00	95742.45	95.7
MOLYBDENUM	2000.00	2029.07	101.4
POTASSIUM	100000.00	93008.70	93.0
SODIUM	100000.00	95197.08	95.2

SAMPLE: ICSAB

File: LNG30A Jul 30, 2020 16:41

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	94763.96	94.8
CALCIUM	100000.00	100832.28	100.8
COPPER	20.47	19.83	100.0
IRON	100000.00	98301.02	98.3
LEAD	20.13	21.21	105.0
MAGNESIUM	100000.00	99425.84	99.4
MOLYBDENUM	2000.00	2107.98	105.4
POTASSIUM	100000.00	96892.76	96.9
SODIUM	100000.00	98907.61	98.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH03A Aug 03, 2020 18:09

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	88966.95	89.0
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	99092.75	99.1
IRON	100000.00	96088.07	96.1
MAGNESIUM	100000.00	94432.86	94.4
MOLYBDENUM	2000.00	2015.73	100.8
POTASSIUM	100000.00	96264.66	96.3
SODIUM	100000.00	95386.02	95.4
ZINC	0.24	0.33	

SAMPLE: ICSAB

File: LNH03A Aug 03, 2020 18:12

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89527.56	89.5
ANTIMONY	20.00	20.99	105.0
CALCIUM	100000.00	100823.13	100.8
IRON	100000.00	99101.75	99.1
MAGNESIUM	100000.00	95652.15	95.7
MOLYBDENUM	2000.00	2085.86	104.3
POTASSIUM	100000.00	98044.02	98.0
SODIUM	100000.00	97315.27	97.3
ZINC	20.40	19.47	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH04A Aug 04, 2020 14:51

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90063.20	90.1
ANTIMONY	0.19	0.17	
CALCIUM	100000.00	99196.61	99.2
IRON	100000.00	96110.21	96.1
MAGNESIUM	100000.00	95522.87	95.5
MOLYBDENUM	2000.00	1994.74	99.8
POTASSIUM	100000.00	96822.08	96.8
SODIUM	100000.00	97712.43	97.7
ZINC	0.24	0.53	

SAMPLE: ICSAB

File: LNH04A Aug 04, 2020 14:54

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91061.63	91.1
ANTIMONY	20.00	20.87	105.0
CALCIUM	100000.00	102667.63	102.7
IRON	100000.00	100851.08	100.9
MAGNESIUM	100000.00	98059.54	98.1
MOLYBDENUM	2000.00	2072.74	103.6
POTASSIUM	100000.00	98832.43	98.8
SODIUM	100000.00	100883.69	100.9
ZINC	20.40	19.65	100.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AP

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	17.7		2.47		29.19	52.3	N	72	124	MS
COPPER, TOTAL	123		45.2		72.99	106.1		84	119	MS
LEAD, TOTAL	593		686		29.19	-317.1	N	84	118	MS
ZINC, TOTAL	424		301		145.97	84.4		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AS

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	17.1		2.47		28.54	51.3	N	72	124	MS
COPPER, TOTAL	111		45.2		71.35	92.8		84	119	MS
LEAD, TOTAL	752		686		28.54	232.0	N	84	118	MS
ZINC, TOTAL	432		301		142.71	91.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AP

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	58.6		1.70		66.43	85.7		72	124	MS
COPPER, TOTAL	227		39.6		166.08	112.6		84	119	MS
LEAD, TOTAL	235		154		66.43	122.2	N	84	118	MS
ZINC, TOTAL	470		111		332.16	108.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AS

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	48.3		1.70		62.86	74.1		72	124	MS
COPPER, TOTAL	193		39.6		157.16	97.7		84	119	MS
LEAD, TOTAL	159		154		62.86	7.4	N	84	118	MS
ZINC, TOTAL	396		111		314.32	90.8		82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AA

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.74		1.71		2	101.6		80	120	MS
COPPER, TOTAL	39.2		31.2		6	132.9	A	80	120	MS
LEAD, TOTAL	486		474		2	626.6	A	80	120	MS
ZINC, TOTAL	241		208		20	165.9	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AA

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.62		0.517		2	105.2		80	120	MS
COPPER, TOTAL	19.5		12.0		6	124.4	A	80	120	MS
LEAD, TOTAL	54.0		46.8		2	362.0	A	80	120	MS
ZINC, TOTAL	58.1		33.7		20	122.1	A	80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		17.1		17.7		3.6		MS
COPPER, TOTAL		111		123		9.6		MS
LEAD, TOTAL		752		593		23.6	*	MS
ZINC, TOTAL		432		424		1.8		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		48.3		58.6		19.3		MS
COPPER, TOTAL		193		227		16.0		MS
LEAD, TOTAL		159		235		38.9	*	MS
ZINC, TOTAL		396		470		16.9		MS

Comments:

FORM VD - IN

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LC2ONG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.93	99.3	72	124
COPPER	25.0	26.3	105.2	84	119
LEAD	10.0	10.5	105.3	84	118
ZINC	50.0	53.1	106.2	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.79	97.9	72	124
COPPER	25.0	25.2	100.9	84	119
LEAD	10.0	10.4	104.3	84	118
ZINC	50.0	52.0	104.1	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG27IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG27IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.69	96.9	72	124
COPPER	25.0	28.2	112.8	84	119
LEAD	10.0	10.4	103.9	84	118
ZINC	50.0	52.8	105.6	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG28IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG28IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	10.3	103.5	72	124
COPPER	25.0	25.4	101.8	84	119
LEAD	10.0	10.0	100.0	84	118
ZINC	50.0	51.5	103.0	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONH03ICS2

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NH03ICS2

Concentration Units : umole/g drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	0.0164	0.0166	101.5	79	114
CADMIUM	0.0445	0.0445	100.0	82	113
COPPER	0.0787	0.0782	99.4	81	117
LEAD	0.00965	0.00995	103.0	81	112
MERCURY	0.000498	0.000488	100.0	80	124
NICKEL	0.170	0.172	101.2	83	113
ZINC	0.153	0.156	102.1	82	113

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG29IMW2

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	100	113	112.7	85	117
COPPER	250	258	103.4	85	118
LEAD	100	104	104.4	88	115
ZINC	500	526	105.1	83	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNH13HGW1

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NH13HGW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.84	116.8	82	119

7D

LABORATORY CONTROL SAMPLE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1 **Lab Sample ID:** LCSONG23IMS1

Concentration Units: mg/Kg drywt

Analyte	Control Limit (%)	LCS Result	LCS Dup. Result	RPD(%)	Q
ANTIMONY	20.0	9.79	9.93	1.4	
COPPER	20.0	25.2	26.3	4.2	
LEAD	20.0	10.4	10.5	0.9	
ZINC	20.0	52.0	53.1	2.0	

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AL

Matrix: SOIL **SDG Name:** SN6056

Lab Sample ID: SN6056-009L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	1.71		1.9		11.1		MS
COPPER, TOTAL	31.2		32.2		3.2		MS
LEAD, TOTAL	474		496		4.6		MS
ZINC, TOTAL	208		234		12.5	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AL

Matrix: SOIL **SDG Name:** SN6056

Lab Sample ID: SN6056-018L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.517		0.56	J	8.3		MS
COPPER, TOTAL	12.0		11.6		3.3		MS
LEAD, TOTAL	46.8		49.0		4.7		MS
ZINC, TOTAL	33.7		35.1		4.2		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 01/17/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
MERCURY	0.20	0.016	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/23/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	300	10	P
ANTIMONY	8.0	1.7	P
CADMIUM	5.0	0.092	P
CALCIUM	100	11	P
COPPER	25	0.55	P
IRON	100	3.6	P
LEAD	5.0	1.0	P
MAGNESIUM	100	2.9	P
MOLYBDENUM	10	0.41	P
NICKEL	10	0.44	P
POTASSIUM	1000	73	P
SODIUM	1000	12	P
ZINC	20	0.45	P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 06/14/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.000010	umole/g	CV	821/R-91-100 / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 06/14/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.00082	umole/g	P	821/R-91-100 / SW846 6010C
CADMIUM	0.00053	umole/g	P	821/R-91-100 / SW846 6010C
COPPER	0.0031	umole/g	P	821/R-91-100 / SW846 6010C
LEAD	0.00039	umole/g	P	821/R-91-100 / SW846 6010C
NICKEL	0.0014	umole/g	P	821/R-91-100 / SW846 6010C
ZINC	0.0030	umole/g	P	821/R-91-100 / SW846 6010C

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.10	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.40	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	1.6	ug/L	MS	SW846 3010A / SW846 6020A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 01/07/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.0000031	umole/g	CV	821/R-91-100 / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 02/09/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.00011	umole/g	P	821/R-91-100 / SW846 6010C
CADMIUM	0.000014	umole/g	P	821/R-91-100 / SW846 6010C
COPPER	0.00050	umole/g	P	821/R-91-100 / SW846 6010C
LEAD	0.000084	umole/g	P	821/R-91-100 / SW846 6010C
NICKEL	0.00015	umole/g	P	821/R-91-100 / SW846 6010C
ZINC	0.00052	umole/g	P	821/R-91-100 / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/25/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.011	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.037	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.015	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	0.78	ug/L	MS	SW846 3010A / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 10/31/2019

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0004837	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0299385	0.0	0.0	0.0
ANTIMONY	206.83	0.0000046	0.0	0.0000158	0.0	0.0000731	0.0053159	0.0	0.0	0.0	-0.0000148	-0.0004021	0.0	-0.0011428
ARSENIC	189.04	0.0000103	0.0	-0.0001057	0.0	0.0	0.0001984	0.0	0.0	0.0	0.0018390	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006836	0.0000896
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0328838	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001135	0.0000801	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	-0.0002011	0.0007850	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000006	0.0	0.0	0.0	0.0	0.0	0.0000828	0.0	0.0	0.0	-0.0000100
COBALT	228.62	0.0	0.0	0.0000045	0.0	0.0	-0.0001286	0.0	0.0	0.0	0.0	0.0001562	0.0022114	0.0
COPPER	327.40	0.0000079	0.0	-0.0000147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006988	0.0002004
GOLD	242.79	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0	0.0	0.0058700	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0000865	0.0	0.0000372	0.0	0.0	-0.0000772	-0.0000211	0.0000931	0.0	-0.0012809	0.0000645	-0.0000220	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000557	0.0	0.0	0.0	0.1395100	0.0	0.0	0.0145280	0.0	0.0001229	0.0
MANGANESE	257.61	0.0000017	0.0	0.0000273	0.0000391	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0000270	0.0	0.0	-0.0000204	0.0	0.0	0.0	-0.0001163
NICKEL	231.60	0.0	0.0	-0.0000260	0.0	0.0	0.0	0.0001789	0.0	0.0	0.0011098	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000345	0.0	0.0000204	0.0	0.0000996	0.0	0.0002593	0.0	0.0003979	0.0	0.0	0.0	0.0001059
SILICON	251.61	0.0	0.0	-0.0000932	0.0	0.0	0.0	0.0	0.0	0.0	0.0093424	0.0	0.0253899	0.0
SILVER	328.07	0.0	0.0	-0.0003035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0008413	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	0.0000086	0.0	0.0000026	0.0	0.0	0.0	0.0014338	0.0001027	-0.0015199	-0.0000004	0.0	-0.0006457	-0.0032486
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001510	0.0	0.0	0.0	0.0002068	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000127	0.0	0.0	-0.0026455	0.0	0.0	-0.0007989	-0.0089144	0.0	0.0003126	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0010444	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 05/04/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MOLYBDENUM	45.00	5000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SODIUM	5.00	200000	P
ZINC	45.00	20000	P

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CADMIUM	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
NICKEL	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG23IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/23/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LC2ONG23IMS1	LC2ONG23IMS1	1	0.1	
LCSONG23IMS1	LCSONG23IMS1	1	0.1	
PBSNG23IMS1	PBSNG23IMS1	1	0.1	
COR05SED01A	SN6056-005	1.03	0.1	A
COR05SED02A	SN6056-006	1.04	0.1	A
COR05SED02B	SN6056-007	1.4	0.1	A
COR05SED03A	SN6056-008	1.02	0.1	A
COR05SED04A	SN6056-009	1.32	0.1	A
COR05SED04AP	SN6056-009P	1.31	0.1	A
COR05SED04AS	SN6056-009S	1.34	0.1	A
COR05SED05A	SN6056-010	1.36	0.1	A
COR05SED06A	SN6056-011	1.01	0.1	A
COR05SED07A	SN6056-012	1.07	0.1	A
COR05SED08A	SN6056-013	1.01	0.1	A
COR06SED01A	SN6056-014	1.23	0.1	A
COR06SED02A	SN6056-015	1.07	0.1	A
COR06SED02B	SN6056-016	1.05	0.1	A
COR06SED03A	SN6056-017	1.01	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG27IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/27/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG27IMS1	LCSONG27IMS1	1	0.1	
PBSNG27IMS1	PBSNG27IMS1	1	0.1	
COR06SED04A	SN6056-018	1.42	0.1	A
COR06SED04AP	SN6056-018P	1.41	0.1	A
COR06SED04AS	SN6056-018S	1.49	0.1	A
COR06SED05A	SN6056-019	1.29	0.1	A
COR06SED06A	SN6056-020	1.33	0.1	A
COR06SED07A	SN6056-021	1.38	0.1	B
COR06SED08A	SN6056-022	1.25	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG28IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/28/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG28IMS1	LCSONG28IMS1	1	0.1	
PBSNG28IMS1	PBSNG28IMS1	1	0.1	
COR04IS01	SN6056-001	1.01	0.1	
COR04IS02	SN6056-002	1.06	0.1	
COR04IS03	SN6056-003	1.02	0.1	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG29IMW2

Matrix: WATER **SDG Name:** SN6056

Method: MS **Prep Date:** 07/29/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG29IMW2	LCSWNG29IMW2	0.05	0.05	
PBWNG29IMW2	PBWNG29IMW2	0.05	0.05	
COR04IS00	SN6056-004	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH03ICS2

Matrix: SOIL **SDG Name:** SN6056

Method: P **Prep Date:** 08/03/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH03ICS2	LCSONH03ICS2	10	0.2	
PBSNH03ICS2	PBSNH03ICS2	10	0.2	
COR05SED07A	SN6056-024	12.603	0.2	
COR06SED07A	SN6056-026	10.262	0.2	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH13HGW1

Matrix: SOIL **SDG Name:** SN6056

Method: CV **Prep Date:** 08/13/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH03ICS2	LCSONH03ICS2	10	0.2	
LCSWNH13HGW1	LCSWNH13HGW1	0.025	0.025	
PBSNH03ICS2	PBSNH03ICS2	10	0.2	
PBWNH13HGW1	PBWNH13HGW1	0.025	0.025	
COR05SED07A	SN6056-024	12.603	0.2	
COR06SED07A	SN6056-026	10.262	0.2	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: CETAC M6100 **File Name:** HNH13C

Date: 08/13/2020 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	14:11	Hg
Standard #1 (0.2 ppb		1	14:13	Hg
Standard #2 (0.5 ppb		1	14:15	Hg
Standard #3 (1.0 ppb		1	14:17	Hg
Standard #4 (5.0 ppb		1	14:19	Hg
Standard #5 (10.0 pp		1	14:21	Hg
ICV		1	14:23	HG
ICB		1	14:25	HG
PQL		1	14:28	HG
CCV		1	14:30	HG
CCB		1	14:32	HG
LCSONH03ICS2		1	14:34	HG
LCSWNH13HGW1		1	14:36	HG
PBSNH03ICS2		1	14:38	HG
PBWNH13HGW1		1	14:40	HG
SN6056-024	COR05SED07A	1	14:42	HG
SN6056-026	COR06SED07A	1	14:45	HG
ZZZZZZ		1	14:47	
ZZZZZZ		1	15:17	
ZZZZZZ		1	15:19	
CCV		1	15:21	HG
CCB		1	15:23	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH06A

Date: 08/06/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	12:38	AL SB	CD CA	CU	FE PB	MG	NI	ZN
Std 1		1	12:43	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICV		1	12:47	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICB		1	12:51	AL SB	CD CA	CU	FE PB	MG	NI	ZN
PQL		1	12:56	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSA		1	13:00	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSAB		1	13:06	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCV		1	13:11	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	13:15	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	13:19							
ZZZZZZ		1	13:28							
CCV		1	13:34	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	13:38	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	13:42							
ZZZZZZ		1	13:47							
ZZZZZZ		1	13:51							
ZZZZZZ		1	13:56							
ZZZZZZ		1	14:00							
ZZZZZZ		1	14:04							
ZZZZZZ		2	14:09							
ZZZZZZ		1	14:13							
ZZZZZZ		1	14:18							
ZZZZZZ		1	14:22							
CCV		1	14:26	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	14:31	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	14:35							
ZZZZZZ		5	14:40							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH06A

Date: 08/06/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		2	14:44							
LCSONH03ICS2		1	14:49	SB	CD	CU	PB		NI	ZN
PBSNH03ICS2		1	14:53	SB	CD	CU	PB		NI	ZN
ZZZZZZ		1	14:57							
SN6056-026	COR06SED07A	1	15:02	SB	CD	CU	PB		NI	ZN
ZZZZZZ		1	15:06							
ZZZZZZ		1	15:10							
ZZZZZZ		5	15:15							
CCV		1	15:19	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	15:23	AL SB	CD CA	CU	FE PB	MG	NI	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH07A

Date: 08/07/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	17:12	AL SB	CD CA	CU	FE PB	MG	NI	ZN
Std 1		1	17:16	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICV		1	17:20	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICB		1	17:25	AL SB	CD CA	CU	FE PB	MG	NI	ZN
PQL		1	17:29	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSA		1	17:33	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSAB		1	17:39	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCV		1	17:44	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	17:48	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	17:53							
ZZZZZZ		1	18:02							
CCV		1	18:07	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	18:11	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		2	18:16							
ZZZZZZ		5	18:20							
ZZZZZZ		1	18:24							
ZZZZZZ		1	18:29							
ZZZZZZ		1	18:33							
ZZZZZZ		1	18:37							
ZZZZZZ		1	18:43							
ZZZZZZ		1	18:48							
ZZZZZZ		1	18:54							
ZZZZZZ		1	18:59							
CCV		1	19:04	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	19:09	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	19:13							
ZZZZZZ		1	19:17							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH07A

Date: 08/07/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	19:22							
ZZZZZZ		1	19:27							
ZZZZZZ		1	19:32							
ZZZZZZ		1	19:38							
ZZZZZZ		1	19:43							
ZZZZZZ		1	19:48							
ZZZZZZ		1	19:53							
ZZZZZZ		1	19:57							
CCV		1	20:01	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	20:06	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	20:10							
ZZZZZZ		1	20:14							
ZZZZZZ		1	20:19							
ZZZZZZ		1	20:23							
ZZZZZZ		1	20:28							
ZZZZZZ		1	20:32							
ZZZZZZ		1	20:36							
ZZZZZZ		1	20:41							
SN6056-024	COR05SED07A	1	20:45	SB	CD	CU	PB		NI	ZN
ZZZZZZ		2	20:49							
CCV		1	20:54	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	20:58	AL SB	CD CA	CU	FE PB	MG	NI	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	17:13	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	17:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	17:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	17:21	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	17:24	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	17:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	17:29	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	17:32											
ZZZZZZ		1	17:34											
ZZZZZZ		1	17:37											
ZZZZZZ		1	17:40											
CCV		1	17:42	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:45	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	17:47											
ZZZZZZ		1	17:50											
ZZZZZZ		1	17:53											
ZZZZZZ		1	17:55											
ZZZZZZ		1	17:58											
ZZZZZZ		1	18:00											
ZZZZZZ		1	18:03											
ZZZZZZ		1	18:05											
ZZZZZZ		1	18:08											
ZZZZZZ		1	18:11											
CCV		1	18:13	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:18											
ZZZZZZ		5	18:21											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	18:24									
ZZZZZZ		1	18:26									
ZZZZZZ		1	18:29									
ZZZZZZ		1	18:31									
ZZZZZZ		5	18:34									
ZZZZZZ		5	18:37									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:42									
CCV		1	18:44	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:47	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:50									
ZZZZZZ		5	18:53									
ZZZZZZ		5	18:55									
ZZZZZZ		5	18:58									
ZZZZZZ		10	19:00									
ZZZZZZ		20	19:03									
ZZZZZZ		5	19:06									
ZZZZZZ		5	19:08									
ZZZZZZ		5	19:11									
ZZZZZZ		5	19:13									
CCV		1	19:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:21									
ZZZZZZ		5	19:24									
ZZZZZZ		5	19:27									
ZZZZZZ		5	19:29									
ZZZZZZ		5	19:32									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	19:35	
ZZZZZZ		5	19:37	
ZZZZZZ		5	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:45	
CCV		1	19:48	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:51	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:53	
ZZZZZZ		5	19:56	
ZZZZZZ		5	19:58	
ZZZZZZ		5	20:01	
ZZZZZZ		25	20:03	
ZZZZZZ		5	20:06	
ZZZZZZ		5	20:08	
ZZZZZZ		5	20:11	
ZZZZZZ		5	20:14	
ZZZZZZ		1	20:16	
CCV		1	20:19	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	20:21	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		1	20:24	
ZZZZZZ		1	20:27	
ZZZZZZ		1	20:29	
ZZZZZZ		100	20:32	
ZZZZZZ		1	20:35	
ZZZZZZ		1	20:37	
ZZZZZZ		5	20:40	
ZZZZZZ		1	20:43	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	20:45									
ZZZZZZ		1	20:48									
CCV		1	20:51	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:53	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:56									
ZZZZZZ		5	20:59									
ZZZZZZ		5	21:01									
PBSNG23IMS1		5	21:04		Sb		Cu							Zn
LCSONG23IMS1		5	21:07		Sb		Cu		Pb					Zn
LC2ONG23IMS1		5	21:09		Sb		Cu		Pb					Zn
SN6056-005	COR05SED01A	5	21:12		Sb		Cu							Zn
SN6056-006	COR05SED02A	5	21:15		Sb		Cu							Zn
SN6056-007	COR05SED02B	5	21:17		Sb		Cu							Zn
SN6056-008	COR05SED03A	5	21:20		Sb		Cu							Zn
CCV		1	21:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-009	COR05SED04A	5	21:28		Sb		Cu							Zn
SN6056-009L	COR05SED04AL	25	21:31		Sb		Cu							Zn
SN6056-009A	COR05SED04AA	5	21:34		Sb		Cu		Pb					Zn
SN6056-009S	COR05SED04AS	5	21:36		Sb		Cu		Pb					Zn
SN6056-009P	COR05SED04AP	5	21:39		Sb		Cu		Pb					Zn
SN6056-010	COR05SED05A	5	21:42		Sb		Cu		Pb					Zn
SN6056-011	COR05SED06A	5	21:44		Sb		Cu		Pb					Zn
SN6056-012	COR05SED07A	5	21:47		Sb		Cu							Zn
SN6056-013	COR05SED08A	5	21:50		Sb		Cu		Pb					Zn
SN6056-014	COR06SED01A	5	21:52		Sb				Pb					Zn
CCV		1	21:55	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements										
CCB		1	21:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-015	COR06SED02A	5	22:01		Sb				Pb					Zn
SN6056-016	COR06SED02B	5	22:03		Sb				Pb					Zn
SN6056-017	COR06SED03A	5	22:06		Sb									Zn
CCV		1	22:08	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	16:21	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	16:24	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	16:27	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	16:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	16:32	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:35	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	16:38	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:40										
ZZZZZZ		1	16:43										
ZZZZZZ		1	16:46										
ZZZZZZ		1	16:48										
CCV		1	16:51	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:54	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:57										
ZZZZZZ		5	16:59										
ZZZZZZ		5	17:02										
ZZZZZZ		5	17:04										
ZZZZZZ		5	17:07										
ZZZZZZ		25	17:10										
ZZZZZZ		5	17:12										
ZZZZZZ		5	17:15										
ZZZZZZ		25	17:18										
ZZZZZZ		5	17:20										
CCV		1	17:23	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:26	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:28										
ZZZZZZ		5	17:31										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	17:33									
ZZZZZZ		1	17:36									
ZZZZZZ		1	17:39									
ZZZZZZ		1	17:41									
ZZZZZZ		1	17:44									
ZZZZZZ		1	17:47									
ZZZZZZ		1	17:49									
ZZZZZZ		1	17:52									
CCV		1	17:55	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:00									
ZZZZZZ		1	18:03									
ZZZZZZ		50	18:05									
ZZZZZZ		5	18:08									
ZZZZZZ		5	18:11									
ZZZZZZ		5	18:13									
ZZZZZZ		5	18:16									
ZZZZZZ		5	18:19									
ZZZZZZ		5	18:21									
ZZZZZZ		5	18:24									
CCV		1	18:27	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:29	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:32									
ZZZZZZ		5	18:35									
ZZZZZZ		5	18:37									
ZZZZZZ		25	18:40									
ZZZZZZ		5	18:43									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		5	18:45										
ZZZZZZ		5	18:48										
ZZZZZZ		5	18:51										
ZZZZZZ		1	18:53										
ZZZZZZ		5	18:56										
CCV		1	18:59	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:01	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	19:04										
PBSNG23IMS1		5	19:07					Pb					
ZZZZZZ		5	19:09										
ZZZZZZ		5	19:12										
SN6056-005	COR05SED01A	5	19:15					Pb					
SN6056-006	COR05SED02A	5	19:17					Pb					
SN6056-007	COR05SED02B	5	19:20					Pb					
SN6056-008	COR05SED03A	5	19:23					Pb					
SN6056-009	COR05SED04A	5	19:25					Pb					
SN6056-009L	COR05SED04AL	25	19:28					Pb					
CCV		1	19:31	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:36										
ZZZZZZ		5	19:39										
ZZZZZZ		5	19:41										
ZZZZZZ		5	19:44										
ZZZZZZ		5	19:47										
ZZZZZZ		5	19:49										
ZZZZZZ		5	19:52										
SN6056-014	COR06SED01A	5	19:54			Cu							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
SN6056-015	COR06SED02A	5	19:57			Cu						
SN6056-016	COR06SED02B	5	20:00			Cu						
CCV		1	20:02	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:07										
ZZZZZZ		1	20:10										
ZZZZZZ		5	20:13										
ZZZZZZ		1	20:15										
ZZZZZZ		1	20:18										
ZZZZZZ		1	20:20										
ZZZZZZ		1	20:23										
ZZZZZZ		1	20:26										
ZZZZZZ		1	20:28										
ZZZZZZ		1	20:31										
CCV		1	20:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:36	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	20:39										
ZZZZZZ		5	20:41										
ZZZZZZ		5	20:44										
ZZZZZZ		5	20:47										
ZZZZZZ		5	20:50										
ZZZZZZ		5	20:52										
ZZZZZZ		5	20:55										
ZZZZZZ		5	20:58										
ZZZZZZ		25	21:00										
ZZZZZZ		5	21:03										
CCV		1	21:06	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCB		1	21:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:11										
ZZZZZZ		5	21:13										
ZZZZZZ		5	21:16										
ZZZZZZ		5	21:19										
ZZZZZZ		5	21:21										
ZZZZZZ		1	21:24										
ZZZZZZ		5	21:27										
ZZZZZZ		1	21:29										
ZZZZZZ		1	21:32										
ZZZZZZ		1	21:35										
CCV		1	21:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	21:43										
ZZZZZZ		5	21:45										
ZZZZZZ		1	21:48										
ZZZZZZ		1	21:51										
ZZZZZZ		1	21:54										
ZZZZZZ		5	21:56										
ZZZZZZ		5	21:59										
ZZZZZZ		5	22:01										
ZZZZZZ		5	22:04										
ZZZZZZ		5	22:07										
CCV		1	22:10	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:15										
ZZZZZZ		5	22:17										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	22:20									
ZZZZZZ		5	22:23									
ZZZZZZ		5	22:25									
ZZZZZZ		5	22:28									
ZZZZZZ		5	22:30									
ZZZZZZ		5	22:33									
ZZZZZZ		5	22:36									
ZZZZZZ		5	22:38									
CCV		1	22:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:46									
ZZZZZZ		5	22:49									
ZZZZZZ		25	22:52									
ZZZZZZ		5	22:54									
ZZZZZZ		5	22:57									
ZZZZZZ		5	23:00									
ZZZZZZ		5	23:02									
ZZZZZZ		5	23:05									
ZZZZZZ		5	23:08									
ZZZZZZ		5	23:10									
CCV		1	23:13	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:16	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	23:18									
ZZZZZZ		5	23:21									
ZZZZZZ		25	23:24									
ZZZZZZ		5	23:26									
ZZZZZZ		5	23:29									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	23:32									
ZZZZZZ		5	23:35									
ZZZZZZ		25	23:37									
ZZZZZZ		5	23:40									
ZZZZZZ		5	23:42									
CCV		1	23:45	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:48	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	23:51									
ZZZZZZ		5	23:53									
ZZZZZZ		5	23:56									
ZZZZZZ		5	23:58									
PBSNG27IMS1		5	00:01			Cu							
LCSONG27IMS1		5	00:04			Cu							
SN6056-018	COR06SED04A	5	00:07			Cu							Zn
SN6056-018L	COR06SED04AL	25	00:09			Cu							Zn
SN6056-018A	COR06SED04AA	5	00:12			Cu							Zn
SN6056-018S	COR06SED04AS	5	00:14			Cu							Zn
CCV		1	00:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:20	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-018P	COR06SED04AP	5	00:23			Cu							Zn
SN6056-019	COR06SED05A	5	00:25			Cu							Zn
SN6056-020	COR06SED06A	5	00:28			Cu							Zn
CCV		1	00:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	12:33	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	12:36	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	12:39	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	12:42	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	12:44	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	12:47	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	12:50	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	12:53										
ZZZZZZ		1	12:55										
ZZZZZZ		1	12:58										
ZZZZZZ		1	13:00										
CCV		1	13:03	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	13:06	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	13:09										
ZZZZZZ		5	13:11										
ZZZZZZ		5	13:14										
ZZZZZZ		5	13:16										
ZZZZZZ		5	13:19										
ZZZZZZ		25	13:22										
ZZZZZZ		5	13:24										
ZZZZZZ		5	13:27										
ZZZZZZ		5	13:30										
ZZZZZZ		5	13:32										
CCV		1	13:35	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	13:38	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	13:40										
ZZZZZZ		5	13:43										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	13:46									
ZZZZZZ		5	13:48									
ZZZZZZ		5	13:51									
ZZZZZZ		5	13:54									
ZZZZZZ		5	13:56									
ZZZZZZ		25	13:59									
ZZZZZZ		5	14:01									
ZZZZZZ		5	14:04									
CCV		1	14:07	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	14:09	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	14:12									
ZZZZZZ		5	14:15									
ZZZZZZ		1	14:17									
ZZZZZZ		5	14:20									
ZZZZZZ		1	14:23									
ZZZZZZ		5	14:25									
ZZZZZZ		5	14:28									
ZZZZZZ		5	14:31									
ZZZZZZ		5	14:33									
ZZZZZZ		5	14:36									
CCV		1	14:39	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	14:41	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	14:44									
ZZZZZZ		5	14:47									
ZZZZZZ		5	14:49									
ZZZZZZ		25	14:52									
ZZZZZZ		5	14:55									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	14:57	
ZZZZZZ		5	15:00	
ZZZZZZ		5	15:03	
ZZZZZZ		5	15:05	
ZZZZZZ		5	15:08	
CCV		1	15:11	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	15:13	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	15:16	
ZZZZZZ		5	15:18	
ZZZZZZ		5	15:21	
ZZZZZZ		5	15:24	
SN6056-017	COR06SED03A	5	15:26	Pb
ZZZZZZ		1	15:29	
ZZZZZZ		5	15:32	
ZZZZZZ		1	15:34	
ZZZZZZ		1	15:37	
ZZZZZZ		1	15:40	
CCV		1	15:42	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	15:45	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		1	15:48	
ZZZZZZ		1	15:50	
ZZZZZZ		5	15:53	
ZZZZZZ		5	15:56	
ZZZZZZ		5	15:58	
ZZZZZZ		5	16:01	
ZZZZZZ		5	16:04	
ZZZZZZ		5	16:06	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	16:09									
ZZZZZZ		25	16:12									
CCV		1	16:14	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:17	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:20									
ZZZZZZ		5	16:22									
ZZZZZZ		5	16:25									
ZZZZZZ		5	16:28									
ZZZZZZ		5	16:30									
ZZZZZZ		1	16:33									
ZZZZZZ		5	16:35									
ZZZZZZ		1	16:38									
ZZZZZZ		5	16:41									
ZZZZZZ		1	16:43									
CCV		1	16:46	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:49	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:51									
ZZZZZZ		1	16:54									
ZZZZZZ		1	16:57									
ZZZZZZ		5	16:59									
ZZZZZZ		1	17:02									
ZZZZZZ		1	17:05									
ZZZZZZ		1	17:07									
ZZZZZZ		5	17:10									
ZZZZZZ		5	17:13									
ZZZZZZ		5	17:15									
CCV		1	17:18	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CCB		1	17:21	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:23										
ZZZZZZ		5	17:26										
ZZZZZZ		5	17:29										
ZZZZZZ		5	17:31										
ZZZZZZ		5	17:35										
ZZZZZZ		5	17:38										
ZZZZZZ		5	17:40										
ZZZZZZ		5	17:43										
ZZZZZZ		5	17:46										
ZZZZZZ		5	17:48										
CCV		1	17:51	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:54	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:56										
ZZZZZZ		5	17:59										
ZZZZZZ		5	18:02										
ZZZZZZ		5	18:04										
ZZZZZZ		25	18:07										
ZZZZZZ		5	18:10										
ZZZZZZ		5	18:12										
ZZZZZZ		5	18:15										
ZZZZZZ		5	18:18										
ZZZZZZ		5	18:20										
CCV		1	18:23	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:26	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:28										
ZZZZZZ		5	18:31										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	18:34	
ZZZZZZ		5	18:36	
ZZZZZZ		25	18:39	
ZZZZZZ		5	18:42	
ZZZZZZ		5	18:44	
ZZZZZZ		5	18:47	
ZZZZZZ		5	18:50	
ZZZZZZ		25	18:52	
CCV		1	18:55	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	18:58	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:00	
ZZZZZZ		5	19:03	
ZZZZZZ		5	19:06	
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
ZZZZZZ		5	19:13	
PBSNG27IMS1		5	19:16	Sb Pb Zn
LCSONG27IMS1		5	19:19	Sb Pb Zn
SN6056-018	COR06SED04A	5	19:22	Sb Pb
SN6056-018L	COR06SED04AL	25	19:24	Sb Pb
CCV		1	19:27	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	19:29	Al Sb Ca Fe Pb Mg Mo K Na Zn
SN6056-018A	COR06SED04AA	5	19:32	Sb Pb
SN6056-018S	COR06SED04AS	5	19:35	Sb Pb
SN6056-018P	COR06SED04AP	5	19:37	Sb Pb
SN6056-019	COR06SED05A	5	19:40	Sb Pb
SN6056-020	COR06SED06A	5	19:43	Sb Pb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:45									
ZZZZZZ		5	19:48									
ZZZZZZ		25	19:51									
ZZZZZZ		5	19:53									
ZZZZZZ		5	19:56									
CCV		1	19:59	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:01	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CalBlank		1	17:04	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CalStd		1	17:07	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICV		1	17:10	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICB		1	17:13	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICSA		1	17:18	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICSAB		1	17:21	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:29								
ZZZZZZ		1	17:31								
ZZZZZZ		1	17:34								
ZZZZZZ		1	17:42								
PQL		1	17:45	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:47								
ZZZZZZ		1	17:50								
ZZZZZZ		1	17:53								
ZZZZZZ		1	17:56								
CCV		1	17:58	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	18:01	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:03								
ZZZZZZ		1	18:06								
ZZZZZZ		1	18:09								
ZZZZZZ		1	18:11								
ZZZZZZ		1	18:14								
ZZZZZZ		5	18:17								
ZZZZZZ		5	18:19								
ZZZZZZ		5	18:22								
ZZZZZZ		5	18:25								
ZZZZZZ		5	18:27								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CCV		1	18:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:35									
ZZZZZZ		5	18:38									
ZZZZZZ		1	18:41									
ZZZZZZ		10	18:43									
ZZZZZZ		10	18:46									
ZZZZZZ		10	18:49									
ZZZZZZ		5	18:51									
ZZZZZZ		1	18:54									
ZZZZZZ		5	18:57									
ZZZZZZ		5	18:59									
CCV		1	19:02	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:07									
ZZZZZZ		25	19:10									
ZZZZZZ		5	19:13									
ZZZZZZ		25	19:15									
ZZZZZZ		5	19:18									
ZZZZZZ		25	19:21									
ZZZZZZ		5	19:23									
ZZZZZZ		5	19:26									
ZZZZZZ		5	19:29									
ZZZZZZ		5	19:31									
CCV		1	19:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:39									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:42									
PBSNG28IMS1		5	19:44			Cu		Pb				
LCSONG28IMS1		5	19:47			Cu		Pb				
SN6056-001	COR04IS01	5	19:50			Cu		Pb				
SN6056-002	COR04IS02	5	19:52			Cu		Pb				
SN6056-003	COR04IS03	5	19:55			Cu		Pb				
PBWNG29IMW2		5	19:57			Cu		Pb				
LCSWNG29IMW2		5	20:00			Cu		Pb				
ZZZZZZ		5	20:03									
CCV		1	20:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	20:10									
ZZZZZZ		5	20:13									
ZZZZZZ		5	20:16									
ZZZZZZ		5	20:18									
SN6056-004	COR04IS00	5	20:21			Cu						
ZZZZZZ		5	20:24									
ZZZZZZ		5	20:26									
ZZZZZZ		5	20:29									
ZZZZZZ		5	20:32									
ZZZZZZ		5	20:34									
CCV		1	20:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	20:42									
ZZZZZZ		5	20:45									
ZZZZZZ		5	20:48									
ZZZZZZ		5	20:50									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	20:53									
ZZZZZZ		25	20:56									
ZZZZZZ		5	20:58									
ZZZZZZ		5	21:01									
ZZZZZZ		5	21:03									
ZZZZZZ		5	21:06									
CCV		1	21:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	21:11	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	21:14									
ZZZZZZ		5	21:16									
ZZZZZZ		5	21:19									
ZZZZZZ		5	21:22									
ZZZZZZ		5	21:24									
ZZZZZZ		5	21:27									
ZZZZZZ		5	21:30									
ZZZZZZ		5	21:32									
ZZZZZZ		5	21:35									
ZZZZZZ		5	21:38									
CCV		1	21:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	21:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	21:45									
ZZZZZZ		5	21:48									
ZZZZZZ		5	21:51									
ZZZZZZ		5	21:54									
ZZZZZZ		5	21:56									
ZZZZZZ		5	21:59									
ZZZZZZ		5	22:01									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	22:04									
ZZZZZZ		5	22:07									
ZZZZZZ		25	22:09									
CCV		1	22:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	22:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	22:17									
ZZZZZZ		5	22:19									
ZZZZZZ		5	22:22									
ZZZZZZ		5	22:24									
ZZZZZZ		5	22:27									
ZZZZZZ		5	22:30									
ZZZZZZ		5	22:32									
ZZZZZZ		5	22:35									
ZZZZZZ		5	22:37									
ZZZZZZ		5	22:40									
CCV		1	22:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	22:45	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	22:48									
ZZZZZZ		5	22:50									
ZZZZZZ		5	22:53									
ZZZZZZ		5	22:56									
ZZZZZZ		5	22:58									
ZZZZZZ		5	23:01									
ZZZZZZ		5	23:04									
ZZZZZZ		5	23:06									
ZZZZZZ		5	23:09									
ZZZZZZ		5	23:12									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CCV		1	23:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	23:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	23:20									
ZZZZZZ		5	23:22									
ZZZZZZ		5	23:25									
ZZZZZZ		5	23:28									
ZZZZZZ		25	23:30									
ZZZZZZ		5	23:33									
ZZZZZZ		5	23:36									
ZZZZZZ		5	23:38									
ZZZZZZ		10	23:41									
ZZZZZZ		20	23:43									
CCV		1	23:46	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	23:49	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	23:51									
ZZZZZZ		1	23:54									
ZZZZZZ		10	23:56									
ZZZZZZ		20	23:59									
ZZZZZZ		25	00:01									
ZZZZZZ		1	00:04									
ZZZZZZ		1	00:06									
ZZZZZZ		10	00:09									
ZZZZZZ		20	00:11									
ZZZZZZ		25	00:14									
CCV		1	00:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	00:19	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	00:22									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	00:24								
ZZZZZZ		10	00:27								
ZZZZZZ		20	00:30								
ZZZZZZ		25	00:32								
ZZZZZZ		1	00:35								
ZZZZZZ		1	00:38								
ZZZZZZ		10	00:40								
ZZZZZZ		20	00:43								
ZZZZZZ		25	00:46								
CCV		1	00:48	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	00:51	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	00:53								
ZZZZZZ		1	00:56								
ZZZZZZ		10	00:58								
ZZZZZZ		20	01:01								
ZZZZZZ		25	01:04								
ZZZZZZ		1	01:06								
ZZZZZZ		1	01:09								
ZZZZZZ		10	01:11								
ZZZZZZ		50	01:14								
ZZZZZZ		10	01:17								
CCV		1	01:19	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	01:22	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	01:25								
ZZZZZZ		1	01:27								
ZZZZZZ		20	01:30								
ZZZZZZ		25	01:33								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	01:35								
ZZZZZZ		1	01:38								
ZZZZZZ		1	01:41								
ZZZZZZ		10	01:43								
ZZZZZZ		20	01:46								
ZZZZZZ		25	01:49								
CCV		1	01:51	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	01:54	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	01:57								
ZZZZZZ		1	01:59								
ZZZZZZ		10	02:02								
ZZZZZZ		20	02:05								
ZZZZZZ		25	02:07								
ZZZZZZ		1	02:10								
ZZZZZZ		1	02:13								
ZZZZZZ		10	02:15								
ZZZZZZ		20	02:18								
ZZZZZZ		25	02:20								
CCV		1	02:23	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	02:26	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	02:28								
ZZZZZZ		1	02:31								
ZZZZZZ		5	02:33								
ZZZZZZ		5	02:36								
ZZZZZZ		5	02:39								
ZZZZZZ		5	02:41								
ZZZZZZ		5	02:44								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	02:47									
ZZZZZZ		5	02:49									
ZZZZZZ		5	02:52									
CCV		1	02:55	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	02:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	03:00									
ZZZZZZ		5	03:02									
ZZZZZZ		25	03:05									
ZZZZZZ		5	03:07									
ZZZZZZ		5	03:10									
ZZZZZZ		5	03:13									
ZZZZZZ		5	03:15									
ZZZZZZ		50	03:18									
SN6056-017	COR06SED03A	5	03:20			Cu						
ZZZZZZ		5	03:23									
CCV		1	03:25	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	03:28	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	16:19	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CalStd		1	16:22	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICV		1	16:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICB		1	16:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
PQL		1	16:35	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSA		1	16:38	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSAB		1	16:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	16:44									
ZZZZZZ		1	16:46									
ZZZZZZ		1	16:49									
ZZZZZZ		1	16:51									
CCV		1	16:54	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	16:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:59									
ZZZZZZ		25	17:02									
ZZZZZZ		5	17:05									
ZZZZZZ		5	17:07									
ZZZZZZ		25	17:10									
ZZZZZZ		5	17:13									
ZZZZZZ		5	17:15									
ZZZZZZ		5	17:18									
SN6056-021	COR06SED07A	5	17:21			Cu		Pb				
SN6056-022	COR06SED08A	5	17:23			Cu		Pb				
CCV		1	17:26	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	17:28	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	17:31									
ZZZZZZ		5	17:34									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	17:36									
ZZZZZZ		5	17:39									
ZZZZZZ		5	17:42									
ZZZZZZ		5	17:44									
ZZZZZZ		5	17:47									
ZZZZZZ		5	17:50									
ZZZZZZ		5	17:52									
ZZZZZZ		5	17:55									
CCV		1	17:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:00	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	18:03									
ZZZZZZ		5	18:05									
ZZZZZZ		5	18:08									
ZZZZZZ		5	18:10									
ZZZZZZ		5	18:13									
SN6056-012	COR05SED07A	50	18:16					Pb				
ZZZZZZ		5	18:18									
ZZZZZZ		5	18:21									
ZZZZZZ		5	18:23									
ZZZZZZ		5	18:26									
CCV		1	18:29	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:31	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	18:34									
ZZZZZZ		5	18:37									
ZZZZZZ		5	18:39									
ZZZZZZ		1	18:42									
ZZZZZZ		5	18:45									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	18:47									
ZZZZZZ		10	18:50									
ZZZZZZ		10	18:53									
ZZZZZZ		10	18:55									
ZZZZZZ		1	18:58									
CCV		1	19:00	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:03	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:06									
ZZZZZZ		5	19:08									
ZZZZZZ		5	19:11									
ZZZZZZ		25	19:14									
ZZZZZZ		5	19:16									
ZZZZZZ		25	19:19									
ZZZZZZ		5	19:22									
ZZZZZZ		25	19:24									
ZZZZZZ		5	19:27									
ZZZZZZ		5	19:29									
CCV		1	19:32	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:37									
ZZZZZZ		5	19:40									
ZZZZZZ		5	19:42									
ZZZZZZ		5	19:45									
ZZZZZZ		5	19:48									
ZZZZZZ		5	19:50									
ZZZZZZ		5	19:53									
ZZZZZZ		5	19:56									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:59									
ZZZZZZ		5	20:01									
CCV		1	20:04	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:07	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	20:09									
SN6056-004	COR04IS00	5	20:12					Pb				
ZZZZZZ		5	20:14									
ZZZZZZ		10	20:17									
ZZZZZZ		25	20:20									
ZZZZZZ		25	20:22									
ZZZZZZ		25	20:25									
ZZZZZZ		25	20:28									
ZZZZZZ		25	20:30									
ZZZZZZ		25	20:33									
CCV		1	20:36	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:38	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	17:54	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	17:57	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	18:01	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	18:04	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	18:06	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	18:09	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	18:12	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:15								
ZZZZZZ		1	18:17								
ZZZZZZ		1	18:20								
ZZZZZZ		1	18:23								
CCV		1	18:25	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:28	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:31								
ZZZZZZ		5	18:33								
ZZZZZZ		5	18:36								
ZZZZZZ		5	18:38								
ZZZZZZ		5	18:41								
ZZZZZZ		5	18:43								
ZZZZZZ		5	18:46								
ZZZZZZ		5	18:49								
ZZZZZZ		5	18:52								
ZZZZZZ		5	18:54								
CCV		1	18:57	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:59	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:02								
ZZZZZZ		5	19:05								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		25	19:07							
ZZZZZZ		5	19:10							
ZZZZZZ		5	19:12							
ZZZZZZ		5	19:15							
ZZZZZZ		1	19:18							
ZZZZZZ		1	19:20							
ZZZZZZ		1	19:23							
ZZZZZZ		5	19:25							
CCV		1	19:28	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	19:30	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:33							
ZZZZZZ		5	19:36							
SN6056-021	COR06SED07A	5	19:38	Sb						Zn
SN6056-022	COR06SED08A	5	19:41	Sb						Zn
PBWNG29IMW2		5	19:44	Sb						
LCSWNG29IMW2		5	19:46	Sb						
ZZZZZZ		5	19:49							
ZZZZZZ		5	19:51							
ZZZZZZ		5	19:54							
ZZZZZZ		5	19:57							
CCV		1	19:59	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	20:02	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:05							
ZZZZZZ		5	20:07							
ZZZZZZ		5	20:10							
SN6056-004	COR04IS00	5	20:12	Sb						
ZZZZZZ		5	20:15							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	20:18							
ZZZZZZ		1	20:20							
ZZZZZZ		1	20:23							
ZZZZZZ		1	20:26							
ZZZZZZ		1	20:28							
CCV		1	20:31	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	20:33	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	14:36	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	14:40	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	14:43	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	14:46	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	14:49	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	14:51	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	14:54	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:57								
ZZZZZZ		1	14:59								
ZZZZZZ		1	15:02								
ZZZZZZ		1	15:05								
CCV		1	15:08	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:10	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
LCSONG28IMS1		5	17:18	Sb							Zn
ZZZZZZ		5	17:22								
PBSNG28IMS1		5	17:24	Sb							Zn
SN6056-001	COR04IS01	5	17:27	Sb							Zn
SN6056-002	COR04IS02	5	17:30	Sb							Zn
SN6056-003	COR04IS03	5	17:32	Sb							Zn
LCSWNG29IMW2		5	17:35								Zn
CCV		1	17:38	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:40	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PBWNG29IMW2		5	17:43								Zn
ZZZZZZ		5	17:46								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		5	17:48							
ZZZZZZ		5	17:51							
ZZZZZZ		5	17:54							
ZZZZZZ		5	17:57							
ZZZZZZ		5	17:59							
ZZZZZZ		5	18:02							
SN6056-004	COR04IS00	5	18:05							Zn
ZZZZZZ		5	18:07							
CCV		1	18:10	Al Sb	Ca	Fe	Mg	Mo	K	Na Zn
CCB		1	18:13	Al Sb	Ca	Fe	Mg	Mo	K	Na Zn

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-1
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS01	SL	20-JUL-20 09:30:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services A000224

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-2
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS02	SL	20-JUL-20 10:00:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services A000225

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-3
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS03	SL	20-JUL-20 10:30:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services A000226

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-5
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED01A	SL	20-JUL-20 12:38:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	41. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000227

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-6
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED02A	SL	20-JUL-20 12:44:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	53. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000228

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-7
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED02B	SL	20-JUL-20 12:45:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	58. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000229

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-8
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED03A	SL	20-JUL-20 12:50:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	18. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000230

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-9
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED04A	SL	20-JUL-20 13:10:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	26. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000231

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-10
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED05A	SL	20-JUL-20 13:15:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000232

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-11
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED06A	SL	20-JUL-20 13:20:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	65. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000233

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-12
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED07A	SL	20-JUL-20 13:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
TOC In Soil	110000 ug/gdrywt	2400	500	1800	LLOYDKAHN	WG283174	30-JUL-20 17:20:44	N/A	N/A	
Total Solids	38. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000234

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-13
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED08A	SL	20-JUL-20 13:34:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	20. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000235

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-14
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED01A	SL	20-JUL-20 14:57:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	46. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000236

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-15
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED02A	SL	20-JUL-20 15:01:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000237

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-16
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED02B	SL	20-JUL-20 15:02:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	7.9 %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000238

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-17
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED03A	SL	20-JUL-20 15:06:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	7.9 %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000239

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-18
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED04A	SL	20-JUL-20 15:10:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000240

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-19
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED05A	SL	20-JUL-20 15:18:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	21. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000241

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-20
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED06A	SL	20-JUL-20 15:22:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	12. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000242

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-21
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED07A	SL	20-JUL-20 15:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
TOC In Soil	58000 ug/gdrywt	1400	300	1100	LLOYDKAHN	WG283174	30-JUL-20 17:31:54	N/A	N/A	
Total Solids	49. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A0000243

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-22
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED08A	SL	20-JUL-20 15:32:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	65. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000244

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-24
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED07A	SL	20-JUL-20 13:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Acid Volatile Sulfide	1.4 umole/g	0.26	0.099	0.20	EPA 821	WG283381	03-AUG-20 17:48:00	EPA 821	03-AUG-20	
Total Solids	38. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000245

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-26
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED07A	SL	20-JUL-20 15:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Acid Volatile Sulfide	U0.16 umole/g	0.20	0.078	0.16	EPA 821	WG283381	03-AUG-20 17:48:00	EPA 821	03-AUG-20	
Total Solids	49. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services A000246

Quality Control Report

Blank Sample Summary Report

Acid Volatile Sulfide

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG283381	EPA 821	03-AUG-20	03-AUG-20	U 0.076 umole/g	0.10 umole/g	0.076

TOC in Soil

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG283174	Lloyd Kahn	30-JUL-20	N/A	U 300 ug/gdrywt	400 ug/gdrywt	300

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282639	SW3540C	24-JUL-20	23-JUL-20	100 %	1 %	N/A
MBLANK	WG282918	SW3540C	28-JUL-20	27-JUL-20	100 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Acid Volatile Sulfide

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG283381-2	LCS	WG283381	03-AUG-20	03-AUG-20	umole/g	23.893	23.	98	80-120	
WG283381-3	LCSD	WG283381	03-AUG-20	03-AUG-20	umole/g	23.893	23.	97	80-120	1

TOC In Soil

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG283174-2	LCS	WG283174	30-JUL-20	N/A	ug/gdrywt	400000.000	430000	107	80-120	

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282639-2	LCS	WG282639	24-JUL-20	23-JUL-20	%	90	90.	100	90-110	
WG282918-2	LCS	WG282918	28-JUL-20	27-JUL-20	%	90	90.	100	90-110	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282639-4	SN6056-18	WG282639	24-JUL-20	%	11.	12.	11	20
WG282639-3	SN6056-9	WG282639	24-JUL-20	%	26.	36.	32*	20

GRAIN SIZE

Sample Data Section

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR05SED07A
Lab Sample ID	SN6056-12

Date Received	07/22/20
Start Date/Time	07/24/20: 9:08
End Date/Time	07/30/20: 9:00

Sample Weight	Sample (g)
Sample Weight (wet)	131.7
Sample Weight (oven dried)	50.74

Date/Time in oven	07/28/20: 9:05
Date/Time out of oven	07/30/20: 8:15

% Moisture	61.47

Hydrometer Data

Serial Number	742340
Cal Date:	07/27/20
Low Temp C	19.30
Low Temp Reading	1.00300
High Temp	22.70
High Temp Reading	1.0025
Hyd Cal Slope	-0.000147
Hyd Cal Intercept	0.005838
Soil Gravity	2.650000

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	4.4
Sample <=#10	46.34
%Passing #10	91.33

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare	Pan+Sample	Sample	%Finer	Classification	Subclass
3”	75000	0.0	0.0	0.0	100	Gravel	
2”	50000	0.0	0.0	0.0	100	Gravel	
1.5”	37500	0.0	0.0	0.0	100	Gravel	
1”	25000	0.0	0.0	0.0	100	Gravel	
3/4”	19000	0.0	0.0	0.0	100	Gravel	
1/4”	6300	404.0	405.0	1.0	98.03	Gravel	
#4	4750	405.2	406.8	1.6	94.88	Gravel	
#10	2000	368.7	370.5	1.8	91.33	Sand	Coarse
#20	850	303.7	305.5	1.8	87.78	Sand	Medium
#40	425	269.8	272.2	2.4	83.05	Sand	Medium
#60	250	245.5	248.1	2.6	77.93	Sand	Fine
#80	180	246.0	248.1	2.1	73.79	Sand	Fine
#100	150	234.6	236.0	1.4	71.03	Sand	Fine
#200	75	226.0	231.5	5.5	60.19	Sand	Fine

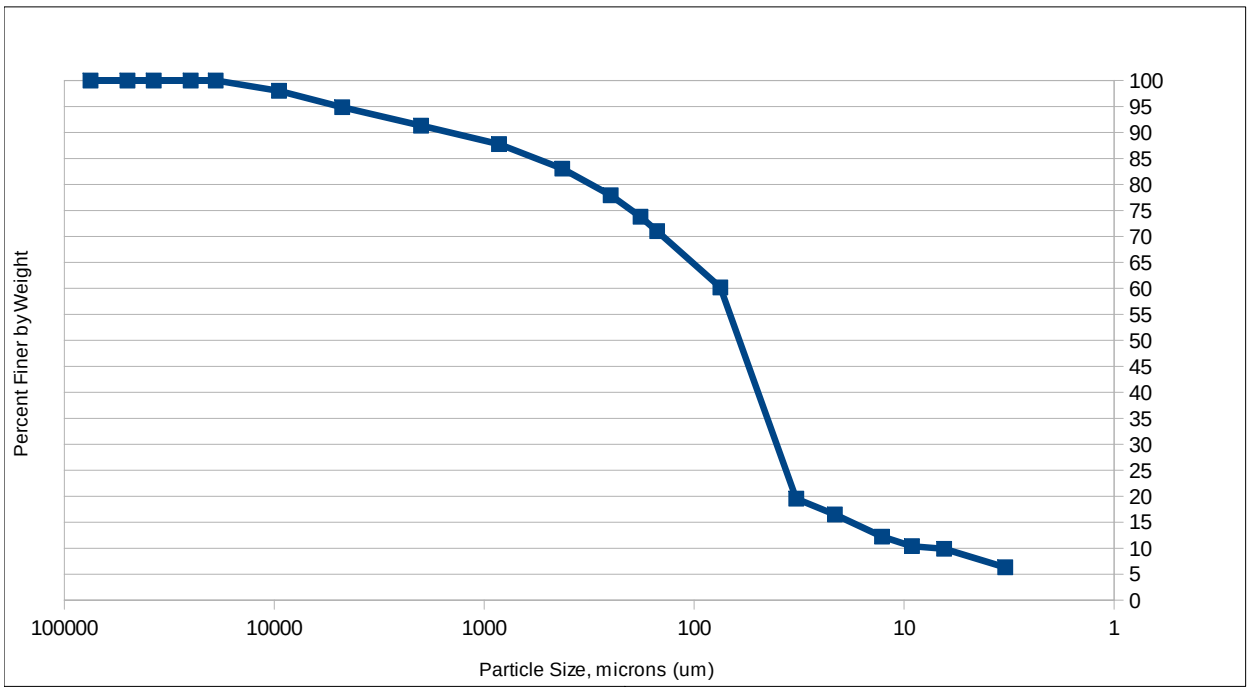
Silt/Clay Fraction (Hydrometer Test)

Time (min)	Actual Time	Spec. Gravity	Temp C	% Finer	Particle Size	Classification
2	2	1.0190	19.5	19.55	32.65	Silt
5	5	1.0165	19.5	16.50	21.37	Silt
15	15	1.0130	19.5	12.23	12.74	Silt
30	30	1.0115	19.5	10.40	9.18	Silt
60	60	1.0110	20	9.88	6.45	Silt
240	240	1.0080	20.5	6.31	3.30	Clay
1440	1440	1.0060	19.5	3.69	1.39	Clay

Gravel	5.12
Sand Coarse	3.55
Sand Medium	8.28
Sand Fine	22.86
Silt	52.53
Clay	7.66
Total =	100

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR05SED07A
Lab Sample ID	SN6056-12



Data		
Sample Fraction	Particle Size	%Passing
3”	75000	100
2”	50000	100
1.5”	37500	100
1”	25000	100
3/4”	19000	100
3/8”	9500	98.03
#4	4750	94.88
#10	2000	91.33
#20	850	87.78
#40	425	83.05
#60	250	77.93
#80	180	73.79
#100	150	71.03
#200	75	60.19
2	32.65	19.55
5	21.37	16.50
15	12.74	12.23
30	9.18	10.40
60	6.45	9.88
240	3.30	6.31
1440	1.39	3.69

Gravel	5.12
Sand Coarse	3.55
Sand Medium	8.28
Sand Fine	22.86
Silt	52.53
Clay	7.66

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR06SED07A
Lab Sample ID	SN6056-21

Date Received	07/22/20
Start Date/Time	07/24/20: 9:10
End Date/Time	07/30/20: 9:05

Sample Weight	Sample (g)
Sample Weight (wet)	141.4
Sample Weight (oven dried)	68.73

Date/Time in oven	07/28/20: 9:05
Date/Time out of oven	07/30/20: 8:15

% Moisture	51.4

Hydrometer Data

Serial Number	742340
Cal Date:	07/27/20
Low Temp C	19.30
Low Temp Reading	1.00300
High Temp	22.70
High Temp Reading	1.0025
Hyd Cal Slope	-0.000147
Hyd Cal Intercept	0.005838
Soil Gravity	2.650000

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	0
Sample <=#10	68.73
%Passing #10	100.00

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare	Pan+Sample	Sample	%Finer	Classification	Subclass
3”	75000	0.0	0.0	0.0	100	Gravel	
2”	50000	0.0	0.0	0.0	100	Gravel	
1.5”	37500	0.0	0.0	0.0	100	Gravel	
1”	25000	0.0	0.0	0.0	100	Gravel	
3/4”	19000	0.0	0.0	0.0	100	Gravel	
1/4”	6300	404.0	404.0	0.0	100.00	Gravel	
#4	4750	405.2	405.2	0.0	100.00	Gravel	
#10	2000	368.7	368.7	0.0	100.00	Sand	Coarse
#20	850	303.7	305.7	2.0	97.09	Sand	Medium
#40	425	269.8	271.4	1.6	94.76	Sand	Medium
#60	250	245.5	246.6	1.1	93.16	Sand	Fine
#80	180	246.0	246.8	0.8	92.00	Sand	Fine
#100	150	234.6	235.0	0.4	91.42	Sand	Fine
#200	75	226.0	228.0	2.0	88.51	Sand	Fine

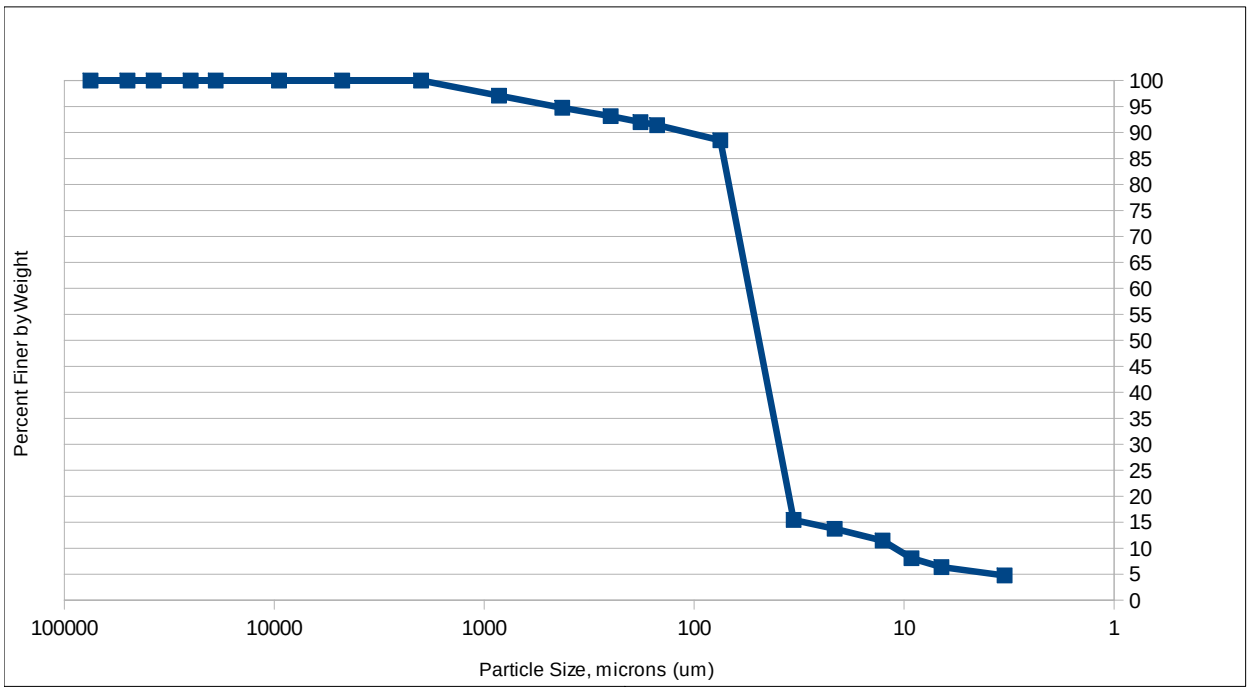
Silt/Clay Fraction (Hydrometer Test)

Time (min)	Actual Time	Spec. Gravity	Temp C	% Finer	Particle Size	Classification
2	2	1.0165	20	15.45	33.57	Silt
5	5	1.0150	20	13.75	21.41	Silt
15	15	1.0130	20	11.48	12.66	Silt
30	30	1.0100	20	8.07	9.22	Silt
60	60	1.0085	20	6.36	6.64	Silt
240	240	1.0070	20.5	4.74	3.32	Clay
1440	1440	1.0055	19.5	2.87	1.40	Clay

Gravel	0.00
Sand Coarse	0.00
Sand Medium	5.24
Sand Fine	6.26
Silt	82.53
Clay	5.98
Total =	100

Katahdin Analytical Services - Report of Analysis
Sediment Grain Size - ASTM D422

Client	AECOM Environment
Client ID	COR06SED07A
Lab Sample ID	SN6056-21



Data		
Sample Fraction	Particle Size	%Passing
3”	75000	100
2”	50000	100
1.5”	37500	100
1”	25000	100
3/4”	19000	100
3/8”	9500	100.00
#4	4750	100.00
#10	2000	100.00
#20	850	97.09
#40	425	94.76
#60	250	93.16
#80	180	92.00
#100	150	91.42
#200	75	88.51
2	33.57	15.45
5	21.41	13.75
15	12.66	11.48
30	9.22	8.07
60	6.64	6.36
240	3.32	4.74
1440	1.40	2.87

Gravel	0.00
Sand Coarse	0.00
Sand Medium	5.24
Sand Fine	6.26
Silt	82.53
Clay	5.98

Raw Data Section

Katahdin Analytical Services, LLC.
Sediment Grain Size - Method ASTM D422

Lab Sample ID	SN6056-12	Start Date/Time	7/24/20 9:08
Analyst:	JR	End Date/Time	7/30/20 9:00
Sample Description:	Gray/Black, muck like, w/ lots of organics (Roots, leaves)		
Sample Weight	Sample (g) APC	Date/Time in oven	7/28/20 9:05
Sample Weight (wet)	~~133.2~~ 131.7 APC 7/30/20	Date/Time out of oven	7/30/20 8:15
Sample Weight (dried)	50.74		

50% from 1.5g org. removed

% Moisture	61.47

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	4.4
Sample <=#10	46.34

Sieve Only:	
Sieve Only, Wet Wash:	

APC 7/30/20

Hydrometer Data	
Serial Number	742-340
Cal Date:	7/27/20
Low Temp C	19.3
Low Temp Reading	1.0030
High Temp	22.7
High Temp Reading	1.0025
Soil Gravity	2.65

Gravel/Sand Fraction (Sieves)			
Sample Fraction	Size (um)	Pan Tare	Pan+Sample
3"	75000		
2"	50000		
1.5"	37500		APC 7/30/20
1"	25000		
3/4"	19000		
1/4"	6300	404.0	405.0
#4	4750	405.2	406.8
#10	2000	368.7	370.5
#20	850	303.7	305.5
#40	425	269.8	272.2
#60	250	245.5	248.1
#80	180	246.0	248.1
#100	150	234.6	236.0
#200	75	226.0	231.5
Pan	Pan	350.0	351.6

8:49

Silt/Clay Fraction (Hydrometer Test)				
Time (min)	Proposed Read Time	Actual Time (min)	Temp C	Spec. Gravity
2	8:51	8:51 (2)	19.4	1.0190
5	8:54	8:54 (5)	19.4	1.0165
15	9:04	9:04 (15)	19.6	1.0130
30	9:19	9:19 (30)	19.7	1.0115
60	9:49	9:49 (60)	19.9	1.0110
240	11:49	11:49 (240)	20.7	1.0080
1440	8:49	8:49 (1440)	19.4	1.0060

Katahdin Analytical Services, LLC.
Sediment Grain Size - Method ASTM D422

Lab Sample ID	SN6056-21	Start Date/Time	7/24/20 9:10
Analyst:	JR	End Date/Time	7/30/20 9:05
Sample Description:	Brown/Gray, Muck like, w/ lots of organics (Roots)		
Sample Weight	Sample (g) AA	Date/Time in oven	7/28/20 9:05
Sample Weight (wet)	~~142.2~~ 141.4 3½	Date/Time out of oven	7/30/20 8:15
Sample Weight (dried)	68.73		

80% FOM .8g org. removed

% Moisture	51.396

Sample Split (Oven Dried)	Sample (g)
Sample >=#10	0
Sample <=#10	68.73

Sieve Only:	
Sieve Only, Wet Wash:	✓

APC 7/30/20

Hydrometer Data	
Serial Number	742340
Cal Date:	7/27/20
Low Temp C	19.3
Low Temp Reading	1.0030
High Temp	22.7
High Temp Reading	1.0025
Soil Gravity	2.65

Gravel/Sand Fraction (Sieves)			
Sample Fraction	Size (um)	Pan Tare	Pan+Sample
3"	75000		
2"	50000		
1.5"	37500		APC 7/30/20
1"	25000		
3/4"	19000		
1/4"	6300	404.0	404.0
#4	4750	405.2	405.2
#10	2000	368.7	368.7
#20	850	303.7	305.7
#40	425	269.8	271.4
#60	250	245.5	246.6
#80	180	246.0	246.8
#100	150	234.6	235.0
#200	75	226.0	228.0
Pan	Pan	350.0	351.5

8:53 Silt/Clay Fraction (Hydrometer Test)				
Time (min)	Proposed Read Time	Actual Time (min)	Temp C	Spec. Gravity
2	8:55	8:55 (2)	19.9	1.0165
5	8:58	8:58 (5)	19.9	1.0150
15	9:08	9:08 (15)	19.9	1.0130
30	9:23	9:23 (30)	20.0	1.0100
60	9:53	9:53 (60)	20.1	1.0085
240	11:53	11:52 (240)	20.7	1.0070
1440	8:53	8:53 (1440)	19.4	1.0055

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SN6056 **SOW No.** SW846

Client Field ID	Lab Sample ID
COR04IS00	SN6056-004
COR04IS01	SN6056-001
COR04IS02	SN6056-002
COR04IS03	SN6056-003
COR05SED01A	SN6056-005
COR05SED02A	SN6056-006
COR05SED02B	SN6056-007
COR05SED03A	SN6056-008
COR05SED04A	SN6056-009
COR05SED04AP	SN6056-009P
COR05SED04AS	SN6056-009S
COR05SED05A	SN6056-010
COR05SED06A	SN6056-011
COR05SED07A	SN6056-012
COR05SED07A	SN6056-024
COR05SED08A	SN6056-013
COR06SED01A	SN6056-014
COR06SED02A	SN6056-015
COR06SED02B	SN6056-016
COR06SED03A	SN6056-017
COR06SED04A	SN6056-018
COR06SED04AP	SN6056-018P
COR06SED04AS	SN6056-018S
COR06SED05A	SN6056-019

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Maren Crabill

Date: 8/19/20 Title: Analyst

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SN6056 **SOW No.** SW846

Client Field ID	Lab Sample ID
COR06SED06A	SN6056-020
COR06SED07A	SN6056-021
COR06SED07A	SN6056-026
COR06SED08A	SN6056-022

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Maren Cargill Name: Maren Crabill

Date: 8/19/20 Title: Analyst

Katahdin Analytical Services 4000005

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS01

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 96.4 **Lab Sample ID:** SN6056-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.14			MS	5	0.10	0.021	0.051
7440-50-8	COPPER, TOTAL	17.0			MS	5	0.31	0.072	0.20
7439-92-1	LEAD, TOTAL	28.1			MS	5	0.10	0.0072	0.051
7440-66-6	ZINC, TOTAL	86.1			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS02

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 95.9 **Lab Sample ID:** SN6056-002

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.098	0.020	0.049
7440-50-8	COPPER, TOTAL	19.1			MS	5	0.30	0.069	0.20
7439-92-1	LEAD, TOTAL	21.1			MS	5	0.098	0.0069	0.049
7440-66-6	ZINC, TOTAL	97.8			MS	5	0.98	0.13	0.79

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS03

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 96.1 **Lab Sample ID:** SN6056-003

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.13			MS	5	0.10	0.020	0.051
7440-50-8	COPPER, TOTAL	16.0			MS	5	0.31	0.071	0.20
7439-92-1	LEAD, TOTAL	21.0			MS	5	0.10	0.0071	0.051
7440-66-6	ZINC, TOTAL	87.2			MS	5	1.0	0.13	0.82

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR04IS00

Matrix: WATER **SDG Name:** SN6056

Percent Solids: 0.00 **Lab Sample ID:** SN6056-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	0.50	U		MS	5	1.0	0.055	0.50
7440-50-8	COPPER, TOTAL	0.95	J		MS	5	3.0	0.19	2.0
7439-92-1	LEAD, TOTAL	0.41	J		MS	5	1.0	0.075	0.50
7440-66-6	ZINC, TOTAL	8.0	U		MS	5	10	3.9	8.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED01A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 41.1 **Lab Sample ID:** SN6056-005

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.29			MS	5	0.24	0.047	0.12
7440-50-8	COPPER, TOTAL	20.0			MS	5	0.71	0.17	0.47
7439-92-1	LEAD, TOTAL	109			MS	5	0.24	0.017	0.12
7440-66-6	ZINC, TOTAL	76.0			MS	5	2.4	0.31	1.9

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED02A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 53.0 **Lab Sample ID:** SN6056-006

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	1.53			MS	5	0.18	0.036	0.091
7440-50-8	COPPER, TOTAL	26.8			MS	5	0.54	0.13	0.36
7439-92-1	LEAD, TOTAL	177			MS	5	0.18	0.013	0.091
7440-66-6	ZINC, TOTAL	176			MS	5	1.8	0.24	1.4

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED02B

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 58.4 **Lab Sample ID:** SN6056-007

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.31			MS	5	0.12	0.024	0.061
7440-50-8	COPPER, TOTAL	33.6			MS	5	0.37	0.086	0.24
7439-92-1	LEAD, TOTAL	234			MS	5	0.12	0.0086	0.061
7440-66-6	ZINC, TOTAL	115			MS	5	1.2	0.16	0.98

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED03A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 18.4 **Lab Sample ID:** SN6056-008

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	6.38			MS	5	0.53	0.11	0.27
7440-50-8	COPPER, TOTAL	30.0			MS	5	1.6	0.37	1.1
7439-92-1	LEAD, TOTAL	918			MS	5	0.53	0.037	0.27
7440-66-6	ZINC, TOTAL	337			MS	5	5.3	0.69	4.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.47		N	MS	5	0.29	0.058	0.14
7440-50-8	COPPER, TOTAL	45.2		A	MS	5	0.87	0.20	0.58
7439-92-1	LEAD, TOTAL	686		N*A	MS	5	0.29	0.020	0.14
7440-66-6	ZINC, TOTAL	301		EA	MS	5	2.9	0.38	2.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED05A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.3 **Lab Sample ID:** SN6056-010

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	4.94			MS	5	0.65	0.13	0.32
7440-50-8	COPPER, TOTAL	67.5			MS	5	2.0	0.46	1.3
7439-92-1	LEAD, TOTAL	690			MS	5	0.65	0.046	0.32
7440-66-6	ZINC, TOTAL	314			MS	5	6.5	0.85	5.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED06A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 65.2 **Lab Sample ID:** SN6056-011

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	2.22			MS	5	0.15	0.030	0.076
7440-50-8	COPPER, TOTAL	32.7			MS	5	0.46	0.11	0.30
7439-92-1	LEAD, TOTAL	431			MS	5	0.15	0.011	0.076
7440-66-6	ZINC, TOTAL	61.8			MS	5	1.5	0.20	1.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 38.5 **Lab Sample ID:** SN6056-012

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	19.8			MS	5	0.24	0.049	0.12
7440-50-8	COPPER, TOTAL	124			MS	5	0.73	0.17	0.48
7439-92-1	LEAD, TOTAL	2780			MS	50	2.4	0.17	1.2
7440-66-6	ZINC, TOTAL	224			MS	5	2.4	0.32	1.9

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED08A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 20.6 **Lab Sample ID:** SN6056-013

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	11.2			MS	5	0.48	0.096	0.24
7440-50-8	COPPER, TOTAL	80.1			MS	5	1.4	0.34	0.96
7439-92-1	LEAD, TOTAL	412			MS	5	0.48	0.034	0.24
7440-66-6	ZINC, TOTAL	348			MS	5	4.8	0.63	3.8

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED01A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 45.7 **Lab Sample ID:** SN6056-014

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.14	J		MS	5	0.18	0.036	0.089
7440-50-8	COPPER, TOTAL	7.67			MS	5	0.53	0.12	0.36
7439-92-1	LEAD, TOTAL	25.5			MS	5	0.18	0.012	0.089
7440-66-6	ZINC, TOTAL	36.3			MS	5	1.8	0.23	1.4

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED02A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.3 **Lab Sample ID:** SN6056-015

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.80	J		MS	5	0.82	0.16	0.41
7440-50-8	COPPER, TOTAL	35.0			MS	5	2.5	0.58	1.6
7439-92-1	LEAD, TOTAL	153			MS	5	0.82	0.058	0.41
7440-66-6	ZINC, TOTAL	80.4			MS	5	8.2	1.1	6.6

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED02B

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 7.89 **Lab Sample ID:** SN6056-016

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	1.2			MS	5	1.2	0.24	0.60
7440-50-8	COPPER, TOTAL	41.3			MS	5	3.6	0.85	2.4
7439-92-1	LEAD, TOTAL	153			MS	5	1.2	0.085	0.60
7440-66-6	ZINC, TOTAL	209			MS	5	12	1.6	9.7

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED03A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 7.90 **Lab Sample ID:** SN6056-017

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.81	J		MS	5	1.2	0.25	0.63
7440-50-8	COPPER, TOTAL	34.2			MS	5	3.8	0.88	2.5
7439-92-1	LEAD, TOTAL	119			MS	5	1.2	0.088	0.63
7440-66-6	ZINC, TOTAL	180			MS	5	12	1.6	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, TOTAL	1.70			MS	5	0.66	0.13	0.33
7440-50-8	COPPER, TOTAL	39.6		A	MS	5	2.0	0.46	1.3
7439-92-1	LEAD, TOTAL	154		N*A	MS	5	0.66	0.046	0.33
7440-66-6	ZINC, TOTAL	111		A	MS	5	6.6	0.86	5.3

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED05A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 21.0 **Lab Sample ID:** SN6056-019

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.37			MS	5	0.37	0.074	0.18
7440-50-8	COPPER, TOTAL	19.6			MS	5	1.1	0.26	0.74
7439-92-1	LEAD, TOTAL	36.0			MS	5	0.37	0.026	0.18
7440-66-6	ZINC, TOTAL	211			MS	5	3.7	0.48	3.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED06A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 11.8 **Lab Sample ID:** SN6056-020

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.38	J		MS	5	0.64	0.13	0.32
7440-50-8	COPPER, TOTAL	23.9			MS	5	1.9	0.45	1.3
7439-92-1	LEAD, TOTAL	73.2			MS	5	0.64	0.045	0.32
7440-66-6	ZINC, TOTAL	120			MS	5	6.4	0.83	5.1

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 48.6 **Lab Sample ID:** SN6056-021

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.17			MS	5	0.15	0.030	0.074
7440-50-8	COPPER, TOTAL	8.75			MS	5	0.45	0.10	0.30
7439-92-1	LEAD, TOTAL	27.0			MS	5	0.15	0.010	0.074
7440-66-6	ZINC, TOTAL	72.4			MS	5	1.5	0.19	1.2

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED08A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 65.2 **Lab Sample ID:** SN6056-022

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-36-0	ANTIMONY, TOTAL	0.14			MS	5	0.12	0.025	0.061
7440-50-8	COPPER, TOTAL	10.4			MS	5	0.37	0.086	0.24
7439-92-1	LEAD, TOTAL	32.3			MS	5	0.12	0.0086	0.061
7440-66-6	ZINC, TOTAL	60.8			MS	5	1.2	0.16	0.98

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 38.5 **Lab Sample ID:** SN6056-024

Concentration Units : umole/g drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, SEM	0.00549			P	1	0.0027	0.00024	0.0016
7440-43-9	CADMIUM, SEM	0.00199			P	1	0.0018	0.000029	0.0011
7440-50-8	COPPER, SEM	0.203			P	1	0.016	0.0010	0.0064
7439-92-1	LEAD, SEM	1.02			P	1	0.00096	0.00017	0.00077
7439-97-6	MERCURY, SEM	0.000021	U	B	CV	1	0.000041	0.0000065	0.000021
7440-02-0	NICKEL, SEM	0.0296			P	1	0.0070	0.00031	0.0027
7440-66-6	ZINC, SEM	1.38			P	1	0.012	0.0011	0.0063

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED07A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 48.6 **Lab Sample ID:** SN6056-026

Concentration Units : umole/g drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	ADJUSTED MDL	ADJUSTED LOD
7440-36-0	ANTIMONY, SEM	0.00045	J		P	1	0.0026	0.00023	0.0016
7440-43-9	CADMIUM, SEM	0.00312			P	1	0.0018	0.000028	0.0011
7440-50-8	COPPER, SEM	0.0736			P	1	0.016	0.0010	0.0063
7439-92-1	LEAD, SEM	0.114			P	1	0.00096	0.00017	0.00077
7439-97-6	MERCURY, SEM	0.0000074	J	B	CV	1	0.000040	0.0000060	0.000020
7440-02-0	NICKEL, SEM	0.0369			P	1	0.0068	0.00031	0.0027
7440-66-6	ZINC, SEM	0.577			P	1	0.012	0.0010	0.0061

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: HNH13C Aug 13, 2020 14:23

Analyte	True	Found	%R (1)
MERCURY	6.0	5.85	97.5

SAMPLE: CCV

File: HNH13C Aug 13, 2020 14:30

Analyte	True	Found	%R (1)
MERCURY	5.0	4.96	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: HNH13C Aug 13, 2020 15:21

Analyte	True	Found	%R (1)
MERCURY	5.0	5.18	103.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: INH06A Aug 06, 2020 12:47

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10580.00	105.8
ANTIMONY	400.0	405.20	101.3
CADMIUM	400.0	407.10	101.8
CALCIUM	10000.0	10540.00	105.4
COPPER	400.0	408.70	102.2
IRON	10000.0	10510.00	105.1
LEAD	400.0	410.40	102.6
MAGNESIUM	10000.0	10350.00	103.5
NICKEL	400.0	412.10	103.0
ZINC	400.0	408.00	102.0

SAMPLE: CCV

File: INH06A Aug 06, 2020 13:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13270.00	106.2
ANTIMONY	500.0	513.00	102.6
CADMIUM	500.0	513.30	102.7
CALCIUM	12500.0	13280.00	106.2
COPPER	500.0	524.90	105.0
IRON	12500.0	13320.00	106.6
LEAD	500.0	519.10	103.8
MAGNESIUM	12500.0	12790.00	102.3
NICKEL	500.0	516.00	103.2
ZINC	500.0	513.40	102.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH06A Aug 06, 2020 13:34

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12950.00	103.6
ANTIMONY	500.0	511.20	102.2
CADMIUM	500.0	512.30	102.5
CALCIUM	12500.0	12960.00	103.7
COPPER	500.0	520.50	104.1
IRON	12500.0	13070.00	104.6
LEAD	500.0	518.00	103.6
MAGNESIUM	12500.0	12700.00	101.6
NICKEL	500.0	514.80	103.0
ZINC	500.0	512.00	102.4

SAMPLE: CCV

File: INH06A Aug 06, 2020 14:26

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13090.00	104.7
ANTIMONY	500.0	508.60	101.7
CADMIUM	500.0	512.40	102.5
CALCIUM	12500.0	13070.00	104.6
COPPER	500.0	521.00	104.2
IRON	12500.0	13170.00	105.4
LEAD	500.0	518.10	103.6
MAGNESIUM	12500.0	12760.00	102.1
NICKEL	500.0	515.40	103.1
ZINC	500.0	511.70	102.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH06A Aug 06, 2020 15:19

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13050.00	104.4
ANTIMONY	500.0	515.00	103.0
CADMIUM	500.0	516.30	103.3
CALCIUM	12500.0	13000.00	104.0
COPPER	500.0	521.30	104.3
IRON	12500.0	13080.00	104.6
LEAD	500.0	521.50	104.3
MAGNESIUM	12500.0	12850.00	102.8
NICKEL	500.0	518.80	103.8
ZINC	500.0	514.30	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: INH07A Aug 07, 2020 17:20

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10070.00	100.7
ANTIMONY	400.0	399.00	99.8
CADMIUM	400.0	401.60	100.4
CALCIUM	10000.0	10160.00	101.6
COPPER	400.0	398.20	99.5
IRON	10000.0	10080.00	100.8
LEAD	400.0	406.20	101.6
MAGNESIUM	10000.0	10240.00	102.4
NICKEL	400.0	406.40	101.6
ZINC	400.0	402.50	100.6

SAMPLE: CCV

File: INH07A Aug 07, 2020 17:44

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12510.00	100.1
ANTIMONY	500.0	499.70	99.9
CADMIUM	500.0	499.60	99.9
CALCIUM	12500.0	12570.00	100.6
COPPER	500.0	503.30	100.7
IRON	12500.0	12620.00	101.0
LEAD	500.0	505.10	101.0
MAGNESIUM	12500.0	12510.00	100.1
NICKEL	500.0	503.10	100.6
ZINC	500.0	498.70	99.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH07A Aug 07, 2020 18:07

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11940.00	95.5
ANTIMONY	500.0	480.50	96.1
CADMIUM	500.0	483.70	96.7
CALCIUM	12500.0	11960.00	95.7
COPPER	500.0	481.00	96.2
IRON	12500.0	12020.00	96.2
LEAD	500.0	490.00	98.0
MAGNESIUM	12500.0	12240.00	97.9
NICKEL	500.0	487.90	97.6
ZINC	500.0	482.30	96.5

SAMPLE: CCV

File: INH07A Aug 07, 2020 19:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12250.00	98.0
ANTIMONY	500.0	482.50	96.5
CADMIUM	500.0	485.60	97.1
CALCIUM	12500.0	12220.00	97.8
COPPER	500.0	479.90	96.0
IRON	12500.0	12190.00	97.5
LEAD	500.0	493.80	98.8
MAGNESIUM	12500.0	12510.00	100.1
NICKEL	500.0	492.40	98.5
ZINC	500.0	485.70	97.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: INH07A Aug 07, 2020 20:01

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11970.00	95.8
ANTIMONY	500.0	469.20	93.8
CADMIUM	500.0	473.00	94.6
CALCIUM	12500.0	11960.00	95.7
COPPER	500.0	468.30	93.7
IRON	12500.0	11900.00	95.2
LEAD	500.0	482.30	96.5
MAGNESIUM	12500.0	12360.00	98.9
NICKEL	500.0	481.20	96.2
ZINC	500.0	473.00	94.6

SAMPLE: CCV

File: INH07A Aug 07, 2020 20:54

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11880.00	95.0
ANTIMONY	500.0	464.10	92.8
CADMIUM	500.0	468.80	93.8
CALCIUM	12500.0	11890.00	95.1
COPPER	500.0	457.80	91.6
IRON	12500.0	11870.00	95.0
LEAD	500.0	478.60	95.7
MAGNESIUM	12500.0	12380.00	99.0
NICKEL	500.0	476.80	95.4
ZINC	500.0	468.40	93.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG24A Jul 24, 2020 17:19

Analyte	True	Found	%R (1)
ALUMINUM	400.0	391.94	98.0
ANTIMONY	20.0	19.69	98.5
CALCIUM	4000.0	3973.95	99.3
COPPER	20.0	20.52	102.6
IRON	4000.0	3948.94	98.7
LEAD	20.0	19.83	99.1
MAGNESIUM	4000.0	4025.92	100.6
MOLYBDENUM	40.0	40.06	100.2
POTASSIUM	4000.0	4014.47	100.4
SODIUM	4000.0	4100.39	102.5
ZINC	20.0	20.16	100.8

SAMPLE: CCV

File: LNG24A Jul 24, 2020 17:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.29	97.1
ANTIMONY	25.0	24.33	97.3
CALCIUM	5000.0	4787.56	95.8
COPPER	25.0	25.10	100.4
IRON	5000.0	4840.93	96.8
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4793.15	95.9
MOLYBDENUM	25.0	24.88	99.5
POTASSIUM	5000.0	4782.74	95.7
SODIUM	5000.0	4958.05	99.2
ZINC	25.0	24.53	98.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.70	95.9
ANTIMONY	25.0	23.34	93.4
CALCIUM	5000.0	4880.97	97.6
COPPER	25.0	25.10	100.4
IRON	5000.0	4863.52	97.3
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4976.93	99.5
MOLYBDENUM	25.0	25.20	100.8
POTASSIUM	5000.0	4813.51	96.3
SODIUM	5000.0	5152.45	103.0
ZINC	25.0	25.28	101.1

SAMPLE: CCV

File: LNG24A Jul 24, 2020 18:44

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.85	96.6
ANTIMONY	25.0	23.09	92.4
CALCIUM	5000.0	4826.83	96.5
COPPER	25.0	24.80	99.2
IRON	5000.0	4765.73	95.3
LEAD	25.0	23.77	95.1
MAGNESIUM	5000.0	4900.34	98.0
MOLYBDENUM	25.0	25.16	100.6
POTASSIUM	5000.0	4796.74	95.9
SODIUM	5000.0	5095.64	101.9
ZINC	25.0	25.29	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:16

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.79	94.2
ANTIMONY	25.0	23.20	92.8
CALCIUM	5000.0	4835.68	96.7
COPPER	25.0	25.13	100.5
IRON	5000.0	4804.85	96.1
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4970.75	99.4
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4840.66	96.8
SODIUM	5000.0	5169.95	103.4
ZINC	25.0	25.59	102.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 19:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.02	94.6
ANTIMONY	25.0	23.73	94.9
CALCIUM	5000.0	4870.24	97.4
COPPER	25.0	24.95	99.8
IRON	5000.0	4816.00	96.3
LEAD	25.0	24.93	99.7
MAGNESIUM	5000.0	5018.00	100.4
MOLYBDENUM	25.0	25.48	101.9
POTASSIUM	5000.0	4786.29	95.7
SODIUM	5000.0	5237.15	104.7
ZINC	25.0	25.63	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 20:19

Analyte	True	Found	%R (1)
ALUMINUM	500.0	489.04	97.8
ANTIMONY	25.0	22.67	90.7
CALCIUM	5000.0	4939.48	98.8
COPPER	25.0	25.23	100.9
IRON	5000.0	4827.54	96.6
LEAD	25.0	23.61	94.4
MAGNESIUM	5000.0	5079.92	101.6
MOLYBDENUM	25.0	25.55	102.2
POTASSIUM	5000.0	4879.18	97.6
SODIUM	5000.0	5248.51	105.0
ZINC	25.0	26.60	106.4

SAMPLE: CCV

File: LNG24A Jul 24, 2020 20:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.11	97.2
ANTIMONY	25.0	24.10	96.4
CALCIUM	5000.0	4844.79	96.9
COPPER	25.0	25.04	100.2
IRON	5000.0	4770.77	95.4
LEAD	25.0	25.00	100.0
MAGNESIUM	5000.0	5063.72	101.3
MOLYBDENUM	25.0	25.42	101.7
POTASSIUM	5000.0	4853.43	97.1
SODIUM	5000.0	5207.42	104.1
ZINC	25.0	26.43	105.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 21:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.01	96.2
ANTIMONY	25.0	23.93	95.7
CALCIUM	5000.0	4905.80	98.1
COPPER	25.0	25.50	102.0
IRON	5000.0	4861.83	97.2
LEAD	25.0	25.11	100.4
MAGNESIUM	5000.0	4990.29	99.8
MOLYBDENUM	25.0	26.00	104.0
POTASSIUM	5000.0	4812.53	96.3
SODIUM	5000.0	5139.96	102.8
ZINC	25.0	25.58	102.3

SAMPLE: CCV

File: LNG24A Jul 24, 2020 21:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.19	98.4
ANTIMONY	25.0	23.75	95.0
CALCIUM	5000.0	4872.73	97.5
COPPER	25.0	24.95	99.8
IRON	5000.0	4825.81	96.5
LEAD	25.0	25.07	100.3
MAGNESIUM	5000.0	4955.76	99.1
MOLYBDENUM	25.0	25.62	102.5
POTASSIUM	5000.0	4826.96	96.5
SODIUM	5000.0	5093.96	101.9
ZINC	25.0	24.85	99.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG24A Jul 24, 2020 22:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.60	96.3
ANTIMONY	25.0	23.03	92.1
CALCIUM	5000.0	4843.11	96.9
COPPER	25.0	25.27	101.1
IRON	5000.0	4787.07	95.7
LEAD	25.0	24.07	96.3
MAGNESIUM	5000.0	4978.36	99.6
MOLYBDENUM	25.0	25.69	102.8
POTASSIUM	5000.0	4807.82	96.2
SODIUM	5000.0	5137.39	102.7
ZINC	25.0	25.47	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG27A Jul 27, 2020 16:27

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.37	92.8
CALCIUM	4000.0	4024.59	100.6
COPPER	20.0	20.22	101.1
IRON	4000.0	4035.38	100.9
LEAD	20.0	20.32	101.6
MAGNESIUM	4000.0	3955.83	98.9
MOLYBDENUM	40.0	39.82	99.6
POTASSIUM	4000.0	3935.04	98.4
SODIUM	4000.0	4031.58	100.8
ZINC	20.0	20.85	104.3

SAMPLE: CCV

File: LNG27A Jul 27, 2020 16:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.45	95.7
CALCIUM	5000.0	4897.84	98.0
COPPER	25.0	25.06	100.2
IRON	5000.0	4949.13	99.0
LEAD	25.0	23.90	95.6
MAGNESIUM	5000.0	4844.99	96.9
MOLYBDENUM	25.0	25.00	100.0
POTASSIUM	5000.0	4849.53	97.0
SODIUM	5000.0	5007.64	100.2
ZINC	25.0	25.21	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.68	93.7
CALCIUM	5000.0	4911.47	98.2
COPPER	25.0	24.77	99.1
IRON	5000.0	4893.39	97.9
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	4923.79	98.5
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	4803.62	96.1
SODIUM	5000.0	5086.07	101.7
ZINC	25.0	24.92	99.7

SAMPLE: CCV

File: LNG27A Jul 27, 2020 17:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.15	93.2
CALCIUM	5000.0	4947.54	99.0
COPPER	25.0	24.86	99.4
IRON	5000.0	4931.12	98.6
LEAD	25.0	24.61	98.4
MAGNESIUM	5000.0	4938.59	98.8
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4770.07	95.4
SODIUM	5000.0	5097.36	101.9
ZINC	25.0	24.48	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.32	93.3
CALCIUM	5000.0	4903.88	98.1
COPPER	25.0	24.84	99.4
IRON	5000.0	4828.46	96.6
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	5000.00	100.0
MOLYBDENUM	25.0	24.94	99.8
POTASSIUM	5000.0	4801.27	96.0
SODIUM	5000.0	5288.90	105.8
ZINC	25.0	24.78	99.1

SAMPLE: CCV

File: LNG27A Jul 27, 2020 18:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.85	96.2
CALCIUM	5000.0	4883.23	97.7
COPPER	25.0	25.07	100.3
IRON	5000.0	4889.59	97.8
LEAD	25.0	23.71	94.8
MAGNESIUM	5000.0	4992.98	99.9
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	4795.56	95.9
SODIUM	5000.0	5076.79	101.5
ZINC	25.0	24.64	98.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 19:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.33	93.3
CALCIUM	5000.0	4964.32	99.3
COPPER	25.0	24.79	99.2
IRON	5000.0	4901.98	98.0
LEAD	25.0	24.73	98.9
MAGNESIUM	5000.0	4881.66	97.6
MOLYBDENUM	25.0	25.15	100.6
POTASSIUM	5000.0	4822.52	96.5
SODIUM	5000.0	4992.11	99.8
ZINC	25.0	25.32	101.3

SAMPLE: CCV

File: LNG27A Jul 27, 2020 20:02

Analyte	True	Found	%R (1)
ALUMINUM	500.0	469.51	93.9
CALCIUM	5000.0	4919.82	98.4
COPPER	25.0	24.84	99.4
IRON	5000.0	4847.04	96.9
LEAD	25.0	23.34	93.4
MAGNESIUM	5000.0	4912.16	98.2
MOLYBDENUM	25.0	24.72	98.9
POTASSIUM	5000.0	4819.57	96.4
SODIUM	5000.0	5013.31	100.3
ZINC	25.0	24.79	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 20:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.40	96.3
CALCIUM	5000.0	5007.88	100.2
COPPER	25.0	25.71	102.8
IRON	5000.0	5163.22	103.3
LEAD	25.0	22.96	91.8
MAGNESIUM	5000.0	4999.88	100.0
MOLYBDENUM	25.0	24.70	98.8
POTASSIUM	5000.0	4960.86	99.2
SODIUM	5000.0	9817.94	196.4•
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNG27A Jul 27, 2020 21:06

Analyte	True	Found	%R (1)
ALUMINUM	500.0	467.18	93.4
CALCIUM	5000.0	4969.81	99.4
COPPER	25.0	25.60	102.4
IRON	5000.0	5035.28	100.7
LEAD	25.0	24.20	96.8
MAGNESIUM	5000.0	5016.51	100.3
MOLYBDENUM	25.0	24.97	99.9
POTASSIUM	5000.0	4866.99	97.3
SODIUM	5000.0	6082.59	121.7•
ZINC	25.0	25.88	103.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 21:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.14	97.2
CALCIUM	5000.0	5070.19	101.4
COPPER	25.0	26.20	104.8
IRON	5000.0	5119.47	102.4
LEAD	25.0	23.65	94.6
MAGNESIUM	5000.0	5133.71	102.7
MOLYBDENUM	25.0	25.61	102.4
POTASSIUM	5000.0	4938.55	98.8
SODIUM	5000.0	5693.69	113.9•
ZINC	25.0	26.11	104.4

SAMPLE: CCV

File: LNG27A Jul 27, 2020 22:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	464.71	92.9
CALCIUM	5000.0	4992.92	99.9
COPPER	25.0	25.58	102.3
IRON	5000.0	4998.53	100.0
LEAD	25.0	24.19	96.8
MAGNESIUM	5000.0	5012.14	100.2
MOLYBDENUM	25.0	25.27	101.1
POTASSIUM	5000.0	4838.53	96.8
SODIUM	5000.0	5441.27	108.8
ZINC	25.0	24.58	98.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 22:41

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.10	95.6
CALCIUM	5000.0	4911.27	98.2
COPPER	25.0	25.69	102.8
IRON	5000.0	4912.43	98.2
LEAD	25.0	23.35	93.4
MAGNESIUM	5000.0	5028.30	100.6
MOLYBDENUM	25.0	25.22	100.9
POTASSIUM	5000.0	4925.58	98.5
SODIUM	5000.0	5378.06	107.6
ZINC	25.0	25.29	101.2

SAMPLE: CCV

File: LNG27A Jul 27, 2020 23:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.50	95.1
CALCIUM	5000.0	4970.59	99.4
COPPER	25.0	25.92	103.7
IRON	5000.0	4978.15	99.6
LEAD	25.0	24.11	96.4
MAGNESIUM	5000.0	5037.72	100.8
MOLYBDENUM	25.0	25.68	102.7
POTASSIUM	5000.0	4894.48	97.9
SODIUM	5000.0	5336.70	106.7
ZINC	25.0	25.65	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 27, 2020 23:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	475.21	95.0
CALCIUM	5000.0	4903.02	98.1
COPPER	25.0	25.37	101.5
IRON	5000.0	4867.97	97.4
LEAD	25.0	24.00	96.0
MAGNESIUM	5000.0	4975.55	99.5
MOLYBDENUM	25.0	25.53	102.1
POTASSIUM	5000.0	4852.74	97.1
SODIUM	5000.0	5263.36	105.3
ZINC	25.0	25.68	102.7

SAMPLE: CCV

File: LNG27A Jul 28, 2020 00:17

Analyte	True	Found	%R (1)
ALUMINUM	500.0	476.38	95.3
CALCIUM	5000.0	4884.36	97.7
COPPER	25.0	26.20	104.8
IRON	5000.0	4892.67	97.9
LEAD	25.0	24.62	98.5
MAGNESIUM	5000.0	5011.80	100.2
MOLYBDENUM	25.0	26.29	105.2
POTASSIUM	5000.0	4889.40	97.8
SODIUM	5000.0	5251.65	105.0
ZINC	25.0	26.17	104.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG27A Jul 28, 2020 00:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.67	93.3
CALCIUM	5000.0	4966.44	99.3
COPPER	25.0	25.71	102.8
IRON	5000.0	4916.18	98.3
LEAD	25.0	24.32	97.3
MAGNESIUM	5000.0	4971.58	99.4
MOLYBDENUM	25.0	25.62	102.5
POTASSIUM	5000.0	4844.04	96.9
SODIUM	5000.0	5204.01	104.1
ZINC	25.0	26.06	104.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG28B Jul 28, 2020 12:39

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.24	95.3
ANTIMONY	20.0	19.98	99.9
CALCIUM	4000.0	3955.47	98.9
IRON	4000.0	3968.37	99.2
LEAD	20.0	20.08	100.4
MAGNESIUM	4000.0	3977.05	99.4
MOLYBDENUM	40.0	39.58	98.9
POTASSIUM	4000.0	3955.18	98.9
SODIUM	4000.0	4043.30	101.1
ZINC	20.0	20.55	102.8

SAMPLE: CCV

File: LNG28B Jul 28, 2020 13:03

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.70	96.1
ANTIMONY	25.0	24.14	96.6
CALCIUM	5000.0	4838.41	96.8
IRON	5000.0	4873.09	97.5
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	4839.40	96.8
MOLYBDENUM	25.0	24.52	98.1
POTASSIUM	5000.0	4815.58	96.3
SODIUM	5000.0	4985.44	99.7
ZINC	25.0	25.07	100.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 13:35

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.03	96.4
ANTIMONY	25.0	24.23	96.9
CALCIUM	5000.0	4771.68	95.4
IRON	5000.0	4709.55	94.2
LEAD	25.0	24.66	98.6
MAGNESIUM	5000.0	4944.06	98.9
MOLYBDENUM	25.0	24.90	99.6
POTASSIUM	5000.0	4781.94	95.6
SODIUM	5000.0	4993.75	99.9
ZINC	25.0	25.15	100.6

SAMPLE: CCV

File: LNG28B Jul 28, 2020 14:07

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.47	96.5
ANTIMONY	25.0	22.97	91.9
CALCIUM	5000.0	4849.51	97.0
IRON	5000.0	4804.58	96.1
LEAD	25.0	24.18	96.7
MAGNESIUM	5000.0	5070.10	101.4
MOLYBDENUM	25.0	24.87	99.5
POTASSIUM	5000.0	4804.42	96.1
SODIUM	5000.0	5214.80	104.3
ZINC	25.0	25.82	103.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 14:39

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.32	98.5
ANTIMONY	25.0	23.83	95.3
CALCIUM	5000.0	4964.11	99.3
IRON	5000.0	4808.13	96.2
LEAD	25.0	25.09	100.4
MAGNESIUM	5000.0	5059.40	101.2
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4850.97	97.0
SODIUM	5000.0	5141.28	102.8
ZINC	25.0	25.43	101.7

SAMPLE: CCV

File: LNG28B Jul 28, 2020 15:11

Analyte	True	Found	%R (1)
ALUMINUM	500.0	468.69	93.7
ANTIMONY	25.0	23.47	93.9
CALCIUM	5000.0	4763.40	95.3
IRON	5000.0	4732.67	94.7
LEAD	25.0	25.20	100.8
MAGNESIUM	5000.0	4938.78	98.8
MOLYBDENUM	25.0	24.75	99.0
POTASSIUM	5000.0	4850.60	97.0
SODIUM	5000.0	5034.86	100.7
ZINC	25.0	25.34	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 15:42

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.60	97.7
ANTIMONY	25.0	23.57	94.3
CALCIUM	5000.0	4908.41	98.2
IRON	5000.0	4850.73	97.0
LEAD	25.0	24.44	97.8
MAGNESIUM	5000.0	4988.04	99.8
MOLYBDENUM	25.0	25.34	101.4
POTASSIUM	5000.0	4851.12	97.0
SODIUM	5000.0	5082.60	101.7
ZINC	25.0	25.59	102.4

SAMPLE: CCV

File: LNG28B Jul 28, 2020 16:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.79	97.0
ANTIMONY	25.0	23.64	94.6
CALCIUM	5000.0	4877.71	97.6
IRON	5000.0	4788.42	95.8
LEAD	25.0	24.31	97.2
MAGNESIUM	5000.0	5032.95	100.7
MOLYBDENUM	25.0	25.17	100.7
POTASSIUM	5000.0	4859.22	97.2
SODIUM	5000.0	5139.61	102.8
ZINC	25.0	25.52	102.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 16:46

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.77	97.0
ANTIMONY	25.0	23.25	93.0
CALCIUM	5000.0	4851.14	97.0
IRON	5000.0	4771.88	95.4
LEAD	25.0	23.92	95.7
MAGNESIUM	5000.0	4992.14	99.8
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4816.75	96.3
SODIUM	5000.0	5092.01	101.8
ZINC	25.0	25.53	102.1

SAMPLE: CCV

File: LNG28B Jul 28, 2020 17:18

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.95	96.6
ANTIMONY	25.0	23.65	94.6
CALCIUM	5000.0	4849.92	97.0
IRON	5000.0	4778.01	95.6
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	5005.48	100.1
MOLYBDENUM	25.0	24.83	99.3
POTASSIUM	5000.0	4842.42	96.8
SODIUM	5000.0	5134.06	102.7
ZINC	25.0	25.60	102.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 17:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	482.61	96.5
ANTIMONY	25.0	23.52	94.1
CALCIUM	5000.0	4892.29	97.8
IRON	5000.0	4850.11	97.0
LEAD	25.0	24.23	96.9
MAGNESIUM	5000.0	4991.37	99.8
MOLYBDENUM	25.0	25.04	100.2
POTASSIUM	5000.0	4821.63	96.4
SODIUM	5000.0	5101.34	102.0
ZINC	25.0	24.94	99.8

SAMPLE: CCV

File: LNG28B Jul 28, 2020 18:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.24	97.2
ANTIMONY	25.0	23.43	93.7
CALCIUM	5000.0	4931.73	98.6
IRON	5000.0	4875.74	97.5
LEAD	25.0	24.21	96.8
MAGNESIUM	5000.0	5044.27	100.9
MOLYBDENUM	25.0	25.06	100.2
POTASSIUM	5000.0	4897.00	97.9
SODIUM	5000.0	5137.34	102.7
ZINC	25.0	25.69	102.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 18:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	489.24	97.8
ANTIMONY	25.0	23.49	94.0
CALCIUM	5000.0	4911.20	98.2
IRON	5000.0	4836.70	96.7
LEAD	25.0	24.16	96.6
MAGNESIUM	5000.0	4951.36	99.0
MOLYBDENUM	25.0	24.53	98.1
POTASSIUM	5000.0	4802.75	96.1
SODIUM	5000.0	5007.12	100.1
ZINC	25.0	25.09	100.4

SAMPLE: CCV

File: LNG28B Jul 28, 2020 19:27

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.03	95.6
ANTIMONY	25.0	25.48	101.9
CALCIUM	5000.0	4854.78	97.1
IRON	5000.0	4773.76	95.5
LEAD	25.0	26.19	104.8
MAGNESIUM	5000.0	4914.64	98.3
MOLYBDENUM	25.0	24.44	97.8
POTASSIUM	5000.0	4816.53	96.3
SODIUM	5000.0	5001.60	100.0
ZINC	25.0	25.59	102.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG28B Jul 28, 2020 19:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.56	98.1
ANTIMONY	25.0	23.79	95.2
CALCIUM	5000.0	5070.84	101.4
IRON	5000.0	4988.25	99.8
LEAD	25.0	24.53	98.1
MAGNESIUM	5000.0	4991.21	99.8
MOLYBDENUM	25.0	24.77	99.1
POTASSIUM	5000.0	4870.73	97.4
SODIUM	5000.0	5075.15	101.5
ZINC	25.0	24.92	99.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG29A Jul 29, 2020 17:10

Analyte	True	Found	%R (1)
ALUMINUM	400.0	371.88	93.0
CALCIUM	4000.0	3901.81	97.5
COPPER	20.0	20.22	101.1
IRON	4000.0	3883.70	97.1
LEAD	20.0	19.93	99.6
MAGNESIUM	4000.0	3928.10	98.2
MOLYBDENUM	40.0	38.80	97.0
POTASSIUM	4000.0	3914.25	97.9
SODIUM	4000.0	4004.40	100.1

SAMPLE: CCV

File: LNG29A Jul 29, 2020 17:58

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.05	96.0
CALCIUM	5000.0	4857.08	97.1
COPPER	25.0	25.11	100.4
IRON	5000.0	4844.89	96.9
LEAD	25.0	24.04	96.2
MAGNESIUM	5000.0	4891.21	97.8
MOLYBDENUM	25.0	25.18	100.7
POTASSIUM	5000.0	4874.36	97.5
SODIUM	5000.0	5081.64	101.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 18:30

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.53	96.3
CALCIUM	5000.0	4843.02	96.9
COPPER	25.0	25.43	101.7
IRON	5000.0	4735.12	94.7
LEAD	25.0	24.06	96.2
MAGNESIUM	5000.0	4928.24	98.6
MOLYBDENUM	25.0	24.73	98.9
POTASSIUM	5000.0	4950.67	99.0
SODIUM	5000.0	5063.54	101.3

SAMPLE: CCV

File: LNG29A Jul 29, 2020 19:02

Analyte	True	Found	%R (1)
ALUMINUM	500.0	491.49	98.3
CALCIUM	5000.0	4865.27	97.3
COPPER	25.0	24.88	99.5
IRON	5000.0	4860.59	97.2
LEAD	25.0	23.87	95.5
MAGNESIUM	5000.0	4985.04	99.7
MOLYBDENUM	25.0	24.38	97.5
POTASSIUM	5000.0	4925.52	98.5
SODIUM	5000.0	5833.82	116.7•

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 19:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	486.41	97.3
CALCIUM	5000.0	4942.57	98.9
COPPER	25.0	24.97	99.9
IRON	5000.0	4716.29	94.3
LEAD	25.0	24.17	96.7
MAGNESIUM	5000.0	4986.11	99.7
MOLYBDENUM	25.0	24.76	99.0
POTASSIUM	5000.0	4922.01	98.4
SODIUM	5000.0	5439.96	108.8

SAMPLE: CCV

File: LNG29A Jul 29, 2020 20:05

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.86	98.2
CALCIUM	5000.0	4816.62	96.3
COPPER	25.0	25.40	101.6
IRON	5000.0	4665.09	93.3
LEAD	25.0	23.34	93.4
MAGNESIUM	5000.0	5131.40	102.6
MOLYBDENUM	25.0	25.30	101.2
POTASSIUM	5000.0	5047.66	101.0
SODIUM	5000.0	5393.38	107.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 20:37

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.87	94.2
CALCIUM	5000.0	4804.48	96.1
COPPER	25.0	25.00	100.0
IRON	5000.0	4717.02	94.3
LEAD	25.0	24.14	96.6
MAGNESIUM	5000.0	4994.58	99.9
MOLYBDENUM	25.0	24.56	98.2
POTASSIUM	5000.0	4891.05	97.8
SODIUM	5000.0	5230.72	104.6

SAMPLE: CCV

File: LNG29A Jul 29, 2020 21:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	465.43	93.1
CALCIUM	5000.0	4816.44	96.3
COPPER	25.0	24.84	99.4
IRON	5000.0	4690.70	93.8
LEAD	25.0	23.02	92.1
MAGNESIUM	5000.0	4904.69	98.1
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4819.78	96.4
SODIUM	5000.0	5122.73	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 21:40

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.14	94.2
CALCIUM	5000.0	4848.00	97.0
COPPER	25.0	24.56	98.2
IRON	5000.0	4697.19	93.9
LEAD	25.0	23.07	92.3
MAGNESIUM	5000.0	4912.89	98.3
MOLYBDENUM	25.0	24.44	97.8
POTASSIUM	5000.0	4814.63	96.3
SODIUM	5000.0	5077.72	101.6

SAMPLE: CCV

File: LNG29A Jul 29, 2020 22:12

Analyte	True	Found	%R (1)
ALUMINUM	500.0	466.47	93.3
CALCIUM	5000.0	4767.18	95.3
COPPER	25.0	24.57	98.3
IRON	5000.0	4591.14	91.8
LEAD	25.0	23.66	94.6
MAGNESIUM	5000.0	4943.18	98.9
MOLYBDENUM	25.0	24.55	98.2
POTASSIUM	5000.0	4854.82	97.1
SODIUM	5000.0	5125.39	102.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 22:43

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.10	96.8
CALCIUM	5000.0	4790.30	95.8
COPPER	25.0	25.32	101.3
IRON	5000.0	4634.08	92.7
LEAD	25.0	23.68	94.7
MAGNESIUM	5000.0	5065.30	101.3
MOLYBDENUM	25.0	25.08	100.3
POTASSIUM	5000.0	4977.66	99.6
SODIUM	5000.0	5242.33	104.8

SAMPLE: CCV

File: LNG29A Jul 29, 2020 23:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	460.83	92.2
CALCIUM	5000.0	4850.34	97.0
COPPER	25.0	24.73	98.9
IRON	5000.0	4676.84	93.5
LEAD	25.0	22.94	91.8
MAGNESIUM	5000.0	4917.51	98.4
MOLYBDENUM	25.0	24.65	98.6
POTASSIUM	5000.0	4764.92	95.3
SODIUM	5000.0	5087.17	101.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 29, 2020 23:46

Analyte	True	Found	%R (1)
ALUMINUM	500.0	464.49	92.9
CALCIUM	5000.0	4821.74	96.4
COPPER	25.0	24.32	97.3
IRON	5000.0	4685.99	93.7
LEAD	25.0	22.79	91.2
MAGNESIUM	5000.0	4922.09	98.4
MOLYBDENUM	25.0	24.46	97.8
POTASSIUM	5000.0	4830.04	96.6
SODIUM	5000.0	5135.04	102.7

SAMPLE: CCV

File: LNG29A Jul 30, 2020 00:17

Analyte	True	Found	%R (1)
ALUMINUM	500.0	479.13	95.8
CALCIUM	5000.0	4822.46	96.4
COPPER	25.0	24.43	97.7
IRON	5000.0	4720.14	94.4
LEAD	25.0	22.98	91.9
MAGNESIUM	5000.0	4900.53	98.0
MOLYBDENUM	25.0	24.04	96.2
POTASSIUM	5000.0	4820.88	96.4
SODIUM	5000.0	5239.43	104.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 00:48

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.94	95.8
CALCIUM	5000.0	4757.72	95.2
COPPER	25.0	25.14	100.6
IRON	5000.0	4657.56	93.2
LEAD	25.0	23.23	92.9
MAGNESIUM	5000.0	5011.33	100.2
MOLYBDENUM	25.0	24.54	98.2
POTASSIUM	5000.0	4904.01	98.1
SODIUM	5000.0	5299.22	106.0

SAMPLE: CCV

File: LNG29A Jul 30, 2020 01:19

Analyte	True	Found	%R (1)
ALUMINUM	500.0	473.56	94.7
CALCIUM	5000.0	4654.12	93.1
COPPER	25.0	24.69	98.8
IRON	5000.0	4552.53	91.1
LEAD	25.0	23.17	92.7
MAGNESIUM	5000.0	4935.05	98.7
MOLYBDENUM	25.0	24.56	98.2
POTASSIUM	5000.0	4837.84	96.8
SODIUM	5000.0	5143.17	102.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 01:51

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.52	96.9
CALCIUM	5000.0	4688.28	93.8
COPPER	25.0	24.60	98.4
IRON	5000.0	4607.09	92.1
LEAD	25.0	22.82	91.3
MAGNESIUM	5000.0	4946.66	98.9
MOLYBDENUM	25.0	24.03	96.1
POTASSIUM	5000.0	4844.26	96.9
SODIUM	5000.0	5163.48	103.3

SAMPLE: CCV

File: LNG29A Jul 30, 2020 02:23

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.21	96.0
CALCIUM	5000.0	4728.60	94.6
COPPER	25.0	24.82	99.3
IRON	5000.0	4611.30	92.2
LEAD	25.0	22.94	91.8
MAGNESIUM	5000.0	5005.48	100.1
MOLYBDENUM	25.0	24.74	99.0
POTASSIUM	5000.0	4840.25	96.8
SODIUM	5000.0	5148.17	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG29A Jul 30, 2020 02:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	488.76	97.8
CALCIUM	5000.0	4838.65	96.8
COPPER	25.0	25.33	101.3
IRON	5000.0	4635.77	92.7
LEAD	25.0	24.47	97.9
MAGNESIUM	5000.0	5080.68	101.6
MOLYBDENUM	25.0	25.10	100.4
POTASSIUM	5000.0	4868.75	97.4
SODIUM	5000.0	5405.86	108.1

SAMPLE: CCV

File: LNG29A Jul 30, 2020 03:25

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.04	94.2
CALCIUM	5000.0	4770.94	95.4
COPPER	25.0	24.24	97.0
IRON	5000.0	4596.94	91.9
LEAD	25.0	23.97	95.9
MAGNESIUM	5000.0	4937.13	98.7
MOLYBDENUM	25.0	24.41	97.6
POTASSIUM	5000.0	4751.88	95.0
SODIUM	5000.0	5130.08	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNG30A Jul 30, 2020 16:30

Analyte	True	Found	%R (1)
ALUMINUM	400.0	381.15	95.3
CALCIUM	4000.0	3952.14	98.8
COPPER	20.0	20.99	104.9
IRON	4000.0	3914.76	97.9
LEAD	20.0	20.85	104.3
MAGNESIUM	4000.0	4031.24	100.8
MOLYBDENUM	40.0	41.41	103.5
POTASSIUM	4000.0	3996.98	99.9
SODIUM	4000.0	4111.21	102.8

SAMPLE: CCV

File: LNG30A Jul 30, 2020 16:54

Analyte	True	Found	%R (1)
ALUMINUM	500.0	490.46	98.1
CALCIUM	5000.0	5002.81	100.1
COPPER	25.0	25.38	101.5
IRON	5000.0	5023.18	100.5
LEAD	25.0	24.44	97.8
MAGNESIUM	5000.0	4964.06	99.3
MOLYBDENUM	25.0	25.19	100.8
POTASSIUM	5000.0	4984.14	99.7
SODIUM	5000.0	5130.73	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 17:26

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.95	94.2
CALCIUM	5000.0	5027.57	100.6
COPPER	25.0	25.21	100.8
IRON	5000.0	5012.66	100.3
LEAD	25.0	26.66	106.6
MAGNESIUM	5000.0	4852.01	97.0
MOLYBDENUM	25.0	24.50	98.0
POTASSIUM	5000.0	4851.36	97.0
SODIUM	5000.0	4998.42	100.0

SAMPLE: CCV

File: LNG30A Jul 30, 2020 17:57

Analyte	True	Found	%R (1)
ALUMINUM	500.0	492.90	98.6
CALCIUM	5000.0	5047.29	100.9
COPPER	25.0	25.37	101.5
IRON	5000.0	5011.21	100.2
LEAD	25.0	24.34	97.4
MAGNESIUM	5000.0	5060.46	101.2
MOLYBDENUM	25.0	24.81	99.2
POTASSIUM	5000.0	4941.18	98.8
SODIUM	5000.0	5284.85	105.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 18:29

Analyte	True	Found	%R (1)
ALUMINUM	500.0	515.93	103.2
CALCIUM	5000.0	4969.83	99.4
COPPER	25.0	26.57	106.3
IRON	5000.0	4880.89	97.6
LEAD	25.0	25.89	103.6
MAGNESIUM	5000.0	5329.84	106.6
MOLYBDENUM	25.0	26.48	105.9
POTASSIUM	5000.0	5156.18	103.1
SODIUM	5000.0	5634.78	112.7•

SAMPLE: CCV

File: LNG30A Jul 30, 2020 19:00

Analyte	True	Found	%R (1)
ALUMINUM	500.0	485.76	97.2
CALCIUM	5000.0	5052.46	101.0
COPPER	25.0	25.15	100.6
IRON	5000.0	5004.63	100.1
LEAD	25.0	25.43	101.7
MAGNESIUM	5000.0	5072.05	101.4
MOLYBDENUM	25.0	24.99	100.0
POTASSIUM	5000.0	4932.44	98.6
SODIUM	5000.0	5310.34	106.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 19:32

Analyte	True	Found	%R (1)
ALUMINUM	500.0	494.22	98.8
CALCIUM	5000.0	5048.70	101.0
COPPER	25.0	25.48	101.9
IRON	5000.0	4931.25	98.6
LEAD	25.0	24.07	96.3
MAGNESIUM	5000.0	5109.76	102.2
MOLYBDENUM	25.0	25.40	101.6
POTASSIUM	5000.0	4942.16	98.8
SODIUM	5000.0	5307.62	106.2

SAMPLE: CCV

File: LNG30A Jul 30, 2020 20:04

Analyte	True	Found	%R (1)
ALUMINUM	500.0	483.27	96.7
CALCIUM	5000.0	4947.77	99.0
COPPER	25.0	25.62	102.5
IRON	5000.0	4891.12	97.8
LEAD	25.0	24.76	99.0
MAGNESIUM	5000.0	5059.09	101.2
MOLYBDENUM	25.0	25.35	101.4
POTASSIUM	5000.0	4902.85	98.1
SODIUM	5000.0	5243.94	104.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNG30A Jul 30, 2020 20:36

Analyte	True	Found	%R (1)
ALUMINUM	500.0	477.64	95.5
CALCIUM	5000.0	5049.54	101.0
COPPER	25.0	25.18	100.7
IRON	5000.0	5010.00	100.2
LEAD	25.0	24.09	96.4
MAGNESIUM	5000.0	5060.19	101.2
MOLYBDENUM	25.0	24.76	99.0
POTASSIUM	5000.0	4945.52	98.9
SODIUM	5000.0	5305.00	106.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNH03A Aug 03, 2020 18:01

Analyte	True	Found	%R (1)
ALUMINUM	400.0	377.96	94.5
ANTIMONY	20.0	21.15	105.7
CALCIUM	4000.0	3926.52	98.2
IRON	4000.0	3987.15	99.7
MAGNESIUM	4000.0	3978.05	99.5
MOLYBDENUM	40.0	41.07	102.7
POTASSIUM	4000.0	3938.00	98.5
SODIUM	4000.0	3938.39	98.5
ZINC	20.0	20.73	103.6

SAMPLE: CCV

File: LNH03A Aug 03, 2020 18:25

Analyte	True	Found	%R (1)
ALUMINUM	500.0	484.47	96.9
ANTIMONY	25.0	26.71	106.8
CALCIUM	5000.0	4842.39	96.8
IRON	5000.0	4920.50	98.4
MAGNESIUM	5000.0	4945.31	98.9
MOLYBDENUM	25.0	25.59	102.4
POTASSIUM	5000.0	4983.75	99.7
SODIUM	5000.0	5001.87	100.0
ZINC	25.0	25.52	102.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH03A Aug 03, 2020 18:57

Analyte	True	Found	%R (1)
ALUMINUM	500.0	471.40	94.3
ANTIMONY	25.0	26.27	105.1
CALCIUM	5000.0	4855.45	97.1
IRON	5000.0	4865.38	97.3
MAGNESIUM	5000.0	4962.76	99.3
MOLYBDENUM	25.0	25.23	100.9
POTASSIUM	5000.0	4935.66	98.7
SODIUM	5000.0	5082.05	101.6
ZINC	25.0	25.38	101.5

SAMPLE: CCV

File: LNH03A Aug 03, 2020 19:28

Analyte	True	Found	%R (1)
ALUMINUM	500.0	478.54	95.7
ANTIMONY	25.0	25.45	101.8
CALCIUM	5000.0	4861.36	97.2
IRON	5000.0	4909.16	98.2
MAGNESIUM	5000.0	5020.75	100.4
MOLYBDENUM	25.0	25.33	101.3
POTASSIUM	5000.0	4938.59	98.8
SODIUM	5000.0	5007.87	100.2
ZINC	25.0	25.46	101.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH03A Aug 03, 2020 19:59

Analyte	True	Found	%R (1)
ALUMINUM	500.0	477.44	95.5
ANTIMONY	25.0	25.83	103.3
CALCIUM	5000.0	4919.56	98.4
IRON	5000.0	4911.31	98.2
MAGNESIUM	5000.0	4989.59	99.8
MOLYBDENUM	25.0	25.25	101.0
POTASSIUM	5000.0	4982.18	99.6
SODIUM	5000.0	5100.48	102.0
ZINC	25.0	25.14	100.6

SAMPLE: CCV

File: LNH03A Aug 03, 2020 20:31

Analyte	True	Found	%R (1)
ALUMINUM	500.0	481.54	96.3
ANTIMONY	25.0	24.82	99.3
CALCIUM	5000.0	4804.29	96.1
IRON	5000.0	4877.87	97.6
MAGNESIUM	5000.0	5029.99	100.6
MOLYBDENUM	25.0	25.24	101.0
POTASSIUM	5000.0	4918.97	98.4
SODIUM	5000.0	5086.34	101.7
ZINC	25.0	24.80	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICV

File: LNH04A Aug 04, 2020 14:43

Analyte	True	Found	%R (1)
ALUMINUM	400.0	373.02	93.3
ANTIMONY	20.0	20.67	103.4
CALCIUM	4000.0	3927.75	98.2
IRON	4000.0	3950.74	98.8
MAGNESIUM	4000.0	3933.84	98.3
MOLYBDENUM	40.0	40.32	100.8
POTASSIUM	4000.0	3913.14	97.8
SODIUM	4000.0	3928.25	98.2
ZINC	20.0	20.52	102.6

SAMPLE: CCV

File: LNH04A Aug 04, 2020 15:08

Analyte	True	Found	%R (1)
ALUMINUM	500.0	470.80	94.2
ANTIMONY	25.0	26.00	104.0
CALCIUM	5000.0	4727.91	94.6
IRON	5000.0	4823.39	96.5
MAGNESIUM	5000.0	4962.06	99.2
MOLYBDENUM	25.0	25.07	100.3
POTASSIUM	5000.0	4903.58	98.1
SODIUM	5000.0	5065.87	101.3
ZINC	25.0	25.20	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCV

File: LNH04A Aug 04, 2020 17:38

Analyte	True	Found	%R (1)
ALUMINUM	500.0	472.80	94.6
ANTIMONY	25.0	24.95	99.8
CALCIUM	5000.0	4777.77	95.6
IRON	5000.0	4810.93	96.2
MAGNESIUM	5000.0	4919.33	98.4
MOLYBDENUM	25.0	24.93	99.7
POTASSIUM	5000.0	4781.17	95.6
SODIUM	5000.0	4936.34	98.7
ZINC	25.0	24.45	97.8

SAMPLE: CCV

File: LNH04A Aug 04, 2020 18:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	480.84	96.2
ANTIMONY	25.0	24.78	99.1
CALCIUM	5000.0	4831.78	96.6
IRON	5000.0	4866.36	97.3
MAGNESIUM	5000.0	5027.15	100.5
MOLYBDENUM	25.0	25.09	100.4
POTASSIUM	5000.0	4857.49	97.1
SODIUM	5000.0	5122.39	102.4
ZINC	25.0	25.15	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: HNH13C Aug 13, 2020 14:28

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.17	85.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: INH06A Aug 06, 2020 12:56

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	327.60	109.2
ANTIMONY	8.0	8.18	102.3
CADMIUM	5.0	5.22	104.4
CALCIUM	100.0	99.03	99.0
COPPER	25.0	26.45	105.8
IRON	100.0	107.30	107.3
LEAD	5.0	5.66	113.2
MAGNESIUM	100.0	111.60	111.6
NICKEL	10.0	10.51	105.1
ZINC	20.0	20.84	104.2

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: INH07A Aug 07, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	322.10	107.4
ANTIMONY	8.0	8.89	111.1
CADMIUM	5.0	5.12	102.4
CALCIUM	100.0	106.40	106.4
COPPER	25.0	25.77	103.1
IRON	100.0	102.90	102.9
LEAD	5.0	5.21	104.2
MAGNESIUM	100.0	109.60	109.6
NICKEL	10.0	10.65	106.5
ZINC	20.0	20.39	102.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG24A Jul 24, 2020 17:24

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.03	100.2
ANTIMONY	0.2	0.21	105.0
CALCIUM	20.0	21.94	109.7
COPPER	0.6	0.93	155.0 •
IRON	20.0	23.11	115.6
LEAD	0.2	0.23	115.0
MAGNESIUM	20.0	19.22	96.1
MOLYBDENUM	1.0	1.12	112.0
POTASSIUM	200.0	209.16	104.6
SODIUM	200.0	228.92	114.5
ZINC	2.0	2.10	105.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG27A Jul 27, 2020 16:32

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.77	93.8
CALCIUM	20.0	22.19	111.0
COPPER	0.6	0.71	118.3
IRON	20.0	21.68	108.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	20.50	102.5
MOLYBDENUM	1.0	1.06	106.0
POTASSIUM	200.0	201.86	100.9
SODIUM	200.0	218.83	109.4
ZINC	2.0	2.19	109.5

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG28B Jul 28, 2020 12:44

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.55	92.8
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	22.04	110.2
IRON	20.0	23.62	118.1
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	18.30	91.5
MOLYBDENUM	1.0	1.01	101.0
POTASSIUM	200.0	206.38	103.2
SODIUM	200.0	204.37	102.2
ZINC	2.0	2.05	102.5

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG29A Jul 29, 2020 17:45

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.93	104.7
CALCIUM	20.0	22.87	114.3
COPPER	0.6	0.63	105.0
IRON	20.0	25.18	125.9•
LEAD	0.2	0.21	105.0
MAGNESIUM	20.0	19.26	96.3
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.00	104.0
SODIUM	200.0	208.66	104.3

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNG30A Jul 30, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	19.97	99.8
CALCIUM	20.0	22.96	114.8
COPPER	0.6	0.62	103.3
IRON	20.0	23.68	118.4
LEAD	0.2	0.22	110.0
MAGNESIUM	20.0	22.50	112.5
MOLYBDENUM	1.0	1.07	107.0
POTASSIUM	200.0	199.86	99.9
SODIUM	200.0	207.92	104.0

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNH03A Aug 03, 2020 18:06

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	20.53	102.6
ANTIMONY	0.2	0.24	120.0
CALCIUM	20.0	21.81	109.1
IRON	20.0	21.27	106.3
MAGNESIUM	20.0	21.43	107.1
MOLYBDENUM	1.0	1.03	103.0
POTASSIUM	200.0	208.97	104.5
SODIUM	200.0	211.50	105.8
ZINC	2.0	2.73	136.5 •

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: PQL

File: LNH04A Aug 04, 2020 14:49

Analyte	TRUE	FOUND	% R
ALUMINUM	20.0	18.59	93.0
ANTIMONY	0.2	0.22	110.0
CALCIUM	20.0	19.77	98.8
IRON	20.0	21.55	107.8
MAGNESIUM	20.0	21.01	105.1
MOLYBDENUM	1.0	1.05	105.0
POTASSIUM	200.0	204.83	102.4
SODIUM	200.0	208.69	104.3
ZINC	2.0	1.97	98.5

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: HNH13C Aug 13, 2020 14:25

Analyte	Result	C
MERCURY	0.016	U

SAMPLE: CCB

File: HNH13C Aug 13, 2020 14:32

Analyte	Result	C
MERCURY	0.016	J

SAMPLE: CCB

File: HNH13C Aug 13, 2020 15:23

Analyte	Result	C
MERCURY	0.017	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: INH06A Aug 06, 2020 12:51

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	3.600	U
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 13:15

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.379	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 13:38

Analyte	Result	C
ALUMINUM	18.170	J
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.014	J
LEAD	1.000	U
MAGNESIUM	4.787	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: INH06A Aug 06, 2020 14:31

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	3.600	U
LEAD	1.000	U
MAGNESIUM	3.711	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH06A Aug 06, 2020 15:23

Analyte	Result	C
ALUMINUM	14.150	J
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	6.329	J
LEAD	1.000	U
MAGNESIUM	2.937	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: INH07A Aug 07, 2020 17:25

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	4.910	J
LEAD	1.000	U
MAGNESIUM	3.451	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH07A Aug 07, 2020 17:48

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	5.741	J
LEAD	1.000	U
MAGNESIUM	3.667	J
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB

File: INH07A Aug 07, 2020 18:11

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	11.000	U
COPPER	0.550	U
IRON	6.381	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: INH07A Aug 07, 2020 19:09

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	13.280	J
COPPER	0.550	U
IRON	4.541	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB
File: INH07A Aug 07, 2020 20:06

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	14.770	J
COPPER	0.929	J
IRON	4.953	J
LEAD	1.000	U
MAGNESIUM	2.900	U
NICKEL	0.440	U
ZINC	0.450	U

SAMPLE: CCB
File: INH07A Aug 07, 2020 20:58

Analyte	Result	C
ALUMINUM	10.000	U
ANTIMONY	1.700	U
CADMIUM	0.092	U
CALCIUM	12.000	J
COPPER	0.550	U
IRON	6.784	J
LEAD	1.000	U
MAGNESIUM	2.980	J
NICKEL	0.440	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG24A Jul 24, 2020 17:21

Analyte	Result	C
ALUMINUM	0.479	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-2.210	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 17:45

Analyte	Result	C
ALUMINUM	3.295	J
ANTIMONY	0.070	J
CALCIUM	6.800	U
COPPER	0.341	B
IRON	6.436	J
LEAD	0.113	B
MAGNESIUM	1.431	J
MOLYBDENUM	0.158	J
POTASSIUM	12.000	U
SODIUM	24.662	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 18:16

Analyte	Result	C
ALUMINUM	0.368	J
ANTIMONY	0.061	U
CALCIUM	8.450	J
COPPER	0.217	J
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-1.125	U
MOLYBDENUM	0.088	J
POTASSIUM	12.000	U
SODIUM	39.932	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 18:47

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-2.104	U
MOLYBDENUM	0.068	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:19

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.020	J
MAGNESIUM	-2.495	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-10.409	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 19:51

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-0.804	U
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	51.319	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG24A Jul 24, 2020 20:21

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.140	U
IRON	6.400	U
LEAD	0.013	J
MAGNESIUM	-1.768	U
MOLYBDENUM	0.073	J
POTASSIUM	-13.035	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 20:53

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	12.785	B
COPPER	0.087	U
IRON	6.400	U
LEAD	0.032	J
MAGNESIUM	-3.044	U
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	10.403	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG24A Jul 24, 2020 21:26

Analyte	Result	C
ALUMINUM	1.081	J
ANTIMONY	0.061	U
CALCIUM	28.158	B
COPPER	-0.094	U
IRON	10.360	B
LEAD	0.132	B
MAGNESIUM	-4.311	U
MOLYBDENUM	0.079	J
POTASSIUM	-13.054	U
SODIUM	-24.951	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG24A Jul 24, 2020 21:58

Analyte	Result	C
ALUMINUM	0.754	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.164	U
IRON	6.400	U
LEAD	0.188	B
MAGNESIUM	-4.856	U
MOLYBDENUM	0.074	J
POTASSIUM	-14.023	U
SODIUM	-27.904	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG24A Jul 24, 2020 22:11

Analyte	Result	C
ALUMINUM	0.862	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
COPPER	-0.186	U
IRON	6.400	U
LEAD	0.113	B
MAGNESIUM	-3.766	U
MOLYBDENUM	0.055	J
POTASSIUM	-17.120	U
SODIUM	-33.968	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG27A Jul 27, 2020 16:30

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.025	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.196	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 16:54

Analyte	Result	C
ALUMINUM	1.453	J
CALCIUM	6.800	U
COPPER	0.158	J
IRON	6.400	U
LEAD	0.060	J
MAGNESIUM	0.595	J
MOLYBDENUM	0.147	J
POTASSIUM	12.000	U
SODIUM	18.722	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 27, 2020 17:26

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	2.573	J
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 17:57

Analyte	Result	C
ALUMINUM	-0.586	U
CALCIUM	7.385	J
COPPER	0.088	J
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	1.243	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	27.633	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 18:29

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	3.305	J
MOLYBDENUM	0.046	J
POTASSIUM	12.000	U
SODIUM	97.453	J
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 19:01

Analyte	Result	C
ALUMINUM	0.762	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.010	J
MAGNESIUM	2.600	J
MOLYBDENUM	0.070	J
POTASSIUM	12.000	U
SODIUM	16.886	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 19:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.068	J
MAGNESIUM	-3.531	U
MOLYBDENUM	0.060	J
POTASSIUM	-14.398	U
SODIUM	-9.468	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 20:05

Analyte	Result	C
ALUMINUM	1.347	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.179	B
MAGNESIUM	-2.460	U
MOLYBDENUM	0.068	J
POTASSIUM	-21.834	U
SODIUM	-21.297	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 20:36

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	-3.869	U
MOLYBDENUM	0.064	J
POTASSIUM	38.814	J
SODIUM	3642.513	B
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 21:08

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.863	J
COPPER	0.087	U
IRON	6.400	U
LEAD	0.038	J
MAGNESIUM	2.473	J
MOLYBDENUM	0.054	J
POTASSIUM	12.000	U
SODIUM	829.802	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 21:40

Analyte	Result	C
ALUMINUM	-0.354	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.678	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	361.921	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 22:12

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.782	J
MOLYBDENUM	0.078	J
POTASSIUM	12.000	U
SODIUM	234.444	B
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG27A Jul 27, 2020 22:43

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.023	J
MAGNESIUM	-0.793	U
MOLYBDENUM	0.040	J
POTASSIUM	12.000	U
SODIUM	162.167	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 23:16

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	-1.581	U
MOLYBDENUM	0.035	J
POTASSIUM	12.000	U
SODIUM	121.164	B
ZINC	0.220	U

SAMPLE: CCB
File: LNG27A Jul 27, 2020 23:48

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	-2.897	U
MOLYBDENUM	0.079	J
POTASSIUM	-15.259	U
SODIUM	84.462	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG27A Jul 28, 2020 00:20

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	-3.887	U
MOLYBDENUM	0.077	J
POTASSIUM	-16.263	U
SODIUM	61.197	J
ZINC	0.220	U

SAMPLE: CCB

File: LNG27A Jul 28, 2020 00:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-3.586	U
MOLYBDENUM	0.056	J
POTASSIUM	12.000	U
SODIUM	54.699	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG28B Jul 28, 2020 12:42

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	-3.775	U
MOLYBDENUM	0.203	J
POTASSIUM	12.000	U
SODIUM	-15.582	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG28B Jul 28, 2020 13:06

Analyte	Result	C
ALUMINUM	1.561	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	7.659	J
LEAD	0.040	J
MAGNESIUM	-1.935	U
MOLYBDENUM	0.155	J
POTASSIUM	12.000	U
SODIUM	-12.824	U
ZINC	0.220	U

SAMPLE: CCB

File: LNG28B Jul 28, 2020 13:38

Analyte	Result	C
ALUMINUM	0.476	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.703	J
MOLYBDENUM	0.085	J
POTASSIUM	12.000	U
SODIUM	-44.417	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 14:09

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.012	J
MAGNESIUM	-0.552	U
MOLYBDENUM	0.084	J
POTASSIUM	12.000	U
SODIUM	-19.173	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 14:41

Analyte	Result	C
ALUMINUM	0.960	J
ANTIMONY	0.061	U
CALCIUM	13.764	B
IRON	6.964	J
LEAD	0.056	J
MAGNESIUM	-1.285	U
MOLYBDENUM	0.080	J
POTASSIUM	12.000	U
SODIUM	-51.392	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 15:13

Analyte	Result	C
ALUMINUM	1.440	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	7.715	J
LEAD	0.820	B
MAGNESIUM	-2.022	U
MOLYBDENUM	0.064	J
POTASSIUM	12.000	U
SODIUM	-78.934	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 15:45

Analyte	Result	C
ALUMINUM	0.682	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.101	B
MAGNESIUM	-3.741	U
MOLYBDENUM	0.098	J
POTASSIUM	12.000	U
SODIUM	-88.467	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 16:17

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.030	J
MAGNESIUM	-4.472	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-65.692	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 16:49

Analyte	Result	C
ALUMINUM	-0.427	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.028	J
MAGNESIUM	-5.377	U
MOLYBDENUM	0.101	J
POTASSIUM	12.000	U
SODIUM	-63.464	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 17:21

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-4.808	U
MOLYBDENUM	0.072	J
POTASSIUM	12.000	U
SODIUM	-45.773	U
ZINC	0.220	U

SAMPLE: CCB
File: LNG28B Jul 28, 2020 17:54

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-3.890	U
MOLYBDENUM	0.053	J
POTASSIUM	12.000	U
SODIUM	-79.708	U
ZINC	0.706	J

SAMPLE: CCB
File: LNG28B Jul 28, 2020 18:26

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	-4.457	U
MOLYBDENUM	0.081	J
POTASSIUM	12.000	U
SODIUM	-79.344	U
ZINC	0.557	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG28B Jul 28, 2020 18:58

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	-4.960	U
MOLYBDENUM	0.076	J
POTASSIUM	12.000	U
SODIUM	-98.725	U
ZINC	0.423	J

SAMPLE: CCB
File: LNG28B Jul 28, 2020 19:29

Analyte	Result	C
ALUMINUM	0.638	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	-6.354	U
MOLYBDENUM	0.074	J
POTASSIUM	12.000	U
SODIUM	-104.211	B
ZINC	0.583	J

SAMPLE: CCB
File: LNG28B Jul 28, 2020 20:01

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	-5.105	U
MOLYBDENUM	0.078	J
POTASSIUM	12.000	U
SODIUM	-95.563	U
ZINC	0.745	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG29A Jul 29, 2020 17:13

Analyte	Result	C
ALUMINUM	-0.339	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.034	J
MAGNESIUM	0.350	U
MOLYBDENUM	0.189	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG29A Jul 29, 2020 18:01

Analyte	Result	C
ALUMINUM	3.771	J
CALCIUM	20.526	B
COPPER	0.087	U
IRON	17.608	B
LEAD	0.048	J
MAGNESIUM	3.711	J
MOLYBDENUM	0.122	J
POTASSIUM	12.000	U
SODIUM	27.289	J

SAMPLE: CCB

File: LNG29A Jul 29, 2020 18:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.025	J
MAGNESIUM	1.661	J
MOLYBDENUM	0.104	J
POTASSIUM	12.000	U
SODIUM	-10.194	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 19:05

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.024	J
MAGNESIUM	1.052	J
MOLYBDENUM	0.107	J
POTASSIUM	12.000	U
SODIUM	560.236	B

SAMPLE: CCB
File: LNG29A Jul 29, 2020 19:37

Analyte	Result	C
ALUMINUM	-0.684	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-0.540	U
MOLYBDENUM	0.129	J
POTASSIUM	12.000	U
SODIUM	240.258	B

SAMPLE: CCB
File: LNG29A Jul 29, 2020 20:08

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.044	J
MAGNESIUM	1.029	J
MOLYBDENUM	0.107	J
POTASSIUM	12.000	U
SODIUM	127.157	B

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 20:40

Analyte	Result	C
ALUMINUM	-0.470	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.700	J
MOLYBDENUM	0.113	J
POTASSIUM	12.000	U
SODIUM	76.885	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 21:11

Analyte	Result	C
ALUMINUM	-0.349	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.027	J
MAGNESIUM	2.886	J
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	40.542	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 21:43

Analyte	Result	C
ALUMINUM	-0.841	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	3.197	J
MOLYBDENUM	0.098	J
POTASSIUM	12.000	U
SODIUM	25.574	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 22:14

Analyte	Result	C
ALUMINUM	-0.648	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	3.126	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	7.009	J

SAMPLE: CCB
File: LNG29A Jul 29, 2020 22:45

Analyte	Result	C
ALUMINUM	-0.940	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	2.957	J
MOLYBDENUM	0.111	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB
File: LNG29A Jul 29, 2020 23:17

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	5.069	J
MOLYBDENUM	0.073	J
POTASSIUM	12.000	U
SODIUM	-9.904	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNG29A Jul 29, 2020 23:49

Analyte	Result	C
ALUMINUM	-0.583	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.018	J
MAGNESIUM	2.253	J
MOLYBDENUM	0.109	J
POTASSIUM	12.000	U
SODIUM	38.960	J

SAMPLE: CCB
File: LNG29A Jul 30, 2020 00:19

Analyte	Result	C
ALUMINUM	-0.668	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	1.887	J
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	92.251	J

SAMPLE: CCB
File: LNG29A Jul 30, 2020 00:51

Analyte	Result	C
ALUMINUM	-0.480	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.024	J
MAGNESIUM	1.449	J
MOLYBDENUM	0.116	J
POTASSIUM	13.055	J
SODIUM	89.372	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG29A Jul 30, 2020 01:22

Analyte	Result	C
ALUMINUM	-0.693	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.015	J
MAGNESIUM	-2.067	U
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	45.820	J

SAMPLE: CCB

File: LNG29A Jul 30, 2020 01:54

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	1.382	J
MOLYBDENUM	0.090	J
POTASSIUM	12.000	U
SODIUM	25.009	J

SAMPLE: CCB

File: LNG29A Jul 30, 2020 02:26

Analyte	Result	C
ALUMINUM	-0.619	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.014	J
MAGNESIUM	-2.450	U
MOLYBDENUM	0.095	J
POTASSIUM	12.000	U
SODIUM	6.600	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG29A Jul 30, 2020 02:57

Analyte	Result	C
ALUMINUM	-0.771	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.017	J
MAGNESIUM	-1.995	U
MOLYBDENUM	0.072	J
POTASSIUM	12.000	U
SODIUM	108.160	B

SAMPLE: CCB

File: LNG29A Jul 30, 2020 03:28

Analyte	Result	C
ALUMINUM	-0.618	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.037	J
MAGNESIUM	-4.809	U
MOLYBDENUM	0.104	J
POTASSIUM	12.000	U
SODIUM	11.177	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNG30A Jul 30, 2020 16:33

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.010	J
MAGNESIUM	-1.388	U
MOLYBDENUM	0.171	J
POTASSIUM	12.000	U
SODIUM	6.600	U

SAMPLE: CCB

File: LNG30A Jul 30, 2020 16:57

Analyte	Result	C
ALUMINUM	1.628	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	9.577	J
LEAD	0.039	J
MAGNESIUM	3.781	J
MOLYBDENUM	0.221	J
POTASSIUM	12.000	U
SODIUM	38.253	J

SAMPLE: CCB

File: LNG30A Jul 30, 2020 17:28

Analyte	Result	C
ALUMINUM	1.102	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	7.742	J
LEAD	0.032	J
MAGNESIUM	1.312	J
MOLYBDENUM	0.126	J
POTASSIUM	12.000	U
SODIUM	-6.796	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG30A Jul 30, 2020 18:00

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.022	J
MAGNESIUM	3.937	J
MOLYBDENUM	0.113	J
POTASSIUM	12.000	U
SODIUM	73.935	J

SAMPLE: CCB

File: LNG30A Jul 30, 2020 18:31

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	10.278	B
COPPER	0.087	U
IRON	6.400	U
LEAD	0.011	J
MAGNESIUM	3.007	J
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	121.005	B

SAMPLE: CCB

File: LNG30A Jul 30, 2020 19:03

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.019	J
MAGNESIUM	1.274	J
MOLYBDENUM	0.120	J
POTASSIUM	12.000	U
SODIUM	60.138	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNG30A Jul 30, 2020 19:34

Analyte	Result	C
ALUMINUM	0.330	U
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.009	J
MAGNESIUM	1.121	J
MOLYBDENUM	0.109	J
POTASSIUM	12.000	U
SODIUM	65.279	J

SAMPLE: CCB

File: LNG30A Jul 30, 2020 20:07

Analyte	Result	C
ALUMINUM	0.432	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.021	J
MAGNESIUM	-0.504	U
MOLYBDENUM	0.105	J
POTASSIUM	12.000	U
SODIUM	17.422	J

SAMPLE: CCB

File: LNG30A Jul 30, 2020 20:38

Analyte	Result	C
ALUMINUM	0.354	J
CALCIUM	6.800	U
COPPER	0.087	U
IRON	6.400	U
LEAD	0.005	J
MAGNESIUM	4.682	J
MOLYBDENUM	0.110	J
POTASSIUM	12.000	U
SODIUM	86.995	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNH03A Aug 03, 2020 18:04

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.667	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH03A Aug 03, 2020 18:28

Analyte	Result	C
ALUMINUM	2.166	J
ANTIMONY	0.071	J
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	3.514	J
MOLYBDENUM	0.125	J
POTASSIUM	12.000	U
SODIUM	15.841	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH03A Aug 03, 2020 18:59

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.288	J
MOLYBDENUM	0.067	J
POTASSIUM	12.000	U
SODIUM	45.212	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB
File: LNH03A Aug 03, 2020 19:30

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	1.913	J
MOLYBDENUM	0.070	J
POTASSIUM	12.000	U
SODIUM	15.664	J
ZINC	0.220	U

SAMPLE: CCB
File: LNH03A Aug 03, 2020 20:02

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.151	J
MOLYBDENUM	0.060	J
POTASSIUM	12.000	U
SODIUM	43.702	J
ZINC	0.220	U

SAMPLE: CCB
File: LNH03A Aug 03, 2020 20:33

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	3.174	J
MOLYBDENUM	0.064	J
POTASSIUM	12.000	U
SODIUM	38.281	J
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICB

File: LNH04A Aug 04, 2020 14:46

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.904	J
MOLYBDENUM	0.096	J
POTASSIUM	12.000	U
SODIUM	6.600	U
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 15:10

Analyte	Result	C
ALUMINUM	1.292	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	2.691	J
MOLYBDENUM	0.116	J
POTASSIUM	12.000	U
SODIUM	7.248	J
ZINC	0.220	U

SAMPLE: CCB

File: LNH04A Aug 04, 2020 17:40

Analyte	Result	C
ALUMINUM	0.897	J
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.807	J
MOLYBDENUM	0.050	J
POTASSIUM	12.000	U
SODIUM	-11.487	U
ZINC	0.220	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: CCB

File: LNH04A Aug 04, 2020 18:13

Analyte	Result	C
ALUMINUM	0.330	U
ANTIMONY	0.061	U
CALCIUM	6.800	U
IRON	6.400	U
MAGNESIUM	0.883	J
MOLYBDENUM	0.055	J
POTASSIUM	12.000	U
SODIUM	11.016	J
ZINC	0.220	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.084	J
LEAD	0.036	J
ZINC	0.89	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG27IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG27IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.20	U
LEAD	0.0088	J
ZINC	0.21	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNG28IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG28IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ANTIMONY	0.050	U
COPPER	0.097	J
LEAD	0.023	J
ZINC	0.30	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSNH03ICS2

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NH03ICS2

Concentration Units : umole/g drywt

Analyte	RESULT	C
ANTIMONY	0.00082	U
CADMIUM	0.00053	U
COPPER	0.00058	J
LEAD	0.000083	J
MERCURY	0.0000142	B
NICKEL	0.00152	J
ZINC	0.00264	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNG29IMW2

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ANTIMONY	0.50	U
COPPER	0.54	J
LEAD	0.20	J
ZINC	8.0	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWNH13HGW1

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NH13HGW1

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: INH06A Aug 06, 2020 13:00

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	515900.00	103.2
ANTIMONY	0	0.11	
CADMIUM	0	-0.87	
CALCIUM	500000.00	482400.00	96.5
COPPER	0	0.64	
IRON	200000.00	192400.00	96.2
LEAD	0	-0.32	
MAGNESIUM	500000.00	442100.00	88.4
NICKEL	0	0.20	
ZINC	0	0.80	

SAMPLE: ICSAB

File: INH06A Aug 06, 2020 13:06

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	505600.00	101.1
ANTIMONY	600.00	573.00	95.5
CADMIUM	1000.00	912.40	91.2
CALCIUM	500000.00	475500.00	95.1
COPPER	500.00	511.10	102.2
IRON	200000.00	191600.00	95.8
LEAD	50.00	45.18	90.0
MAGNESIUM	500000.00	437200.00	87.4
NICKEL	1000.00	894.00	89.4
ZINC	1000.00	907.00	90.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: INH07A Aug 07, 2020 17:33

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	505900.00	101.2
ANTIMONY	0	1.31	
CADMIUM	0	-0.12	
CALCIUM	500000.00	476700.00	95.3
COPPER	0	0.55	
IRON	200000.00	193400.00	96.7
LEAD	0	-0.01	
MAGNESIUM	500000.00	454600.00	90.9
NICKEL	0	0.21	
ZINC	0	0.63	

SAMPLE: ICSAB

File: INH07A Aug 07, 2020 17:39

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	481900.00	96.4
ANTIMONY	600.00	575.00	95.8
CADMIUM	1000.00	911.30	91.1
CALCIUM	500000.00	454900.00	91.0
COPPER	500.00	502.20	100.4
IRON	200000.00	185700.00	92.8
LEAD	50.00	43.69	88.0
MAGNESIUM	500000.00	436700.00	87.3
NICKEL	1000.00	892.00	89.2
ZINC	1000.00	903.80	90.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG24A Jul 24, 2020 17:26

Analyte	TRUE	FOUND	% R	
ALUMINUM	100000.00	97196.56	97.2	
ANTIMONY	0.19	0.17		
CALCIUM	100000.00	97945.29	97.9	
COPPER	0.26	0.75		•
IRON	100000.00	96464.18	96.5	
LEAD	0.13	0.09		
MAGNESIUM	100000.00	101202.85	101.2	
MOLYBDENUM	2000.00	2114.34	105.7	
POTASSIUM	100000.00	97416.54	97.4	
SODIUM	100000.00	101176.76	101.2	
ZINC	0.24	0.53		

SAMPLE: ICSAB

File: LNG24A Jul 24, 2020 17:29

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	92943.98	92.9
ANTIMONY	20.00	19.66	100.0
CALCIUM	100000.00	97685.99	97.7
COPPER	20.47	19.60	100.0
IRON	100000.00	95228.33	95.2
LEAD	20.13	20.51	105.0
MAGNESIUM	100000.00	96860.91	96.9
MOLYBDENUM	2000.00	2054.76	102.8
POTASSIUM	100000.00	93389.44	93.4
SODIUM	100000.00	97298.41	97.3
ZINC	20.40	20.08	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG27A Jul 27, 2020 16:35

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93327.61	93.3
CALCIUM	100000.00	101196.79	101.2
COPPER	0.26	0.55	
IRON	100000.00	98471.88	98.5
LEAD	0.13	0.09	
MAGNESIUM	100000.00	101869.86	101.9
MOLYBDENUM	2000.00	2077.93	103.9
POTASSIUM	100000.00	96134.05	96.1
SODIUM	100000.00	98444.57	98.4
ZINC	0.24	0.46	

SAMPLE: ICSAB

File: LNG27A Jul 27, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90492.65	90.5
CALCIUM	100000.00	96094.68	96.1
COPPER	20.47	19.03	95.0
IRON	100000.00	93815.11	93.8
LEAD	20.13	20.04	100.0
MAGNESIUM	100000.00	99295.07	99.3
MOLYBDENUM	2000.00	2048.57	102.5
POTASSIUM	100000.00	93391.14	93.4
SODIUM	100000.00	96442.34	96.4
ZINC	20.40	20.13	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG28B Jul 28, 2020 12:47

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	95079.39	95.1
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	98439.82	98.4
IRON	100000.00	96748.49	96.7
LEAD	0.13	0.10	
MAGNESIUM	100000.00	99189.40	99.2
MOLYBDENUM	2000.00	2046.83	102.4
POTASSIUM	100000.00	96004.63	96.0
SODIUM	100000.00	99437.43	99.4
ZINC	0.24	0.42	

SAMPLE: ICSAB

File: LNG28B Jul 28, 2020 12:50

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	93668.59	93.7
ANTIMONY	20.00	19.04	95.0
CALCIUM	100000.00	97020.86	97.0
IRON	100000.00	95582.53	95.6
LEAD	20.13	20.05	100.0
MAGNESIUM	100000.00	98090.79	98.1
MOLYBDENUM	2000.00	2056.45	102.8
POTASSIUM	100000.00	95042.43	95.0
SODIUM	100000.00	98453.34	98.5
ZINC	20.40	20.38	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG29A Jul 29, 2020 17:18

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91972.15	92.0
CALCIUM	100000.00	101214.55	101.2
COPPER	0.26	0.42	
IRON	100000.00	98144.43	98.1
LEAD	0.13	0.12	
MAGNESIUM	100000.00	97242.51	97.2
MOLYBDENUM	2000.00	2039.95	102.0
POTASSIUM	100000.00	94755.69	94.8
SODIUM	100000.00	97496.03	97.5

SAMPLE: ICSAB

File: LNG29A Jul 29, 2020 17:21

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91991.97	92.0
CALCIUM	100000.00	99655.02	99.7
COPPER	20.47	19.39	95.0
IRON	100000.00	96185.52	96.2
LEAD	20.13	20.39	100.0
MAGNESIUM	100000.00	97258.87	97.3
MOLYBDENUM	2000.00	2063.44	103.2
POTASSIUM	100000.00	95022.34	95.0
SODIUM	100000.00	97572.81	97.6

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNG30A Jul 30, 2020 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91086.77	91.1
CALCIUM	100000.00	102707.34	102.7
COPPER	0.26	0.29	
IRON	100000.00	100408.06	100.4
LEAD	0.13	0.08	
MAGNESIUM	100000.00	95742.45	95.7
MOLYBDENUM	2000.00	2029.07	101.4
POTASSIUM	100000.00	93008.70	93.0
SODIUM	100000.00	95197.08	95.2

SAMPLE: ICSAB

File: LNG30A Jul 30, 2020 16:41

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	94763.96	94.8
CALCIUM	100000.00	100832.28	100.8
COPPER	20.47	19.83	100.0
IRON	100000.00	98301.02	98.3
LEAD	20.13	21.21	105.0
MAGNESIUM	100000.00	99425.84	99.4
MOLYBDENUM	2000.00	2107.98	105.4
POTASSIUM	100000.00	96892.76	96.9
SODIUM	100000.00	98907.61	98.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH03A Aug 03, 2020 18:09

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	88966.95	89.0
ANTIMONY	0.19	0.16	
CALCIUM	100000.00	99092.75	99.1
IRON	100000.00	96088.07	96.1
MAGNESIUM	100000.00	94432.86	94.4
MOLYBDENUM	2000.00	2015.73	100.8
POTASSIUM	100000.00	96264.66	96.3
SODIUM	100000.00	95386.02	95.4
ZINC	0.24	0.33	

SAMPLE: ICSAB

File: LNH03A Aug 03, 2020 18:12

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	89527.56	89.5
ANTIMONY	20.00	20.99	105.0
CALCIUM	100000.00	100823.13	100.8
IRON	100000.00	99101.75	99.1
MAGNESIUM	100000.00	95652.15	95.7
MOLYBDENUM	2000.00	2085.86	104.3
POTASSIUM	100000.00	98044.02	98.0
SODIUM	100000.00	97315.27	97.3
ZINC	20.40	19.47	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Concentration Units: ug/L

SAMPLE: ICSA

File: LNH04A Aug 04, 2020 14:51

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	90063.20	90.1
ANTIMONY	0.19	0.17	
CALCIUM	100000.00	99196.61	99.2
IRON	100000.00	96110.21	96.1
MAGNESIUM	100000.00	95522.87	95.5
MOLYBDENUM	2000.00	1994.74	99.8
POTASSIUM	100000.00	96822.08	96.8
SODIUM	100000.00	97712.43	97.7
ZINC	0.24	0.53	

SAMPLE: ICSAB

File: LNH04A Aug 04, 2020 14:54

Analyte	TRUE	FOUND	% R
ALUMINUM	100000.00	91061.63	91.1
ANTIMONY	20.00	20.87	105.0
CALCIUM	100000.00	102667.63	102.7
IRON	100000.00	100851.08	100.9
MAGNESIUM	100000.00	98059.54	98.1
MOLYBDENUM	2000.00	2072.74	103.6
POTASSIUM	100000.00	98832.43	98.8
SODIUM	100000.00	100883.69	100.9
ZINC	20.40	19.65	100.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AP

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	17.7		2.47		29.19	52.3	N	72	124	MS
COPPER, TOTAL	123		45.2		72.99	106.1		84	119	MS
LEAD, TOTAL	593		686		29.19	-317.1	N	84	118	MS
ZINC, TOTAL	424		301		145.97	84.4		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AS

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	17.1		2.47		28.54	51.3	N	72	124	MS
COPPER, TOTAL	111		45.2		71.35	92.8		84	119	MS
LEAD, TOTAL	752		686		28.54	232.0	N	84	118	MS
ZINC, TOTAL	432		301		142.71	91.7		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AP

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	58.6		1.70		66.43	85.7		72	124	MS
COPPER, TOTAL	227		39.6		166.08	112.6		84	119	MS
LEAD, TOTAL	235		154		66.43	122.2	N	84	118	MS
ZINC, TOTAL	470		111		332.16	108.0		82	119	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AS

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	48.3		1.70		62.86	74.1		72	124	MS
COPPER, TOTAL	193		39.6		157.16	97.7		84	119	MS
LEAD, TOTAL	159		154		62.86	7.4	N	84	118	MS
ZINC, TOTAL	396		111		314.32	90.8		82	119	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AA

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	3.74		1.71		2	101.6		80	120	MS
COPPER, TOTAL	39.2		31.2		6	132.9	A	80	120	MS
LEAD, TOTAL	486		474		2	626.6	A	80	120	MS
ZINC, TOTAL	241		208		20	165.9	A	80	120	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AA

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ANTIMONY, TOTAL	2.62		0.517		2	105.2		80	120	MS
COPPER, TOTAL	19.5		12.0		6	124.4	A	80	120	MS
LEAD, TOTAL	54.0		46.8		2	362.0	A	80	120	MS
ZINC, TOTAL	58.1		33.7		20	122.1	A	80	120	MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 26.1 **Lab Sample ID:** SN6056-009

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		17.1		17.7		3.6		MS
COPPER, TOTAL		111		123		9.6		MS
LEAD, TOTAL		752		593		23.6	*	MS
ZINC, TOTAL		432		424		1.8		MS

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04A

Matrix: SOIL **SDG Name:** SN6056

Percent Solids: 10.7 **Lab Sample ID:** SN6056-018

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ANTIMONY, TOTAL		48.3		58.6		19.3		MS
COPPER, TOTAL		193		227		16.0		MS
LEAD, TOTAL		159		235		38.9	*	MS
ZINC, TOTAL		396		470		16.9		MS

Comments:

FORM VD - IN

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LC2ONG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.93	99.3	72	124
COPPER	25.0	26.3	105.2	84	119
LEAD	10.0	10.5	105.3	84	118
ZINC	50.0	53.1	106.2	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG23IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.79	97.9	72	124
COPPER	25.0	25.2	100.9	84	119
LEAD	10.0	10.4	104.3	84	118
ZINC	50.0	52.0	104.1	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG27IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG27IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	9.69	96.9	72	124
COPPER	25.0	28.2	112.8	84	119
LEAD	10.0	10.4	103.9	84	118
ZINC	50.0	52.8	105.6	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONG28IMS1

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG28IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	10.0	10.3	103.5	72	124
COPPER	25.0	25.4	101.8	84	119
LEAD	10.0	10.0	100.0	84	118
ZINC	50.0	51.5	103.0	82	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSONH03ICS2

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NH03ICS2

Concentration Units : umole/g drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	0.0164	0.0166	101.5	79	114
CADMIUM	0.0445	0.0445	100.0	82	113
COPPER	0.0787	0.0782	99.4	81	117
LEAD	0.00965	0.00995	103.0	81	112
MERCURY	0.000498	0.000488	100.0	80	124
NICKEL	0.170	0.172	101.2	83	113
ZINC	0.153	0.156	102.1	82	113

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNG29IMW2

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NG29IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ANTIMONY	100	113	112.7	85	117
COPPER	250	258	103.4	85	118
LEAD	100	104	104.4	88	115
ZINC	500	526	105.1	83	119

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWNH13HGW1

Matrix: WATER **SDG Name:** SN6056

QC Batch ID: NH13HGW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.84	116.8	82	119

7D

LABORATORY CONTROL SAMPLE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: SOIL **SDG Name:** SN6056

QC Batch ID: NG23IMS1 **Lab Sample ID:** LCSONG23IMS1

Concentration Units: mg/Kg drywt

Analyte	Control Limit (%)	LCS Result	LCS Dup. Result	RPD(%)	Q
ANTIMONY	20.0	9.79	9.93	1.4	
COPPER	20.0	25.2	26.3	4.2	
LEAD	20.0	10.4	10.5	0.9	
ZINC	20.0	52.0	53.1	2.0	

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR05SED04AL

Matrix: SOIL **SDG Name:** SN6056

Lab Sample ID: SN6056-009L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	1.71		1.9		11.1		MS
COPPER, TOTAL	31.2		32.2		3.2		MS
LEAD, TOTAL	474		496		4.6		MS
ZINC, TOTAL	208		234		12.5	E	MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** COR06SED04AL

Matrix: SOIL **SDG Name:** SN6056

Lab Sample ID: SN6056-018L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ANTIMONY, TOTAL	0.517		0.56	J	8.3		MS
COPPER, TOTAL	12.0		11.6		3.3		MS
LEAD, TOTAL	46.8		49.0		4.7		MS
ZINC, TOTAL	33.7		35.1		4.2		MS

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 01/17/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
MERCURY	0.20	0.016	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/23/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	300	10	P
ANTIMONY	8.0	1.7	P
CADMIUM	5.0	0.092	P
CALCIUM	100	11	P
COPPER	25	0.55	P
IRON	100	3.6	P
LEAD	5.0	1.0	P
MAGNESIUM	100	2.9	P
MOLYBDENUM	10	0.41	P
NICKEL	10	0.44	P
POTASSIUM	1000	73	P
SODIUM	1000	12	P
ZINC	20	0.45	P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2018

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	20	0.33	MS
ANTIMONY	0.20	0.061	MS
CALCIUM	20	6.8	MS
COPPER	0.60	0.087	MS
IRON	20	6.4	MS
LEAD	0.20	0.0049	MS
MAGNESIUM	20	0.35	MS
MOLYBDENUM	1.0	0.020	MS
POTASSIUM	200	12	MS
SODIUM	200	6.6	MS
ZINC	2.0	0.22	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 06/14/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.000010	umole/g	CV	821/R-91-100 / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 06/14/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.00082	umole/g	P	821/R-91-100 / SW846 6010C
CADMIUM	0.00053	umole/g	P	821/R-91-100 / SW846 6010C
COPPER	0.0031	umole/g	P	821/R-91-100 / SW846 6010C
LEAD	0.00039	umole/g	P	821/R-91-100 / SW846 6010C
NICKEL	0.0014	umole/g	P	821/R-91-100 / SW846 6010C
ZINC	0.0030	umole/g	P	821/R-91-100 / SW846 6010C

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.10	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.40	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	1.6	ug/L	MS	SW846 3010A / SW846 6020A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 06/13/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 01/07/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.0000031	umole/g	CV	821/R-91-100 / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 02/09/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/20/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.00011	umole/g	P	821/R-91-100 / SW846 6010C
CADMIUM	0.000014	umole/g	P	821/R-91-100 / SW846 6010C
COPPER	0.00050	umole/g	P	821/R-91-100 / SW846 6010C
LEAD	0.000084	umole/g	P	821/R-91-100 / SW846 6010C
NICKEL	0.00015	umole/g	P	821/R-91-100 / SW846 6010C
ZINC	0.00052	umole/g	P	821/R-91-100 / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/25/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.011	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.037	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.015	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	0.78	ug/L	MS	SW846 3010A / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 01/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 10/31/2019

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0004837	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0299385	0.0	0.0	0.0
ANTIMONY	206.83	0.0000046	0.0	0.0000158	0.0	0.0000731	0.0053159	0.0	0.0	0.0	-0.0000148	-0.0004021	0.0	-0.0011428
ARSENIC	189.04	0.0000103	0.0	-0.0001057	0.0	0.0	0.0001984	0.0	0.0	0.0	0.0018390	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006836	0.0000896
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0328838	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000944	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001135	0.0000801	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	-0.0002011	0.0007850	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000006	0.0	0.0	0.0	0.0	0.0	0.0000828	0.0	0.0	0.0	-0.0000100
COBALT	228.62	0.0	0.0	0.0000045	0.0	0.0	-0.0001286	0.0	0.0	0.0	0.0	0.0001562	0.0022114	0.0
COPPER	327.40	0.0000079	0.0	-0.0000147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006988	0.0002004
GOLD	242.79	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0	0.0	0.0058700	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0000865	0.0	0.0000372	0.0	0.0	-0.0000772	-0.0000211	0.0000931	0.0	-0.0012809	0.0000645	-0.0000220	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000557	0.0	0.0	0.0	0.1395100	0.0	0.0	0.0145280	0.0	0.0001229	0.0
MANGANESE	257.61	0.0000017	0.0	0.0000273	0.0000391	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0000270	0.0	0.0	-0.0000204	0.0	0.0	0.0	-0.0001163
NICKEL	231.60	0.0	0.0	-0.0000260	0.0	0.0	0.0	0.0001789	0.0	0.0	0.0011098	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000345	0.0	0.0000204	0.0	0.0000996	0.0	0.0002593	0.0	0.0003979	0.0	0.0	0.0	0.0001059
SILICON	251.61	0.0	0.0	-0.0000932	0.0	0.0	0.0	0.0	0.0	0.0	0.0093424	0.0	0.0253899	0.0
SILVER	328.07	0.0	0.0	-0.0003035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0008413	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	0.0000086	0.0	0.0000026	0.0	0.0	0.0	0.0014338	0.0001027	-0.0015199	-0.0000004	0.0	-0.0006457	-0.0032486
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001510	0.0	0.0	0.0	0.0002068	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000127	0.0	0.0	-0.0026455	0.0	0.0	-0.0007989	-0.0089144	0.0	0.0003126	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0010444	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 05/04/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MOLYBDENUM	45.00	5000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SODIUM	5.00	200000	P
ZINC	45.00	20000	P

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** L

Instrument Name: AGILENT 7800 ICP-MS **Date:** 05/13/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
CADMIUM	0.10	1000	MS
CALCIUM	0.03	200000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MOLYBDENUM	0.10	1000	MS
NICKEL	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SODIUM	0.01	200000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG23IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/23/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LC2ONG23IMS1	LC2ONG23IMS1	1	0.1	
LCSONG23IMS1	LCSONG23IMS1	1	0.1	
PBSNG23IMS1	PBSNG23IMS1	1	0.1	
COR05SED01A	SN6056-005	1.03	0.1	A
COR05SED02A	SN6056-006	1.04	0.1	A
COR05SED02B	SN6056-007	1.4	0.1	A
COR05SED03A	SN6056-008	1.02	0.1	A
COR05SED04A	SN6056-009	1.32	0.1	A
COR05SED04AP	SN6056-009P	1.31	0.1	A
COR05SED04AS	SN6056-009S	1.34	0.1	A
COR05SED05A	SN6056-010	1.36	0.1	A
COR05SED06A	SN6056-011	1.01	0.1	A
COR05SED07A	SN6056-012	1.07	0.1	A
COR05SED08A	SN6056-013	1.01	0.1	A
COR06SED01A	SN6056-014	1.23	0.1	A
COR06SED02A	SN6056-015	1.07	0.1	A
COR06SED02B	SN6056-016	1.05	0.1	A
COR06SED03A	SN6056-017	1.01	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG27IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/27/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG27IMS1	LCSONG27IMS1	1	0.1	
PBSNG27IMS1	PBSNG27IMS1	1	0.1	
COR06SED04A	SN6056-018	1.42	0.1	A
COR06SED04AP	SN6056-018P	1.41	0.1	A
COR06SED04AS	SN6056-018S	1.49	0.1	A
COR06SED05A	SN6056-019	1.29	0.1	A
COR06SED06A	SN6056-020	1.33	0.1	A
COR06SED07A	SN6056-021	1.38	0.1	B
COR06SED08A	SN6056-022	1.25	0.1	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG28IMS1

Matrix: SOIL **SDG Name:** SN6056

Method: MS **Prep Date:** 07/28/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONG28IMS1	LCSONG28IMS1	1	0.1	
PBSNG28IMS1	PBSNG28IMS1	1	0.1	
COR04IS01	SN6056-001	1.01	0.1	
COR04IS02	SN6056-002	1.06	0.1	
COR04IS03	SN6056-003	1.02	0.1	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NG29IMW2

Matrix: WATER **SDG Name:** SN6056

Method: MS **Prep Date:** 07/29/2020

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWNG29IMW2	LCSWNG29IMW2	0.05	0.05	
PBWNG29IMW2	PBWNG29IMW2	0.05	0.05	
COR04IS00	SN6056-004	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH03ICS2

Matrix: SOIL **SDG Name:** SN6056

Method: P **Prep Date:** 08/03/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH03ICS2	LCSONH03ICS2	10	0.2	
PBSNH03ICS2	PBSNH03ICS2	10	0.2	
COR05SED07A	SN6056-024	12.603	0.2	
COR06SED07A	SN6056-026	10.262	0.2	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** NH13HGW1

Matrix: SOIL **SDG Name:** SN6056

Method: CV **Prep Date:** 08/13/2020

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSONH03ICS2	LCSONH03ICS2	10	0.2	
LCSWNH13HGW1	LCSWNH13HGW1	0.025	0.025	
PBSNH03ICS2	PBSNH03ICS2	10	0.2	
PBWNH13HGW1	PBWNH13HGW1	0.025	0.025	
COR05SED07A	SN6056-024	12.603	0.2	
COR06SED07A	SN6056-026	10.262	0.2	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: CETAC M6100 **File Name:** HNH13C

Date: 08/13/2020 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	14:11	Hg
Standard #1 (0.2 ppb		1	14:13	Hg
Standard #2 (0.5 ppb		1	14:15	Hg
Standard #3 (1.0 ppb		1	14:17	Hg
Standard #4 (5.0 ppb		1	14:19	Hg
Standard #5 (10.0 pp		1	14:21	Hg
ICV		1	14:23	HG
ICB		1	14:25	HG
PQL		1	14:28	HG
CCV		1	14:30	HG
CCB		1	14:32	HG
LCSONH03ICS2		1	14:34	HG
LCSWNH13HGW1		1	14:36	HG
PBSNH03ICS2		1	14:38	HG
PBWNH13HGW1		1	14:40	HG
SN6056-024	COR05SED07A	1	14:42	HG
SN6056-026	COR06SED07A	1	14:45	HG
ZZZZZZ		1	14:47	
ZZZZZZ		1	15:17	
ZZZZZZ		1	15:19	
CCV		1	15:21	HG
CCB		1	15:23	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH06A

Date: 08/06/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	12:38	AL SB	CD CA	CU	FE PB	MG	NI	ZN
Std 1		1	12:43	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICV		1	12:47	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICB		1	12:51	AL SB	CD CA	CU	FE PB	MG	NI	ZN
PQL		1	12:56	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSA		1	13:00	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSAB		1	13:06	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCV		1	13:11	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	13:15	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	13:19							
ZZZZZZ		1	13:28							
CCV		1	13:34	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	13:38	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	13:42							
ZZZZZZ		1	13:47							
ZZZZZZ		1	13:51							
ZZZZZZ		1	13:56							
ZZZZZZ		1	14:00							
ZZZZZZ		1	14:04							
ZZZZZZ		2	14:09							
ZZZZZZ		1	14:13							
ZZZZZZ		1	14:18							
ZZZZZZ		1	14:22							
CCV		1	14:26	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	14:31	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	14:35							
ZZZZZZ		5	14:40							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH06A

Date: 08/06/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		2	14:44							
LCSONH03ICS2		1	14:49	SB	CD	CU	PB		NI	ZN
PBSNH03ICS2		1	14:53	SB	CD	CU	PB		NI	ZN
ZZZZZZ		1	14:57							
SN6056-026	COR06SED07A	1	15:02	SB	CD	CU	PB		NI	ZN
ZZZZZZ		1	15:06							
ZZZZZZ		1	15:10							
ZZZZZZ		5	15:15							
CCV		1	15:19	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	15:23	AL SB	CD CA	CU	FE PB	MG	NI	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH07A

Date: 08/07/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	17:12	AL SB	CD CA	CU	FE PB	MG	NI	ZN
Std 1		1	17:16	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICV		1	17:20	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICB		1	17:25	AL SB	CD CA	CU	FE PB	MG	NI	ZN
PQL		1	17:29	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSA		1	17:33	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ICSAB		1	17:39	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCV		1	17:44	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	17:48	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	17:53							
ZZZZZZ		1	18:02							
CCV		1	18:07	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	18:11	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		2	18:16							
ZZZZZZ		5	18:20							
ZZZZZZ		1	18:24							
ZZZZZZ		1	18:29							
ZZZZZZ		1	18:33							
ZZZZZZ		1	18:37							
ZZZZZZ		1	18:43							
ZZZZZZ		1	18:48							
ZZZZZZ		1	18:54							
ZZZZZZ		1	18:59							
CCV		1	19:04	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	19:09	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	19:13							
ZZZZZZ		1	19:17							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: THERMO ICAP 6500 **File Name:** INH07A

Date: 08/07/2020 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	19:22							
ZZZZZZ		1	19:27							
ZZZZZZ		1	19:32							
ZZZZZZ		1	19:38							
ZZZZZZ		1	19:43							
ZZZZZZ		1	19:48							
ZZZZZZ		1	19:53							
ZZZZZZ		1	19:57							
CCV		1	20:01	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	20:06	AL SB	CD CA	CU	FE PB	MG	NI	ZN
ZZZZZZ		1	20:10							
ZZZZZZ		1	20:14							
ZZZZZZ		1	20:19							
ZZZZZZ		1	20:23							
ZZZZZZ		1	20:28							
ZZZZZZ		1	20:32							
ZZZZZZ		1	20:36							
ZZZZZZ		1	20:41							
SN6056-024	COR05SED07A	1	20:45	SB	CD	CU	PB		NI	ZN
ZZZZZZ		2	20:49							
CCV		1	20:54	AL SB	CD CA	CU	FE PB	MG	NI	ZN
CCB		1	20:58	AL SB	CD CA	CU	FE PB	MG	NI	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	17:13	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	17:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	17:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	17:21	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	17:24	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	17:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	17:29	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	17:32											
ZZZZZZ		1	17:34											
ZZZZZZ		1	17:37											
ZZZZZZ		1	17:40											
CCV		1	17:42	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:45	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	17:47											
ZZZZZZ		1	17:50											
ZZZZZZ		1	17:53											
ZZZZZZ		1	17:55											
ZZZZZZ		1	17:58											
ZZZZZZ		1	18:00											
ZZZZZZ		1	18:03											
ZZZZZZ		1	18:05											
ZZZZZZ		1	18:08											
ZZZZZZ		1	18:11											
CCV		1	18:13	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:18											
ZZZZZZ		5	18:21											

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	18:24									
ZZZZZZ		1	18:26									
ZZZZZZ		1	18:29									
ZZZZZZ		1	18:31									
ZZZZZZ		5	18:34									
ZZZZZZ		5	18:37									
ZZZZZZ		5	18:39									
ZZZZZZ		5	18:42									
CCV		1	18:44	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:47	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:50									
ZZZZZZ		5	18:53									
ZZZZZZ		5	18:55									
ZZZZZZ		5	18:58									
ZZZZZZ		10	19:00									
ZZZZZZ		20	19:03									
ZZZZZZ		5	19:06									
ZZZZZZ		5	19:08									
ZZZZZZ		5	19:11									
ZZZZZZ		5	19:13									
CCV		1	19:16	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:19	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:21									
ZZZZZZ		5	19:24									
ZZZZZZ		5	19:27									
ZZZZZZ		5	19:29									
ZZZZZZ		5	19:32									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	19:35	
ZZZZZZ		5	19:37	
ZZZZZZ		5	19:40	
ZZZZZZ		5	19:43	
ZZZZZZ		5	19:45	
CCV		1	19:48	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	19:51	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:53	
ZZZZZZ		5	19:56	
ZZZZZZ		5	19:58	
ZZZZZZ		5	20:01	
ZZZZZZ		25	20:03	
ZZZZZZ		5	20:06	
ZZZZZZ		5	20:08	
ZZZZZZ		5	20:11	
ZZZZZZ		5	20:14	
ZZZZZZ		1	20:16	
CCV		1	20:19	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
CCB		1	20:21	Al Sb Ca Cu Fe Pb Mg Mo K Na Zn
ZZZZZZ		1	20:24	
ZZZZZZ		1	20:27	
ZZZZZZ		1	20:29	
ZZZZZZ		100	20:32	
ZZZZZZ		1	20:35	
ZZZZZZ		1	20:37	
ZZZZZZ		5	20:40	
ZZZZZZ		1	20:43	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		1	20:45										
ZZZZZZ		1	20:48										
CCV		1	20:51	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:53	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:56											
ZZZZZZ		5	20:59											
ZZZZZZ		5	21:01											
PBSNG23IMS1		5	21:04		Sb		Cu							Zn
LCSONG23IMS1		5	21:07		Sb		Cu		Pb					Zn
LC2ONG23IMS1		5	21:09		Sb		Cu		Pb					Zn
SN6056-005	COR05SED01A	5	21:12		Sb		Cu							Zn
SN6056-006	COR05SED02A	5	21:15		Sb		Cu							Zn
SN6056-007	COR05SED02B	5	21:17		Sb		Cu							Zn
SN6056-008	COR05SED03A	5	21:20		Sb		Cu							Zn
CCV		1	21:23	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:26	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-009	COR05SED04A	5	21:28		Sb		Cu							Zn
SN6056-009L	COR05SED04AL	25	21:31		Sb		Cu							Zn
SN6056-009A	COR05SED04AA	5	21:34		Sb		Cu		Pb					Zn
SN6056-009S	COR05SED04AS	5	21:36		Sb		Cu		Pb					Zn
SN6056-009P	COR05SED04AP	5	21:39		Sb		Cu		Pb					Zn
SN6056-010	COR05SED05A	5	21:42		Sb		Cu		Pb					Zn
SN6056-011	COR05SED06A	5	21:44		Sb		Cu		Pb					Zn
SN6056-012	COR05SED07A	5	21:47		Sb		Cu							Zn
SN6056-013	COR05SED08A	5	21:50		Sb		Cu		Pb					Zn
SN6056-014	COR06SED01A	5	21:52		Sb				Pb					Zn
CCV		1	21:55	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG24A

Date: 07/24/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
CCB		1	21:58	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-015	COR06SED02A	5	22:01		Sb				Pb					Zn
SN6056-016	COR06SED02B	5	22:03		Sb				Pb					Zn
SN6056-017	COR06SED03A	5	22:06		Sb									Zn
CCV		1	22:08	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:11	Al	Sb	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	16:21	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CalStd		1	16:24	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICV		1	16:27	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICB		1	16:30	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
PQL		1	16:32	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSA		1	16:35	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ICSAB		1	16:38	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:40									
ZZZZZZ		1	16:43									
ZZZZZZ		1	16:46									
ZZZZZZ		1	16:48									
CCV		1	16:51	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	16:54	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:57									
ZZZZZZ		5	16:59									
ZZZZZZ		5	17:02									
ZZZZZZ		5	17:04									
ZZZZZZ		5	17:07									
ZZZZZZ		25	17:10									
ZZZZZZ		5	17:12									
ZZZZZZ		5	17:15									
ZZZZZZ		25	17:18									
ZZZZZZ		5	17:20									
CCV		1	17:23	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
CCB		1	17:26	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:28									
ZZZZZZ		5	17:31									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	17:33									
ZZZZZZ		1	17:36									
ZZZZZZ		1	17:39									
ZZZZZZ		1	17:41									
ZZZZZZ		1	17:44									
ZZZZZZ		1	17:47									
ZZZZZZ		1	17:49									
ZZZZZZ		1	17:52									
CCV		1	17:55	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	17:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:00									
ZZZZZZ		1	18:03									
ZZZZZZ		50	18:05									
ZZZZZZ		5	18:08									
ZZZZZZ		5	18:11									
ZZZZZZ		5	18:13									
ZZZZZZ		5	18:16									
ZZZZZZ		5	18:19									
ZZZZZZ		5	18:21									
ZZZZZZ		5	18:24									
CCV		1	18:27	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	18:29	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:32									
ZZZZZZ		5	18:35									
ZZZZZZ		5	18:37									
ZZZZZZ		25	18:40									
ZZZZZZ		5	18:43									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements									
ZZZZZZ		5	18:45										
ZZZZZZ		5	18:48										
ZZZZZZ		5	18:51										
ZZZZZZ		1	18:53										
ZZZZZZ		5	18:56										
CCV		1	18:59	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:01	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	19:04										
PBSNG23IMS1		5	19:07					Pb					
ZZZZZZ		5	19:09										
ZZZZZZ		5	19:12										
SN6056-005	COR05SED01A	5	19:15					Pb					
SN6056-006	COR05SED02A	5	19:17					Pb					
SN6056-007	COR05SED02B	5	19:20					Pb					
SN6056-008	COR05SED03A	5	19:23					Pb					
SN6056-009	COR05SED04A	5	19:25					Pb					
SN6056-009L	COR05SED04AL	25	19:28					Pb					
CCV		1	19:31	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	19:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:36										
ZZZZZZ		5	19:39										
ZZZZZZ		5	19:41										
ZZZZZZ		5	19:44										
ZZZZZZ		5	19:47										
ZZZZZZ		5	19:49										
ZZZZZZ		5	19:52										
SN6056-014	COR06SED01A	5	19:54			Cu							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
SN6056-015	COR06SED02A	5	19:57			Cu						
SN6056-016	COR06SED02B	5	20:00			Cu						
CCV		1	20:02	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:07										
ZZZZZZ		1	20:10										
ZZZZZZ		5	20:13										
ZZZZZZ		1	20:15										
ZZZZZZ		1	20:18										
ZZZZZZ		1	20:20										
ZZZZZZ		1	20:23										
ZZZZZZ		1	20:26										
ZZZZZZ		1	20:28										
ZZZZZZ		1	20:31										
CCV		1	20:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:36	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	20:39										
ZZZZZZ		5	20:41										
ZZZZZZ		5	20:44										
ZZZZZZ		5	20:47										
ZZZZZZ		5	20:50										
ZZZZZZ		5	20:52										
ZZZZZZ		5	20:55										
ZZZZZZ		5	20:58										
ZZZZZZ		25	21:00										
ZZZZZZ		5	21:03										
CCV		1	21:06	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CCB		1	21:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	21:11										
ZZZZZZ		5	21:13										
ZZZZZZ		5	21:16										
ZZZZZZ		5	21:19										
ZZZZZZ		5	21:21										
ZZZZZZ		1	21:24										
ZZZZZZ		5	21:27										
ZZZZZZ		1	21:29										
ZZZZZZ		1	21:32										
ZZZZZZ		1	21:35										
CCV		1	21:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	21:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	21:43										
ZZZZZZ		5	21:45										
ZZZZZZ		1	21:48										
ZZZZZZ		1	21:51										
ZZZZZZ		1	21:54										
ZZZZZZ		5	21:56										
ZZZZZZ		5	21:59										
ZZZZZZ		5	22:01										
ZZZZZZ		5	22:04										
ZZZZZZ		5	22:07										
CCV		1	22:10	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:15										
ZZZZZZ		5	22:17										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	22:20									
ZZZZZZ		5	22:23									
ZZZZZZ		5	22:25									
ZZZZZZ		5	22:28									
ZZZZZZ		5	22:30									
ZZZZZZ		5	22:33									
ZZZZZZ		5	22:36									
ZZZZZZ		5	22:38									
CCV		1	22:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	22:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	22:46									
ZZZZZZ		5	22:49									
ZZZZZZ		25	22:52									
ZZZZZZ		5	22:54									
ZZZZZZ		5	22:57									
ZZZZZZ		5	23:00									
ZZZZZZ		5	23:02									
ZZZZZZ		5	23:05									
ZZZZZZ		5	23:08									
ZZZZZZ		5	23:10									
CCV		1	23:13	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:16	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	23:18									
ZZZZZZ		5	23:21									
ZZZZZZ		25	23:24									
ZZZZZZ		5	23:26									
ZZZZZZ		5	23:29									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG27A

Date: 07/27/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	23:32									
ZZZZZZ		5	23:35									
ZZZZZZ		25	23:37									
ZZZZZZ		5	23:40									
ZZZZZZ		5	23:42									
CCV		1	23:45	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	23:48	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	23:51									
ZZZZZZ		5	23:53									
ZZZZZZ		5	23:56									
ZZZZZZ		5	23:58									
PBSNG27IMS1		5	00:01			Cu							
LCSONG27IMS1		5	00:04			Cu							
SN6056-018	COR06SED04A	5	00:07			Cu							Zn
SN6056-018L	COR06SED04AL	25	00:09			Cu							Zn
SN6056-018A	COR06SED04AA	5	00:12			Cu							Zn
SN6056-018S	COR06SED04AS	5	00:14			Cu							Zn
CCV		1	00:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:20	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
SN6056-018P	COR06SED04AP	5	00:23			Cu							Zn
SN6056-019	COR06SED05A	5	00:25			Cu							Zn
SN6056-020	COR06SED06A	5	00:28			Cu							Zn
CCV		1	00:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	00:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	12:33	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CalStd		1	12:36	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICV		1	12:39	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICB		1	12:42	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
PQL		1	12:44	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICSA		1	12:47	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ICSAB		1	12:50	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	12:53										
ZZZZZZ		1	12:55										
ZZZZZZ		1	12:58										
ZZZZZZ		1	13:00										
CCV		1	13:03	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	13:06	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	13:09										
ZZZZZZ		5	13:11										
ZZZZZZ		5	13:14										
ZZZZZZ		5	13:16										
ZZZZZZ		5	13:19										
ZZZZZZ		25	13:22										
ZZZZZZ		5	13:24										
ZZZZZZ		5	13:27										
ZZZZZZ		5	13:30										
ZZZZZZ		5	13:32										
CCV		1	13:35	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	13:38	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	13:40										
ZZZZZZ		5	13:43										

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	13:46									
ZZZZZZ		5	13:48									
ZZZZZZ		5	13:51									
ZZZZZZ		5	13:54									
ZZZZZZ		5	13:56									
ZZZZZZ		25	13:59									
ZZZZZZ		5	14:01									
ZZZZZZ		5	14:04									
CCV		1	14:07	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	14:09	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	14:12									
ZZZZZZ		5	14:15									
ZZZZZZ		1	14:17									
ZZZZZZ		5	14:20									
ZZZZZZ		1	14:23									
ZZZZZZ		5	14:25									
ZZZZZZ		5	14:28									
ZZZZZZ		5	14:31									
ZZZZZZ		5	14:33									
ZZZZZZ		5	14:36									
CCV		1	14:39	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	14:41	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	14:44									
ZZZZZZ		5	14:47									
ZZZZZZ		5	14:49									
ZZZZZZ		25	14:52									
ZZZZZZ		5	14:55									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	14:57									
ZZZZZZ		5	15:00									
ZZZZZZ		5	15:03									
ZZZZZZ		5	15:05									
ZZZZZZ		5	15:08									
CCV		1	15:11	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	15:13	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	15:16									
ZZZZZZ		5	15:18									
ZZZZZZ		5	15:21									
ZZZZZZ		5	15:24									
SN6056-017	COR06SED03A	5	15:26					Pb				
ZZZZZZ		1	15:29									
ZZZZZZ		5	15:32									
ZZZZZZ		1	15:34									
ZZZZZZ		1	15:37									
ZZZZZZ		1	15:40									
CCV		1	15:42	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	15:45	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	15:48									
ZZZZZZ		1	15:50									
ZZZZZZ		5	15:53									
ZZZZZZ		5	15:56									
ZZZZZZ		5	15:58									
ZZZZZZ		5	16:01									
ZZZZZZ		5	16:04									
ZZZZZZ		5	16:06									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	16:09									
ZZZZZZ		25	16:12									
CCV		1	16:14	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:17	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		5	16:20									
ZZZZZZ		5	16:22									
ZZZZZZ		5	16:25									
ZZZZZZ		5	16:28									
ZZZZZZ		5	16:30									
ZZZZZZ		1	16:33									
ZZZZZZ		5	16:35									
ZZZZZZ		1	16:38									
ZZZZZZ		5	16:41									
ZZZZZZ		1	16:43									
CCV		1	16:46	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	16:49	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
ZZZZZZ		1	16:51									
ZZZZZZ		1	16:54									
ZZZZZZ		1	16:57									
ZZZZZZ		5	16:59									
ZZZZZZ		1	17:02									
ZZZZZZ		1	17:05									
ZZZZZZ		1	17:07									
ZZZZZZ		5	17:10									
ZZZZZZ		5	17:13									
ZZZZZZ		5	17:15									
CCV		1	17:18	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	17:21	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	17:23	
ZZZZZZ		5	17:26	
ZZZZZZ		5	17:29	
ZZZZZZ		5	17:31	
ZZZZZZ		5	17:35	
ZZZZZZ		5	17:38	
ZZZZZZ		5	17:40	
ZZZZZZ		5	17:43	
ZZZZZZ		5	17:46	
ZZZZZZ		5	17:48	
CCV		1	17:51	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	17:54	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	17:56	
ZZZZZZ		5	17:59	
ZZZZZZ		5	18:02	
ZZZZZZ		5	18:04	
ZZZZZZ		25	18:07	
ZZZZZZ		5	18:10	
ZZZZZZ		5	18:12	
ZZZZZZ		5	18:15	
ZZZZZZ		5	18:18	
ZZZZZZ		5	18:20	
CCV		1	18:23	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	18:26	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	18:28	
ZZZZZZ		5	18:31	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	18:34	
ZZZZZZ		5	18:36	
ZZZZZZ		25	18:39	
ZZZZZZ		5	18:42	
ZZZZZZ		5	18:44	
ZZZZZZ		5	18:47	
ZZZZZZ		5	18:50	
ZZZZZZ		25	18:52	
CCV		1	18:55	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	18:58	Al Sb Ca Fe Pb Mg Mo K Na Zn
ZZZZZZ		5	19:00	
ZZZZZZ		5	19:03	
ZZZZZZ		5	19:06	
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
ZZZZZZ		5	19:13	
PBSNG27IMS1		5	19:16	Sb Pb Zn
LCSONG27IMS1		5	19:19	Sb Pb Zn
SN6056-018	COR06SED04A	5	19:22	Sb Pb
SN6056-018L	COR06SED04AL	25	19:24	Sb Pb
CCV		1	19:27	Al Sb Ca Fe Pb Mg Mo K Na Zn
CCB		1	19:29	Al Sb Ca Fe Pb Mg Mo K Na Zn
SN6056-018A	COR06SED04AA	5	19:32	Sb Pb
SN6056-018S	COR06SED04AS	5	19:35	Sb Pb
SN6056-018P	COR06SED04AP	5	19:37	Sb Pb
SN6056-019	COR06SED05A	5	19:40	Sb Pb
SN6056-020	COR06SED06A	5	19:43	Sb Pb

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG28B

Date: 07/28/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:45									
ZZZZZZ		5	19:48									
ZZZZZZ		25	19:51									
ZZZZZZ		5	19:53									
ZZZZZZ		5	19:56									
CCV		1	19:59	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn
CCB		1	20:01	Al	Sb	Ca	Fe	Pb	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CalBlank		1	17:04	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CalStd		1	17:07	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICV		1	17:10	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICB		1	17:13	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICSA		1	17:18	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ICSAB		1	17:21	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:29								
ZZZZZZ		1	17:31								
ZZZZZZ		1	17:34								
ZZZZZZ		1	17:42								
PQL		1	17:45	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	17:47								
ZZZZZZ		1	17:50								
ZZZZZZ		1	17:53								
ZZZZZZ		1	17:56								
CCV		1	17:58	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	18:01	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:03								
ZZZZZZ		1	18:06								
ZZZZZZ		1	18:09								
ZZZZZZ		1	18:11								
ZZZZZZ		1	18:14								
ZZZZZZ		5	18:17								
ZZZZZZ		5	18:19								
ZZZZZZ		5	18:22								
ZZZZZZ		5	18:25								
ZZZZZZ		5	18:27								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CCV		1	18:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	18:35									
ZZZZZZ		5	18:38									
ZZZZZZ		1	18:41									
ZZZZZZ		10	18:43									
ZZZZZZ		10	18:46									
ZZZZZZ		10	18:49									
ZZZZZZ		5	18:51									
ZZZZZZ		1	18:54									
ZZZZZZ		5	18:57									
ZZZZZZ		5	18:59									
CCV		1	19:02	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:07									
ZZZZZZ		25	19:10									
ZZZZZZ		5	19:13									
ZZZZZZ		25	19:15									
ZZZZZZ		5	19:18									
ZZZZZZ		25	19:21									
ZZZZZZ		5	19:23									
ZZZZZZ		5	19:26									
ZZZZZZ		5	19:29									
ZZZZZZ		5	19:31									
CCV		1	19:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:39									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:42									
PBSNG28IMS1		5	19:44			Cu		Pb				
LCSONG28IMS1		5	19:47			Cu		Pb				
SN6056-001	COR04IS01	5	19:50			Cu		Pb				
SN6056-002	COR04IS02	5	19:52			Cu		Pb				
SN6056-003	COR04IS03	5	19:55			Cu		Pb				
PBWNG29IMW2		5	19:57			Cu		Pb				
LCSWNG29IMW2		5	20:00			Cu		Pb				
ZZZZZZ		5	20:03									
CCV		1	20:05	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	20:10									
ZZZZZZ		5	20:13									
ZZZZZZ		5	20:16									
ZZZZZZ		5	20:18									
SN6056-004	COR04IS00	5	20:21			Cu						
ZZZZZZ		5	20:24									
ZZZZZZ		5	20:26									
ZZZZZZ		5	20:29									
ZZZZZZ		5	20:32									
ZZZZZZ		5	20:34									
CCV		1	20:37	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	20:42									
ZZZZZZ		5	20:45									
ZZZZZZ		5	20:48									
ZZZZZZ		5	20:50									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	20:53									
ZZZZZZ		25	20:56									
ZZZZZZ		5	20:58									
ZZZZZZ		5	21:01									
ZZZZZZ		5	21:03									
ZZZZZZ		5	21:06									
CCV		1	21:08	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	21:11	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	21:14									
ZZZZZZ		5	21:16									
ZZZZZZ		5	21:19									
ZZZZZZ		5	21:22									
ZZZZZZ		5	21:24									
ZZZZZZ		5	21:27									
ZZZZZZ		5	21:30									
ZZZZZZ		5	21:32									
ZZZZZZ		5	21:35									
ZZZZZZ		5	21:38									
CCV		1	21:40	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	21:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	21:45									
ZZZZZZ		5	21:48									
ZZZZZZ		5	21:51									
ZZZZZZ		5	21:54									
ZZZZZZ		5	21:56									
ZZZZZZ		5	21:59									
ZZZZZZ		5	22:01									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	22:04									
ZZZZZZ		5	22:07									
ZZZZZZ		25	22:09									
CCV		1	22:12	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	22:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	22:17									
ZZZZZZ		5	22:19									
ZZZZZZ		5	22:22									
ZZZZZZ		5	22:24									
ZZZZZZ		5	22:27									
ZZZZZZ		5	22:30									
ZZZZZZ		5	22:32									
ZZZZZZ		5	22:35									
ZZZZZZ		5	22:37									
ZZZZZZ		5	22:40									
CCV		1	22:43	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	22:45	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	22:48									
ZZZZZZ		5	22:50									
ZZZZZZ		5	22:53									
ZZZZZZ		5	22:56									
ZZZZZZ		5	22:58									
ZZZZZZ		5	23:01									
ZZZZZZ		5	23:04									
ZZZZZZ		5	23:06									
ZZZZZZ		5	23:09									
ZZZZZZ		5	23:12									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/29/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
CCV		1	23:14	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	23:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	23:20									
ZZZZZZ		5	23:22									
ZZZZZZ		5	23:25									
ZZZZZZ		5	23:28									
ZZZZZZ		25	23:30									
ZZZZZZ		5	23:33									
ZZZZZZ		5	23:36									
ZZZZZZ		5	23:38									
ZZZZZZ		10	23:41									
ZZZZZZ		20	23:43									
CCV		1	23:46	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	23:49	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	23:51									
ZZZZZZ		1	23:54									
ZZZZZZ		10	23:56									
ZZZZZZ		20	23:59									
ZZZZZZ		25	00:01									
ZZZZZZ		1	00:04									
ZZZZZZ		1	00:06									
ZZZZZZ		10	00:09									
ZZZZZZ		20	00:11									
ZZZZZZ		25	00:14									
CCV		1	00:17	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	00:19	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	00:22									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	00:24								
ZZZZZZ		10	00:27								
ZZZZZZ		20	00:30								
ZZZZZZ		25	00:32								
ZZZZZZ		1	00:35								
ZZZZZZ		1	00:38								
ZZZZZZ		10	00:40								
ZZZZZZ		20	00:43								
ZZZZZZ		25	00:46								
CCV		1	00:48	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	00:51	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	00:53								
ZZZZZZ		1	00:56								
ZZZZZZ		10	00:58								
ZZZZZZ		20	01:01								
ZZZZZZ		25	01:04								
ZZZZZZ		1	01:06								
ZZZZZZ		1	01:09								
ZZZZZZ		10	01:11								
ZZZZZZ		50	01:14								
ZZZZZZ		10	01:17								
CCV		1	01:19	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
CCB		1	01:22	Al	Ca	Cu	Fe Pb	Mg	Mo	K	Na
ZZZZZZ		1	01:25								
ZZZZZZ		1	01:27								
ZZZZZZ		20	01:30								
ZZZZZZ		25	01:33								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	01:35								
ZZZZZZ		1	01:38								
ZZZZZZ		1	01:41								
ZZZZZZ		10	01:43								
ZZZZZZ		20	01:46								
ZZZZZZ		25	01:49								
CCV		1	01:51	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	01:54	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	01:57								
ZZZZZZ		1	01:59								
ZZZZZZ		10	02:02								
ZZZZZZ		20	02:05								
ZZZZZZ		25	02:07								
ZZZZZZ		1	02:10								
ZZZZZZ		1	02:13								
ZZZZZZ		10	02:15								
ZZZZZZ		20	02:18								
ZZZZZZ		25	02:20								
CCV		1	02:23	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	02:26	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	02:28								
ZZZZZZ		1	02:31								
ZZZZZZ		5	02:33								
ZZZZZZ		5	02:36								
ZZZZZZ		5	02:39								
ZZZZZZ		5	02:41								
ZZZZZZ		5	02:44								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG29A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	02:47									
ZZZZZZ		5	02:49									
ZZZZZZ		5	02:52									
CCV		1	02:55	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	02:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	03:00									
ZZZZZZ		5	03:02									
ZZZZZZ		25	03:05									
ZZZZZZ		5	03:07									
ZZZZZZ		5	03:10									
ZZZZZZ		5	03:13									
ZZZZZZ		5	03:15									
ZZZZZZ		50	03:18									
SN6056-017	COR06SED03A	5	03:20			Cu						
ZZZZZZ		5	03:23									
CCV		1	03:25	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	03:28	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
CalBlank		1	16:19	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CalStd		1	16:22	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICV		1	16:30	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICB		1	16:33	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
PQL		1	16:35	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSA		1	16:38	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ICSAB		1	16:41	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		1	16:44									
ZZZZZZ		1	16:46									
ZZZZZZ		1	16:49									
ZZZZZZ		1	16:51									
CCV		1	16:54	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	16:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	16:59									
ZZZZZZ		25	17:02									
ZZZZZZ		5	17:05									
ZZZZZZ		5	17:07									
ZZZZZZ		25	17:10									
ZZZZZZ		5	17:13									
ZZZZZZ		5	17:15									
ZZZZZZ		5	17:18									
SN6056-021	COR06SED07A	5	17:21			Cu		Pb				
SN6056-022	COR06SED08A	5	17:23			Cu		Pb				
CCV		1	17:26	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	17:28	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	17:31									
ZZZZZZ		5	17:34									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	17:36									
ZZZZZZ		5	17:39									
ZZZZZZ		5	17:42									
ZZZZZZ		5	17:44									
ZZZZZZ		5	17:47									
ZZZZZZ		5	17:50									
ZZZZZZ		5	17:52									
ZZZZZZ		5	17:55									
CCV		1	17:57	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:00	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		25	18:03									
ZZZZZZ		5	18:05									
ZZZZZZ		5	18:08									
ZZZZZZ		5	18:10									
ZZZZZZ		5	18:13									
SN6056-012	COR05SED07A	50	18:16					Pb				
ZZZZZZ		5	18:18									
ZZZZZZ		5	18:21									
ZZZZZZ		5	18:23									
ZZZZZZ		5	18:26									
CCV		1	18:29	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	18:31	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	18:34									
ZZZZZZ		5	18:37									
ZZZZZZ		5	18:39									
ZZZZZZ		1	18:42									
ZZZZZZ		5	18:45									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		1	18:47									
ZZZZZZ		10	18:50									
ZZZZZZ		10	18:53									
ZZZZZZ		10	18:55									
ZZZZZZ		1	18:58									
CCV		1	19:00	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:03	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:06									
ZZZZZZ		5	19:08									
ZZZZZZ		5	19:11									
ZZZZZZ		25	19:14									
ZZZZZZ		5	19:16									
ZZZZZZ		25	19:19									
ZZZZZZ		5	19:22									
ZZZZZZ		25	19:24									
ZZZZZZ		5	19:27									
ZZZZZZ		5	19:29									
CCV		1	19:32	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	19:34	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	19:37									
ZZZZZZ		5	19:40									
ZZZZZZ		5	19:42									
ZZZZZZ		5	19:45									
ZZZZZZ		5	19:48									
ZZZZZZ		5	19:50									
ZZZZZZ		5	19:53									
ZZZZZZ		5	19:56									

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNG30A

Date: 07/30/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements								
ZZZZZZ		5	19:59									
ZZZZZZ		5	20:01									
CCV		1	20:04	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:07	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
ZZZZZZ		5	20:09									
SN6056-004	COR04IS00	5	20:12					Pb				
ZZZZZZ		5	20:14									
ZZZZZZ		10	20:17									
ZZZZZZ		25	20:20									
ZZZZZZ		25	20:22									
ZZZZZZ		25	20:25									
ZZZZZZ		25	20:28									
ZZZZZZ		25	20:30									
ZZZZZZ		25	20:33									
CCV		1	20:36	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na
CCB		1	20:38	Al	Ca	Cu	Fe	Pb	Mg	Mo	K	Na

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	17:54	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	17:57	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	18:01	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	18:04	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	18:06	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	18:09	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	18:12	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	18:15								
ZZZZZZ		1	18:17								
ZZZZZZ		1	18:20								
ZZZZZZ		1	18:23								
CCV		1	18:25	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:28	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	18:31								
ZZZZZZ		5	18:33								
ZZZZZZ		5	18:36								
ZZZZZZ		5	18:38								
ZZZZZZ		5	18:41								
ZZZZZZ		5	18:43								
ZZZZZZ		5	18:46								
ZZZZZZ		5	18:49								
ZZZZZZ		5	18:52								
ZZZZZZ		5	18:54								
CCV		1	18:57	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	18:59	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:02								
ZZZZZZ		5	19:05								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		25	19:07							
ZZZZZZ		5	19:10							
ZZZZZZ		5	19:12							
ZZZZZZ		5	19:15							
ZZZZZZ		1	19:18							
ZZZZZZ		1	19:20							
ZZZZZZ		1	19:23							
ZZZZZZ		5	19:25							
CCV		1	19:28	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	19:30	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	19:33							
ZZZZZZ		5	19:36							
SN6056-021	COR06SED07A	5	19:38	Sb						Zn
SN6056-022	COR06SED08A	5	19:41	Sb						Zn
PBWNG29IMW2		5	19:44	Sb						
LCSWNG29IMW2		5	19:46	Sb						
ZZZZZZ		5	19:49							
ZZZZZZ		5	19:51							
ZZZZZZ		5	19:54							
ZZZZZZ		5	19:57							
CCV		1	19:59	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	20:02	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	20:05							
ZZZZZZ		5	20:07							
ZZZZZZ		5	20:10							
SN6056-004	COR04IS00	5	20:12	Sb						
ZZZZZZ		5	20:15							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH03A

Date: 08/03/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	20:18							
ZZZZZZ		1	20:20							
ZZZZZZ		1	20:23							
ZZZZZZ		1	20:26							
ZZZZZZ		1	20:28							
CCV		1	20:31	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	20:33	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
CalBlank		1	14:36	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CalStd		1	14:40	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	14:43	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	14:46	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	14:49	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSA		1	14:51	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	14:54	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	14:57								
ZZZZZZ		1	14:59								
ZZZZZZ		1	15:02								
ZZZZZZ		1	15:05								
CCV		1	15:08	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	15:10	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		5	17:10								
ZZZZZZ		5	17:13								
ZZZZZZ		5	17:15								
LCSONG28IMS1		5	17:18	Sb							Zn
ZZZZZZ		5	17:22								
PBSNG28IMS1		5	17:24	Sb							Zn
SN6056-001	COR04IS01	5	17:27	Sb							Zn
SN6056-002	COR04IS02	5	17:30	Sb							Zn
SN6056-003	COR04IS03	5	17:32	Sb							Zn
LCSWNG29IMW2		5	17:35								Zn
CCV		1	17:38	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	17:40	Al Sb	Ca	Fe	Mg	Mo	K	Na	Zn
PBWNG29IMW2		5	17:43								Zn
ZZZZZZ		5	17:46								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SN6056

Instrument ID: AGILENT 7800 ICP-MS **File Name:** LNH04A

Date: 08/04/2020 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		5	17:48							
ZZZZZZ		5	17:51							
ZZZZZZ		5	17:54							
ZZZZZZ		5	17:57							
ZZZZZZ		5	17:59							
ZZZZZZ		5	18:02							
SN6056-004	COR04IS00	5	18:05							Zn
ZZZZZZ		5	18:07							
CCV		1	18:10	Al Sb	Ca	Fe	Mg	Mo	K	Na Zn
CCB		1	18:13	Al Sb	Ca	Fe	Mg	Mo	K	Na Zn

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: Cetac M6100 (H) **ANALYST**: CD/SF **ANALYSIS DATE**: 08/13/2020

FILE NAME: HNH13C **METHOD**: **CVAA**

Analyte : Mercury

$SnCl_2$ Lot : MR2749

- ☑ 245.1
- ☑ 7470
- ☐ 7471
- ☐ DoD
- ☐ _____

STANDARDS USED:

Standard Name	Prep. Date08/10/2020	Expiration Date	Standard Conc.
Cal. Blank / ICB / CCB	08/13/2020	08/13/2020	0.00 ug/L
Standard #1 / PQL	08/13/2020	08/13/2020	0.20 ug/L
Standard #2	08/13/2020	08/13/2020	0.50 ug/L
Standard #3	08/13/2020	08/13/2020	1.00 ug/L
Standard #4 / CCV	08/13/2020	08/13/2020	5.00 ug/L
Standard #5	08/13/2020	08/13/2020	10.00 ug/L
ICV	08/13/2020	08/13/2020	6.00 ug/L

Additional Comments and Notes:

REVIEWED
EP 8/19/2020
KATAHDIN ANALYTICAL
METALS SECTION

Dilutions:

5x Diln.: 6.4 mL (pipet M26) of Cal. Blank + 1.6mL (pipet M26) of sample

Post Spike (7470/245.1): 0.005 mL MW19402 (pipet M17) + 8.0mL (pipet M26) of sample

INSTRUMENT RUNLOG

Instrument: CETAC M6100

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Calibration Blank	1.0000	HNH13C	8/13/2020	14:11	CD
Standard #1 (0.2 ppb)	1.0000	HNH13C	8/13/2020	14:13	CD
Standard #2 (0.5 ppb)	1.0000	HNH13C	8/13/2020	14:15	CD
Standard #3 (1.0 ppb)	1.0000	HNH13C	8/13/2020	14:17	CD
Standard #4 (5.0 ppb)	1.0000	HNH13C	8/13/2020	14:19	CD
Standard #5 (10.0 ppb)	1.0000	HNH13C	8/13/2020	14:21	CD
ICV	1.0000	HNH13C	8/13/2020	14:23	CD
ICB	1.0000	HNH13C	8/13/2020	14:25	CD
PQL	1.0000	HNH13C	8/13/2020	14:28	CD
CCV	1.0000	HNH13C	8/13/2020	14:30	CD
CCB	1.0000	HNH13C	8/13/2020	14:32	CD
LCSONH03ICS2	1.0000	HNH13C	8/13/2020	14:34	CD
LCSWNH13HGW1	1.0000	HNH13C	8/13/2020	14:36	CD
PBSNH03ICS2	1.0000	HNH13C	8/13/2020	14:38	CD
PBWNH13HGW1	1.0000	HNH13C	8/13/2020	14:40	CD
SN6056-024	1.0000	HNH13C	8/13/2020	14:42	CD
SN6056-026	1.0000	HNH13C	8/13/2020	14:45	CD
SN6639-001	1.0000	HNH13C	8/13/2020	14:47	CD
SN6668-001	1.0000	HNH13C	8/13/2020	15:17	CD
SN6668-002	1.0000	HNH13C	8/13/2020	15:19	CD
CCV	1.0000	HNH13C	8/13/2020	15:21	CD
CCB	1.0000	HNH13C	8/13/2020	15:23	CD
LCSWNH13HGW2	1.0000	HNH13C	8/13/2020	15:26	CD
PBWNH13HGW2	1.0000	HNH13C	8/13/2020	15:28	CD
SN6579-002	1.0000	HNH13C	8/13/2020	15:30	CD
SN6713-002	1.0000	HNH13C	8/13/2020	15:32	CD
SN6713-002L	5.0000	HNH13C	8/13/2020	15:34	CD
SN6713-002A	1.0000	HNH13C	8/13/2020	15:36	CD
SN6713-002P	1.0000	HNH13C	8/13/2020	15:38	CD
SN6713-002S	1.0000	HNH13C	8/13/2020	15:41	CD
CCV	1.0000	HNH13C	8/13/2020	15:43	CD
CCB	1.0000	HNH13C	8/13/2020	15:45	CD

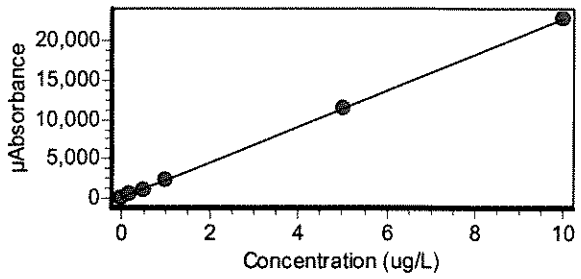
Report Generated By CETAC QuickTrace
Analyst: metals
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HNH13C.wsz
Date Started: 8/13/2020 2:08:43 PM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags
Calibration Blank					STD	08/13/20 02:11:02 pm	0.000	62	23.66	
Replicates	69.6	48.5	79.3	51.5						
Standard #1 (0.2 ppb)					STD	08/13/20 02:13:08 pm	0.200	482	6.78	
Replicates	481.9	460.3	528.4	457.9						
Standard #2 (0.5 ppb)					STD	08/13/20 02:15:16 pm	0.500	1099	1.45	
Replicates	1078.0	1095.1	1111.3	1111.5						
Standard #3 (1.0 ppb)					STD	08/13/20 02:17:23 pm	1.000	2296	1.50	
Replicates	2285.3	2252.0	2326.3	2320.6						
Standard #4 (5.0 ppb)					STD	08/13/20 02:19:31 pm	5.000	11520	0.22	
Replicates	11500.1	11512.9	11508.7	11556.7						
Standard #5 (10.0 ppb)					STD	08/13/20 02:21:39 pm	10.000	22905	0.59	
Replicates	22759.7	22825.6	22986.6	23048.9						

Calibration

Equation: A = 18.434 + 2290.635C
R2: 0.99998
SEE: 47.4478
Flags:



ICV					ICV	08/13/20 02:23:49 pm	5.850	13418	0.76	
Replicates	13303.2	13374.1	13456.4	13538.6						
% Recovery	97.50									
ICB					ICB	08/13/20 02:25:55 pm	-0.002	13	116.70	
Replicates	24.0	8.3	-6.4	25.8						

Katahdin Analytical Services 4000226

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags
CCV					CCV	08/13/20 03:21:51 pm	5.176	11874	0.73	
	Replicates	11769.2	11859.1	11887.4	11979.4					
	% Recovery	103.51								
CCB					CCB	08/13/20 03:23:58 pm	0.017	58	77.09	
	Replicates	48.8	12.2	119.7	51.9					
LCSWNH13HGW2					LCS	08/13/20 03:26:07 pm	5.937	13618	0.89	
	Replicates	13474.5	13570.6	13674.5	13750.6					
	% Recovery	118.74								
PBWH ~~PBWH~~G13HGW2					PBK	08/13/20 03:28:14 pm	-0.017	-21	146.51	CD 8-13-20
	Replicates	-21.4	22.4	-40.0	-43.8					
SN6579-002					UNK	08/13/20 03:30:23 pm	0.014	51	29.57	
	Replicates	53.4	36.4	70.4	42.2					
SN6713-002					UNK	08/13/20 03:32:31 pm	0.013	49	50.40	
	Replicates	12.3	65.7	57.4	60.9					
SN6713-002L					UNK	08/13/20 03:34:40 pm	0.156	90	50.52	
	Replicates	118.3	138.6	47.0	55.8					
SN6713-002A					UNK	08/13/20 03:36:49 pm	1.757	4044	0.75	
	Replicates	4009.4	4039.2	4042.9	4082.9					
SN6713-002P					UNK	08/13/20 03:38:59 pm	1.219	2811	1.11	
	Replicates	2793.1	2807.6	2787.9	2856.4					
SN6713-002S					UNK	08/13/20 03:41:08 pm	1.130	2607	0.61	
	Replicates	2594.6	2595.8	2629.0	2609.0					
CCV					CCV	08/13/20 03:43:16 pm	4.933	11319	0.52	
	Replicates	11390.0	11277.5	11265.0	11342.8					
	% Recovery	98.67								
CCB					CCB	08/13/20 03:45:23 pm	0.010	42	48.85	
	Replicates	61.1	18.6	58.6	31.7					

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	
PQL					CRDL	08/13/20 02:28:02 pm	0.168	403	11.26		
	Replicates	423.6	384.9	453.0	349.0						
	% Recovery	83.86									
CCV					CCV	08/13/20 02:30:10 pm	4.962	11385	0.40		
	Replicates	11346.4	11346.0	11411.3	11435.6						
	% Recovery	99.24									
CCB					CCB	08/13/20 02:32:17 pm	0.016	55	37.41		
	Replicates	78.7	63.9	47.0	31.0						
LCSO ~~LCS~~NH03ICS2					LCS	08/13/20 02:34:24 pm	4.891	11222	0.37		CD 8-13-20
	Replicates	11275.6	11199.6	11180.4	11230.7						
	% Recovery	97.82									
LCSWNH13HGW1					LCS	08/13/20 02:36:32 pm	5.837	13388	0.23		
	Replicates	13356.3	13367.7	13412.3	13415.5						
	% Recovery	116.73									
PBSNH03ICS2					PBK	08/13/20 02:38:39 pm	0.142	343	10.06	Q	
	Replicates	388.3	352.7	319.2	313.5						
PBWNH13HGW1					PBK	08/13/20 02:40:48 pm	0.002	23	120.44		
	Replicates	6.1	36.0	-5.5	54.9						
SN6056-024					UNK	08/13/20 02:42:56 pm	0.007	34	82.17		
	Replicates	26.2	-2.2	57.9	52.6						
SN6 ~~SN5~~056-026					UNK	08/13/20 02:45:04 pm	0.037	103	8.42		CD 8-13-20
	Replicates	109.5	91.4	101.7	109.9						
SN6639-001					UNK	08/13/20 02:47:12 pm	-0.033	-57	24.13		
	Replicates	-71.2	-53.4	-63.9	-39.5						
SN6668-001					UNK	08/13/20 03:17:35 pm	-0.003	12	166.78		
	Replicates	39.0	3.6	16.3	-9.4						
SN6668-002					UNK	08/13/20 03:19:43 pm	0.014	50	61.26		
	Replicates	38.9	72.8	11.7	76.3						

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST**: EP **ANALYSIS DATE**: 08/06/2020

METHOD: ICP **FILE NAME**: INH06A

- ☐ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19515	07/23/2020	07/23/2021	0 ug/L
Standard 1	MW19518	07/23/20	10/23/20	Varies by Element
ICV	MW19494	07/14/20	10/14/20	Varies by Element
PQL	MW19537	08/06/2020	11/06/2020	Varies by Element
LRS1	MW19521	07/24/2020	10/01/2020	Varies by Element
LRS2	MW19533	08/05/2020	09/21/2020	Varies by Element
ICSA	MW19472	06/26/2020	09/26/20	Varies by Element
ICSAB	MW19536	08/06/2020	11/06/2020	Varies by Element
CCV	MW19517 MW19527	07/23/20 08/03/2020	10/23/2020 11/03/2020	Varies by Element
Internal Standard	MW19534	08/06/2020	11/06/2020	5.0 mg/L Yttrium

Additional Comments and Notes:

REVIEWED
MC 8/11/20
KATAHDIN ANALYTICAL
METALS SECTION

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

2x diln.: 4.0mL of sample (pipet M25) + 4.0mL of MW19515 (pipet M25)

5x Serial dil'n.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19515(pipet M22)

Post Spike: 0.123mL MW19468 (pipet M27) to 6.0mL of sample (pipet M25)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	INH06A	8/6/2020	12:38	EP
Std 1	1.000	INH06A	8/6/2020	12:43	EP
ICV	1.000	INH06A	8/6/2020	12:47	EP
ICB	1.000	INH06A	8/6/2020	12:51	EP
PQL	1.000	INH06A	8/6/2020	12:56	EP
ICSA	1.000	INH06A	8/6/2020	13:00	EP
ICSAB	1.000	INH06A	8/6/2020	13:06	EP
CCV	1.000	INH06A	8/6/2020	13:11	EP
CCB	1.000	INH06A	8/6/2020	13:15	EP
LRS1	1.000	INH06A	8/6/2020	13:19	EP
LRS2	1.000	INH06A	8/6/2020	13:28	EP
CCV	1.000	INH06A	8/6/2020	13:34	EP
CCB	1.000	INH06A	8/6/2020	13:38	EP
LCSWNH04ICW1	1.000	INH06A	8/6/2020	13:42	EP
PBWNH04ICW1	1.000	INH06A	8/6/2020	13:47	EP
SN6198-002	1.000	INH06A	8/6/2020	13:51	EP
LC2ONG23ICS1	1.000	INH06A	8/6/2020	13:56	EP
LCSWNG28ICW1	1.000	INH06A	8/6/2020	14:00	EP
PBWNG28ICW1	1.000	INH06A	8/6/2020	14:04	EP
SN6180-012	2.000	INH06A	8/6/2020	14:09	EP
PBSNG31ICS1	1.000	INH06A	8/6/2020	14:13	EP
PBWNG31ICW2	1.000	INH06A	8/6/2020	14:18	EP
LCSONH03ICS1	1.000	INH06A	8/6/2020	14:22	EP
CCV	1.000	INH06A	8/6/2020	14:26	EP
CCB	1.000	INH06A	8/6/2020	14:31	EP
PBSNH03ICS1	1.000	INH06A	8/6/2020	14:35	EP
SN6311-004	5.000	INH06A	8/6/2020	14:40	EP
SN6359-002	2.000	INH06A	8/6/2020	14:44	EP
LCSONH03ICS2	1.000	INH06A	8/6/2020	14:49	EP
PBSNH03ICS2	1.000	INH06A	8/6/2020	14:53	EP
SN6054-024	1.000	INH06A	8/6/2020	14:57	EP
SN6056-026	1.000	INH06A	8/6/2020	15:02	EP
SN6100-011	1.000	INH06A	8/6/2020	15:06	EP
SN6100-012	1.000	INH06A	8/6/2020	15:10	EP
SN6100-012L	5.000	INH06A	8/6/2020	15:15	EP
CCV	1.000	INH06A	8/6/2020	15:19	EP
CCB	1.000	INH06A	8/6/2020	15:23	EP
SN6100-012A	1.000	INH06A	8/6/2020	15:28	EP
SN6100-012P	1.000	INH06A	8/6/2020	15:32	EP
SN6100-012S	1.000	INH06A	8/6/2020	15:36	EP
SN6100-013	1.000	INH06A	8/6/2020	15:41	EP
SN6100-014	1.000	INH06A	8/6/2020	15:46	EP
LCSONH04ICS1	1.000	INH06A	8/6/2020	15:50	EP
PBSHN04ICS1	1.000	INH06A	8/6/2020	15:55	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6391-015	2.000	INH06A	8/6/2020	15:59	EP
SN6391-016	2.000	INH06A	8/6/2020	16:03	EP
SN6391-019	1.000	INH06A	8/6/2020	16:08	EP
CCV	1.000	INH06A	8/6/2020	16:12	EP
CCB	1.000	INH06A	8/6/2020	16:16	EP
SN6391-020	2.000	INH06A	8/6/2020	16:21	EP
LCSWNH04ICW1	1.000	INH06A	8/6/2020	16:25	EP
PBT1643A	1.000	INH06A	8/6/2020	16:29	EP
PBWNH04ICW1	1.000	INH06A	8/6/2020	16:34	EP
SN6235-002	1.000	INH06A	8/6/2020	16:39	EP
SN6235-004	1.000	INH06A	8/6/2020	16:44	EP
SN6235-006	1.000	INH06A	8/6/2020	16:49	EP
SN6236-006	1.000	INH06A	8/6/2020	16:54	EP
SN6284-003	1.000	INH06A	8/6/2020	16:59	EP
SN6284-006	1.000	INH06A	8/6/2020	17:04	EP
CCV	1.000	INH06A	8/6/2020	17:08	EP
CCB	1.000	INH06A	8/6/2020	17:13	EP
SN6284-009	1.000	INH06A	8/6/2020	17:17	EP
SN6284-009L	5.000	INH06A	8/6/2020	17:23	EP
SN6284-009A	1.000	INH06A	8/6/2020	17:27	EP
SN6284-009P	1.000	INH06A	8/6/2020	17:32	EP
SN6284-009S	1.000	INH06A	8/6/2020	17:38	EP
SN6317-002	1.000	INH06A	8/6/2020	17:43	EP
SN6317-005	1.000	INH06A	8/6/2020	17:47	EP
SN6363-002	1.000	INH06A	8/6/2020	17:52	EP
LCSONH05ICS1	1.000	INH06A	8/6/2020	17:56	EP
PBSNH05ICS1	1.000	INH06A	8/6/2020	18:00	EP
CCV	1.000	INH06A	8/6/2020	18:05	EP
CCB	1.000	INH06A	8/6/2020	18:09	EP
SN6391-023	1.000	INH06A	8/6/2020	18:14	EP
SN6391-024	1.000	INH06A	8/6/2020	18:19	EP
SN6420-001	1.000	INH06A	8/6/2020	18:24	EP
SN6420-002	1.000	INH06A	8/6/2020	18:28	EP
SN6420-003	1.000	INH06A	8/6/2020	18:33	EP
SN6420-004	1.000	INH06A	8/6/2020	18:37	EP
SN6420-005	1.000	INH06A	8/6/2020	18:41	EP
SN6420-006	1.000	INH06A	8/6/2020	18:46	EP
SN6420-008	1.000	INH06A	8/6/2020	18:50	EP
SN6420-009	1.000	INH06A	8/6/2020	18:54	EP
CCV	1.000	INH06A	8/6/2020	18:59	EP
CCB	1.000	INH06A	8/6/2020	19:03	EP
LCSONH05ICS2	1.000	INH06A	8/6/2020	19:07	EP
PBSNH05ICS2	1.000	INH06A	8/6/2020	19:12	EP
SN6259-005	1.000	INH06A	8/6/2020	19:16	EP
SN6259-006	1.000	INH06A	8/6/2020	19:21	EP
SN6259-007	1.000	INH06A	8/6/2020	19:25	EP
SN6259-008	1.000	INH06A	8/6/2020	19:29	EP

mc 8/11/20

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6259-009	1.000	INH06A	8/6/2020	19:34	EP
SN6259-009L	5.000	INH06A	8/6/2020	19:38	EP
SN6259-009A	1.000	INH06A	8/6/2020	19:42	EP
SN6259-009D	1.000	INH06A	8/6/2020	19:47	EP
CCV	1.000	INH06A	8/6/2020	19:51	EP
CCB	1.000	INH06A	8/6/2020	19:55	EP
SN6259-009S	1.000	INH06A	8/6/2020	20:00	EP
SN6259-010	1.000	INH06A	8/6/2020	20:04	EP
SN6259-011	1.000	INH06A	8/6/2020	20:08	EP
SN6259-012	1.000	INH06A	8/6/2020	20:13	EP
SN6259-013	1.000	INH06A	8/6/2020	20:17	EP
SN6259-014	1.000	INH06A	8/6/2020	20:21	EP
SN6259-015	1.000	INH06A	8/6/2020	20:26	EP
SN6259-016	1.000	INH06A	8/6/2020	20:30	EP
LCSWNH05ICW1	1.000	INH06A	8/6/2020	20:35	EP
PBWNH05ICW1	1.000	INH06A	8/6/2020	20:39	EP
CCV	1.000	INH06A	8/6/2020	20:43	EP
CCB	1.000	INH06A	8/6/2020	20:48	EP
SN6369-001	1.000	INH06A	8/6/2020	20:52	EP
SN6369-002	1.000	INH06A	8/6/2020	20:57	EP
SN6369-003	1.000	INH06A	8/6/2020	21:01	EP
SN6435-005	1.000	INH06A	8/6/2020	21:05	EP
SN6435-006	1.000	INH06A	8/6/2020	21:11	EP
SN6435-007	1.000	INH06A	8/6/2020	21:16	EP
SN6435-008	1.000	INH06A	8/6/2020	21:21	EP
SN6435-009	1.000	INH06A	8/6/2020	21:26	EP
SN6435-010	1.000	INH06A	8/6/2020	21:31	EP
LCSWNG13IMW2	1.000	INH06A	8/6/2020	21:36	EP
CCV	1.000	INH06A	8/6/2020	21:40	EP
CCB	1.000	INH06A	8/6/2020	21:45	EP
LCSONH04IMS1	1.000	INH06A	8/6/2020	21:49	EP
SN6032-001	1.000	INH06A	8/6/2020	21:54	EP
SN6032-001	2.000	INH06A	8/6/2020	21:58	EP
SN6032-001	5.000	INH06A	8/6/2020	22:02	EP
SN6032-001	10.00	INH06A	8/6/2020	22:07	EP
CCV	1.000	INH06A	8/6/2020	22:11	EP
CCB	1.000	INH06A	8/6/2020	22:16	EP
PQL	1.000	INH06A	8/6/2020	22:20	EP
ICSA	1.000	INH06A	8/6/2020	22:24	EP
ICSAB	1.000	INH06A	8/6/2020	22:29	EP
CCV	1.000	INH06A	8/6/2020	22:34	EP
CCB	1.000	INH06A	8/6/2020	22:39	EP

Intensity Report

Author:

Published: 8/7/2020 8:15:10AM

Notes:

AL500

Method Name: FAST-2016_NO_AU Method Revision: 1,451

Analyst Name: EP

Acquire Date: 8/6/2020 11:11:28AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		68.22	ug/L	0.8895	1.304	597.4
Al3961_R		467,000	ug/L	2,332	0.4993	137,100
As1891_A	F	60.31	ug/L	4.971	8.242	13.29
B_2089_A		66.90	ug/L	8.591	12.84	52.65
Ba4554_R		70.18	ug/L	0.6583	0.9380	1,223
Be3130_R		68.09	ug/L	0.7634	1.121	1,723
Ca3158_R		1,729	ug/L	2.721	0.1574	657.6
Cd2265_A		61.40	ug/L	6.012	9.791	555.4
Co2286_A		65.08	ug/L	7.163	11.01	150.3
Cr2677_A		72.98	ug/L	0.01592	0.02182	538.3
Cu3273_A		55.74	ug/L	1.851	3.321	353.6
Fe2599_R		1,771	ug/L	21.92	1.238	935.9
K_7664_R		1,420	ug/L	54.35	3.829	264.8
Li6707_R		76.14	ug/L	10.18	13.36	233.3
Mg2025_A		1,516	ug/L	167.3	11.03	255.6
Mn2576_R	F	78.64	ug/L	1.351	1.719	196.7
Mo2020_A		62.56	ug/L	6.104	9.757	118.7
Na5895_R		1,651	ug/L	31.24	1.892	1,078
Ni2316_A		62.65	ug/L	6.014	9.598	80.61
Pb2203_A	F	53.94	ug/L	5.075	9.408	-0.3018
Sb2068_A	F	63.72	ug/L	7.871	12.35	18.97
Se1960_A	F	86.56	ug/L	6.366	7.355	17.28
Si2516_R		4,536	ug/L	17.91	0.3949	680.6
Sn1899_A		66.53	ug/L	5.566	8.366	24.57
Sr4215_R		65.23	ug/L	0.8538	1.309	1,509
Ti3349_A		67.63	ug/L	0.05458	0.08070	908.0
Tl1908_A	F	62.49	ug/L	5.941	9.507	21.93
V_2924_A		66.65	ug/L	2.180	3.271	436.5
Zn2062_A		68.38	ug/L	6.815	9.967	172.3
Y_3600_R		4,478.4	Cts/S	73.507	1.6414	4,478.4
Y_2243_A		5,156.9	Cts/S	628.19	12.182	5,156.9
Y_3600_A		67,846	Cts/S	3,715.1	5.4758	67,846

FE200

Method Name: FAST-2016_NO_AU Method Revision: 1,451

Analyst Name: EP

Acquire Date: 8/6/2020 11:16:27AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	6.451	ug/L	1.208	18.73	-958.4
Al3961_R		26.54	ug/L	6.371	24.01	1.335
As1891_A	F	-6.713	ug/L	1.374	20.47	-27.51
B_2089_A		-0.3116	ug/L	0.7339	235.5	2.232
Ba4554_R		0.7005	ug/L	0.4440	63.38	79.47
Be3130_R		0.05081	ug/L	0.07427	146.2	-8.972
Ca3158_R		0.4068	ug/L	4.688	1,152	-14.63
Cd2265_A	F	-0.7449	ug/L	0.1054	14.15	480.6
Co2286_A		-0.8182	ug/L	0.05621	6.870	9.095
Cr2677_A		-3.092	ug/L	0.4891	15.82	-50.48
Cu3273_A		-1.143	ug/L	0.3549	31.06	-122.5
Fe2599_R		268,100	ug/L	2,766	1.032	311,200
K_7664_R		-49.07	ug/L	25.28	51.52	-93.09
Li6707_R		3.396	ug/L	2.634	77.56	28.96

FE200

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 11:16:27AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A	F	-6.159	ug/L	3.038	49.32	-2.074
Mn2576_R	F	11.22	ug/L	0.8376	7.468	23.54
Mo2020_A		-0.5107	ug/L	0.1655	32.40	-2.132
Na5895_R		-6.487	ug/L	6.776	104.4	-44.60
Ni2316_A		-0.6891	ug/L	0.08742	12.69	-28.29
Pb2203_A	F	-3.332	ug/L	0.8291	24.89	5.889
Sb2068_A		0.01516	ug/L	0.01502	99.04	4.014
Se1960_A	F	3.721	ug/L	0.8098	21.76	5.588
Si2516_R	F	67.23	ug/L	13.80	20.53	14.43
Sn1899_A		1.646	ug/L	0.3690	22.41	2.414
Sr4215_R		0.2258	ug/L	0.1979	87.65	-15.53
Ti3349_A		-0.2843	ug/L	0.05705	20.07	-40.53
Tl1908_A		-0.9525	ug/L	0.3925	41.21	-2.334
V_2924_A		0.2575	ug/L	0.2804	108.9	14.72
Zn2062_A		2.413	ug/L	0.1380	5.718	13.80
Y_3600_R		9,846.6	Cts/S	173.97	1.7668	9,846.6
Y_2243_A		10,699	Cts/S	87.000	0.81313	10,699
Y_3600_A		148,270	Cts/S	1,602.4	1.0807	148,270

Blank

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:38:54PM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001910	Cts/S	0.00002200	11.31	-35.16
Al3961_R		-0.001851	Cts/S	0.0004920	26.59	-22.76
As1891_A		-0.0002050	Cts/S	0.00001200	6.043	-2.776
B_2089_A		0.0002160	Cts/S	0.00003600	16.54	2.917
Ba4554_R		0.005599	Cts/S	0.001339	23.92	68.81
Be3130_R		-0.0008130	Cts/S	0.0004260	52.39	-9.942
Ca3158_R		-0.0009530	Cts/S	0.0001170	12.23	-11.71
Cd2265_A		0.000004000	Cts/S	0.00004400	1,084	-0.05490
Co2286_A		0.0005350	Cts/S	0.00003400	6.437	7.233
Cr2677_A		0.00003200	Cts/S	0.000008000	24.31	5.814
Cu3273_A		-0.0003600	Cts/S	0.00005500	15.21	-66.07
Fe2599_R		0.0001030	Cts/S	0.0004050	393.7	1.292
K_7664_R		-0.005599	Cts/S	0.0001900	3.391	-68.70
Li6707_R		0.003196	Cts/S	0.0007540	23.58	39.28
Mg2025_A		-0.0005980	Cts/S	0.000004000	0.7415	-8.082
Mn2576_R		0.0001490	Cts/S	0.0002610	175.0	1.810
Mo2020_A		-0.00004100	Cts/S	0.00002000	48.99	-0.5510
Na5895_R		-0.002013	Cts/S	0.0003740	18.57	-24.73
Ni2316_A		0.0000	Cts/S	0.00004200	14,920	-0.003433
Pb2203_A		-0.0001580	Cts/S	0.00003400	21.45	-2.138
Sb2068_A		0.00006500	Cts/S	0.00001300	20.70	0.8756
Se1960_A		0.0002880	Cts/S	0.00001800	6.080	3.893
Si2516_R		0.001358	Cts/S	0.00005000	3.649	16.67
Sn1899_A		0.0001420	Cts/S	0.00001100	7.765	1.925
Sr4215_R		-0.001657	Cts/S	0.0005610	33.87	-20.37
Ti3349_A		-0.0002100	Cts/S	0.00005800	27.35	-38.68
Tl1908_A		-0.0001220	Cts/S	0.00009000	74.06	-1.653
V_2924_A		-0.00002200	Cts/S	0.00003100	144.7	-3.965
Zn2062_A		0.0001030	Cts/S	0.000001000	1.129	1.388
Y_3600_R		12,273	Cts/S	143.82	1.1718	12,273
Y_2243_A		13,525	Cts/S	16.836	0.12448	13,525
Y_3600_A		183,740	Cts/S	917.75	0.49947	183,740

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:43:18PM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1250	Cts/S	0.001148	0.9187	22,790
Al3961_R		1.571	Cts/S	0.007120	0.4532	19,670
As1891_A		0.04657	Cts/S	0.0001730	0.3707	629.5
B_2089_A		0.1458	Cts/S	0.0005110	0.3502	1,971
Ba4554_R		3.625	Cts/S	0.02210	0.6097	45,390
Be3130_R		5.272	Cts/S	0.03395	0.6440	66,000
Ca3158_R		2.066	Cts/S	0.01016	0.4916	25,870
Cd2265_A		1.701	Cts/S	0.006206	0.3648	23,000
Co2286_A		0.4402	Cts/S	0.0002800	0.06352	5,950
Cr2677_A		0.1044	Cts/S	0.001055	1.011	19,030
Cu3273_A		0.08709	Cts/S	0.001102	1.265	15,880
Fe2599_R		2.844	Cts/S	0.02275	0.7997	35,610
K_7664_R		1.105	Cts/S	0.001816	0.1644	13,830
Li6707_R		0.5851	Cts/S	0.004337	0.7414	7,324
Mg2025_A		0.8267	Cts/S	0.001807	0.2185	11,180
Mn2576_R		0.5946	Cts/S	0.002314	0.3892	7,444
Mo2020_A		0.3643	Cts/S	0.001762	0.4837	4,924
Na5895_R		3.443	Cts/S	0.01427	0.4145	43,100
Ni2316_A		0.2450	Cts/S	0.0007560	0.3085	3,311
Pb2203_A		0.1285	Cts/S	0.0004650	0.3622	1,736
Sb2068_A		0.05234	Cts/S	0.0002460	0.4709	707.5
Se1960_A		0.03370	Cts/S	0.0001270	0.3764	455.6
Si2516_R		0.8062	Cts/S	0.003044	0.3776	10,090
Sn1899_A		0.06731	Cts/S	0.0002050	0.3052	909.9
Sr4215_R		4.916	Cts/S	0.02319	0.4716	61,540
Ti3349_A		0.1934	Cts/S	0.001993	1.031	35,260
Tl1908_A		0.06933	Cts/S	0.00004800	0.06897	937.2
V_2924_A		0.08978	Cts/S	0.001197	1.333	16,370
Zn2062_A		0.4747	Cts/S	0.001381	0.2909	6,417
Y_3600_R		12,519	Cts/S	61.848	0.49402	12,519
Y_2243_A		13,518	Cts/S	2.1746	0.016087	13,518
Y_3600_A		182,350	Cts/S	575.43	0.31556	182,350

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:47:31PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		413.1	ug/L	3.288	0.7958	9,394
Al3961_R	W	10,580	ug/L	18.33	0.1733	8,117
As1891_A		391.4	ug/L	0.03763	0.009614	247.4
B_2089_A		408.6	ug/L	0.9789	0.2396	816.5
Ba4554_R		417.8	ug/L	1.523	0.3645	18,570
Be3130_R	W	426.9	ug/L	0.3874	0.09075	27,530
Ca3158_R	W	10,540	ug/L	27.33	0.2592	10,650
Cd2265_A		407.1	ug/L	0.5338	0.1311	9,472
Co2286_A		412.0	ug/L	0.1499	0.03637	2,484
Cr2677_A		413.3	ug/L	5.654	1.368	7,870
Cu3273_A		408.7	ug/L	6.255	1.530	6,453
Fe2599_R		10,510	ug/L	38.48	0.3660	14,640
K_7664_R		14,050	ug/L	15.68	0.1116	7,569
Li6707_R	W	429.0	ug/L	3.028	0.7060	3,093
Mg2025_A		10,350	ug/L	13.19	0.1274	4,676
Mn2576_R		418.0	ug/L	3.081	0.7371	3,041
Mo2020_A		412.9	ug/L	0.4492	0.1088	2,056
Na5895_R		10,520	ug/L	15.68	0.1490	17,710
Ni2316_A		412.1	ug/L	0.5104	0.1238	1,380

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:47:31PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		410.4	ug/L	1.004	0.2448	719.5
Sb2068_A		405.2	ug/L	0.8268	0.2041	290.4
Se1960_A		404.9	ug/L	1.416	0.3498	188.9
Si2516_R	W	10,610	ug/L	131.5	1.239	4,113
Sn1899_A		416.3	ug/L	1.519	0.3649	384.3
Sr4215_R	W	425.3	ug/L	0.5735	0.1349	25,570
Ti3349_A		410.6	ug/L	5.422	1.320	14,460
Tl1908_A		412.0	ug/L	1.754	0.4257	389.6
V_2924_A		409.1	ug/L	5.585	1.365	6,696
Zn2062_A		408.0	ug/L	0.4000	0.09805	2,649
Y_3600_R		12,235	Cts/S	42.231	0.34516	12,235
Y_2243_A		13,673	Cts/S	40.751	0.29804	13,673
Y_3600_A		182,380	Cts/S	1,469.8	0.80589	182,380

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:51:45PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5278	ug/L	0.2266	42.94	-22.99
Al3961_R		9.610	ug/L	3.396	35.34	-15.21
As1891_A		0.8415	ug/L	1.053	125.1	-2.247
B_2089_A		1.359	ug/L	0.3775	27.78	5.648
Ba4554_R		-0.1275	ug/L	0.1039	81.48	62.83
Be3130_R		-0.1075	ug/L	0.08017	74.55	-16.92
Ca3158_R		-9.477	ug/L	3.819	40.30	-21.23
Cd2265_A		-0.003911	ug/L	0.001451	37.10	-0.1369
Co2286_A		0.1055	ug/L	0.03162	29.99	7.885
Cr2677_A		0.04185	ug/L	0.1246	297.8	6.615
Cu3273_A		0.4537	ug/L	0.6187	136.4	-58.82
Fe2599_R		3.404	ug/L	0.4529	13.30	5.996
K_7664_R		-43.03	ug/L	16.22	37.70	-91.85
Li6707_R		-1.903	ug/L	0.5595	29.40	25.55
Mg2025_A		1.142	ug/L	1.230	107.6	-7.570
Mn2576_R		0.1158	ug/L	0.6146	530.6	2.653
Mo2020_A		2.356	ug/L	0.3867	16.41	11.09
Na5895_R		-4.764	ug/L	1.114	23.38	-32.63
Ni2316_A		0.01342	ug/L	0.1435	1,069	0.09465
Pb2203_A		-0.08496	ug/L	0.3903	459.4	-2.298
Sb2068_A		0.3663	ug/L	0.5630	153.7	1.136
Se1960_A		-0.7086	ug/L	0.4083	57.62	3.583
Si2516_R		10.53	ug/L	13.82	131.2	20.68
Sn1899_A		0.3866	ug/L	0.4201	108.7	2.282
Sr4215_R		0.09690	ug/L	0.06682	68.96	-14.42
Ti3349_A		0.4742	ug/L	0.2808	59.21	-21.75
Tl1908_A		1.123	ug/L	0.2682	23.89	-0.6018
V_2924_A		-0.5126	ug/L	0.3951	77.07	-12.69
Zn2062_A		0.05727	ug/L	0.1225	213.9	1.760
Y_3600_R		12,228	Cts/S	50.315	0.41148	12,228
Y_2243_A		13,559	Cts/S	16.666	0.12291	13,559
Y_3600_A		183,770	Cts/S	169.71	0.092349	183,770

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:56:11PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 12:56:11PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.85	ug/L	0.4047	3.729	215.9
Al3961_R		327.6	ug/L	11.72	3.579	229.9
As1891_A		7.976	ug/L	0.5324	6.675	2.298
B_2089_A		50.48	ug/L	0.4661	0.9233	101.5
Ba4554_R		5.414	ug/L	0.1787	3.300	309.1
Be3130_R		5.270	ug/L	0.08074	1.532	330.7
Ca3158_R		99.03	ug/L	1.052	1.062	88.75
Cd2265_A		5.225	ug/L	0.01211	0.2318	121.1
Co2286_A		10.71	ug/L	0.1217	1.136	71.50
Cr2677_A		10.48	ug/L	0.08449	0.8059	207.6
Cu3273_A		26.45	ug/L	0.2013	0.7612	360.5
Fe2599_R		107.3	ug/L	1.438	1.340	151.0
K_7664_R		1,030	ug/L	0.5785	0.05618	492.6
Li6707_R		103.7	ug/L	5.075	4.894	779.3
Mg2025_A		111.6	ug/L	2.034	1.823	42.62
Mn2576_R		5.198	ug/L	0.4090	7.868	39.70
Mo2020_A		11.13	ug/L	0.07410	0.6656	54.73
Na5895_R		1,076	ug/L	5.670	0.5268	1,795
Ni2316_A		10.51	ug/L	0.01049	0.09986	35.10
Pb2203_A		5.659	ug/L	0.2761	4.879	7.726
Sb2068_A		8.176	ug/L	0.2528	3.091	5.985
Se1960_A		8.704	ug/L	1.609	18.49	7.886
Si2516_R		211.8	ug/L	8.013	3.783	98.71
Sn1899_A		105.1	ug/L	0.6037	0.5745	98.14
Sr4215_R		10.63	ug/L	0.1587	1.493	620.9
Ti3349_A		15.42	ug/L	0.1388	0.9001	511.6
Tl1908_A		16.04	ug/L	0.2497	1.557	13.51
V_2924_A		10.41	ug/L	0.2380	2.286	168.5
Zn2062_A		20.84	ug/L	0.007500	0.03599	136.3
Y_3600_R		12,267	Cts/S	36.225	0.29531	12,267
Y_2243_A		13,630	Cts/S	19.245	0.14120	13,630
Y_3600_A		184,490	Cts/S	127.61	0.069166	184,490

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:00:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.391	ug/L	0.05477	1.615	-786.0
Al3961_R		515,900	ug/L	8,892	1.724	392,900
As1891_A		0.4334	ug/L	1.475	340.3	-21.87
B_2089_A		0.2444	ug/L	0.1404	57.46	3.152
Ba4554_R		0.1145	ug/L	0.08604	75.14	72.95
Be3130_R		-0.1163	ug/L	0.03699	31.80	-17.41
Ca3158_R		482,400	ug/L	10,280	2.132	483,600
Cd2265_A		-0.8694	ug/L	0.1407	16.19	388.9
Co2286_A		-0.5937	ug/L	0.1882	31.69	8.768
Cr2677_A		-0.6910	ug/L	0.06680	9.667	-8.973
Cu3273_A		0.6438	ug/L	0.1160	18.01	-32.39
Fe2599_R		192,400	ug/L	223.5	0.1162	265,400
K_7664_R		-11.95	ug/L	43.75	366.0	-74.21
Li6707_R		4.911	ug/L	1.891	38.51	73.34
Mg2025_A		442,100	ug/L	2,540	0.5744	185,200
Mn2576_R		0.9037	ug/L	0.6581	72.83	6.516
Mo2020_A		-0.9890	ug/L	0.5126	51.83	-5.104
Na5895_R		27.10	ug/L	2.193	8.094	20.85
Ni2316_A		0.2004	ug/L	0.01137	5.673	-20.62

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:00:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.3174	ug/L	1.448	456.2	-88.37
Sb2068_A		0.1077	ug/L	2.052	1,906	5.563
Se1960_A		-2.053	ug/L	1.175	57.22	6.479
Si2516_R		12.19	ug/L	12.88	105.6	9.543
Sn1899_A		2.102	ug/L	1.321	62.84	3.608
Sr4215_R	W	5.078	ug/L	0.02734	0.5383	282.8
Ti3349_A		2.140	ug/L	0.4601	21.50	34.18
Tl1908_A		-0.6538	ug/L	0.7882	120.6	-1.174
V_2924_A		-0.3422	ug/L	0.3943	115.2	4.235
Zn2062_A		0.8026	ug/L	0.3762	46.87	6.171
Y_3600_R		12,127	Cts/S	129.09	1.0645	12,127
Y_2243_A		12,735	Cts/S	45.807	0.35970	12,735
Y_3600_A		168,040	Cts/S	254.55	0.15148	168,040

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:06:02PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		214.6	ug/L	0.1318	0.06142	3,635
Al3961_R		505,600	ug/L	1,892	0.3742	385,000
As1891_A		98.86	ug/L	3.881	3.925	37.04
B_2089_A		472.1	ug/L	4.068	0.8617	875.4
Ba4554_R		506.0	ug/L	0.7860	0.1553	22,280
Be3130_R		509.9	ug/L	1.202	0.2358	32,590
Ca3158_R		475,500	ug/L	10,380	2.184	476,700
Cd2265_A		912.4	ug/L	7.276	0.7974	20,080
Co2286_A		451.6	ug/L	3.298	0.7302	2,535
Cr2677_A		479.1	ug/L	0.7477	0.1561	8,311
Cu3273_A		511.1	ug/L	4.515	0.8834	7,388
Fe2599_R		191,600	ug/L	644.6	0.3365	264,300
K_7664_R		20,600	ug/L	37.82	0.1836	11,030
Li6707_R		527.3	ug/L	2.908	0.5514	3,759
Mg2025_A		437,200	ug/L	2,940	0.6725	182,700
Mn2576_R		476.4	ug/L	3.198	0.6712	3,435
Mo2020_A		460.5	ug/L	1.548	0.3361	2,131
Na5895_R		20,770	ug/L	37.45	0.1803	34,680
Ni2316_A		894.0	ug/L	6.405	0.7164	2,754
Pb2203_A		45.18	ug/L	1.212	2.682	-12.21
Sb2068_A		573.0	ug/L	3.170	0.5532	386.1
Se1960_A		51.46	ug/L	1.245	2.420	29.20
Si2516_R		2,031	ug/L	13.27	0.6530	784.9
Sn1899_A		456.1	ug/L	4.607	1.010	391.0
Sr4215_R		511.8	ug/L	1.455	0.2842	30,490
Ti3349_A		485.1	ug/L	1.169	0.2411	15,570
Tl1908_A		85.82	ug/L	0.6106	0.7115	75.86
V_2924_A		489.8	ug/L	2.448	0.4998	7,322
Zn2062_A		907.0	ug/L	7.403	0.8162	5,473
Y_3600_R		12,124	Cts/S	47.642	0.39294	12,124
Y_2243_A		12,705	Cts/S	56.479	0.44456	12,705
Y_3600_A		166,190	Cts/S	173.08	0.10414	166,190

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:11:18PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:11:18PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		519.2	ug/L	5.133	0.9885	11,710
Al3961_R	W	13,270	ug/L	98.62	0.7430	10,170
As1891_A		505.5	ug/L	1.863	0.3686	319.7
B_2089_A		511.1	ug/L	4.263	0.8341	1,018
Ba4554_R	W	530.9	ug/L	4.785	0.9014	23,510
Be3130_R	W	536.1	ug/L	5.934	1.107	34,480
Ca3158_R	W	13,280	ug/L	121.6	0.9158	13,380
Cd2265_A		513.3	ug/L	3.398	0.6620	11,920
Co2286_A		513.0	ug/L	2.414	0.4706	3,084
Cr2677_A		523.0	ug/L	4.614	0.8822	9,872
Cu3273_A		524.9	ug/L	6.338	1.207	8,234
Fe2599_R	W	13,320	ug/L	87.59	0.6578	18,480
K_7664_R		13,130	ug/L	138.7	1.056	7,049
Li6707_R	W	527.8	ug/L	4.419	0.8372	3,786
Mg2025_A		12,790	ug/L	62.56	0.4889	5,769
Mn2576_R		525.4	ug/L	4.335	0.8252	3,812
Mo2020_A		511.7	ug/L	1.120	0.2189	2,543
Na5895_R	W	13,320	ug/L	128.5	0.9644	22,380
Ni2316_A		516.0	ug/L	3.470	0.6724	1,724
Pb2203_A		519.1	ug/L	5.547	1.069	908.7
Sb2068_A		513.0	ug/L	4.426	0.8629	366.7
Se1960_A		503.2	ug/L	1.632	0.3243	233.3
Si2516_R	W	13,800	ug/L	166.9	1.210	5,329
Sn1899_A		517.5	ug/L	2.373	0.4585	476.2
Sr4215_R	W	533.1	ug/L	3.838	0.7200	31,970
Ti3349_A		517.5	ug/L	5.645	1.091	18,070
Tl1908_A		513.4	ug/L	2.543	0.4953	484.8
V_2924_A		526.2	ug/L	4.671	0.8877	8,542
Zn2062_A		513.4	ug/L	4.347	0.8467	3,325
Y_3600_R		12,202	Cts/S	102.35	0.83886	12,202
Y_2243_A		13,643	Cts/S	66.674	0.48869	13,643
Y_3600_A		180,810	Cts/S	1,875.0	1.0370	180,810

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:15:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04321	ug/L	0.1561	361.3	-36.73
Al3961_R		-6.664	ug/L	1.102	16.54	-28.36
As1891_A		1.068	ug/L	0.5038	47.15	-2.144
B_2089_A		1.044	ug/L	0.1243	11.91	5.143
Ba4554_R		-0.02250	ug/L	0.008744	38.86	69.09
Be3130_R		-0.007036	ug/L	0.09299	1,322	-10.67
Ca3158_R		-9.357	ug/L	0.3124	3.339	-21.62
Cd2265_A		-0.01947	ug/L	0.01761	90.43	-0.5013
Co2286_A		0.09394	ug/L	0.1425	151.7	7.971
Cr2677_A		-0.3410	ug/L	0.1552	45.51	-0.7272
Cu3273_A		-0.1509	ug/L	0.2173	144.0	-69.54
Fe2599_R		5.379	ug/L	1.180	21.94	8.953
K_7664_R		-7.808	ug/L	2.412	30.89	-74.45
Li6707_R		-0.2525	ug/L	0.1825	72.26	38.18
Mg2025_A		2.128	ug/L	1.246	58.57	-7.273
Mn2576_R		0.2393	ug/L	0.008166	3.412	3.647
Mo2020_A		2.415	ug/L	0.4947	20.49	11.61
Na5895_R		3.481	ug/L	4.261	122.4	-19.19
Ni2316_A		0.1819	ug/L	0.4704	258.6	0.6665

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:15:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4670	ug/L	0.6534	139.9	-1.354
Sb2068_A		-0.05837	ug/L	0.2768	474.2	0.8479
Se1960_A		-0.2243	ug/L	0.4871	217.2	3.877
Si2516_R		11.15	ug/L	1.200	10.76	21.41
Sn1899_A		0.3295	ug/L	0.7008	212.7	2.273
Sr4215_R		0.01037	ug/L	0.2010	1,938	-20.09
Ti3349_A		0.4845	ug/L	0.04510	9.309	-21.71
Tl1908_A		-0.1047	ug/L	0.1063	101.6	-1.790
V_2924_A		0.009655	ug/L	0.2610	2,703	-4.040
Zn2062_A		-0.02278	ug/L	0.05017	220.2	1.272
Y_3600_R		12,522	Cts/S	32.259	0.25762	12,522
Y_2243_A		13,829	Cts/S	35.070	0.25360	13,829
Y_3600_A		186,500	Cts/S	1,266.3	0.67900	186,500

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:19:58PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,092	ug/L	3.893	0.1861	46,400
Al3961_R		43.32	ug/L	4.403	10.16	159.6
As1891_A		20,660	ug/L	149.7	0.7246	12,650
B_2089_A		20,460	ug/L	160.8	0.7860	38,250
Ba4554_R		20,310	ug/L	126.6	0.6232	896,100
Be3130_R		20,170	ug/L	335.8	1.665	1,296,000
Ca3158_R		10.77	ug/L	0.3346	3.108	11.50
Cd2265_A		19,860	ug/L	64.07	0.3227	439,600
Co2286_A		20,650	ug/L	162.2	0.7855	118,400
Cr2677_A		20,080	ug/L	130.8	0.6514	372,400
Cu3273_A		20,230	ug/L	112.9	0.5581	314,500
Fe2599_R		8.760	ug/L	0.3676	4.196	13.40
K_7664_R		-18.79	ug/L	23.10	122.9	-78.40
Li6707_R		20,460	ug/L	51.64	0.2524	145,100
Mg2025_A		1,603	ug/L	3.604	0.2248	1,963
Mn2576_R		20,330	ug/L	80.54	0.3961	147,400
Mo2020_A		5,260	ug/L	53.83	1.023	24,990
Na5895_R		47.49	ug/L	6.230	13.12	55.21
Ni2316_A		20,680	ug/L	159.1	0.7692	65,790
Pb2203_A		21,150	ug/L	149.2	0.7054	35,570
Sb2068_A		20,170	ug/L	141.0	0.6990	13,750
Se1960_A		20,560	ug/L	139.5	0.6783	8,959
Si2516_R		585.3	ug/L	95.16	16.26	333.6
Sn1899_A		20,500	ug/L	180.2	0.8789	17,960
Sr4215_R		20,780	ug/L	131.8	0.6343	1,245,000
Ti3349_A		19,710	ug/L	76.94	0.3904	677,600
Tl1908_A		20,080	ug/L	163.4	0.8138	18,190
V_2924_A		20,100	ug/L	228.6	1.137	322,100
Zn2062_A		20,150	ug/L	148.8	0.7384	124,700
Y_3600_R		12,189	Cts/S	36.177	0.29681	12,189
Y_2243_A		13,043	Cts/S	116.45	0.89285	13,043
Y_3600_A		177,730	Cts/S	158.42	0.089136	177,730

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:28:43PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:28:43PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.382	ug/L	0.4249	12.56	-981.7
Al3961_R		508,900	ug/L	4,160	0.8175	387,200
As1891_A		3.557	ug/L	1.892	53.20	-24.81
B_2089_A		15.16	ug/L	1.656	10.92	30.51
Ba4554_R		0.4441	ug/L	0.3819	85.99	87.25
Be3130_R		-0.08445	ug/L	0.07094	84.00	-15.72
Ca3158_R		485,400	ug/L	4,972	1.024	486,200
Cd2265_A		-1.910	ug/L	0.4312	22.57	470.5
Co2286_A		-0.8140	ug/L	0.1139	13.99	8.976
Cr2677_A		-1.460	ug/L	0.2437	16.70	-22.69
Cu3273_A		1.331	ug/L	0.1072	8.055	-33.21
Fe2599_R		240,700	ug/L	3,256	1.353	331,700
K_7664_R		302,000	ug/L	1,876	0.6212	162,500
Li6707_R		3.467	ug/L	2.743	79.13	63.22
Mg2025_A	F	176,500	ug/L	196.9	0.1116	74,150
Mn2576_R		18.54	ug/L	0.4071	2.195	66.02
Mo2020_A		3.793	ug/L	0.7759	20.46	17.13
Na5895_R		202,700	ug/L	3,836	1.893	338,200
Ni2316_A		1.321	ug/L	0.2501	18.93	-22.45
Pb2203_A		-0.5199	ug/L	1.260	242.3	-85.13
Sb2068_A		0.4776	ug/L	1.096	229.6	6.481
Se1960_A		6.281	ug/L	0.5026	8.001	10.31
Si2516_R		51,330	ug/L	384.6	0.7492	19,620
Sn1899_A		3.277	ug/L	0.5398	16.48	4.630
Sr4215_R		2.770	ug/L	0.08741	3.156	144.9
Ti3349_A		10.60	ug/L	0.1762	1.663	305.3
Tl1908_A		-1.009	ug/L	1.324	131.2	-1.575
V_2924_A		-0.08526	ug/L	0.01559	18.28	10.88
Zn2062_A		3.758	ug/L	0.3926	10.45	24.14
Y_3600_R		12,114	Cts/S	76.979	0.63546	12,114
Y_2243_A		12,778	Cts/S	4.2579	0.033323	12,778
Y_3600_A		165,990	Cts/S	83.905	0.050549	165,990

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:34:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		510.0	ug/L	0.1572	0.03083	11,660
Al3961_R		12,950	ug/L	2.572	0.01986	10,100
As1891_A		503.8	ug/L	2.163	0.4293	320.1
B_2089_A		516.9	ug/L	1.917	0.3710	1,034
Ba4554_R		522.5	ug/L	1.005	0.1924	23,560
Be3130_R		523.1	ug/L	1.192	0.2278	34,250
Ca3158_R		12,960	ug/L	55.42	0.4278	13,300
Cd2265_A		512.3	ug/L	1.264	0.2466	11,950
Co2286_A		510.7	ug/L	1.286	0.2519	3,085
Cr2677_A		516.9	ug/L	0.7763	0.1502	9,889
Cu3273_A		520.5	ug/L	3.002	0.5768	8,275
Fe2599_R		13,070	ug/L	13.02	0.09962	18,470
K_7664_R		12,910	ug/L	21.82	0.1690	7,057
Li6707_R		517.5	ug/L	0.1925	0.03720	3,780
Mg2025_A		12,700	ug/L	39.46	0.3109	5,751
Mn2576_R		515.4	ug/L	1.216	0.2358	3,808
Mo2020_A		510.0	ug/L	0.1703	0.03339	2,546
Na5895_R		13,050	ug/L	18.12	0.1389	22,310
Ni2316_A		514.8	ug/L	1.003	0.1949	1,728

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:34:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		518.0	ug/L	1.945	0.3756	911.0
Sb2068_A		511.2	ug/L	1.485	0.2905	367.1
Se1960_A		504.2	ug/L	0.1535	0.03045	234.9
Si2516_R	W	13,500	ug/L	159.2	1.180	5,310
Sn1899_A		515.3	ug/L	0.9804	0.1903	476.4
Sr4215_R		521.7	ug/L	0.6549	0.1255	31,850
Ti3349_A		511.2	ug/L	0.8311	0.1626	18,090
Tl1908_A		510.1	ug/L	1.965	0.3853	483.9
V_2924_A		522.7	ug/L	1.965	0.3760	8,600
Zn2062_A		512.0	ug/L	1.022	0.1997	3,332
Y_3600_R		12,423	Cts/S	62.613	0.50399	12,423
Y_2243_A		13,707	Cts/S	5.6393	0.041143	13,707
Y_3600_A		183,240	Cts/S	232.86	0.12708	183,240

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:38:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4707	ug/L	0.4057	86.19	-23.67
Al3961_R		18.17	ug/L	3.138	17.27	-8.452
As1891_A		1.520	ug/L	0.6143	40.41	-1.785
B_2089_A		6.493	ug/L	0.3517	5.417	15.36
Ba4554_R		0.1026	ug/L	0.2559	249.4	71.78
Be3130_R		-0.05458	ug/L	0.09058	165.9	-13.25
Ca3158_R		-8.100	ug/L	5.249	64.80	-19.51
Cd2265_A		0.03524	ug/L	0.02435	69.10	0.7556
Co2286_A		0.1631	ug/L	0.1891	116.0	8.095
Cr2677_A		0.02454	ug/L	0.07336	298.9	6.107
Cu3273_A		-0.4446	ug/L	0.5919	133.1	-71.02
Fe2599_R		5.014	ug/L	0.3519	7.019	8.095
K_7664_R		33.09	ug/L	47.47	143.4	-49.64
Li6707_R		-1.470	ug/L	2.856	194.3	28.14
Mg2025_A		4.787	ug/L	3.701	77.32	-5.837
Mn2576_R		0.4657	ug/L	0.6798	146.0	5.119
Mo2020_A		3.460	ug/L	0.3858	11.15	16.27
Na5895_R		5.890	ug/L	0.7187	12.20	-14.44
Ni2316_A		-0.04943	ug/L	0.06665	134.8	-0.08654
Pb2203_A		0.7448	ug/L	0.8794	118.1	-0.8367
Sb2068_A		0.6357	ug/L	0.5152	81.05	1.305
Se1960_A		1.774	ug/L	0.2578	14.53	4.629
Si2516_R		14.14	ug/L	7.095	50.18	21.70
Sn1899_A		0.4100	ug/L	0.2289	55.82	2.265
Sr4215_R		-0.03164	ug/L	0.1015	320.9	-21.79
Ti3349_A		0.7111	ug/L	0.005562	0.7823	-12.91
Tl1908_A		0.2644	ug/L	0.7483	283.0	-1.385
V_2924_A		0.2595	ug/L	0.1262	48.61	0.06358
Zn2062_A		0.1857	ug/L	0.01158	6.234	2.545
Y_3600_R		12,022	Cts/S	6.3195	0.052564	12,022
Y_2243_A		13,337	Cts/S	8.7741	0.065786	13,337
Y_3600_A		178,330	Cts/S	2,775.7	1.5565	178,330

LCSWNH04ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:42:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSWNH04ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:42:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.45	ug/L	0.5751	1.096	1,163
Al3961_R		2,212	ug/L	6.429	0.2907	1,707
As1891_A		108.8	ug/L	0.4620	0.4246	67.12
B_2089_A		540.4	ug/L	1.043	0.1931	1,063
Ba4554_R		2,171	ug/L	0.6196	0.02854	97,700
Be3130_R		54.53	ug/L	0.5591	1.025	3,562
Ca3158_R		2,759	ug/L	22.82	0.8268	2,823
Cd2265_A		271.1	ug/L	0.2395	0.08836	6,308
Co2286_A		541.8	ug/L	0.9369	0.1729	3,272
Cr2677_A		214.8	ug/L	1.561	0.7267	4,125
Cu3273_A		270.7	ug/L	1.177	0.4350	4,283
Fe2599_R		1,099	ug/L	3.157	0.2874	1,554
K_7664_R		10,930	ug/L	13.08	0.1197	5,964
Li6707_R		558.1	ug/L	1.157	0.2073	4,074
Mg2025_A		5,424	ug/L	3.598	0.06633	2,472
Mn2576_R		538.2	ug/L	1.138	0.2114	3,978
Mo2020_A		110.9	ug/L	0.2561	0.2308	553.1
Na5895_R		8,390	ug/L	2.099	0.02502	14,340
Ni2316_A		545.4	ug/L	0.2565	0.04703	1,822
Pb2203_A		109.4	ug/L	0.4636	0.4237	190.8
Sb2068_A		110.0	ug/L	0.8620	0.7838	76.27
Se1960_A		108.5	ug/L	0.8584	0.7912	53.71
Si2516_R		1,164	ug/L	10.00	0.8592	475.4
Sn1899_A		555.6	ug/L	2.586	0.4654	513.4
Sr4215_R		559.3	ug/L	2.309	0.4128	34,150
Ti3349_A		537.5	ug/L	3.514	0.6536	19,070
Tl1908_A		109.1	ug/L	1.579	1.447	103.1
V_2924_A		536.3	ug/L	3.214	0.5992	8,901
Zn2062_A		535.0	ug/L	0.1614	0.03017	3,483
Y_3600_R		12,424	Cts/S	84.941	0.68370	12,424
Y_2243_A		13,705	Cts/S	10.412	0.075970	13,705
Y_3600_A		183,790	Cts/S	613.56	0.33384	183,790

PBWNH04ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:47:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.09469	ug/L	0.04120	43.51	-37.62
Al3961_R		14.99	ug/L	0.5951	3.970	-11.04
As1891_A		0.4509	ug/L	0.2380	52.79	-2.494
B_2089_A		4.868	ug/L	0.9666	19.86	12.38
Ba4554_R		0.05416	ug/L	0.08347	154.1	70.56
Be3130_R		-0.1587	ug/L	0.008819	5.558	-20.11
Ca3158_R		1.024	ug/L	5.291	516.5	-10.58
Cd2265_A		0.01544	ug/L	0.01083	70.15	0.3110
Co2286_A		0.02677	ug/L	0.1714	640.2	7.414
Cr2677_A		-0.1883	ug/L	0.1148	60.96	2.210
Cu3273_A		1.040	ug/L	0.6006	57.74	-49.66
Fe2599_R		4.130	ug/L	1.726	41.79	6.975
K_7664_R		-29.84	ug/L	32.88	110.2	-84.30
Li6707_R		0.07820	ug/L	3.511	4,490	39.46
Mg2025_A		4.976	ug/L	0.2400	4.823	-5.866
Mn2576_R		0.2449	ug/L	0.4571	186.6	3.588
Mo2020_A		1.401	ug/L	0.1613	11.52	6.360
Na5895_R		26.91	ug/L	2.549	9.474	20.63
Ni2316_A		-0.09915	ug/L	0.2060	207.8	-0.3001

PBWNH04ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:47:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.2325	ug/L	0.6337	272.6	-2.554
Sb2068_A		-0.5152	ug/L	0.4959	96.25	0.5061
Se1960_A		0.7083	ug/L	0.5870	82.88	4.219
Si2516_R		28.75	ug/L	3.260	11.34	27.58
Sn1899_A		0.4462	ug/L	0.2564	57.47	2.334
Sr4215_R		-0.09496	ug/L	0.1677	176.6	-25.85
Ti3349_A		0.7545	ug/L	0.1544	20.47	-11.87
Tl1908_A		0.2801	ug/L	0.1849	66.04	-1.393
V_2924_A		0.06003	ug/L	0.2709	451.2	-3.077
Zn2062_A		1.604	ug/L	0.08379	5.225	11.71
Y_3600_R		12,176	Cts/S	12.622	0.10366	12,176
Y_2243_A		13,546	Cts/S	39.292	0.29005	13,546
Y_3600_A		184,850	Cts/S	699.03	0.37815	184,850

SN6198-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:51:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3909	ug/L	0.2601	66.55	-45.65
Al3961_R		63.72	ug/L	10.13	15.90	33.66
As1891_A		-0.6699	ug/L	1.262	188.4	-3.130
B_2089_A		64.73	ug/L	0.1345	0.2077	120.1
Ba4554_R		26.39	ug/L	0.2946	1.117	1,206
Be3130_R		-0.02156	ug/L	0.02990	138.7	-11.04
Ca3158_R		12,620	ug/L	11.84	0.09383	12,430
Cd2265_A		0.4898	ug/L	0.04103	8.376	12.99
Co2286_A		1.527	ug/L	0.001042	0.06826	15.41
Cr2677_A		0.5272	ug/L	0.001691	0.3208	14.88
Cu3273_A	W	1,236	ug/L	2.778	0.2248	18,090
Fe2599_R		1,225	ug/L	7.221	0.5892	1,663
K_7664_R		174.1	ug/L	43.28	24.85	25.58
Li6707_R		-0.1343	ug/L	0.6635	493.9	37.15
Mg2025_A		1,014	ug/L	2.565	0.2530	418.1
Mn2576_R		239.5	ug/L	0.9646	0.4027	1,700
Mo2020_A		0.5038	ug/L	0.01479	2.935	1.794
Na5895_R	F	336,500	ug/L	4,658	1.384	552,700
Ni2316_A		51.63	ug/L	0.09143	0.1771	159.8
Pb2203_A		3.306	ug/L	1.095	33.11	3.972
Sb2068_A		-0.8355	ug/L	0.5165	61.81	0.3173
Se1960_A		-0.3757	ug/L	0.8764	233.3	3.564
Si2516_R		424.2	ug/L	7.137	1.683	175.6
Sn1899_A		0.6425	ug/L	0.8007	124.6	2.359
Sr4215_R		59.71	ug/L	0.1115	0.1868	3,481
Ti3349_A		0.1224	ug/L	0.2764	225.9	-31.33
Tl1908_A		-0.3475	ug/L	0.04960	14.27	-1.963
V_2924_A		0.06614	ug/L	0.3133	473.8	-3.847
Zn2062_A	W	2,619	ug/L	2.054	0.07844	15,830
Y_3600_R		11,922	Cts/S	107.13	0.89854	11,922
Y_2243_A		12,722	Cts/S	9.4311	0.074133	12,722
Y_3600_A		167,890	Cts/S	278.44	0.16585	167,890

LC2ONG23ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:56:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LC2ONG23ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 1:56:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.60	ug/L	0.3016	0.5960	1,102
Al3961_R		2,175	ug/L	4.151	0.1908	1,643
As1891_A		103.5	ug/L	1.036	1.001	62.60
B_2089_A		507.6	ug/L	0.6365	0.1254	981.1
Ba4554_R		2,129	ug/L	1.209	0.05679	93,820
Be3130_R		53.62	ug/L	0.5465	1.019	3,430
Ca3158_R		2,681	ug/L	9.747	0.3635	2,686
Cd2265_A		259.8	ug/L	0.3489	0.1343	5,938
Co2286_A		528.4	ug/L	1.173	0.2221	3,134
Cr2677_A		212.1	ug/L	0.2636	0.1242	4,008
Cu3273_A		266.2	ug/L	0.2140	0.08039	4,143
Fe2599_R		1,091	ug/L	0.4401	0.04033	1,512
K_7664_R		10,460	ug/L	2.724	0.02604	5,586
Li6707_R		541.8	ug/L	0.7069	0.1305	3,874
Mg2025_A		5,235	ug/L	25.12	0.4799	2,343
Mn2576_R		527.9	ug/L	3.029	0.5739	3,822
Mo2020_A		107.1	ug/L	0.3772	0.3522	524.4
Na5895_R		7,691	ug/L	25.67	0.3338	12,870
Ni2316_A		532.1	ug/L	0.6395	0.1202	1,746
Pb2203_A		105.1	ug/L	0.6701	0.6373	180.0
Sb2068_A		104.0	ug/L	0.2313	0.2223	70.52
Se1960_A		102.8	ug/L	1.171	1.139	50.21
Si2516_R		1,122	ug/L	3.085	0.2749	449.6
Sn1899_A		581.1	ug/L	1.892	0.3255	527.3
Sr4215_R		544.1	ug/L	1.262	0.2320	32,530
Ti3349_A		527.3	ug/L	0.6415	0.1217	18,400
Tl1908_A		104.9	ug/L	0.5527	0.5267	97.39
V_2924_A		530.5	ug/L	0.4482	0.08448	8,661
Zn2062_A		521.3	ug/L	0.2532	0.04858	3,334
Y_3600_R		12,166	Cts/S	5.3194	0.043723	12,166
Y_2243_A		13,461	Cts/S	2.4710	0.018357	13,461
Y_3600_A		180,790	Cts/S	168.14	0.093002	180,790

LCSWNG28ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:00:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.32	ug/L	0.3667	0.7145	1,154
Al3961_R	F	2,340	ug/L	0.3466	0.01481	1,820
As1891_A		109.0	ug/L	0.02077	0.01906	67.69
B_2089_A		539.7	ug/L	0.02682	0.004969	1,069
Ba4554_R		2,160	ug/L	7.179	0.3324	97,900
Be3130_R		54.72	ug/L	0.02991	0.05465	3,600
Ca3158_R		2,761	ug/L	16.58	0.6006	2,844
Cd2265_A		271.8	ug/L	0.5287	0.1945	6,370
Co2286_A		540.8	ug/L	1.017	0.1881	3,289
Cr2677_A		214.2	ug/L	0.6410	0.2993	4,175
Cu3273_A		271.0	ug/L	0.4708	0.1737	4,353
Fe2599_R		1,105	ug/L	3.593	0.3251	1,574
K_7664_R		10,890	ug/L	17.04	0.1565	5,983
Li6707_R		553.2	ug/L	1.084	0.1960	4,068
Mg2025_A		5,439	ug/L	8.917	0.1640	2,496
Mn2576_R		531.5	ug/L	0.3490	0.06566	3,957
Mo2020_A		110.4	ug/L	0.4869	0.4411	554.2
Na5895_R		8,397	ug/L	60.19	0.7168	14,450
Ni2316_A		545.0	ug/L	1.780	0.3266	1,834

LCSWNG28ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:00:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		110.3	ug/L	0.5835	0.5289	193.7
Sb2068_A		109.8	ug/L	0.7577	0.6899	76.69
Se1960_A		108.3	ug/L	0.4098	0.3782	54.02
Si2516_R		1,169	ug/L	6.398	0.5471	481.0
Sn1899_A		555.8	ug/L	1.308	0.2353	517.2
Sr4215_R		558.4	ug/L	0.1376	0.02465	34,340
Ti3349_A		534.1	ug/L	0.6382	0.1195	19,230
Tl1908_A		109.5	ug/L	0.3562	0.3254	104.2
V_2924_A		537.2	ug/L	2.210	0.4113	9,049
Zn2062_A		533.8	ug/L	1.223	0.2291	3,500
Y_3600_R		12,512	Cts/S	59.036	0.47183	12,512
Y_2243_A		13,801	Cts/S	35.927	0.26031	13,801
Y_3600_A		186,530	Cts/S	698.59	0.37452	186,530

PBWNG28ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:04:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1168	ug/L	0.5105	436.9	-32.70
Al3961_R		23.01	ug/L	1.022	4.442	-4.967
As1891_A		0.6100	ug/L	0.5905	96.81	-2.415
B_2089_A		3.543	ug/L	0.3342	9.432	9.885
Ba4554_R		0.1008	ug/L	0.2519	250.0	72.96
Be3130_R		-0.1149	ug/L	0.01397	12.16	-17.39
Ca3158_R		-5.338	ug/L	3.348	62.72	-17.06
Cd2265_A		-0.002084	ug/L	0.01094	524.9	-0.09540
Co2286_A		0.09765	ug/L	0.04509	46.17	7.909
Cr2677_A		-0.2455	ug/L	0.1862	75.87	1.099
Cu3273_A		0.4999	ug/L	0.1888	37.77	-58.49
Fe2599_R		3.381	ug/L	0.08743	2.586	5.966
K_7664_R		-7.504	ug/L	2.506	33.39	-72.58
Li6707_R		-1.850	ug/L	1.461	78.95	25.93
Mg2025_A		4.856	ug/L	1.665	34.29	-5.976
Mn2576_R		0.1994	ug/L	0.06561	32.89	3.272
Mo2020_A		0.7270	ug/L	0.05930	8.157	3.065
Na5895_R		23.54	ug/L	5.666	24.07	15.06
Ni2316_A		0.09956	ug/L	0.3108	312.1	0.3442
Pb2203_A		0.4530	ug/L	0.3820	84.34	-1.368
Sb2068_A		0.1715	ug/L	0.9602	560.1	1.001
Se1960_A		-0.2044	ug/L	0.1417	69.32	3.843
Si2516_R		5.891	ug/L	16.56	281.1	18.89
Sn1899_A		0.9353	ug/L	0.03186	3.406	2.805
Sr4215_R		-0.07683	ug/L	0.1889	245.9	-24.90
Ti3349_A		0.7816	ug/L	0.09960	12.74	-10.96
Tl1908_A		-0.1587	ug/L	0.6346	399.8	-1.821
V_2924_A		-0.06388	ug/L	0.1257	196.7	-5.092
Zn2062_A		0.3830	ug/L	0.006937	1.811	3.894
Y_3600_R		12,236	Cts/S	16.835	0.13759	12,236
Y_2243_A		13,675	Cts/S	2.5752	0.018831	13,675
Y_3600_A		185,140	Cts/S	1,517.8	0.81982	185,140

SN6180-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:09:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6180-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:09:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6690	ug/L	0.4930	73.70	-27.05
Al3961_R		-46.53	ug/L	31.99	68.75	67.43
As1891_A		2.457	ug/L	0.1570	6.390	-1.934
B_2089_A		58.95	ug/L	0.2258	0.3831	57.30
Ba4554_R		208.8	ug/L	0.6466	0.3096	4,669
Be3130_R		-0.1078	ug/L	0.01749	16.22	-13.41
Ca3158_R	W	332,300	ug/L	98.94	0.02978	167,200
Cd2265_A		-0.05825	ug/L	0.03402	58.40	-0.1519
Co2286_A		18.89	ug/L	0.06665	0.3528	60.54
Cr2677_A		2.226	ug/L	0.4471	20.08	33.35
Cu3273_A		6.384	ug/L	1.522	23.85	-13.95
Fe2599_R		535.8	ug/L	8.102	1.512	372.3
K_7664_R		9,880	ug/L	33.61	0.3402	2,603
Li6707_R		99.13	ug/L	0.5511	0.5560	390.0
Mg2025_A		30,670	ug/L	112.1	0.3657	6,513
Mn2576_R	W	10,390	ug/L	6.333	0.06095	37,610
Mo2020_A		9.550	ug/L	0.05556	0.5818	21.47
Na5895_R	W	280,800	ug/L	594.1	0.2116	235,500
Ni2316_A		30.41	ug/L	0.3845	1.265	47.94
Pb2203_A		1.523	ug/L	1.425	93.60	-0.7620
Sb2068_A		-1.944	ug/L	0.01249	0.6426	0.1717
Se1960_A		0.01146	ug/L	3.337	29,110	4.921
Si2516_R		12,800	ug/L	18.08	0.1413	2,474
Sn1899_A		1.401	ug/L	0.6773	48.35	2.449
Sr4215_R		1,190	ug/L	3.589	0.3016	35,610
Ti3349_A		1.086	ug/L	0.6921	63.71	-18.07
Tl1908_A		-1.204	ug/L	0.1142	9.489	-6.914
V_2924_A		-1.677	ug/L	0.1711	10.20	-45.40
Zn2062_A		100.3	ug/L	0.4994	0.4981	309.3
Y_3600_R		12,174	Cts/S	21.180	0.17398	12,174
Y_2243_A		12,931	Cts/S	33.276	0.25733	12,931
Y_3600_A		173,040	Cts/S	1,223.7	0.70714	173,040

PBSNG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:13:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2406	ug/L	0.1617	67.19	-30.03
Al3961_R		19.24	ug/L	20.75	107.8	-8.012
As1891_A		-0.2290	ug/L	0.2207	96.40	-2.961
B_2089_A		6.106	ug/L	0.2720	4.455	14.91
Ba4554_R		0.2555	ug/L	0.2861	112.0	81.63
Be3130_R		-0.05058	ug/L	0.006389	12.63	-13.53
Ca3158_R		36.26	ug/L	0.2407	0.6636	25.59
Cd2265_A		0.02033	ug/L	0.05475	269.4	0.4543
Co2286_A		0.01723	ug/L	0.1022	593.4	7.438
Cr2677_A		0.6576	ug/L	0.07827	11.90	18.65
Cu3273_A		1.868	ug/L	0.5103	27.31	-36.47
Fe2599_R		15.54	ug/L	1.246	8.017	23.41
K_7664_R		84.61	ug/L	28.86	34.11	-23.02
Li6707_R		-1.849	ug/L	2.324	125.7	26.53
Mg2025_A		19.25	ug/L	1.545	8.022	0.4956
Mn2576_R		1.680	ug/L	0.03136	1.866	14.37
Mo2020_A		0.5361	ug/L	0.03643	6.796	2.118
Na5895_R		56.36	ug/L	7.306	12.96	71.99
Ni2316_A		0.5211	ug/L	0.2048	39.30	1.744

PBSNG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:13:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.6017	ug/L	0.06049	10.05	-1.106
Sb2068_A		0.2706	ug/L	0.5873	217.0	0.7576
Se1960_A		-0.9399	ug/L	1.069	113.7	3.515
Si2516_R		26.43	ug/L	5.882	22.26	27.43
Sn1899_A		43.25	ug/L	0.1426	0.3298	41.76
Sr4215_R		0.2152	ug/L	0.02045	9.501	-7.490
Ti3349_A		0.4608	ug/L	0.2004	43.50	-22.51
Tl1908_A		-1.009	ug/L	0.2134	21.16	-2.634
V_2924_A		-0.04729	ug/L	0.3524	745.2	-4.904
Zn2062_A		4.452	ug/L	0.09672	2.172	30.39
Y_3600_R		12,513	Cts/S	0.16787	0.0013420	12,513
Y_2243_A		13,705	Cts/S	54.161	0.39519	13,705
Y_3600_A		186,010	Cts/S	1,600.6	0.86047	186,010

PBWNG31ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:18:09PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3049	ug/L	0.09393	30.81	-28.90
Al3961_R		13.74	ug/L	20.07	146.1	-12.37
As1891_A		0.5085	ug/L	0.9682	190.4	-2.488
B_2089_A		1.757	ug/L	0.1098	6.247	6.404
Ba4554_R		-0.06265	ug/L	0.1812	289.1	67.42
Be3130_R		-0.09442	ug/L	0.06830	72.34	-16.44
Ca3158_R		2.488	ug/L	1.991	80.05	-9.381
Cd2265_A		0.01543	ug/L	0.01853	120.1	0.3113
Co2286_A		-0.03871	ug/L	0.02595	67.03	7.107
Cr2677_A		-0.2936	ug/L	0.1685	57.38	0.1863
Cu3273_A		0.6659	ug/L	0.2160	32.44	-56.88
Fe2599_R		3.265	ug/L	0.4113	12.60	5.953
K_7664_R		24.40	ug/L	20.56	84.24	-56.62
Li6707_R		-1.039	ug/L	0.7024	67.60	32.51
Mg2025_A		6.070	ug/L	0.04826	0.7951	-5.459
Mn2576_R		0.05861	ug/L	0.06002	102.4	2.305
Mo2020_A		0.2203	ug/L	0.09396	42.66	0.5418
Na5895_R		19.49	ug/L	11.43	58.63	8.480
Ni2316_A		-0.03540	ug/L	0.08448	238.6	-0.1174
Pb2203_A		-0.2160	ug/L	0.02322	10.75	-2.554
Sb2068_A		0.05812	ug/L	1.270	2,185	0.9263
Se1960_A		0.1666	ug/L	0.01198	7.190	4.025
Si2516_R		2.038	ug/L	0.9746	47.81	17.84
Sn1899_A		0.3824	ug/L	0.09965	26.06	2.305
Sr4215_R		0.07706	ug/L	0.0001400	0.1812	-16.03
Ti3349_A		0.2201	ug/L	0.1978	89.87	-31.66
Tl1908_A		-0.04146	ug/L	0.3131	755.1	-1.715
V_2924_A		0.09548	ug/L	0.1187	124.4	-2.431
Zn2062_A		0.8805	ug/L	0.01793	2.036	7.149
Y_3600_R		12,546	Cts/S	44.899	0.35787	12,546
Y_2243_A		13,719	Cts/S	1.6765	0.012220	13,719
Y_3600_A		188,700	Cts/S	164.67	0.087267	188,700

LCSONH03ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:22:36PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSONH03ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:22:36PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.26	ug/L	0.7138	1.449	1,071
Al3961_R		2,117	ug/L	4.940	0.2333	1,585
As1891_A		102.0	ug/L	0.1853	0.1818	61.45
B_2089_A		505.8	ug/L	0.5119	0.1012	975.1
Ba4554_R		2,079	ug/L	19.62	0.9437	90,790
Be3130_R		52.33	ug/L	0.2982	0.5699	3,316
Ca3158_R		2,661	ug/L	14.27	0.5363	2,641
Cd2265_A		257.4	ug/L	0.6365	0.2473	5,867
Co2286_A		517.6	ug/L	0.5891	0.1138	3,062
Cr2677_A		206.0	ug/L	0.3688	0.1790	3,891
Cu3273_A		259.0	ug/L	2.175	0.8399	4,026
Fe2599_R		1,067	ug/L	8.393	0.7866	1,465
K_7664_R		10,410	ug/L	66.19	0.6359	5,508
Li6707_R		531.7	ug/L	3.762	0.7075	3,769
Mg2025_A		5,147	ug/L	4.456	0.08658	2,298
Mn2576_R		512.3	ug/L	2.071	0.4043	3,675
Mo2020_A		105.3	ug/L	0.1060	0.1007	514.1
Na5895_R		8,067	ug/L	72.31	0.8963	13,380
Ni2316_A		519.7	ug/L	0.7132	0.1372	1,701
Pb2203_A		104.8	ug/L	0.3686	0.3517	178.9
Sb2068_A		103.3	ug/L	0.03097	0.02999	69.85
Se1960_A		102.6	ug/L	0.2422	0.2361	49.97
Si2516_R		1,040	ug/L	17.61	1.693	414.3
Sn1899_A		572.6	ug/L	1.718	0.3000	518.3
Sr4215_R		534.6	ug/L	4.485	0.8389	31,670
Ti3349_A		514.2	ug/L	0.07964	0.01549	17,940
Tl1908_A		103.3	ug/L	1.241	1.201	95.63
V_2924_A		512.0	ug/L	0.7551	0.1475	8,354
Zn2062_A		509.9	ug/L	0.8551	0.1677	3,252
Y_3600_R		12,056	Cts/S	19.370	0.16066	12,056
Y_2243_A		13,426	Cts/S	15.870	0.11820	13,426
Y_3600_A		180,710	Cts/S	77.666	0.042979	180,710

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:26:54PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		512.9	ug/L	2.419	0.4716	11,620
Al3961_R		13,090	ug/L	27.30	0.2086	10,060
As1891_A		504.0	ug/L	0.9562	0.1897	318.7
B_2089_A		510.3	ug/L	1.689	0.3310	1,016
Ba4554_R		525.6	ug/L	0.01118	0.002126	23,370
Be3130_R	W	529.5	ug/L	0.5625	0.1062	34,170
Ca3158_R		13,070	ug/L	12.12	0.09278	13,220
Cd2265_A		512.4	ug/L	2.210	0.4313	11,890
Co2286_A		512.8	ug/L	1.703	0.3320	3,083
Cr2677_A		519.7	ug/L	0.1075	0.02068	9,857
Cu3273_A		521.0	ug/L	1.922	0.3690	8,212
Fe2599_R		13,170	ug/L	36.40	0.2765	18,340
K_7664_R		12,970	ug/L	0.6289	0.004849	6,987
Li6707_R		520.8	ug/L	2.673	0.5132	3,750
Mg2025_A		12,760	ug/L	41.28	0.3236	5,751
Mn2576_R		519.3	ug/L	1.137	0.2190	3,782
Mo2020_A		509.6	ug/L	0.3870	0.07595	2,532
Na5895_R		13,170	ug/L	8.457	0.06423	22,190
Ni2316_A		515.4	ug/L	2.242	0.4350	1,722

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:26:54PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		518.1	ug/L	1.437	0.2773	906.8
Sb2068_A		508.6	ug/L	3.018	0.5933	363.6
Se1960_A		500.9	ug/L	0.7481	0.1493	232.3
Si2516_R	W	13,550	ug/L	25.40	0.1875	5,253
Sn1899_A		515.2	ug/L	2.542	0.4935	474.0
Sr4215_R		525.7	ug/L	0.2326	0.04425	31,640
Ti3349_A		514.1	ug/L	1.696	0.3300	18,040
Tl1908_A		513.5	ug/L	1.037	0.2019	484.8
V_2924_A		522.4	ug/L	0.8412	0.1610	8,520
Zn2062_A		511.7	ug/L	2.522	0.4928	3,314
Y_3600_R		12,245	Cts/S	76.484	0.62462	12,245
Y_2243_A		13,640	Cts/S	32.348	0.23715	13,640
Y_3600_A		181,680	Cts/S	202.23	0.11131	181,680

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:31:08PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5841	ug/L	0.08456	14.48	-21.45
Al3961_R		5.916	ug/L	4.796	81.07	-17.84
As1891_A		1.554	ug/L	1.687	108.6	-1.781
B_2089_A		2.260	ug/L	0.08984	3.976	7.325
Ba4554_R		0.02040	ug/L	0.4877	2,391	68.61
Be3130_R		-0.05369	ug/L	0.08915	166.1	-13.29
Ca3158_R		-4.467	ug/L	2.119	47.44	-16.00
Cd2265_A		0.03876	ug/L	0.04933	127.3	0.8402
Co2286_A		0.1087	ug/L	0.05510	50.67	7.841
Cr2677_A		-0.03953	ug/L	0.1609	407.0	4.995
Cu3273_A		0.05315	ug/L	0.05858	110.2	-64.53
Fe2599_R		3.398	ug/L	0.1111	3.270	5.924
K_7664_R		12.10	ug/L	5.027	41.56	-61.24
Li6707_R		1.492	ug/L	1.832	122.8	49.16
Mg2025_A		3.711	ug/L	0.06039	1.627	-6.375
Mn2576_R		0.2909	ug/L	0.1778	61.13	3.893
Mo2020_A		2.235	ug/L	0.2946	13.18	10.40
Na5895_R		9.934	ug/L	6.009	60.49	-7.775
Ni2316_A		-0.2471	ug/L	0.03964	16.04	-0.7625
Pb2203_A		0.09310	ug/L	0.3918	420.8	-1.970
Sb2068_A		-0.4216	ug/L	0.5887	139.6	0.5707
Se1960_A		-0.3181	ug/L	1.356	426.3	3.729
Si2516_R		12.53	ug/L	19.77	157.7	21.21
Sn1899_A		0.1039	ug/L	0.1224	117.8	2.008
Sr4215_R		-0.1044	ug/L	0.1462	140.0	-26.25
Ti3349_A		0.4195	ug/L	0.06407	15.27	-23.44
Tl1908_A		0.3000	ug/L	0.4193	139.8	-1.364
V_2924_A		-0.04929	ug/L	0.2749	557.8	-4.923
Zn2062_A		0.03752	ug/L	0.07808	208.1	1.621
Y_3600_R		12,101	Cts/S	42.975	0.35515	12,101
Y_2243_A		13,452	Cts/S	29.749	0.22116	13,452
Y_3600_A		181,740	Cts/S	376.20	0.20700	181,740

PBSNH03ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:35:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBSNH03ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:35:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3075	ug/L	0.05589	18.17	-28.97
Al3961_R		13.32	ug/L	4.230	31.76	-12.82
As1891_A		0.8087	ug/L	1.075	132.9	-2.326
B_2089_A		6.033	ug/L	0.08585	1.423	14.97
Ba4554_R		0.1210	ug/L	0.1955	161.6	76.45
Be3130_R		-0.06001	ug/L	0.008620	14.36	-14.32
Ca3158_R		30.98	ug/L	5.301	17.11	20.37
Cd2265_A		-0.05589	ug/L	0.02386	42.69	-1.340
Co2286_A		0.001944	ug/L	0.07603	3,912	7.448
Cr2677_A		0.2697	ug/L	0.3350	124.2	11.27
Cu3273_A		1.598	ug/L	0.08207	5.134	-41.58
Fe2599_R		15.51	ug/L	0.3337	2.152	23.64
K_7664_R		10.08	ug/L	8.525	84.58	-65.22
Li6707_R		-0.4299	ug/L	3.462	805.4	37.25
Mg2025_A		19.37	ug/L	0.9024	4.658	0.5560
Mn2576_R		0.3088	ug/L	0.4407	142.7	4.203
Mo2020_A		0.7300	ug/L	0.1174	16.08	3.130
Na5895_R		45.26	ug/L	5.525	12.21	53.46
Ni2316_A		0.3310	ug/L	0.03311	10.00	1.131
Pb2203_A		0.2997	ug/L	0.08815	29.41	-1.661
Sb2068_A		0.6063	ug/L	0.1024	16.89	1.017
Se1960_A		0.06605	ug/L	0.4207	636.9	4.029
Si2516_R		17.94	ug/L	2.613	14.57	24.36
Sn1899_A		42.56	ug/L	0.2639	0.6201	41.68
Sr4215_R		0.1040	ug/L	0.1107	106.4	-14.48
Ti3349_A		0.5056	ug/L	0.1139	22.53	-21.30
Tl1908_A		-0.1780	ug/L	0.3832	215.2	-1.869
V_2924_A		-0.1265	ug/L	0.3644	288.0	-6.278
Zn2062_A		3.884	ug/L	0.03566	0.9182	27.05
Y_3600_R		12,660	Cts/S	52.051	0.41114	12,660
Y_2243_A		13,889	Cts/S	77.968	0.56136	13,889
Y_3600_A		189,140	Cts/S	1,933.0	1.0220	189,140

SN6311-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:40:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.65	ug/L	6.994	14.09	-702.6
Al3961_R	W	148,000	ug/L	536.1	0.3622	23,500
As1891_A		99.26	ug/L	2.452	2.471	-9.541
B_2089_A		2,327	ug/L	13.89	0.5970	893.1
Ba4554_R	W	6,836	ug/L	3.238	0.04737	62,660
Be3130_R		2,122	ug/L	10.40	0.4899	28,240
Ca3158_R		115,400	ug/L	81.17	0.07030	24,130
Cd2265_A		275.9	ug/L	1.534	0.5562	1,665
Co2286_A		1,920	ug/L	8.640	0.4500	2,277
Cr2677_A		1,848	ug/L	39.38	2.131	6,999
Cu3273_A	F	119,000	ug/L	1,033	0.8682	377,400
Fe2599_R	W	938,300	ug/L	15,300	1.630	270,000
K_7664_R		22,290	ug/L	39.55	0.1774	2,434
Li6707_R		205.9	ug/L	28.16	13.68	343.7
Mg2025_A		74,470	ug/L	431.6	0.5796	6,600
Mn2576_R	W	11,570	ug/L	62.73	0.5420	17,370
Mo2020_A		608.4	ug/L	0.4332	0.07120	591.0
Na5895_R		42,670	ug/L	81.95	0.1920	14,850
Ni2316_A	W	8,665	ug/L	56.07	0.6471	5,613

SN6311-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:40:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A	W	45,050	ug/L	322.3	0.7153	15,520
Sb2068_A		115.0	ug/L	2.222	1.933	2.835
Se1960_A		18.49	ug/L	10.05	54.37	7.349
Si2516_R		2,077	ug/L	31.26	1.505	177.0
Sn1899_A	W	13,100	ug/L	93.01	0.7100	2,351
Sr4215_R		925.7	ug/L	0.9644	0.1042	11,500
Ti3349_A	W	6,644	ug/L	145.0	2.183	46,570
Tl1908_A		-16.33	ug/L	3.178	19.46	-4.593
V_2924_A		332.3	ug/L	10.63	3.198	1,075
Zn2062_A	F	348,100	ug/L	272.3	0.07823	441,500
Y_3600_R		12,648	Cts/S	157.57	1.2458	12,648
Y_2243_A		13,348	Cts/S	64.562	0.48367	13,348
Y_3600_A		181,370	Cts/S	3,116.0	1.7180	181,370

SN6359-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:44:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.85	ug/L	1.680	15.48	-658.8
Al3961_R	W	147,900	ug/L	290.7	0.1966	57,080
As1891_A		140.7	ug/L	0.7389	0.5252	26.00
B_2089_A		30.96	ug/L	0.1564	0.5052	32.73
Ba4554_R		403.6	ug/L	0.1378	0.03414	9,049
Be3130_R		3.214	ug/L	0.07939	2.470	-37.74
Ca3158_R	W	80,760	ug/L	451.6	0.5592	41,040
Cd2265_A		128.6	ug/L	0.4701	0.3654	1,813
Co2286_A		102.9	ug/L	0.1975	0.1919	348.4
Cr2677_A		371.9	ug/L	0.1949	0.05240	3,466
Cu3273_A	W	3,107	ug/L	5.183	0.1668	24,110
Fe2599_R	W	302,000	ug/L	1,157	0.3832	211,200
K_7664_R		24,780	ug/L	8.089	0.03265	6,698
Li6707_R		279.1	ug/L	0.03455	0.01238	1,038
Mg2025_A	W	72,620	ug/L	210.1	0.2893	16,070
Mn2576_R	W	4,425	ug/L	8.728	0.1973	16,150
Mo2020_A		6.492	ug/L	0.1145	1.764	15.09
Na5895_R		6,340	ug/L	6.258	0.09870	5,346
Ni2316_A		360.2	ug/L	1.133	0.3147	572.5
Pb2203_A		499.8	ug/L	3.936	0.7875	426.0
Sb2068_A		7.495	ug/L	0.2004	2.674	6.055
Se1960_A		-2.076	ug/L	1.199	57.75	5.258
Si2516_R		2,629	ug/L	13.37	0.5083	530.1
Sn1899_A		186.6	ug/L	0.7194	0.3856	86.24
Sr4215_R		340.2	ug/L	0.8319	0.2445	10,270
Ti3349_A	W	6,242	ug/L	1.864	0.02987	107,600
Tl1908_A		-2.462	ug/L	0.7994	32.46	-7.347
V_2924_A		291.5	ug/L	1.317	0.4518	2,374
Zn2062_A	W	9,803	ug/L	15.77	0.1608	31,340
Y_3600_R		12,295	Cts/S	89.073	0.72443	12,295
Y_2243_A		13,458	Cts/S	65.793	0.48889	13,458
Y_3600_A		178,300	Cts/S	954.09	0.53509	178,300

LCSONH03ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:49:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSONH03ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:49:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.25	ug/L	0.02784	0.05653	1,109
Al3961_R		2,050	ug/L	32.42	1.582	1,606
As1891_A		100.4	ug/L	0.7734	0.7703	62.49
B_2089_A		507.8	ug/L	0.2717	0.05350	1,012
Ba4554_R		1,978	ug/L	8.642	0.4368	90,500
Be3130_R		50.17	ug/L	0.4593	0.9155	3,331
Ca3158_R		2,484	ug/L	25.71	1.035	2,582
Cd2265_A		250.2	ug/L	0.4688	0.1873	5,897
Co2286_A		499.2	ug/L	0.2310	0.04626	3,053
Cr2677_A		198.1	ug/L	0.05232	0.02641	3,872
Cu3273_A		248.6	ug/L	0.06709	0.02698	3,999
Fe2599_R		1,118	ug/L	15.00	1.342	1,607
K_7664_R		9,822	ug/L	66.25	0.6745	5,440
Li6707_R		491.8	ug/L	2.400	0.4880	3,654
Mg2025_A		5,112	ug/L	5.005	0.09791	2,358
Mn2576_R		490.3	ug/L	4.324	0.8820	3,684
Mo2020_A		93.39	ug/L	1.228	1.315	471.4
Na5895_R		7,571	ug/L	52.97	0.6997	13,150
Ni2316_A		505.8	ug/L	0.1726	0.03412	1,711
Pb2203_A		103.1	ug/L	0.7624	0.7395	182.0
Sb2068_A		101.4	ug/L	1.191	1.175	71.39
Se1960_A		99.67	ug/L	0.5191	0.5208	50.30
Si2516_R		1,070	ug/L	11.21	1.048	445.5
Sn1899_A		496.5	ug/L	0.1546	0.03113	464.9
Sr4215_R		494.3	ug/L	4.084	0.8262	30,670
Ti3349_A		474.4	ug/L	0.7565	0.1595	17,130
Tl1908_A		101.6	ug/L	0.7388	0.7269	97.21
V_2924_A		491.2	ug/L	1.023	0.2083	8,296
Zn2062_A		510.4	ug/L	1.175	0.2302	3,365
Y_3600_R		12,629	Cts/S	93.296	0.73873	12,629
Y_2243_A		13,879	Cts/S	3.0827	0.022211	13,879
Y_3600_A		187,050	Cts/S	99.249	0.053060	187,050

PBSNH03ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:53:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.05577	ug/L	0.3287	589.4	-34.52
Al3961_R		20.71	ug/L	9.039	43.65	-6.851
As1891_A		1.284	ug/L	0.5525	43.03	-2.012
B_2089_A		1.614	ug/L	0.1439	8.914	6.226
Ba4554_R		0.2335	ug/L	0.2434	104.3	80.63
Be3130_R		-0.06787	ug/L	0.02976	43.86	-14.71
Ca3158_R		13.68	ug/L	4.103	29.99	2.232
Cd2265_A		-0.03449	ug/L	0.01948	56.48	-0.7151
Co2286_A		0.4542	ug/L	0.2729	60.08	10.19
Cr2677_A		1.004	ug/L	0.1456	14.50	25.28
Cu3273_A		1.827	ug/L	0.2435	13.33	-37.08
Fe2599_R	W	69.01	ug/L	3.010	4.362	99.52
K_7664_R		30.71	ug/L	66.61	216.9	-52.97
Li6707_R		-1.982	ug/L	3.944	199.0	25.57
Mg2025_A		15.40	ug/L	1.155	7.502	-1.214
Mn2576_R	W	2.802	ug/L	0.1299	4.635	22.70
Mo2020_A		1.322	ug/L	0.2981	22.55	6.097
Na5895_R		36.78	ug/L	5.978	16.25	38.22
Ni2316_A		4.470	ug/L	0.1996	4.465	15.08

PBSNH03ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:53:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.8616	ug/L	0.7184	83.37	-0.6553
Sb2068_A		0.05499	ug/L	0.1724	313.6	0.9373
Se1960_A		-0.6417	ug/L	0.6906	107.6	3.687
Si2516_R		26.61	ug/L	1.561	5.868	27.50
Sn1899_A		0.1194	ug/L	0.3225	270.0	2.079
Sr4215_R		0.07224	ug/L	0.1303	180.3	-16.28
Ti3349_A		1.672	ug/L	0.1578	9.438	21.01
Tl1908_A		1.403	ug/L	0.02116	1.508	-0.3477
V_2924_A		0.1615	ug/L	0.03313	20.51	-1.434
Zn2062_A		8.637	ug/L	0.1003	1.162	58.20
Y_3600_R		12,512	Cts/S	5.6097	0.044835	12,512
Y_2243_A		13,840	Cts/S	90.827	0.65629	13,840
Y_3600_A		185,460	Cts/S	1,634.3	0.88123	185,460

SN6054-024

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 2:57:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6224	ug/L	0.2315	37.20	-189.2
Al3961_R		14,450	ug/L	34.41	0.2382	11,550
As1891_A		40.63	ug/L	0.5249	1.292	20.00
B_2089_A		63.76	ug/L	0.3555	0.5575	130.0
Ba4554_R		403.9	ug/L	0.5430	0.1344	18,600
Be3130_R		1.633	ug/L	0.01781	1.091	92.28
Ca3158_R	W	112,900	ug/L	720.2	0.6381	118,300
Cd2265_A		5.344	ug/L	0.06211	1.162	208.4
Co2286_A		16.70	ug/L	0.07692	0.4607	113.0
Cr2677_A		12.04	ug/L	0.2090	1.736	238.0
Cu3273_A		345.4	ug/L	5.022	1.454	5,486
Fe2599_R	W	35,020	ug/L	129.9	0.3710	50,510
K_7664_R		1,445	ug/L	2.931	0.2029	742.6
Li6707_R		16.66	ug/L	3.115	18.69	163.4
Mg2025_A		11,830	ug/L	52.32	0.4422	5,430
Mn2576_R		953.7	ug/L	5.915	0.6201	7,184
Mo2020_A		0.6583	ug/L	0.05014	7.616	2.656
Na5895_R		199.4	ug/L	4.946	2.481	322.7
Ni2316_A		44.05	ug/L	0.04397	0.09984	145.6
Pb2203_A	W	5,369	ug/L	12.36	0.2302	9,671
Sb2068_A		17.46	ug/L	1.340	7.674	14.39
Se1960_A		-2.135	ug/L	0.5554	26.02	3.567
Si2516_R		8,505	ug/L	58.26	0.6850	3,417
Sn1899_A		1.872	ug/L	0.1993	10.64	3.745
Sr4215_R		195.0	ug/L	0.9131	0.4683	12,130
Ti3349_A		191.3	ug/L	2.179	1.139	6,769
Tl1908_A		1.098	ug/L	0.2645	24.09	-1.657
V_2924_A		48.07	ug/L	0.6833	1.422	795.3
Zn2062_A	W	2,320	ug/L	8.804	0.3794	15,400
Y_3600_R		12,676	Cts/S	43.021	0.33938	12,676
Y_2243_A		13,970	Cts/S	22.019	0.15761	13,970
Y_3600_A		184,030	Cts/S	2,074.2	1.1271	184,030

SN6056-026

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:02:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6056-026

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:02:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.632	ug/L	0.1757	6.675	-381.3
Al3961_R	W	56,620	ug/L	5.501	0.009716	45,530
As1891_A		27.99	ug/L	0.03097	0.1106	6.629
B_2089_A		9.570	ug/L	0.1630	1.703	22.57
Ba4554_R		716.2	ug/L	0.4672	0.06523	33,290
Be3130_R		4.426	ug/L	0.04548	1.028	277.3
Ca3158_R		22,580	ug/L	10.96	0.04855	23,910
Cd2265_A		8.741	ug/L	0.1007	1.152	408.7
Co2286_A		41.24	ug/L	0.2478	0.6009	272.2
Cr2677_A		23.02	ug/L	0.05348	0.2323	463.6
Cu3273_A		116.6	ug/L	0.8631	0.7402	1,840
Fe2599_R	W	83,030	ug/L	133.7	0.1611	121,000
K_7664_R		1,517	ug/L	45.88	3.024	791.8
Li6707_R		33.74	ug/L	0.7085	2.100	292.5
Mg2025_A		5,163	ug/L	13.56	0.2626	2,416
Mn2576_R	W	3,474	ug/L	4.919	0.1416	26,450
Mo2020_A		1.562	ug/L	0.06049	3.873	7.073
Na5895_R		355.9	ug/L	3.306	0.9289	602.5
Ni2316_A		54.10	ug/L	0.09670	0.1788	177.4
Pb2203_A		588.3	ug/L	1.894	0.3219	1,071
Sb2068_A		1.371	ug/L	0.3050	22.24	3.502
Se1960_A		-0.7269	ug/L	0.8044	110.7	5.488
Si2516_R		15,370	ug/L	22.16	0.1442	6,228
Sn1899_A		2.421	ug/L	0.03845	1.588	4.343
Sr4215_R		68.27	ug/L	0.2707	0.3965	4,280
Ti3349_A		388.4	ug/L	0.7400	0.1905	14,130
Tl1908_A		1.214	ug/L	0.7507	61.84	-4.159
V_2924_A		144.3	ug/L	0.04193	0.02906	2,448
Zn2062_A		940.4	ug/L	3.304	0.3514	6,364
Y_3600_R		12,814	Cts/S	31.057	0.24238	12,814
Y_2243_A		14,242	Cts/S	53.458	0.37535	14,242
Y_3600_A		188,610	Cts/S	225.64	0.11964	188,610

SN6100-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:06:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.888	ug/L	0.3694	19.56	-183.0
Al3961_R	W	33,020	ug/L	165.2	0.5003	26,660
As1891_A		35.67	ug/L	0.4767	1.336	16.55
B_2089_A		53.98	ug/L	0.06193	0.1147	111.7
Ba4554_R		435.3	ug/L	0.003265	0.0007500	20,310
Be3130_R		4.833	ug/L	0.03079	0.6371	315.3
Ca3158_R	W	96,750	ug/L	250.9	0.2594	102,700
Cd2265_A		4.796	ug/L	0.1203	2.508	205.2
Co2286_A		27.04	ug/L	0.1039	0.3843	178.5
Cr2677_A		12.59	ug/L	0.04060	0.3225	268.2
Cu3273_A		93.25	ug/L	0.5971	0.6404	1,492
Fe2599_R	W	38,300	ug/L	136.9	0.3575	55,960
K_7664_R		5,241	ug/L	46.08	0.8792	2,918
Li6707_R		46.48	ug/L	1.784	3.838	388.4
Mg2025_A		15,320	ug/L	32.83	0.2142	7,112
Mn2576_R	W	6,264	ug/L	31.59	0.5042	47,830
Mo2020_A		0.1743	ug/L	0.05153	29.56	-0.4333
Na5895_R		1,147	ug/L	0.8840	0.07708	2,004
Ni2316_A		53.32	ug/L	0.1231	0.2309	178.7

SN6100-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:06:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		554.7	ug/L	0.9697	0.1748	1,004
Sb2068_A		-0.7583	ug/L	0.3954	52.15	1.021
Se1960_A		-0.9843	ug/L	1.093	111.0	5.602
Si2516_R		9,859	ug/L	5.985	0.06070	4,011
Sn1899_A		2.507	ug/L	0.06572	2.621	4.388
Sr4215_R		468.5	ug/L	0.9011	0.1923	29,570
Ti3349_A		198.4	ug/L	0.9550	0.4813	7,332
Tl1908_A		0.07364	ug/L	0.5515	749.0	-7.937
V_2924_A		165.8	ug/L	0.01318	0.007950	2,846
Zn2062_A		393.4	ug/L	0.4710	0.1197	2,641
Y_3600_R		12,844	Cts/S	82.636	0.64339	12,844
Y_2243_A		14,123	Cts/S	34.692	0.24564	14,123
Y_3600_A		192,100	Cts/S	11.544	0.0060090	192,100

SN6100-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:10:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7976	ug/L	0.4919	61.67	-80.51
Al3961_R		11,580	ug/L	39.26	0.3389	9,333
As1891_A		3.459	ug/L	1.042	30.13	-2.026
B_2089_A		27.05	ug/L	0.6008	2.221	57.47
Ba4554_R		356.4	ug/L	0.3802	0.1067	16,580
Be3130_R		4.066	ug/L	0.09306	2.289	262.3
Ca3158_R	W	79,570	ug/L	30.34	0.03813	84,170
Cd2265_A		3.571	ug/L	0.001463	0.04097	115.9
Co2286_A		11.35	ug/L	0.03685	0.3246	79.24
Cr2677_A		3.557	ug/L	0.1325	3.724	75.27
Cu3273_A		125.6	ug/L	0.3327	0.2649	1,985
Fe2599_R		12,960	ug/L	5.687	0.04389	18,860
K_7664_R		2,013	ug/L	12.77	0.6345	1,073
Li6707_R		-1.228	ug/L	1.860	151.4	31.75
Mg2025_A		8,091	ug/L	28.42	0.3513	3,749
Mn2576_R		100.3	ug/L	0.8571	0.8549	762.4
Mo2020_A		0.1406	ug/L	0.05831	41.48	0.1074
Na5895_R		807.8	ug/L	12.64	1.564	1,398
Ni2316_A		64.31	ug/L	0.3001	0.4667	219.4
Pb2203_A		539.4	ug/L	2.196	0.4071	978.1
Sb2068_A		-0.9823	ug/L	0.8723	88.81	0.3920
Se1960_A		-2.124	ug/L	0.07279	3.428	3.234
Si2516_R		2,201	ug/L	5.298	0.2407	905.4
Sn1899_A		0.6760	ug/L	0.1382	20.44	2.649
Sr4215_R		537.9	ug/L	0.9075	0.1687	33,820
Ti3349_A		85.22	ug/L	0.08815	0.1034	3,041
Tl1908_A		1.313	ug/L	0.03842	2.927	-0.5206
V_2924_A		51.06	ug/L	0.05016	0.09824	861.0
Zn2062_A		225.3	ug/L	0.9958	0.4420	1,512
Y_3600_R		12,796	Cts/S	0.38857	0.0030370	12,796
Y_2243_A		14,115	Cts/S	19.020	0.13476	14,115
Y_3600_A		186,920	Cts/S	1,051.0	0.56230	186,920

SN6100-012L

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:15:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6100-012L

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:15:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4117	ug/L	1.489	361.7	-46.82
Al3961_R		11,950	ug/L	107.4	0.8984	1,866
As1891_A		4.494	ug/L	6.956	154.8	-2.551
B_2089_A		30.98	ug/L	0.4225	1.364	15.25
Ba4554_R		370.8	ug/L	3.855	1.040	3,429
Be3130_R		3.795	ug/L	0.1957	5.157	39.58
Ca3158_R		85,030	ug/L	630.5	0.7415	17,580
Cd2265_A		3.509	ug/L	0.03577	1.019	22.71
Co2286_A		12.10	ug/L	0.04714	0.3895	22.45
Cr2677_A		3.601	ug/L	0.5573	15.47	19.83
Cu3273_A		131.3	ug/L	6.206	4.727	359.5
Fe2599_R		13,510	ug/L	110.4	0.8168	3,849
K_7664_R		2,139	ug/L	150.9	7.052	167.8
Li6707_R		27.37	ug/L	9.785	35.75	79.86
Mg2025_A		8,525	ug/L	5.153	0.06045	770.0
Mn2576_R		107.1	ug/L	0.1586	0.1480	160.8
Mo2020_A		0.7892	ug/L	0.6375	80.78	0.2257
Na5895_R		844.3	ug/L	28.48	3.374	266.0
Ni2316_A		68.16	ug/L	0.8813	1.293	45.72
Pb2203_A		566.9	ug/L	2.792	0.4925	200.4
Sb2068_A		1.818	ug/L	0.7203	39.62	1.208
Se1960_A		-6.142	ug/L	2.740	44.60	3.460
Si2516_R		2,329	ug/L	92.59	3.976	200.7
Sn1899_A		0.6061	ug/L	1.231	203.0	2.088
Sr4215_R		566.9	ug/L	0.4156	0.07332	6,956
Ti3349_A		89.71	ug/L	1.156	1.289	605.6
Tl1908_A		1.909	ug/L	0.9873	51.73	-1.344
V_2924_A		53.31	ug/L	1.157	2.170	175.5
Zn2062_A		614.8	ug/L	3.204	0.5212	812.1
Y_3600_R		12,514	Cts/S	7.2649	0.058054	12,514
Y_2243_A		13,876	Cts/S	63.651	0.45872	13,876
Y_3600_A		185,760	Cts/S	863.68	0.46494	185,760

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:19:41PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		511.6	ug/L	1.305	0.2551	11,580
Al3961_R		13,050	ug/L	7.897	0.06052	10,060
As1891_A		506.5	ug/L	0.2517	0.04969	318.5
B_2089_A		513.8	ug/L	0.9646	0.1877	1,018
Ba4554_R		524.5	ug/L	1.350	0.2574	23,380
Be3130_R	W	527.4	ug/L	0.04081	0.007737	34,130
Ca3158_R		13,000	ug/L	4.025	0.03096	13,190
Cd2265_A		516.3	ug/L	0.7139	0.1383	11,920
Co2286_A		516.4	ug/L	0.5696	0.1103	3,087
Cr2677_A		517.8	ug/L	2.040	0.3940	9,807
Cu3273_A		521.3	ug/L	0.1120	0.02149	8,206
Fe2599_R		13,080	ug/L	35.03	0.2679	18,270
K_7664_R		12,970	ug/L	16.20	0.1248	7,007
Li6707_R		521.1	ug/L	3.340	0.6410	3,762
Mg2025_A		12,850	ug/L	4.965	0.03865	5,759
Mn2576_R		516.9	ug/L	0.9346	0.1808	3,774
Mo2020_A		512.8	ug/L	1.872	0.3651	2,534
Na5895_R		13,130	ug/L	39.14	0.2981	22,190
Ni2316_A		518.8	ug/L	0.2142	0.04129	1,724

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:19:41PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		521.5	ug/L	0.3289	0.06307	907.7
Sb2068_A		515.0	ug/L	2.839	0.5513	366.1
Se1960_A		505.2	ug/L	2.921	0.5781	232.9
Si2516_R	W	13,490	ug/L	90.72	0.6726	5,243
Sn1899_A		517.8	ug/L	0.7324	0.1414	473.7
Sr4215_R		524.6	ug/L	0.6432	0.1226	31,650
Ti3349_A		511.6	ug/L	0.7378	0.1442	17,930
Tl1908_A		514.5	ug/L	0.5517	0.1072	483.1
V_2924_A		523.0	ug/L	0.8994	0.1720	8,519
Zn2062_A		514.3	ug/L	0.1765	0.03432	3,312
Y_3600_R		12,277	Cts/S	31.909	0.25990	12,277
Y_2243_A		13,565	Cts/S	25.582	0.18859	13,565
Y_3600_A		181,430	Cts/S	426.90	0.23529	181,430

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:23:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4045	ug/L	0.1124	27.78	-25.97
Al3961_R		14.15	ug/L	6.325	44.70	-11.70
As1891_A		0.9153	ug/L	0.4319	47.19	-2.224
B_2089_A		0.9897	ug/L	0.1222	12.35	4.975
Ba4554_R		-0.01651	ug/L	0.1683	1,019	67.56
Be3130_R		-0.03352	ug/L	0.0004550	1.357	-12.10
Ca3158_R		-7.568	ug/L	1.928	25.47	-19.26
Cd2265_A		0.006299	ug/L	0.01637	259.9	0.1054
Co2286_A		0.1350	ug/L	0.2779	205.9	8.148
Cr2677_A		-0.09840	ug/L	0.1684	171.2	3.942
Cu3273_A		0.4935	ug/L	0.1783	36.13	-58.43
Fe2599_R		6.329	ug/L	2.065	32.62	10.04
K_7664_R		-11.98	ug/L	28.11	234.7	-74.77
Li6707_R		-2.268	ug/L	1.648	72.68	22.90
Mg2025_A		2.937	ug/L	2.242	76.34	-6.843
Mn2576_R		0.1361	ug/L	0.02367	17.39	2.802
Mo2020_A		2.037	ug/L	0.4444	21.82	9.616
Na5895_R		-2.174	ug/L	8.013	368.6	-28.19
Ni2316_A		0.1694	ug/L	0.4593	271.1	0.6090
Pb2203_A		0.05531	ug/L	0.4639	838.8	-2.074
Sb2068_A		-0.4811	ug/L	0.009046	1.880	0.5407
Se1960_A		-0.03067	ug/L	1.538	5,014	3.931
Si2516_R		18.36	ug/L	15.30	83.30	23.63
Sn1899_A		-0.1490	ug/L	0.03459	23.21	1.813
Sr4215_R		-0.2073	ug/L	0.09092	43.86	-32.64
Ti3349_A		0.5746	ug/L	0.05244	9.127	-18.27
Tl1908_A		0.5344	ug/L	0.6167	115.4	-1.167
V_2924_A		-0.1954	ug/L	0.01974	10.10	-7.412
Zn2062_A		0.2191	ug/L	0.02942	13.43	2.834
Y_3600_R		12,195	Cts/S	18.073	0.14820	12,195
Y_2243_A		13,707	Cts/S	14.263	0.10406	13,707
Y_3600_A		184,590	Cts/S	112.93	0.061181	184,590

SN6100-012A

Method Name: FAST-2016_NO_AU
Method Revision: 1,451
Analyst Name: EP
Acquire Date: 8/6/2020 3:28:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST**: EP **ANALYSIS DATE**: 08/07/2020

METHOD: ICP
- ☑ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

FILE NAME: INH07A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19515	07/23/2020	07/23/2021	0 ug/L
Standard 1	MW19518	07/23/20	10/23/20	Varies by Element
ICV	MW19494	07/14/20	10/14/20	Varies by Element
PQL	MW19537	08/06/2020	11/06/2020	Varies by Element
LRS1	MW19521	07/24/2020	10/01/2020	Varies by Element
LRS2	MW19533	08/05/20	09/21/2020	Varies by Element
ICSA	MW19472	06/26/2020	09/26/20	Varies by Element
ICSAB	MW19536	08/06/2020	11/06/20	Varies by Element
CCV	MW19527	08/03/2020	11/03/2020	Varies by Element
Internal Standard	MW19534	08/06/2020	11/06/2020	5.0 mg/L Yttrium

Additional Comments and Notes:

REVIEWED
MC 8/13/20
KATAHDIN ANALYTICAL
METALS SECTION

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

2x diln.: 4.0mL of sample (pipet M25) + 4.0mL of MW19515 (pipet M25)

5x Serial dil'n.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19515(pipet M22)

Post Spike: 0.123mL MW19468 (pipet M27) to 6.0mL of sample (pipet M25)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	INH07A	8/7/2020	17:12	EP
Std 1	1.000	INH07A	8/7/2020	17:16	EP
ICV	1.000	INH07A	8/7/2020	17:20	EP
ICB	1.000	INH07A	8/7/2020	17:25	EP
PQL	1.000	INH07A	8/7/2020	17:29	EP
ICSA	1.000	INH07A	8/7/2020	17:33	EP
ICSAB	1.000	INH07A	8/7/2020	17:39	EP
CCV	1.000	INH07A	8/7/2020	17:44	EP
CCB	1.000	INH07A	8/7/2020	17:48	EP
LRS1	1.000	INH07A	8/7/2020	17:53	EP
LRS2	1.000	INH07A	8/7/2020	18:02	EP
CCV	1.000	INH07A	8/7/2020	18:07	EP
CCB	1.000	INH07A	8/7/2020	18:11	EP
SN6180-012	2.000	INH07A	8/7/2020	18:16	EP
SN6180-012	5.000	INH07A	8/7/2020	18:20	EP
LCSONG31ICS1	1.000	INH07A	8/7/2020	18:24	EP
PBSNG31ICS1	1.000	INH07A	8/7/2020	18:29	EP
SN6234-001	1.000	INH07A	8/7/2020	18:33	EP
SN6235-001	1.000	INH07A	8/7/2020	18:37	EP
SN6235-003	1.000	INH07A	8/7/2020	18:43	EP
SN6235-005	1.000	INH07A	8/7/2020	18:48	EP
SN6236-001	1.000	INH07A	8/7/2020	18:54	EP
SN6236-003	1.000	INH07A	8/7/2020	18:59	EP
CCV	1.000	INH07A	8/7/2020	19:04	EP
CCB	1.000	INH07A	8/7/2020	19:09	EP
SN6236-005	1.000	INH07A	8/7/2020	19:13	EP
SN6250-004	1.000	INH07A	8/7/2020	19:17	EP
SN6250-005	1.000	INH07A	8/7/2020	19:22	EP
SN6250-006	1.000	INH07A	8/7/2020	19:27	EP
SN6284-002	1.000	INH07A	8/7/2020	19:32	EP
SN6284-005	1.000	INH07A	8/7/2020	19:38	EP
SN6284-008	1.000	INH07A	8/7/2020	19:43	EP
SN6274-002	1.000	INH07A	8/7/2020	19:48	EP
SN6274-003	1.000	INH07A	8/7/2020	19:53	EP
SN6274-004	1.000	INH07A	8/7/2020	19:57	EP
CCV	1.000	INH07A	8/7/2020	20:01	EP
CCB	1.000	INH07A	8/7/2020	20:06	EP
SN6290-002	1.000	INH07A	8/7/2020	20:10	EP
SN6290-003	1.000	INH07A	8/7/2020	20:14	EP
SN6290-004	1.000	INH07A	8/7/2020	20:19	EP
SN6306-001	1.000	INH07A	8/7/2020	20:23	EP
SN6306-002	1.000	INH07A	8/7/2020	20:28	EP
SN6306-003	1.000	INH07A	8/7/2020	20:32	EP
SN6306-004	1.000	INH07A	8/7/2020	20:36	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6306-005	1.000	INH07A	8/7/2020	20:41	EP
SN6056-024	1.000	INH07A	8/7/2020	20:45	EP
SN6100-013	2.000	INH07A	8/7/2020	20:49	EP
CCV	1.000	INH07A	8/7/2020	20:54	EP
CCB	1.000	INH07A	8/7/2020	20:58	EP
SN6391-019	1.000	INH07A	8/7/2020	21:02	EP
SN6391-020	2.000	INH07A	8/7/2020	21:07	EP
LCSWNH04ICW1	1.000	INH07A	8/7/2020	21:11	EP
PBT1643A	1.000	INH07A	8/7/2020	21:15	EP
PBWNH04ICW1	1.000	INH07A	8/7/2020	21:20	EP
SN6317-002	1.000	INH07A	8/7/2020	21:24	EP
SN6317-005	1.000	INH07A	8/7/2020	21:29	EP
SN6363-002	1.000	INH07A	8/7/2020	21:33	EP
SN6391-023	2.000	INH07A	8/7/2020	21:38	EP
SN6259-009S	1.000	INH07A	8/7/2020	21:42	EP
CCV	1.000	INH07A	8/7/2020	21:46	EP
CCB	1.000	INH07A	8/7/2020	21:50	EP
SN6259-010	1.000	INH07A	8/7/2020	21:55	EP
SN6259-011	1.000	INH07A	8/7/2020	21:59	EP
SN6259-012	1.000	INH07A	8/7/2020	22:04	EP
SN6259-013	1.000	INH07A	8/7/2020	22:08	EP
SN6259-014	1.000	INH07A	8/7/2020	22:12	EP
SN6259-015	1.000	INH07A	8/7/2020	22:17	EP
SN6259-016	1.000	INH07A	8/7/2020	22:21	EP
LCSWNH05ICW1	1.000	INH07A	8/7/2020	22:25	EP
PBWNH05ICW1	1.000	INH07A	8/7/2020	22:30	EP
SN6369-001	1.000	INH07A	8/7/2020	22:34	EP
CCV	1.000	INH07A	8/7/2020	22:38	EP
CCB	1.000	INH07A	8/7/2020	22:43	EP
SN6369-002	1.000	INH07A	8/7/2020	22:47	EP
SN6369-003	1.000	INH07A	8/7/2020	22:51	EP
LCSWNH06ICW1	1.000	INH07A	8/7/2020	22:56	EP
PBWNH06ICW1	1.000	INH07A	8/7/2020	23:00	EP
SN6482-001	1.000	INH07A	8/7/2020	23:05	EP
SN6482-001L	5.000	INH07A	8/7/2020	23:10	EP
SN6482-001A	1.000	INH07A	8/7/2020	23:14	EP
SN6482-001P	1.000	INH07A	8/7/2020	23:20	EP
SN6482-001S	1.000	INH07A	8/7/2020	23:25	EP
LCSWNH06ICW2	1.000	INH07A	8/7/2020	23:31	EP
CCV	1.000	INH07A	8/7/2020	23:35	EP
CCB	1.000	INH07A	8/7/2020	23:39	EP
PBWNH06ICW2	1.000	INH07A	8/7/2020	23:44	EP
SN6435-005	1.000	INH07A	8/7/2020	23:48	EP
SN6435-005L	5.000	INH07A	8/7/2020	23:53	EP
SN6435-005A	1.000	INH07A	8/7/2020	23:58	EP
SN6435-005P	1.000	INH07A	8/8/2020	0:03	EP
SN6435-005S	1.000	INH07A	8/8/2020	0:08	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6435-011	1.000	INH07A	8/8/2020	0:13	EP
SN6435-012	1.000	INH07A	8/8/2020	0:18	EP
SN6513-018	1.000	INH07A	8/8/2020	0:24	EP
SN6513-019	1.000	INH07A	8/8/2020	0:28	EP
CCV	1.000	INH07A	8/8/2020	0:32	EP
CCB	1.000	INH07A	8/8/2020	0:37	EP
SN6513-020	1.000	INH07A	8/8/2020	0:41	EP
LCSWNH06ICW3	1.000	INH07A	8/8/2020	0:46	EP
PBWNH06ICW3	1.000	INH07A	8/8/2020	0:50	EP
SN6513-001	1.000	INH07A	8/8/2020	0:54	EP
SN6513-002	1.000	INH07A	8/8/2020	0:59	EP
SN6513-003	1.000	INH07A	8/8/2020	1:03	EP
SN6513-004	1.000	INH07A	8/8/2020	1:08	EP
SN6513-005	1.000	INH07A	8/8/2020	1:12	EP
SN6513-006	1.000	INH07A	8/8/2020	1:17	EP
SN6513-007	1.000	INH07A	8/8/2020	1:22	EP
CCV	1.000	INH07A	8/8/2020	1:27	EP
CCB	1.000	INH07A	8/8/2020	1:31	EP
SN6513-008	1.000	INH07A	8/8/2020	1:36	EP
SN6513-009	1.000	INH07A	8/8/2020	1:40	EP
SN6513-010	1.000	INH07A	8/8/2020	1:45	EP
SN6513-014	1.000	INH07A	8/8/2020	1:51	EP
SN6513-015	1.000	INH07A	8/8/2020	1:56	EP
SN6513-016	1.000	INH07A	8/8/2020	2:00	EP
SN6513-017	1.000	INH07A	8/8/2020	2:05	EP
CCV	1.000	INH07A	8/8/2020	2:09	EP
CCB	1.000	INH07A	8/8/2020	2:14	EP
PQL	1.000	INH07A	8/8/2020	2:18	EP
ICSA	1.000	INH07A	8/8/2020	2:22	EP
ICSAB	1.000	INH07A	8/8/2020	2:28	EP
CCV	1.000	INH07A	8/8/2020	2:33	EP
CCB	1.000	INH07A	8/8/2020	2:37	EP

INH07A ICV-all passing ICB-all passing PQL-all passing ICSA-Sc warning ICSAB-all passing ccv-all passing CCB-all passing LRS1-all passing LRS2-Mg fail ccv-all passing CCB-all passing

	Pos ID	Type	Samplename	Comment	CorrFact	Check Table
1	1	Unk	SN6180-012		2	Sample
2	2	Unk	SN6180-012		5	Sample
3	3	Unk	LCSONG31ICS1		1	LCS-DOD5-SOIL
4	4	Unk	PBSNG31ICS1		1	PBW
5	5	Unk	SN6234-001		1	Sample
6	6	Unk	SN6235-001	Fe↑ 2x	1	Sample
7	7	Unk	SN6235-003		1	Sample
8	8	Unk	SN6235-005	Fe↑ 2x	1	Sample
9	9	Unk	SN6236-001		1	Sample
10	10	Unk	SN6236-003		1	Sample
11	11	Unk	SN6236-005		1	Sample
12	12	Unk	SN6250-004		1	Sample
13	13	Unk	SN6250-005		1	Sample
14	14	Unk	SN6250-006		1	Sample
15	15	Unk	SN6284-002	Fe↑ 2x	1	Sample
16	16	Unk	SN6284-005		1	Sample
17	17	Unk	SN6284-008		1	Sample
18	18	Unk	SN6274-002		1	Sample
19	19	Unk	SN6274-003		1	Sample
20	20	Unk	SN6274-004		1	Sample
21	21	Unk	SN6290-002		1	Sample
22	22	Unk	SN6290-003		1	Sample
23	23	Unk	SN6290-004		1	Sample
24	24	Unk	SN6306-001		1	Sample
25	25	Unk	SN6306-002		1	Sample
26	26	Unk	SN6306-003		1	Sample
27	27	Unk	SN6306-004		1	Sample
28	28	Unk	SN6306-005		1	Sample
29	29	Unk	SN6056-024		1	Sample
30	30	Unk	SN6100-013		2	Sample
31	31	Unk	SN6391-019		1	Sample
32	32	Unk	SN6391-020		2	Sample
33	33	Unk	LCSWNH04ICW1		1	LCS-DOD5-WATER
34	34	Unk	PBT1643A	Na ↑	1	PBT
35	35	Unk	PBWNH04ICW1		1	PBW
36	36	Unk	SN6317-002		1	Sample
37	37	Unk	SN6317-005		1	Sample
38	38	Unk	SN6363-002		1	Sample
39	39	Unk	SN6391-023		2	Sample
40	40	Unk	SN6259-009S		1	Sample
41	41	Unk	SN6259-010		1	Sample
42	42	Unk	SN6259-011		1	Sample
43	43	Unk	SN6259-012		1	Sample
44	44	Unk	SN6259-013		1	Sample
45	45	Unk	SN6259-014		1	Sample
46	46	Unk	SN6259-015		1	Sample
47	47	Unk	SN6259-016		1	Sample
48	48	Unk	LCSWNH05ICW1		1	LCSW-200-7
49	49	Unk	PBWNH05ICW1		1	PBW
50	50	Unk	SN6369-001		1	Sample
51	51	Unk	SN6369-002		1	Sample
52	52	Unk	SN6369-003		1	Sample
53	53	Unk	LCSWNH06ICW1	Mo↓	1	LCSW-200-7
54	54	Unk	PBWNH06ICW1		1	PBW
55	55	Unk	SN6482-001	Na↑5x	1	Sample
56	56	Unk	SN6482-001L		5	Sample
57	57	Unk	SN6482-001A	Na↑5x	1	Sample
58	58	Unk	SN6482-001P	Na↑5x	1	Sample
59	59	Unk	SN6482-001S	Na↑5x	1	Sample

ccv/ccb passing

ccv/ccb passing

ccv/ccb passing

ccv/ccb passing

ccv/ccb passing

Blnk Int std
12605
13900
197570

	Pos ID	Type	Samplename	Comment	CorrFact	Check Table
60	60	Unk	LCSWNH06ICW2		1	LCS-DOD5-WATER
61	61	Unk	PBWNH06ICW2		1	PBW
62	62	Unk	SN6435-005	Na ↑ 5x	1	Sample
63	63	Unk	SN6435-005L		5	Sample
64	64	Unk	SN6435-005A	Na ↑ 5x	1	Sample
65	65	Unk	SN6435-005P	Na ↑ 5x	1	Sample
66	66	Unk	SN6435-005S	Na ↑ 5x	1	Sample
67	67	Unk	SN6435-011	Na ↑ 5x	1	Sample
68	68	Unk	SN6435-012	Na ↑ 5x	1	Sample
69	69	Unk	SN6513-018		1	Sample
70	70	Unk	SN6513-019		1	Sample
71	71	Unk	SN6513-020		1	Sample
72	72	Unk	LCSWNH06ICW3		1	LCS-DOD5-WATER
73	73	Unk	PBWNH06ICW3		1	PBW
74	74	Unk	SN6513-001		1	Sample
75	75	Unk	SN6513-002		1	Sample
76	76	Unk	SN6513-003		1	Sample
77	77	Unk	SN6513-004		1	Sample
78	78	Unk	SN6513-005		1	Sample
79	79	Unk	SN6513-006	Na ↑ 2x	1	Sample
80	80	Unk	SN6513-007		1	Sample
81	81	Unk	SN6513-008		1	Sample
82	82	Unk	SN6513-009		1	Sample
83	83	Unk	SN6513-010		1	Sample
84	84	Unk	SN6513-014	Na ↑ 5x	1	Sample
85	85	Unk	SN6513-015		1	Sample
86	86	Unk	SN6513-016		1	Sample
87	87	Unk	SN6513-017		1	Sample

CCV/CCB passing

CCV/CCB passing

CCV/CCB passing

CCV-Li warning
CCB-all passing
PQL-all passing
ICSA-Sr warning
ICSAB-all passing
CCV-all passing
CCB-all passing

Intensity Report

Author:

Published: 8/10/2020 8:08:59AM

Notes:

Blank

Method Name: FAST-2016_NO_AU Method Revision: 1,453

Analyst Name: EP

Acquire Date: 8/7/2020 5:12:15PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001580	Cts/S	0.00007600	47.90	-29.72
Al3961_R		-0.001447	Cts/S	0.00006200	4.261	-18.24
As1891_A		-0.0002180	Cts/S	0.000008000	3.602	-3.030
B_2089_A		0.0002310	Cts/S	0.00001900	8.326	3.206
Ba4554_R		0.005237	Cts/S	0.0002340	4.473	66.00
Be3130_R		-0.0008930	Cts/S	0.0003760	42.16	-11.28
Ca3158_R		-0.001825	Cts/S	0.0001940	10.64	-22.99
Cd2265_A		-0.00004200	Cts/S	0.00006500	154.2	-0.5898
Co2286_A		0.0005870	Cts/S	0.00002700	4.627	8.155
Cr2677_A		0.000007000	Cts/S	0.000006000	93.65	1.276
Cu3273_A		-0.0003200	Cts/S	0.00002500	7.849	-60.06
Fe2599_R		0.0002250	Cts/S	0.0003570	158.8	2.811
K_7664_R		-0.004502	Cts/S	0.0006990	15.52	-56.70
Li6707_R		0.001885	Cts/S	0.0001170	6.180	23.75
Mg2025_A		-0.0005930	Cts/S	0.00004600	7.668	-8.248
Mn2576_R		0.0002420	Cts/S	0.0003840	158.6	3.030
Mo2020_A		0.000001000	Cts/S	0.00001600	1,044	0.02123
Na5895_R		0.007989	Cts/S	0.0007730	9.677	100.6
Ni2316_A		-0.00003200	Cts/S	0.00001000	32.23	-0.4436
Pb2203_A		-0.0001680	Cts/S	0.00002700	16.08	-2.340
Sb2068_A		0.00004600	Cts/S	0.00005500	118.7	0.6404
Se1960_A		0.0002190	Cts/S	0.00001200	5.466	3.047
Si2516_R		0.0004790	Cts/S	0.00002900	5.951	6.044
Sn1899_A		0.0001670	Cts/S	0.00004900	29.25	2.318
Sr4215_R		-0.001593	Cts/S	0.0007740	48.58	-20.03
Ti3349_A		-0.0002500	Cts/S	0.00005100	20.49	-46.92
Tl1908_A		-0.0001110	Cts/S	0.000008000	7.572	-1.545
V_2924_A		-0.00003900	Cts/S	0.000004000	10.19	-7.334
Zn2062_A		0.0001490	Cts/S	0.000001000	0.4324	2.069
Y_3600_R		12,605	Cts/S	131.34	1.0420	12,605
Y_2243_A		13,900	Cts/S	57.401	0.41295	13,900
Y_3600_A		187,570	Cts/S	571.80	0.30484	187,570

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,453

Analyst Name: EP

Acquire Date: 8/7/2020 5:16:39PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1284	Cts/S	0.0003010	0.2345	23,130
Al3961_R		1.646	Cts/S	0.0005960	0.03622	20,120
As1891_A		0.04798	Cts/S	0.0004790	0.9987	637.8
B_2089_A		0.1495	Cts/S	0.001216	0.8136	1,987
Ba4554_R		3.818	Cts/S	0.01373	0.3597	46,660
Be3130_R		5.471	Cts/S	0.003377	0.06172	66,870
Ca3158_R		2.151	Cts/S	0.001657	0.07700	26,290
Cd2265_A		1.748	Cts/S	0.01101	0.6299	23,230
Co2286_A		0.4576	Cts/S	0.003535	0.7725	6,082
Cr2677_A		0.1082	Cts/S	0.0004850	0.4486	19,480
Cu3273_A		0.08943	Cts/S	0.0002790	0.3118	16,100
Fe2599_R		2.990	Cts/S	0.006821	0.2281	36,550
K_7664_R		1.140	Cts/S	0.003516	0.3084	13,930
Li6707_R		0.6367	Cts/S	0.0003130	0.04918	7,781

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:16:39PM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		0.8551	Cts/S	0.006572	0.7685	11,370
Mn2576_R		0.6220	Cts/S	0.0006500	0.1046	7,602
Mo2020_A		0.3754	Cts/S	0.004481	1.194	4,990
Na5895_R		3.564	Cts/S	0.008739	0.2452	43,550
Ni2316_A		0.2521	Cts/S	0.001917	0.7604	3,351
Pb2203_A		0.1321	Cts/S	0.0007360	0.5570	1,756
Sb2068_A		0.05338	Cts/S	0.0003240	0.6076	709.5
Se1960_A		0.03466	Cts/S	0.0003690	1.064	460.7
Si2516_R		0.8217	Cts/S	0.001977	0.2406	10,040
Sn1899_A		0.06862	Cts/S	0.0005490	0.7998	912.0
Sr4215_R		5.146	Cts/S	0.007611	0.1479	62,900
Ti3349_A		0.1996	Cts/S	0.0003070	0.1539	35,940
Tl1908_A		0.07198	Cts/S	0.0005720	0.7950	956.7
V_2924_A		0.09201	Cts/S	0.0003900	0.4241	16,570
Zn2062_A		0.4882	Cts/S	0.003453	0.7073	6,489
Y_3600_R		12,222	Cts/S	104.56	0.85550	12,222
Y_2243_A		13,292	Cts/S	79.684	0.59948	13,292
Y_3600_A		180,090	Cts/S	95.327	0.052934	180,090

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:20:50PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		403.0	ug/L	0.05691	0.01412	9,487
Al3961_R		10,070	ug/L	3.215	0.03192	8,194
As1891_A		388.5	ug/L	0.8347	0.2148	251.0
B_2089_A		403.6	ug/L	0.1691	0.04190	820.2
Ba4554_R		398.0	ug/L	0.6302	0.1583	18,830
Be3130_R		409.7	ug/L	1.958	0.4780	27,710
Ca3158_R		10,160	ug/L	14.57	0.1434	10,800
Cd2265_A		401.6	ug/L	0.7772	0.1935	9,520
Co2286_A		408.0	ug/L	0.8161	0.2000	2,537
Cr2677_A		404.0	ug/L	0.02850	0.007055	8,024
Cu3273_A		398.2	ug/L	0.06615	0.01661	6,504
Fe2599_R		10,080	ug/L	6.140	0.06088	14,920
K_7664_R		13,530	ug/L	15.08	0.1114	7,606
Li6707_R		410.8	ug/L	0.5771	0.1405	3,248
Mg2025_A		10,240	ug/L	11.96	0.1167	4,746
Mn2576_R		403.6	ug/L	1.318	0.3264	3,106
Mo2020_A		408.4	ug/L	0.06392	0.01565	2,080
Na5895_R		10,080	ug/L	39.65	0.3933	17,830
Ni2316_A		406.4	ug/L	0.06556	0.01613	1,390
Pb2203_A		406.2	ug/L	1.319	0.3248	726.5
Sb2068_A		399.0	ug/L	1.712	0.4291	289.2
Se1960_A		401.4	ug/L	0.9703	0.2417	190.5
Si2516_R		10,160	ug/L	56.14	0.5526	4,052
Sn1899_A		411.1	ug/L	1.501	0.3651	383.9
Sr4215_R		406.4	ug/L	0.6957	0.1712	25,850
Ti3349_A		401.6	ug/L	0.3193	0.07952	14,690
Tl1908_A		408.2	ug/L	0.1325	0.03248	397.6
V_2924_A		397.5	ug/L	0.7693	0.1935	6,711
Zn2062_A		402.5	ug/L	0.1478	0.03673	2,666
Y_3600_R		12,367	Cts/S	44.901	0.36308	12,367
Y_2243_A		13,563	Cts/S	7.5397	0.055591	13,563
Y_3600_A		183,630	Cts/S	342.55	0.18655	183,630

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:25:01PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03491	ug/L	0.2452	702.5	-30.61
Al3961_R		7.141	ug/L	1.122	15.72	-11.99
As1891_A		0.6977	ug/L	1.152	165.2	-2.542
B_2089_A		1.264	ug/L	0.04453	3.523	5.820
Ba4554_R		0.1895	ug/L	0.3807	200.9	73.53
Be3130_R		-0.01210	ug/L	0.05994	495.4	-11.89
Ca3158_R		3.525	ug/L	3.554	100.8	-18.78
Cd2265_A		-0.008529	ug/L	0.002799	32.82	-0.7758
Co2286_A		-0.1116	ug/L	0.02362	21.18	7.389
Cr2677_A		0.1374	ug/L	0.3832	278.9	4.047
Cu3273_A		-0.04140	ug/L	0.4820	1,164	-60.77
Fe2599_R		4.910	ug/L	1.394	28.38	10.04
K_7664_R		26.90	ug/L	1.393	5.177	-40.39
Li6707_R		-2.049	ug/L	0.9714	47.42	7.190
Mg2025_A		3.451	ug/L	0.5313	15.39	-6.548
Mn2576_R		0.003188	ug/L	0.1274	3,997	3.021
Mo2020_A		2.287	ug/L	0.5021	21.95	11.84
Na5895_R		-14.95	ug/L	3.082	20.61	72.42
Ni2316_A		0.3554	ug/L	0.01182	3.324	0.8418
Pb2203_A		0.7322	ug/L	0.1580	21.58	-0.9829
Sb2068_A		-0.4772	ug/L	0.08637	18.10	0.2881
Se1960_A		3.035	ug/L	1.350	44.49	4.455
Si2516_R		13.11	ug/L	6.869	52.41	11.13
Sn1899_A		-0.6185	ug/L	0.2763	44.67	1.711
Sr4215_R		0.2376	ug/L	0.2617	110.1	-4.641
Ti3349_A		0.7584	ug/L	0.006608	0.8714	-18.49
Tl1908_A		0.4385	ug/L	0.1316	30.02	-1.096
V_2924_A		0.2586	ug/L	0.3598	139.1	-3.040
Zn2062_A		-0.06002	ug/L	0.06637	110.6	1.647
Y_3600_R		12,351	Cts/S	106.99	0.86624	12,351
Y_2243_A		13,774	Cts/S	151.81	1.1022	13,774
Y_3600_A		187,670	Cts/S	745.56	0.39728	187,670

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:29:27PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.16	ug/L	0.4463	4.392	214.5
Al3961_R		322.1	ug/L	9.637	2.992	241.3
As1891_A		9.139	ug/L	0.2500	2.735	3.028
B_2089_A		49.45	ug/L	0.1374	0.2778	101.4
Ba4554_R		4.998	ug/L	0.08637	1.728	296.6
Be3130_R		5.197	ug/L	0.02761	0.5313	336.0
Ca3158_R		106.4	ug/L	1.599	1.503	89.61
Cd2265_A		5.118	ug/L	0.04451	0.8696	120.6
Co2286_A		10.49	ug/L	0.1095	1.044	72.93
Cr2677_A		10.18	ug/L	0.1066	1.048	206.4
Cu3273_A		25.77	ug/L	0.1924	0.7469	371.4
Fe2599_R		102.9	ug/L	0.9975	0.9693	153.0
K_7664_R		984.4	ug/L	76.87	7.809	495.2
Li6707_R		104.9	ug/L	1.076	1.026	835.8
Mg2025_A		109.6	ug/L	0.5286	0.4824	43.21
Mn2576_R		4.765	ug/L	0.1032	2.166	39.11
Mo2020_A		10.83	ug/L	0.01834	0.1694	55.08
Na5895_R		1,028	ug/L	13.38	1.302	1,882
Ni2316_A		10.65	ug/L	0.1390	1.305	35.98

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:29:27PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		5.207	ug/L	0.7241	13.90	7.008
Sb2068_A		8.894	ug/L	0.8171	9.188	6.338
Se1960_A		10.28	ug/L	0.6592	6.410	7.766
Si2516_R		210.5	ug/L	4.170	1.980	88.68
Sn1899_A		102.5	ug/L	0.4245	0.4140	97.33
Sr4215_R		9.884	ug/L	0.1054	1.066	601.8
Ti3349_A		15.33	ug/L	0.01697	0.1107	524.1
Tl1908_A		15.35	ug/L	0.1009	0.6569	13.48
V_2924_A		9.767	ug/L	0.2764	2.830	160.2
Zn2062_A		20.39	ug/L	0.07265	0.3563	136.9
Y_3600_R		12,209	Cts/S	19.237	0.15756	12,209
Y_2243_A		13,545	Cts/S	25.029	0.18478	13,545
Y_3600_A		186,360	Cts/S	1,780.9	0.95564	186,360

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:33:51PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.790	ug/L	0.1937	10.82	-757.5
Al3961_R		505,900	ug/L	6,641	1.313	394,300
As1891_A		-1.319	ug/L	1.006	76.28	-22.82
B_2089_A		0.4118	ug/L	0.6553	159.1	3.514
Ba4554_R		-0.06493	ug/L	0.5369	826.8	59.08
Be3130_R		-0.02592	ug/L	0.008129	31.36	-12.37
Ca3158_R		476,700	ug/L	3,481	0.7301	486,200
Cd2265_A		-0.1185	ug/L	0.04380	36.97	401.0
Co2286_A		-0.7664	ug/L	0.01638	2.137	8.187
Cr2677_A		-0.2805	ug/L	0.4411	157.3	-6.037
Cu3273_A		0.5450	ug/L	0.7080	129.9	-27.08
Fe2599_R		193,400	ug/L	104.7	0.05413	273,900
K_7664_R		-14.19	ug/L	13.00	91.63	-61.01
Li6707_R		5.049	ug/L	0.7237	14.33	60.28
Mg2025_A		454,600	ug/L	888.9	0.1955	188,900
Mn2576_R		0.7867	ug/L	0.06062	7.705	10.56
Mo2020_A		-1.031	ug/L	0.2069	20.06	-4.712
Na5895_R		88.40	ug/L	1.777	2.010	243.5
Ni2316_A		0.2132	ug/L	0.1929	90.46	-20.82
Pb2203_A		-0.005167	ug/L	0.05183	1,003	-91.45
Sb2068_A		1.314	ug/L	1.306	99.40	7.835
Se1960_A		2.268	ug/L	0.6188	27.28	7.232
Si2516_R		31.48	ug/L	9.213	29.27	6.046
Sn1899_A		1.492	ug/L	0.02889	1.936	3.283
Sr4215_R	W	5.099	ug/L	0.02179	0.4273	292.0
Ti3349_A		2.351	ug/L	0.01263	0.5373	35.71
Tl1908_A		0.3154	ug/L	0.1083	34.33	-0.1486
V_2924_A		-0.3406	ug/L	0.8084	237.3	1.512
Zn2062_A		0.6274	ug/L	0.05533	8.819	5.564
Y_3600_R		11,843	Cts/S	13.241	0.11180	11,843
Y_2243_A		12,217	Cts/S	9.8487	0.080617	12,217
Y_3600_A		163,000	Cts/S	134.23	0.082353	163,000

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:39:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:39:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		206.6	ug/L	0.2067	0.1001	3,717
Al3961_R		481,900	ug/L	12,630	2.621	383,300
As1891_A		98.02	ug/L	1.724	1.759	37.28
B_2089_A		472.6	ug/L	1.671	0.3535	876.7
Ba4554_R		485.8	ug/L	0.8521	0.1754	22,450
Be3130_R		491.3	ug/L	0.5217	0.1062	32,480
Ca3158_R		454,900	ug/L	5,508	1.211	473,500
Cd2265_A		911.3	ug/L	0.3031	0.03326	20,090
Co2286_A		451.2	ug/L	0.3294	0.07301	2,569
Cr2677_A		470.8	ug/L	1.304	0.2771	8,447
Cu3273_A		502.2	ug/L	1.262	0.2513	7,443
Fe2599_R		185,700	ug/L	318.3	0.1714	268,500
K_7664_R		19,970	ug/L	98.14	0.4914	11,000
Li6707_R		511.8	ug/L	0.6746	0.1318	3,949
Mg2025_A		436,700	ug/L	1,560	0.3573	184,200
Mn2576_R		464.8	ug/L	0.1703	0.03664	3,499
Mo2020_A		460.1	ug/L	1.589	0.3454	2,141
Na5895_R		20,080	ug/L	3.494	0.01740	34,620
Ni2316_A		892.0	ug/L	0.03123	0.003501	2,761
Pb2203_A		43.69	ug/L	1.891	4.328	-17.04
Sb2068_A		575.0	ug/L	2.480	0.4313	387.0
Se1960_A		50.63	ug/L	1.044	2.061	27.90
Si2516_R		1,970	ug/L	21.59	1.096	763.8
Sn1899_A		454.3	ug/L	1.603	0.3528	387.6
Sr4215_R		491.2	ug/L	0.5996	0.1221	30,540
Ti3349_A		477.4	ug/L	0.7877	0.1650	15,790
Tl1908_A		85.91	ug/L	0.9284	1.081	77.08
V_2924_A		479.1	ug/L	1.531	0.3196	7,324
Zn2062_A		903.8	ug/L	0.2880	0.03186	5,473
Y_3600_R		12,087	Cts/S	120.14	0.99399	12,087
Y_2243_A		12,397	Cts/S	20.383	0.16442	12,397
Y_3600_A		165,920	Cts/S	292.13	0.17607	165,920

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:44:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		496.1	ug/L	1.668	0.3362	11,670
Al3961_R		12,510	ug/L	63.74	0.5096	10,080
As1891_A		494.8	ug/L	1.923	0.3887	320.9
B_2089_A		498.2	ug/L	1.985	0.3984	1,013
Ba4554_R		500.8	ug/L	0.1633	0.03262	23,460
Be3130_R		503.1	ug/L	2.684	0.5336	33,710
Ca3158_R		12,570	ug/L	45.94	0.3656	13,240
Cd2265_A		499.6	ug/L	1.273	0.2548	11,860
Co2286_A		502.1	ug/L	1.664	0.3315	3,124
Cr2677_A		502.8	ug/L	4.149	0.8253	9,976
Cu3273_A		503.3	ug/L	5.593	1.111	8,227
Fe2599_R		12,620	ug/L	55.66	0.4413	18,490
K_7664_R		12,520	ug/L	30.21	0.2412	6,969
Li6707_R		501.6	ug/L	1.844	0.3677	3,924
Mg2025_A		12,510	ug/L	34.17	0.2731	5,807
Mn2576_R		500.5	ug/L	2.975	0.5943	3,815
Mo2020_A		500.2	ug/L	3.111	0.6220	2,550
Na5895_R		12,560	ug/L	5.657	0.04503	21,990
Ni2316_A		503.1	ug/L	0.8422	0.1674	1,722

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:44:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		505.1	ug/L	0.8608	0.1704	905.0
Sb2068_A		499.7	ug/L	0.3954	0.07914	362.5
Se1960_A		495.2	ug/L	0.8617	0.1740	234.6
Si2516_R		12,900	ug/L	4.729	0.03665	5,097
Sn1899_A		499.8	ug/L	0.1040	0.02081	466.8
Sr4215_R		502.1	ug/L	1.066	0.2122	31,640
Ti3349_A		497.7	ug/L	2.597	0.5217	18,200
Tl1908_A		502.3	ug/L	0.1590	0.03165	490.2
V_2924_A		503.6	ug/L	4.906	0.9740	8,497
Zn2062_A		498.7	ug/L	1.054	0.2113	3,307
Y_3600_R		12,251	Cts/S	46.908	0.38289	12,251
Y_2243_A		13,579	Cts/S	22.003	0.16204	13,579
Y_3600_A		183,450	Cts/S	1,580.4	0.86151	183,450

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:48:47PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1399	ug/L	0.1825	130.4	-33.00
Al3961_R		9.189	ug/L	3.239	35.25	-10.31
As1891_A		0.8963	ug/L	0.5381	60.03	-2.392
B_2089_A		1.320	ug/L	0.06552	4.963	5.901
Ba4554_R		0.2874	ug/L	0.04717	16.41	78.03
Be3130_R		-0.04244	ug/L	0.01044	24.61	-13.89
Ca3158_R		10.06	ug/L	6.979	69.40	-11.81
Cd2265_A		0.04136	ug/L	0.04668	112.9	0.4230
Co2286_A		0.1003	ug/L	0.02281	22.73	8.668
Cr2677_A		0.3085	ug/L	0.1002	32.47	7.503
Cu3273_A		0.3634	ug/L	0.4465	122.9	-53.72
Fe2599_R		5.741	ug/L	0.4291	7.473	11.23
K_7664_R		-16.33	ug/L	50.12	306.9	-64.64
Li6707_R		-3.164	ug/L	0.8629	27.28	-1.505
Mg2025_A		3.667	ug/L	0.5829	15.90	-6.398
Mn2576_R		0.3237	ug/L	0.6764	209.0	5.458
Mo2020_A		2.308	ug/L	0.4059	17.58	11.89
Na5895_R		-2.235	ug/L	6.272	280.6	94.50
Ni2316_A		0.1030	ug/L	0.2158	209.6	-0.02934
Pb2203_A		-0.6664	ug/L	0.9586	143.9	-3.521
Sb2068_A		0.6875	ug/L	0.2750	40.00	1.142
Se1960_A		2.444	ug/L	0.3096	12.67	4.155
Si2516_R		9.048	ug/L	0.6804	7.520	9.503
Sn1899_A		-0.5178	ug/L	0.4747	91.68	1.797
Sr4215_R		0.05695	ug/L	0.1106	194.2	-16.01
Ti3349_A		0.6147	ug/L	0.1635	26.60	-23.76
Tl1908_A		0.1864	ug/L	0.4447	238.6	-1.339
V_2924_A		0.09495	ug/L	0.2146	226.0	-5.890
Zn2062_A		0.3019	ug/L	0.04036	13.37	4.056
Y_3600_R		12,322	Cts/S	36.092	0.29292	12,322
Y_2243_A		13,697	Cts/S	3.3213	0.024249	13,697
Y_3600_A		186,830	Cts/S	95.998	0.051382	186,830

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:53:13PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 5:53:13PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1,990	ug/L	32.67	1.642	46,510
Al3961_R		45.44	ug/L	2.553	5.619	170.0
As1891_A		19,780	ug/L	0.7798	0.003942	12,650
B_2089_A		19,560	ug/L	40.89	0.2091	37,950
Ba4554_R		19,220	ug/L	34.69	0.1805	904,400
Be3130_R		19,380	ug/L	397.6	2.051	1,309,000
Ca3158_R		12.17	ug/L	2.042	16.78	2.827
Cd2265_A		18,730	ug/L	17.59	0.09388	431,500
Co2286_A		19,750	ug/L	19.23	0.09738	119,200
Cr2677_A		18,940	ug/L	143.3	0.7568	373,600
Cu3273_A		19,110	ug/L	264.4	1.384	312,800
Fe2599_R		4.100	ug/L	0.7746	18.89	8.821
K_7664_R		-11.37	ug/L	54.51	479.2	-62.10
Li6707_R		19,450	ug/L	4.568	0.02349	152,400
Mg2025_A		1,271	ug/L	30.87	2.429	1,848
Mn2576_R		19,280	ug/L	20.24	0.1050	148,000
Mo2020_A		5,027	ug/L	13.64	0.2714	24,920
Na5895_R		48.85	ug/L	0.4008	0.8203	184.3
Ni2316_A		19,700	ug/L	23.68	0.1202	65,350
Pb2203_A		20,140	ug/L	11.17	0.05543	35,310
Sb2068_A		19,210	ug/L	43.18	0.2248	13,520
Se1960_A		19,720	ug/L	4.827	0.02448	8,968
Si2516_R		510.8	ug/L	20.70	4.052	299.5
Sn1899_A		19,520	ug/L	45.38	0.2325	17,650
Sr4215_R		19,540	ug/L	150.5	0.7701	1,241,000
Ti3349_A		18,800	ug/L	240.1	1.277	685,000
Tl1908_A		19,210	ug/L	32.65	0.1699	18,300
V_2924_A		18,910	ug/L	310.8	1.644	318,700
Zn2062_A		19,160	ug/L	8.346	0.04355	123,500
Y_3600_R		12,340	Cts/S	98.465	0.79793	12,340
Y_2243_A		13,209	Cts/S	2.4869	0.018827	13,209
Y_3600_A		182,410	Cts/S	2,315.7	1.2695	182,410

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:02:04PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.884	ug/L	0.4357	23.12	-912.0
Al3961_R		496,500	ug/L	4,937	0.9943	397,100
As1891_A		0.4883	ug/L	1.375	281.6	-26.17
B_2089_A		15.43	ug/L	0.4093	2.653	31.33
Ba4554_R		1.043	ug/L	0.1234	11.83	112.0
Be3130_R		0.07354	ug/L	0.04583	62.32	-6.434
Ca3158_R		468,100	ug/L	1,658	0.3543	489,900
Cd2265_A		-0.2386	ug/L	0.1049	43.98	492.1
Co2286_A		-1.004	ug/L	0.002999	0.2988	8.220
Cr2677_A		-1.129	ug/L	0.09741	8.625	-21.74
Cu3273_A		1.574	ug/L	0.08253	5.242	-21.81
Fe2599_R		232,000	ug/L	1,219	0.5254	337,200
K_7664_R		293,400	ug/L	592.5	0.2020	163,200
Li6707_R		4.038	ug/L	0.1502	3.718	54.06
Mg2025_A	F	177,400	ug/L	81.84	0.04613	75,710
Mn2576_R		18.39	ug/L	0.6740	3.665	72.78
Mo2020_A		4.083	ug/L	0.5180	12.69	19.25
Na5895_R		194,800	ug/L	401.3	0.2060	336,800
Ni2316_A		1.046	ug/L	0.1342	12.83	-22.98

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:02:04PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.487	ug/L	1.603	107.9	-88.18
Sb2068_A		-1.683	ug/L	0.8336	49.53	6.699
Se1960_A		6.545	ug/L	0.1252	1.913	9.460
Si2516_R		49,750	ug/L	40.27	0.08094	19,450
Sn1899_A		2.515	ug/L	0.2865	11.39	4.250
Sr4215_R		2.623	ug/L	0.1096	4.178	144.8
Ti3349_A		10.88	ug/L	0.2568	2.361	318.0
Tl1908_A		-0.2862	ug/L	1.134	396.1	-0.7785
V_2924_A		0.3781	ug/L	0.1959	51.82	14.79
Zn2062_A		3.209	ug/L	0.09564	2.980	21.54
Y_3600_R		12,152	Cts/S	26.837	0.22084	12,152
Y_2243_A		12,546	Cts/S	25.639	0.20436	12,546
Y_3600_A		165,460	Cts/S	151.06	0.091300	165,460

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:07:41PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		479.4	ug/L	7.046	1.470	11,700
Al3961_R		11,940	ug/L	61.63	0.5159	10,180
As1891_A		483.4	ug/L	2.787	0.5766	320.3
B_2089_A		492.0	ug/L	3.470	0.7053	1,022
Ba4554_R		476.1	ug/L	2.318	0.4868	23,590
Be3130_R		476.9	ug/L	6.024	1.263	33,800
Ca3158_R		11,960	ug/L	119.0	0.9947	13,320
Cd2265_A		483.7	ug/L	3.533	0.7305	11,730
Co2286_A		491.2	ug/L	3.915	0.7969	3,123
Cr2677_A		483.4	ug/L	9.098	1.882	9,949
Cu3273_A		481.0	ug/L	8.091	1.682	8,154
Fe2599_R		12,020	ug/L	124.7	1.038	18,630
K_7664_R		11,960	ug/L	53.89	0.4506	7,034
Li6707_R		475.6	ug/L	3.041	0.6394	3,935
Mg2025_A		12,240	ug/L	82.52	0.6744	5,803
Mn2576_R		482.1	ug/L	0.2140	0.04439	3,886
Mo2020_A		488.6	ug/L	1.916	0.3922	2,545
Na5895_R		11,920	ug/L	40.12	0.3366	22,070
Ni2316_A		487.9	ug/L	3.747	0.7681	1,707
Pb2203_A		490.0	ug/L	3.114	0.6356	897.2
Sb2068_A		480.5	ug/L	3.475	0.7232	356.2
Se1960_A		485.9	ug/L	0.8007	0.1648	235.3
Si2516_R		12,350	ug/L	73.33	0.5936	5,160
Sn1899_A		482.1	ug/L	2.378	0.4932	460.2
Sr4215_R		474.6	ug/L	1.814	0.3823	31,630
Ti3349_A		482.8	ug/L	7.428	1.539	18,310
Tl1908_A		492.7	ug/L	3.074	0.6238	491.4
V_2924_A		478.9	ug/L	7.243	1.512	8,380
Zn2062_A		482.3	ug/L	3.891	0.8069	3,268
Y_3600_R		12,954	Cts/S	51.963	0.40113	12,954
Y_2243_A		13,876	Cts/S	69.777	0.50285	13,876
Y_3600_A		190,290	Cts/S	1,716.6	0.90214	190,290

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:11:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:11:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.4334	ug/L	0.01850	4.267	-40.88
Al3961_R		-0.9336	ug/L	2.725	291.9	-19.11
As1891_A		1.687	ug/L	0.7407	43.91	-1.899
B_2089_A		6.560	ug/L	0.2333	3.557	16.71
Ba4554_R		0.1811	ug/L	0.05602	30.94	75.50
Be3130_R		0.01252	ug/L	0.06549	522.9	-10.55
Ca3158_R		9.647	ug/L	2.347	24.33	-12.66
Cd2265_A		0.05066	ug/L	0.03769	74.39	0.6562
Co2286_A		-0.1833	ug/L	0.06307	34.40	7.019
Cr2677_A		-0.07980	ug/L	0.2780	348.3	-0.3102
Cu3273_A		0.4791	ug/L	0.4436	92.57	-52.76
Fe2599_R		6.381	ug/L	1.311	20.55	12.59
K_7664_R		9.543	ug/L	37.80	396.1	-51.85
Li6707_R		0.4645	ug/L	0.6218	133.9	27.79
Mg2025_A		2.882	ug/L	1.369	47.51	-6.895
Mn2576_R		0.5418	ug/L	0.2097	38.71	7.385
Mo2020_A		3.148	ug/L	0.5639	17.91	16.49
Na5895_R		-2.998	ug/L	1.032	34.42	96.32
Ni2316_A		0.1881	ug/L	0.07741	41.15	0.2885
Pb2203_A		-0.1159	ug/L	0.1378	118.9	-2.564
Sb2068_A		0.1468	ug/L	0.08226	56.05	0.7540
Se1960_A		1.745	ug/L	0.8455	48.46	3.891
Si2516_R		18.53	ug/L	1.550	8.369	13.71
Sn1899_A		-0.3065	ug/L	0.2091	68.21	2.029
Sr4215_R		0.1542	ug/L	0.03050	19.78	-10.19
Ti3349_A		0.9587	ug/L	0.2910	30.36	-11.20
Tl1908_A		-0.1278	ug/L	0.01431	11.19	-1.679
V_2924_A		0.1636	ug/L	0.05314	32.48	-4.847
Zn2062_A		0.3840	ug/L	0.01947	5.071	4.689
Y_3600_R		12,739	Cts/S	85.973	0.67491	12,739
Y_2243_A		13,935	Cts/S	60.891	0.43698	13,935
Y_3600_A		190,520	Cts/S	2,587.7	1.3582	190,520

SN6180-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:16:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2090	ug/L	0.1742	83.36	-26.94
Al3961_R		-49.97	ug/L	7.867	15.74	69.97
As1891_A		4.594	ug/L	0.4287	9.331	-1.428
B_2089_A		62.26	ug/L	0.2672	0.4292	63.01
Ba4554_R		193.3	ug/L	1.077	0.5574	4,729
Be3130_R		-0.01312	ug/L	0.05636	429.6	-11.81
Ca3158_R	W	308,800	ug/L	246.6	0.07986	168,200
Cd2265_A		-0.06567	ug/L	0.1106	168.4	-0.7959
Co2286_A		17.57	ug/L	0.05466	0.3111	60.39
Cr2677_A		2.772	ug/L	0.6327	22.83	35.96
Cu3273_A		4.435	ug/L	1.420	32.01	-21.78
Fe2599_R		486.0	ug/L	1.079	0.2221	370.5
K_7664_R		9,173	ug/L	18.45	0.2012	2,600
Li6707_R		91.15	ug/L	0.6645	0.7290	389.9
Mg2025_A		29,390	ug/L	62.72	0.2135	6,559
Mn2576_R	W	9,801	ug/L	10.29	0.1050	38,570
Mo2020_A		11.13	ug/L	0.003652	0.03281	26.99
Na5895_R	W	258,600	ug/L	391.4	0.1514	232,800
Ni2316_A		28.55	ug/L	0.6249	2.189	46.69

SN6180-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:16:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.677	ug/L	1.722	102.7	-0.7431
Sb2068_A		-1.244	ug/L	1.620	130.2	0.1684
Se1960_A		4.927	ug/L	0.2368	4.806	5.175
Si2516_R		11,840	ug/L	33.20	0.2803	2,418
Sn1899_A		0.1500	ug/L	0.3500	233.2	2.257
Sr4215_R		1,093	ug/L	3.821	0.3496	35,570
Ti3349_A		1.762	ug/L	0.6912	39.22	-13.19
Tl1908_A		-2.126	ug/L	0.9357	44.02	-7.235
V_2924_A		-0.7216	ug/L	0.1518	21.04	-41.71
Zn2062_A		28.83	ug/L	0.4062	1.409	94.48
Y_3600_R		12,652	Cts/S	74.479	0.58868	12,652
Y_2243_A		13,138	Cts/S	33.041	0.25149	13,138
Y_3600_A		179,270	Cts/S	417.76	0.23303	179,270

SN6180-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:20:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.171	ug/L	0.07530	3.469	-19.46
Al3961_R		-15.32	ug/L	36.08	235.5	23.65
As1891_A		7.670	ug/L	3.197	41.69	-1.963
B_2089_A		70.08	ug/L	0.5930	0.8461	31.07
Ba4554_R		192.2	ug/L	0.1887	0.09820	1,943
Be3130_R		-0.1233	ug/L	0.1644	133.3	-13.16
Ca3158_R	W	313,000	ug/L	1,112	0.3553	68,990
Cd2265_A		-0.05939	ug/L	0.2894	487.2	-0.6410
Co2286_A		18.05	ug/L	0.09237	0.5116	30.36
Cr2677_A		2.113	ug/L	0.7890	37.34	13.13
Cu3273_A		4.548	ug/L	0.2631	5.786	-44.47
Fe2599_R		495.9	ug/L	14.85	2.994	154.7
K_7664_R		9,246	ug/L	278.0	3.006	1,026
Li6707_R		99.32	ug/L	11.32	11.39	185.5
Mg2025_A		30,020	ug/L	102.6	0.3419	2,767
Mn2576_R	W	9,982	ug/L	9.715	0.09733	15,900
Mo2020_A		12.48	ug/L	0.2317	1.856	12.55
Na5895_R	W	260,400	ug/L	750.4	0.2882	94,910
Ni2316_A		31.06	ug/L	0.02895	0.09319	20.77
Pb2203_A		1.096	ug/L	1.984	181.0	-1.891
Sb2068_A		-4.331	ug/L	3.630	83.81	-0.0009649
Se1960_A		12.79	ug/L	19.94	155.9	4.676
Si2516_R		11,800	ug/L	88.74	0.7522	978.4
Sn1899_A		-1.413	ug/L	0.8089	57.27	2.002
Sr4215_R		1,101	ug/L	1.953	0.1773	14,490
Ti3349_A		-0.09153	ug/L	0.5237	572.2	-47.23
Tl1908_A		0.3449	ug/L	2.218	642.9	-3.453
V_2924_A		-0.4824	ug/L	0.3587	74.35	-21.13
Zn2062_A		106.2	ug/L	0.4096	0.3856	143.1
Y_3600_R		12,800	Cts/S	15.554	0.12152	12,800
Y_2243_A		13,589	Cts/S	31.258	0.23002	13,589
Y_3600_A		186,370	Cts/S	1,636.7	0.87821	186,370

LCSONG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:24:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSONG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:24:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.95	ug/L	1.009	2.062	1,113
Al3961_R		2,087	ug/L	4.672	0.2239	1,675
As1891_A		100.1	ug/L	0.9223	0.9217	61.75
B_2089_A		495.8	ug/L	3.036	0.6124	976.0
Ba4554_R		2,026	ug/L	2.973	0.1467	95,080
Be3130_R		50.36	ug/L	0.002679	0.005320	3,378
Ca3158_R		2,577	ug/L	16.35	0.6346	2,708
Cd2265_A		248.4	ug/L	1.659	0.6678	5,794
Co2286_A		516.4	ug/L	2.756	0.5336	3,164
Cr2677_A		204.1	ug/L	0.9849	0.4826	4,037
Cu3273_A		251.0	ug/L	0.5517	0.2197	4,060
Fe2599_R		1,052	ug/L	5.414	0.5147	1,550
K_7664_R		10,110	ug/L	22.68	0.2244	5,635
Li6707_R		514.2	ug/L	2.135	0.4152	4,038
Mg2025_A		5,038	ug/L	26.71	0.5302	2,318
Mn2576_R		511.5	ug/L	2.392	0.4676	3,916
Mo2020_A		103.9	ug/L	0.5290	0.5092	521.3
Na5895_R		7,677	ug/L	20.00	0.2606	13,530
Ni2316_A		511.0	ug/L	4.040	0.7906	1,714
Pb2203_A		100.8	ug/L	1.354	1.343	176.1
Sb2068_A		99.76	ug/L	1.363	1.366	68.35
Se1960_A		102.3	ug/L	1.825	1.784	50.11
Si2516_R		1,033	ug/L	1.202	0.1164	417.0
Sn1899_A		550.3	ug/L	4.237	0.7700	505.9
Sr4215_R		511.8	ug/L	1.171	0.2288	32,390
Ti3349_A		507.1	ug/L	3.419	0.6741	18,470
Tl1908_A		102.1	ug/L	0.5505	0.5391	97.91
V_2924_A		496.3	ug/L	3.085	0.6217	8,394
Zn2062_A		496.9	ug/L	3.807	0.7662	3,247
Y_3600_R		12,299	Cts/S	47.805	0.38868	12,299
Y_2243_A		13,372	Cts/S	59.208	0.44276	13,372
Y_3600_A		182,840	Cts/S	2,217.7	1.2129	182,840

PBSNG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:29:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1387	ug/L	0.1063	76.62	-32.92
Al3961_R		9.532	ug/L	13.17	138.1	-10.21
As1891_A		0.9955	ug/L	1.660	166.7	-2.281
B_2089_A		7.583	ug/L	0.04891	0.6450	17.99
Ba4554_R		0.1404	ug/L	0.02042	14.54	72.29
Be3130_R		-0.005995	ug/L	0.01949	325.0	-11.63
Ca3158_R		47.37	ug/L	5.681	11.99	28.22
Cd2265_A		0.04003	ug/L	0.02127	53.14	0.3977
Co2286_A		-0.06232	ug/L	0.1671	268.1	7.502
Cr2677_A		0.5588	ug/L	0.3516	62.92	12.51
Cu3273_A		0.8010	ug/L	0.05053	6.309	-46.28
Fe2599_R		12.95	ug/L	0.1176	0.9087	22.21
K_7664_R		38.63	ug/L	19.24	49.80	-34.23
Li6707_R		1.406	ug/L	1.252	89.06	34.78
Mg2025_A		19.25	ug/L	0.3290	1.709	0.8289
Mn2576_R		1.891	ug/L	0.1021	5.398	17.76
Mo2020_A		0.7658	ug/L	0.1067	13.94	3.877
Na5895_R		39.46	ug/L	3.426	8.682	170.3
Ni2316_A		0.7575	ug/L	0.03529	4.658	2.134

PBSNG31ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:29:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.2874	ug/L	0.8279	288.1	-1.745
Sb2068_A		0.3503	ug/L	0.3045	86.92	0.5557
Se1960_A		2.011	ug/L	1.074	53.41	3.868
Si2516_R		39.59	ug/L	2.284	5.769	21.97
Sn1899_A		42.19	ug/L	0.2924	0.6930	40.97
Sr4215_R		0.1630	ug/L	0.09337	57.27	-9.443
Ti3349_A		1.156	ug/L	0.1202	10.40	-3.612
Tl1908_A		-0.5035	ug/L	0.3005	59.67	-1.979
V_2924_A		0.3133	ug/L	0.1089	34.77	-1.972
Zn2062_A		4.519	ug/L	0.09651	2.136	31.60
Y_3600_R		12,523	Cts/S	8.9244	0.071265	12,523
Y_2243_A		13,412	Cts/S	54.840	0.40890	13,412
Y_3600_A		186,400	Cts/S	1,502.3	0.80597	186,400

SN6234-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:33:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.418	ug/L	0.2543	4.694	35.01
Al3961_R		7,059	ug/L	11.32	0.1604	6,098
As1891_A		6.951	ug/L	0.2392	3.441	-0.01749
B_2089_A		92.25	ug/L	0.3631	0.3936	186.9
Ba4554_R		336.0	ug/L	0.8663	0.2579	16,880
Be3130_R		0.5718	ug/L	0.003107	0.5433	16.63
Ca3158_R	W	34,070	ug/L	16.21	0.04757	38,470
Cd2265_A		1.658	ug/L	0.0007830	0.04722	74.25
Co2286_A		10.11	ug/L	0.07448	0.7368	74.24
Cr2677_A		40.09	ug/L	0.4206	1.049	844.8
Cu3273_A		559.5	ug/L	2.714	0.4850	9,691
Fe2599_R		15,070	ug/L	46.31	0.3073	23,650
K_7664_R		5,468	ug/L	23.72	0.4337	3,226
Li6707_R		6.605	ug/L	0.7858	11.90	79.75
Mg2025_A		4,022	ug/L	9.518	0.2367	1,855
Mn2576_R		898.4	ug/L	0.3398	0.03782	7,332
Mo2020_A		8.247	ug/L	0.1053	1.276	42.06
Na5895_R		1,112	ug/L	6.069	0.5459	2,180
Ni2316_A		40.79	ug/L	0.06583	0.1614	137.1
Pb2203_A		58.24	ug/L	0.1803	0.3096	102.2
Sb2068_A		3.118	ug/L	0.1511	4.845	2.760
Se1960_A		7.861	ug/L	0.6933	8.819	7.023
Si2516_R		1,882	ug/L	8.077	0.4291	801.6
Sn1899_A		85.73	ug/L	0.006469	0.007545	82.13
Sr4215_R		111.5	ug/L	0.03039	0.02725	7,514
Ti3349_A		275.4	ug/L	1.827	0.6635	10,630
Tl1908_A		-1.070	ug/L	0.5668	52.97	-3.631
V_2924_A		16.69	ug/L	0.3539	2.120	289.5
Zn2062_A	W	1,200	ug/L	2.022	0.1685	7,982
Y_3600_R		13,122	Cts/S	11.443	0.087201	13,122
Y_2243_A		13,609	Cts/S	23.785	0.17478	13,609
Y_3600_A		194,240	Cts/S	369.31	0.19013	194,240

SN6235-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:37:57PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6235-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:37:57PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.349	ug/L	0.4211	7.873	-1,256
Al3961_R	W	186,300	ug/L	499.7	0.2682	163,200
As1891_A		170.4	ug/L	1.190	0.6985	78.07
B_2089_A		76.73	ug/L	1.037	1.351	155.9
Ba4554_R	W	1,338	ug/L	3.151	0.2355	67,970
Be3130_R		2.561	ug/L	0.09670	3.776	-159.0
Ca3158_R	W	321,100	ug/L	8,194	2.552	367,900
Cd2265_A		4.657	ug/L	0.7227	15.52	790.9
Co2286_A		208.4	ug/L	0.6996	0.3357	1,420
Cr2677_A		756.2	ug/L	5.351	0.7076	14,980
Cu3273_A	W	1,580	ug/L	8.754	0.5539	25,780
Fe2599_R	F	286,200	ug/L	5,243	1.832	455,400
K_7664_R	W	62,380	ug/L	144.0	0.2309	37,940
Li6707_R		271.3	ug/L	1.314	0.4844	2,316
Mg2025_A	W	119,500	ug/L	552.1	0.4619	55,260
Mn2576_R	W	5,032	ug/L	19.11	0.3798	41,580
Mo2020_A		10.44	ug/L	0.2176	2.084	50.84
Na5895_R		5,723	ug/L	13.03	0.2276	10,940
Ni2316_A	W	1,038	ug/L	4.226	0.4073	3,498
Pb2203_A	W	1,051	ug/L	3.876	0.3689	1,864
Sb2068_A		12.57	ug/L	0.3112	2.476	17.00
Se1960_A		3.262	ug/L	4.027	123.4	8.534
Si2516_R		2,436	ug/L	21.68	0.8902	1,076
Sn1899_A		79.25	ug/L	0.4946	0.6241	75.95
Sr4215_R	W	1,224	ug/L	2.616	0.2138	83,800
Ti3349_A	W	10,060	ug/L	113.4	1.128	367,600
Tl1908_A		-5.096	ug/L	0.5353	10.50	-17.85
V_2924_A	W	3,397	ug/L	19.37	0.5704	57,760
Zn2062_A	W	1,711	ug/L	6.947	0.4061	11,350
Y_3600_R		13,306	Cts/S	194.73	1.4635	13,306
Y_2243_A		13,586	Cts/S	24.814	0.18265	13,586
Y_3600_A		183,100	Cts/S	698.09	0.38126	183,100

SN6235-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:43:30PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		7.124	ug/L	0.3914	5.493	-1,086
Al3961_R	W	220,900	ug/L	304.3	0.1377	196,900
As1891_A		65.36	ug/L	2.350	3.595	15.66
B_2089_A		11.91	ug/L	0.4022	3.378	27.99
Ba4554_R	W	1,262	ug/L	2.735	0.2167	65,270
Be3130_R		4.169	ug/L	0.1484	3.559	-318.3
Ca3158_R	W	53,850	ug/L	0.05867	0.0001090	62,810
Cd2265_A		1.035	ug/L	0.09241	8.927	605.4
Co2286_A		108.4	ug/L	0.2091	0.1928	859.8
Cr2677_A	W	1,197	ug/L	9.647	0.8060	24,740
Cu3273_A		348.4	ug/L	2.745	0.7878	5,741
Fe2599_R	W	230,400	ug/L	772.1	0.3351	373,400
K_7664_R	W	78,760	ug/L	22.04	0.02798	48,790
Li6707_R		211.8	ug/L	0.8726	0.4121	1,847
Mg2025_A	W	138,400	ug/L	313.0	0.2262	66,550
Mn2576_R	W	6,503	ug/L	10.50	0.1614	54,750
Mo2020_A		3.006	ug/L	0.04345	1.445	15.14
Na5895_R		7,818	ug/L	30.96	0.3961	15,170
Ni2316_A		579.1	ug/L	1.627	0.2809	2,023

SN6235-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:43:30PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		371.6	ug/L	0.1704	0.04587	655.1
Sb2068_A		22.67	ug/L	0.3867	1.706	28.14
Se1960_A		2.723	ug/L	0.1290	4.738	8.897
Si2516_R		2,740	ug/L	24.44	0.8921	1,244
Sn1899_A		46.97	ug/L	0.3004	0.6395	47.82
Sr4215_R		269.4	ug/L	0.02965	0.01101	18,770
Ti3349_A	W	12,630	ug/L	117.3	0.9290	481,800
Tl1908_A		-3.902	ug/L	0.1278	3.276	-23.92
V_2924_A		496.6	ug/L	3.738	0.7528	8,875
Zn2062_A		535.0	ug/L	1.324	0.2474	3,689
Y_3600_R		13,549	Cts/S	52.777	0.38954	13,549
Y_2243_A		14,138	Cts/S	6.4566	0.045667	14,138
Y_3600_A		191,100	Cts/S	568.11	0.29728	191,100

SN6235-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:48:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.676	ug/L	0.3919	6.904	-1,185
Al3961_R	W	138,400	ug/L	658.8	0.4761	122,500
As1891_A		140.2	ug/L	2.036	1.452	60.81
B_2089_A		30.91	ug/L	0.03734	0.1208	66.92
Ba4554_R		780.1	ug/L	2.028	0.2600	40,070
Be3130_R		2.130	ug/L	0.08837	4.148	-98.99
Ca3158_R	W	130,600	ug/L	523.3	0.4006	151,300
Cd2265_A		2.489	ug/L	0.1076	4.322	722.7
Co2286_A		140.1	ug/L	0.03436	0.02453	978.5
Cr2677_A		818.8	ug/L	8.966	1.095	16,940
Cu3273_A		513.9	ug/L	6.049	1.177	8,643
Fe2599_R	F	275,300	ug/L	891.0	0.3236	442,900
K_7664_R	W	43,240	ug/L	142.5	0.3296	26,560
Li6707_R		221.0	ug/L	0.3782	0.1711	1,912
Mg2025_A	W	107,500	ug/L	259.6	0.2414	50,820
Mn2576_R	W	5,568	ug/L	12.15	0.2183	46,520
Mo2020_A		22.61	ug/L	0.09991	0.4419	116.4
Na5895_R		2,636	ug/L	12.27	0.4655	5,149
Ni2316_A	W	1,300	ug/L	2.485	0.1912	4,491
Pb2203_A	W	1,135	ug/L	2.256	0.1988	2,070
Sb2068_A		16.18	ug/L	1.204	7.444	20.67
Se1960_A		2.919	ug/L	0.06230	2.134	8.401
Si2516_R		2,550	ug/L	26.43	1.036	1,122
Sn1899_A		56.53	ug/L	0.2780	0.4917	56.06
Sr4215_R		467.2	ug/L	1.685	0.3607	32,330
Ti3349_A	W	6,521	ug/L	53.95	0.8274	248,900
Tl1908_A		-2.719	ug/L	0.1873	6.888	-14.62
V_2924_A	W	1,697	ug/L	18.55	1.093	30,120
Zn2062_A	W	1,017	ug/L	1.998	0.1965	6,896
Y_3600_R		13,450	Cts/S	15.976	0.11879	13,450
Y_2243_A		13,889	Cts/S	13.502	0.097218	13,889
Y_3600_A		191,230	Cts/S	2,308.8	1.2074	191,230

SN6236-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:54:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6236-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:54:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.403	ug/L	0.5403	8.438	-1,021
Al3961_R	W	167,600	ug/L	370.2	0.2209	143,500
As1891_A		99.38	ug/L	0.4922	0.4953	36.03
B_2089_A		11.01	ug/L	0.2250	2.043	25.30
Ba4554_R		828.8	ug/L	4.236	0.5111	41,210
Be3130_R		4.061	ug/L	0.06286	1.548	-62.99
Ca3158_R		24,980	ug/L	109.7	0.4392	27,980
Cd2265_A		0.8957	ug/L	0.3174	35.43	604.4
Co2286_A		109.4	ug/L	1.001	0.9153	778.3
Cr2677_A		629.2	ug/L	1.559	0.2478	12,580
Cu3273_A	W	1,500	ug/L	4.707	0.3138	24,710
Fe2599_R	W	244,700	ug/L	1,666	0.6808	381,000
K_7664_R	W	36,640	ug/L	47.08	0.1285	21,780
Li6707_R		238.1	ug/L	1.001	0.4203	1,992
Mg2025_A	W	122,900	ug/L	829.0	0.6746	57,010
Mn2576_R	W	3,393	ug/L	12.93	0.3812	27,430
Mo2020_A		4.911	ug/L	0.03958	0.8059	24.64
Na5895_R		3,090	ug/L	7.775	0.2516	5,826
Ni2316_A		456.9	ug/L	1.786	0.3908	1,532
Pb2203_A	W	1,263	ug/L	7.374	0.5837	2,258
Sb2068_A		11.65	ug/L	1.127	9.675	16.90
Se1960_A		1.930	ug/L	1.839	95.25	7.238
Si2516_R		2,116	ug/L	13.59	0.6421	909.6
Sn1899_A		50.99	ug/L	0.8577	1.682	49.87
Sr4215_R		118.5	ug/L	0.6569	0.5544	7,920
Ti3349_A	W	7,428	ug/L	3.860	0.05197	274,000
Tl1908_A		-3.419	ug/L	1.206	35.28	-14.48
V_2924_A		437.8	ug/L	1.236	0.2822	7,558
Zn2062_A		941.7	ug/L	4.476	0.4753	6,273
Y_3600_R		13,019	Cts/S	80.192	0.61597	13,019
Y_2243_A		13,639	Cts/S	37.142	0.27233	13,639
Y_3600_A		184,820	Cts/S	338.52	0.18317	184,820

SN6236-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:59:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.079	ug/L	0.2164	4.260	-758.3
Al3961_R	W	101,800	ug/L	260.7	0.2561	88,760
As1891_A		122.3	ug/L	1.389	1.136	61.00
B_2089_A		11.16	ug/L	0.04514	0.4045	26.38
Ba4554_R		517.7	ug/L	2.231	0.4310	26,240
Be3130_R		3.174	ug/L	0.1263	3.981	-102.2
Ca3158_R		24,860	ug/L	33.93	0.1365	28,360
Cd2265_A		1.231	ug/L	0.09693	7.876	445.2
Co2286_A		71.37	ug/L	0.3011	0.4219	547.4
Cr2677_A		374.4	ug/L	3.426	0.9151	7,757
Cu3273_A		407.1	ug/L	4.920	1.209	6,831
Fe2599_R	W	168,500	ug/L	319.2	0.1894	267,200
K_7664_R		21,280	ug/L	23.57	0.1108	12,850
Li6707_R		155.5	ug/L	3.500	2.250	1,334
Mg2025_A	W	56,480	ug/L	357.8	0.6336	26,890
Mn2576_R	W	2,765	ug/L	9.603	0.3473	22,760
Mo2020_A		7.492	ug/L	0.05750	0.7674	38.89
Na5895_R		1,924	ug/L	1.870	0.09721	3,734
Ni2316_A		327.3	ug/L	1.169	0.3573	1,127

SN6236-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 6:59:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		810.0	ug/L	3.799	0.4690	1,486
Sb2068_A		8.174	ug/L	0.3322	4.064	11.64
Se1960_A		2.797	ug/L	0.3378	12.08	6.807
Si2516_R		2,318	ug/L	0.2094	0.009031	1,015
Sn1899_A		65.24	ug/L	0.04710	0.07220	64.83
Sr4215_R		94.21	ug/L	0.2387	0.2534	6,409
Ti3349_A	W	6,880	ug/L	75.27	1.094	263,000
Tl1908_A		-2.840	ug/L	0.2884	10.15	-13.43
V_2924_A		420.8	ug/L	4.325	1.028	7,532
Zn2062_A		865.8	ug/L	5.482	0.6332	5,919
Y_3600_R		13,258	Cts/S	49.308	0.37191	13,258
Y_2243_A		13,995	Cts/S	87.907	0.62815	13,995
Y_3600_A		191,510	Cts/S	1,716.4	0.89628	191,510

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:04:51PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		489.1	ug/L	6.019	1.231	11,990
Al3961_R		12,250	ug/L	18.05	0.1474	10,390
As1891_A		491.9	ug/L	2.409	0.4897	323.9
B_2089_A		488.1	ug/L	0.4203	0.08612	1,008
Ba4554_R		481.3	ug/L	0.7585	0.1576	23,730
Be3130_R		475.0	ug/L	0.8644	0.1820	33,500
Ca3158_R		12,220	ug/L	31.46	0.2575	13,540
Cd2265_A		485.6	ug/L	0.7710	0.1588	11,700
Co2286_A		501.4	ug/L	0.9112	0.1817	3,167
Cr2677_A		488.1	ug/L	4.708	0.9646	10,090
Cu3273_A		479.9	ug/L	5.566	1.160	8,167
Fe2599_R		12,190	ug/L	42.28	0.3470	18,790
K_7664_R		12,100	ug/L	17.24	0.1424	7,085
Li6707_R	W	472.1	ug/L	0.9359	0.1982	3,888
Mg2025_A		12,510	ug/L	4.619	0.03691	5,897
Mn2576_R		497.1	ug/L	0.2205	0.04435	3,988
Mo2020_A		494.5	ug/L	2.521	0.5099	2,559
Na5895_R		11,970	ug/L	3.410	0.02849	22,050
Ni2316_A		492.4	ug/L	0.3529	0.07166	1,712
Pb2203_A		493.8	ug/L	1.815	0.3676	898.3
Sb2068_A		482.5	ug/L	0.1236	0.02562	355.4
Se1960_A		495.3	ug/L	2.154	0.4349	238.2
Si2516_R		12,260	ug/L	16.33	0.1332	5,095
Sn1899_A		486.3	ug/L	0.6132	0.1261	461.2
Sr4215_R		479.9	ug/L	1.102	0.2297	31,830
Ti3349_A		495.3	ug/L	6.977	1.409	18,860
Tl1908_A		505.3	ug/L	0.8706	0.1723	500.7
V_2924_A		474.4	ug/L	5.212	1.099	8,332
Zn2062_A		485.7	ug/L	0.09433	0.01942	3,270
Y_3600_R		12,892	Cts/S	8.5103	0.066013	12,892
Y_2243_A		13,786	Cts/S	18.210	0.13209	13,786
Y_3600_A		191,070	Cts/S	1,418.7	0.74250	191,070

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:09:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:09:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3427	ug/L	0.08232	24.03	-22.37
Al3961_R		4.035	ug/L	8.445	209.3	-15.50
As1891_A		1.557	ug/L	0.03301	2.120	-2.009
B_2089_A		1.059	ug/L	0.01866	1.761	5.509
Ba4554_R		-0.1874	ug/L	0.1729	92.27	59.63
Be3130_R		0.04323	ug/L	0.06956	160.9	-8.676
Ca3158_R		13.28	ug/L	2.727	20.54	-8.986
Cd2265_A		0.01228	ug/L	0.03969	323.2	-0.2824
Co2286_A		-0.01574	ug/L	0.02795	177.6	8.174
Cr2677_A		0.2478	ug/L	0.3346	135.0	6.590
Cu3273_A		0.006400	ug/L	0.4829	7,545	-62.61
Fe2599_R		4.541	ug/L	1.301	28.64	10.12
K_7664_R		4.189	ug/L	54.25	1,295	-56.79
Li6707_R		-0.2738	ug/L	1.132	413.3	22.58
Mg2025_A		2.690	ug/L	1.376	51.13	-7.060
Mn2576_R		0.1237	ug/L	0.4782	386.7	4.214
Mo2020_A		1.763	ug/L	0.2475	14.04	9.344
Na5895_R		-38.58	ug/L	4.016	10.41	33.01
Ni2316_A		0.2041	ug/L	0.2311	113.3	0.3132
Pb2203_A		-0.1344	ug/L	0.5448	405.3	-2.626
Sb2068_A		0.01436	ug/L	0.5666	3,947	0.6669
Se1960_A		2.702	ug/L	0.1772	6.556	4.399
Si2516_R		17.65	ug/L	6.801	38.52	13.82
Sn1899_A		-0.6810	ug/L	0.1678	24.64	1.691
Sr4215_R		0.04361	ug/L	0.2030	465.5	-18.03
Ti3349_A		0.9128	ug/L	0.1791	19.62	-13.27
Tl1908_A		0.9512	ug/L	0.07117	7.482	-0.6025
V_2924_A		0.3458	ug/L	0.01161	3.358	-1.552
Zn2062_A		0.2913	ug/L	0.06096	20.93	4.100
Y_3600_R		13,187	Cts/S	34.018	0.25797	13,187
Y_2243_A		14,088	Cts/S	12.238	0.086872	14,088
Y_3600_A		195,840	Cts/S	584.50	0.29845	195,840

SN6236-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:13:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		4.027	ug/L	0.8191	20.34	-481.7
Al3961_R	W	79,100	ug/L	446.7	0.5647	67,730
As1891_A		117.4	ug/L	1.365	1.162	63.32
B_2089_A		11.44	ug/L	0.3087	2.698	26.48
Ba4554_R		346.2	ug/L	3.481	1.006	17,260
Be3130_R		2.609	ug/L	0.1039	3.982	-27.51
Ca3158_R		12,390	ug/L	62.68	0.5059	13,870
Cd2265_A		0.7980	ug/L	0.1129	14.15	284.5
Co2286_A		59.66	ug/L	0.3577	0.5996	437.0
Cr2677_A		237.2	ug/L	4.755	2.005	4,879
Cu3273_A		226.5	ug/L	3.616	1.597	3,737
Fe2599_R	W	109,400	ug/L	1,012	0.9243	170,500
K_7664_R		16,150	ug/L	107.1	0.6631	9,570
Li6707_R		102.5	ug/L	0.6120	0.5969	872.1
Mg2025_A	W	41,210	ug/L	37.97	0.09213	19,330
Mn2576_R	W	2,618	ug/L	13.74	0.5249	21,180
Mo2020_A		5.917	ug/L	0.04414	0.7461	30.20
Na5895_R		1,359	ug/L	12.56	0.9237	2,622
Ni2316_A		282.2	ug/L	0.8639	0.3062	961.4

SN6236-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:13:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		303.0	ug/L	0.7996	0.2639	539.5
Sb2068_A		5.049	ug/L	0.1241	2.458	7.390
Se1960_A		2.841	ug/L	0.2270	7.990	6.182
Si2516_R		2,523	ug/L	24.03	0.9524	1,076
Sn1899_A		51.93	ug/L	0.7919	1.525	51.31
Sr4215_R		62.42	ug/L	0.3037	0.4866	4,164
Ti3349_A	W	4,481	ug/L	75.31	1.681	170,000
Tl1908_A		-2.433	ug/L	0.7786	32.01	-10.45
V_2924_A		342.4	ug/L	7.397	2.160	6,067
Zn2062_A		393.2	ug/L	1.630	0.4147	2,649
Y_3600_R		13,023	Cts/S	101.51	0.77942	13,023
Y_2243_A		13,789	Cts/S	32.959	0.23902	13,789
Y_3600_A		190,110	Cts/S	3,399.1	1.7880	190,110

SN6250-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:17:51PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2919	ug/L	0.1333	45.67	-23.25
Al3961_R		57.00	ug/L	3.720	6.526	58.13
As1891_A		77.71	ug/L	2.346	3.019	46.60
B_2089_A		562.2	ug/L	10.26	1.825	1,084
Ba4554_R		20.83	ug/L	0.3006	1.443	1,092
Be3130_R		0.03824	ug/L	0.07041	184.1	-8.874
Ca3158_R	W	39,440	ug/L	394.8	1.001	43,790
Cd2265_A		1.762	ug/L	0.07835	4.448	40.39
Co2286_A		2.908	ug/L	0.3119	10.72	25.24
Cr2677_A		1.690	ug/L	0.03417	2.022	35.04
Cu3273_A		3.682	ug/L	0.01714	0.4655	1.848
Fe2599_R		229.9	ug/L	0.3608	0.1570	357.5
K_7664_R	W	76,730	ug/L	82.28	0.1072	45,250
Li6707_R		3.284	ug/L	1.171	35.67	51.19
Mg2025_A	W	25,670	ug/L	517.8	2.017	11,490
Mn2576_R		95.66	ug/L	0.8220	0.8593	776.7
Mo2020_A		2.781	ug/L	0.02826	1.016	13.76
Na5895_R	W	95,960	ug/L	355.4	0.3703	176,100
Ni2316_A		4.413	ug/L	0.1324	3.000	14.18
Pb2203_A		0.07741	ug/L	0.5681	733.8	-2.094
Sb2068_A		0.3879	ug/L	0.4614	118.9	0.5935
Se1960_A		1.249	ug/L	1.295	103.7	3.475
Si2516_R		108.3	ug/L	8.588	7.931	51.16
Sn1899_A		40.67	ug/L	1.222	3.005	38.83
Sr4215_R	W	1,863	ug/L	9.147	0.4910	123,700
Ti3349_A		5.862	ug/L	0.3713	6.335	169.5
Tl1908_A		-0.5960	ug/L	0.7443	124.9	-2.107
V_2924_A		4.647	ug/L	0.06795	1.462	71.35
Zn2062_A		205.5	ug/L	4.151	2.020	1,324
Y_3600_R		12,898	Cts/S	21.099	0.16359	12,898
Y_2243_A		13,166	Cts/S	220.09	1.6716	13,166
Y_3600_A		184,080	Cts/S	65.853	0.035775	184,080

SN6250-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:22:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6250-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:22:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1434	ug/L	0.5792	404.1	-33.52
Al3961_R		127.5	ug/L	6.382	5.007	115.7
As1891_A		55.95	ug/L	1.222	2.184	32.79
B_2089_A		546.8	ug/L	2.496	0.4564	1,056
Ba4554_R		20.33	ug/L	0.1627	0.8006	1,072
Be3130_R		0.01826	ug/L	0.05730	313.9	-10.51
Ca3158_R	W	35,690	ug/L	66.14	0.1853	39,790
Cd2265_A		0.9511	ug/L	0.01544	1.623	21.82
Co2286_A		1.119	ug/L	0.1649	14.74	14.54
Cr2677_A		1.372	ug/L	0.03420	2.492	28.54
Cu3273_A		4.782	ug/L	0.4621	9.663	19.96
Fe2599_R		227.5	ug/L	6.238	2.742	355.5
K_7664_R	W	46,400	ug/L	85.64	0.1846	27,460
Li6707_R		2.375	ug/L	0.3675	15.47	43.95
Mg2025_A	W	31,340	ug/L	95.77	0.3056	14,040
Mn2576_R		28.11	ug/L	0.5455	1.941	237.3
Mo2020_A		1.029	ug/L	0.2301	22.37	5.110
Na5895_R	W	118,000	ug/L	247.8	0.2099	217,600
Ni2316_A		1.593	ug/L	0.09151	5.743	4.839
Pb2203_A		0.3966	ug/L	0.4875	122.9	-1.540
Sb2068_A		0.7422	ug/L	0.4035	54.37	0.8474
Se1960_A		2.675	ug/L	0.5663	21.17	4.113
Si2516_R		232.1	ug/L	3.515	1.515	103.0
Sn1899_A		40.30	ug/L	0.3610	0.8957	38.55
Sr4215_R	W	1,661	ug/L	6.372	0.3837	110,700
Ti3349_A		6.584	ug/L	0.09671	1.469	195.4
Tl1908_A		-0.6156	ug/L	0.3944	64.07	-2.075
V_2924_A		1.890	ug/L	0.4366	23.10	24.78
Zn2062_A		61.57	ug/L	0.2268	0.3683	398.4
Y_3600_R		12,956	Cts/S	23.542	0.18171	12,956
Y_2243_A		13,180	Cts/S	51.657	0.39194	13,180
Y_3600_A		183,590	Cts/S	20.482	0.011156	183,590

SN6250-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:27:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1577	ug/L	0.2108	133.6	-33.16
Al3961_R		43.95	ug/L	18.83	42.84	44.17
As1891_A		123.4	ug/L	0.7065	0.5726	74.40
B_2089_A		627.4	ug/L	0.4038	0.06436	1,189
Ba4554_R		25.54	ug/L	0.1713	0.6709	1,293
Be3130_R		-0.05197	ug/L	0.02051	39.46	-14.88
Ca3158_R	W	36,860	ug/L	73.90	0.2005	39,970
Cd2265_A		1.781	ug/L	0.01783	1.001	40.25
Co2286_A		2.228	ug/L	0.03515	1.577	20.79
Cr2677_A		1.552	ug/L	0.5841	37.64	31.36
Cu3273_A		7.412	ug/L	1.017	13.72	61.71
Fe2599_R		279.0	ug/L	1.859	0.6664	423.2
K_7664_R	W	66,890	ug/L	134.1	0.2004	38,520
Li6707_R		0.6780	ug/L	1.106	163.1	29.14
Mg2025_A	W	28,690	ug/L	16.71	0.05825	12,620
Mn2576_R		83.78	ug/L	0.7039	0.8403	666.2
Mo2020_A		2.049	ug/L	0.03989	1.947	9.961
Na5895_R	W	102,500	ug/L	137.4	0.1341	183,700
Ni2316_A		1.850	ug/L	0.01314	0.7101	5.601

SN6250-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:27:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3842	ug/L	0.9871	256.9	-1.515
Sb2068_A		-0.08227	ug/L	0.1112	135.1	0.2598
Se1960_A		2.632	ug/L	0.4358	16.56	4.035
Si2516_R		103.6	ug/L	7.495	7.236	48.04
Sn1899_A		41.05	ug/L	0.02484	0.06051	38.50
Sr4215_R	W	1,848	ug/L	5.952	0.3221	119,800
Ti3349_A		4.229	ug/L	0.2472	5.846	106.4
Tl1908_A		-0.4189	ug/L	0.5146	122.9	-1.902
V_2924_A		3.196	ug/L	0.02036	0.6370	45.40
Zn2062_A		137.7	ug/L	0.01021	0.007413	872.2
Y_3600_R		12,596	Cts/S	68.413	0.54311	12,596
Y_2243_A		12,937	Cts/S	18.399	0.14222	12,937
Y_3600_A		178,990	Cts/S	753.41	0.42093	178,990

SN6284-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:32:36PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		20.45	ug/L	0.4785	2.340	-944.7
Al3961_R	W	194,000	ug/L	277.4	0.1430	173,100
As1891_A		116.3	ug/L	0.3575	0.3075	41.11
B_2089_A		116.6	ug/L	0.2462	0.2112	236.3
Ba4554_R		844.2	ug/L	1.053	0.1247	43,690
Be3130_R		4.775	ug/L	0.06664	1.395	-28.96
Ca3158_R	W	305,000	ug/L	2,782	0.9121	355,900
Cd2265_A		8.631	ug/L	0.08888	1.030	920.6
Co2286_A		150.3	ug/L	0.8560	0.5694	1,049
Cr2677_A		661.4	ug/L	0.1737	0.02626	13,320
Cu3273_A		369.1	ug/L	0.9346	0.2532	5,965
Fe2599_R	F	300,900	ug/L	11.58	0.003847	487,700
K_7664_R	W	53,480	ug/L	21.31	0.03984	33,120
Li6707_R		273.2	ug/L	1.241	0.4544	2,375
Mg2025_A	W	142,200	ug/L	133.1	0.09357	66,040
Mn2576_R	W	6,498	ug/L	5.659	0.08709	54,700
Mo2020_A		14.37	ug/L	0.03925	0.2731	72.31
Na5895_R		5,647	ug/L	31.89	0.5647	10,990
Ni2316_A	W	1,166	ug/L	2.437	0.2090	3,953
Pb2203_A		288.5	ug/L	1.042	0.3611	490.8
Sb2068_A		33.60	ug/L	0.09353	0.2783	33.68
Se1960_A		3.216	ug/L	0.1512	4.701	9.109
Si2516_R		3,757	ug/L	6.791	0.1808	1,664
Sn1899_A		46.90	ug/L	0.08710	0.1857	46.10
Sr4215_R	W	1,061	ug/L	4.201	0.3959	74,000
Ti3349_A	W	8,619	ug/L	22.77	0.2642	320,100
Tl1908_A		-3.665	ug/L	0.5390	14.71	-18.40
V_2924_A	W	1,317	ug/L	1.936	0.1471	22,770
Zn2062_A		787.2	ug/L	2.228	0.2831	5,247
Y_3600_R		13,550	Cts/S	166.45	1.2284	13,550
Y_2243_A		13,650	Cts/S	11.809	0.086513	13,650
Y_3600_A		186,040	Cts/S	558.45	0.30018	186,040

SN6284-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:38:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6284-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:38:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.501	ug/L	0.2892	4.449	-907.8
Al3961_R	W	134,400	ug/L	744.5	0.5540	118,400
As1891_A		104.2	ug/L	0.9145	0.8778	42.48
B_2089_A		34.63	ug/L	0.3396	0.9806	72.64
Ba4554_R		874.5	ug/L	2.739	0.3132	44,700
Be3130_R		2.378	ug/L	0.09648	4.058	-187.5
Ca3158_R	W	181,200	ug/L	337.2	0.1861	208,900
Cd2265_A		1.474	ug/L	0.1922	13.04	545.9
Co2286_A		145.6	ug/L	0.01630	0.01120	1,002
Cr2677_A		604.2	ug/L	2.111	0.3493	12,240
Cu3273_A		295.3	ug/L	0.8153	0.2761	4,784
Fe2599_R	W	214,000	ug/L	2,543	1.188	342,700
K_7664_R	W	52,680	ug/L	147.1	0.2792	32,220
Li6707_R		189.7	ug/L	1.034	0.5449	1,637
Mg2025_A	W	91,590	ug/L	7.786	0.008500	42,440
Mn2576_R	W	3,868	ug/L	26.48	0.6846	32,160
Mo2020_A		13.97	ug/L	0.08938	0.6398	70.80
Na5895_R		6,034	ug/L	2.104	0.03486	11,600
Ni2316_A		480.0	ug/L	0.3639	0.07581	1,612
Pb2203_A		464.4	ug/L	1.571	0.3383	816.7
Sb2068_A		11.87	ug/L	0.6073	5.115	16.00
Se1960_A		2.418	ug/L	1.701	70.35	7.191
Si2516_R		2,173	ug/L	3.348	0.1540	962.7
Sn1899_A		53.39	ug/L	0.02753	0.05156	52.03
Sr4215_R		879.6	ug/L	2.095	0.2382	60,590
Ti3349_A	W	7,523	ug/L	24.25	0.3223	281,200
Tl1908_A		-2.283	ug/L	0.8652	37.90	-13.89
V_2924_A		545.6	ug/L	1.017	0.1864	9,525
Zn2062_A		512.7	ug/L	0.4982	0.09717	3,409
Y_3600_R		13,386	Cts/S	4.0070	0.029934	13,386
Y_2243_A		13,618	Cts/S	6.3800	0.046851	13,618
Y_3600_A		187,240	Cts/S	343.81	0.18362	187,240

SN6284-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:43:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.489	ug/L	0.2550	7.309	-655.3
Al3961_R	W	96,220	ug/L	400.8	0.4166	82,580
As1891_A		68.37	ug/L	0.8258	1.208	24.62
B_2089_A		10.78	ug/L	0.4649	4.312	24.61
Ba4554_R		671.2	ug/L	0.5797	0.08638	33,450
Be3130_R		1.634	ug/L	0.03773	2.309	11.25
Ca3158_R	W	69,300	ug/L	451.0	0.6509	77,830
Cd2265_A		0.5457	ug/L	0.002397	0.4392	382.6
Co2286_A		113.9	ug/L	0.3800	0.3336	741.7
Cr2677_A		563.9	ug/L	0.9023	0.1600	11,480
Cu3273_A		126.9	ug/L	0.3137	0.2473	2,031
Fe2599_R	W	159,500	ug/L	150.5	0.09438	248,900
K_7664_R		22,130	ug/L	51.97	0.2348	13,160
Li6707_R		134.6	ug/L	0.8404	0.6243	1,139
Mg2025_A	W	82,650	ug/L	37.83	0.04578	37,980
Mn2576_R	W	2,758	ug/L	14.09	0.5108	22,350
Mo2020_A		5.155	ug/L	0.1069	2.074	25.66
Na5895_R		1,467	ug/L	10.08	0.6873	2,826
Ni2316_A	W	1,016	ug/L	1.427	0.1404	3,422

SN6284-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:43:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		184.3	ug/L	0.1818	0.09861	314.2
Sb2068_A		8.146	ug/L	0.4182	5.134	11.50
Se1960_A		1.418	ug/L	0.3091	21.80	5.837
Si2516_R		3,784	ug/L	46.00	1.216	1,595
Sn1899_A		42.51	ug/L	0.8532	2.007	41.56
Sr4215_R		298.0	ug/L	0.9493	0.3185	19,990
Ti3349_A	W	2,417	ug/L	5.243	0.2169	90,790
Tl1908_A		-3.142	ug/L	0.06052	1.926	-8.810
V_2924_A		502.5	ug/L	1.254	0.2496	8,764
Zn2062_A		386.0	ug/L	0.2485	0.06438	2,546
Y_3600_R		13,046	Cts/S	144.52	1.1078	13,046
Y_2243_A		13,509	Cts/S	2.7832	0.020603	13,509
Y_3600_A		188,190	Cts/S	99.804	0.053034	188,190

SN6274-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:48:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6967	ug/L	0.04162	5.973	-84.75
Al3961_R		5.251	ug/L	1.667	31.75	19.05
As1891_A		0.6165	ug/L	0.2828	45.87	-4.443
B_2089_A		5.899	ug/L	0.003386	0.05739	14.85
Ba4554_R		15.45	ug/L	0.3084	1.996	835.5
Be3130_R		0.09140	ug/L	0.1702	186.2	-5.156
Ca3158_R	W	46,010	ug/L	83.78	0.1821	51,570
Cd2265_A		0.01082	ug/L	0.03387	313.1	40.40
Co2286_A		-0.2759	ug/L	0.04367	15.83	6.810
Cr2677_A		0.3899	ug/L	0.07019	18.00	9.493
Cu3273_A		2.182	ug/L	0.06334	2.902	-27.50
Fe2599_R		17,510	ug/L	80.14	0.4576	27,280
K_7664_R		6,243	ug/L	10.11	0.1619	3,663
Li6707_R		5.402	ug/L	0.7337	13.58	69.20
Mg2025_A		6,212	ug/L	0.9500	0.01529	2,865
Mn2576_R		349.1	ug/L	0.09015	0.02582	2,828
Mo2020_A		-0.1707	ug/L	0.1909	111.9	-0.8868
Na5895_R		23,120	ug/L	29.97	0.1296	42,920
Ni2316_A		-0.08071	ug/L	0.03404	42.18	-2.836
Pb2203_A		-0.08279	ug/L	0.2760	333.3	-1.742
Sb2068_A		-1.119	ug/L	0.1409	12.59	0.1717
Se1960_A		1.205	ug/L	0.4182	34.69	3.744
Si2516_R		4,206	ug/L	13.42	0.3192	1,768
Sn1899_A		0.4538	ug/L	0.4793	105.6	2.687
Sr4215_R		134.5	ug/L	0.3196	0.2377	8,995
Ti3349_A		1.430	ug/L	0.1347	9.417	6.587
Tl1908_A		0.1082	ug/L	0.2575	238.0	-1.778
V_2924_A		0.3408	ug/L	0.1111	32.60	-2.130
Zn2062_A		1.399	ug/L	0.01011	0.7225	11.31
Y_3600_R		13,022	Cts/S	23.908	0.18360	13,022
Y_2243_A		13,595	Cts/S	14.874	0.10941	13,595
Y_3600_A		186,670	Cts/S	362.93	0.19442	186,670

SN6274-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:53:05PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6274-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:53:05PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1295	ug/L	0.05692	43.96	-34.62
Al3961_R		142.5	ug/L	0.4154	0.2915	151.7
As1891_A		1.287	ug/L	0.8430	65.49	-2.132
B_2089_A		29.12	ug/L	0.2034	0.6985	60.07
Ba4554_R		6.881	ug/L	0.1001	1.454	408.1
Be3130_R		0.03427	ug/L	0.03770	110.0	-9.610
Ca3158_R	W	67,720	ug/L	109.5	0.1617	75,600
Cd2265_A		0.03514	ug/L	0.05217	148.5	1.248
Co2286_A		0.3827	ug/L	0.07554	19.74	10.31
Cr2677_A		0.9620	ug/L	0.005906	0.6139	21.28
Cu3273_A		5.775	ug/L	0.2887	4.999	36.82
Fe2599_R		429.4	ug/L	1.167	0.2717	668.9
K_7664_R		6,987	ug/L	31.53	0.4513	4,089
Li6707_R		15.02	ug/L	1.312	8.738	148.1
Mg2025_A		16,850	ug/L	62.16	0.3689	7,668
Mn2576_R		364.6	ug/L	1.121	0.3074	2,947
Mo2020_A		-0.02972	ug/L	0.02807	94.46	-0.1665
Na5895_R	W	69,250	ug/L	31.11	0.04492	127,800
Ni2316_A		2.110	ug/L	0.1339	6.349	6.603
Pb2203_A		0.2193	ug/L	0.8899	405.7	-1.872
Sb2068_A		1.249	ug/L	0.9754	78.12	1.525
Se1960_A		-0.4427	ug/L	0.6517	147.2	2.826
Si2516_R		11,570	ug/L	46.43	0.4014	4,834
Sn1899_A		0.5845	ug/L	0.1216	20.81	2.768
Sr4215_R		534.4	ug/L	1.490	0.2789	35,650
Ti3349_A		9.593	ug/L	0.07759	0.8088	310.7
Tl1908_A		-0.2493	ug/L	0.5067	203.3	-2.099
V_2924_A		0.2496	ug/L	0.1532	61.37	-5.049
Zn2062_A		12.37	ug/L	0.1218	0.9842	82.96
Y_3600_R		12,967	Cts/S	110.08	0.84892	12,967
Y_2243_A		13,394	Cts/S	51.236	0.38252	13,394
Y_3600_A		186,580	Cts/S	694.71	0.37234	186,580

SN6274-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:57:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3994	ug/L	0.3453	86.46	-35.88
Al3961_R		31.90	ug/L	6.506	20.40	14.05
As1891_A		0.2779	ug/L	0.8077	290.7	-3.224
B_2089_A		12.24	ug/L	0.02989	0.2441	28.01
Ba4554_R		0.1384	ug/L	0.3373	243.8	76.91
Be3130_R		0.07616	ug/L	0.02885	37.88	-6.419
Ca3158_R		7,189	ug/L	27.99	0.3893	8,236
Cd2265_A		0.01253	ug/L	0.004194	33.47	8.141
Co2286_A		0.01417	ug/L	0.05710	403.1	8.347
Cr2677_A		0.1908	ug/L	0.2271	119.0	5.452
Cu3273_A		1.541	ug/L	0.3754	24.36	-36.20
Fe2599_R		3,553	ug/L	30.13	0.8481	5,672
K_7664_R		12,390	ug/L	29.97	0.2420	7,504
Li6707_R		23.90	ug/L	1.391	5.818	227.6
Mg2025_A		6,823	ug/L	4.639	0.06799	3,209
Mn2576_R		112.1	ug/L	0.3178	0.2835	934.0
Mo2020_A		0.4123	ug/L	0.1921	46.58	2.156
Na5895_R		8,527	ug/L	67.90	0.7962	16,290
Ni2316_A		0.4833	ug/L	0.006134	1.269	0.8075

SN6274-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 7:57:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.1484	ug/L	0.4395	296.1	-2.468
Sb2068_A		-1.128	ug/L	0.4139	36.70	-0.1192
Se1960_A		0.7641	ug/L	0.3196	41.82	3.455
Si2516_R		172.2	ug/L	9.677	5.619	80.12
Sn1899_A		-0.4733	ug/L	0.03036	6.413	1.861
Sr4215_R		12.04	ug/L	0.2285	1.897	805.8
Ti3349_A		1.513	ug/L	0.07485	4.946	10.07
Tl1908_A		0.5733	ug/L	0.08133	14.19	-1.089
V_2924_A		0.1673	ug/L	0.1028	61.48	-5.012
Zn2062_A		4.401	ug/L	0.03049	0.6928	31.87
Y_3600_R		13,341	Cts/S	6.1297	0.045948	13,341
Y_2243_A		13,861	Cts/S	33.875	0.24439	13,861
Y_3600_A		193,990	Cts/S	1,298.1	0.66912	193,990

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:01:51PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		485.2	ug/L	6.535	1.347	12,030
Al3961_R		11,970	ug/L	34.68	0.2897	10,430
As1891_A		486.9	ug/L	0.6380	0.1310	324.6
B_2089_A		477.6	ug/L	0.08444	0.01768	998.4
Ba4554_R	W	469.5	ug/L	1.190	0.2535	23,770
Be3130_R	W	459.7	ug/L	0.6863	0.1493	33,300
Ca3158_R		11,960	ug/L	21.23	0.1776	13,610
Cd2265_A	W	473.0	ug/L	0.1286	0.02719	11,540
Co2286_A		495.0	ug/L	0.1853	0.03743	3,166
Cr2677_A		481.0	ug/L	6.495	1.350	10,060
Cu3273_A	W	468.3	ug/L	4.998	1.067	8,062
Fe2599_R		11,900	ug/L	45.70	0.3842	18,840
K_7664_R	W	11,820	ug/L	16.42	0.1390	7,103
Li6707_R	W	458.9	ug/L	3.281	0.7148	3,883
Mg2025_A		12,360	ug/L	8.171	0.06609	5,898
Mn2576_R		489.8	ug/L	0.2619	0.05348	4,036
Mo2020_A		485.9	ug/L	2.808	0.5779	2,546
Na5895_R	W	11,600	ug/L	16.16	0.1393	21,940
Ni2316_A		481.2	ug/L	0.08527	0.01772	1,693
Pb2203_A		482.3	ug/L	1.851	0.3837	888.2
Sb2068_A	W	469.2	ug/L	0.7811	0.1665	349.9
Se1960_A		487.3	ug/L	1.229	0.2521	237.3
Si2516_R	W	11,840	ug/L	6.058	0.05119	5,054
Sn1899_A	W	471.5	ug/L	0.2806	0.05952	452.8
Sr4215_R	W	466.6	ug/L	1.216	0.2606	31,790
Ti3349_A		487.7	ug/L	5.933	1.217	18,790
Tl1908_A		499.6	ug/L	1.610	0.3222	501.2
V_2924_A	W	460.4	ug/L	4.498	0.9769	8,180
Zn2062_A		473.0	ug/L	0.6886	0.1456	3,224
Y_3600_R		13,243	Cts/S	6.5849	0.049725	13,243
Y_2243_A		13,958	Cts/S	12.799	0.091695	13,958
Y_3600_A		193,310	Cts/S	2,536.7	1.3123	193,310

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:06:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:06:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.03935	ug/L	0.2342	595.2	-30.02
Al3961_R		0.2907	ug/L	6.285	2,162	-18.59
As1891_A		0.8509	ug/L	1.230	144.6	-2.424
B_2089_A		1.058	ug/L	0.2731	25.82	5.371
Ba4554_R		-0.07168	ug/L	0.09312	129.9	64.81
Be3130_R		0.1075	ug/L	0.02369	22.03	-4.006
Ca3158_R		14.77	ug/L	1.496	10.12	-7.215
Cd2265_A		0.08357	ug/L	0.04662	55.78	1.431
Co2286_A		-0.1423	ug/L	0.1148	80.62	7.163
Cr2677_A		0.2501	ug/L	0.1879	75.11	6.596
Cu3273_A		0.9292	ug/L	0.6758	72.73	-46.30
Fe2599_R		4.953	ug/L	0.8668	17.50	10.68
K_7664_R		1.152	ug/L	11.47	995.6	-58.12
Li6707_R		-0.2205	ug/L	0.7834	355.3	22.82
Mg2025_A		1.908	ug/L	1.465	76.81	-7.242
Mn2576_R		-0.1735	ug/L	0.3707	213.7	1.744
Mo2020_A		2.054	ug/L	0.4291	20.89	10.60
Na5895_R		-34.85	ug/L	23.23	66.65	39.43
Ni2316_A		0.4027	ug/L	0.05367	13.33	0.9949
Pb2203_A		0.4703	ug/L	1.169	248.5	-1.456
Sb2068_A		-0.1221	ug/L	0.9274	759.8	0.5474
Se1960_A		2.099	ug/L	0.1787	8.510	3.997
Si2516_R		24.48	ug/L	2.039	8.330	16.55
Sn1899_A		-0.4228	ug/L	0.2759	65.26	1.888
Sr4215_R		-0.06111	ug/L	0.1206	197.4	-24.88
Ti3349_A		0.7456	ug/L	0.1796	24.08	-19.75
Tl1908_A		0.03373	ug/L	0.07697	228.2	-1.491
V_2924_A		0.01415	ug/L	0.1688	1,193	-7.643
Zn2062_A		0.3633	ug/L	0.07723	21.26	4.473
Y_3600_R		13,059	Cts/S	100.76	0.77157	13,059
Y_2243_A		13,712	Cts/S	21.479	0.15664	13,712
Y_3600_A		196,010	Cts/S	3,650.1	1.8622	196,010

SN6290-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:10:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.07493	ug/L	0.2232	297.9	-35.81
Al3961_R		229.9	ug/L	0.08412	0.03659	201.3
As1891_A		2.285	ug/L	0.7079	30.98	-1.655
B_2089_A		55.76	ug/L	0.1650	0.2960	113.9
Ba4554_R		22.95	ug/L	0.5507	2.399	1,202
Be3130_R		-0.03140	ug/L	0.05130	163.4	-14.24
Ca3158_R	W	33,260	ug/L	132.6	0.3988	37,110
Cd2265_A		0.03337	ug/L	0.07763	232.7	4.435
Co2286_A		1.019	ug/L	0.1151	11.30	14.47
Cr2677_A		0.9252	ug/L	0.04589	4.959	22.02
Cu3273_A		1.964	ug/L	0.2880	14.66	-27.66
Fe2599_R		1,819	ug/L	11.50	0.6325	2,822
K_7664_R		10,300	ug/L	35.36	0.3434	6,051
Li6707_R		4.138	ug/L	3.561	86.06	58.46
Mg2025_A		9,068	ug/L	9.206	0.1015	4,185
Mn2576_R	W	1,110	ug/L	4.159	0.3745	8,956
Mo2020_A		1.698	ug/L	0.06247	3.680	8.569
Na5895_R	W	57,210	ug/L	307.5	0.5376	105,600
Ni2316_A		9.952	ug/L	0.07999	0.8037	33.29

SN6290-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:10:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.2114	ug/L	0.5445	257.5	-1.884
Sb2068_A		0.1398	ug/L	1.259	900.2	0.7650
Se1960_A		0.4194	ug/L	1.308	311.7	3.466
Si2516_R		6,292	ug/L	71.93	1.143	2,631
Sn1899_A		0.2810	ug/L	0.5620	200.0	2.526
Sr4215_R		151.3	ug/L	1.123	0.7420	10,080
Ti3349_A		10.05	ug/L	0.03079	0.3065	331.4
Tl1908_A		-0.4372	ug/L	0.3304	75.57	-3.070
V_2924_A		0.9134	ug/L	0.1046	11.45	1.951
Zn2062_A		4.604	ug/L	0.05474	1.189	32.60
Y_3600_R		12,961	Cts/S	13.626	0.10513	12,961
Y_2243_A		13,593	Cts/S	19.057	0.14019	13,593
Y_3600_A		188,720	Cts/S	591.11	0.31322	188,720

SN6290-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:14:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.390	ug/L	0.5891	42.39	-305.0
Al3961_R		32.66	ug/L	7.056	21.60	48.09
As1891_A		2.589	ug/L	0.09922	3.833	-9.195
B_2089_A		557.6	ug/L	5.448	0.9771	1,078
Ba4554_R		413.0	ug/L	2.605	0.6308	20,480
Be3130_R		0.05884	ug/L	0.06055	102.9	-7.373
Ca3158_R	W	54,000	ug/L	86.88	0.1609	60,260
Cd2265_A		0.2046	ug/L	0.1246	60.93	176.3
Co2286_A		3.720	ug/L	0.01273	0.3421	32.41
Cr2677_A		1.760	ug/L	0.2959	16.81	38.28
Cu3273_A		6.500	ug/L	0.3354	5.160	29.99
Fe2599_R	W	76,280	ug/L	475.6	0.6235	118,200
K_7664_R	W	34,610	ug/L	196.0	0.5663	20,480
Li6707_R		4.511	ug/L	1.946	43.14	61.58
Mg2025_A		21,920	ug/L	209.5	0.9558	9,835
Mn2576_R	W	1,816	ug/L	0.7809	0.04300	14,630
Mo2020_A		-0.02286	ug/L	0.02542	111.2	-0.2773
Na5895_R	W	73,730	ug/L	279.1	0.3786	136,000
Ni2316_A		13.47	ug/L	0.04222	0.3134	35.17
Pb2203_A		2.057	ug/L	0.5712	27.76	4.320
Sb2068_A		-1.392	ug/L	0.1776	12.76	1.147
Se1960_A		2.602	ug/L	1.227	47.15	4.993
Si2516_R		9,852	ug/L	26.04	0.2643	4,112
Sn1899_A		0.7911	ug/L	0.3171	40.08	2.913
Sr4215_R		355.6	ug/L	1.603	0.4509	23,710
Ti3349_A		1.458	ug/L	0.1612	11.05	7.535
Tl1908_A		-1.160	ug/L	0.4556	39.28	-4.415
V_2924_A		1.817	ug/L	0.1856	10.21	18.80
Zn2062_A		9.359	ug/L	0.1104	1.179	62.29
Y_3600_R		12,961	Cts/S	59.438	0.45859	12,961
Y_2243_A		13,197	Cts/S	91.299	0.69182	13,197
Y_3600_A		183,940	Cts/S	157.38	0.085560	183,940

SN6290-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:19:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6290-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:19:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1039	ug/L	0.1046	100.6	-36.87
Al3961_R		494.7	ug/L	6.973	1.410	438.4
As1891_A		2.930	ug/L	0.5792	19.77	-1.241
B_2089_A		56.14	ug/L	1.058	1.885	113.4
Ba4554_R		23.87	ug/L	0.3070	1.286	1,285
Be3130_R		0.003171	ug/L	0.04978	1,570	-12.83
Ca3158_R	W	31,430	ug/L	84.98	0.2704	36,110
Cd2265_A		0.02233	ug/L	0.009565	42.84	4.686
Co2286_A		1.171	ug/L	0.1124	9.606	15.40
Cr2677_A		1.462	ug/L	0.1263	8.637	33.28
Cu3273_A		2.160	ug/L	0.2591	12.00	-24.87
Fe2599_R		2,052	ug/L	19.35	0.9430	3,278
K_7664_R		9,859	ug/L	48.08	0.4877	5,965
Li6707_R		4.338	ug/L	0.2111	4.867	61.93
Mg2025_A		9,126	ug/L	154.7	1.695	4,167
Mn2576_R	W	1,018	ug/L	3.478	0.3416	8,458
Mo2020_A		1.406	ug/L	0.08711	6.196	7.010
Na5895_R	W	54,510	ug/L	178.6	0.3276	103,600
Ni2316_A		13.06	ug/L	3.927	30.06	43.30
Pb2203_A		0.5771	ug/L	0.2898	50.22	-1.254
Sb2068_A		0.7743	ug/L	1.394	180.0	1.217
Se1960_A		2.116	ug/L	1.706	80.63	4.189
Si2516_R		6,286	ug/L	12.40	0.1972	2,707
Sn1899_A		-0.1536	ug/L	0.5300	345.0	2.096
Sr4215_R		143.3	ug/L	1.093	0.7632	9,824
Ti3349_A		24.41	ug/L	0.4199	1.720	884.7
Tl1908_A		0.1066	ug/L	0.8724	818.4	-2.437
V_2924_A		1.302	ug/L	0.03643	2.798	9.650
Zn2062_A		7.542	ug/L	1.248	16.55	51.49
Y_3600_R		13,349	Cts/S	96.276	0.72124	13,349
Y_2243_A		13,449	Cts/S	182.25	1.3551	13,449
Y_3600_A		191,360	Cts/S	1,417.3	0.74062	191,360

SN6306-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:23:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1701	ug/L	0.2389	140.5	-26.91
Al3961_R		52.42	ug/L	2.095	3.997	38.59
As1891_A		9.165	ug/L	0.1653	1.804	3.170
B_2089_A		8.516	ug/L	0.1928	2.264	20.75
Ba4554_R		1.357	ug/L	0.1131	8.332	139.4
Be3130_R		-0.05301	ug/L	0.07197	135.8	-15.71
Ca3158_R		15,790	ug/L	47.58	0.3013	18,190
Cd2265_A		0.07005	ug/L	0.005664	8.085	1.135
Co2286_A		-0.1019	ug/L	0.05485	53.85	7.591
Cr2677_A		1.250	ug/L	0.1334	10.68	28.01
Cu3273_A		0.6842	ug/L	0.4189	61.22	-51.01
Fe2599_R		5.530	ug/L	0.7284	13.17	11.87
K_7664_R		1,019	ug/L	45.72	4.487	564.6
Li6707_R		27.37	ug/L	3.279	11.98	257.8
Mg2025_A		3,394	ug/L	17.40	0.5128	1,614
Mn2576_R		0.2925	ug/L	0.04503	15.39	6.539
Mo2020_A		0.5091	ug/L	0.1098	21.58	2.705
Na5895_R		6,090	ug/L	42.18	0.6926	11,710
Ni2316_A		0.1549	ug/L	0.07201	46.48	0.1094

SN6306-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:23:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.009577	ug/L	0.5762	6,017	-2.393
Sb2068_A		-0.02312	ug/L	0.2664	1,153	0.6366
Se1960_A		1.976	ug/L	1.447	73.24	4.040
Si2516_R		6,375	ug/L	62.45	0.9796	2,755
Sn1899_A		0.01880	ug/L	0.02303	122.5	2.361
Sr4215_R		67.29	ug/L	0.1747	0.2597	4,618
Ti3349_A		-0.006416	ug/L	0.1909	2,976	-49.65
Tl1908_A		-0.2246	ug/L	0.5677	252.7	-1.787
V_2924_A		2.311	ug/L	0.05784	2.503	34.47
Zn2062_A		0.5030	ug/L	0.04900	9.742	5.536
Y_3600_R		13,393	Cts/S	119.08	0.88911	13,393
Y_2243_A		14,057	Cts/S	66.247	0.47127	14,057
Y_3600_A		197,360	Cts/S	1,579.5	0.80034	197,360

SN6306-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:28:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06211	ug/L	0.2854	459.5	-30.57
Al3961_R		-18.93	ug/L	1.647	8.702	66.00
As1891_A		3.599	ug/L	0.1072	2.978	-0.6386
B_2089_A		316.2	ug/L	0.9304	0.2942	627.9
Ba4554_R		16.49	ug/L	0.2553	1.549	910.2
Be3130_R		0.06582	ug/L	0.07437	113.0	-7.204
Ca3158_R	W	136,900	ug/L	422.6	0.3088	157,500
Cd2265_A		0.07807	ug/L	0.01293	16.56	2.275
Co2286_A		0.4078	ug/L	0.1434	35.15	10.48
Cr2677_A		0.6560	ug/L	0.03963	6.041	15.17
Cu3273_A		1.682	ug/L	0.004344	0.2583	-32.43
Fe2599_R		437.1	ug/L	2.085	0.4769	701.7
K_7664_R		3,773	ug/L	11.67	0.3093	2,249
Li6707_R		90.12	ug/L	2.944	3.266	790.0
Mg2025_A	W	46,310	ug/L	65.11	0.1406	21,300
Mn2576_R		190.2	ug/L	0.1749	0.09195	1,596
Mo2020_A		0.1303	ug/L	0.1862	142.9	0.6632
Na5895_R	W	38,760	ug/L	31.68	0.08174	73,790
Ni2316_A		2.405	ug/L	0.1041	4.328	7.672
Pb2203_A		0.2638	ug/L	1.783	676.0	-1.783
Sb2068_A		0.5591	ug/L	0.6810	121.8	1.042
Se1960_A		0.2364	ug/L	0.7225	305.6	3.126
Si2516_R		11,210	ug/L	63.38	0.5653	4,830
Sn1899_A		-0.1011	ug/L	0.6413	634.0	2.160
Sr4215_R		605.2	ug/L	0.02441	0.004033	41,620
Ti3349_A		0.9264	ug/L	0.03997	4.314	-12.46
Tl1908_A		-0.2947	ug/L	0.8397	284.9	-1.982
V_2924_A		-0.02612	ug/L	0.03934	150.6	-9.093
Zn2062_A		1.166	ug/L	0.08276	7.095	9.714
Y_3600_R		13,366	Cts/S	176.92	1.3236	13,366
Y_2243_A		13,525	Cts/S	19.979	0.14772	13,525
Y_3600_A		191,050	Cts/S	135.09	0.070710	191,050

SN6306-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:32:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6306-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:32:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5528	ug/L	0.8655	156.6	-18.06
Al3961_R		0.6347	ug/L	13.38	2,107	30.04
As1891_A		0.5317	ug/L	0.9878	185.8	-2.655
B_2089_A		15.26	ug/L	0.06216	0.4075	33.49
Ba4554_R		5.011	ug/L	0.2828	5.644	323.6
Be3130_R		-0.04912	ug/L	0.05004	101.9	-15.48
Ca3158_R	W	65,630	ug/L	63.86	0.09729	75,130
Cd2265_A		0.5738	ug/L	0.01634	2.848	13.84
Co2286_A		0.4762	ug/L	0.1376	28.89	10.96
Cr2677_A		0.6492	ug/L	0.05889	9.071	15.17
Cu3273_A		1.529	ug/L	0.3214	21.01	-34.98
Fe2599_R		345.2	ug/L	0.7698	0.2230	551.9
K_7664_R		1,447	ug/L	13.30	0.9189	821.1
Li6707_R		63.79	ug/L	2.598	4.072	563.6
Mg2025_A	W	48,390	ug/L	255.2	0.5273	22,400
Mn2576_R		276.3	ug/L	0.7893	0.2857	2,300
Mo2020_A		0.1381	ug/L	0.1184	85.71	0.6989
Na5895_R		22,230	ug/L	6.725	0.03025	42,140
Ni2316_A		2.389	ug/L	0.1380	5.777	7.678
Pb2203_A		-0.7671	ug/L	0.1782	23.23	-3.668
Sb2068_A		0.1653	ug/L	1.740	1,053	0.7558
Se1960_A		1.026	ug/L	1.192	116.2	3.535
Si2516_R		11,490	ug/L	2.997	0.02609	4,924
Sn1899_A		-0.07435	ug/L	0.06913	92.98	2.199
Sr4215_R		254.3	ug/L	0.8677	0.3412	17,390
Ti3349_A		0.2895	ug/L	0.2902	100.3	-36.73
Tl1908_A		0.1291	ug/L	0.2550	197.6	-1.666
V_2924_A		-0.05196	ug/L	0.2454	472.3	-10.08
Zn2062_A		4.484	ug/L	0.05914	1.319	31.84
Y_3600_R		13,296	Cts/S	161.95	1.2180	13,296
Y_2243_A		13,612	Cts/S	59.273	0.43545	13,612
Y_3600_A		190,900	Cts/S	275.82	0.14448	190,900

SN6306-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:36:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08844	ug/L	0.1211	136.9	-28.58
Al3961_R		74.00	ug/L	6.592	8.908	123.6
As1891_A		3.133	ug/L	0.5805	18.53	-0.9158
B_2089_A		45.23	ug/L	0.2423	0.5358	93.24
Ba4554_R		8.185	ug/L	0.1167	1.426	483.3
Be3130_R		-0.04482	ug/L	0.07779	173.6	-15.29
Ca3158_R	W	105,900	ug/L	173.7	0.1641	120,900
Cd2265_A		0.2513	ug/L	0.001719	0.6839	5.684
Co2286_A		-0.07129	ug/L	0.1205	169.0	7.604
Cr2677_A		0.9315	ug/L	0.2408	25.85	20.48
Cu3273_A		1.782	ug/L	0.2413	13.54	-30.57
Fe2599_R		120.1	ug/L	2.591	2.157	193.5
K_7664_R		2,290	ug/L	21.03	0.9187	1,330
Li6707_R		52.26	ug/L	1.556	2.977	465.0
Mg2025_A		21,300	ug/L	177.5	0.8337	9,866
Mn2576_R		2.716	ug/L	0.07090	2.611	30.94
Mo2020_A		0.5916	ug/L	0.03392	5.733	3.048
Na5895_R		19,010	ug/L	58.62	0.3083	35,960
Ni2316_A		0.2740	ug/L	0.08910	32.52	0.5013

SN6306-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:36:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.1798	ug/L	0.8423	468.4	-1.974
Sb2068_A		-0.7289	ug/L	1.533	210.3	0.09889
Se1960_A		0.1614	ug/L	0.7416	459.5	3.065
Si2516_R		5,674	ug/L	17.25	0.3041	2,429
Sn1899_A		-0.05470	ug/L	0.7567	1,383	2.218
Sr4215_R		366.1	ug/L	1.189	0.3248	24,970
Ti3349_A		4.608	ug/L	0.05482	1.190	127.6
Tl1908_A		0.07364	ug/L	0.3058	415.3	-1.450
V_2924_A		0.7974	ug/L	0.1788	22.43	6.585
Zn2062_A		1.238	ug/L	0.05753	4.647	10.26
Y_3600_R		13,262	Cts/S	30.700	0.23149	13,262
Y_2243_A		13,631	Cts/S	96.505	0.70800	13,631
Y_3600_A		190,510	Cts/S	859.92	0.45138	190,510

SN6306-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:41:05PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.04615	ug/L	0.07985	173.0	-29.41
Al3961_R		-5.138	ug/L	0.3771	7.340	24.54
As1891_A		0.2901	ug/L	0.8819	304.0	-2.783
B_2089_A		101.4	ug/L	0.5588	0.5513	205.1
Ba4554_R		9.083	ug/L	0.2015	2.219	534.6
Be3130_R		-0.07627	ug/L	0.08818	115.6	-17.57
Ca3158_R	W	64,850	ug/L	240.2	0.3704	74,870
Cd2265_A		1.314	ug/L	0.03383	2.574	30.70
Co2286_A		0.1877	ug/L	0.03152	16.79	9.172
Cr2677_A		0.4108	ug/L	0.03741	9.106	10.99
Cu3273_A		1.064	ug/L	0.2187	20.54	-43.26
Fe2599_R		14.04	ug/L	0.5448	3.880	25.53
K_7664_R		2,795	ug/L	7.855	0.2811	1,655
Li6707_R		42.06	ug/L	0.008157	0.01939	383.3
Mg2025_A		17,310	ug/L	66.39	0.3836	8,019
Mn2576_R		652.0	ug/L	3.774	0.5789	5,444
Mo2020_A		-0.1070	ug/L	0.1086	101.5	-0.5963
Na5895_R	W	38,630	ug/L	37.13	0.09612	73,780
Ni2316_A		2.174	ug/L	0.004074	0.1874	6.989
Pb2203_A		-0.6144	ug/L	0.8012	130.4	-3.402
Sb2068_A		-0.08295	ug/L	0.8874	1,070	0.5667
Se1960_A		1.525	ug/L	0.9968	65.38	3.867
Si2516_R		9,203	ug/L	12.68	0.1378	3,979
Sn1899_A		0.2773	ug/L	0.5163	186.2	2.531
Sr4215_R		329.4	ug/L	0.8744	0.2655	22,720
Ti3349_A		0.3448	ug/L	0.001918	0.5562	-34.93
Tl1908_A		-0.3586	ug/L	0.5215	145.4	-2.529
V_2924_A		0.4972	ug/L	0.2490	50.08	-2.661
Zn2062_A		2.083	ug/L	0.1706	8.190	15.91
Y_3600_R		13,408	Cts/S	29.537	0.22029	13,408
Y_2243_A		13,635	Cts/S	34.011	0.24943	13,635
Y_3600_A		192,600	Cts/S	876.94	0.45532	192,600

SN6056-024

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:45:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SN6056-024

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:45:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.8987	ug/L	0.1919	21.35	-149.9
Al3961_R		13,380	ug/L	16.47	0.1231	12,020
As1891_A		39.42	ug/L	0.3347	0.8491	20.07
B_2089_A		61.18	ug/L	0.2454	0.4011	128.6
Ba4554_R		369.0	ug/L	2.202	0.5967	19,190
Be3130_R		1.561	ug/L	0.02276	1.458	96.74
Ca3158_R	W	105,000	ug/L	95.36	0.09079	122,900
Cd2265_A		5.427	ug/L	0.09958	1.835	209.9
Co2286_A		16.51	ug/L	0.04773	0.2891	117.0
Cr2677_A		11.46	ug/L	0.1124	0.9812	242.2
Cu3273_A		313.9	ug/L	3.956	1.260	5,383
Fe2599_R	W	32,370	ug/L	76.35	0.2359	52,610
K_7664_R		1,371	ug/L	1.389	0.1013	791.7
Li6707_R		17.30	ug/L	2.384	13.78	174.7
Mg2025_A		11,810	ug/L	96.17	0.8145	5,626
Mn2576_R		915.0	ug/L	1.153	0.1260	7,730
Mo2020_A		0.2426	ug/L	0.06037	24.89	1.176
Na5895_R		137.9	ug/L	4.855	3.521	375.0
Ni2316_A		42.20	ug/L	0.05938	0.1407	143.8
Pb2203_A	W	5,121	ug/L	32.05	0.6260	9,524
Sb2068_A		16.25	ug/L	0.7786	4.792	13.70
Se1960_A		0.4114	ug/L	0.3352	81.48	3.798
Si2516_R		7,581	ug/L	12.23	0.1614	3,321
Sn1899_A		0.8299	ug/L	0.7138	86.02	3.131
Sr4215_R		176.3	ug/L	0.1427	0.08096	12,310
Ti3349_A		183.8	ug/L	2.597	1.413	7,052
Tl1908_A		1.173	ug/L	0.5921	50.49	-1.390
V_2924_A		42.55	ug/L	0.2365	0.5559	754.8
Zn2062_A	W	2,193	ug/L	17.15	0.7821	15,020
Y_3600_R		13,589	Cts/S	136.37	1.0035	13,589
Y_2243_A		14,020	Cts/S	63.556	0.45332	14,020
Y_3600_A		193,470	Cts/S	2,446.3	1.2644	193,470

SN6100-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:49:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.590	ug/L	0.2094	5.833	-155.6
Al3961_R		34,390	ug/L	111.2	0.3232	15,510
As1891_A		137.7	ug/L	3.564	2.587	40.42
B_2089_A		27.76	ug/L	0.1175	0.4234	32.43
Ba4554_R		502.4	ug/L	0.3210	0.06389	13,210
Be3130_R		7.608	ug/L	0.09103	1.196	269.8
Ca3158_R	W	56,040	ug/L	264.6	0.4722	33,080
Cd2265_A		9.213	ug/L	0.09019	0.9789	207.5
Co2286_A		73.89	ug/L	0.6734	0.9113	253.9
Cr2677_A		8.961	ug/L	0.03497	0.3903	99.78
Cu3273_A	W	4,171	ug/L	2.149	0.05154	37,450
Fe2599_R	W	75,410	ug/L	214.3	0.2842	61,860
K_7664_R		2,283	ug/L	40.34	1.767	655.1
Li6707_R		6.442	ug/L	1.261	19.58	53.88
Mg2025_A		6,604	ug/L	39.29	0.5950	1,609
Mn2576_R	W	2,081	ug/L	8.831	0.4244	8,870
Mo2020_A		-0.2964	ug/L	0.06325	21.34	-0.9641
Na5895_R		1,529	ug/L	1.946	0.1273	1,601
Ni2316_A		191.9	ug/L	1.524	0.7940	340.2

SN6100-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:49:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A	W	20,490	ug/L	133.5	0.6517	19,530
Sb2068_A		12.69	ug/L	0.2287	1.802	6.401
Se1960_A		-0.1969	ug/L	0.5882	298.7	3.731
Si2516_R		8,734	ug/L	65.46	0.7495	1,933
Sn1899_A		3.634	ug/L	0.8699	23.94	4.182
Sr4215_R		343.9	ug/L	1.203	0.3497	12,120
Ti3349_A		367.7	ug/L	0.9352	0.2543	7,306
Tl1908_A		-1.142	ug/L	0.01794	1.571	-3.038
V_2924_A		233.0	ug/L	1.488	0.6389	2,156
Zn2062_A		1,111	ug/L	9.204	0.8284	3,901
Y_3600_R		13,718	Cts/S	112.81	0.82239	13,718
Y_2243_A		14,365	Cts/S	80.081	0.55748	14,365
Y_3600_A		200,400	Cts/S	1,273.6	0.63552	200,400

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:54:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		478.2	ug/L	4.506	0.9423	12,010
Al3961_R		11,880	ug/L	68.11	0.5731	10,400
As1891_A		486.5	ug/L	2.691	0.5531	323.6
B_2089_A		475.1	ug/L	2.837	0.5971	991.3
Ba4554_R	W	465.6	ug/L	3.121	0.6702	23,670
Be3130_R	W	453.8	ug/L	3.579	0.7887	33,000
Ca3158_R		11,890	ug/L	77.45	0.6512	13,590
Cd2265_A	W	468.8	ug/L	2.410	0.5141	11,410
Co2286_A		495.4	ug/L	3.135	0.6328	3,161
Cr2677_A		473.0	ug/L	5.426	1.147	10,020
Cu3273_A	W	457.8	ug/L	6.251	1.365	7,980
Fe2599_R		11,870	ug/L	99.14	0.8354	18,870
K_7664_R	W	11,700	ug/L	74.58	0.6371	7,064
Li6707_R	W	450.3	ug/L	2.095	0.4653	3,825
Mg2025_A		12,380	ug/L	71.38	0.5764	5,896
Mn2576_R		487.5	ug/L	3.026	0.6207	4,033
Mo2020_A		485.4	ug/L	5.318	1.096	2,538
Na5895_R	W	11,420	ug/L	34.19	0.2995	21,700
Ni2316_A		476.8	ug/L	2.575	0.5402	1,674
Pb2203_A		478.6	ug/L	2.084	0.4354	879.4
Sb2068_A	W	464.1	ug/L	3.301	0.7114	345.4
Se1960_A		488.6	ug/L	5.969	1.222	237.4
Si2516_R	W	11,660	ug/L	64.49	0.5529	5,001
Sn1899_A	W	466.6	ug/L	0.3455	0.07405	447.1
Sr4215_R	W	461.4	ug/L	2.563	0.5554	31,560
Ti3349_A		480.4	ug/L	3.403	0.7084	18,740
Tl1908_A		500.0	ug/L	2.006	0.4012	500.5
V_2924_A	W	448.8	ug/L	4.882	1.088	8,075
Zn2062_A	W	468.4	ug/L	1.895	0.4047	3,186
Y_3600_R		13,295	Cts/S	78.860	0.59313	13,295
Y_2243_A		13,928	Cts/S	62.236	0.44685	13,928
Y_3600_A		195,770	Cts/S	2,351.4	1.2011	195,770

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:58:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 8:58:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.09563	ug/L	0.006933	7.249	-33.73
Al3961_R		9.187	ug/L	10.85	118.1	-11.09
As1891_A		0.9677	ug/L	0.3016	31.17	-2.388
B_2089_A		1.003	ug/L	0.2999	29.90	5.344
Ba4554_R		-0.1409	ug/L	0.1163	82.55	62.31
Be3130_R		0.06870	ug/L	0.006503	9.466	-6.869
Ca3158_R		12.00	ug/L	2.235	18.63	-10.50
Cd2265_A		0.04273	ug/L	0.03045	71.27	0.4672
Co2286_A		-0.06696	ug/L	0.06949	103.8	7.765
Cr2677_A		0.1611	ug/L	0.09563	59.36	4.782
Cu3273_A		0.4648	ug/L	0.2358	50.73	-54.96
Fe2599_R		6.784	ug/L	1.393	20.53	13.73
K_7664_R		5.851	ug/L	3.478	59.43	-56.13
Li6707_R		-0.2257	ug/L	2.378	1,053	23.07
Mg2025_A		2.980	ug/L	1.389	46.62	-6.855
Mn2576_R		0.5400	ug/L	0.4233	78.37	7.667
Mo2020_A		1.877	ug/L	0.4873	25.97	9.850
Na5895_R		-37.50	ug/L	3.602	9.604	35.20
Ni2316_A		0.006234	ug/L	0.01091	175.0	-0.3787
Pb2203_A		0.05957	ug/L	0.8750	1,469	-2.242
Sb2068_A		1.085	ug/L	0.4857	44.74	1.460
Se1960_A		2.966	ug/L	0.3597	12.13	4.482
Si2516_R		20.06	ug/L	13.77	68.63	14.93
Sn1899_A		-0.4519	ug/L	0.3382	74.84	1.893
Sr4215_R		0.02445	ug/L	0.07285	298.0	-19.46
Ti3349_A		0.7492	ug/L	0.02449	3.269	-19.81
Tl1908_A		0.4590	ug/L	0.3737	81.41	-1.091
V_2924_A		0.4219	ug/L	0.2647	62.74	-0.1772
Zn2062_A		0.3345	ug/L	0.1128	33.72	4.354
Y_3600_R		13,256	Cts/S	31.419	0.23701	13,256
Y_2243_A		13,949	Cts/S	4.4570	0.031953	13,949
Y_3600_A		197,360	Cts/S	555.94	0.28169	197,360

SN6391-019

Method Name: FAST-2016_NO_AU
Method Revision: 1,453
Analyst Name: EP
Acquire Date: 8/7/2020 9:02:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.187	ug/L	0.1203	1.944	-417.0
Al3961_R	W	75,520	ug/L	67.01	0.08873	66,610
As1891_A		102.0	ug/L	0.1578	0.1547	53.70
B_2089_A		17.94	ug/L	0.1514	0.8440	39.26
Ba4554_R		501.1	ug/L	1.111	0.2218	25,690
Be3130_R		2.584	ug/L	0.08612	3.333	-88.42
Ca3158_R	W	42,750	ug/L	41.48	0.09703	49,340
Cd2265_A		1.146	ug/L	0.03218	2.808	273.4
Co2286_A		47.08	ug/L	0.1232	0.2617	366.9
Cr2677_A		228.2	ug/L	0.01972	0.008643	4,742
Cu3273_A		133.9	ug/L	0.09806	0.07323	2,167
Fe2599_R	W	100,800	ug/L	73.74	0.07318	161,600
K_7664_R		17,770	ug/L	19.46	0.1095	10,850
Li6707_R		179.3	ug/L	0.9789	0.5459	1,552
Mg2025_A	W	34,300	ug/L	7.245	0.02112	16,010
Mn2576_R	W	1,974	ug/L	3.540	0.1793	16,440
Mo2020_A		2.939	ug/L	0.1539	5.236	14.89
Na5895_R		1,381	ug/L	2.352	0.1703	2,741
Ni2316_A		151.0	ug/L	0.2685	0.1778	506.8

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/24/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
07/30/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG24A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
AP (initials) on 7/24/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (17:24) fails high for Cu (0.933 ug/L) ; Closing PQL (22:14) fails low for Ni and high for Pb (0.352 ug/L)

ICSA (17:26) fails high for Mn (0.52 ug/L) Cu (0.751 ug/L)

CCB fails at 20:53 for Be (0.114 ug/L) Ca (12.785 ug/L) Ni (-0.32 ug/L) Ba (0.262 ug/L)

CCBs fails at 21:26 for Ca (28.152 ug/L) Fe (10.36 ug/L) Ni (-0.325 ug/L) Pb (0.132 ug/L), 21:58 for Ni (-0.252 ug/L) Pb (0.188 ug/L)

For high failing ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element

concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

100x diln.: 0.1 mL of sample (pipet M27) + 9.9mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG24A	07/24/2020	17:13	AP
CalStd	1	LNG24A	07/24/2020	17:16	AP
ICV	1	LNG24A	07/24/2020	17:19	AP
ICB	1	LNG24A	07/24/2020	17:21	AP
PQL	1	LNG24A	07/24/2020	17:24	AP
ICSA	1	LNG24A	07/24/2020	17:26	AP
ICSAB	1	LNG24A	07/24/2020	17:29	AP
LRS1	1	LNG24A	07/24/2020	17:32	AP
LRS2	1	LNG24A	07/24/2020	17:34	AP
RINSE	1	LNG24A	07/24/2020	17:37	AP
RINSE	1	LNG24A	07/24/2020	17:40	AP
CCV	1	LNG24A	07/24/2020	17:42	AP
CCB	1	LNG24A	07/24/2020	17:45	AP
missed	1	LNG24A	07/24/2020	17:47	AP
SN5980-002	1	LNG24A	07/24/2020	17:50	AP
SN5980-003	1	LNG24A	07/24/2020	17:53	AP
SN5980-004	1	LNG24A	07/24/2020	17:55	AP
SN5980-005	1	LNG24A	07/24/2020	17:58	AP
SN5980-001	1	LNG24A	07/24/2020	18:00	AP
SN5980-006	1	LNG24A	07/24/2020	18:03	AP
SN5980-007	1	LNG24A	07/24/2020	18:05	AP
SN5980-008	1	LNG24A	07/24/2020	18:08	AP
SN5980-009	1	LNG24A	07/24/2020	18:11	AP
CCV	1	LNG24A	07/24/2020	18:13	AP
CCB	1	LNG24A	07/24/2020	18:16	AP
SN5980-010	1	LNG24A	07/24/2020	18:18	AP
UNDIGESTED LCS TE	5	LNG24A	07/24/2020	18:21	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	18:24	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	18:26	AP
SN5286-001R	1	LNG24A	07/24/2020	18:29	AP
SN5286-002R	1	LNG24A	07/24/2020	18:31	AP
PBWNG13IMW1	5	LNG24A	07/24/2020	18:34	AP
LCSWNG13IMW1	5	LNG24A	07/24/2020	18:37	AP
SN5589-007	5	LNG24A	07/24/2020	18:39	AP
PBWNG17IMW1	5	LNG24A	07/24/2020	18:42	AP
CCV	1	LNG24A	07/24/2020	18:44	AP
CCB	1	LNG24A	07/24/2020	18:47	AP
LCSWNG17IMW1	5	LNG24A	07/24/2020	18:50	AP
SN5772-003R	5	LNG24A	07/24/2020	18:53	AP
PBSNG20IMS1	5	LNG24A	07/24/2020	18:55	AP
LCSONG20IMS1	5	LNG24A	07/24/2020	18:58	AP
SN5515-001R	10	LNG24A	07/24/2020	19:00	AP
SN5515-001R	20	LNG24A	07/24/2020	19:03	AP
PBWNG20IMW1	5	LNG24A	07/24/2020	19:06	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
LCSWNG20IMW1	5	LNG24A	07/24/2020	19:08	AP
SN5920-001	5	LNG24A	07/24/2020	19:11	AP
SN5920-002	5	LNG24A	07/24/2020	19:13	AP
CCV	1	LNG24A	07/24/2020	19:16	AP
CCB	1	LNG24A	07/24/2020	19:19	AP
SN5920-003	5	LNG24A	07/24/2020	19:21	AP
PBSNG21IMW2	5	LNG24A	07/24/2020	19:24	AP
LCSWNG21IMW2	5	LNG24A	07/24/2020	19:27	AP
SN5717-020	5	LNG24A	07/24/2020	19:29	AP
SN5830-002	5	LNG24A	07/24/2020	19:32	AP
SN5832-001	5	LNG24A	07/24/2020	19:35	AP
SN5832-002	5	LNG24A	07/24/2020	19:37	AP
SN5832-003	5	LNG24A	07/24/2020	19:40	AP
SN5832-004	5	LNG24A	07/24/2020	19:43	AP
SN5859-001	5	LNG24A	07/24/2020	19:45	AP
CCV	1	LNG24A	07/24/2020	19:48	AP
CCB	1	LNG24A	07/24/2020	19:51	AP
SN5859-002	5	LNG24A	07/24/2020	19:53	AP
SN5859-003	5	LNG24A	07/24/2020	19:56	AP
SN5897-001	5	LNG24A	07/24/2020	19:58	AP
SN5897-002	5	LNG24A	07/24/2020	20:01	AP
SN5897-002L	25	LNG24A	07/24/2020	20:03	AP
SN5897-002A	5	LNG24A	07/24/2020	20:06	AP
SN5897-002S	5	LNG24A	07/24/2020	20:08	AP
SN5897-002P	5	LNG24A	07/24/2020	20:11	AP
SN5946-001	5	LNG24A	07/24/2020	20:14	AP
PBWNG22IMW11	1	LNG24A	07/24/2020	20:16	AP
CCV	1	LNG24A	07/24/2020	20:19	AP
CCB	1	LNG24A	07/24/2020	20:21	AP
LCSWNG22IMW1	1	LNG24A	07/24/2020	20:24	AP
SN5286-001R	1	LNG24A	07/24/2020	20:27	AP
SN5286-002R	1	LNG24A	07/24/2020	20:29	AP
SN5907-001	100	LNG24A	07/24/2020	20:32	AP
SN5923-001	1	LNG24A	07/24/2020	20:35	AP
SN5997-001	1	LNG24A	07/24/2020	20:37	AP
SN5997-001L	5	LNG24A	07/24/2020	20:40	AP
SN5997-001A	1	LNG24A	07/24/2020	20:43	AP
SN5997-001S	1	LNG24A	07/24/2020	20:45	AP
SN5997-001P	1	LNG24A	07/24/2020	20:48	AP
CCV	1	LNG24A	07/24/2020	20:51	AP
CCB	1	LNG24A	07/24/2020	20:53	AP
PBWNG22IMW2	5	LNG24A	07/24/2020	20:56	AP
LCSWNG22IMW2	5	LNG24A	07/24/2020	20:59	AP
SN5920-004	5	LNG24A	07/24/2020	21:01	AP
PBSNG23IMS1	5	LNG24A	07/24/2020	21:04	AP
LCSONG23IMS1	5	LNG24A	07/24/2020	21:07	AP
LC2ONG23IMS1	5	LNG24A	07/24/2020	21:09	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6056-005	5	LNG24A	07/24/2020	21:12	AP
SN6056-006	5	LNG24A	07/24/2020	21:15	AP
SN6056-007	5	LNG24A	07/24/2020	21:17	AP
SN6056-008	5	LNG24A	07/24/2020	21:20	AP
CCV	1	LNG24A	07/24/2020	21:23	AP
CCB	1	LNG24A	07/24/2020	21:26	AP
SN6056-009	5	LNG24A	07/24/2020	21:28	AP
SN6056-009L	25	LNG24A	07/24/2020	21:31	AP
SN6056-009A	5	LNG24A	07/24/2020	21:34	AP
SN6056-009S	5	LNG24A	07/24/2020	21:36	AP
SN6056-009P	5	LNG24A	07/24/2020	21:39	AP
SN6056-010	5	LNG24A	07/24/2020	21:42	AP
SN6056-011	5	LNG24A	07/24/2020	21:44	AP
SN6056-012	5	LNG24A	07/24/2020	21:47	AP
SN6056-013	5	LNG24A	07/24/2020	21:50	AP
SN6056-014	5	LNG24A	07/24/2020	21:52	AP
CCV	1	LNG24A	07/24/2020	21:55	AP
CCB	1	LNG24A	07/24/2020	21:58	AP
SN6056-015	5	LNG24A	07/24/2020	22:01	AP
SN6056-016	5	LNG24A	07/24/2020	22:03	AP
SN6056-017	5	LNG24A	07/24/2020	22:06	AP
CCV	1	LNG24A	07/24/2020	22:08	AP
CCB	1	LNG24A	07/24/2020	22:11	AP
PQL	1	LNG24A	07/24/2020	22:14	AP
RINSE	1	LNG24A	07/24/2020	22:17	AP
RINSE	1	LNG24A	07/24/2020	22:19	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq. Date-Time	7/24/2020 4:41:08 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

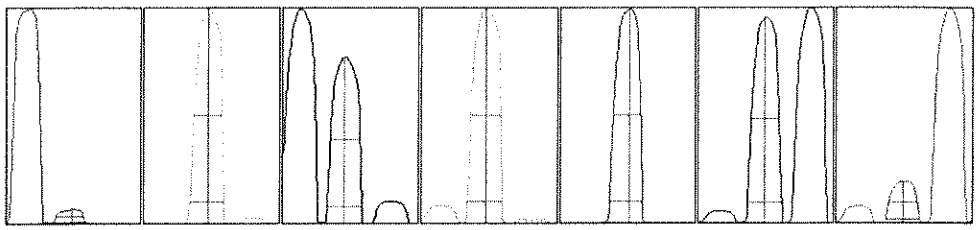
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	4432	44321.35	0.771	5.000	
9	1161	11608.37	0.925	5.000	
24	48564	485644.47	0.299	5.000	
59	9076	90755.10	0.378	5.000	
115	151195	1511950.56	0.395	5.000	
205	9665	96645.71	0.587	5.000	
208	21345	213446.86	0.560	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	4484	4447	4400	4423	4406
9	1151	1166	1150	1161	1176
24	48420	48394	48641	48673	48694
59	9036	9058	9070	9088	9127
115	150453	150647	151531	151597	151747
205	9662	9632	9682	9599	9749
208	21209	21234	21489	21414	21377

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	7328.00	7.00	6.90 - 7.10	
9	1929.84	8.95	8.90 - 9.10	
24	76565.05	23.90	23.90 - 24.10	
59	14388.91	58.95	58.90 - 59.10	
115	254344.15	115.05	114.90 - 115.10	
205	16055.77	205.00	204.90 - 205.10	
208	35395.17	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.706	0.900	
9	0.62	0.739	0.900	
24	0.67	0.773	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.63	0.764	0.900	
208	0.63	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	12.4 V
Extract 2	-125.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	543	5428.54	1.623	5.000	
89	81836	818356.85	1.327	5.000	
205	8500	84996.41	0.414	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	531	541	546	555	541
89	80111	81553	82148	82429	82937
205	8450	8542	8499	8522	8485

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.6 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1730	17299.49	0.939	5.000	
89	17530	175302.74	0.724	5.000	
205	4780	47799.55	0.593	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1730	1713	1715	1741	1751
89	17435	17445	17434	17653	17685
205	4765	4746	4770	4810	4809

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	1.2 V
Extract 2	-125.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-60 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:13:00 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	32.22	6.0
11	B	6	No Gas	1895.75	7.5
23	Na	45	He	10849.49	3.0
24	Mg	45	He	891.20	3.0
27	Al	45	He	20.00	33.4
28	Si	45	H2	560.63	1.8
39	K	45	He	12795.01	1.8
40	Ca	45	H2	876.73	7.6
51	V	89	He	361.13	15.4
52	Cr	89	He	72.66	15.7
55	Mn	89	He	12.00	44.1
56	Fe	89	H2	2496.33	9.9
59	Co	89	He	15.56	24.7
60	Ni	89	He	323.35	4.5
63	Cu	89	He	492.25	3.9
66	Zn	89	He	74.45	27.4
75	As	89	He	7.00	28.6
78	Se	89	H2	0.83	69.3
88	Sr	89	He	6.66	86.6
95	Mo	89	He	2.22	86.6
107	Ag	89	He	14.45	26.7
111	Cd	89	He	0.37	173.2
118	Sn	159	He	66.67	31.2
121	Sb	159	No Gas	36.71	56.8
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	23.36	137.8
205	Tl	209	No Gas	140.16	28.6
208	Pb	209	No Gas	223.59	23.0
232	Th	209	No Gas	93.44	24.7

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1881686.03	0.6
Sc	45	No Gas	3915123.71	0.9
Sc	45	H2	507902.10	3.4
Sc	45	He	102593.00	2.7
Ge	72	No Gas	852546.94	0.2
Ge	72	H2	193980.16	2.8
Ge	72	He	77385.19	1.8
Y	89	H2	3089458.15	2.9
Y	89	He	678154.65	3.0
Tb	159	No Gas	7727080.72	1.1
Tb	159	He	3280980.40	3.2
Bi	209	No Gas	3977089.87	0.9

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:16:01 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	67502.29	2.9
11	B	6	No Gas	45358.57	0.9
23	Na	45	He	1125490.00	0.5
24	Mg	45	He	624674.37	1.0
27	Al	45	He	24971.38	0.6
28	Si	45	H2	52561.46	1.0
39	K	45	He	603436.61	0.4
40	Ca	45	H2	4660697.01	1.1
51	V	89	He	46795.15	0.1
52	Cr	89	He	56590.09	0.8
55	Mn	89	He	26977.50	0.6
56	Fe	89	H2	18067101.26	0.9
59	Co	89	He	97479.57	1.0
60	Ni	89	He	26403.45	2.3
63	Cu	89	He	74433.98	0.3
66	Zn	89	He	9826.01	1.0
75	As	89	He	8412.13	0.8
78	Se	89	H2	4414.17	0.8
88	Sr	89	He	42557.76	1.5
95	Mo	89	He	45670.27	1.1
107	Ag	89	He	153875.52	0.6
111	Cd	89	He	20006.34	0.9
118	Sn	159	He	44445.21	0.8
121	Sb	159	No Gas	320641.43	3.0
137	Ba	159	No Gas	123351.38	2.7
182	W	159	No Gas	230565.80	3.6
205	Tl	209	No Gas	501343.10	2.6
208	Pb	209	No Gas	694163.43	3.0
232	Th	209	No Gas	698065.23	3.5
238	U	209	No Gas	660958.09	4.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1921569.14	0.6	1881686.03	102.12	29.5	120.4	
Sc	45	No Gas	3909481.43	0.6	3915123.71	99.86	29.5	120.4	
Sc	45	H2	504747.77	0.4	507902.1	99.38	29.5	120.4	
Sc	45	He	97531.06	0.3	102593	95.07	29.5	120.4	
Ge	72	No Gas	855194.93	0.6	852546.94	100.31	29.5	120.4	
Ge	72	H2	190993.11	1.1	193980.16	98.46	29.5	120.4	
Ge	72	He	74746.31	0.4	77385.19	96.59	29.5	120.4	
Y	89	H2	3116398.06	1.1	3089458.15	100.87	29.5	120.4	
Y	89	He	655460.68	0.1	678154.65	96.65	29.5	120.4	
Tb	159	No Gas	7802752.94	0.5	7727080.72	100.98	29.5	120.4	
Tb	159	He	3257769.19	0.1	3280980.4	99.29	29.5	120.4	
Bi	209	No Gas	3989935.89	0.7	3977089.87	100.32	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:19:02 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.308	ppb	9.0	26839.01	20	101.54	89.6	110.4	
11	B	6	No Gas	18.860	ppb	7.6	17922.78	20	94.3	89.6	110.4	
23	Na	45	He	4100.386	ppb	0.6	473255.47	4000	102.51	89.6	110.4	
24	Mg	45	He	4025.915	ppb	1.2	255045.65	4000	100.65	89.6	110.4	
27	Al	45	He	391.943	ppb	1.9	9917.09	400	97.99	89.6	110.4	
28	Si	45	H2	432.375	ppb	0.9	23040.75	400	108.09	89.6	110.4	
39	K	45	He	4014.472	ppb	0.2	252570.40	4000	100.36	89.6	110.4	
40	Ca	45	H2	3973.945	ppb	1.7	1852319.40	4000	99.35	89.6	110.4	
51	V	89	He	20.121	ppb	0.7	19163.63	20	100.6	89.6	110.4	
52	Cr	89	He	20.465	ppb	0.9	23354.28	20	102.32	89.6	110.4	
55	Mn	89	He	20.838	ppb	1.7	11321.83	20	104.19	89.6	110.4	
56	Fe	89	H2	3948.943	ppb	2.5	7184436.53	4000	98.72	89.6	110.4	
59	Co	89	He	20.275	ppb	0.5	39792.17	20	101.38	89.6	110.4	
60	Ni	89	He	20.522	ppb	0.7	11092.51	20	102.61	89.6	110.4	
63	Cu	89	He	20.518	ppb	0.8	31025.17	20	102.59	89.6	110.4	
66	Zn	89	He	20.156	ppb	0.8	4029.62	20	100.78	89.6	110.4	
75	As	89	He	20.560	ppb	1.6	3485.49	20	102.8	89.6	110.4	
78	Se	89	H2	20.170	ppb	1.8	1793.37	20	100.85	89.6	110.4	
88	Sr	89	He	19.756	ppb	2.3	16928.72	20	98.78	89.6	110.4	
95	Mo	89	He	40.064	ppb	1.8	36827.10	40	100.16	89.6	110.4	
107	Ag	89	He	20.697	ppb	0.2	64112.90	20	103.48	89.6	110.4	
111	Cd	89	He	20.603	ppb	1.1	8297.44	20	103.02	89.6	110.4	
118	Sn	159	He	19.990	ppb	1.6	17887.94	20	99.95	89.6	110.4	
121	Sb	159	No Gas	19.688	ppb	9.2	128352.62	20	98.44	89.6	110.4	
137	Ba	159	No Gas	19.783	ppb	8.6	49620.80	20	98.92	89.6	110.4	
182	W	159	No Gas	19.382	ppb	10.1	90842.74	20	96.91	89.6	110.4	
205	Tl	209	No Gas	20.503	ppb	9.3	210825.97	20	102.52	89.6	110.4	
208	Pb	209	No Gas	19.827	ppb	8.5	282367.61	20	99.14	89.6	110.4	
232	Th	209	No Gas	19.945	ppb	9.5	285489.78	20	99.72	89.6	110.4	
238	U	209	No Gas	19.627	ppb	9.6	265949.72	20	98.14	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1882886.82	3.0	1881686.03	100.06	29.5	120.4	
Sc	45	No Gas	3918917.09	3.9	3915123.71	100.1	29.5	120.4	
Sc	45	H2	504756.38	2.1	507902.1	99.38	29.5	120.4	
Sc	45	He	98716.83	1.0	102593	96.22	29.5	120.4	
Ge	72	No Gas	858014.60	2.5	852546.94	100.64	29.5	120.4	
Ge	72	H2	190817.99	0.2	193980.16	98.37	29.5	120.4	
Ge	72	He	75705.89	0.5	77385.19	97.83	29.5	120.4	
Y	89	H2	3138177.70	2.2	3089458.15	101.58	29.5	120.4	
Y	89	He	659673.25	0.7	678154.65	97.27	29.5	120.4	
Tb	159	No Gas	7948454.60	3.8	7727080.72	102.86	29.5	120.4	
Tb	159	He	3271947.49	0.5	3280980.4	99.72	29.5	120.4	
Bi	209	No Gas	4099612.54	4.0	3977089.87	103.08	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:21:41 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.057	ppb	29.5	105.56	0.2	
11	B	6	No Gas	0.503	ppb	38.7	2273.59	4	
23	Na	45	He	1.378	ppb	138.7	10522.15	200	
24	Mg	45	He	-2.210	ppb	N/A	713.40	20	
27	Al	45	He	0.479	ppb	86.8	31.11	20	
28	Si	45	H2	0.973	ppb	123.2	600.69	100	
39	K	45	He	0.641	ppb	281.7	12263.18	200	
40	Ca	45	H2	1.354	ppb	2.7	1483.46	20	
51	V	89	He	-0.083	ppb	N/A	272.24	1	
52	Cr	89	He	-0.010	ppb	N/A	59.32	1	
55	Mn	89	He	0.010	ppb	82.4	16.67	0.4	
56	Fe	89	H2	2.570	ppb	4.1	7022.86	20	
59	Co	89	He	0.000	ppb	1819.2	15.56	0.2	
60	Ni	89	He	-0.143	ppb	N/A	237.79	0.4	
63	Cu	89	He	0.032	ppb	105.0	521.14	0.6	
66	Zn	89	He	-0.072	ppb	N/A	57.78	2	
75	As	89	He	-0.008	ppb	N/A	5.33	1	
78	Se	89	H2	0.016	ppb	84.4	2.17	1	
88	Sr	89	He	-0.001	ppb	N/A	5.56	1	
95	Mo	89	He	0.171	ppb	20.0	157.79	1	
107	Ag	89	He	0.006	ppb	64.3	32.22	0.2	
111	Cd	89	He	0.005	ppb	159.1	2.22	0.2	
118	Sn	159	He	0.071	ppb	73.0	127.79	1	
121	Sb	159	No Gas	0.024	ppb	27.6	190.21	0.2	
137	Ba	159	No Gas	0.025	ppb	35.9	73.42	0.4	
182	W	159	No Gas	0.052	ppb	60.3	260.30	1	
205	Tl	209	No Gas	0.024	ppb	6.9	387.10	0.2	
208	Pb	209	No Gas	0.022	ppb	15.2	537.28	0.2	
232	Th	209	No Gas	0.046	ppb	16.2	740.85	1	
238	U	209	No Gas	0.021	ppb	12.8	276.98	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841311.05	0.4	1881686.03	97.85	29.5	120.4	
Sc	45	No Gas	3786276.74	1.3	3915123.71	96.71	29.5	120.4	
Sc	45	H2	498730.53	1.1	507902.1	98.19	29.5	120.4	
Sc	45	He	97952.29	1.3	102593	95.48	29.5	120.4	
Ge	72	No Gas	835863.08	1.9	852546.94	98.04	29.5	120.4	
Ge	72	H2	187819.55	1.2	193980.16	96.82	29.5	120.4	
Ge	72	He	74710.41	0.7	77385.19	96.54	29.5	120.4	
Y	89	H2	3053927.60	1.0	3089458.15	98.85	29.5	120.4	
Y	89	He	653526.53	1.3	678154.65	96.37	29.5	120.4	
Tb	159	No Gas	7709154.33	1.8	7727080.72	99.77	29.5	120.4	
Tb	159	He	3223734.74	1.3	3280980.4	98.26	29.5	120.4	
Bi	209	No Gas	4005113.07	1.9	3977089.87	100.7	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:24:16 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.200	ppb	20.1	303.35	0.2	100	79.5	120.4
11	B	6	No Gas	3.805	ppb	9.1	5244.46	4	95.12	79.5	120.4
23	Na	45	He	228.917	ppb	2.7	35871.37	200	114.46	79.5	120.4
24	Mg	45	He	19.220	ppb	12.3	2049.18	20	96.1	79.5	120.4
27	Al	45	He	20.031	ppb	8.1	518.92	20	100.16	79.5	120.4
28	Si	45	H2	94.581	ppb	6.0	5300.20	100	94.58	79.5	120.4
39	K	45	He	209.155	ppb	1.5	24555.12	200	104.58	79.5	120.4
40	Ca	45	H2	21.944	ppb	6.9	10737.77	20	109.72	79.5	120.4
51	V	89	He	1.284	ppb	14.2	1524.58	1	128.4	79.5	120.4
52	Cr	89	He	1.049	ppb	1.8	1241.17	1	104.9	79.5	120.4
55	Mn	89	He	0.416	ppb	6.2	233.29	0.4	104	79.5	120.4
56	Fe	89	H2	23.115	ppb	5.2	43023.56	20	115.57	79.5	120.4
59	Co	89	He	0.211	ppb	13.9	422.26	0.2	105.5	79.5	120.4
60	Ni	89	He	0.383	ppb	10.9	506.69	0.4	95.75	79.5	120.4
63	Cu	89	He	0.933	ppb	6.8	1833.52	0.6	155.5	79.5	120.4
66	Zn	89	He	2.103	ppb	3.6	476.69	2	105.15	79.5	120.4
75	As	89	He	1.007	ppb	7.8	174.02	1	100.7	79.5	120.4
78	Se	89	H2	0.987	ppb	9.5	85.33	1	98.7	79.5	120.4
88	Sr	89	He	1.035	ppb	8.8	876.73	1	103.5	79.5	120.4
95	Mo	89	He	1.123	ppb	3.8	1015.63	1	112.3	79.5	120.4
107	Ag	89	He	0.218	ppb	8.8	677.82	0.2	109	79.5	120.4
111	Cd	89	He	0.224	ppb	6.0	88.89	0.2	112	79.5	120.4
118	Sn	159	He	1.139	ppb	3.2	1063.42	1	113.9	79.5	120.4
121	Sb	159	No Gas	0.206	ppb	20.2	1358.25	0.2	103	79.5	120.4
137	Ba	159	No Gas	0.427	ppb	15.1	1071.24	0.4	106.75	79.5	120.4
182	W	159	No Gas	1.006	ppb	8.2	4672.74	1	100.6	79.5	120.4
205	Tl	209	No Gas	0.210	ppb	16.4	2276.10	0.2	105	79.5	120.4
208	Pb	209	No Gas	0.225	ppb	3.6	3397.33	0.2	112.5	79.5	120.4
232	Th	209	No Gas	0.259	ppb	3.3	3764.78	0.2	129.5	79.5	120.4
238	U	209	No Gas	0.192	ppb	9.7	2579.83	0.2	96	79.5	120.4

QC Flag
Failed DoD

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1923469.77	0.8	1881686.03	102.22	29.5	120.4	
Sc	45	No Gas	3842597.57	0.8	3915123.71	98.15	29.5	120.4	
Sc	45	H2	489247.15	4.8	507902.1	96.33	29.5	120.4	
Sc	45	He	97593.17	0.9	102593	95.13	29.5	120.4	
Ge	72	No Gas	848119.85	1.3	852546.94	99.48	29.5	120.4	
Ge	72	H2	185277.17	3.9	193980.16	95.51	29.5	120.4	
Ge	72	He	74019.00	0.3	77385.19	95.65	29.5	120.4	
Y	89	H2	3031936.33	4.4	3089458.15	98.14	29.5	120.4	
Y	89	He	647814.80	0.6	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	7821809.40	1.2	7727080.72	101.23	29.5	120.4	
Tb	159	He	3216718.01	1.6	3280980.4	98.04	29.5	120.4	
Bi	209	No Gas	4055537.89	1.4	3977089.87	101.97	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:26:51 PM
Sample Type	ICSA
Total Dilution	1.0000
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass

Analyte Table:

Name	Mass	ISTD	Tune Step	Tune Mode	Conc.	Units	Det.	CPS	Ratio	Integ Time
[Li]	7	6	1	No Gas	116.028	ppb	Pulse	109257.29	0.0611	0.0999
Be	9	6	1	No Gas	0.028	ppb	Pulse	65.56	0.0000	0.3000
B	11	6	1	No Gas	0.365	ppb	Pulse	2098.01	0.0012	0.3000
Sb	121	159	1	No Gas	0.165	ppb	Pulse	1111.29	0.0001	0.0999
Ba	137	159	1	No Gas	0.163	ppb	Pulse	420.48	0.0001	0.0999
W	182	159	1	No Gas	0.209	ppb	Pulse	1001.16	0.0001	0.0999
Tl	205	209	1	No Gas	0.009	ppb	Pulse	226.92	0.0001	0.0999
[Pb]	206	209	1	No Gas	0.068	ppb	Pulse	307.01	0.0001	0.0999
[Pb]	207	209	1	No Gas	0.087	ppb	Pulse	307.01	0.0001	0.0999
Pb	208	209	1	No Gas	0.085	ppb	Pulse	1364.89	0.0004	0.0999
Th	232	209	1	No Gas	0.037	ppb	Pulse	600.69	0.0002	0.0999
U	238	209	1	No Gas	0.005	ppb	Pulse	70.08	0.0000	0.0999
Si	28	45	2	H2	5.615	ppb	Pulse	790.90	0.0017	0.0999
Ca	40	45	2	H2	97945.288	ppb	Analog	42490864.37	90.4270	0.3000
Fe	56	89	2	H2	96464.178	ppb	Analog	165386936.11	55.9247	0.0999
Se	78	89	2	H2	0.078	ppb	Pulse	7.33	0.0000	2.0001
Na	23	45	3	He	101176.764	ppb	Analog	10286230.35	115.7916	0.0999
Mg	24	45	3	He	101202.852	ppb	Analog	5751294.15	64.7414	0.1500
Al	27	45	3	He	97196.564	ppb	Analog	2208949.80	24.8671	0.3000
K	39	45	3	He	97416.537	ppb	Analog	5257550.66	59.1821	0.2001
V	51	89	3	He	0.034	ppb	Pulse	351.13	0.0006	0.3000
Cr	52	89	3	He	0.293	ppb	Pulse	369.94	0.0006	0.5001
Mn	55	89	3	He	0.520	ppb	Pulse	269.29	0.0004	0.5001
Co	59	89	3	He	0.305	ppb	Pulse	560.06	0.0009	0.1500
Ni	60	89	3	He	0.116	ppb	Pulse	344.46	0.0006	0.3000
Cu	63	89	3	He	0.751	ppb	Pulse	1460.14	0.0024	0.3000
Zn	66	89	3	He	0.526	ppb	Pulse	161.12	0.0003	0.3000
As	75	89	3	He	0.065	ppb	Pulse	16.33	0.0000	0.9999
Sr	88	89	3	He	0.810	ppb	Pulse	641.15	0.0011	0.3000
Mo	95	89	3	He	2114.343	ppb	Analog	1778699.78	2.9463	0.3000
Ag	107	89	3	He	0.027	ppb	Pulse	90.01	0.0001	0.3000
Cd	111	89	3	He	0.358	ppb	Pulse	132.60	0.0002	0.9000
Sn	118	159	3	He	0.388	ppb	Pulse	393.35	0.0001	0.3000

ISTD Table:

Name	Mass	ISTD Conc.	Units	Det.	Tune Step	Tune Mode	CPS	CPS RSD
Li	6	1	ppb	Analog	1	No Gas	1788832.90	0.9
Sc	45	1	ppb	Analog	1	No Gas	3769213.51	0.7
Ge	72	1	ppb	Pulse	1	No Gas	831279.97	0.8
Tb	159	1	ppb	Analog	1	No Gas	7905431.55	0.4
Bi	209	1	ppb	Analog	1	No Gas	3890679.26	0.3
Sc	45	1	ppb	Pulse	2	H2	469893.26	0.5
Ge	72	1	ppb	Pulse	2	H2	174741.38	1.5
Y	89	1	ppb	Analog	2	H2	2957468.95	1.0
Sc	45	1	ppb	Pulse	3	He	88885.87	2.7
Ge	72	1	ppb	Pulse	3	He	67975.61	2.2
Y	89	1	ppb	Pulse	3	He	603985.91	2.4
Tb	159	1	ppb	Analog	3	He	3125184.43	2.5
Bi	209	1	ppb	Analog	3	He	1785607.96	2.2

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:29:29 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.266	ppb	1.9	23693.39	20	79.5	120.4	
11	B	6	No Gas	20.783	ppb	3.5	17294.23	20	79.5	120.4	
23	Na	45	He	97298.408	ppb	4.0	10268265.82	100000	79.5	120.4	
24	Mg	45	He	96860.913	ppb	4.6	5712881.17	100000	79.5	120.4	
27	Al	45	He	92943.980	ppb	4.7	2192346.72	100000	79.5	120.4	
28	Si	45	H2	463.937	ppb	1.9	22532.95	500	79.5	120.4	
39	K	45	He	93389.437	ppb	4.0	5232108.85	100000	79.5	120.4	
40	Ca	45	H2	97685.991	ppb	0.9	41547806.05	100000	79.5	120.4	
51	V	89	He	19.758	ppb	4.4	17829.58	20	79.5	120.4	
52	Cr	89	He	20.187	ppb	4.9	21816.85	20	79.5	120.4	
55	Mn	89	He	19.735	ppb	3.9	10158.49	20	79.5	120.4	
56	Fe	89	H2	95228.334	ppb	0.5	162998067.33	100000	79.5	120.4	
59	Co	89	He	19.823	ppb	5.5	36841.98	20	79.5	120.4	
60	Ni	89	He	19.247	ppb	5.9	9870.47	20	79.5	120.4	
63	Cu	89	He	19.595	ppb	5.3	28077.82	20	79.5	120.4	
66	Zn	89	He	20.080	ppb	7.0	3800.66	20	79.5	120.4	
75	As	89	He	20.072	ppb	3.9	3223.40	20	79.5	120.4	
78	Se	89	H2	19.500	ppb	0.3	1631.52	20	79.5	120.4	
88	Sr	89	He	20.087	ppb	2.7	16307.97	20	79.5	120.4	
95	Mo	89	He	2054.763	ppb	4.4	1789077.77	2000	79.5	120.4	
107	Ag	89	He	19.562	ppb	3.5	57409.78	20	79.5	120.4	
111	Cd	89	He	20.008	ppb	5.0	7631.11	20	79.5	120.4	
118	Sn	159	He	19.256	ppb	4.4	17093.61	20	79.5	120.4	
121	Sb	159	No Gas	19.663	ppb	2.3	127974.68	20	79.5	120.4	
137	Ba	159	No Gas	20.074	ppb	2.5	50263.99	20	79.5	120.4	
182	W	159	No Gas	20.443	ppb	2.0	95652.09	20	79.5	120.4	
205	Tl	209	No Gas	20.613	ppb	1.8	202547.18	20	79.5	120.4	
208	Pb	209	No Gas	20.513	ppb	1.9	279116.55	20	79.5	120.4	
232	Th	209	No Gas	21.322	ppb	2.9	291707.24	20	79.5	120.4	
238	U	209	No Gas	21.019	ppb	2.7	272233.34	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1662402.72	1.4	1881686.03	88.35	29.5	120.4	
Sc	45	No Gas	3605738.16	2.5	3915123.71	92.1	29.5	120.4	
Sc	45	H2	460676.27	1.5	507902.1	90.7	29.5	120.4	
Sc	45	He	92293.53	3.4	102593	89.96	29.5	120.4	
Ge	72	No Gas	807331.66	1.8	852546.94	94.7	29.5	120.4	
Ge	72	H2	171822.68	1.6	193980.16	88.58	29.5	120.4	
Ge	72	He	70832.22	2.4	77385.19	91.53	29.5	120.4	
Y	89	H2	2952330.82	1.0	3089458.15	95.56	29.5	120.4	
Y	89	He	625462.29	3.5	678154.65	92.23	29.5	120.4	
Tb	159	No Gas	7914497.04	2.3	7727080.72	102.43	29.5	120.4	
Tb	159	He	3248608.91	3.5	3280980.4	99.01	29.5	120.4	
Bi	209	No Gas	3907124.59	2.0	3977089.87	98.24	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:32:11 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	104.956	ppb	2.6	135725.96	100	104.96	89.5	110.4	
11	B	6	No Gas	490.873	ppb	3.3	410272.68	500	98.17	89.5	110.4	
51	V	89	He	1016.899	ppb	1.0	918085.99	1000	101.69	89.5	110.4	
52	Cr	89	He	2027.483	ppb	0.6	2226814.42	2000	101.37	89.5	110.4	
55	Mn	89	He	2007.160	ppb	0.5	1051756.59	2000	100.36	89.5	110.4	
59	Co	89	He	1017.142	ppb	1.1	1926362.61	1000	101.71	89.5	110.4	
60	Ni	89	He	1052.454	ppb	0.7	533885.07	1000	105.25	89.5	110.4	
63	Cu	89	He	1985.579	ppb	0.7	2853997.53	2000	99.28	89.5	110.4	
66	Zn	89	He	2072.485	ppb	0.9	392880.42	2000	103.62	89.5	110.4	
75	As	89	He	1014.457	ppb	0.6	165699.00	1000	101.45	89.5	110.4	
78	Se	89	H2	1016.637	ppb	3.9	87140.66	1000	101.66	89.5	110.4	
88	Sr	89	He	1993.216	ppb	0.7	1648095.60	2000	99.66	89.5	110.4	
95	Mo	89	He	1026.151	ppb	0.6	910624.89	1000	102.62	89.5	110.4	
107	Ag	89	He	110.605	ppb	0.9	330701.82	100	110.6	89.5	110.4	> +/- 10%
111	Cd	89	He	1047.209	ppb	0.6	407103.71	1000	104.72	89.5	110.4	
118	Sn	159	He	976.915	ppb	0.2	870993.67	1000	97.69	89.5	110.4	
121	Sb	159	No Gas	961.506	ppb	2.3	6618258.23	1000	96.15	89.5	110.4	
137	Ba	159	No Gas	1964.766	ppb	2.2	5202706.53	2000	98.24	89.5	110.4	
182	W	159	No Gas	1016.831	ppb	2.1	5033038.07	1000	101.68	89.5	110.4	
205	Tl	209	No Gas	981.300	ppb	1.3	10715099.30	1000	98.13	89.5	110.4	
208	Pb	209	No Gas	1937.836	ppb	1.5	29297348.46	2000	96.89	89.5	110.4	
232	Th	209	No Gas	1004.584	ppb	2.0	15276578.75	1000	100.46	89.5	110.4	
238	U	209	No Gas	978.859	ppb	2.3	14096233.03	1000	97.89	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841098.35	0.9	1881686.03	97.84	29.5	120.4	
Sc	45	No Gas	3948146.63	0.5	3915123.71	100.84	29.5	120.4	
Ge	72	No Gas	883094.38	0.1	852546.94	103.58	29.5	120.4	
Tb	159	No Gas	8375370.01	0.7	7727080.72	108.39	29.5	120.4	
Bi	209	No Gas	4345439.82	0.4	3977089.87	109.26	29.5	120.4	
Sc	45	H2	477440.07	4.5	507902.1	94	29.5	120.4	
Ge	72	H2	182263.16	3.7	193980.16	93.96	29.5	120.4	
Y	89	H2	3028896.89	3.6	3089458.15	98.04	29.5	120.4	
Sc	45	He	94755.94	0.9	102593	92.36	29.5	120.4	
Ge	72	He	73231.33	0.6	77385.19	94.63	29.5	120.4	
Y	89	He	636849.38	0.6	678154.65	93.91	29.5	120.4	
Tb	159	He	3272217.59	0.4	3280980.4	99.73	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS2
File Name	014SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:34:42 PM
Sample Type	Sample
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.255	ppb	23.5	302.24				100	
11	B	6	No Gas	11.382	ppb	11.8	9489.02				100	
23	Na	45	He	196781.367	ppb	3.3	21676874.65				100	
24	Mg	45	He	197105.781	ppb	3.6	12140325.79				100	
27	Al	45	He	193693.161	ppb	3.6	4771636.77				100	
28	Si	45	H2	9315.914	ppb	1.1	459359.41				100	
39	K	45	He	192559.354	ppb	2.8	11254985.58				100	
40	Ca	45	H2	194327.006	ppb	1.5	85762528.16				100	
51	V	89	He	0.096	ppb	234.0	427.81				100	
52	Cr	89	He	1.670	ppb	27.5	1915.20				100	
55	Mn	89	He	7.903	ppb	7.9	4196.56				100	
56	Fe	89	H2	95634.266	ppb	1.0	167005678.13				100	
59	Co	89	He	0.818	ppb	35.8	1571.37				100	
60	Ni	89	He	1.981	ppb	10.1	1322.33				100	
63	Cu	89	He	1.466	ppb	34.3	2584.92				100	
66	Zn	89	He	2.443	ppb	15.2	538.92				100	
75	As	89	He	0.447	ppb	55.9	79.68				100	
78	Se	89	H2	0.702	ppb	5.5	60.67				100	
88	Sr	89	He	1.491	ppb	38.4	1243.49				100	
95	Mo	89	He	2.013	ppb	21.7	1802.47				100	
107	Ag	89	He	0.128	ppb	38.7	398.91				100	
111	Cd	89	He	0.257	ppb	93.8	99.26				100	
118	Sn	159	He	1.395	ppb	18.3	1293.46				100	
121	Sb	159	No Gas	0.864	ppb	23.1	5667.61				100	
137	Ba	159	No Gas	1.682	ppb	18.1	4232.08				100	
182	W	159	No Gas	1.825	ppb	12.3	8569.10				100	
205	Tl	209	No Gas	0.728	ppb	29.2	7130.09				100	
208	Pb	209	No Gas	1.505	ppb	24.9	20239.44				100	
232	Th	209	No Gas	1.794	ppb	31.4	24125.28				100	
238	U	209	No Gas	0.827	ppb	31.6	10489.78				100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1541932.76	1.7	1881686.03	81.94	29.5	120.4	
Sc	45	No Gas	3611270.00	1.0	3915123.71	92.24	29.5	120.4	
Ge	72	No Gas	793851.05	1.0	852546.94	93.12	29.5	120.4	
Tb	159	No Gas	7926284.60	1.4	7727080.72	102.58	29.5	120.4	
Bi	209	No Gas	3821340.40	1.2	3977089.87	96.08	29.5	120.4	
Sc	45	H2	478039.09	1.5	507902.1	94.12	29.5	120.4	
Ge	72	H2	176594.89	1.0	193980.16	91.04	29.5	120.4	
Y	89	H2	3012324.72	1.8	3089458.15	97.5	29.5	120.4	
Sc	45	He	96381.41	4.1	102593	93.95	29.5	120.4	
Ge	72	He	72838.11	3.1	77385.19	94.12	29.5	120.4	
Y	89	He	644738.89	3.5	678154.65	95.07	29.5	120.4	
Tb	159	He	3240489.78	3.0	3280980.4	98.77	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:42:37 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.077	ppb	6.4	32745.62	25	96.31	89.8	110.2	
11	B	6	No Gas	24.361	ppb	4.2	23257.08	25	97.44	89.8	110.2	
23	Na	45	He	4958.049	ppb	1.9	587025.73	5000	99.16	89.8	110.2	
24	Mg	45	He	4793.145	ppb	2.2	312521.63	5000	95.86	89.8	110.2	
27	Al	45	He	485.294	ppb	3.8	12639.37	500	97.06	89.8	110.2	
28	Si	45	H2	464.055	ppb	1.5	25126.88	500	92.81	89.8	110.2	
39	K	45	He	4782.742	ppb	2.6	307403.47	5000	95.65	89.8	110.2	
40	Ca	45	H2	4787.558	ppb	0.9	2271281.74	5000	95.75	89.8	110.2	
51	V	89	He	24.334	ppb	3.2	23640.52	25	97.34	89.8	110.2	
52	Cr	89	He	24.560	ppb	2.0	28668.44	25	98.24	89.8	110.2	
55	Mn	89	He	24.952	ppb	1.7	13873.65	25	99.81	89.8	110.2	
56	Fe	89	H2	4840.930	ppb	0.7	8988732.37	5000	96.82	89.8	110.2	
59	Co	89	He	24.721	ppb	1.3	49653.12	25	98.88	89.8	110.2	
60	Ni	89	He	24.672	ppb	1.9	13583.71	25	98.69	89.8	110.2	
63	Cu	89	He	25.103	ppb	1.5	38737.95	25	100.41	89.8	110.2	
66	Zn	89	He	24.527	ppb	3.8	5002.19	25	98.11	89.8	110.2	
75	As	89	He	24.502	ppb	2.6	4249.79	25	98.01	89.8	110.2	
78	Se	89	H2	23.916	ppb	2.5	2169.91	25	95.66	89.8	110.2	
88	Sr	89	He	23.459	ppb	2.1	20571.56	25	93.84	89.8	110.2	
95	Mo	89	He	24.881	ppb	1.6	23410.72	25	99.52	89.8	110.2	
107	Ag	89	He	24.824	ppb	1.9	78695.92	25	99.3	89.8	110.2	
111	Cd	89	He	24.575	ppb	2.9	10127.58	25	98.3	89.8	110.2	
118	Sn	159	He	24.016	ppb	2.9	22232.31	25	96.06	89.8	110.2	
121	Sb	159	No Gas	24.327	ppb	4.8	165434.82	25	97.31	89.8	110.2	
137	Ba	159	No Gas	24.880	ppb	4.0	65091.58	25	99.52	89.8	110.2	
182	W	159	No Gas	23.943	ppb	4.7	117079.59	25	95.77	89.8	110.2	
205	Tl	209	No Gas	24.172	ppb	3.2	257556.90	25	96.69	89.8	110.2	
208	Pb	209	No Gas	24.325	ppb	5.0	358838.44	25	97.3	89.8	110.2	
232	Th	209	No Gas	24.292	ppb	6.9	360244.61	25	97.17	89.8	110.2	
238	U	209	No Gas	23.928	ppb	5.6	335972.43	25	95.71	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1935971.03	1.8	1881686.03	102.88	29.5	120.4	
Sc	45	No Gas	4058156.14	1.7	3915123.71	103.65	29.5	120.4	
Sc	45	H2	513691.53	1.0	507902.1	101.14	29.5	120.4	
Sc	45	He	101668.83	1.4	102593	99.1	29.5	120.4	
Ge	72	No Gas	900139.75	1.3	852546.94	105.58	29.5	120.4	
Ge	72	H2	190859.46	0.2	193980.16	98.39	29.5	120.4	
Ge	72	He	77228.25	1.1	77385.19	99.8	29.5	120.4	
Y	89	H2	3201945.24	0.2	3089458.15	103.64	29.5	120.4	
Y	89	He	675255.16	1.4	678154.65	99.57	29.5	120.4	
Tb	159	No Gas	8274975.36	1.0	7727080.72	107.09	29.5	120.4	
Tb	159	He	3387911.89	1.3	3280980.4	103.26	29.5	120.4	
Bi	209	No Gas	4239102.60	1.2	3977089.87	106.59	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 5:45:11 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.110	ppb	30.7	178.90	0.2	Failed DoD
11	B	6	No Gas	1.113	ppb	4.9	2871.49	4	
23	Na	45	He	24.662	ppb	29.7	13898.95	200	
24	Mg	45	He	1.431	ppb	352.7	995.69	20	
27	Al	45	He	3.295	ppb	90.9	107.79	20	
28	Si	45	H2	1.161	ppb	172.0	640.73	100	
39	K	45	He	7.277	ppb	125.6	13400.25	200	
40	Ca	45	H2	2.374	ppb	3.4	2048.00	20	
51	V	89	He	0.155	ppb	32.5	517.81	1	
52	Cr	89	He	0.028	ppb	112.1	107.32	1	
55	Mn	89	He	0.079	ppb	17.6	56.66	0.4	
56	Fe	89	H2	6.436	ppb	3.5	14857.68	20	
59	Co	89	He	0.033	ppb	25.8	82.23	0.2	
60	Ni	89	He	-0.067	ppb	N/A	291.12	0.4	
63	Cu	89	He	0.341	ppb	13.5	1026.74	0.6	Failed DoD
66	Zn	89	He	0.045	ppb	147.9	84.45	2	
75	As	89	He	0.018	ppb	170.9	10.33	1	
78	Se	89	H2	0.064	ppb	12.5	6.83	1	
88	Sr	89	He	0.021	ppb	60.8	25.56	1	
95	Mo	89	He	0.158	ppb	15.2	153.34	1	
107	Ag	89	He	0.009	ppb	44.8	44.45	0.2	
111	Cd	89	He	0.019	ppb	87.0	8.52	0.2	
118	Sn	159	He	0.067	ppb	66.7	131.12	1	
121	Sb	159	No Gas	0.070	ppb	38.5	513.92	0.2	
137	Ba	159	No Gas	0.071	ppb	28.5	200.22	0.4	
182	W	159	No Gas	0.101	ppb	14.9	520.59	1	
205	Tl	209	No Gas	0.060	ppb	40.4	780.91	0.2	
208	Pb	209	No Gas	0.113	ppb	31.4	1895.51	0.2	Failed DoD
232	Th	209	No Gas	0.092	ppb	19.4	1451.73	1	
238	U	209	No Gas	0.047	ppb	44.1	654.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1900884.16	0.7	1881686.03	101.02	29.5	120.4	
Sc	45	No Gas	4095714.89	0.1	3915123.71	104.61	29.5	120.4	
Sc	45	H2	522988.05	1.1	507902.1	102.97	29.5	120.4	
Sc	45	He	103711.63	1.5	102593	101.09	29.5	120.4	
Ge	72	No Gas	897216.83	0.7	852546.94	105.24	29.5	120.4	
Ge	72	H2	197900.57	1.0	193980.16	102.02	29.5	120.4	
Ge	72	He	79345.51	0.8	77385.19	102.53	29.5	120.4	
Y	89	H2	3271730.39	0.5	3089458.15	105.9	29.5	120.4	
Y	89	He	686535.85	1.1	678154.65	101.24	29.5	120.4	
Tb	159	No Gas	8268609.25	0.4	7727080.72	107.01	29.5	120.4	
Tb	159	He	3378528.14	2.1	3280980.4	102.97	29.5	120.4	
Bi	209	No Gas	4213319.58	0.5	3977089.87	105.94	29.5	120.4	

Sample Report

Sample Name missed

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:47:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	13.1	73.33	100	
11	B	6	No Gas	-0.139	ppb	N/A	2180.25	1000	
23	Na	45	He	1095.572	ppb	113.1	9483.74	200000	
24	Mg	45	He	511.268	ppb	107.3	2189.23	200000	
27	Al	45	He	69.314	ppb	96.8	120.00	200000	
28	Si	45	H2	18.924	ppb	91.0	43.38	10000	
39	K	45	He	1033.270	ppb	129.7	5262.01	200000	
40	Ca	45	H2	199.703	ppb	21.7	2445.93	200000	
51	V	89	He	-0.145	ppb	N/A	35.56	1000	
52	Cr	89	He	0.767	ppb	107.2	64.66	2000	
55	Mn	89	He	1.781	ppb	104.5	66.66	2000	
56	Fe	89	H2	540.478	ppb	24.8	24419.44	100000	
59	Co	89	He	0.574	ppb	112.1	73.34	1000	
60	Ni	89	He	12.183	ppb	122.1	416.69	1000	
63	Cu	89	He	3.735	ppb	117.5	475.58	2000	
66	Zn	89	He	0.704	ppb	88.7	33.34	2000	
75	As	89	He	0.434	ppb	113.0	6.67	1000	
78	Se	89	H2	1.138	ppb	51.9	2.50	1000	
88	Sr	89	He	0.250	ppb	93.5	18.89	2000	
95	Mo	89	He	0.646	ppb	78.1	48.89	1000	
107	Ag	89	He	0.086	ppb	101.0	24.45	100	
111	Cd	89	He	0.273	ppb	103.4	6.67	1000	
118	Sn	159	He	1.737	ppb	126.1	86.67	1000	
121	Sb	159	No Gas	0.014	ppb	41.1	153.50	1000	
137	Ba	159	No Gas	0.009	ppb	73.3	46.72	2000	
182	W	159	No Gas	0.043	ppb	16.0	276.98	1000	
205	Tl	209	No Gas	0.009	ppb	20.7	283.65	1000	
208	Pb	209	No Gas	0.030	ppb	31.7	774.21	2000	
232	Th	209	No Gas	0.020	ppb	25.3	467.20	1000	
238	U	209	No Gas	0.005	ppb	30.6	86.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2341816.97	15.6	1881686.03	124.45	29.5	120.4	6020/DoD
Sc	45	No Gas	5013852.69	15.7	3915123.71	128.06	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	13286.51	47.9	507902.1	2.62	29.5	120.4	6020/DoD□ EPA
Sc	45	He	27335.44	132.6	102593	26.64	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	1056074.75	17.4	852546.94	123.87	29.5	120.4	6020/DoD
Ge	72	H2	5297.22	47.9	193980.16	2.73	29.5	120.4	6020/DoD□ EPA
Ge	72	He	19834.71	130.5	77385.19	25.63	29.5	120.4	6020/DoD□ EPA
Y	89	H2	83832.24	44.5	3089458.15	2.71	29.5	120.4	6020/DoD□ EPA
Y	89	He	172416.18	132.4	678154.65	25.42	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	9851205.96	15.5	7727080.72	127.49	29.5	120.4	6020/DoD□ EPA
Tb	159	He	838432.26	131.6	3280980.4	25.55	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	4972585.17	16.6	3977089.87	125.03	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5980-002

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:50:25 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	11.4	68.89	100	
11	B	6	No Gas	18.673	ppb	9.5	16766.89	1000	
23	Na	45	He	42165.018	ppb	0.6	4635049.78	200000	
24	Mg	45	He	7386.534	ppb	0.6	454068.31	200000	
27	Al	45	He	7.895	ppb	18.2	212.23	200000	
28	Si	45	H2	6847.596	ppb	1.5	341564.03	10000	
39	K	45	He	4940.108	ppb	0.8	299267.30	200000	
40	Ca	45	H2	57709.129	ppb	0.2	25752963.50	200000	
51	V	89	He	-0.159	ppb	N/A	198.90	1000	
52	Cr	89	He	0.098	ppb	14.6	178.64	2000	
55	Mn	89	He	0.718	ppb	9.5	391.93	2000	
56	Fe	89	H2	26.637	ppb	6.1	49456.04	100000	
59	Co	89	He	0.033	ppb	46.9	77.79	1000	
60	Ni	89	He	2.453	ppb	3.3	1566.81	1000	
63	Cu	89	He	103.177	ppb	1.1	150563.25	2000	
66	Zn	89	He	47.910	ppb	2.4	9263.38	2000	
75	As	89	He	0.734	ppb	4.2	128.01	1000	
78	Se	89	H2	0.033	ppb	26.9	3.67	1000	
88	Sr	89	He	207.362	ppb	1.0	173564.66	2000	
95	Mo	89	He	0.188	ppb	12.0	171.12	1000	
107	Ag	89	He	0.014	ppb	5.0	55.56	100	
111	Cd	89	He	0.028	ppb	34.7	11.48	1000	
118	Sn	159	He	0.201	ppb	32.3	248.90	1000	
121	Sb	159	No Gas	0.675	ppb	1.6	4512.48	1000	
137	Ba	159	No Gas	2.613	ppb	7.2	6665.73	2000	
182	W	159	No Gas	0.081	ppb	20.2	407.13	1000	
205	Tl	209	No Gas	0.005	ppb	68.9	193.55	1000	
208	Pb	209	No Gas	1.164	ppb	6.0	16843.31	2000	
232	Th	209	No Gas	0.021	ppb	16.4	393.78	1000	
238	U	209	No Gas	0.332	ppb	5.6	4509.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778431.12	3.7	1881686.03	94.51	29.5	120.4	
Sc	45	No Gas	3860232.75	3.1	3915123.71	98.6	29.5	120.4	
Sc	45	H2	483344.21	1.0	507902.1	95.16	29.5	120.4	
Sc	45	He	95932.25	0.9	102593	93.51	29.5	120.4	
Ge	72	No Gas	846221.68	3.1	852546.94	99.26	29.5	120.4	
Ge	72	H2	181794.51	0.7	193980.16	93.72	29.5	120.4	
Ge	72	He	73826.97	0.9	77385.19	95.4	29.5	120.4	
Y	89	H2	3042409.57	0.7	3089458.15	98.48	29.5	120.4	
Y	89	He	644663.43	0.8	678154.65	95.06	29.5	120.4	
Tb	159	No Gas	8060990.16	2.8	7727080.72	104.32	29.5	120.4	
Tb	159	He	3301007.07	0.6	3280980.4	100.61	29.5	120.4	
Bi	209	No Gas	4108172.04	2.6	3977089.87	103.3	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:53:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	40.1	73.34	100	
11	B	6	No Gas	19.730	ppb	6.4	17643.49	1000	
23	Na	45	He	42042.733	ppb	0.4	4698009.51	200000	
24	Mg	45	He	7422.513	ppb	1.0	463802.64	200000	
27	Al	45	He	1.692	ppb	46.5	61.11	200000	
28	Si	45	H2	7001.658	ppb	2.4	342903.50	10000	
39	K	45	He	4927.784	ppb	0.5	303486.64	200000	
40	Ca	45	H2	58862.262	ppb	2.2	25792818.78	200000	
51	V	89	He	-0.065	ppb	N/A	286.68	1000	
52	Cr	89	He	0.048	ppb	33.3	122.65	2000	
55	Mn	89	He	0.405	ppb	10.8	227.30	2000	
56	Fe	89	H2	9.483	ppb	4.6	18753.31	100000	
59	Co	89	He	0.037	ppb	8.4	86.67	1000	
60	Ni	89	He	2.893	ppb	9.6	1801.30	1000	
63	Cu	89	He	136.934	ppb	0.6	200658.24	2000	
66	Zn	89	He	95.488	ppb	2.5	18480.55	2000	
75	As	89	He	0.757	ppb	9.9	132.35	1000	
78	Se	89	H2	0.058	ppb	18.8	5.67	1000	
88	Sr	89	He	209.401	ppb	1.0	176132.56	2000	
95	Mo	89	He	0.100	ppb	38.1	92.23	1000	
107	Ag	89	He	0.024	ppb	21.9	85.56	100	
111	Cd	89	He	0.018	ppb	54.9	7.41	1000	
118	Sn	159	He	0.103	ppb	11.5	161.12	1000	
121	Sb	159	No Gas	0.730	ppb	8.6	4966.44	1000	
137	Ba	159	No Gas	2.497	ppb	7.0	6498.86	2000	
182	W	159	No Gas	0.098	ppb	23.2	500.57	1000	
205	Tl	209	No Gas	0.023	ppb	48.3	390.45	1000	
208	Pb	209	No Gas	1.321	ppb	6.7	19390.80	2000	
232	Th	209	No Gas	0.031	ppb	12.7	550.64	1000	
238	U	209	No Gas	0.332	ppb	8.2	4589.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778590.92	1.6	1881686.03	94.52	29.5	120.4	
Sc	45	No Gas	3884904.09	1.9	3915123.71	99.23	29.5	120.4	
Sc	45	H2	474815.52	3.0	507902.1	93.49	29.5	120.4	
Sc	45	He	97513.06	0.6	102593	95.05	29.5	120.4	
Ge	72	No Gas	854192.20	1.8	852546.94	100.19	29.5	120.4	
Ge	72	H2	179633.21	2.3	193980.16	92.6	29.5	120.4	
Ge	72	He	74688.20	0.2	77385.19	96.51	29.5	120.4	
Y	89	H2	2975237.77	2.5	3089458.15	96.3	29.5	120.4	
Y	89	He	647831.52	0.8	678154.65	95.53	29.5	120.4	
Tb	159	No Gas	8222208.07	1.8	7727080.72	106.41	29.5	120.4	
Tb	159	He	3317860.75	0.1	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4173378.91	2.7	3977089.87	104.94	29.5	120.4	

Sample Report

Sample Name SN5980-004

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:55:38 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	53.4	83.34	100	
11	B	6	No Gas	20.720	ppb	6.0	18975.26	1000	
23	Na	45	He	42728.012	ppb	3.4	4895212.80	200000	
24	Mg	45	He	7633.963	ppb	4.0	489014.70	200000	
27	Al	45	He	1.579	ppb	18.0	60.00	200000	
28	Si	45	H2	6963.396	ppb	1.8	356335.39	10000	
39	K	45	He	5146.778	ppb	3.1	324455.54	200000	
40	Ca	45	H2	59959.259	ppb	1.1	27453260.70	200000	
51	V	89	He	-0.035	ppb	N/A	321.13	1000	
52	Cr	89	He	0.035	ppb	51.1	110.65	2000	
55	Mn	89	He	0.477	ppb	4.3	271.29	2000	
56	Fe	89	H2	13.343	ppb	2.5	26507.87	100000	
59	Co	89	He	0.047	ppb	47.1	106.67	1000	
60	Ni	89	He	5.509	ppb	6.0	3218.27	1000	
63	Cu	89	He	259.755	ppb	4.1	388465.48	2000	
66	Zn	89	He	213.732	ppb	4.2	42175.78	2000	
75	As	89	He	0.556	ppb	14.9	101.01	1000	
78	Se	89	H2	0.032	ppb	26.0	3.67	1000	
88	Sr	89	He	214.531	ppb	3.6	184389.74	2000	
95	Mo	89	He	0.074	ppb	16.8	70.01	1000	
107	Ag	89	He	0.025	ppb	28.5	91.11	100	
111	Cd	89	He	0.048	ppb	25.1	19.63	1000	
118	Sn	159	He	0.142	ppb	3.1	200.01	1000	
121	Sb	159	No Gas	0.690	ppb	14.0	4726.12	1000	
137	Ba	159	No Gas	2.629	ppb	8.4	6896.20	2000	
182	W	159	No Gas	0.080	ppb	17.9	417.14	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	123.47	1000	
208	Pb	209	No Gas	1.447	ppb	3.9	21477.88	2000	
232	Th	209	No Gas	0.007	ppb	58.4	200.23	1000	
238	U	209	No Gas	0.300	ppb	8.2	4188.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1830158.73	1.3	1881686.03	97.26	29.5	120.4	
Sc	45	No Gas	3960858.06	2.2	3915123.71	101.17	29.5	120.4	
Sc	45	H2	495953.62	1.3	507902.1	97.65	29.5	120.4	
Sc	45	He	100042.60	2.8	102593	97.51	29.5	120.4	
Ge	72	No Gas	868011.49	2.1	852546.94	101.81	29.5	120.4	
Ge	72	H2	186199.77	2.0	193980.16	95.99	29.5	120.4	
Ge	72	He	76391.29	2.2	77385.19	98.72	29.5	120.4	
Y	89	H2	3102248.65	1.1	3089458.15	100.41	29.5	120.4	
Y	89	He	662443.79	3.1	678154.65	97.68	29.5	120.4	
Tb	159	No Gas	8288027.52	2.4	7727080.72	107.26	29.5	120.4	
Tb	159	He	3383454.98	3.0	3280980.4	103.12	29.5	120.4	
Bi	209	No Gas	4222160.97	2.6	3977089.87	106.16	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 5:58:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	83.0	58.89	100	
11	B	6	No Gas	20.918	ppb	2.7	18561.32	1000	
23	Na	45	He	41472.415	ppb	1.1	4663041.00	200000	
24	Mg	45	He	7478.083	ppb	0.7	470183.08	200000	
27	Al	45	He	1.806	ppb	10.1	64.45	200000	
28	Si	45	H2	6879.574	ppb	0.9	350849.44	10000	
39	K	45	He	4928.567	ppb	1.4	305400.15	200000	
40	Ca	45	H2	58352.051	ppb	1.3	26624107.66	200000	
51	V	89	He	0.068	ppb	24.1	412.24	1000	
52	Cr	89	He	0.042	ppb	39.5	117.31	2000	
55	Mn	89	He	0.608	ppb	7.6	338.61	2000	
56	Fe	89	H2	8.628	ppb	5.3	18068.41	100000	
59	Co	89	He	0.025	ppb	15.8	64.45	1000	
60	Ni	89	He	17.839	ppb	1.3	9601.40	1000	
63	Cu	89	He	169.186	ppb	1.0	250186.85	2000	
66	Zn	89	He	192.694	ppb	0.3	37583.70	2000	
75	As	89	He	0.655	ppb	7.6	116.68	1000	
78	Se	89	H2	0.036	ppb	14.7	4.00	1000	
88	Sr	89	He	210.165	ppb	1.0	178476.66	2000	
95	Mo	89	He	0.079	ppb	25.7	74.45	1000	
107	Ag	89	He	0.067	ppb	13.4	220.01	100	
111	Cd	89	He	0.032	ppb	25.6	13.33	1000	
118	Sn	159	He	0.139	ppb	23.1	195.56	1000	
121	Sb	159	No Gas	0.713	ppb	3.3	4619.27	1000	
137	Ba	159	No Gas	2.867	ppb	3.0	7103.21	2000	
182	W	159	No Gas	0.068	ppb	15.3	337.05	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	2.024	ppb	2.0	28427.68	2000	
232	Th	209	No Gas	0.011	ppb	23.9	246.95	1000	
238	U	209	No Gas	0.347	ppb	0.9	4616.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773479.05	2.5	1881686.03	94.25	29.5	120.4	
Sc	45	No Gas	3704745.24	5.6	3915123.71	94.63	29.5	120.4	
Sc	45	H2	494257.40	1.6	507902.1	97.31	29.5	120.4	
Sc	45	He	98124.15	1.1	102593	95.64	29.5	120.4	
Ge	72	No Gas	824691.38	4.8	852546.94	96.73	29.5	120.4	
Ge	72	H2	183614.17	1.6	193980.16	94.66	29.5	120.4	
Ge	72	He	75501.98	0.3	77385.19	97.57	29.5	120.4	
Y	89	H2	3109946.74	1.4	3089458.15	100.66	29.5	120.4	
Y	89	He	654079.81	0.8	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7828894.95	5.4	7727080.72	101.32	29.5	120.4	
Tb	159	He	3354393.35	0.3	3280980.4	102.24	29.5	120.4	
Bi	209	No Gas	4007559.97	4.7	3977089.87	100.77	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:00:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	52.6	55.56	100	
11	B	6	No Gas	19.345	ppb	5.1	17920.50	1000	
23	Na	45	He	43305.426	ppb	2.4	4787214.75	200000	
24	Mg	45	He	7575.873	ppb	2.6	468319.50	200000	
27	Al	45	He	2.284	ppb	79.6	74.45	200000	
28	Si	45	H2	6821.025	ppb	0.9	349600.18	10000	
39	K	45	He	5030.219	ppb	2.4	306248.89	200000	
40	Ca	45	H2	57382.005	ppb	1.6	26311859.05	200000	
51	V	89	He	0.099	ppb	38.1	435.58	1000	
52	Cr	89	He	0.094	ppb	10.0	173.97	2000	
55	Mn	89	He	0.952	ppb	7.9	516.59	2000	
56	Fe	89	H2	46.705	ppb	1.5	87055.67	100000	
59	Co	89	He	0.067	ppb	28.8	142.24	1000	
60	Ni	89	He	18.634	ppb	6.0	9873.83	1000	
63	Cu	89	He	231.403	ppb	3.1	337345.71	2000	
66	Zn	89	He	168.692	ppb	3.3	32458.57	2000	
75	As	89	He	0.533	ppb	12.0	94.68	1000	
78	Se	89	H2	0.047	ppb	41.9	5.00	1000	
88	Sr	89	He	212.028	ppb	3.2	177597.10	2000	
95	Mo	89	He	0.075	ppb	37.4	70.00	1000	
107	Ag	89	He	0.111	ppb	6.4	348.90	100	
111	Cd	89	He	0.036	ppb	34.2	14.44	1000	
118	Sn	159	He	0.187	ppb	9.6	236.68	1000	
121	Sb	159	No Gas	0.710	ppb	2.1	4903.07	1000	
137	Ba	159	No Gas	2.478	ppb	5.8	6542.30	2000	
182	W	159	No Gas	0.051	ppb	21.1	273.65	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	146.84	1000	
208	Pb	209	No Gas	2.868	ppb	3.3	42729.45	2000	
232	Th	209	No Gas	0.007	ppb	24.7	200.23	1000	
238	U	209	No Gas	0.343	ppb	0.6	4846.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1838228.24	0.7	1881686.03	97.69	29.5	120.4	
Sc	45	No Gas	3933916.72	0.8	3915123.71	100.48	29.5	120.4	
Sc	45	H2	496695.12	1.1	507902.1	97.79	29.5	120.4	
Sc	45	He	96511.96	2.4	102593	94.07	29.5	120.4	
Ge	72	No Gas	862642.42	0.9	852546.94	101.18	29.5	120.4	
Ge	72	H2	186293.71	1.5	193980.16	96.04	29.5	120.4	
Ge	72	He	74388.50	2.0	77385.19	96.13	29.5	120.4	
Y	89	H2	3122254.77	1.6	3089458.15	101.06	29.5	120.4	
Y	89	He	645433.64	2.4	678154.65	95.17	29.5	120.4	
Tb	159	No Gas	8336254.60	1.3	7727080.72	107.88	29.5	120.4	
Tb	159	He	3317832.48	2.4	3280980.4	101.12	29.5	120.4	
Bi	209	No Gas	4259294.30	1.5	3977089.87	107.1	29.5	120.4	

Sample Report

Sample Name SN5980-006

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:03:23 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	141.4	41.11	100	
11	B	6	No Gas	19.445	ppb	3.2	18047.38	1000	
23	Na	45	He	42782.118	ppb	0.2	4797311.31	200000	
24	Mg	45	He	7674.093	ppb	0.5	481194.68	200000	
27	Al	45	He	6.699	ppb	39.9	186.68	200000	
28	Si	45	H2	6908.462	ppb	1.0	355950.70	10000	
39	K	45	He	5125.709	ppb	0.4	316297.99	200000	
40	Ca	45	H2	59135.670	ppb	1.3	27259028.48	200000	
51	V	89	He	0.096	ppb	35.3	438.91	1000	
52	Cr	89	He	0.072	ppb	10.5	151.30	2000	
55	Mn	89	He	0.775	ppb	6.5	429.27	2000	
56	Fe	89	H2	14.563	ppb	2.0	28737.98	100000	
59	Co	89	He	0.056	ppb	37.7	124.46	1000	
60	Ni	89	He	13.517	ppb	3.2	7363.30	1000	
63	Cu	89	He	246.432	ppb	0.2	364885.03	2000	
66	Zn	89	He	227.532	ppb	1.0	44446.14	2000	
75	As	89	He	0.604	ppb	11.4	108.34	1000	
78	Se	89	H2	0.030	ppb	50.9	3.50	1000	
88	Sr	89	He	214.914	ppb	0.4	182856.77	2000	
95	Mo	89	He	0.078	ppb	5.2	73.34	1000	
107	Ag	89	He	0.039	ppb	21.4	133.34	100	
111	Cd	89	He	0.052	ppb	18.2	21.11	1000	
118	Sn	159	He	0.058	ppb	47.1	122.23	1000	
121	Sb	159	No Gas	0.650	ppb	6.4	4559.21	1000	
137	Ba	159	No Gas	2.459	ppb	6.8	6592.34	2000	
182	W	159	No Gas	0.072	ppb	15.0	387.11	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	106.79	1000	
208	Pb	209	No Gas	2.216	ppb	4.4	33414.59	2000	
232	Th	209	No Gas	0.004	ppb	88.3	163.52	1000	
238	U	209	No Gas	0.295	ppb	3.5	4202.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842440.72	1.3	1881686.03	97.91	29.5	120.4	
Sc	45	No Gas	3973341.25	2.4	3915123.71	101.49	29.5	120.4	
Sc	45	H2	499305.70	1.4	507902.1	98.31	29.5	120.4	
Sc	45	He	97858.63	0.3	102593	95.39	29.5	120.4	
Ge	72	No Gas	870052.42	0.4	852546.94	102.05	29.5	120.4	
Ge	72	H2	185150.92	0.8	193980.16	95.45	29.5	120.4	
Ge	72	He	75215.51	0.2	77385.19	97.2	29.5	120.4	
Y	89	H2	3106283.15	1.1	3089458.15	100.54	29.5	120.4	
Y	89	He	655278.84	0.5	678154.65	96.63	29.5	120.4	
Tb	159	No Gas	8460322.03	2.0	7727080.72	109.49	29.5	120.4	
Tb	159	He	3362272.59	0.4	3280980.4	102.48	29.5	120.4	
Bi	209	No Gas	4302429.83	1.7	3977089.87	108.18	29.5	120.4	

Sample Report

Sample Name SN5980-007

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:05:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	77.3	54.45	100	
11	B	6	No Gas	21.088	ppb	6.5	19394.73	1000	
23	Na	45	He	42744.334	ppb	1.4	4744010.77	200000	
24	Mg	45	He	7657.893	ppb	1.7	475262.71	200000	
27	Al	45	He	2.381	ppb	32.0	77.78	200000	
28	Si	45	H2	6854.418	ppb	2.1	350565.28	10000	
39	K	45	He	5040.604	ppb	1.4	308062.69	200000	
40	Ca	45	H2	57900.689	ppb	2.0	26494606.27	200000	
51	V	89	He	0.129	ppb	33.8	462.25	1000	
52	Cr	89	He	0.023	ppb	52.2	94.65	2000	
55	Mn	89	He	0.621	ppb	8.7	340.61	2000	
56	Fe	89	H2	11.995	ppb	2.3	24013.94	100000	
59	Co	89	He	0.173	ppb	26.8	346.69	1000	
60	Ni	89	He	13.206	ppb	5.4	7087.62	1000	
63	Cu	89	He	200.828	ppb	2.5	292764.99	2000	
66	Zn	89	He	222.989	ppb	2.7	42873.35	2000	
75	As	89	He	0.710	ppb	11.8	124.01	1000	
78	Se	89	H2	0.038	ppb	10.6	4.17	1000	
88	Sr	89	He	210.546	ppb	2.6	176315.16	2000	
95	Mo	89	He	0.073	ppb	24.0	67.78	1000	
107	Ag	89	He	0.086	ppb	5.0	273.35	100	
111	Cd	89	He	0.061	ppb	9.1	24.45	1000	
118	Sn	159	He	0.165	ppb	26.2	217.79	1000	
121	Sb	159	No Gas	0.657	ppb	3.8	4569.22	1000	
137	Ba	159	No Gas	2.497	ppb	13.0	6632.46	2000	
182	W	159	No Gas	0.059	ppb	15.3	320.37	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	2.763	ppb	6.4	41446.21	2000	
232	Th	209	No Gas	0.006	ppb	17.4	193.56	1000	
238	U	209	No Gas	0.369	ppb	14.5	5233.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1841381.09	1.5	1881686.03	97.86	29.5	120.4	
Sc	45	No Gas	3943353.58	1.7	3915123.71	100.72	29.5	120.4	
Sc	45	H2	495698.08	1.2	507902.1	97.6	29.5	120.4	
Sc	45	He	96863.28	0.8	102593	94.42	29.5	120.4	
Ge	72	No Gas	869552.20	1.5	852546.94	101.99	29.5	120.4	
Ge	72	H2	185429.22	1.5	193980.16	95.59	29.5	120.4	
Ge	72	He	74179.70	1.0	77385.19	95.86	29.5	120.4	
Y	89	H2	3093708.24	1.6	3089458.15	100.14	29.5	120.4	
Y	89	He	645107.92	1.5	678154.65	95.13	29.5	120.4	
Tb	159	No Gas	8396157.10	1.8	7727080.72	108.66	29.5	120.4	
Tb	159	He	3322489.57	1.2	3280980.4	101.27	29.5	120.4	
Bi	209	No Gas	4290905.18	2.3	3977089.87	107.89	29.5	120.4	

Sample Report

Sample Name SN5980-008

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:08:34 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	64.9	40.00	100	
11	B	6	No Gas	21.595	ppb	15.2	18133.20	1000	
23	Na	45	He	41836.870	ppb	1.1	4690233.71	200000	
24	Mg	45	He	7493.153	ppb	1.3	469734.22	200000	
27	Al	45	He	1.813	ppb	46.4	64.45	200000	
28	Si	45	H2	6960.287	ppb	1.2	352838.38	10000	
39	K	45	He	4983.281	ppb	0.8	307773.08	200000	
40	Ca	45	H2	59067.660	ppb	0.8	26791624.32	200000	
51	V	89	He	0.118	ppb	34.7	458.91	1000	
52	Cr	89	He	0.035	ppb	50.8	109.31	2000	
55	Mn	89	He	0.406	ppb	5.4	229.96	2000	
56	Fe	89	H2	5.456	ppb	1.3	12262.37	100000	
59	Co	89	He	0.032	ppb	26.0	77.78	1000	
60	Ni	89	He	10.291	ppb	5.1	5669.13	1000	
63	Cu	89	He	223.460	ppb	1.4	330258.83	2000	
66	Zn	89	He	215.234	ppb	1.9	41963.96	2000	
75	As	89	He	0.526	ppb	10.6	95.01	1000	
78	Se	89	H2	0.034	ppb	69.5	3.83	1000	
88	Sr	89	He	209.625	ppb	0.6	178009.82	2000	
95	Mo	89	He	0.051	ppb	28.5	48.89	1000	
107	Ag	89	He	0.032	ppb	22.3	113.34	100	
111	Cd	89	He	0.055	ppb	12.8	22.22	1000	
118	Sn	159	He	0.071	ppb	33.5	134.45	1000	
121	Sb	159	No Gas	0.746	ppb	19.0	4625.99	1000	
137	Ba	159	No Gas	2.867	ppb	22.8	6769.36	2000	
182	W	159	No Gas	0.065	ppb	38.2	307.01	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	66.75	1000	
208	Pb	209	No Gas	2.025	ppb	17.2	27068.51	2000	
232	Th	209	No Gas	0.005	ppb	81.2	156.84	1000	
238	U	209	No Gas	0.336	ppb	15.5	4245.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1701708.25	11.7	1881686.03	90.44	29.5	120.4	
Sc	45	No Gas	3556170.89	14.8	3915123.71	90.83	29.5	120.4	
Sc	45	H2	491279.03	0.9	507902.1	96.73	29.5	120.4	
Sc	45	He	97840.94	1.4	102593	95.37	29.5	120.4	
Ge	72	No Gas	784744.91	14.8	852546.94	92.05	29.5	120.4	
Ge	72	H2	184844.78	1.2	193980.16	95.29	29.5	120.4	
Ge	72	He	75286.54	1.4	77385.19	97.29	29.5	120.4	
Y	89	H2	3086348.35	0.7	3089458.15	99.9	29.5	120.4	
Y	89	He	654056.04	1.4	678154.65	96.45	29.5	120.4	
Tb	159	No Gas	7629541.69	15.1	7727080.72	98.74	29.5	120.4	
Tb	159	He	3378060.05	1.0	3280980.4	102.96	29.5	120.4	
Bi	209	No Gas	3880714.59	15.6	3977089.87	97.58	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:11:06 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.016	ppb	60.3	51.11	100	
11	B	6	No Gas	19.573	ppb	4.9	17892.68	1000	
23	Na	45	He	42614.181	ppb	0.8	4757629.70	200000	
24	Mg	45	He	7625.623	ppb	0.4	476078.37	200000	
27	Al	45	He	3.609	ppb	14.5	108.89	200000	
28	Si	45	H2	6989.211	ppb	1.1	350238.27	10000	
39	K	45	He	5114.264	ppb	0.4	314242.91	200000	
40	Ca	45	H2	60611.413	ppb	1.2	27175127.09	200000	
51	V	89	He	0.139	ppb	10.8	475.58	1000	
52	Cr	89	He	0.051	ppb	42.0	126.64	2000	
55	Mn	89	He	0.434	ppb	6.4	243.29	2000	
56	Fe	89	H2	8.120	ppb	0.3	16875.59	100000	
59	Co	89	He	0.073	ppb	7.2	155.57	1000	
60	Ni	89	He	6.105	ppb	3.0	3468.32	1000	
63	Cu	89	He	193.057	ppb	0.5	283586.68	2000	
66	Zn	89	He	197.676	ppb	1.5	38303.38	2000	
75	As	89	He	0.674	ppb	7.7	119.01	1000	
78	Se	89	H2	0.033	ppb	56.2	3.67	1000	
88	Sr	89	He	214.029	ppb	0.5	180589.90	2000	
95	Mo	89	He	0.060	ppb	42.8	56.67	1000	
107	Ag	89	He	0.023	ppb	33.2	83.33	100	
111	Cd	89	He	0.072	ppb	28.2	28.89	1000	
118	Sn	159	He	0.040	ppb	49.8	105.56	1000	
121	Sb	159	No Gas	0.648	ppb	14.0	4469.07	1000	
137	Ba	159	No Gas	2.632	ppb	5.8	6942.91	2000	
182	W	159	No Gas	0.062	ppb	8.1	330.37	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	1.881	ppb	6.3	28056.88	2000	
232	Th	209	No Gas	0.003	ppb	95.0	150.17	1000	
238	U	209	No Gas	0.336	ppb	11.0	4736.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1816397.20	1.3	1881686.03	96.53	29.5	120.4	
Sc	45	No Gas	3872740.73	1.8	3915123.71	98.92	29.5	120.4	
Sc	45	H2	485648.02	0.7	507902.1	95.62	29.5	120.4	
Sc	45	He	97432.28	0.4	102593	94.97	29.5	120.4	
Ge	72	No Gas	859639.83	1.6	852546.94	100.83	29.5	120.4	
Ge	72	H2	182133.49	0.6	193980.16	93.89	29.5	120.4	
Ge	72	He	74101.80	0.5	77385.19	95.76	29.5	120.4	
Y	89	H2	3058651.64	0.2	3089458.15	99	29.5	120.4	
Y	89	He	649842.75	0.1	678154.65	95.83	29.5	120.4	
Tb	159	No Gas	8330882.58	2.3	7727080.72	107.81	29.5	120.4	
Tb	159	He	3358171.86	0.2	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4255191.97	2.2	3977089.87	106.99	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:13:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.379	ppb	6.9	30253.55	25	93.52	89.8	110.2	
11	B	6	No Gas	23.322	ppb	8.4	21252.94	25	93.29	89.8	110.2	
23	Na	45	He	5152.453	ppb	1.5	562303.88	5000	103.05	89.8	110.2	
24	Mg	45	He	4976.930	ppb	1.0	299297.77	5000	99.54	89.8	110.2	
27	Al	45	He	479.705	ppb	1.5	11525.04	500	95.94	89.8	110.2	
28	Si	45	H2	461.673	ppb	0.9	23040.86	500	92.33	89.8	110.2	
39	K	45	He	4813.505	ppb	1.3	285304.18	5000	96.27	89.8	110.2	
40	Ca	45	H2	4880.974	ppb	0.5	2134044.62	5000	97.62	89.8	110.2	
51	V	89	He	24.479	ppb	2.3	22344.99	25	97.92	89.8	110.2	
52	Cr	89	He	24.655	ppb	0.9	27042.16	25	98.62	89.8	110.2	
55	Mn	89	He	24.808	ppb	1.8	12960.27	25	99.23	89.8	110.2	
56	Fe	89	H2	4863.523	ppb	0.5	8500385.61	5000	97.27	89.8	110.2	
59	Co	89	He	24.617	ppb	1.9	46455.17	25	98.47	89.8	110.2	
60	Ni	89	He	24.627	ppb	0.7	12740.68	25	98.51	89.8	110.2	
63	Cu	89	He	25.100	ppb	2.7	36391.56	25	100.4	89.8	110.2	
66	Zn	89	He	25.282	ppb	0.9	4843.23	25	101.13	89.8	110.2	
75	As	89	He	24.395	ppb	1.3	3975.68	25	97.58	89.8	110.2	
78	Se	89	H2	24.313	ppb	1.8	2076.39	25	97.25	89.8	110.2	
88	Sr	89	He	23.640	ppb	0.9	19477.68	25	94.56	89.8	110.2	
95	Mo	89	He	25.195	ppb	2.6	22273.17	25	100.78	89.8	110.2	
107	Ag	89	He	25.383	ppb	1.3	75612.05	25	101.53	89.8	110.2	
111	Cd	89	He	25.519	ppb	1.4	9882.58	25	102.08	89.8	110.2	
118	Sn	159	He	23.571	ppb	0.8	21432.10	25	94.28	89.8	110.2	
121	Sb	159	No Gas	23.339	ppb	8.3	161022.81	25	93.36	89.8	110.2	
137	Ba	159	No Gas	23.530	ppb	8.8	62442.37	25	94.12	89.8	110.2	
182	W	159	No Gas	23.407	ppb	10.1	116078.78	25	93.63	89.8	110.2	
205	Tl	209	No Gas	24.000	ppb	9.0	261936.85	25	96	89.8	110.2	
208	Pb	209	No Gas	24.107	ppb	8.4	364368.75	25	96.43	89.8	110.2	
232	Th	209	No Gas	23.661	ppb	10.0	359460.40	25	94.64	89.8	110.2	
238	U	209	No Gas	23.784	ppb	8.8	342180.06	25	95.14	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1842827.46	2.7	1881686.03	97.93	29.5	120.4	
Sc	45	No Gas	3810947.12	3.6	3915123.71	97.34	29.5	120.4	
Sc	45	H2	473401.52	0.6	507902.1	93.21	29.5	120.4	
Sc	45	He	93767.90	1.0	102593	91.4	29.5	120.4	
Ge	72	No Gas	857017.51	3.7	852546.94	100.52	29.5	120.4	
Ge	72	H2	178813.37	0.4	193980.16	92.18	29.5	120.4	
Ge	72	He	72523.87	0.3	77385.19	93.72	29.5	120.4	
Y	89	H2	3013949.94	0.3	3089458.15	97.56	29.5	120.4	
Y	89	He	634407.47	0.6	678154.65	93.55	29.5	120.4	
Tb	159	No Gas	8407759.18	3.5	7727080.72	108.81	29.5	120.4	
Tb	159	He	3326899.43	0.5	3280980.4	101.4	29.5	120.4	
Bi	209	No Gas	4350678.18	3.7	3977089.87	109.39	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:16:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	53.4	87.78	0.2	
11	B	6	No Gas	0.544	ppb	17.4	2266.93	4	
23	Na	45	He	39.932	ppb	13.7	13902.11	200	
24	Mg	45	He	-1.125	ppb	N/A	731.18	20	
27	Al	45	He	0.368	ppb	63.7	26.67	20	
28	Si	45	H2	0.299	ppb	46.9	543.95	100	
39	K	45	He	4.002	ppb	223.0	11674.59	200	
40	Ca	45	H2	8.450	ppb	1.7	4565.33	20	
51	V	89	He	0.096	ppb	32.1	415.58	1	
52	Cr	89	He	0.002	ppb	583.1	68.66	1	
55	Mn	89	He	0.015	ppb	124.2	18.67	0.4	
56	Fe	89	H2	2.381	ppb	4.4	6635.74	20	
59	Co	89	He	0.008	ppb	139.8	28.89	0.2	
60	Ni	89	He	-0.193	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.217	ppb	23.3	754.49	0.6	
66	Zn	89	He	0.070	ppb	53.6	81.11	2	
75	As	89	He	-0.011	ppb	N/A	4.67	1	
78	Se	89	H2	0.031	ppb	48.7	3.50	1	
88	Sr	89	He	0.027	ppb	68.9	27.78	1	
95	Mo	89	He	0.088	ppb	18.5	77.78	1	
107	Ag	89	He	0.000	ppb	627.3	14.45	0.2	
111	Cd	89	He	0.008	ppb	132.6	3.33	0.2	
118	Sn	159	He	0.025	ppb	36.3	87.78	1	
121	Sb	159	No Gas	0.023	ppb	13.3	193.55	0.2	
137	Ba	159	No Gas	0.016	ppb	61.0	56.73	0.4	
182	W	159	No Gas	0.041	ppb	5.9	223.59	1	
205	Tl	209	No Gas	0.011	ppb	24.9	276.98	0.2	
208	Pb	209	No Gas	0.021	ppb	27.5	550.62	0.2	
232	Th	209	No Gas	0.067	ppb	9.1	1111.30	1	
238	U	209	No Gas	0.016	ppb	13.7	226.92	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809766.02	2.8	1881686.03	96.18	29.5	120.4	
Sc	45	No Gas	3773656.15	3.6	3915123.71	96.39	29.5	120.4	
Sc	45	H2	479226.70	1.3	507902.1	94.35	29.5	120.4	
Sc	45	He	91863.02	4.4	102593	89.54	29.5	120.4	
Ge	72	No Gas	847782.64	3.5	852546.94	99.44	29.5	120.4	
Ge	72	H2	180855.50	0.7	193980.16	93.23	29.5	120.4	
Ge	72	He	71533.82	3.7	77385.19	92.44	29.5	120.4	
Y	89	H2	3029958.26	0.7	3089458.15	98.07	29.5	120.4	
Y	89	He	619770.68	4.6	678154.65	91.39	29.5	120.4	
Tb	159	No Gas	8303100.29	3.8	7727080.72	107.45	29.5	120.4	
Tb	159	He	3217690.71	4.3	3280980.4	98.07	29.5	120.4	
Bi	209	No Gas	4330710.82	4.5	3977089.87	108.89	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:18:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	59.6	55.56	100	
11	B	6	No Gas	19.745	ppb	6.9	17333.14	1000	
23	Na	45	He	41386.508	ppb	1.3	4466271.48	200000	
24	Mg	45	He	7432.758	ppb	1.3	448524.67	200000	
27	Al	45	He	1.773	ppb	17.4	61.11	200000	
28	Si	45	H2	7002.213	ppb	2.8	335345.17	10000	
39	K	45	He	4946.948	ppb	1.3	294174.22	200000	
40	Ca	45	H2	59588.371	ppb	3.1	25531725.18	200000	
51	V	89	He	0.152	ppb	47.9	473.36	1000	
52	Cr	89	He	0.044	ppb	41.4	115.98	2000	
55	Mn	89	He	0.344	ppb	8.1	189.97	2000	
56	Fe	89	H2	6.746	ppb	1.7	13878.96	100000	
59	Co	89	He	0.031	ppb	20.6	73.34	1000	
60	Ni	89	He	8.986	ppb	5.0	4816.57	1000	
63	Cu	89	He	221.522	ppb	0.9	316041.92	2000	
66	Zn	89	He	210.195	ppb	2.3	39559.11	2000	
75	As	89	He	0.620	ppb	9.9	107.01	1000	
78	Se	89	H2	0.035	ppb	55.1	3.67	1000	
88	Sr	89	He	207.133	ppb	0.6	169786.67	2000	
95	Mo	89	He	0.061	ppb	14.0	55.56	1000	
107	Ag	89	He	0.032	ppb	18.2	108.89	100	
111	Cd	89	He	0.049	ppb	38.5	19.26	1000	
118	Sn	159	He	0.192	ppb	18.2	241.12	1000	
121	Sb	159	No Gas	0.629	ppb	0.8	4255.45	1000	
137	Ba	159	No Gas	2.534	ppb	4.9	6552.29	2000	
182	W	159	No Gas	0.070	ppb	18.1	363.75	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.291	ppb	4.8	33755.66	2000	
232	Th	209	No Gas	0.046	ppb	13.6	780.90	1000	
238	U	209	No Gas	0.296	ppb	8.8	4122.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1745263.44	0.5	1881686.03	92.75	29.5	120.4	
Sc	45	No Gas	3704255.45	0.9	3915123.71	94.61	29.5	120.4	
Sc	45	H2	464317.70	2.4	507902.1	91.42	29.5	120.4	
Sc	45	He	94183.34	1.6	102593	91.8	29.5	120.4	
Ge	72	No Gas	826960.63	1.0	852546.94	97	29.5	120.4	
Ge	72	H2	174902.51	0.9	193980.16	90.17	29.5	120.4	
Ge	72	He	72308.32	0.5	77385.19	93.44	29.5	120.4	
Y	89	H2	2940454.00	2.3	3089458.15	95.18	29.5	120.4	
Y	89	He	631319.86	0.9	678154.65	93.09	29.5	120.4	
Tb	159	No Gas	8161365.64	0.7	7727080.72	105.62	29.5	120.4	
Tb	159	He	3312891.79	0.6	3280980.4	100.97	29.5	120.4	
Bi	209	No Gas	4207775.75	1.8	3977089.87	105.8	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	UNDIGESTED LCS TEST
File Name	032LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:21:28 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.327	ppb	6.8	13811.52	50	20.53	79.5	120.4	
B	11	6	No Gas	528.962	ppb	7.3	93296.56	500	21.16	79.5	120.4	
Na	23	45	He	9428.917	ppb	1.7	208329.28	7500	25.14	79.5	120.4	6020□ DoD
Mg	24	45	He	5952.505	ppb	0.5	70938.08	5000	23.81	79.5	120.4	DoD
Al	27	45	He	2144.204	ppb	1.3	10123.91	2000	21.44	79.5	120.4	
Si	28	45	H2	1094.166	ppb	2.3	11036.47	1000	21.88	0	200	
K	39	45	He	11413.759	ppb	1.5	138951.17	10000	22.83	79.5	120.4	
Ca	40	45	H2	2933.249	ppb	0.9	253537.78	2500	23.47	79.5	120.4	
V	51	89	He	569.533	ppb	1.0	101197.63	500	22.78	79.5	120.4	
Cr	52	89	He	232.964	ppb	1.2	50273.02	200	23.3	79.5	120.4	DoD
Mn	55	89	He	581.830	ppb	0.7	59838.43	500	23.27	79.5	120.4	DoD
Fe	56	89	H2	1168.560	ppb	0.7	406349.15	1000	23.37	79.5	120.4	
Co	59	89	He	578.884	ppb	1.0	215148.78	500	23.16	79.5	120.4	DoD
Ni	60	89	He	592.467	ppb	1.2	59239.46	500	23.7	79.5	120.4	DoD
Cu	63	89	He	293.200	ppb	1.6	83133.89	250	23.46	79.5	120.4	
Zn	66	89	He	599.034	ppb	0.6	22349.66	500	23.96	79.5	120.4	DoD
As	75	89	He	118.246	ppb	2.1	3795.94	100	23.65	79.5	120.4	DoD
Se	78	89	H2	112.189	ppb	1.0	1895.54	100	22.44	79.5	120.4	
Sr	88	89	He	569.593	ppb	0.3	92428.10	500	22.78	79.5	120.4	
Mo	95	89	He	118.594	ppb	2.7	20650.63	100	23.72	79.5	120.4	DoD
Ag	107	89	He	61.468	ppb	1.1	36075.43	50	24.59	79.5	120.4	6020□ DoD
Cd	111	89	He	303.379	ppb	1.3	23144.27	250	24.27	79.5	120.4	6020□ DoD
Sn	118	159	He	558.438	ppb	0.9	100650.73	500	22.34	79.5	120.4	
Sb	121	159	No Gas	109.717	ppb	7.7	152316.27	100	21.94	79.5	120.4	
Ba	137	159	No Gas	2150.159	ppb	8.8	1147760.79	2000	21.5	79.5	120.4	
W	182	159	No Gas	113.538	ppb	7.8	113348.47	100	22.71	79.5	120.4	
Tl	205	209	No Gas	114.339	ppb	8.6	253476.18	100	22.87	79.5	120.4	
[Pb]	206	209	No Gas	114.743	ppb	7.9	88040.79	100	22.95	79.5	120.4	
[Pb]	207	209	No Gas	114.903	ppb	7.9	77269.23	100	22.98	79.5	120.4	
Pb	208	209	No Gas	113.950	ppb	8.2	349837.01	100	22.79	79.5	120.4	
Th	232	209	No Gas	112.879	ppb	10.5	348226.66	100	22.58	79.5	120.4	
U	238	209	No Gas	112.648	ppb	9.0	329116.24	100	22.53	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1913019.11	2.3	1881686.03	101.67	29.5	120.4	
Sc	45	No Gas	3736818.59	3.8	3915123.71	95.45	29.5	120.4	
Sc	45	H2	466659.33	1.0	507902.1	91.88	29.5	120.4	
Sc	45	He	92109.83	1.3	102593	89.78	29.5	120.4	
Ge	72	No Gas	851017.70	3.2	852546.94	99.82	29.5	120.4	
Ge	72	H2	175742.23	0.9	193980.16	90.6	29.5	120.4	
Ge	72	He	71396.68	1.0	77385.19	92.26	29.5	120.4	
Y	89	H2	2981391.52	1.1	3089458.15	96.5	29.5	120.4	
Y	89	He	624874.92	1.2	678154.65	92.14	29.5	120.4	
Tb	159	No Gas	8459115.29	3.7	7727080.72	109.47	29.5	120.4	
Tb	159	He	3305682.45	1.0	3280980.4	100.75	29.5	120.4	
Bi	209	No Gas	4417907.96	3.7	3977089.87	111.08	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW11
File Name	033_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:24:04 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.043	ppb	27.6	85.56	0.1	
B	11	6	No Gas	2.426	ppb	4.9	3806.19	2	200.8 PB Fails DoD
Na	23	45	He	40.446	ppb	5.2	14293.12	100	
Mg	24	45	He	2.115	ppb	85.2	944.54	10	
Al	27	45	He	3.858	ppb	27.2	111.12	10	
Si	28	45	H2	17.438	ppb	17.8	1351.57	50	
K	39	45	He	-5.458	ppb	N/A	11417.87	100	
Ca	40	45	H2	6.179	ppb	3.5	3464.99	10	
V	51	89	He	0.456	ppb	14.0	747.82	0.5	
Cr	52	89	He	0.287	ppb	3.2	381.27	0.5	
Mn	55	89	He	0.375	ppb	2.3	206.63	0.2	200.8 PB Fails DoD
Fe	56	89	H2	3.936	ppb	5.5	9183.26	10	
Co	59	89	He	0.060	ppb	15.9	126.67	0.1	
Ni	60	89	He	-0.062	ppb	N/A	271.12	0.2	
Cu	63	89	He	0.322	ppb	8.8	920.07	0.3	200.8 PB Fails DoD
Zn	66	89	He	39.917	ppb	2.0	7595.67	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.017	ppb	74.9	9.33	0.5	
Se	78	89	H2	0.040	ppb	52.7	4.17	0.5	
Sr	88	89	He	0.064	ppb	38.6	58.89	0.5	
Mo	95	89	He	0.081	ppb	12.2	73.34	0.5	
Ag	107	89	He	0.007	ppb	68.2	35.56	0.1	
Cd	111	89	He	0.026	ppb	94.3	10.37	0.1	
Sn	118	159	He	0.325	ppb	12.2	362.24	0.5	
Sb	121	159	No Gas	0.025	ppb	30.1	213.57	0.1	
Ba	137	159	No Gas	0.524	ppb	8.8	1411.65	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
W	182	159	No Gas	0.050	ppb	7.2	273.64	0.5	
Tl	205	209	No Gas	0.019	ppb	19.2	360.41	0.1	
[Pb]	206	209	No Gas	0.047	ppb	3.6	266.97	0.1	
[Pb]	207	209	No Gas	0.046	ppb	23.1	210.24	0.1	
Pb	208	209	No Gas	0.048	ppb	6.4	974.44	0.1	
Th	232	209	No Gas	0.111	ppb	13.0	1812.15	0.5	
U	238	209	No Gas	0.015	ppb	4.7	213.58	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1808600.60	1.6	1881686.03	96.12	29.5	120.4	
Sc	45	No Gas	3782994.03	2.4	3915123.71	96.63	29.5	120.4	
Sc	45	H2	466548.48	2.0	507902.1	91.86	29.5	120.4	
Sc	45	He	93966.04	0.5	102593	91.59	29.5	120.4	
Ge	72	No Gas	857696.15	2.1	852546.94	100.6	29.5	120.4	
Ge	72	H2	180246.87	2.4	193980.16	92.92	29.5	120.4	
Ge	72	He	73056.70	0.4	77385.19	94.41	29.5	120.4	
Y	89	H2	2971746.51	1.7	3089458.15	96.19	29.5	120.4	
Y	89	He	633492.69	0.2	678154.65	93.41	29.5	120.4	
Tb	159	No Gas	8421805.57	2.4	7727080.72	108.99	29.5	120.4	
Tb	159	He	3321401.10	0.2	3280980.4	101.23	29.5	120.4	
Bi	209	No Gas	4398287.92	2.7	3977089.87	110.59	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	034_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:26:36 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	43.702	ppb	6.7	58828.13	50	87.4	79.5	120.4	
B	11	6	No Gas	439.983	ppb	7.3	382821.37	500	88	79.5	120.4	
Na	23	45	He	7047.578	ppb	1.4	761335.37	7500	93.97	79.5	120.4	
Mg	24	45	He	5035.581	ppb	1.1	301181.45	5000	100.71	79.5	120.4	
Al	27	45	He	1858.693	ppb	0.1	44367.55	2000	92.93	79.5	120.4	
Si	28	45	H2	974.518	ppb	3.9	47534.85	1000	97.45	79.5	120.4	
K	39	45	He	9634.897	ppb	1.1	556346.81	10000	96.35	79.5	120.4	
Ca	40	45	H2	2432.081	ppb	1.1	1052149.38	2500	97.28	79.5	120.4	
V	51	89	He	480.471	ppb	0.1	430793.17	500	96.09	79.5	120.4	
Cr	52	89	He	193.983	ppb	0.2	211557.87	200	96.99	79.5	120.4	
Mn	55	89	He	491.455	ppb	0.6	255645.07	500	98.29	79.5	120.4	
Fe	56	89	H2	977.789	ppb	0.4	1692288.53	1000	97.78	79.5	120.4	
Co	59	89	He	487.732	ppb	0.7	916959.98	500	97.55	79.5	120.4	
Ni	60	89	He	495.597	ppb	0.3	249726.14	500	99.12	79.5	120.4	
Cu	63	89	He	241.505	ppb	0.5	344992.90	250	96.6	79.5	120.4	
Zn	66	89	He	501.425	ppb	0.7	94412.01	500	100.28	79.5	120.4	
As	75	89	He	99.032	ppb	0.6	16063.01	100	99.03	79.5	120.4	
Se	78	89	H2	96.081	ppb	0.9	8114.15	100	96.08	79.5	120.4	
Sr	88	89	He	483.568	ppb	0.4	396922.32	500	96.71	79.5	120.4	
Mo	95	89	He	100.959	ppb	0.3	88939.45	100	100.96	79.5	120.4	
Ag	107	89	He	50.453	ppb	0.8	149751.93	50	100.91	79.5	120.4	
Cd	111	89	He	253.970	ppb	0.9	98007.58	250	101.59	79.5	120.4	
Sn	118	159	He	469.773	ppb	0.6	425211.63	500	93.95	79.5	120.4	
Sb	121	159	No Gas	93.044	ppb	7.7	637331.35	100	93.04	79.5	120.4	
Ba	137	159	No Gas	1833.337	ppb	8.1	4830275.47	2000	91.67	79.5	120.4	
W	182	159	No Gas	96.276	ppb	8.2	474183.57	100	96.28	79.5	120.4	
Tl	205	209	No Gas	95.654	ppb	5.2	1029175.90	100	95.65	79.5	120.4	
Pb	208	209	No Gas	97.442	ppb	8.3	1450589.20	100	97.44	79.5	120.4	
Th	232	209	No Gas	96.772	ppb	9.7	1448467.62	100	96.77	79.5	120.4	
U	238	209	No Gas	95.496	ppb	9.0	1353677.94	100	95.5	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1917212.20	2.0	1881686.03	101.89	29.5	120.4	
Sc	45	No Gas	3743286.20	3.5	3915123.71	95.61	29.5	120.4	
Sc	45	H2	468235.92	1.0	507902.1	92.19	29.5	120.4	
Sc	45	He	93262.65	1.0	102593	90.91	29.5	120.4	
Ge	72	No Gas	845717.74	3.5	852546.94	99.2	29.5	120.4	
Ge	72	H2	175819.61	1.3	193980.16	90.64	29.5	120.4	
Ge	72	He	72363.86	0.4	77385.19	93.51	29.5	120.4	
Y	89	H2	2981074.41	0.4	3089458.15	96.49	29.5	120.4	
Y	89	He	632179.30	0.4	678154.65	93.22	29.5	120.4	
Tb	159	No Gas	8346003.90	2.9	7727080.72	108.01	29.5	120.4	
Tb	159	He	3321799.05	0.5	3280980.4	101.24	29.5	120.4	
Bi	209	No Gas	4286575.23	3.6	3977089.87	107.78	29.5	120.4	

Sample Report

Sample Name SN5286-001R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:29:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.133	ppb	27.2	195.56	100	
11	B	6	No Gas	8.629	ppb	8.5	8704.02	1000	
23	Na	45	He	1454.195	ppb	4.1	161121.46	200000	
24	Mg	45	He	1160.635	ppb	2.6	68435.57	200000	
27	Al	45	He	13.412	ppb	15.2	330.02	200000	
28	Si	45	H2	5098.274	ppb	2.5	244003.59	10000	
39	K	45	He	634.741	ppb	3.5	46434.16	200000	
40	Ca	45	H2	4203.492	ppb	1.6	1799754.66	200000	
51	V	89	He	0.748	ppb	7.0	987.86	1000	
52	Cr	89	He	0.245	ppb	24.5	327.28	2000	
55	Mn	89	He	1.043	ppb	5.0	542.58	2000	
56	Fe	89	H2	23.821	ppb	0.3	43364.75	100000	
59	Co	89	He	0.110	ppb	30.3	215.57	1000	
60	Ni	89	He	-0.124	ppb	N/A	234.45	1000	
63	Cu	89	He	0.469	ppb	11.2	1104.53	2000	
66	Zn	89	He	1.686	ppb	6.1	378.91	2000	
75	As	89	He	0.272	ppb	11.3	49.67	1000	
78	Se	89	H2	0.175	ppb	3.9	15.50	1000	
88	Sr	89	He	9.577	ppb	4.9	7709.09	2000	
95	Mo	89	He	0.269	ppb	25.3	235.57	1000	
107	Ag	89	He	0.009	ppb	97.2	38.89	100	
111	Cd	89	He	0.033	ppb	32.8	12.96	1000	
118	Sn	159	He	0.883	ppb	15.8	852.28	1000	
121	Sb	159	No Gas	0.115	ppb	44.4	817.63	1000	
137	Ba	159	No Gas	2.650	ppb	33.7	6934.12	2000	
182	W	159	No Gas	0.251	ppb	18.8	1248.12	1000	
205	Tl	209	No Gas	0.099	ppb	53.9	1238.17	1000	
208	Pb	209	No Gas	0.117	ppb	33.8	2025.72	2000	
232	Th	209	No Gas	0.383	ppb	22.6	5968.31	1000	
238	U	209	No Gas	0.124	ppb	33.0	1792.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1773096.33	2.0	1881686.03	94.23	29.5	120.4	
Sc	45	No Gas	3712944.82	2.6	3915123.71	94.84	29.5	120.4	
Sc	45	H2	463581.34	0.5	507902.1	91.27	29.5	120.4	
Sc	45	He	91143.66	1.8	102593	88.84	29.5	120.4	
Ge	72	No Gas	841586.65	2.6	852546.94	98.71	29.5	120.4	
Ge	72	H2	177437.73	0.9	193980.16	91.47	29.5	120.4	
Ge	72	He	71402.37	2.0	77385.19	92.27	29.5	120.4	
Y	89	H2	2966171.14	0.5	3089458.15	96.01	29.5	120.4	
Y	89	He	619807.45	2.1	678154.65	91.4	29.5	120.4	
Tb	159	No Gas	8278548.00	3.0	7727080.72	107.14	29.5	120.4	
Tb	159	He	3267126.30	2.1	3280980.4	99.58	29.5	120.4	
Bi	209	No Gas	4371998.56	2.9	3977089.87	109.93	29.5	120.4	

Sample Report

Sample Name SN5286-002R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:31:45 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	68.3	88.89	100	
11	B	6	No Gas	3.517	ppb	15.3	4510.94	1000	
23	Na	45	He	1363.699	ppb	1.1	153609.80	200000	
24	Mg	45	He	1047.770	ppb	1.3	62628.91	200000	
27	Al	45	He	15.145	ppb	9.1	375.57	200000	
28	Si	45	H2	4817.122	ppb	0.7	228990.26	10000	
39	K	45	He	519.577	ppb	1.6	40572.27	200000	
40	Ca	45	H2	4000.978	ppb	0.8	1701210.22	200000	
51	V	89	He	0.849	ppb	3.7	1084.52	1000	
52	Cr	89	He	0.206	ppb	4.3	289.28	2000	
55	Mn	89	He	0.565	ppb	5.1	301.28	2000	
56	Fe	89	H2	9.298	ppb	0.9	18258.72	100000	
59	Co	89	He	0.052	ppb	45.9	111.12	1000	
60	Ni	89	He	-0.117	ppb	N/A	240.01	1000	
63	Cu	89	He	0.359	ppb	11.3	958.96	2000	
66	Zn	89	He	1.742	ppb	13.4	392.24	2000	
75	As	89	He	0.205	ppb	31.4	39.34	1000	
78	Se	89	H2	0.042	ppb	20.7	4.33	1000	
88	Sr	89	He	10.314	ppb	1.7	8366.18	2000	
95	Mo	89	He	0.157	ppb	11.1	138.90	1000	
107	Ag	89	He	0.005	ppb	34.8	27.78	100	
111	Cd	89	He	0.019	ppb	39.9	7.41	1000	
118	Sn	159	He	0.244	ppb	13.0	285.57	1000	
121	Sb	159	No Gas	0.050	ppb	99.6	380.46	1000	
137	Ba	159	No Gas	1.937	ppb	28.5	5084.09	2000	
182	W	159	No Gas	0.079	ppb	51.7	413.82	1000	
205	Tl	209	No Gas	0.030	ppb	140.9	490.62	1000	
208	Pb	209	No Gas	0.065	ppb	62.3	1238.13	2000	
232	Th	209	No Gas	0.067	ppb	73.8	1138.14	1000	
238	U	209	No Gas	0.045	ppb	95.1	667.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1737784.30	1.9	1881686.03	92.35	29.5	120.4	
Sc	45	No Gas	3670029.88	1.9	3915123.71	93.74	29.5	120.4	
Sc	45	H2	460388.62	1.7	507902.1	90.65	29.5	120.4	
Sc	45	He	92257.08	0.8	102593	89.93	29.5	120.4	
Ge	72	No Gas	838759.03	2.2	852546.94	98.38	29.5	120.4	
Ge	72	H2	175397.25	1.4	193980.16	90.42	29.5	120.4	
Ge	72	He	71571.70	0.4	77385.19	92.49	29.5	120.4	
Y	89	H2	2944778.97	1.0	3089458.15	95.32	29.5	120.4	
Y	89	He	624306.68	0.3	678154.65	92.06	29.5	120.4	
Tb	159	No Gas	8245936.33	2.1	7727080.72	106.71	29.5	120.4	
Tb	159	He	3285965.51	0.0	3280980.4	100.15	29.5	120.4	
Bi	209	No Gas	4358451.06	2.8	3977089.87	109.59	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW1
File Name	037_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:34:25 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.130	ppb	15.5	65.56	0.5	
B	11	6	No Gas	6.197	ppb	10.6	2901.50	10	
Na	23	45	He	185.900	ppb	12.9	13561.53	500	
Mg	24	45	He	-0.699	ppb	N/A	786.75	50	
Al	27	45	He	53.650	ppb	5.3	268.90	50	PB 6020 Fails DoD
Si	28	45	H2	21.556	ppb	48.9	697.46	250	
K	39	45	He	-40.156	ppb	N/A	10962.68	500	
Ca	40	45	H2	43.621	ppb	3.2	4407.52	50	
V	51	89	He	5.738	ppb	7.1	1343.45	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cr	52	89	He	0.516	ppb	29.7	177.31	2.5	
Mn	55	89	He	2.083	ppb	12.4	223.96	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	15.703	ppb	7.5	7704.00	50	
Co	59	89	He	0.076	ppb	138.1	42.22	0.5	
Ni	60	89	He	-0.723	ppb	N/A	225.57	1	
Cu	63	89	He	4.843	ppb	9.5	1811.30	1.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Zn	66	89	He	2.923	ppb	11.4	176.67	5	
As	75	89	He	0.331	ppb	32.8	17.00	2.5	
Se	78	89	H2	0.304	ppb	13.8	5.83	2.5	
Sr	88	89	He	0.458	ppb	7.9	80.00	2.5	
Mo	95	89	He	0.283	ppb	17.4	51.11	2.5	
Ag	107	89	He	0.025	ppb	94.1	27.78	0.5	
Cd	111	89	He	0.079	ppb	84.5	6.30	0.5	
Sn	118	159	He	2.053	ppb	7.1	436.69	2.5	
Sb	121	159	No Gas	0.042	ppb	85.5	96.78	0.5	
Ba	137	159	No Gas	0.263	ppb	25.5	153.50	1	
W	182	159	No Gas	0.164	ppb	22.2	186.88	2.5	
Tl	205	209	No Gas	-0.004	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.176	ppb	19.3	784.22	0.5	
Th	232	209	No Gas	0.278	ppb	16.8	954.44	2.5	
U	238	209	No Gas	0.006	ppb	66.1	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1851631.11	2.7	1881686.03	98.4	29.5	120.4	
Sc	45	No Gas	3647038.47	4.0	3915123.71	93.15	29.5	120.4	
Sc	45	H2	450687.80	1.8	507902.1	88.74	29.5	120.4	
Sc	45	He	91439.52	1.7	102593	89.13	29.5	120.4	
Ge	72	No Gas	832295.58	1.2	852546.94	97.62	29.5	120.4	
Ge	72	H2	170555.05	1.6	193980.16	87.92	29.5	120.4	
Ge	72	He	70251.78	1.1	77385.19	90.78	29.5	120.4	
Y	89	H2	2927774.05	1.3	3089458.15	94.77	29.5	120.4	
Y	89	He	621995.20	1.2	678154.65	91.72	29.5	120.4	
Tb	159	No Gas	8394441.82	3.5	7727080.72	108.64	29.5	120.4	
Tb	159	He	3300763.01	1.0	3280980.4	100.6	29.5	120.4	
Bi	209	No Gas	4394589.96	3.1	3977089.87	110.5	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW1
File Name	038LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:37:05 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.759	ppb	3.3	12588.07	50	19.1	79.5	120.4	
B	11	6	No Gas	495.188	ppb	6.1	85620.53	500	19.81	79.5	120.4	
Na	23	45	He	7899.366	ppb	0.6	176996.18	7500	21.06	79.5	120.4	
Mg	24	45	He	5375.095	ppb	0.8	64448.04	5000	21.5	79.5	120.4	
Al	27	45	He	2012.510	ppb	1.4	9549.09	2000	20.13	79.5	120.4	
Si	28	45	H2	1012.247	ppb	6.1	10204.91	1000	20.24	0	200	
K	39	45	He	10097.979	ppb	1.0	124873.64	10000	20.2	79.5	120.4	
Ca	40	45	H2	2629.903	ppb	0.6	226487.00	2500	21.04	79.5	120.4	
V	51	89	He	518.233	ppb	0.8	92545.71	500	20.73	79.5	120.4	
Cr	52	89	He	211.845	ppb	0.2	45937.14	200	21.18	79.5	120.4	
Mn	55	89	He	524.603	ppb	0.5	54206.25	500	20.98	79.5	120.4	
Fe	56	89	H2	1083.611	ppb	0.8	376337.28	1000	21.67	79.5	120.4	
Co	59	89	He	530.404	ppb	0.4	198061.23	500	21.22	79.5	120.4	
Ni	60	89	He	535.531	ppb	0.4	53828.59	500	21.42	79.5	120.4	
Cu	63	89	He	266.534	ppb	0.3	75973.17	250	21.32	79.5	120.4	
Zn	66	89	He	533.793	ppb	2.6	20017.19	500	21.35	79.5	120.4	
As	75	89	He	105.476	ppb	2.1	3402.79	100	21.1	79.5	120.4	
Se	78	89	H2	98.562	ppb	1.6	1662.53	100	19.71	79.5	120.4	
Sr	88	89	He	504.939	ppb	0.7	82319.68	500	20.2	79.5	120.4	
Mo	95	89	He	108.780	ppb	0.9	19033.81	100	21.76	79.5	120.4	
Ag	107	89	He	55.046	ppb	1.0	32460.78	50	22.02	79.5	120.4	
Cd	111	89	He	270.432	ppb	0.8	20726.33	250	21.63	79.5	120.4	
Sn	118	159	He	485.917	ppb	0.8	88668.75	500	19.44	79.5	120.4	
Sb	121	159	No Gas	100.738	ppb	6.2	142648.68	100	20.15	79.5	120.4	
Ba	137	159	No Gas	2005.007	ppb	6.3	1091914.94	2000	20.05	79.5	120.4	
W	182	159	No Gas	106.182	ppb	5.4	108142.50	100	21.24	79.5	120.4	
Tl	205	209	No Gas	106.630	ppb	6.5	238614.37	100	21.33	79.5	120.4	
[Pb]	206	209	No Gas	105.956	ppb	8.6	82008.58	100	21.19	79.5	120.4	
[Pb]	207	209	No Gas	106.889	ppb	6.7	72542.99	100	21.38	79.5	120.4	
Pb	208	209	No Gas	106.223	ppb	7.0	329107.97	100	21.24	79.5	120.4	
Th	232	209	No Gas	105.673	ppb	6.8	329195.52	100	21.14	79.5	120.4	
U	238	209	No Gas	104.791	ppb	7.2	309007.63	100	20.96	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1872376.67	2.3	1881686.03	99.51	29.5	120.4	
Sc	45	No Gas	3745985.20	3.3	3915123.71	95.68	29.5	120.4	
Sc	45	H2	464772.10	0.9	507902.1	91.51	29.5	120.4	
Sc	45	He	92555.40	0.6	102593	90.22	29.5	120.4	
Ge	72	No Gas	868154.90	2.4	852546.94	101.83	29.5	120.4	
Ge	72	H2	173827.30	1.7	193980.16	89.61	29.5	120.4	
Ge	72	He	71628.38	0.5	77385.19	92.56	29.5	120.4	
Y	89	H2	2976244.37	0.9	3089458.15	96.34	29.5	120.4	
Y	89	He	627762.25	0.5	678154.65	92.57	29.5	120.4	
Tb	159	No Gas	8624334.18	3.4	7727080.72	111.61	29.5	120.4	
Tb	159	He	3346282.87	0.2	3280980.4	101.99	29.5	120.4	
Bi	209	No Gas	4456858.05	3.6	3977089.87	112.06	29.5	120.4	

Sample Report

Sample Name SN5589-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:39:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.151	ppb	48.3	70.00	100	
11	B	6	No Gas	30.529	ppb	8.9	6887.42	1000	
23	Na	45	He	10752.862	ppb	2.1	231848.37	200000	
24	Mg	45	He	8657.809	ppb	3.2	100888.23	200000	
27	Al	45	He	15.434	ppb	13.7	88.89	200000	
28	Si	45	H2	3100.433	ppb	1.0	29948.39	10000	
39	K	45	He	416.723	ppb	4.1	15851.68	200000	
40	Ca	45	H2	10818.457	ppb	0.5	921287.94	200000	
51	V	89	He	2.938	ppb	18.7	842.28	1000	
52	Cr	89	He	0.458	ppb	29.1	163.31	2000	
55	Mn	89	He	1230.722	ppb	1.7	124916.90	2000	
56	Fe	89	H2	27740.360	ppb	0.7	9586127.35	100000	
59	Co	89	He	13.428	ppb	2.5	4941.24	1000	
60	Ni	89	He	36.961	ppb	4.8	3924.03	1000	
63	Cu	89	He	4.198	ppb	8.3	1615.71	2000	
66	Zn	89	He	53.098	ppb	2.7	2016.89	2000	
75	As	89	He	2.551	ppb	10.2	87.01	1000	
78	Se	89	H2	0.239	ppb	25.2	4.83	1000	
88	Sr	89	He	34.006	ppb	3.2	5452.39	2000	
95	Mo	89	He	0.260	ppb	24.7	46.67	1000	
107	Ag	89	He	0.012	ppb	52.9	20.00	100	
111	Cd	89	He	0.050	ppb	46.8	4.07	1000	
118	Sn	159	He	1.544	ppb	5.5	346.69	1000	
121	Sb	159	No Gas	0.397	ppb	3.7	604.02	1000	
137	Ba	159	No Gas	4.561	ppb	2.3	2503.02	2000	
182	W	159	No Gas	0.237	ppb	30.8	266.97	1000	
205	Tl	209	No Gas	0.049	ppb	78.1	270.31	1000	
208	Pb	209	No Gas	0.186	ppb	21.4	834.28	2000	
232	Th	209	No Gas	0.819	ppb	19.7	2690.01	1000	
238	U	209	No Gas	0.069	ppb	46.5	206.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1829225.02	1.4	1881686.03	97.21	29.5	120.4	
Sc	45	No Gas	3754199.07	1.4	3915123.71	95.89	29.5	120.4	
Sc	45	H2	460806.80	0.4	507902.1	90.73	29.5	120.4	
Sc	45	He	90417.83	1.9	102593	88.13	29.5	120.4	
Ge	72	No Gas	871667.07	2.0	852546.94	102.24	29.5	120.4	
Ge	72	H2	173220.23	0.4	193980.16	89.3	29.5	120.4	
Ge	72	He	70970.45	1.1	77385.19	91.71	29.5	120.4	
Y	89	H2	2979647.12	0.5	3089458.15	96.45	29.5	120.4	
Y	89	He	616824.14	1.5	678154.65	90.96	29.5	120.4	
Tb	159	No Gas	8627061.26	1.2	7727080.72	111.65	29.5	120.4	
Tb	159	He	3315118.56	1.2	3280980.4	101.04	29.5	120.4	
Bi	209	No Gas	4500646.37	1.8	3977089.87	113.16	29.5	120.4	

Sample Report

Sample Name PBWNG17IMW1

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:42:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	56.8	50.00	100	
11	B	6	No Gas	4.473	ppb	18.0	2532.54	1000	
23	Na	45	He	140.437	ppb	7.9	12706.48	200000	
24	Mg	45	He	-13.098	ppb	N/A	646.73	200000	
27	Al	45	He	6.560	ppb	33.4	48.89	200000	
28	Si	45	H2	16.719	ppb	51.4	654.07	10000	
39	K	45	He	-34.923	ppb	N/A	11104.38	200000	
40	Ca	45	H2	47.148	ppb	0.5	4709.83	200000	
51	V	89	He	3.655	ppb	4.8	978.96	1000	
52	Cr	89	He	0.361	ppb	17.4	144.64	2000	
55	Mn	89	He	1.687	ppb	12.6	183.97	2000	
56	Fe	89	H2	21.721	ppb	4.8	9827.64	100000	
59	Co	89	He	0.058	ppb	49.4	35.56	1000	
60	Ni	89	He	-0.793	ppb	N/A	218.90	1000	
63	Cu	89	He	3.799	ppb	11.2	1521.26	2000	
66	Zn	89	He	3.513	ppb	22.6	198.90	2000	
75	As	89	He	0.226	ppb	15.1	13.67	1000	
78	Se	89	H2	0.132	ppb	77.4	3.00	1000	
88	Sr	89	He	0.031	ppb	74.8	11.11	2000	
95	Mo	89	He	0.135	ppb	31.9	25.56	1000	
107	Ag	89	He	0.032	ppb	28.2	32.22	100	
111	Cd	89	He	0.034	ppb	88.1	2.96	1000	
118	Sn	159	He	1.573	ppb	24.2	353.37	1000	
121	Sb	159	No Gas	0.030	ppb	45.5	83.43	1000	
137	Ba	159	No Gas	0.360	ppb	33.4	210.24	2000	
182	W	159	No Gas	0.083	ppb	45.2	110.12	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.167	ppb	13.4	777.55	2000	
232	Th	209	No Gas	0.115	ppb	14.7	467.20	1000	
238	U	209	No Gas	0.008	ppb	21.9	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794812.07	2.4	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3698832.22	2.8	3915123.71	94.48	29.5	120.4	
Sc	45	H2	451565.74	1.3	507902.1	88.91	29.5	120.4	
Sc	45	He	92091.87	1.2	102593	89.76	29.5	120.4	
Ge	72	No Gas	846479.29	1.3	852546.94	99.29	29.5	120.4	
Ge	72	H2	170775.26	1.8	193980.16	88.04	29.5	120.4	
Ge	72	He	71319.68	0.9	77385.19	92.16	29.5	120.4	
Y	89	H2	2952126.79	0.9	3089458.15	95.55	29.5	120.4	
Y	89	He	623360.64	0.9	678154.65	91.92	29.5	120.4	
Tb	159	No Gas	8634619.73	2.7	7727080.72	111.74	29.5	120.4	
Tb	159	He	3330376.44	0.6	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4505633.97	2.7	3977089.87	113.29	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name CCV

File Name 041_CCV.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:44:58 PM

Sample Type CCV

Total Dilution 1.0000

Comment ---

ISTD Ref FileName 006CALB.d

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

Operator **admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.589	ppb	10.8	28991.00	25	94.36	89.8	110.2	
11	B	6	No Gas	24.172	ppb	10.6	20862.34	25	96.69	89.8	110.2	
23	Na	45	He	5095.640	ppb	1.8	551013.40	5000	101.91	89.8	110.2	
24	Mg	45	He	4900.341	ppb	1.8	291957.57	5000	98.01	89.8	110.2	
27	Al	45	He	482.853	ppb	1.5	11492.81	500	96.57	89.8	110.2	
28	Si	45	H2	445.263	ppb	2.6	21787.60	500	89.05	89.8	110.2	> +/- 10%
39	K	45	He	4796.745	ppb	1.7	281700.35	5000	95.93	89.8	110.2	
40	Ca	45	H2	4826.826	ppb	1.2	2067104.69	5000	96.54	89.8	110.2	
51	V	89	He	24.411	ppb	3.8	22171.40	25	97.64	89.8	110.2	
52	Cr	89	He	24.592	ppb	4.0	26832.46	25	98.37	89.8	110.2	
55	Mn	89	He	24.577	ppb	2.0	12775.48	25	98.31	89.8	110.2	
56	Fe	89	H2	4765.732	ppb	1.4	8323306.45	5000	95.31	89.8	110.2	
59	Co	89	He	24.646	ppb	1.3	46283.50	25	98.58	89.8	110.2	
60	Ni	89	He	24.350	ppb	2.8	12536.01	25	97.4	89.8	110.2	
63	Cu	89	He	24.795	ppb	3.3	35772.28	25	99.18	89.8	110.2	
66	Zn	89	He	25.285	ppb	2.5	4819.89	25	101.14	89.8	110.2	
75	As	89	He	23.997	ppb	1.9	3891.31	25	95.99	89.8	110.2	
78	Se	89	H2	23.910	ppb	2.2	2040.39	25	95.64	89.8	110.2	
88	Sr	89	He	23.378	ppb	2.3	19165.06	25	93.51	89.8	110.2	
95	Mo	89	He	25.163	ppb	2.9	22132.98	25	100.65	89.8	110.2	
107	Ag	89	He	25.799	ppb	2.2	76464.06	25	103.2	89.8	110.2	
111	Cd	89	He	25.163	ppb	4.3	9693.55	25	100.65	89.8	110.2	
118	Sn	159	He	23.492	ppb	3.5	21611.21	25	93.97	89.8	110.2	
121	Sb	159	No Gas	23.090	ppb	9.9	163703.09	25	92.36	89.8	110.2	
137	Ba	159	No Gas	23.455	ppb	9.7	63975.08	25	93.82	89.8	110.2	
182	W	159	No Gas	23.478	ppb	8.6	119720.68	25	93.91	89.8	110.2	
205	Tl	209	No Gas	23.878	ppb	9.1	269616.31	25	95.51	89.8	110.2	
208	Pb	209	No Gas	23.766	ppb	9.8	371519.22	25	95.06	89.8	110.2	
232	Th	209	No Gas	23.624	ppb	11.2	371162.65	25	94.5	89.8	110.2	
238	U	209	No Gas	23.698	ppb	10.3	352557.55	25	94.79	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752098.64	3.3	1881686.03	93.11	29.5	120.4	
Sc	45	No Gas	3778384.01	3.5	3915123.71	96.51	29.5	120.4	
Sc	45	H2	463728.13	1.1	507902.1	91.3	29.5	120.4	
Sc	45	He	92900.25	1.5	102593	90.55	29.5	120.4	
Ge	72	No Gas	866180.65	3.4	852546.94	101.6	29.5	120.4	
Ge	72	H2	176442.82	1.9	193980.16	90.96	29.5	120.4	
Ge	72	He	72398.66	1.3	77385.19	93.56	29.5	120.4	
Y	89	H2	3011895.04	0.9	3089458.15	97.49	29.5	120.4	
Y	89	He	631338.88	1.7	678154.65	93.1	29.5	120.4	
Tb	159	No Gas	8644671.61	3.7	7727080.72	111.88	29.5	120.4	
Tb	159	He	3367241.41	1.9	3280980.4	102.63	29.5	120.4	
Bi	209	No Gas	4502300.11	4.2	3977089.87	113.21	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:47:37 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	34.9	93.34	0.2	
11	B	6	No Gas	0.746	ppb	23.3	2345.83	4	
23	Na	45	He	-2.520	ppb	N/A	9653.99	200	
24	Mg	45	He	-2.104	ppb	N/A	688.95	20	
27	Al	45	He	0.305	ppb	114.0	25.56	20	
28	Si	45	H2	1.084	ppb	80.4	573.98	100	
39	K	45	He	-4.892	ppb	N/A	11424.45	200	
40	Ca	45	H2	4.750	ppb	65.0	2882.92	20	
51	V	89	He	-0.067	ppb	N/A	278.90	1	
52	Cr	89	He	0.001	ppb	1104.8	69.32	1	
55	Mn	89	He	0.021	ppb	49.2	22.00	0.4	
56	Fe	89	H2	3.461	ppb	34.8	8472.70	20	
59	Co	89	He	0.010	ppb	34.5	33.34	0.2	
60	Ni	89	He	-0.266	ppb	N/A	168.89	0.4	Failed DoD
63	Cu	89	He	0.027	ppb	49.1	500.03	0.6	
66	Zn	89	He	0.037	ppb	319.4	76.67	2	
75	As	89	He	-0.012	ppb	N/A	4.67	1	
78	Se	89	H2	0.043	ppb	36.6	4.50	1	
88	Sr	89	He	0.006	ppb	103.8	11.11	1	
95	Mo	89	He	0.068	ppb	3.1	62.23	1	
107	Ag	89	He	0.007	ppb	94.6	33.34	0.2	
111	Cd	89	He	0.003	ppb	150.8	1.48	0.2	
118	Sn	159	He	0.030	ppb	6.8	95.56	1	
121	Sb	159	No Gas	0.018	ppb	20.1	166.86	0.2	
137	Ba	159	No Gas	0.020	ppb	57.9	66.74	0.4	
182	W	159	No Gas	0.053	ppb	13.3	286.99	1	
205	Tl	209	No Gas	0.008	ppb	62.6	240.27	0.2	
208	Pb	209	No Gas	0.023	ppb	15.9	597.35	0.2	
232	Th	209	No Gas	0.057	ppb	11.2	981.14	1	
238	U	209	No Gas	0.016	ppb	37.7	236.94	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1746346.04	2.9	1881686.03	92.81	29.5	120.4	
Sc	45	No Gas	3764984.62	3.6	3915123.71	96.17	29.5	120.4	
Sc	45	H2	471809.95	0.9	507902.1	92.89	29.5	120.4	
Sc	45	He	93765.61	0.4	102593	91.4	29.5	120.4	
Ge	72	No Gas	853742.86	3.9	852546.94	100.14	29.5	120.4	
Ge	72	H2	178681.31	1.5	193980.16	92.11	29.5	120.4	
Ge	72	He	72857.13	0.2	77385.19	94.15	29.5	120.4	
Y	89	H2	3009209.83	0.9	3089458.15	97.4	29.5	120.4	
Y	89	He	635287.21	0.6	678154.65	93.68	29.5	120.4	
Tb	159	No Gas	8425275.64	3.8	7727080.72	109.04	29.5	120.4	
Tb	159	He	3330615.65	0.2	3280980.4	101.51	29.5	120.4	
Bi	209	No Gas	4416349.16	4.1	3977089.87	111.04	29.5	120.4	

Sample Report

Sample Name LCSWNG17IMW1

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:50:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.851	ppb	5.0	13507.85	100	
11	B	6	No Gas	524.377	ppb	4.9	89570.46	1000	
23	Na	45	He	8467.346	ppb	1.6	188311.55	200000	
24	Mg	45	He	5765.628	ppb	0.9	68817.41	200000	
27	Al	45	He	2126.110	ppb	1.6	10049.44	200000	
28	Si	45	H2	1057.276	ppb	4.2	10555.76	10000	
39	K	45	He	10897.568	ppb	2.0	133336.76	200000	
40	Ca	45	H2	2840.396	ppb	0.7	242673.89	200000	
51	V	89	He	557.793	ppb	1.8	98644.46	1000	
52	Cr	89	He	225.938	ppb	2.3	48523.85	2000	
55	Mn	89	He	563.410	ppb	3.1	57657.78	2000	
56	Fe	89	H2	1141.868	ppb	1.3	394870.83	100000	
59	Co	89	He	569.294	ppb	2.0	210568.48	1000	
60	Ni	89	He	574.493	ppb	2.0	57176.34	1000	
63	Cu	89	He	283.710	ppb	2.1	80073.80	2000	
66	Zn	89	He	578.749	ppb	2.1	21490.53	2000	
75	As	89	He	110.814	ppb	2.4	3541.18	1000	
78	Se	89	H2	110.518	ppb	3.7	1856.71	1000	
88	Sr	89	He	547.140	ppb	2.0	88353.84	2000	
95	Mo	89	He	117.893	ppb	2.1	20432.54	1000	
107	Ag	89	He	59.207	ppb	1.7	34584.85	100	
111	Cd	89	He	293.825	ppb	1.5	22308.42	1000	
118	Sn	159	He	529.371	ppb	2.2	96122.74	1000	
121	Sb	159	No Gas	109.045	ppb	5.6	152829.25	1000	
137	Ba	159	No Gas	2126.820	ppb	5.3	1146485.25	2000	
182	W	159	No Gas	113.980	ppb	5.4	114878.13	1000	
205	Tl	209	No Gas	114.518	ppb	3.9	255883.23	1000	
208	Pb	209	No Gas	113.216	ppb	4.9	350248.14	2000	
232	Th	209	No Gas	113.913	ppb	6.0	354257.73	1000	
238	U	209	No Gas	112.264	ppb	6.2	330514.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1850887.52	1.0	1881686.03	98.36	29.5	120.4	
Sc	45	No Gas	3695606.52	2.2	3915123.71	94.39	29.5	120.4	
Sc	45	H2	461201.60	0.5	507902.1	90.81	29.5	120.4	
Sc	45	He	92223.11	1.7	102593	89.89	29.5	120.4	
Ge	72	No Gas	854074.05	2.1	852546.94	100.18	29.5	120.4	
Ge	72	H2	172651.26	0.7	193980.16	89	29.5	120.4	
Ge	72	He	71269.90	1.8	77385.19	92.1	29.5	120.4	
Y	89	H2	2964415.28	0.3	3089458.15	95.95	29.5	120.4	
Y	89	He	621969.05	1.8	678154.65	91.71	29.5	120.4	
Tb	159	No Gas	8530661.47	2.0	7727080.72	110.4	29.5	120.4	
Tb	159	He	3330789.29	1.6	3280980.4	101.52	29.5	120.4	
Bi	209	No Gas	4445999.13	2.1	3977089.87	111.79	29.5	120.4	

Sample Report

Sample Name SN5772-003R

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 6:53:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.215	ppb	26.5	80.00	100	
11	B	6	No Gas	614.128	ppb	10.9	95003.98	1000	
23	Na	45	He	126597.959	ppb	1.0	2656458.87	200000	
24	Mg	45	He	8718.907	ppb	0.9	102771.06	200000	
27	Al	45	He	555.616	ppb	1.7	2617.01	200000	
28	Si	45	H2	10206.928	ppb	2.8	96088.38	10000	
39	K	45	He	954.483	ppb	2.2	21992.01	200000	
40	Ca	45	H2	72589.729	ppb	0.9	6092247.06	200000	
51	V	89	He	5.088	ppb	2.1	1221.21	1000	
52	Cr	89	He	2.009	ppb	5.1	494.59	2000	
55	Mn	89	He	18.394	ppb	1.2	1881.12	2000	
56	Fe	89	H2	538.820	ppb	0.8	185994.29	100000	
59	Co	89	He	0.318	ppb	21.5	131.12	1000	
60	Ni	89	He	0.413	ppb	98.7	335.57	1000	
63	Cu	89	He	4.242	ppb	9.8	1631.27	2000	
66	Zn	89	He	5.980	ppb	14.2	287.79	2000	
75	As	89	He	0.461	ppb	53.7	21.00	1000	
78	Se	89	H2	1.304	ppb	7.1	22.50	1000	
88	Sr	89	He	1101.475	ppb	0.9	176734.09	2000	
95	Mo	89	He	0.608	ppb	11.3	106.67	1000	
107	Ag	89	He	0.029	ppb	39.5	30.00	100	
111	Cd	89	He	0.064	ppb	147.6	5.18	1000	
118	Sn	159	He	1.650	ppb	8.0	367.80	1000	
121	Sb	159	No Gas	0.163	ppb	32.3	253.62	1000	
137	Ba	159	No Gas	45.523	ppb	10.2	23326.45	2000	
182	W	159	No Gas	0.294	ppb	5.3	307.01	1000	
205	Tl	209	No Gas	0.065	ppb	64.0	283.66	1000	
208	Pb	209	No Gas	0.606	ppb	17.8	1995.64	2000	
232	Th	209	No Gas	0.802	ppb	18.0	2442.98	1000	
238	U	209	No Gas	3.703	ppb	17.7	10215.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1690839.79	8.4	1881686.03	89.86	29.5	120.4	
Sc	45	No Gas	3508447.31	8.7	3915123.71	89.61	29.5	120.4	
Sc	45	H2	454490.09	0.6	507902.1	89.48	29.5	120.4	
Sc	45	He	91427.67	0.7	102593	89.12	29.5	120.4	
Ge	72	No Gas	814621.23	9.4	852546.94	95.55	29.5	120.4	
Ge	72	H2	171393.06	0.4	193980.16	88.36	29.5	120.4	
Ge	72	He	71303.60	0.9	77385.19	92.14	29.5	120.4	
Y	89	H2	2939085.05	0.5	3089458.15	95.13	29.5	120.4	
Y	89	He	617884.08	0.2	678154.65	91.11	29.5	120.4	
Tb	159	No Gas	8148333.70	9.1	7727080.72	105.45	29.5	120.4	
Tb	159	He	3332826.93	0.4	3280980.4	101.58	29.5	120.4	
Bi	209	No Gas	4209907.36	9.4	3977089.87	105.85	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG20IMS1
File Name	045_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:55:40 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.079	ppb	17.3	51.12	0.5	
B	11	6	No Gas	11.017	ppb	8.4	3627.25	10	PB 6020 Fails DoD
Na	23	45	He	136.985	ppb	9.9	12596.28	500	
Mg	24	45	He	-3.729	ppb	N/A	755.63	50	
Al	27	45	He	17.077	ppb	40.2	97.78	50	
Si	28	45	H2	9.295	ppb	117.4	594.01	250	
K	39	45	He	-7.655	ppb	N/A	11376.17	500	
Ca	40	45	H2	64.599	ppb	6.2	6252.70	50	PB 6020 Fails DoD
V	51	89	He	4.873	ppb	10.2	1187.87	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.031	ppb	3.4	287.28	2.5	
Mn	55	89	He	1.407	ppb	9.3	154.64	1	PB 6020 Fails DoD
Fe	56	89	H2	34.953	ppb	2.3	14450.18	50	
Co	59	89	He	0.070	ppb	43.2	40.00	0.5	
Ni	60	89	He	-0.334	ppb	N/A	263.35	1	
Cu	63	89	He	3.484	ppb	6.3	1425.68	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	3.680	ppb	24.6	204.45	5	
As	75	89	He	0.292	ppb	67.1	15.67	2.5	
Se	78	89	H2	0.221	ppb	59.4	4.50	2.5	
Sr	88	89	He	0.320	ppb	24.4	57.78	2.5	
Mo	95	89	He	0.213	ppb	28.1	38.89	2.5	
Ag	107	89	He	0.013	ppb	28.5	21.11	0.5	
Cd	111	89	He	0.030	ppb	103.8	2.59	0.5	
Sn	118	159	He	41.575	ppb	2.3	7644.70	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.050	ppb	19.6	113.46	0.5	
Ba	137	159	No Gas	0.413	ppb	20.6	243.60	1	
W	182	159	No Gas	0.072	ppb	60.0	100.11	2.5	
Tl	205	209	No Gas	-0.006	ppb	N/A	146.83	0.5	
Pb	208	209	No Gas	0.276	ppb	15.8	1127.95	0.5	
Th	232	209	No Gas	0.131	ppb	11.6	523.94	2.5	
U	238	209	No Gas	0.011	ppb	18.2	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1810305.65	1.0	1881686.03	96.21	29.5	120.4	
Sc	45	No Gas	3726847.47	1.2	3915123.71	95.19	29.5	120.4	
Sc	45	H2	458168.88	1.8	507902.1	90.21	29.5	120.4	
Sc	45	He	91845.86	1.7	102593	89.52	29.5	120.4	
Ge	72	No Gas	865178.32	0.8	852546.94	101.48	29.5	120.4	
Ge	72	H2	171378.89	1.3	193980.16	88.35	29.5	120.4	
Ge	72	He	71231.45	1.2	77385.19	92.05	29.5	120.4	
Y	89	H2	2971303.28	1.3	3089458.15	96.18	29.5	120.4	
Y	89	He	620630.07	1.6	678154.65	91.52	29.5	120.4	
Tb	159	No Gas	8736699.66	1.1	7727080.72	113.07	29.5	120.4	
Tb	159	He	3345231.20	1.7	3280980.4	101.96	29.5	120.4	
Bi	209	No Gas	4546186.60	1.7	3977089.87	114.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG20IMS1
File Name	046LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 6:58:13 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.558	ppb	4.2	12312.31	50	19.42	79.5	120.4	
B	11	6	No Gas	502.842	ppb	2.3	83687.52	500	20.11	79.5	120.4	
Na	23	45	He	7667.161	ppb	1.7	171764.39	7500	20.45	79.5	120.4	
Mg	24	45	He	5241.419	ppb	1.7	62747.11	5000	20.97	79.5	120.4	
Al	27	45	He	1886.011	ppb	2.0	8933.10	2000	18.86	79.5	120.4	
Si	28	45	H2	904.687	ppb	4.3	9119.69	1000	18.09	79.5	120.4	
K	39	45	He	9947.464	ppb	0.9	122964.90	10000	19.89	79.5	120.4	
Ca	40	45	H2	2558.925	ppb	0.7	219022.73	2500	20.47	79.5	120.4	
V	51	89	He	496.416	ppb	1.7	88789.49	500	19.86	79.5	120.4	
Cr	52	89	He	204.769	ppb	1.9	44468.74	200	20.48	79.5	120.4	
Mn	55	89	He	515.474	ppb	0.2	53349.21	500	20.62	79.5	120.4	
Fe	56	89	H2	1046.584	ppb	1.7	365317.25	1000	20.93	79.5	120.4	
Co	59	89	He	514.051	ppb	1.1	192243.78	500	20.56	79.5	120.4	
Ni	60	89	He	518.764	ppb	1.2	52229.15	500	20.75	79.5	120.4	
Cu	63	89	He	257.983	ppb	1.6	73656.50	250	20.64	79.5	120.4	
Zn	66	89	He	512.569	ppb	0.6	19253.91	500	20.5	79.5	120.4	
As	75	89	He	100.386	ppb	0.8	3244.40	100	20.08	79.5	120.4	
Se	78	89	H2	96.689	ppb	1.6	1638.85	100	19.34	79.5	120.4	
Sr	88	89	He	489.763	ppb	1.0	79964.93	500	19.59	79.5	120.4	
Mo	95	89	He	105.834	ppb	2.1	18544.25	100	21.17	79.5	120.4	
Ag	107	89	He	53.478	ppb	0.6	31584.27	50	21.39	79.5	120.4	
Cd	111	89	He	262.241	ppb	1.6	20128.03	250	20.98	79.5	120.4	
Sn	118	159	He	514.248	ppb	1.3	94930.19	500	20.57	79.5	120.4	
Sb	121	159	No Gas	102.414	ppb	7.0	142092.86	100	20.48	79.5	120.4	
Ba	137	159	No Gas	2027.619	ppb	6.6	1082125.68	2000	20.28	79.5	120.4	
W	182	159	No Gas	109.435	ppb	7.0	109176.14	100	21.89	79.5	120.4	
Tl	205	209	No Gas	110.019	ppb	5.1	241117.19	100	22	79.5	120.4	
[Pb]	206	209	No Gas	109.092	ppb	6.5	82679.25	100	21.82	79.5	120.4	
[Pb]	207	209	No Gas	108.610	ppb	6.0	72160.47	100	21.72	79.5	120.4	
Pb	208	209	No Gas	108.515	ppb	5.8	329196.96	100	21.7	79.5	120.4	
Th	232	209	No Gas	110.059	ppb	6.4	335594.83	100	22.01	79.5	120.4	
U	238	209	No Gas	108.979	ppb	6.0	314671.99	100	21.8	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1802187.23	4.0	1881686.03	95.78	29.5	120.4	
Sc	45	No Gas	3616120.34	6.6	3915123.71	92.36	29.5	120.4	
Sc	45	H2	461862.51	0.4	507902.1	90.94	29.5	120.4	
Sc	45	He	92399.04	1.6	102593	90.06	29.5	120.4	
Ge	72	No Gas	851671.33	4.9	852546.94	99.9	29.5	120.4	
Ge	72	H2	171883.88	0.1	193980.16	88.61	29.5	120.4	
Ge	72	He	72186.68	1.4	77385.19	93.28	29.5	120.4	
Y	89	H2	2990635.48	0.5	3089458.15	96.8	29.5	120.4	
Y	89	He	628774.14	1.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8463453.21	6.4	7727080.72	109.53	29.5	120.4	
Tb	159	He	3385674.78	1.1	3280980.4	103.19	29.5	120.4	
Bi	209	No Gas	4366822.30	6.0	3977089.87	109.8	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:00:52 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.627	ppb	17.1	224.45	100	
11	B	6	No Gas	325.409	ppb	5.1	26857.78	1000	
23	Na	45	He	1936.370	ppb	3.7	28824.09	200000	
24	Mg	45	He	29851.626	ppb	0.8	168920.72	200000	
27	Al	45	He	35605.609	ppb	0.3	80244.35	200000	
28	Si	45	H2	2533.668	ppb	1.6	12028.72	10000	
39	K	45	He	9268.683	ppb	0.7	60478.44	200000	
40	Ca	45	H2	204982.603	ppb	0.4	8367086.40	200000	
51	V	89	He	73.290	ppb	2.6	6685.15	1000	
52	Cr	89	He	372.925	ppb	0.3	39436.80	2000	
55	Mn	89	He	9396.269	ppb	0.2	473297.93	2000	
56	Fe	89	H2	295682.493	ppb	0.4	49863275.27	100000	
59	Co	89	He	44.969	ppb	2.1	8200.80	1000	
60	Ni	89	He	234.527	ppb	0.6	11721.95	1000	
63	Cu	89	He	3441.335	ppb	0.4	475854.54	2000	
66	Zn	89	He	4086.864	ppb	0.3	74528.30	2000	
75	As	89	He	49.535	ppb	3.1	784.11	1000	
78	Se	89	H2	39.229	ppb	2.3	323.99	1000	
88	Sr	89	He	1388.583	ppb	1.0	110374.23	2000	
95	Mo	89	He	114.812	ppb	3.2	9796.09	1000	
107	Ag	89	He	21.434	ppb	2.1	6173.87	100	
111	Cd	89	He	6.820	ppb	0.8	255.19	1000	
118	Sn	159	He	303.052	ppb	1.1	27430.84	1000	
121	Sb	159	No Gas	11.652	ppb	9.3	8258.42	1000	
137	Ba	159	No Gas	2649.444	ppb	4.9	718979.63	2000	
182	W	159	No Gas	21.111	ppb	8.2	10733.08	1000	
205	Tl	209	No Gas	0.573	ppb	16.4	897.70	1000	
208	Pb	209	No Gas	248.985	ppb	4.6	433404.83	2000	
232	Th	209	No Gas	1.967	ppb	8.6	3561.16	1000	
238	U	209	No Gas	20.127	ppb	6.1	33348.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1709584.03	1.0	1881686.03	90.85	29.5	120.4	
Sc	45	No Gas	3629404.09	0.7	3915123.71	92.7	29.5	120.4	
Sc	45	H2	442093.00	0.2	507902.1	87.04	29.5	120.4	
Sc	45	He	88070.69	0.9	102593	85.84	29.5	120.4	
Ge	72	No Gas	834412.95	1.5	852546.94	97.87	29.5	120.4	
Ge	72	H2	164444.72	0.6	193980.16	84.77	29.5	120.4	
Ge	72	He	68424.16	1.3	77385.19	88.42	29.5	120.4	
Y	89	H2	2908729.28	0.1	3089458.15	94.15	29.5	120.4	
Y	89	He	612162.10	0.7	678154.65	90.27	29.5	120.4	
Tb	159	No Gas	8584228.06	0.6	7727080.72	111.09	29.5	120.4	
Tb	159	He	3313886.76	1.0	3280980.4	101	29.5	120.4	
Bi	209	No Gas	5001292.21	0.8	3977089.87	125.75	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5515-001R

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:03:25 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.832	ppb	29.5	136.67	100	
11	B	6	No Gas	332.351	ppb	9.7	14311.98	1000	
23	Na	45	He	2027.431	ppb	3.4	19621.77	200000	
24	Mg	45	He	31763.654	ppb	1.1	90656.39	200000	
27	Al	45	He	37515.577	ppb	0.3	42482.95	200000	
28	Si	45	H2	2712.678	ppb	3.4	6689.12	10000	
39	K	45	He	9529.047	ppb	2.2	36603.52	200000	
40	Ca	45	H2	215616.885	ppb	1.8	4416731.53	200000	
51	V	89	He	73.069	ppb	0.7	3511.67	1000	
52	Cr	89	He	391.679	ppb	0.4	20830.91	2000	
55	Mn	89	He	9910.920	ppb	0.5	250697.04	2000	
56	Fe	89	H2	311079.926	ppb	1.3	26319446.23	100000	
59	Co	89	He	47.184	ppb	2.9	4327.68	1000	
60	Ni	89	He	233.693	ppb	1.7	6012.62	1000	
63	Cu	89	He	3638.563	ppb	0.7	252863.41	2000	
66	Zn	89	He	4213.347	ppb	0.8	38616.50	2000	
75	As	89	He	50.936	ppb	9.2	408.05	1000	
78	Se	89	H2	39.105	ppb	6.7	162.49	1000	
88	Sr	89	He	1444.916	ppb	0.5	57677.15	2000	
95	Mo	89	He	121.381	ppb	2.2	5201.18	1000	
107	Ag	89	He	22.008	ppb	4.6	3189.38	100	
111	Cd	89	He	7.796	ppb	5.6	146.67	1000	
118	Sn	159	He	315.378	ppb	1.2	14419.28	1000	
121	Sb	159	No Gas	11.606	ppb	10.6	4208.70	1000	
137	Ba	159	No Gas	2731.225	ppb	10.4	377282.81	2000	
182	W	159	No Gas	21.886	ppb	16.8	5671.01	1000	
205	Tl	209	No Gas	0.310	ppb	30.8	363.74	1000	
208	Pb	209	No Gas	268.029	ppb	8.7	228761.21	2000	
232	Th	209	No Gas	0.585	ppb	23.4	617.38	1000	
238	U	209	No Gas	21.450	ppb	11.7	17408.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1683346.07	3.4	1881686.03	89.46	29.5	120.4	
Sc	45	No Gas	3666159.57	4.4	3915123.71	93.64	29.5	120.4	
Sc	45	H2	443709.79	1.1	507902.1	87.36	29.5	120.4	
Sc	45	He	88489.62	0.9	102593	86.25	29.5	120.4	
Ge	72	No Gas	842244.46	3.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	167680.79	1.7	193980.16	86.44	29.5	120.4	
Ge	72	He	69916.69	1.1	77385.19	90.35	29.5	120.4	
Y	89	H2	2918663.25	1.1	3089458.15	94.47	29.5	120.4	
Y	89	He	614811.83	0.4	678154.65	90.66	29.5	120.4	
Tb	159	No Gas	8762440.43	4.1	7727080.72	113.4	29.5	120.4	
Tb	159	He	3340319.50	0.4	3280980.4	101.81	29.5	120.4	
Bi	209	No Gas	4911973.57	4.0	3977089.87	123.51	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBWNG20IMW1
File Name	049_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:06:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.032	ppb	91.5	35.56	0.5	
B	11	6	No Gas	6.170	ppb	33.1	2549.20	10	
Na	23	45	He	45.861	ppb	18.6	10472.17	500	
Mg	24	45	He	-18.214	ppb	N/A	573.39	50	
Al	27	45	He	9.721	ppb	49.9	62.22	50	
Si	28	45	H2	11.267	ppb	36.5	597.34	250	
K	39	45	He	-30.816	ppb	N/A	10897.61	500	
Ca	40	45	H2	42.798	ppb	3.7	4303.03	50	
V	51	89	He	0.802	ppb	14.3	468.91	2.5	
Cr	52	89	He	0.345	ppb	17.7	139.31	2.5	
Mn	55	89	He	1.370	ppb	22.3	149.31	1	PB 6020 Fails DoD
Fe	56	89	H2	32.699	ppb	1.6	13511.54	50	
Co	59	89	He	0.028	ppb	184.8	24.44	0.5	
Ni	60	89	He	-1.093	ppb	N/A	186.67	1	PB 6020 Fails DoD
Cu	63	89	He	2.739	ppb	8.0	1207.88	1.5	PB 6020 Fails DoD
Zn	66	89	He	2.522	ppb	2.4	160.01	5	
As	75	89	He	0.136	ppb	47.5	10.67	2.5	
Se	78	89	H2	0.133	ppb	22.4	3.00	2.5	
Sr	88	89	He	0.136	ppb	22.8	27.78	2.5	
Mo	95	89	He	0.125	ppb	15.7	23.33	2.5	
Ag	107	89	He	0.012	ppb	45.8	20.00	0.5	
Cd	111	89	He	0.020	ppb	43.2	1.85	0.5	
Sn	118	159	He	1.380	ppb	5.4	318.91	2.5	
Sb	121	159	No Gas	0.037	ppb	67.4	90.10	0.5	
Ba	137	159	No Gas	1.430	ppb	62.2	760.88	1	PB 6020 Fails DoD
W	182	159	No Gas	0.056	ppb	61.3	83.43	2.5	
Tl	205	209	No Gas	-0.038	ppb	N/A	70.08	0.5	
Pb	208	209	No Gas	0.220	ppb	38.2	911.04	0.5	
Th	232	209	No Gas	0.100	ppb	39.1	407.14	2.5	
U	238	209	No Gas	0.024	ppb	80.2	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1637241.48	6.9	1881686.03	87.01	29.5	120.4	
Sc	45	No Gas	3557206.59	8.0	3915123.71	90.86	29.5	120.4	
Sc	45	H2	447033.60	0.8	507902.1	88.02	29.5	120.4	
Sc	45	He	90002.44	1.0	102593	87.73	29.5	120.4	
Ge	72	No Gas	812366.41	9.3	852546.94	95.29	29.5	120.4	
Ge	72	H2	168307.35	0.6	193980.16	86.77	29.5	120.4	
Ge	72	He	70569.94	0.9	77385.19	91.19	29.5	120.4	
Y	89	H2	2936424.50	0.1	3089458.15	95.05	29.5	120.4	
Y	89	He	615476.55	1.4	678154.65	90.76	29.5	120.4	
Tb	159	No Gas	8459546.40	8.0	7727080.72	109.48	29.5	120.4	
Tb	159	He	3334140.64	1.0	3280980.4	101.62	29.5	120.4	
Bi	209	No Gas	4405576.93	8.8	3977089.87	110.77	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG20IMW1
File Name	050LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:08:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.715	ppb	7.8	12630.33	50	20.29	79.5	120.4	
B	11	6	No Gas	529.882	ppb	7.3	86506.72	500	21.2	79.5	120.4	
Na	23	45	He	8181.968	ppb	1.1	180231.59	7500	21.82	79.5	120.4	
Mg	24	45	He	5643.564	ppb	0.2	66615.67	5000	22.57	79.5	120.4	
Al	27	45	He	2038.406	ppb	2.7	9525.74	2000	20.38	79.5	120.4	
Si	28	45	H2	1022.105	ppb	1.6	10131.60	1000	20.44	0	200	
K	39	45	He	10565.230	ppb	1.0	128173.11	10000	21.13	79.5	120.4	
Ca	40	45	H2	2713.322	ppb	0.8	229751.46	2500	21.71	79.5	120.4	
V	51	89	He	543.694	ppb	0.5	95876.40	500	21.75	79.5	120.4	
Cr	52	89	He	224.397	ppb	0.1	48054.41	200	22.44	79.5	120.4	
Mn	55	89	He	553.186	ppb	0.9	56453.75	500	22.13	79.5	120.4	
Fe	56	89	H2	1125.257	ppb	0.9	391845.33	1000	22.51	79.5	120.4	
Co	59	89	He	564.330	ppb	0.3	208126.52	500	22.57	79.5	120.4	
Ni	60	89	He	578.723	ppb	1.1	57424.02	500	23.15	79.5	120.4	
Cu	63	89	He	284.745	ppb	0.7	80133.03	250	22.78	79.5	120.4	
Zn	66	89	He	564.100	ppb	2.3	20884.07	500	22.56	79.5	120.4	
As	75	89	He	110.927	ppb	1.8	3534.51	100	22.18	79.5	120.4	
Se	78	89	H2	105.423	ppb	1.8	1783.37	100	21.08	79.5	120.4	
Sr	88	89	He	535.334	ppb	1.0	86197.96	500	21.41	79.5	120.4	
Mo	95	89	He	116.227	ppb	0.8	20084.36	100	23.24	79.5	120.4	DoD
Ag	107	89	He	59.978	ppb	1.6	34926.83	50	23.99	79.5	120.4	DoD
Cd	111	89	He	287.101	ppb	1.0	21731.99	250	22.97	79.5	120.4	
Sn	118	159	He	514.214	ppb	0.8	94320.46	500	20.57	79.5	120.4	
Sb	121	159	No Gas	101.835	ppb	9.1	149524.29	100	20.37	79.5	120.4	
Ba	137	159	No Gas	2020.089	ppb	9.7	1140575.96	2000	20.2	79.5	120.4	
W	182	159	No Gas	107.783	ppb	8.6	113810.26	100	21.56	79.5	120.4	
Tl	205	209	No Gas	108.365	ppb	7.9	252375.41	100	21.67	79.5	120.4	
[Pb]	206	209	No Gas	108.002	ppb	10.0	87000.08	100	21.6	79.5	120.4	
[Pb]	207	209	No Gas	107.979	ppb	7.8	76272.18	100	21.6	79.5	120.4	
Pb	208	209	No Gas	107.600	ppb	9.0	346901.78	100	21.52	79.5	120.4	
Th	232	209	No Gas	108.094	ppb	10.7	350271.53	100	21.62	79.5	120.4	
U	238	209	No Gas	107.105	ppb	10.1	328589.59	100	21.42	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1770750.91	2.2	1881686.03	94.1	29.5	120.4	
Sc	45	No Gas	3799028.53	3.3	3915123.71	97.03	29.5	120.4	
Sc	45	H2	457037.87	1.2	507902.1	89.99	29.5	120.4	
Sc	45	He	91172.20	0.8	102593	88.87	29.5	120.4	
Ge	72	No Gas	875948.99	3.3	852546.94	102.74	29.5	120.4	
Ge	72	H2	170813.22	0.1	193980.16	88.06	29.5	120.4	
Ge	72	He	71282.04	0.8	77385.19	92.11	29.5	120.4	
Y	89	H2	2984826.44	0.4	3089458.15	96.61	29.5	120.4	
Y	89	He	620010.87	0.9	678154.65	91.43	29.5	120.4	
Tb	159	No Gas	8948514.10	3.4	7727080.72	115.81	29.5	120.4	
Tb	159	He	3363909.71	0.5	3280980.4	102.53	29.5	120.4	
Bi	209	No Gas	4640064.07	3.6	3977089.87	116.67	29.5	120.4	

Sample Report

Sample Name SN5920-001

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:11:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.119	ppb	27.3	58.89	100	
11	B	6	No Gas	16.822	ppb	2.7	4410.82	1000	
23	Na	45	He	11619.957	ppb	1.5	249464.50	200000	
24	Mg	45	He	5455.673	ppb	1.6	63804.90	200000	
27	Al	45	He	55.550	ppb	10.8	274.46	200000	
28	Si	45	H2	11093.059	ppb	0.1	104680.60	10000	
39	K	45	He	1597.808	ppb	2.0	28761.02	200000	
40	Ca	45	H2	6675.357	ppb	0.4	562525.30	200000	
51	V	89	He	2.178	ppb	4.5	710.04	1000	
52	Cr	89	He	0.573	ppb	14.8	187.97	2000	
55	Mn	89	He	2103.002	ppb	1.0	213399.09	2000	
56	Fe	89	H2	8432.091	ppb	0.3	2902257.60	100000	
59	Co	89	He	13.840	ppb	0.9	5090.18	1000	
60	Ni	89	He	10.041	ppb	1.1	1280.10	1000	
63	Cu	89	He	2.676	ppb	1.1	1192.32	2000	
66	Zn	89	He	5.209	ppb	7.7	258.90	2000	
75	As	89	He	5.627	ppb	1.3	184.35	1000	
78	Se	89	H2	0.340	ppb	23.0	6.50	1000	
88	Sr	89	He	41.413	ppb	5.1	6638.51	2000	
95	Mo	89	He	0.758	ppb	4.2	132.23	1000	
107	Ag	89	He	0.025	ppb	49.2	27.78	100	
111	Cd	89	He	0.069	ppb	43.9	5.56	1000	
118	Sn	159	He	1.846	ppb	10.9	404.46	1000	
121	Sb	159	No Gas	0.132	ppb	19.7	236.93	1000	
137	Ba	159	No Gas	14.774	ppb	4.1	8352.04	2000	
182	W	159	No Gas	0.250	ppb	27.2	290.33	1000	
205	Tl	209	No Gas	0.055	ppb	93.4	293.66	1000	
208	Pb	209	No Gas	0.180	ppb	9.4	840.95	2000	
232	Th	209	No Gas	0.782	ppb	10.0	2639.90	1000	
238	U	209	No Gas	0.088	ppb	28.5	270.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744859.19	2.1	1881686.03	92.73	29.5	120.4	
Sc	45	No Gas	3782001.35	2.1	3915123.71	96.6	29.5	120.4	
Sc	45	H2	455746.27	0.8	507902.1	89.73	29.5	120.4	
Sc	45	He	90295.92	1.4	102593	88.01	29.5	120.4	
Ge	72	No Gas	874047.04	1.6	852546.94	102.52	29.5	120.4	
Ge	72	H2	170626.95	1.0	193980.16	87.96	29.5	120.4	
Ge	72	He	70912.09	1.1	77385.19	91.64	29.5	120.4	
Y	89	H2	2966041.49	0.6	3089458.15	96.01	29.5	120.4	
Y	89	He	616639.50	1.2	678154.65	90.93	29.5	120.4	
Tb	159	No Gas	8928031.95	1.8	7727080.72	115.54	29.5	120.4	
Tb	159	He	3343441.93	1.2	3280980.4	101.9	29.5	120.4	
Bi	209	No Gas	4624510.08	1.9	3977089.87	116.28	29.5	120.4	

Sample Report

Sample Name SN5920-002

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:13:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.113	ppb	45.0	55.56	100	
11	B	6	No Gas	12.011	ppb	5.5	3521.66	1000	
23	Na	45	He	9794.093	ppb	2.7	215665.49	200000	
24	Mg	45	He	5493.776	ppb	1.9	65423.86	200000	
27	Al	45	He	14.382	ppb	12.6	85.56	200000	
28	Si	45	H2	5239.000	ppb	1.1	49621.14	10000	
39	K	45	He	2131.730	ppb	1.3	35247.54	200000	
40	Ca	45	H2	13008.357	ppb	0.8	1093655.30	200000	
51	V	89	He	1.848	ppb	5.8	661.15	1000	
52	Cr	89	He	0.455	ppb	18.0	165.30	2000	
55	Mn	89	He	811.482	ppb	3.3	83405.10	2000	
56	Fe	89	H2	4319.663	ppb	1.1	1489591.34	100000	
59	Co	89	He	2.555	ppb	14.9	962.33	1000	
60	Ni	89	He	2.344	ppb	9.9	531.14	1000	
63	Cu	89	He	2.251	ppb	13.1	1087.86	2000	
66	Zn	89	He	8.554	ppb	1.3	386.69	2000	
75	As	89	He	4.151	ppb	13.9	139.35	1000	
78	Se	89	H2	0.190	ppb	15.2	4.00	1000	
88	Sr	89	He	47.457	ppb	3.3	7703.54	2000	
95	Mo	89	He	0.717	ppb	19.8	126.67	1000	
107	Ag	89	He	0.017	ppb	90.1	23.33	100	
111	Cd	89	He	0.059	ppb	15.5	4.81	1000	
118	Sn	159	He	1.124	ppb	22.7	275.57	1000	
121	Sb	159	No Gas	0.161	ppb	54.7	266.97	1000	
137	Ba	159	No Gas	6.863	ppb	26.3	3714.80	2000	
182	W	159	No Gas	0.586	ppb	8.2	617.38	1000	
205	Tl	209	No Gas	0.013	ppb	586.0	183.55	1000	
208	Pb	209	No Gas	0.218	ppb	55.8	921.06	2000	
232	Th	209	No Gas	0.155	ppb	66.8	584.02	1000	
238	U	209	No Gas	0.081	ppb	123.7	236.96	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682595.15	1.6	1881686.03	89.42	29.5	120.4	
Sc	45	No Gas	3611849.77	2.9	3915123.71	92.25	29.5	120.4	
Sc	45	H2	455006.42	0.6	507902.1	89.59	29.5	120.4	
Sc	45	He	91971.17	1.6	102593	89.65	29.5	120.4	
Ge	72	No Gas	842266.63	3.1	852546.94	98.79	29.5	120.4	
Ge	72	H2	168773.67	0.9	193980.16	87.01	29.5	120.4	
Ge	72	He	71313.06	1.0	77385.19	92.15	29.5	120.4	
Y	89	H2	2969426.20	0.8	3089458.15	96.11	29.5	120.4	
Y	89	He	624727.58	1.8	678154.65	92.12	29.5	120.4	
Tb	159	No Gas	8559443.41	2.7	7727080.72	110.77	29.5	120.4	
Tb	159	He	3377887.13	1.4	3280980.4	102.95	29.5	120.4	
Bi	209	No Gas	4449705.49	3.0	3977089.87	111.88	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:16:24 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.850	ppb	7.9	29428.52	25	99.4	89.8	110.2	
11	B	6	No Gas	24.916	ppb	7.7	20668.72	25	99.66	89.8	110.2	
23	Na	45	He	5169.954	ppb	1.0	554495.08	5000	103.4	89.8	110.2	
24	Mg	45	He	4970.752	ppb	1.4	293787.06	5000	99.42	89.8	110.2	
27	Al	45	He	470.788	ppb	1.9	11116.91	500	94.16	89.8	110.2	
28	Si	45	H2	453.557	ppb	0.7	21957.94	500	90.71	89.8	110.2	
39	K	45	He	4840.659	ppb	1.5	281917.27	5000	96.81	89.8	110.2	
40	Ca	45	H2	4835.682	ppb	1.9	2049757.68	5000	96.71	89.8	110.2	
51	V	89	He	24.332	ppb	0.2	21918.77	25	97.33	89.8	110.2	
52	Cr	89	He	25.163	ppb	1.3	27231.13	25	100.65	89.8	110.2	
55	Mn	89	He	24.638	ppb	0.4	12700.76	25	98.55	89.8	110.2	
56	Fe	89	H2	4804.847	ppb	1.4	8320350.16	5000	96.1	89.8	110.2	
59	Co	89	He	25.223	ppb	1.7	46968.14	25	100.89	89.8	110.2	
60	Ni	89	He	25.429	ppb	0.2	12970.87	25	101.72	89.8	110.2	
63	Cu	89	He	25.129	ppb	1.2	35951.56	25	100.52	89.8	110.2	
66	Zn	89	He	25.592	ppb	2.0	4836.57	25	102.37	89.8	110.2	
75	As	89	He	24.525	ppb	1.2	3943.66	25	98.1	89.8	110.2	
78	Se	89	H2	23.670	ppb	3.0	2002.72	25	94.68	89.8	110.2	
88	Sr	89	He	23.622	ppb	1.3	19204.06	25	94.49	89.8	110.2	
95	Mo	89	He	25.351	ppb	1.7	22115.20	25	101.4	89.8	110.2	
107	Ag	89	He	26.209	ppb	0.5	77033.06	25	104.84	89.8	110.2	
111	Cd	89	He	25.807	ppb	0.3	9861.46	25	103.23	89.8	110.2	
118	Sn	159	He	23.261	ppb	0.7	21350.88	25	93.04	89.8	110.2	
121	Sb	159	No Gas	23.195	ppb	9.8	168348.67	25	92.78	89.8	110.2	
137	Ba	159	No Gas	23.723	ppb	9.6	66238.45	25	94.89	89.8	110.2	
182	W	159	No Gas	23.761	ppb	8.6	124043.08	25	95.04	89.8	110.2	
205	Tl	209	No Gas	24.230	ppb	7.9	279345.22	25	96.92	89.8	110.2	
208	Pb	209	No Gas	24.135	ppb	9.0	385185.48	25	96.54	89.8	110.2	
232	Th	209	No Gas	24.026	ppb	8.0	385619.31	25	96.1	89.8	110.2	
238	U	209	No Gas	24.159	ppb	9.4	366998.37	25	96.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1686115.81	2.0	1881686.03	89.61	29.5	120.4	
Sc	45	No Gas	3791856.88	3.0	3915123.71	96.85	29.5	120.4	
Sc	45	H2	459029.55	1.3	507902.1	90.38	29.5	120.4	
Sc	45	He	92158.72	1.3	102593	89.83	29.5	120.4	
Ge	72	No Gas	870662.35	2.9	852546.94	102.12	29.5	120.4	
Ge	72	H2	173561.88	0.3	193980.16	89.47	29.5	120.4	
Ge	72	He	71719.82	0.2	77385.19	92.68	29.5	120.4	
Y	89	H2	2986338.14	0.9	3089458.15	96.66	29.5	120.4	
Y	89	He	625952.34	0.2	678154.65	92.3	29.5	120.4	
Tb	159	No Gas	8847471.95	3.3	7727080.72	114.5	29.5	120.4	
Tb	159	He	3358240.71	0.1	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4594067.97	3.6	3977089.87	115.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:19:03 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.051	ppb	20.4	91.12	0.2	
11	B	6	No Gas	0.844	ppb	11.4	2406.95	4	
23	Na	45	He	-10.409	ppb	N/A	8678.98	200	
24	Mg	45	He	-2.495	ppb	N/A	655.62	20	
27	Al	45	He	0.086	ppb	568.6	20.00	20	
28	Si	45	H2	1.603	ppb	102.6	600.68	100	
39	K	45	He	-6.145	ppb	N/A	11186.08	200	
40	Ca	45	H2	2.101	ppb	6.9	1732.39	20	
51	V	89	He	-0.170	ppb	N/A	185.56	1	
52	Cr	89	He	-0.004	ppb	N/A	63.32	1	
55	Mn	89	He	0.054	ppb	45.8	39.32	0.4	
56	Fe	89	H2	2.271	ppb	7.7	6411.93	20	
59	Co	89	He	0.011	ppb	127.8	35.56	0.2	
60	Ni	89	He	-0.259	ppb	N/A	171.12	0.4	Failed DoD
63	Cu	89	He	-0.009	ppb	N/A	445.58	0.6	
66	Zn	89	He	0.075	ppb	25.4	83.34	2	
75	As	89	He	0.009	ppb	244.4	8.00	1	
78	Se	89	H2	0.012	ppb	29.5	1.83	1	
88	Sr	89	He	0.010	ppb	60.7	14.44	1	
95	Mo	89	He	0.076	ppb	29.2	68.89	1	
107	Ag	89	He	0.005	ppb	66.6	28.89	0.2	
111	Cd	89	He	0.010	ppb	86.6	4.07	0.2	
118	Sn	159	He	0.019	ppb	155.1	85.56	1	
121	Sb	159	No Gas	0.019	ppb	17.7	176.87	0.2	
137	Ba	159	No Gas	0.023	ppb	37.1	76.75	0.4	
182	W	159	No Gas	0.057	ppb	17.2	310.35	1	
205	Tl	209	No Gas	0.016	ppb	36.5	333.71	0.2	
208	Pb	209	No Gas	0.020	ppb	18.7	567.31	0.2	
232	Th	209	No Gas	0.108	ppb	10.5	1788.80	1	
238	U	209	No Gas	0.021	ppb	38.3	317.02	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1732743.96	3.0	1881686.03	92.08	29.5	120.4	
Sc	45	No Gas	3805595.67	3.6	3915123.71	97.2	29.5	120.4	
Sc	45	H2	472622.84	1.3	507902.1	93.05	29.5	120.4	
Sc	45	He	92379.88	0.4	102593	90.05	29.5	120.4	
Ge	72	No Gas	861880.72	3.7	852546.94	101.09	29.5	120.4	
Ge	72	H2	179558.89	0.7	193980.16	92.57	29.5	120.4	
Ge	72	He	72619.95	0.6	77385.19	93.84	29.5	120.4	
Y	89	H2	3014323.85	1.0	3089458.15	97.57	29.5	120.4	
Y	89	He	631017.63	0.3	678154.65	93.05	29.5	120.4	
Tb	159	No Gas	8553647.37	3.7	7727080.72	110.7	29.5	120.4	
Tb	159	He	3330175.37	0.2	3280980.4	101.5	29.5	120.4	
Bi	209	No Gas	4471469.17	3.8	3977089.87	112.43	29.5	120.4	

Sample Report

Sample Name	SN5920-003
File Name	055SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:21:49 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.126	ppb	44.4	61.11	100	
11	B	6	No Gas	29.794	ppb	9.4	6471.67	1000	
23	Na	45	He	15036.095	ppb	1.0	320202.50	200000	
24	Mg	45	He	6770.606	ppb	0.7	79036.67	200000	
27	Al	45	He	13.965	ppb	24.5	82.23	200000	
28	Si	45	H2	4071.755	ppb	1.1	37898.94	10000	
39	K	45	He	864.381	ppb	0.9	20745.73	200000	
40	Ca	45	H2	10569.514	ppb	1.1	870837.66	200000	
51	V	89	He	1.464	ppb	30.9	584.48	1000	
52	Cr	89	He	0.557	ppb	13.5	184.63	2000	
55	Mn	89	He	1040.159	ppb	0.2	105471.60	2000	
56	Fe	89	H2	15490.956	ppb	0.7	5238662.59	100000	
59	Co	89	He	25.348	ppb	3.7	9301.51	1000	
60	Ni	89	He	65.391	ppb	1.7	6708.53	1000	
63	Cu	89	He	2.093	ppb	11.2	1028.97	2000	
66	Zn	89	He	78.081	ppb	3.7	2931.54	2000	
75	As	89	He	3.448	ppb	6.5	115.34	1000	
78	Se	89	H2	0.225	ppb	34.9	4.50	1000	
88	Sr	89	He	45.630	ppb	2.1	7306.63	2000	
95	Mo	89	He	0.196	ppb	32.2	35.55	1000	
107	Ag	89	He	0.019	ppb	16.7	24.44	100	
111	Cd	89	He	0.050	ppb	74.8	4.07	1000	
118	Sn	159	He	1.212	ppb	9.1	286.68	1000	
121	Sb	159	No Gas	0.081	ppb	7.6	153.51	1000	
137	Ba	159	No Gas	11.165	ppb	10.0	6038.10	2000	
182	W	159	No Gas	0.240	ppb	23.2	266.97	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	0.118	ppb	12.9	617.36	2000	
232	Th	209	No Gas	0.438	ppb	6.0	1475.09	1000	
238	U	209	No Gas	0.017	ppb	65.9	50.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1750600.81	2.5	1881686.03	93.03	29.5	120.4	
Sc	45	No Gas	3681495.22	2.8	3915123.71	94.03	29.5	120.4	
Sc	45	H2	445855.07	1.1	507902.1	87.78	29.5	120.4	
Sc	45	He	90346.24	0.9	102593	88.06	29.5	120.4	
Ge	72	No Gas	853722.37	2.4	852546.94	100.14	29.5	120.4	
Ge	72	H2	170005.50	2.6	193980.16	87.64	29.5	120.4	
Ge	72	He	71340.89	1.0	77385.19	92.19	29.5	120.4	
Y	89	H2	2915371.05	0.7	3089458.15	94.37	29.5	120.4	
Y	89	He	616117.46	0.6	678154.65	90.85	29.5	120.4	
Tb	159	No Gas	8541320.57	2.5	7727080.72	110.54	29.5	120.4	
Tb	159	He	3314930.89	0.5	3280980.4	101.03	29.5	120.4	
Bi	209	No Gas	4465687.93	3.1	3977089.87	112.29	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	056_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:24:24 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.068	ppb	106.2	46.67	0.5	
B	11	6	No Gas	3.718	ppb	16.2	2354.71	10	
Na	23	45	He	45.745	ppb	10.5	10595.70	500	
Mg	24	45	He	-11.921	ppb	N/A	653.40	50	
Al	27	45	He	9.317	ppb	43.7	61.11	50	
Si	28	45	H2	22.590	ppb	21.7	714.14	250	
K	39	45	He	-54.984	ppb	N/A	10762.58	500	
Ca	40	45	H2	33.866	ppb	3.3	3630.60	50	
V	51	89	He	1.514	ppb	13.7	595.59	2.5	
Cr	52	89	He	0.385	ppb	15.3	148.64	2.5	
Mn	55	89	He	0.853	ppb	39.1	97.32	1	
Fe	56	89	H2	15.965	ppb	8.0	7850.93	50	
Co	59	89	He	0.016	ppb	302.6	20.00	0.5	
Ni	60	89	He	-1.033	ppb	N/A	193.34	1	PB 6020 Fails DoD
Cu	63	89	He	1.819	ppb	12.2	955.62	1.5	PB 6020 Fails DoD
Zn	66	89	He	14.442	ppb	9.1	598.93	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.072	ppb	50.6	8.67	2.5	
Se	78	89	H2	0.073	ppb	84.0	2.00	2.5	
Sr	88	89	He	0.074	ppb	117.4	17.78	2.5	
Mo	95	89	He	0.098	ppb	21.2	18.89	2.5	
Ag	107	89	He	0.004	ppb	357.8	15.56	0.5	
Cd	111	89	He	0.005	ppb	332.1	0.74	0.5	
Sn	118	159	He	1.023	ppb	26.7	254.46	2.5	
Sb	121	159	No Gas	0.015	ppb	144.1	63.40	0.5	
Ba	137	159	No Gas	0.194	ppb	13.4	123.47	1	
W	182	159	No Gas	0.023	ppb	87.0	50.06	2.5	
Tl	205	209	No Gas	-0.034	ppb	N/A	83.43	0.5	
Pb	208	209	No Gas	0.064	ppb	30.3	460.53	0.5	
Th	232	209	No Gas	0.081	ppb	23.2	367.08	2.5	
U	238	209	No Gas	0.011	ppb	42.9	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1752221.57	1.9	1881686.03	93.12	29.5	120.4	
Sc	45	No Gas	3775386.48	2.5	3915123.71	96.43	29.5	120.4	
Sc	45	H2	455085.41	1.2	507902.1	89.6	29.5	120.4	
Sc	45	He	91100.88	1.7	102593	88.8	29.5	120.4	
Ge	72	No Gas	866775.01	2.9	852546.94	101.67	29.5	120.4	
Ge	72	H2	169491.37	1.4	193980.16	87.38	29.5	120.4	
Ge	72	He	70721.42	1.8	77385.19	91.39	29.5	120.4	
Y	89	H2	2951431.22	1.2	3089458.15	95.53	29.5	120.4	
Y	89	He	618070.08	1.5	678154.65	91.14	29.5	120.4	
Tb	159	No Gas	8835323.34	2.5	7727080.72	114.34	29.5	120.4	
Tb	159	He	3342464.15	1.5	3280980.4	101.87	29.5	120.4	
Bi	209	No Gas	4579504.66	3.0	3977089.87	115.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	057LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:27:06 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.044	ppb	3.8	13134.15	50	20.82	79.5	120.4	
B	11	6	No Gas	529.237	ppb	3.5	87560.46	500	21.17	79.5	120.4	
Na	23	45	He	8135.469	ppb	1.5	179368.45	7500	21.69	79.5	120.4	
Mg	24	45	He	5564.197	ppb	1.1	65727.47	5000	22.26	79.5	120.4	
Al	27	45	He	2004.774	ppb	0.5	9375.60	2000	20.05	79.5	120.4	
Si	28	45	H2	991.928	ppb	3.1	9834.34	1000	19.84	0	200	
K	39	45	He	10391.842	ppb	0.9	126327.97	10000	20.78	79.5	120.4	
Ca	40	45	H2	2653.800	ppb	1.3	224441.10	2500	21.23	79.5	120.4	
V	51	89	He	535.605	ppb	0.7	94839.38	500	21.42	79.5	120.4	
Cr	52	89	He	217.130	ppb	1.1	46688.77	200	21.71	79.5	120.4	
Mn	55	89	He	541.491	ppb	0.9	55482.87	500	21.66	79.5	120.4	
Fe	56	89	H2	1078.823	ppb	1.1	376062.78	1000	21.58	79.5	120.4	
Co	59	89	He	549.594	ppb	0.2	203515.78	500	21.98	79.5	120.4	
Ni	60	89	He	557.499	ppb	0.4	55556.42	500	22.3	79.5	120.4	
Cu	63	89	He	278.250	ppb	0.7	78632.56	250	22.26	79.5	120.4	
Zn	66	89	He	560.871	ppb	2.0	20850.60	500	22.43	79.5	120.4	
As	75	89	He	107.454	ppb	1.3	3437.81	100	21.49	79.5	120.4	
Se	78	89	H2	103.309	ppb	1.9	1749.03	100	20.66	79.5	120.4	
Sr	88	89	He	514.229	ppb	0.8	83136.91	500	20.57	79.5	120.4	
Mo	95	89	He	111.391	ppb	1.6	19328.68	100	22.28	79.5	120.4	
Ag	107	89	He	58.000	ppb	0.5	33915.35	50	23.2	79.5	120.4	
Cd	111	89	He	276.892	ppb	0.5	21044.94	250	22.15	79.5	120.4	
Sn	118	159	He	499.059	ppb	0.4	91372.05	500	19.96	79.5	120.4	
Sb	121	159	No Gas	103.030	ppb	4.0	149412.81	100	20.61	79.5	120.4	
Ba	137	159	No Gas	2050.585	ppb	4.2	1143665.31	2000	20.51	79.5	120.4	
W	182	159	No Gas	107.459	ppb	3.9	112057.25	100	21.49	79.5	120.4	
Tl	205	209	No Gas	110.078	ppb	4.8	252980.62	100	22.02	79.5	120.4	
[Pb]	206	209	No Gas	108.285	ppb	5.2	86111.78	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	108.705	ppb	4.5	75772.37	100	21.74	79.5	120.4	
Pb	208	209	No Gas	108.121	ppb	4.7	344079.38	100	21.62	79.5	120.4	
Th	232	209	No Gas	108.371	ppb	4.9	346723.89	100	21.67	79.5	120.4	
U	238	209	No Gas	108.508	ppb	6.0	328611.37	100	21.7	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1793011.78	1.2	1881686.03	95.29	29.5	120.4	
Sc	45	No Gas	3792854.34	2.0	3915123.71	96.88	29.5	120.4	
Sc	45	H2	456428.00	0.7	507902.1	89.87	29.5	120.4	
Sc	45	He	91224.88	0.5	102593	88.92	29.5	120.4	
Ge	72	No Gas	875735.46	1.7	852546.94	102.72	29.5	120.4	
Ge	72	H2	172139.51	1.6	193980.16	88.74	29.5	120.4	
Ge	72	He	71598.82	0.7	77385.19	92.52	29.5	120.4	
Y	89	H2	2987112.58	0.6	3089458.15	96.69	29.5	120.4	
Y	89	He	622538.18	0.7	678154.65	91.8	29.5	120.4	
Tb	159	No Gas	8823935.63	1.6	7727080.72	114.19	29.5	120.4	
Tb	159	He	3357533.67	0.3	3280980.4	102.33	29.5	120.4	
Bi	209	No Gas	4573238.44	2.1	3977089.87	114.99	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:29:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.120	ppb	28.0	61.11	100	
11	B	6	No Gas	8.518	ppb	6.8	3187.13	1000	
23	Na	45	He	242.708	ppb	8.2	14900.97	200000	
24	Mg	45	He	19.711	ppb	23.5	1035.67	200000	
27	Al	45	He	95.376	ppb	7.2	468.92	200000	
28	Si	45	H2	116.645	ppb	9.3	1605.21	10000	
39	K	45	He	88.267	ppb	20.0	12519.91	200000	
40	Ca	45	H2	108.958	ppb	1.4	9994.97	200000	
51	V	89	He	1.744	ppb	25.5	644.49	1000	
52	Cr	89	He	0.984	ppb	5.0	279.95	2000	
55	Mn	89	He	5.565	ppb	0.8	584.58	2000	
56	Fe	89	H2	125.910	ppb	2.7	45869.21	100000	
59	Co	89	He	0.153	ppb	18.8	71.12	1000	
60	Ni	89	He	0.368	ppb	146.4	335.57	1000	
63	Cu	89	He	2.329	ppb	16.7	1113.42	2000	
66	Zn	89	He	23.391	ppb	6.4	941.18	2000	
75	As	89	He	0.359	ppb	10.2	18.00	1000	
78	Se	89	H2	0.220	ppb	35.7	4.50	1000	
88	Sr	89	He	0.386	ppb	30.0	68.89	2000	
95	Mo	89	He	0.357	ppb	24.9	64.45	1000	
107	Ag	89	He	0.032	ppb	49.4	32.22	100	
111	Cd	89	He	0.039	ppb	36.5	3.33	1000	
118	Sn	159	He	1.379	ppb	18.2	320.01	1000	
121	Sb	159	No Gas	0.109	ppb	41.5	203.56	1000	
137	Ba	159	No Gas	2.148	ppb	4.1	1234.78	2000	
182	W	159	No Gas	0.231	ppb	21.6	270.31	1000	
205	Tl	209	No Gas	0.035	ppb	56.6	246.95	1000	
208	Pb	209	No Gas	3.855	ppb	11.9	12653.29	2000	
232	Th	209	No Gas	0.962	ppb	19.6	3264.10	1000	
238	U	209	No Gas	0.037	ppb	31.6	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794755.50	5.9	1881686.03	95.38	29.5	120.4	
Sc	45	No Gas	3864360.34	9.3	3915123.71	98.7	29.5	120.4	
Sc	45	H2	457607.48	0.8	507902.1	90.1	29.5	120.4	
Sc	45	He	92377.74	1.7	102593	90.04	29.5	120.4	
Ge	72	No Gas	880584.68	7.4	852546.94	103.29	29.5	120.4	
Ge	72	H2	169769.99	1.1	193980.16	87.52	29.5	120.4	
Ge	72	He	71733.65	1.4	77385.19	92.7	29.5	120.4	
Y	89	H2	2976735.82	0.7	3089458.15	96.35	29.5	120.4	
Y	89	He	626298.47	1.0	678154.65	92.35	29.5	120.4	
Tb	159	No Gas	8991530.28	8.4	7727080.72	116.36	29.5	120.4	
Tb	159	He	3349347.90	0.8	3280980.4	102.08	29.5	120.4	
Bi	209	No Gas	4651524.12	8.6	3977089.87	116.96	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:32:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	14.8	62.23	100	
11	B	6	No Gas	381.007	ppb	7.4	60418.30	1000	
23	Na	45	He	114927.589	ppb	1.1	2402825.56	200000	
24	Mg	45	He	14441.774	ppb	0.8	169024.80	200000	
27	Al	45	He	48.435	ppb	4.7	243.35	200000	
28	Si	45	H2	10136.194	ppb	1.3	93788.42	10000	
39	K	45	He	274.248	ppb	11.3	14392.46	200000	
40	Ca	45	H2	133458.532	ppb	1.0	11007526.78	200000	
51	V	89	He	1.952	ppb	27.8	664.48	1000	
52	Cr	89	He	0.665	ppb	21.5	205.96	2000	
55	Mn	89	He	319.294	ppb	0.6	32139.85	2000	
56	Fe	89	H2	21.498	ppb	1.7	9664.16	100000	
59	Co	89	He	0.725	ppb	13.1	277.80	1000	
60	Ni	89	He	1.661	ppb	39.6	453.36	1000	
63	Cu	89	He	2.513	ppb	20.0	1137.87	2000	
66	Zn	89	He	24.627	ppb	4.4	963.40	2000	
75	As	89	He	0.181	ppb	122.3	12.00	1000	
78	Se	89	H2	0.174	ppb	36.5	3.67	1000	
88	Sr	89	He	1833.340	ppb	0.9	291106.29	2000	
95	Mo	89	He	0.726	ppb	25.7	125.56	1000	
107	Ag	89	He	0.020	ppb	35.4	24.45	100	
111	Cd	89	He	0.070	ppb	56.3	5.56	1000	
118	Sn	159	He	1.178	ppb	7.1	283.35	1000	
121	Sb	159	No Gas	0.054	ppb	82.0	120.14	1000	
137	Ba	159	No Gas	33.654	ppb	9.1	18837.66	2000	
182	W	159	No Gas	0.080	ppb	26.8	110.12	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	143.50	1000	
208	Pb	209	No Gas	0.341	ppb	8.2	1338.19	2000	
232	Th	209	No Gas	0.140	ppb	18.8	553.96	1000	
238	U	209	No Gas	3.828	ppb	9.4	11565.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706339.61	2.4	1881686.03	90.68	29.5	120.4	
Sc	45	No Gas	3773385.05	3.3	3915123.71	96.38	29.5	120.4	
Sc	45	H2	446686.20	0.9	507902.1	87.95	29.5	120.4	
Sc	45	He	91063.77	0.9	102593	88.76	29.5	120.4	
Ge	72	No Gas	875919.05	2.8	852546.94	102.74	29.5	120.4	
Ge	72	H2	169673.49	1.4	193980.16	87.47	29.5	120.4	
Ge	72	He	70546.45	0.6	77385.19	91.16	29.5	120.4	
Y	89	H2	2926195.03	0.9	3089458.15	94.72	29.5	120.4	
Y	89	He	611489.06	0.8	678154.65	90.17	29.5	120.4	
Tb	159	No Gas	8860174.80	2.9	7727080.72	114.66	29.5	120.4	
Tb	159	He	3345790.96	0.7	3280980.4	101.98	29.5	120.4	
Bi	209	No Gas	4565423.39	2.7	3977089.87	114.79	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:35:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	39.5	50.00	100	
11	B	6	No Gas	2186.275	ppb	2.4	327254.81	1000	
23	Na	45	He	1272872.922	ppb	0.5	26958548.85	200000	>LDR
24	Mg	45	He	261607.181	ppb	0.5	3099164.78	200000	
27	Al	45	He	11.914	ppb	33.5	74.45	200000	
28	Si	45	H2	8725.794	ppb	4.2	83372.46	10000	
39	K	45	He	8147.257	ppb	0.8	103011.27	200000	
40	Ca	45	H2	496829.799	ppb	1.0	42273052.70	200000	
51	V	89	He	5.777	ppb	12.0	1352.33	1000	
52	Cr	89	He	0.995	ppb	2.2	280.62	2000	
55	Mn	89	He	31.867	ppb	1.6	3276.47	2000	
56	Fe	89	H2	182.914	ppb	0.9	65659.04	100000	
59	Co	89	He	0.538	ppb	9.6	213.35	1000	
60	Ni	89	He	8.499	ppb	3.5	1140.09	1000	
63	Cu	89	He	4.741	ppb	1.9	1784.62	2000	
66	Zn	89	He	22.375	ppb	4.1	897.84	2000	
75	As	89	He	0.435	ppb	19.9	20.33	1000	
78	Se	89	H2	1.382	ppb	11.9	24.17	1000	
88	Sr	89	He	7120.059	ppb	0.5	1151393.17	2000	
95	Mo	89	He	0.494	ppb	30.9	87.78	1000	
107	Ag	89	He	0.057	ppb	19.6	46.67	100	
111	Cd	89	He	0.112	ppb	46.7	8.89	1000	
118	Sn	159	He	1.503	ppb	4.5	341.13	1000	
121	Sb	159	No Gas	0.110	ppb	39.9	193.55	1000	
137	Ba	159	No Gas	16.099	ppb	1.0	8675.79	2000	
182	W	159	No Gas	0.051	ppb	69.2	76.75	1000	
205	Tl	209	No Gas	-0.015	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	1.867	ppb	4.1	5736.92	2000	
232	Th	209	No Gas	0.084	ppb	18.8	347.06	1000	
238	U	209	No Gas	8.588	ppb	2.7	24083.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1647402.83	0.5	1881686.03	87.55	29.5	120.4	
Sc	45	No Gas	3659947.14	0.2	3915123.71	93.48	29.5	120.4	
Sc	45	H2	460780.49	1.4	507902.1	90.72	29.5	120.4	
Sc	45	He	92580.64	0.4	102593	90.24	29.5	120.4	
Ge	72	No Gas	845351.38	0.2	852546.94	99.16	29.5	120.4	
Ge	72	H2	170688.84	1.8	193980.16	87.99	29.5	120.4	
Ge	72	He	71652.49	1.0	77385.19	92.59	29.5	120.4	
Y	89	H2	2982115.71	1.5	3089458.15	96.53	29.5	120.4	
Y	89	He	622739.18	0.8	678154.65	91.83	29.5	120.4	
Tb	159	No Gas	8508112.79	0.5	7727080.72	110.11	29.5	120.4	
Tb	159	He	3332356.83	0.6	3280980.4	101.57	29.5	120.4	
Bi	209	No Gas	4232103.15	0.9	3977089.87	106.41	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:37:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.122	ppb	62.2	61.11	100	
11	B	6	No Gas	2163.780	ppb	4.6	349179.23	1000	
23	Na	45	He	1206551.601	ppb	0.6	26204648.94	200000	>LDR
24	Mg	45	He	220736.084	ppb	0.6	2681655.52	200000	
27	Al	45	He	87.471	ppb	3.4	443.36	200000	
28	Si	45	H2	8375.970	ppb	0.4	81499.01	10000	
39	K	45	He	10855.195	ppb	1.4	136801.53	200000	
40	Ca	45	H2	555730.987	ppb	0.3	48145654.28	200000	
51	V	89	He	7.037	ppb	2.5	1590.15	1000	
52	Cr	89	He	5.817	ppb	4.5	1329.16	2000	
55	Mn	89	He	238.473	ppb	0.7	24688.44	2000	
56	Fe	89	H2	6638.947	ppb	0.7	2319648.24	100000	
59	Co	89	He	2.386	ppb	2.8	906.76	1000	
60	Ni	89	He	9.666	ppb	4.5	1267.88	1000	
63	Cu	89	He	5.475	ppb	1.7	2010.22	2000	
66	Zn	89	He	25.209	ppb	9.0	1012.30	2000	
75	As	89	He	1.100	ppb	24.5	42.00	1000	
78	Se	89	H2	0.344	ppb	39.7	6.67	1000	
88	Sr	89	He	9044.283	ppb	0.3	1476801.21	2000	
95	Mo	89	He	0.838	ppb	1.5	148.90	1000	
107	Ag	89	He	0.064	ppb	44.8	51.11	100	
111	Cd	89	He	0.082	ppb	35.9	6.67	1000	
118	Sn	159	He	1.198	ppb	7.7	287.79	1000	
121	Sb	159	No Gas	0.089	ppb	34.0	170.19	1000	
137	Ba	159	No Gas	18.025	ppb	9.6	10048.38	2000	
182	W	159	No Gas	0.065	ppb	62.8	93.44	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	83.42	1000	
208	Pb	209	No Gas	3.372	ppb	5.4	10433.36	2000	
232	Th	209	No Gas	0.056	ppb	10.1	273.65	1000	
238	U	209	No Gas	6.034	ppb	7.9	17358.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1777309.14	2.3	1881686.03	94.45	29.5	120.4	
Sc	45	No Gas	3877319.03	2.6	3915123.71	99.03	29.5	120.4	
Sc	45	H2	469191.21	0.2	507902.1	92.38	29.5	120.4	
Sc	45	He	94940.13	0.9	102593	92.54	29.5	120.4	
Ge	72	No Gas	875107.58	2.2	852546.94	102.65	29.5	120.4	
Ge	72	H2	174003.58	0.9	193980.16	89.7	29.5	120.4	
Ge	72	He	72247.35	1.1	77385.19	93.36	29.5	120.4	
Y	89	H2	3010297.41	0.3	3089458.15	97.44	29.5	120.4	
Y	89	He	628813.93	0.6	678154.65	92.72	29.5	120.4	
Tb	159	No Gas	8815817.72	2.5	7727080.72	114.09	29.5	120.4	
Tb	159	He	3358153.63	0.7	3280980.4	102.35	29.5	120.4	
Bi	209	No Gas	4347631.64	3.0	3977089.87	109.32	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:40:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.097	ppb	103.6	53.34	100	
11	B	6	No Gas	2337.026	ppb	11.9	364561.61	1000	
23	Na	45	He	1235819.546	ppb	1.3	26821218.19	200000	>LDR
24	Mg	45	He	225454.844	ppb	1.4	2737028.61	200000	
27	Al	45	He	55.559	ppb	18.6	287.79	200000	
28	Si	45	H2	8486.305	ppb	1.5	81827.53	10000	
39	K	45	He	11236.807	ppb	0.9	141103.03	200000	
40	Ca	45	H2	569929.909	ppb	0.7	48935104.27	200000	
51	V	89	He	6.935	ppb	9.2	1571.26	1000	
52	Cr	89	He	3.758	ppb	6.7	881.21	2000	
55	Mn	89	He	257.089	ppb	0.8	26587.48	2000	
56	Fe	89	H2	7226.943	ppb	0.6	2519358.04	100000	
59	Co	89	He	3.050	ppb	5.8	1153.46	1000	
60	Ni	89	He	8.566	ppb	5.8	1156.76	1000	
63	Cu	89	He	4.846	ppb	2.4	1830.19	2000	
66	Zn	89	He	21.988	ppb	0.7	891.18	2000	
75	As	89	He	0.698	ppb	18.8	29.00	1000	
78	Se	89	H2	0.178	ppb	53.0	3.83	1000	
88	Sr	89	He	9123.306	ppb	0.9	1488132.18	2000	
95	Mo	89	He	0.775	ppb	4.7	137.79	1000	
107	Ag	89	He	0.022	ppb	25.9	26.67	100	
111	Cd	89	He	0.034	ppb	23.9	2.96	1000	
118	Sn	159	He	0.934	ppb	8.7	240.01	1000	
121	Sb	159	No Gas	0.083	ppb	27.2	156.84	1000	
137	Ba	159	No Gas	20.127	ppb	15.5	10723.06	2000	
182	W	159	No Gas	0.051	ppb	35.2	76.75	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.922	ppb	12.0	5797.04	2000	
232	Th	209	No Gas	0.034	ppb	55.3	196.89	1000	
238	U	209	No Gas	6.364	ppb	14.7	17505.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1729003.66	8.4	1881686.03	91.89	29.5	120.4	
Sc	45	No Gas	3747467.23	9.3	3915123.71	95.72	29.5	120.4	
Sc	45	H2	464995.29	1.0	507902.1	91.55	29.5	120.4	
Sc	45	He	94883.09	1.5	102593	92.48	29.5	120.4	
Ge	72	No Gas	842248.24	10.8	852546.94	98.79	29.5	120.4	
Ge	72	H2	172855.44	0.4	193980.16	89.11	29.5	120.4	
Ge	72	He	72444.31	1.3	77385.19	93.62	29.5	120.4	
Y	89	H2	3003630.01	0.5	3089458.15	97.22	29.5	120.4	
Y	89	He	628188.98	1.2	678154.65	92.63	29.5	120.4	
Tb	159	No Gas	8498552.37	9.9	7727080.72	109.98	29.5	120.4	
Tb	159	He	3362151.75	1.0	3280980.4	102.47	29.5	120.4	
Bi	209	No Gas	4193350.57	10.5	3977089.87	105.44	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:43:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.056	ppb	114.4	46.67	100	
11	B	6	No Gas	703.360	ppb	4.7	120750.08	1000	
23	Na	45	He	356269.602	ppb	0.5	7762372.30	200000	
24	Mg	45	He	46075.355	ppb	0.5	561689.97	200000	
27	Al	45	He	21.526	ppb	12.4	123.34	200000	
28	Si	45	H2	7216.041	ppb	4.1	70894.71	10000	
39	K	45	He	3337.668	ppb	0.7	50384.10	200000	
40	Ca	45	H2	160552.499	ppb	1.7	14029772.29	200000	
51	V	89	He	8.281	ppb	7.2	1822.41	1000	
52	Cr	89	He	0.926	ppb	3.8	269.95	2000	
55	Mn	89	He	64.642	ppb	0.1	6739.74	2000	
56	Fe	89	H2	202.755	ppb	1.2	74363.42	100000	
59	Co	89	He	0.470	ppb	29.5	191.13	1000	
60	Ni	89	He	-0.140	ppb	N/A	287.79	1000	
63	Cu	89	He	3.413	ppb	3.9	1433.47	2000	
66	Zn	89	He	47.144	ppb	5.4	1844.64	2000	
75	As	89	He	0.877	ppb	12.3	35.00	1000	
78	Se	89	H2	0.491	ppb	47.2	9.33	1000	
88	Sr	89	He	1739.889	ppb	0.9	285779.11	2000	
95	Mo	89	He	0.833	ppb	14.8	148.90	1000	
107	Ag	89	He	0.020	ppb	80.0	25.56	100	
111	Cd	89	He	0.043	ppb	101.6	3.70	1000	
118	Sn	159	He	1.246	ppb	6.6	302.24	1000	
121	Sb	159	No Gas	0.162	ppb	28.4	290.33	1000	
137	Ba	159	No Gas	51.094	ppb	4.7	29746.29	2000	
182	W	159	No Gas	0.064	ppb	32.1	96.77	1000	
205	Tl	209	No Gas	-0.039	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	0.130	ppb	31.8	687.44	2000	
232	Th	209	No Gas	0.032	ppb	23.1	216.91	1000	
238	U	209	No Gas	3.520	ppb	9.1	10943.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1870712.13	2.0	1881686.03	99.42	29.5	120.4	
Sc	45	No Gas	4017057.57	2.7	3915123.71	102.6	29.5	120.4	
Sc	45	H2	473274.44	1.4	507902.1	93.18	29.5	120.4	
Sc	45	He	95153.85	0.3	102593	92.75	29.5	120.4	
Ge	72	No Gas	923537.90	2.3	852546.94	108.33	29.5	120.4	
Ge	72	H2	175313.47	1.1	193980.16	90.38	29.5	120.4	
Ge	72	He	73372.42	0.5	77385.19	94.81	29.5	120.4	
Y	89	H2	3057678.19	0.8	3089458.15	98.97	29.5	120.4	
Y	89	He	632526.92	0.4	678154.65	93.27	29.5	120.4	
Tb	159	No Gas	9208050.07	2.3	7727080.72	119.17	29.5	120.4	
Tb	159	He	3422088.77	0.7	3280980.4	104.3	29.5	120.4	
Bi	209	No Gas	4697354.43	2.2	3977089.87	118.11	29.5	120.4	

Sample Report

Sample Name SN5859-001

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:45:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.098	ppb	78.5	57.78	100	
11	B	6	No Gas	36.522	ppb	3.7	8066.97	1000	
23	Na	45	He	23102.446	ppb	1.2	509168.39	200000	
24	Mg	45	He	9915.850	ppb	0.6	120676.26	200000	
27	Al	45	He	12.523	ppb	19.9	78.89	200000	
28	Si	45	H2	5797.133	ppb	0.6	56474.16	10000	
39	K	45	He	2648.794	ppb	0.7	42138.05	200000	
40	Ca	45	H2	50387.545	ppb	1.6	4358513.83	200000	
51	V	89	He	8.634	ppb	2.1	1894.64	1000	
52	Cr	89	He	0.607	ppb	14.4	201.30	2000	
55	Mn	89	He	693.472	ppb	0.7	72527.60	2000	
56	Fe	89	H2	193.904	ppb	1.2	71226.07	100000	
59	Co	89	He	0.979	ppb	5.4	384.48	1000	
60	Ni	89	He	1.296	ppb	16.3	434.47	1000	
63	Cu	89	He	3.856	ppb	12.7	1566.81	2000	
66	Zn	89	He	19.218	ppb	5.2	796.72	2000	
75	As	89	He	3.511	ppb	0.5	121.01	1000	
78	Se	89	H2	0.126	ppb	92.4	3.00	1000	
88	Sr	89	He	223.507	ppb	0.7	36886.95	2000	
95	Mo	89	He	0.358	ppb	11.7	65.56	1000	
107	Ag	89	He	0.001	ppb	223.9	14.44	100	
111	Cd	89	He	0.014	ppb	150.8	1.48	1000	
118	Sn	159	He	0.892	ppb	28.6	236.68	1000	
121	Sb	159	No Gas	0.079	ppb	62.2	163.52	1000	
137	Ba	159	No Gas	19.185	ppb	2.2	11220.64	2000	
182	W	159	No Gas	0.048	ppb	87.3	80.09	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	70.08	1000	
208	Pb	209	No Gas	0.094	ppb	32.1	580.66	2000	
232	Th	209	No Gas	0.032	ppb	32.0	220.25	1000	
238	U	209	No Gas	0.783	ppb	2.7	2476.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1871948.68	0.4	1881686.03	99.48	29.5	120.4	
Sc	45	No Gas	3980161.30	0.6	3915123.71	101.66	29.5	120.4	
Sc	45	H2	468445.91	1.3	507902.1	92.23	29.5	120.4	
Sc	45	He	94487.03	0.5	102593	92.1	29.5	120.4	
Ge	72	No Gas	919360.11	1.3	852546.94	107.84	29.5	120.4	
Ge	72	H2	175476.61	0.3	193980.16	90.46	29.5	120.4	
Ge	72	He	73691.20	0.8	77385.19	95.23	29.5	120.4	
Y	89	H2	3058076.67	0.8	3089458.15	98.98	29.5	120.4	
Y	89	He	635455.61	0.5	678154.65	93.7	29.5	120.4	
Tb	159	No Gas	9237170.21	0.9	7727080.72	119.54	29.5	120.4	
Tb	159	He	3427399.64	0.5	3280980.4	104.46	29.5	120.4	
Bi	209	No Gas	4770006.24	0.8	3977089.87	119.94	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:48:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.552	ppb	5.0	31599.66	25	102.21	89.8	110.2	
11	B	6	No Gas	27.153	ppb	3.6	23367.41	25	108.61	89.8	110.2	
23	Na	45	He	5237.152	ppb	0.9	559763.01	5000	104.74	89.8	110.2	
24	Mg	45	He	5017.999	ppb	1.0	295607.68	5000	100.36	89.8	110.2	
27	Al	45	He	473.020	ppb	2.2	11132.48	500	94.6	89.8	110.2	
28	Si	45	H2	463.555	ppb	1.8	22730.06	500	92.71	89.8	110.2	
39	K	45	He	4786.285	ppb	0.6	277989.36	5000	95.73	89.8	110.2	
40	Ca	45	H2	4870.245	ppb	0.8	2092256.09	5000	97.4	89.8	110.2	
51	V	89	He	24.721	ppb	2.6	22170.30	25	98.88	89.8	110.2	
52	Cr	89	He	24.934	ppb	0.4	26869.21	25	99.74	89.8	110.2	
55	Mn	89	He	24.919	ppb	0.5	12790.83	25	99.68	89.8	110.2	
56	Fe	89	H2	4816.005	ppb	0.7	8447550.48	5000	96.32	89.8	110.2	
59	Co	89	He	24.623	ppb	0.9	45657.00	25	98.49	89.8	110.2	
60	Ni	89	He	24.794	ppb	0.4	12600.60	25	99.18	89.8	110.2	
63	Cu	89	He	24.953	ppb	0.3	35551.64	25	99.81	89.8	110.2	
66	Zn	89	He	25.631	ppb	1.4	4823.23	25	102.52	89.8	110.2	
75	As	89	He	24.168	ppb	1.6	3869.96	25	96.67	89.8	110.2	
78	Se	89	H2	23.770	ppb	1.1	2037.56	25	95.08	89.8	110.2	
88	Sr	89	He	23.453	ppb	0.1	18985.96	25	93.81	89.8	110.2	
95	Mo	89	He	25.484	ppb	0.3	22136.33	25	101.94	89.8	110.2	
107	Ag	89	He	26.200	ppb	0.6	76680.98	25	104.8	89.8	110.2	
111	Cd	89	He	25.588	ppb	0.5	9736.55	25	102.35	89.8	110.2	
118	Sn	159	He	22.936	ppb	0.8	21262.88	25	91.74	89.8	110.2	
121	Sb	159	No Gas	23.731	ppb	5.1	175698.46	25	94.92	89.8	110.2	
137	Ba	159	No Gas	24.286	ppb	5.4	69166.48	25	97.14	89.8	110.2	
182	W	159	No Gas	24.829	ppb	4.3	132198.66	25	99.32	89.8	110.2	
205	Tl	209	No Gas	24.762	ppb	5.1	291402.78	25	99.05	89.8	110.2	
208	Pb	209	No Gas	24.932	ppb	4.5	406319.97	25	99.73	89.8	110.2	
232	Th	209	No Gas	24.881	ppb	4.9	407681.63	25	99.52	89.8	110.2	
238	U	209	No Gas	25.025	ppb	5.6	388148.19	25	100.1	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1760387.82	2.1	1881686.03	93.55	29.5	120.4	
Sc	45	No Gas	3877909.26	2.9	3915123.71	99.05	29.5	120.4	
Sc	45	H2	465138.12	0.7	507902.1	91.58	29.5	120.4	
Sc	45	He	91854.91	1.0	102593	89.53	29.5	120.4	
Ge	72	No Gas	883440.48	3.2	852546.94	103.62	29.5	120.4	
Ge	72	H2	176011.94	2.0	193980.16	90.74	29.5	120.4	
Ge	72	He	71515.40	0.3	77385.19	92.41	29.5	120.4	
Y	89	H2	3024800.61	0.9	3089458.15	97.91	29.5	120.4	
Y	89	He	623304.05	0.2	678154.65	91.91	29.5	120.4	
Tb	159	No Gas	9013312.99	2.4	7727080.72	116.65	29.5	120.4	
Tb	159	He	3391599.64	0.5	3280980.4	103.37	29.5	120.4	
Bi	209	No Gas	4685305.45	2.8	3977089.87	117.81	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 7:51:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.039	ppb	16.4	75.56	0.2	
11	B	6	No Gas	1.755	ppb	10.2	3070.44	4	
23	Na	45	He	51.319	ppb	7.1	15111.45	200	
24	Mg	45	He	-0.804	ppb	N/A	751.19	20	
27	Al	45	He	0.185	ppb	40.5	22.22	20	
28	Si	45	H2	1.846	ppb	40.8	590.67	100	
39	K	45	He	-9.278	ppb	N/A	10947.69	200	
40	Ca	45	H2	5.043	ppb	3.3	2911.52	20	
51	V	89	He	0.076	ppb	23.2	400.02	1	
52	Cr	89	He	0.000	ppb	N/A	66.66	1	
55	Mn	89	He	0.032	ppb	31.1	27.33	0.4	
56	Fe	89	H2	1.350	ppb	18.5	4719.40	20	
59	Co	89	He	-0.004	ppb	N/A	6.67	0.2	
60	Ni	89	He	-0.356	ppb	N/A	121.11	0.4	Failed DoD
63	Cu	89	He	-0.062	ppb	N/A	365.57	0.6	
66	Zn	89	He	0.086	ppb	115.4	84.45	2	
75	As	89	He	-0.007	ppb	N/A	5.33	1	
78	Se	89	H2	0.020	ppb	29.5	2.50	1	
88	Sr	89	He	0.032	ppb	19.1	32.22	1	
95	Mo	89	He	0.046	ppb	10.0	42.22	1	
107	Ag	89	He	0.001	ppb	361.1	16.67	0.2	
111	Cd	89	He	0.004	ppb	113.3	1.85	0.2	
118	Sn	159	He	0.005	ppb	572.0	73.33	1	
121	Sb	159	No Gas	0.022	ppb	48.3	196.88	0.2	
137	Ba	159	No Gas	0.019	ppb	87.8	66.74	0.4	
182	W	159	No Gas	0.045	ppb	11.8	253.62	1	
205	Tl	209	No Gas	0.010	ppb	18.8	280.32	0.2	
208	Pb	209	No Gas	0.011	ppb	11.2	430.49	0.2	
232	Th	209	No Gas	0.051	ppb	18.4	921.07	1	
238	U	209	No Gas	0.020	ppb	19.8	310.35	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1706210.44	2.7	1881686.03	90.67	29.5	120.4	
Sc	45	No Gas	3721119.61	2.7	3915123.71	95.04	29.5	120.4	
Sc	45	H2	456262.05	0.4	507902.1	89.83	29.5	120.4	
Sc	45	He	91843.31	1.1	102593	89.52	29.5	120.4	
Ge	72	No Gas	848365.94	1.9	852546.94	99.51	29.5	120.4	
Ge	72	H2	173109.13	1.0	193980.16	89.24	29.5	120.4	
Ge	72	He	71678.17	0.4	77385.19	92.63	29.5	120.4	
Y	89	H2	2964302.17	0.5	3089458.15	95.95	29.5	120.4	
Y	89	He	623568.50	0.4	678154.65	91.95	29.5	120.4	
Tb	159	No Gas	8658977.30	3.1	7727080.72	112.06	29.5	120.4	
Tb	159	He	3351006.41	0.6	3280980.4	102.13	29.5	120.4	
Bi	209	No Gas	4569808.55	3.3	3977089.87	114.9	29.5	120.4	

Sample Report

Sample Name SN5859-002

File Name 067SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:53:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.133	ppb	41.3	63.34	100	
11	B	6	No Gas	22.609	ppb	15.5	5367.86	1000	
23	Na	45	He	22963.877	ppb	0.5	483502.51	200000	
24	Mg	45	He	10069.797	ppb	1.0	117046.37	200000	
27	Al	45	He	9.914	ppb	31.8	63.34	200000	
28	Si	45	H2	5854.138	ppb	0.4	54776.25	10000	
39	K	45	He	2729.246	ppb	1.5	41130.42	200000	
40	Ca	45	H2	50372.454	ppb	0.7	4185660.49	200000	
51	V	89	He	5.416	ppb	15.7	1274.55	1000	
52	Cr	89	He	0.482	ppb	30.3	168.64	2000	
55	Mn	89	He	27.112	ppb	3.2	2759.12	2000	
56	Fe	89	H2	14.557	ppb	3.8	7346.71	100000	
59	Co	89	He	0.125	ppb	76.7	60.01	1000	
60	Ni	89	He	-0.539	ppb	N/A	241.13	1000	
63	Cu	89	He	3.428	ppb	7.0	1400.13	2000	
66	Zn	89	He	18.097	ppb	8.3	731.16	2000	
75	As	89	He	2.109	ppb	23.4	73.01	1000	
78	Se	89	H2	0.193	ppb	54.3	4.00	1000	
88	Sr	89	He	230.054	ppb	0.6	36803.39	2000	
95	Mo	89	He	0.429	ppb	5.5	75.56	1000	
107	Ag	89	He	0.018	ppb	65.7	23.33	100	
111	Cd	89	He	0.010	ppb	145.4	1.11	1000	
118	Sn	159	He	1.443	ppb	13.0	332.24	1000	
121	Sb	159	No Gas	0.094	ppb	18.5	176.87	1000	
137	Ba	159	No Gas	17.466	ppb	9.0	9637.61	2000	
182	W	159	No Gas	0.059	ppb	29.1	86.76	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	0.090	ppb	21.7	540.61	2000	
232	Th	209	No Gas	0.486	ppb	2.4	1661.97	1000	
238	U	209	No Gas	0.674	ppb	10.8	2035.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1762618.99	2.9	1881686.03	93.67	29.5	120.4	
Sc	45	No Gas	3695144.49	3.5	3915123.71	94.38	29.5	120.4	
Sc	45	H2	449948.19	0.8	507902.1	88.59	29.5	120.4	
Sc	45	He	90252.25	0.1	102593	87.97	29.5	120.4	
Ge	72	No Gas	859312.29	2.9	852546.94	100.79	29.5	120.4	
Ge	72	H2	170455.05	1.2	193980.16	87.87	29.5	120.4	
Ge	72	He	70937.73	0.4	77385.19	91.67	29.5	120.4	
Y	89	H2	2940837.92	0.8	3089458.15	95.19	29.5	120.4	
Y	89	He	615968.73	0.2	678154.65	90.83	29.5	120.4	
Tb	159	No Gas	8728556.40	3.1	7727080.72	112.96	29.5	120.4	
Tb	159	He	3353225.96	0.2	3280980.4	102.2	29.5	120.4	
Bi	209	No Gas	4568581.70	4.1	3977089.87	114.87	29.5	120.4	

Sample Report

Sample Name SN5859-003

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:56:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.047	ppb	25.0	42.22	100	
11	B	6	No Gas	20.985	ppb	6.5	5165.55	1000	
23	Na	45	He	23695.357	ppb	2.3	503910.33	200000	
24	Mg	45	He	10435.715	ppb	2.0	122569.17	200000	
27	Al	45	He	83.338	ppb	12.9	406.69	200000	
28	Si	45	H2	5957.977	ppb	1.6	56755.27	10000	
39	K	45	He	2827.158	ppb	2.7	42652.57	200000	
40	Ca	45	H2	51425.986	ppb	0.6	4351530.70	200000	
51	V	89	He	5.640	ppb	12.6	1313.45	1000	
52	Cr	89	He	0.861	ppb	15.3	249.29	2000	
55	Mn	89	He	1.000	ppb	27.2	111.98	2000	
56	Fe	89	H2	11.787	ppb	3.5	6495.36	100000	
59	Co	89	He	0.101	ppb	37.7	51.11	1000	
60	Ni	89	He	1.047	ppb	27.3	396.69	1000	
63	Cu	89	He	2.030	ppb	10.5	1011.19	2000	
66	Zn	89	He	17.547	ppb	4.5	711.15	2000	
75	As	89	He	1.762	ppb	20.7	62.01	1000	
78	Se	89	H2	0.199	ppb	21.4	4.17	1000	
88	Sr	89	He	235.332	ppb	1.0	37654.74	2000	
95	Mo	89	He	0.481	ppb	29.6	84.45	1000	
107	Ag	89	He	0.025	ppb	24.5	27.78	100	
111	Cd	89	He	0.040	ppb	1.4	3.33	1000	
118	Sn	159	He	1.159	ppb	16.1	280.01	1000	
121	Sb	159	No Gas	0.044	ppb	65.6	106.79	1000	
137	Ba	159	No Gas	16.233	ppb	11.0	9236.92	2000	
182	W	159	No Gas	0.037	ppb	34.7	66.74	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	0.022	ppb	22.8	333.71	2000	
232	Th	209	No Gas	0.087	ppb	24.0	393.78	1000	
238	U	209	No Gas	0.021	ppb	40.9	63.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1779408.95	2.1	1881686.03	94.56	29.5	120.4	
Sc	45	No Gas	3823254.32	2.6	3915123.71	97.65	29.5	120.4	
Sc	45	H2	458202.22	0.8	507902.1	90.21	29.5	120.4	
Sc	45	He	91232.55	1.4	102593	88.93	29.5	120.4	
Ge	72	No Gas	890871.35	2.7	852546.94	104.5	29.5	120.4	
Ge	72	H2	169511.95	1.9	193980.16	87.39	29.5	120.4	
Ge	72	He	71023.14	1.9	77385.19	91.78	29.5	120.4	
Y	89	H2	2984583.28	1.2	3089458.15	96.61	29.5	120.4	
Y	89	He	616137.18	1.2	678154.65	90.85	29.5	120.4	
Tb	159	No Gas	9001790.56	3.0	7727080.72	116.5	29.5	120.4	
Tb	159	He	3346615.96	1.2	3280980.4	102	29.5	120.4	
Bi	209	No Gas	4667539.88	3.1	3977089.87	117.36	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 7:58:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.003	ppb	1195.3	31.11	100	
11	B	6	No Gas	6.489	ppb	10.7	2815.92	1000	
23	Na	45	He	286.332	ppb	15.1	15979.94	200000	
24	Mg	45	He	2.254	ppb	274.4	837.87	200000	
27	Al	45	He	14.330	ppb	21.1	86.67	200000	
28	Si	45	H2	25.137	ppb	50.2	760.88	10000	
39	K	45	He	-41.613	ppb	N/A	11174.35	200000	
40	Ca	45	H2	131.868	ppb	34.4	12258.54	200000	
51	V	89	He	5.070	ppb	4.2	1243.44	1000	
52	Cr	89	He	0.556	ppb	8.8	188.64	2000	
55	Mn	89	He	2.166	ppb	4.2	235.96	2000	
56	Fe	89	H2	10.770	ppb	9.6	6245.00	100000	
59	Co	89	He	0.039	ppb	69.5	28.89	1000	
60	Ni	89	He	-0.841	ppb	N/A	216.68	1000	
63	Cu	89	He	1.483	ppb	25.6	878.95	2000	
66	Zn	89	He	19.953	ppb	10.9	818.94	2000	
75	As	89	He	0.261	ppb	72.4	15.00	1000	
78	Se	89	H2	0.079	ppb	76.6	2.17	1000	
88	Sr	89	He	0.365	ppb	71.6	65.56	2000	
95	Mo	89	He	0.058	ppb	51.0	12.22	1000	
107	Ag	89	He	0.017	ppb	56.4	23.34	100	
111	Cd	89	He	0.010	ppb	1.8	1.11	1000	
118	Sn	159	He	1.171	ppb	9.0	286.68	1000	
121	Sb	159	No Gas	0.035	ppb	90.0	93.44	1000	
137	Ba	159	No Gas	0.288	ppb	27.2	176.86	2000	
182	W	159	No Gas	0.064	ppb	114.9	93.44	1000	
205	Tl	209	No Gas	-0.044	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	0.107	ppb	19.1	604.01	2000	
232	Th	209	No Gas	0.051	ppb	40.9	273.64	1000	
238	U	209	No Gas	0.010	ppb	56.1	30.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1766565.45	0.8	1881686.03	93.88	29.5	120.4	
Sc	45	No Gas	3781003.06	1.2	3915123.71	96.57	29.5	120.4	
Sc	45	H2	468823.47	1.7	507902.1	92.31	29.5	120.4	
Sc	45	He	93307.79	1.1	102593	90.95	29.5	120.4	
Ge	72	No Gas	883736.76	1.5	852546.94	103.66	29.5	120.4	
Ge	72	H2	174197.70	1.2	193980.16	89.8	29.5	120.4	
Ge	72	He	72284.49	0.4	77385.19	93.41	29.5	120.4	
Y	89	H2	3033901.32	0.9	3089458.15	98.2	29.5	120.4	
Y	89	He	630660.74	1.2	678154.65	93	29.5	120.4	
Tb	159	No Gas	8889886.60	1.5	7727080.72	115.05	29.5	120.4	
Tb	159	He	3403128.52	0.9	3280980.4	103.72	29.5	120.4	
Bi	209	No Gas	4621652.95	1.4	3977089.87	116.21	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:01:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	204.0	35.56	100	
11	B	6	No Gas	5.448	ppb	12.0	2687.01	1000	
23	Na	45	He	222.461	ppb	2.5	14526.72	200000	
24	Mg	45	He	-3.283	ppb	N/A	766.74	200000	
27	Al	45	He	9.541	ppb	31.1	63.34	200000	
28	Si	45	H2	23.004	ppb	29.0	730.83	10000	
39	K	45	He	-48.592	ppb	N/A	11022.70	200000	
40	Ca	45	H2	50.526	ppb	8.2	5121.13	200000	
51	V	89	He	5.145	ppb	15.2	1251.22	1000	
52	Cr	89	He	0.538	ppb	21.9	183.97	2000	
55	Mn	89	He	1.054	ppb	12.6	119.98	2000	
56	Fe	89	H2	13.858	ppb	5.5	7323.42	100000	
59	Co	89	He	0.015	ppb	236.7	20.00	1000	
60	Ni	89	He	-1.176	ppb	N/A	182.23	1000	
63	Cu	89	He	1.376	ppb	24.1	845.61	2000	
66	Zn	89	He	17.418	ppb	12.2	720.04	2000	
75	As	89	He	0.326	ppb	37.9	17.00	1000	
78	Se	89	H2	0.069	ppb	111.8	2.00	1000	
88	Sr	89	He	0.119	ppb	20.1	25.55	2000	
95	Mo	89	He	0.071	ppb	94.5	14.44	1000	
107	Ag	89	He	0.007	ppb	117.3	17.78	100	
111	Cd	89	He	0.005	ppb	332.5	0.74	1000	
118	Sn	159	He	0.886	ppb	15.6	233.34	1000	
121	Sb	159	No Gas	0.020	ppb	23.2	73.42	1000	
137	Ba	159	No Gas	0.626	ppb	21.7	373.76	2000	
182	W	159	No Gas	0.031	ppb	64.5	60.07	1000	
205	Tl	209	No Gas	-0.051	ppb	N/A	46.72	1000	
208	Pb	209	No Gas	0.048	ppb	31.7	420.47	2000	
232	Th	209	No Gas	0.028	ppb	78.1	203.56	1000	
238	U	209	No Gas	0.003	ppb	99.6	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1791999.26	2.1	1881686.03	95.23	29.5	120.4	
Sc	45	No Gas	3872864.63	3.5	3915123.71	98.92	29.5	120.4	
Sc	45	H2	463171.46	1.3	507902.1	91.19	29.5	120.4	
Sc	45	He	92684.57	0.7	102593	90.34	29.5	120.4	
Ge	72	No Gas	898121.12	2.7	852546.94	105.35	29.5	120.4	
Ge	72	H2	172056.30	1.4	193980.16	88.7	29.5	120.4	
Ge	72	He	71951.39	0.4	77385.19	92.98	29.5	120.4	
Y	89	H2	3029568.84	1.1	3089458.15	98.06	29.5	120.4	
Y	89	He	627894.89	0.3	678154.65	92.59	29.5	120.4	
Tb	159	No Gas	9077690.07	3.3	7727080.72	117.48	29.5	120.4	
Tb	159	He	3396512.76	0.3	3280980.4	103.52	29.5	120.4	
Bi	209	No Gas	4713000.13	3.7	3977089.87	118.5	29.5	120.4	

Sample Report

Sample Name SN5897-002L

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:03:51 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.027	ppb	918.6	31.11	100	
11	B	6	No Gas	14.981	ppb	13.9	2230.25	1000	
23	Na	45	He	754.886	ppb	12.3	12953.72	200000	
24	Mg	45	He	1.761	ppb	1169.9	806.74	200000	
27	Al	45	He	38.530	ppb	34.9	54.45	200000	
28	Si	45	H2	45.371	ppb	94.2	597.35	10000	
39	K	45	He	-181.752	ppb	N/A	11111.07	200000	
40	Ca	45	H2	159.979	ppb	6.4	3531.68	200000	
51	V	89	He	18.770	ppb	2.7	1003.41	1000	
52	Cr	89	He	0.922	ppb	10.8	107.31	2000	
55	Mn	89	He	5.020	ppb	22.3	114.65	2000	
56	Fe	89	H2	36.123	ppb	3.0	4929.68	100000	
59	Co	89	He	0.016	ppb	868.9	15.56	1000	
60	Ni	89	He	-6.595	ppb	N/A	167.79	1000	
63	Cu	89	He	2.705	ppb	12.1	608.92	2000	
66	Zn	89	He	22.594	ppb	28.5	237.79	2000	
75	As	89	He	1.167	ppb	36.0	14.00	1000	
78	Se	89	H2	0.058	ppb	436.9	1.00	1000	
88	Sr	89	He	0.666	ppb	64.5	27.78	2000	
95	Mo	89	He	0.578	ppb	50.9	22.22	1000	
107	Ag	89	He	0.009	ppb	501.4	14.44	100	
111	Cd	89	He	0.001	ppb	4904.5	0.37	1000	
118	Sn	159	He	2.101	ppb	8.7	146.67	1000	
121	Sb	159	No Gas	0.108	ppb	71.4	73.42	1000	
137	Ba	159	No Gas	0.874	ppb	18.2	113.46	2000	
182	W	159	No Gas	0.160	ppb	106.9	60.06	1000	
205	Tl	209	No Gas	-0.250	ppb	N/A	46.72	1000	
208	Pb	209	No Gas	0.141	ppb	28.3	350.39	2000	
232	Th	209	No Gas	0.182	ppb	25.7	226.92	1000	
238	U	209	No Gas	0.006	ppb	173.2	3.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1744540.65	2.2	1881686.03	92.71	29.5	120.4	
Sc	45	No Gas	3825645.15	2.5	3915123.71	97.71	29.5	120.4	
Sc	45	H2	462628.57	0.5	507902.1	91.09	29.5	120.4	
Sc	45	He	92287.27	1.3	102593	89.95	29.5	120.4	
Ge	72	No Gas	881569.15	1.7	852546.94	103.4	29.5	120.4	
Ge	72	H2	172754.18	1.0	193980.16	89.06	29.5	120.4	
Ge	72	He	71501.68	0.3	77385.19	92.4	29.5	120.4	
Y	89	H2	2992131.58	0.6	3089458.15	96.85	29.5	120.4	
Y	89	He	627747.99	0.6	678154.65	92.57	29.5	120.4	
Tb	159	No Gas	8892903.90	2.8	7727080.72	115.09	29.5	120.4	
Tb	159	He	3384076.69	1.0	3280980.4	103.14	29.5	120.4	
Bi	209	No Gas	4628399.49	2.7	3977089.87	116.38	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 072SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:06:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.196	ppb	8.3	2582.55	100	
11	B	6	No Gas	211.878	ppb	9.5	35917.83	1000	
23	Na	45	He	11415.971	ppb	1.3	251687.01	200000	
24	Mg	45	He	1098.163	ppb	2.0	13820.99	200000	
27	Al	45	He	990.837	ppb	4.8	4715.39	200000	
28	Si	45	H2	4777.318	ppb	0.2	45824.28	10000	
39	K	45	He	10260.513	ppb	0.7	126836.56	200000	
40	Ca	45	H2	1116.125	ppb	0.4	95659.45	200000	
51	V	89	He	56.840	ppb	1.9	10460.92	1000	
52	Cr	89	He	53.803	ppb	2.3	11730.76	2000	
55	Mn	89	He	23.146	ppb	4.9	2404.45	2000	
56	Fe	89	H2	1091.242	ppb	1.2	382393.42	100000	
59	Co	89	He	11.376	ppb	0.6	4267.62	1000	
60	Ni	89	He	20.853	ppb	2.9	2386.96	1000	
63	Cu	89	He	34.475	ppb	1.7	10237.45	2000	
66	Zn	89	He	123.151	ppb	0.6	4676.51	2000	
75	As	89	He	51.088	ppb	0.3	1653.61	1000	
78	Se	89	H2	50.380	ppb	0.5	857.82	1000	
88	Sr	89	He	50.001	ppb	1.2	8167.14	2000	
95	Mo	89	He	55.224	ppb	1.8	9677.10	1000	
107	Ag	89	He	11.908	ppb	4.4	7040.97	100	
111	Cd	89	He	11.431	ppb	5.4	877.45	1000	
118	Sn	159	He	50.823	ppb	2.2	9522.58	1000	
121	Sb	159	No Gas	10.167	ppb	9.6	14908.32	1000	
137	Ba	159	No Gas	21.008	ppb	8.9	11835.07	2000	
182	W	159	No Gas	51.807	ppb	10.8	54488.85	1000	
205	Tl	209	No Gas	10.617	ppb	8.3	25075.77	1000	
208	Pb	209	No Gas	10.583	ppb	7.1	34650.62	2000	
232	Th	209	No Gas	10.662	ppb	9.2	34941.10	1000	
238	U	209	No Gas	10.733	ppb	10.7	33194.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1783946.51	2.2	1881686.03	94.81	29.5	120.4	
Sc	45	No Gas	3801762.72	2.8	3915123.71	97.1	29.5	120.4	
Sc	45	H2	460333.69	1.5	507902.1	90.63	29.5	120.4	
Sc	45	He	92663.52	1.5	102593	90.32	29.5	120.4	
Ge	72	No Gas	884559.74	2.5	852546.94	103.75	29.5	120.4	
Ge	72	H2	172278.11	1.1	193980.16	88.81	29.5	120.4	
Ge	72	He	71748.12	0.9	77385.19	92.72	29.5	120.4	
Y	89	H2	3002869.64	0.7	3089458.15	97.2	29.5	120.4	
Y	89	He	628554.70	1.1	678154.65	92.69	29.5	120.4	
Tb	159	No Gas	8913077.57	3.0	7727080.72	115.35	29.5	120.4	
Tb	159	He	3413798.59	1.3	3280980.4	104.05	29.5	120.4	
Bi	209	No Gas	4677555.57	3.4	3977089.87	117.61	29.5	120.4	

Sample Report

Sample Name SN5897-002S

File Name 073SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:08:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.989	ppb	7.7	12979.55	100	
11	B	6	No Gas	526.827	ppb	9.0	86201.69	1000	
23	Na	45	He	7916.484	ppb	0.3	175570.17	200000	
24	Mg	45	He	5370.612	ppb	0.5	63747.00	200000	
27	Al	45	He	1980.586	ppb	0.4	9303.33	200000	
28	Si	45	H2	968.405	ppb	4.4	9707.43	10000	
39	K	45	He	10008.947	ppb	0.9	122626.81	200000	
40	Ca	45	H2	2583.630	ppb	0.7	220755.70	200000	
51	V	89	He	526.040	ppb	0.7	92879.05	1000	
52	Cr	89	He	216.413	ppb	0.5	46401.90	2000	
55	Mn	89	He	532.474	ppb	0.2	54402.27	2000	
56	Fe	89	H2	1072.581	ppb	1.6	375878.25	100000	
59	Co	89	He	539.129	ppb	0.5	199056.78	1000	
60	Ni	89	He	548.325	ppb	1.1	54486.75	1000	
63	Cu	89	He	270.377	ppb	0.7	76199.21	2000	
66	Zn	89	He	548.955	ppb	1.7	20349.85	2000	
75	As	89	He	105.487	ppb	0.2	3365.11	1000	
78	Se	89	H2	99.624	ppb	2.6	1695.86	1000	
88	Sr	89	He	502.431	ppb	0.4	80991.08	2000	
95	Mo	89	He	107.865	ppb	0.3	18662.23	1000	
107	Ag	89	He	56.428	ppb	0.8	32900.68	100	
111	Cd	89	He	267.891	ppb	0.8	20301.95	1000	
118	Sn	159	He	480.652	ppb	0.2	88794.08	1000	
121	Sb	159	No Gas	99.575	ppb	8.4	145639.54	1000	
137	Ba	159	No Gas	2032.031	ppb	8.5	1142955.94	2000	
182	W	159	No Gas	106.138	ppb	8.2	111639.43	1000	
205	Tl	209	No Gas	106.628	ppb	8.2	247608.94	1000	
208	Pb	209	No Gas	106.145	ppb	8.9	341212.52	2000	
232	Th	209	No Gas	108.107	ppb	9.0	349380.24	1000	
238	U	209	No Gas	106.670	ppb	8.9	326364.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778356.31	5.6	1881686.03	94.51	29.5	120.4	
Sc	45	No Gas	3800751.35	5.8	3915123.71	97.08	29.5	120.4	
Sc	45	H2	461092.31	1.4	507902.1	90.78	29.5	120.4	
Sc	45	He	91624.11	0.2	102593	89.31	29.5	120.4	
Ge	72	No Gas	879293.29	6.5	852546.94	103.14	29.5	120.4	
Ge	72	H2	170890.76	0.8	193980.16	88.1	29.5	120.4	
Ge	72	He	71445.49	0.4	77385.19	92.32	29.5	120.4	
Y	89	H2	3003385.26	1.7	3089458.15	97.21	29.5	120.4	
Y	89	He	620728.59	0.7	678154.65	91.53	29.5	120.4	
Tb	159	No Gas	8924831.19	5.9	7727080.72	115.5	29.5	120.4	
Tb	159	He	3387655.40	0.5	3280980.4	103.25	29.5	120.4	
Bi	209	No Gas	4633938.41	6.4	3977089.87	116.52	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:11:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.074	ppb	4.1	12809.42	100	
11	B	6	No Gas	523.763	ppb	6.1	86112.18	1000	
23	Na	45	He	7876.194	ppb	1.3	177779.72	200000	
24	Mg	45	He	5281.537	ppb	3.6	63784.69	200000	
27	Al	45	He	1932.587	ppb	0.9	9237.77	200000	
28	Si	45	H2	946.428	ppb	4.0	9457.03	10000	
39	K	45	He	9960.299	ppb	2.3	124210.17	200000	
40	Ca	45	H2	2627.769	ppb	0.7	223461.76	200000	
51	V	89	He	518.505	ppb	2.3	93107.38	1000	
52	Cr	89	He	213.562	ppb	2.1	46567.86	2000	
55	Mn	89	He	526.490	ppb	2.4	54702.75	2000	
56	Fe	89	H2	1097.918	ppb	0.4	383571.48	100000	
59	Co	89	He	536.807	ppb	2.6	201558.45	1000	
60	Ni	89	He	543.105	ppb	2.3	54889.56	1000	
63	Cu	89	He	266.495	ppb	2.1	76387.36	2000	
66	Zn	89	He	553.376	ppb	3.2	20860.67	2000	
75	As	89	He	102.791	ppb	3.7	3334.43	1000	
78	Se	89	H2	102.035	ppb	1.0	1731.36	1000	
88	Sr	89	He	497.060	ppb	1.9	81487.42	2000	
95	Mo	89	He	107.050	ppb	2.3	18835.79	1000	
107	Ag	89	He	56.315	ppb	2.4	33392.95	100	
111	Cd	89	He	268.438	ppb	1.5	20690.69	1000	
118	Sn	159	He	477.404	ppb	2.9	89320.24	1000	
121	Sb	159	No Gas	97.860	ppb	7.4	144622.33	1000	
137	Ba	159	No Gas	1976.832	ppb	7.4	1123596.09	2000	
182	W	159	No Gas	104.442	ppb	6.1	111014.13	1000	
205	Tl	209	No Gas	105.436	ppb	6.3	246791.64	1000	
208	Pb	209	No Gas	104.230	ppb	7.3	337774.61	2000	
232	Th	209	No Gas	105.594	ppb	7.3	344024.59	1000	
238	U	209	No Gas	103.669	ppb	7.4	319745.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1781944.85	1.4	1881686.03	94.7	29.5	120.4	
Sc	45	No Gas	3808209.87	2.2	3915123.71	97.27	29.5	120.4	
Sc	45	H2	458913.16	0.6	507902.1	90.35	29.5	120.4	
Sc	45	He	93236.95	1.5	102593	90.88	29.5	120.4	
Ge	72	No Gas	890514.66	2.2	852546.94	104.45	29.5	120.4	
Ge	72	H2	172368.53	0.1	193980.16	88.86	29.5	120.4	
Ge	72	He	72173.85	1.2	77385.19	93.27	29.5	120.4	
Y	89	H2	2993994.04	0.9	3089458.15	96.91	29.5	120.4	
Y	89	He	631400.00	1.5	678154.65	93.11	29.5	120.4	
Tb	159	No Gas	8998201.60	2.3	7727080.72	116.45	29.5	120.4	
Tb	159	He	3432137.07	1.9	3280980.4	104.61	29.5	120.4	
Bi	209	No Gas	4659839.88	2.7	3977089.87	117.17	29.5	120.4	

Sample Report

Sample Name SN5946-001

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:14:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.224	ppb	25.8	81.12	100	
11	B	6	No Gas	655.769	ppb	4.7	100563.42	1000	
23	Na	45	He	155560.330	ppb	3.4	3161336.77	200000	
24	Mg	45	He	49927.023	ppb	3.0	566716.97	200000	
27	Al	45	He	17.513	ppb	40.1	96.67	200000	
28	Si	45	H2	9347.585	ppb	2.4	87853.48	10000	
39	K	45	He	1200.128	ppb	6.2	23952.67	200000	
40	Ca	45	H2	193218.327	ppb	1.4	16179317.54	200000	
51	V	89	He	4.010	ppb	3.0	1004.52	1000	
52	Cr	89	He	0.639	ppb	9.9	197.30	2000	
55	Mn	89	He	932.930	ppb	2.8	92295.10	2000	
56	Fe	89	H2	5367.506	ppb	0.5	1850705.42	100000	
59	Co	89	He	0.507	ppb	59.3	195.58	1000	
60	Ni	89	He	-0.735	ppb	N/A	216.68	1000	
63	Cu	89	He	1.438	ppb	8.4	826.72	2000	
66	Zn	89	He	18.086	ppb	0.4	713.38	2000	
75	As	89	He	1.030	ppb	31.3	38.00	1000	
78	Se	89	H2	0.360	ppb	32.4	6.83	1000	
88	Sr	89	He	1892.408	ppb	2.3	295407.07	2000	
95	Mo	89	He	1.533	ppb	3.8	258.90	1000	
107	Ag	89	He	0.032	ppb	13.6	31.11	100	
111	Cd	89	He	0.196	ppb	103.8	14.81	1000	
118	Sn	159	He	2.115	ppb	3.6	450.03	1000	
121	Sb	159	No Gas	0.163	ppb	32.7	280.32	1000	
137	Ba	159	No Gas	131.699	ppb	4.9	73950.65	2000	
182	W	159	No Gas	0.270	ppb	20.2	310.35	1000	
205	Tl	209	No Gas	0.081	ppb	54.2	343.72	1000	
208	Pb	209	No Gas	0.169	ppb	32.5	784.23	2000	
232	Th	209	No Gas	1.626	ppb	27.0	5257.02	1000	
238	U	209	No Gas	0.879	ppb	6.7	2633.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1668401.94	0.5	1881686.03	88.67	29.5	120.4	
Sc	45	No Gas	3726477.62	1.2	3915123.71	95.18	29.5	120.4	
Sc	45	H2	453536.16	1.7	507902.1	89.3	29.5	120.4	
Sc	45	He	88661.08	2.9	102593	86.42	29.5	120.4	
Ge	72	No Gas	870890.44	1.3	852546.94	102.15	29.5	120.4	
Ge	72	H2	169629.40	1.9	193980.16	87.45	29.5	120.4	
Ge	72	He	69734.73	1.5	77385.19	90.11	29.5	120.4	
Y	89	H2	2969953.36	1.1	3089458.15	96.13	29.5	120.4	
Y	89	He	601293.34	1.7	678154.65	88.67	29.5	120.4	
Tb	159	No Gas	8881287.78	1.1	7727080.72	114.94	29.5	120.4	
Tb	159	He	3317041.51	2.0	3280980.4	101.1	29.5	120.4	
Bi	209	No Gas	4515705.08	1.3	3977089.87	113.54	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW1
File Name	076_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:16:34 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.027	ppb	20.8	62.23	0.1	
B	11	6	No Gas	3.168	ppb	1.5	4181.86	2	200.8 PB Fails DoD
Na	23	45	He	25.173	ppb	8.4	12332.29	100	
Mg	24	45	He	4.079	ppb	55.1	1035.68	10	
Al	27	45	He	3.555	ppb	6.4	101.11	10	
Si	28	45	H2	13.608	ppb	15.0	1154.66	50	
K	39	45	He	-3.901	ppb	N/A	11216.07	100	
Ca	40	45	H2	11.337	ppb	10.7	5616.89	10	200.8 PB Fails DoD
V	51	89	He	0.251	ppb	12.8	556.70	0.5	
Cr	52	89	He	0.336	ppb	17.8	429.33	0.5	
Mn	55	89	He	0.387	ppb	4.8	209.96	0.2	200.8 PB Fails DoD
Fe	56	89	H2	3.217	ppb	3.8	7997.89	10	
Co	59	89	He	0.051	ppb	21.7	108.90	0.1	
Ni	60	89	He	-0.175	ppb	N/A	211.12	0.2	
Cu	63	89	He	-0.030	ppb	N/A	412.24	0.3	
Zn	66	89	He	40.218	ppb	1.3	7552.27	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	-0.003	ppb	N/A	6.00	0.5	
Se	78	89	H2	0.010	ppb	132.6	1.67	0.5	
Sr	88	89	He	0.080	ppb	16.1	71.11	0.5	
Mo	95	89	He	0.075	ppb	25.4	67.78	0.5	
Ag	107	89	He	0.003	ppb	114.0	22.22	0.1	
Cd	111	89	He	0.010	ppb	46.0	4.07	0.1	
Sn	118	159	He	0.253	ppb	9.2	302.24	0.5	
Sb	121	159	No Gas	0.006	ppb	34.5	90.10	0.1	
Ba	137	159	No Gas	0.327	ppb	7.2	937.74	0.2	200.8 PB Fails DoD
W	182	159	No Gas	0.020	ppb	9.1	133.49	0.5	
Tl	205	209	No Gas	0.000	ppb	N/A	160.18	0.1	
[Pb]	206	209	No Gas	0.016	ppb	24.5	160.18	0.1	
[Pb]	207	209	No Gas	0.023	ppb	43.4	140.16	0.1	
Pb	208	209	No Gas	0.026	ppb	18.6	677.44	0.1	
Th	232	209	No Gas	0.009	ppb	33.1	250.29	0.5	
U	238	209	No Gas	0.004	ppb	35.4	70.08	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1714580.97	3.4	1881686.03	91.12	29.5	120.4	
Sc	45	No Gas	3825496.54	4.2	3915123.71	97.71	29.5	120.4	
Sc	45	H2	460846.65	1.0	507902.1	90.74	29.5	120.4	
Sc	45	He	91598.51	0.2	102593	89.28	29.5	120.4	
Ge	72	No Gas	883344.92	3.7	852546.94	103.61	29.5	120.4	
Ge	72	H2	175678.31	1.4	193980.16	90.57	29.5	120.4	
Ge	72	He	72231.76	0.6	77385.19	93.34	29.5	120.4	
Y	89	H2	2990333.46	0.9	3089458.15	96.79	29.5	120.4	
Y	89	He	625226.16	0.6	678154.65	92.2	29.5	120.4	
Tb	159	No Gas	8916856.05	4.5	7727080.72	115.4	29.5	120.4	
Tb	159	He	3377249.11	0.4	3280980.4	102.93	29.5	120.4	
Bi	209	No Gas	4669340.11	4.3	3977089.87	117.41	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	077_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:19:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.988	ppb	9.2	28524.51	25	95.95	89.8	110.2	
11	B	6	No Gas	25.502	ppb	5.6	21210.59	25	102.01	89.8	110.2	
23	Na	45	He	5248.509	ppb	1.0	543533.57	5000	104.97	89.8	110.2	
24	Mg	45	He	5079.917	ppb	0.9	289966.49	5000	101.6	89.8	110.2	
27	Al	45	He	489.040	ppb	0.9	11153.61	500	97.81	89.8	110.2	
28	Si	45	H2	455.815	ppb	2.1	21707.53	500	91.16	89.8	110.2	
39	K	45	He	4879.177	ppb	0.9	274370.62	5000	97.58	89.8	110.2	
40	Ca	45	H2	4939.482	ppb	1.6	2060215.33	5000	98.79	89.8	110.2	
51	V	89	He	24.623	ppb	2.0	21572.68	25	98.49	89.8	110.2	
52	Cr	89	He	25.214	ppb	2.2	26539.95	25	100.86	89.8	110.2	
55	Mn	89	He	25.211	ppb	1.9	12640.68	25	100.84	89.8	110.2	
56	Fe	89	H2	4827.536	ppb	1.6	8257291.79	5000	96.55	89.8	110.2	
59	Co	89	He	24.862	ppb	2.8	45028.09	25	99.45	89.8	110.2	
60	Ni	89	He	25.041	ppb	1.1	12429.28	25	100.16	89.8	110.2	
63	Cu	89	He	25.233	ppb	1.6	35112.66	25	100.93	89.8	110.2	
66	Zn	89	He	26.599	ppb	0.6	4887.72	25	106.4	89.8	110.2	
75	As	89	He	24.498	ppb	3.3	3831.28	25	97.99	89.8	110.2	
78	Se	89	H2	23.722	ppb	2.9	1982.55	25	94.89	89.8	110.2	
88	Sr	89	He	23.811	ppb	0.6	18831.27	25	95.24	89.8	110.2	
95	Mo	89	He	25.551	ppb	2.4	21678.91	25	102.2	89.8	110.2	
107	Ag	89	He	26.685	ppb	3.2	76282.13	25	106.74	89.8	110.2	
111	Cd	89	He	25.951	ppb	1.5	9646.12	25	103.8	89.8	110.2	
118	Sn	159	He	23.361	ppb	2.6	21187.26	25	93.44	89.8	110.2	
121	Sb	159	No Gas	22.673	ppb	8.0	161102.36	25	90.69	89.8	110.2	
137	Ba	159	No Gas	23.162	ppb	8.6	63300.65	25	92.65	89.8	110.2	
182	W	159	No Gas	23.412	ppb	8.7	119601.22	25	93.65	89.8	110.2	
205	Tl	209	No Gas	23.824	ppb	7.1	270046.14	25	95.3	89.8	110.2	
208	Pb	209	No Gas	23.606	ppb	8.6	370396.12	25	94.42	89.8	110.2	
232	Th	209	No Gas	23.514	ppb	9.5	370893.33	25	94.06	89.8	110.2	
238	U	209	No Gas	23.875	ppb	8.5	356599.46	25	95.5	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1693432.22	2.0	1881686.03	90	29.5	120.4	
Sc	45	No Gas	3723598.73	3.6	3915123.71	95.11	29.5	120.4	
Sc	45	H2	451671.83	1.4	507902.1	88.93	29.5	120.4	
Sc	45	He	89006.12	0.8	102593	86.76	29.5	120.4	
Ge	72	No Gas	855512.42	3.1	852546.94	100.35	29.5	120.4	
Ge	72	H2	171477.20	1.1	193980.16	88.4	29.5	120.4	
Ge	72	He	69785.61	1.5	77385.19	90.18	29.5	120.4	
Y	89	H2	2949856.29	1.1	3089458.15	95.48	29.5	120.4	
Y	89	He	608964.20	1.4	678154.65	89.8	29.5	120.4	
Tb	159	No Gas	8658306.96	3.3	7727080.72	112.05	29.5	120.4	
Tb	159	He	3319009.92	1.5	3280980.4	101.16	29.5	120.4	
Bi	209	No Gas	4515346.39	3.2	3977089.87	113.53	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	078_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:21:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.060	ppb	18.0	100.00	0.2	
11	B	6	No Gas	1.152	ppb	21.7	2580.32	4	
23	Na	45	He	-0.983	ppb	N/A	9483.71	200	
24	Mg	45	He	-1.768	ppb	N/A	684.52	20	
27	Al	45	He	0.195	ppb	343.8	22.22	20	
28	Si	45	H2	1.187	ppb	46.3	560.64	100	
39	K	45	He	-13.035	ppb	N/A	10580.90	200	
40	Ca	45	H2	2.848	ppb	21.9	1989.11	20	
51	V	89	He	-0.093	ppb	N/A	247.79	1	
52	Cr	89	He	-0.011	ppb	N/A	53.99	1	
55	Mn	89	He	0.018	ppb	95.0	20.00	0.4	
56	Fe	89	H2	2.052	ppb	30.2	5847.77	20	
59	Co	89	He	0.007	ppb	52.6	26.67	0.2	
60	Ni	89	He	-0.291	ppb	N/A	151.12	0.4	Failed DoD
63	Cu	89	He	-0.140	ppb	N/A	251.12	0.6	
66	Zn	89	He	0.019	ppb	371.7	71.12	2	
75	As	89	He	-0.013	ppb	N/A	4.33	1	
78	Se	89	H2	0.039	ppb	55.3	4.00	1	
88	Sr	89	He	0.008	ppb	80.2	12.22	1	
95	Mo	89	He	0.073	ppb	17.2	64.45	1	
107	Ag	89	He	0.005	ppb	96.9	27.78	0.2	
111	Cd	89	He	0.006	ppb	27.9	2.59	0.2	
118	Sn	159	He	0.028	ppb	48.3	93.34	1	
121	Sb	159	No Gas	0.017	ppb	30.9	160.18	0.2	
137	Ba	159	No Gas	0.028	ppb	26.6	90.10	0.4	
182	W	159	No Gas	0.049	ppb	31.9	266.97	1	
205	Tl	209	No Gas	0.018	ppb	9.7	353.73	0.2	
208	Pb	209	No Gas	0.013	ppb	60.2	453.85	0.2	
232	Th	209	No Gas	0.054	ppb	23.3	937.76	1	
238	U	209	No Gas	0.018	ppb	44.0	263.63	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1689833.85	2.2	1881686.03	89.8	29.5	120.4	
Sc	45	No Gas	3668291.83	2.3	3915123.71	93.7	29.5	120.4	
Sc	45	H2	457055.70	0.7	507902.1	89.99	29.5	120.4	
Sc	45	He	90531.48	1.3	102593	88.24	29.5	120.4	
Ge	72	No Gas	838136.58	2.1	852546.94	98.31	29.5	120.4	
Ge	72	H2	173116.78	1.3	193980.16	89.24	29.5	120.4	
Ge	72	He	70796.28	0.8	77385.19	91.49	29.5	120.4	
Y	89	H2	2927528.31	0.9	3089458.15	94.76	29.5	120.4	
Y	89	He	614895.56	1.1	678154.65	90.67	29.5	120.4	
Tb	159	No Gas	8428121.05	2.3	7727080.72	109.07	29.5	120.4	
Tb	159	He	3311017.59	0.5	3280980.4	100.92	29.5	120.4	
Bi	209	No Gas	4422804.58	1.8	3977089.87	111.21	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	079_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:24:26 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	46.266	ppb	5.1	58348.50	50	92.53	79.5	120.4	
B	11	6	No Gas	463.946	ppb	6.0	378100.94	500	92.79	79.5	120.4	
Na	23	45	He	7203.628	ppb	1.3	743812.48	7500	96.05	79.5	120.4	
Mg	24	45	He	5092.092	ppb	1.2	291157.18	5000	101.84	79.5	120.4	
Al	27	45	He	1881.381	ppb	0.9	42930.80	2000	94.07	79.5	120.4	
Si	28	45	H2	972.556	ppb	1.2	45181.29	1000	97.26	79.5	120.4	
K	39	45	He	9627.477	ppb	0.2	531497.73	10000	96.27	79.5	120.4	
Ca	40	45	H2	2452.607	ppb	0.4	1010603.65	2500	98.1	79.5	120.4	
V	51	89	He	478.728	ppb	1.5	413940.76	500	95.75	79.5	120.4	
Cr	52	89	He	194.968	ppb	1.3	205059.89	200	97.48	79.5	120.4	
Mn	55	89	He	490.638	ppb	0.7	246145.08	500	98.13	79.5	120.4	
Fe	56	89	H2	971.950	ppb	0.4	1622144.82	1000	97.2	79.5	120.4	
Co	59	89	He	490.289	ppb	1.2	888961.53	500	98.06	79.5	120.4	
Ni	60	89	He	498.692	ppb	1.0	242342.73	500	99.74	79.5	120.4	
Cu	63	89	He	242.683	ppb	0.6	334349.22	250	97.07	79.5	120.4	
Zn	66	89	He	505.381	ppb	0.6	91774.55	500	101.08	79.5	120.4	
As	75	89	He	98.969	ppb	0.4	15482.28	100	98.97	79.5	120.4	
Se	78	89	H2	97.044	ppb	1.3	7902.54	100	97.04	79.5	120.4	
Sr	88	89	He	483.824	ppb	0.8	383001.00	500	96.76	79.5	120.4	
Mo	95	89	He	101.014	ppb	1.0	85820.92	100	101.01	79.5	120.4	
Ag	107	89	He	51.419	ppb	0.8	147193.31	50	102.84	79.5	120.4	
Cd	111	89	He	258.778	ppb	0.7	96313.47	250	103.51	79.5	120.4	
Sn	118	159	He	463.289	ppb	0.5	416243.32	500	92.66	79.5	120.4	
Sb	121	159	No Gas	95.105	ppb	5.6	653769.90	100	95.1	79.5	120.4	
Ba	137	159	No Gas	1867.457	ppb	5.9	4937807.69	2000	93.37	79.5	120.4	
W	182	159	No Gas	99.902	ppb	6.7	493722.37	100	99.9	79.5	120.4	
Tl	205	209	No Gas	96.653	ppb	5.8	1048837.72	100	96.65	79.5	120.4	
Pb	208	209	No Gas	100.084	ppb	6.6	1503486.47	100	100.08	79.5	120.4	
Th	232	209	No Gas	100.218	ppb	7.5	1513803.05	100	100.22	79.5	120.4	
U	238	209	No Gas	98.643	ppb	7.6	1410913.75	100	98.64	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1796292.70	2.5	1881686.03	95.46	29.5	120.4	
Sc	45	No Gas	3615617.08	3.4	3915123.71	92.35	29.5	120.4	
Sc	45	H2	445976.53	0.4	507902.1	87.81	29.5	120.4	
Sc	45	He	89158.40	0.6	102593	86.9	29.5	120.4	
Ge	72	No Gas	822824.33	3.4	852546.94	96.51	29.5	120.4	
Ge	72	H2	168888.75	1.0	193980.16	87.06	29.5	120.4	
Ge	72	He	69355.41	0.6	77385.19	89.62	29.5	120.4	
Y	89	H2	2874705.36	0.5	3089458.15	93.05	29.5	120.4	
Y	89	He	609722.18	1.1	678154.65	89.91	29.5	120.4	
Tb	159	No Gas	8373135.22	3.1	7727080.72	108.36	29.5	120.4	
Tb	159	He	3297193.01	0.5	3280980.4	100.49	29.5	120.4	
Bi	209	No Gas	4324075.12	3.6	3977089.87	108.72	29.5	120.4	

Sample Report

Sample Name SN5286-001R

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:27:04 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.097	ppb	19.8	141.12	100	
11	B	6	No Gas	9.026	ppb	5.8	8448.30	1000	
23	Na	45	He	1424.358	ppb	1.8	154788.55	200000	
24	Mg	45	He	1154.309	ppb	0.6	66669.17	200000	
27	Al	45	He	11.456	ppb	13.4	278.90	200000	
28	Si	45	H2	4921.549	ppb	0.2	230202.79	10000	
39	K	45	He	615.263	ppb	1.4	44426.92	200000	
40	Ca	45	H2	4113.806	ppb	0.2	1721251.62	200000	
51	V	89	He	0.556	ppb	4.4	800.06	1000	
52	Cr	89	He	0.246	ppb	8.8	321.28	2000	
55	Mn	89	He	1.012	ppb	0.3	514.59	2000	
56	Fe	89	H2	24.431	ppb	1.4	43897.33	100000	
59	Co	89	He	0.114	ppb	23.7	220.02	1000	
60	Ni	89	He	-0.180	ppb	N/A	202.23	1000	
63	Cu	89	He	0.232	ppb	23.1	755.60	2000	
66	Zn	89	He	1.921	ppb	16.8	412.24	2000	
75	As	89	He	0.235	ppb	6.3	42.67	1000	
78	Se	89	H2	0.143	ppb	38.1	12.67	1000	
88	Sr	89	He	9.497	ppb	2.6	7465.62	2000	
95	Mo	89	He	0.290	ppb	10.5	246.68	1000	
107	Ag	89	He	0.013	ppb	61.0	51.11	100	
111	Cd	89	He	0.052	ppb	17.8	19.63	1000	
118	Sn	159	He	0.855	ppb	7.0	835.61	1000	
121	Sb	159	No Gas	0.079	ppb	19.0	580.66	1000	
137	Ba	159	No Gas	2.000	ppb	12.1	5303.65	2000	
182	W	159	No Gas	0.239	ppb	9.9	1208.08	1000	
205	Tl	209	No Gas	0.054	ppb	17.3	767.56	1000	
208	Pb	209	No Gas	0.082	ppb	12.4	1528.43	2000	
232	Th	209	No Gas	0.308	ppb	15.7	4919.87	1000	
238	U	209	No Gas	0.101	ppb	17.5	1501.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1660264.19	1.1	1881686.03	88.23	29.5	120.4	
Sc	45	No Gas	3624433.81	1.4	3915123.71	92.58	29.5	120.4	
Sc	45	H2	452997.29	0.5	507902.1	89.19	29.5	120.4	
Sc	45	He	89244.86	0.2	102593	86.99	29.5	120.4	
Ge	72	No Gas	827843.75	1.3	852546.94	97.1	29.5	120.4	
Ge	72	H2	174369.56	1.3	193980.16	89.89	29.5	120.4	
Ge	72	He	69994.05	0.8	77385.19	90.45	29.5	120.4	
Y	89	H2	2931633.67	0.2	3089458.15	94.89	29.5	120.4	
Y	89	He	604961.09	0.7	678154.65	89.21	29.5	120.4	
Tb	159	No Gas	8368512.65	1.5	7727080.72	108.3	29.5	120.4	
Tb	159	He	3298463.84	0.9	3280980.4	100.53	29.5	120.4	
Bi	209	No Gas	4457667.04	2.0	3977089.87	112.08	29.5	120.4	

Sample Report

Sample Name SN5286-002R

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:29:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	32.8	77.78	100	
11	B	6	No Gas	3.705	ppb	12.9	4398.59	1000	
23	Na	45	He	1442.876	ppb	5.9	149479.54	200000	
24	Mg	45	He	1124.634	ppb	7.6	61950.42	200000	
27	Al	45	He	16.728	ppb	7.2	382.24	200000	
28	Si	45	H2	4822.886	ppb	1.2	221417.97	10000	
39	K	45	He	556.622	ppb	9.3	39344.54	200000	
40	Ca	45	H2	4037.461	ppb	1.3	1657951.87	200000	
51	V	89	He	0.611	ppb	10.8	820.06	1000	
52	Cr	89	He	0.218	ppb	3.8	283.28	2000	
55	Mn	89	He	0.545	ppb	6.0	273.95	2000	
56	Fe	89	H2	8.839	ppb	3.4	17065.96	100000	
59	Co	89	He	0.053	ppb	29.0	106.67	1000	
60	Ni	89	He	-0.183	ppb	N/A	194.45	1000	
63	Cu	89	He	0.128	ppb	32.2	593.37	2000	
66	Zn	89	He	2.019	ppb	16.3	415.58	2000	
75	As	89	He	0.245	ppb	22.6	43.00	1000	
78	Se	89	H2	0.048	ppb	57.5	4.67	1000	
88	Sr	89	He	10.798	ppb	6.3	8218.33	2000	
95	Mo	89	He	0.148	ppb	20.6	122.23	1000	
107	Ag	89	He	0.008	ppb	22.9	33.33	100	
111	Cd	89	He	0.033	ppb	29.9	12.22	1000	
118	Sn	159	He	0.263	ppb	7.2	295.57	1000	
121	Sb	159	No Gas	0.019	ppb	25.4	166.85	1000	
137	Ba	159	No Gas	1.594	ppb	3.7	4201.99	2000	
182	W	159	No Gas	0.042	ppb	39.9	230.26	1000	
205	Tl	209	No Gas	0.004	ppb	180.4	203.56	1000	
208	Pb	209	No Gas	0.026	ppb	14.7	650.73	2000	
232	Th	209	No Gas	0.034	ppb	13.9	634.06	1000	
238	U	209	No Gas	0.023	ppb	15.7	333.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1641484.58	2.0	1881686.03	87.23	29.5	120.4	
Sc	45	No Gas	3572169.28	2.7	3915123.71	91.24	29.5	120.4	
Sc	45	H2	444618.51	0.9	507902.1	87.54	29.5	120.4	
Sc	45	He	85286.03	4.6	102593	83.13	29.5	120.4	
Ge	72	No Gas	822144.75	3.1	852546.94	96.43	29.5	120.4	
Ge	72	H2	169345.40	0.4	193980.16	87.3	29.5	120.4	
Ge	72	He	67932.45	4.8	77385.19	87.78	29.5	120.4	
Y	89	H2	2876153.76	0.4	3089458.15	93.1	29.5	120.4	
Y	89	He	586885.12	4.5	678154.65	86.54	29.5	120.4	
Tb	159	No Gas	8310995.57	2.3	7727080.72	107.56	29.5	120.4	
Tb	159	He	3211375.37	5.1	3280980.4	97.88	29.5	120.4	
Bi	209	No Gas	4412051.01	2.5	3977089.87	110.94	29.5	120.4	

Sample Report

Sample Name SN5907-001

File Name 082SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:32:27 PM

Sample Type Sample

Total Dilution 100.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.877	ppb	43.1	61.11	100	
11	B	6	No Gas	271.831	ppb	9.3	3662.81	1000	
23	Na	45	He	2791597.031	ppb	0.7	2872132.87	200000	
24	Mg	45	He	9156.051	ppb	2.1	6032.80	200000	
27	Al	45	He	180.675	ppb	48.4	58.89	200000	
28	Si	45	H2	8313.174	ppb	2.1	4342.16	10000	
39	K	45	He	43870.720	ppb	1.1	35046.99	200000	
40	Ca	45	H2	89833.809	ppb	1.2	373204.20	200000	
51	V	89	He	30.075	ppb	26.7	590.04	1000	
52	Cr	89	He	1.196	ppb	35.0	78.66	2000	
55	Mn	89	He	314.227	ppb	2.7	1599.81	2000	
56	Fe	89	H2	196.079	ppb	1.7	5660.77	100000	
59	Co	89	He	4.079	ppb	67.5	88.90	1000	
60	Ni	89	He	-16.559	ppb	N/A	212.23	1000	
63	Cu	89	He	-9.399	ppb	N/A	315.57	2000	
66	Zn	89	He	66.452	ppb	28.9	188.90	2000	
75	As	89	He	3.590	ppb	62.4	12.00	1000	
78	Se	89	H2	2.718	ppb	99.5	3.00	1000	
88	Sr	89	He	456.042	ppb	2.9	3645.06	2000	
95	Mo	89	He	30.115	ppb	8.3	260.01	1000	
107	Ag	89	He	0.237	ppb	47.5	20.00	100	
111	Cd	89	He	0.696	ppb	23.8	2.96	1000	
118	Sn	159	He	7.915	ppb	12.3	140.01	1000	
121	Sb	159	No Gas	1.391	ppb	18.3	133.49	1000	
137	Ba	159	No Gas	28.339	ppb	24.9	754.20	2000	
182	W	159	No Gas	1.887	ppb	24.3	116.80	1000	
205	Tl	209	No Gas	-0.368	ppb	N/A	113.46	1000	
208	Pb	209	No Gas	0.196	ppb	156.2	273.64	2000	
232	Th	209	No Gas	1.591	ppb	25.2	343.73	1000	
238	U	209	No Gas	0.532	ppb	25.1	76.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1638317.49	1.5	1881686.03	87.07	29.5	120.4	
Sc	45	No Gas	3581214.18	2.0	3915123.71	91.47	29.5	120.4	
Sc	45	H2	449078.38	1.4	507902.1	88.42	29.5	120.4	
Sc	45	He	89687.14	0.7	102593	87.42	29.5	120.4	
Ge	72	No Gas	823973.54	1.8	852546.94	96.65	29.5	120.4	
Ge	72	H2	172564.35	1.2	193980.16	88.96	29.5	120.4	
Ge	72	He	70916.14	0.9	77385.19	91.64	29.5	120.4	
Y	89	H2	2907642.75	1.1	3089458.15	94.11	29.5	120.4	
Y	89	He	614617.43	0.8	678154.65	90.63	29.5	120.4	
Tb	159	No Gas	8262009.88	1.9	7727080.72	106.92	29.5	120.4	
Tb	159	He	3331808.53	0.2	3280980.4	101.55	29.5	120.4	
Bi	209	No Gas	4338792.55	1.9	3977089.87	109.09	29.5	120.4	

Sample Report

Sample Name SN5923-001

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:35:09 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.250	ppb	14.9	295.57	100	
11	B	6	No Gas	81.336	ppb	4.8	57867.89	1000	
23	Na	45	He	152417.457	ppb	2.4	15628566.66	200000	
24	Mg	45	He	12671.905	ppb	2.2	727230.73	200000	
27	Al	45	He	368.516	ppb	3.1	8467.23	200000	
28	Si	45	H2	33514.729	ppb	1.0	1540005.38	10000	>LDR
39	K	45	He	41645.480	ppb	1.8	2274090.31	200000	
40	Ca	45	H2	58025.750	ppb	0.6	23884729.92	200000	
51	V	89	He	6.676	ppb	2.9	6099.30	1000	
52	Cr	89	He	6.691	ppb	2.7	7107.19	2000	
55	Mn	89	He	310.669	ppb	1.6	156006.10	2000	
56	Fe	89	H2	1958.778	ppb	0.3	3275287.20	100000	
59	Co	89	He	1.862	ppb	3.7	3391.77	1000	
60	Ni	89	He	7.298	ppb	2.8	3837.33	1000	
63	Cu	89	He	50.045	ppb	2.1	69359.54	2000	
66	Zn	89	He	74.733	ppb	1.3	13642.70	2000	
75	As	89	He	14.590	ppb	1.9	2290.11	1000	
78	Se	89	H2	0.897	ppb	18.8	74.00	1000	
88	Sr	89	He	292.934	ppb	1.7	232107.45	2000	
95	Mo	89	He	25.814	ppb	2.7	21951.64	1000	
107	Ag	89	He	0.051	ppb	14.1	157.78	100	
111	Cd	89	He	2.773	ppb	4.5	1033.01	1000	
118	Sn	159	He	0.450	ppb	4.6	471.14	1000	
121	Sb	159	No Gas	0.776	ppb	5.0	5126.70	1000	
137	Ba	159	No Gas	71.747	ppb	4.1	180932.13	2000	
182	W	159	No Gas	0.476	ppb	11.6	2269.42	1000	
205	Tl	209	No Gas	0.560	ppb	2.2	5854.56	1000	
208	Pb	209	No Gas	12.921	ppb	3.5	182686.00	2000	
232	Th	209	No Gas	0.491	ppb	11.8	7066.63	1000	
238	U	209	No Gas	3.299	ppb	3.9	44374.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1532168.42	0.6	1881686.03	81.43	29.5	120.4	
Sc	45	No Gas	3508355.99	1.5	3915123.71	89.61	29.5	120.4	
Sc	45	H2	445847.17	0.8	507902.1	87.78	29.5	120.4	
Sc	45	He	89656.07	2.3	102593	87.39	29.5	120.4	
Ge	72	No Gas	782494.17	0.7	852546.94	91.78	29.5	120.4	
Ge	72	H2	170644.54	0.8	193980.16	87.97	29.5	120.4	
Ge	72	He	69578.33	1.7	77385.19	89.91	29.5	120.4	
Y	89	H2	2882204.99	0.4	3089458.15	93.29	29.5	120.4	
Y	89	He	610357.44	1.5	678154.65	90	29.5	120.4	
Tb	159	No Gas	7972569.74	1.5	7727080.72	103.18	29.5	120.4	
Tb	159	He	3295767.03	1.3	3280980.4	100.45	29.5	120.4	
Bi	209	No Gas	4058371.98	0.9	3977089.87	102.04	29.5	120.4	

Sample Report

Sample Name SN5997-001

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:37:45 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	29.1	70.00	100	
11	B	6	No Gas	15.162	ppb	1.7	12156.63	1000	
23	Na	45	He	28018.756	ppb	3.6	2802488.80	200000	
24	Mg	45	He	19177.315	ppb	4.1	1070122.02	200000	
27	Al	45	He	7.143	ppb	32.5	175.56	200000	
28	Si	45	H2	2074.862	ppb	0.7	95278.57	10000	
39	K	45	He	1343.069	ppb	3.2	81889.39	200000	
40	Ca	45	H2	67237.832	ppb	0.7	27523930.15	200000	
51	V	89	He	0.282	ppb	16.1	562.26	1000	
52	Cr	89	He	1.349	ppb	9.1	1463.81	2000	
55	Mn	89	He	0.715	ppb	11.6	363.94	2000	
56	Fe	89	H2	8.640	ppb	1.5	16952.48	100000	
59	Co	89	He	0.100	ppb	29.2	193.35	1000	
60	Ni	89	He	0.776	ppb	6.6	658.93	1000	
63	Cu	89	He	0.395	ppb	8.3	973.40	2000	
66	Zn	89	He	33.536	ppb	7.3	6068.20	2000	
75	As	89	He	0.169	ppb	18.9	32.33	1000	
78	Se	89	H2	0.449	ppb	4.1	37.83	1000	
88	Sr	89	He	255.935	ppb	3.1	200023.91	2000	
95	Mo	89	He	0.289	ppb	12.7	244.46	1000	
107	Ag	89	He	0.027	ppb	28.8	90.00	100	
111	Cd	89	He	0.087	ppb	3.7	32.22	1000	
118	Sn	159	He	0.212	ppb	11.4	255.57	1000	
121	Sb	159	No Gas	0.039	ppb	32.8	293.67	1000	
137	Ba	159	No Gas	36.463	ppb	1.7	91920.87	2000	
182	W	159	No Gas	0.113	ppb	6.3	553.97	1000	
205	Tl	209	No Gas	0.014	ppb	52.4	283.65	1000	
208	Pb	209	No Gas	0.069	ppb	6.9	1211.39	2000	
232	Th	209	No Gas	0.029	ppb	16.6	517.27	1000	
238	U	209	No Gas	0.034	ppb	2.8	457.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1546446.26	1.0	1881686.03	82.18	29.5	120.4	
Sc	45	No Gas	3404930.49	2.7	3915123.71	86.97	29.5	120.4	
Sc	45	H2	443412.79	1.9	507902.1	87.3	29.5	120.4	
Sc	45	He	87264.09	3.6	102593	85.06	29.5	120.4	
Ge	72	No Gas	787103.55	1.3	852546.94	92.32	29.5	120.4	
Ge	72	H2	169429.31	1.0	193980.16	87.34	29.5	120.4	
Ge	72	He	69003.69	2.5	77385.19	89.17	29.5	120.4	
Y	89	H2	2913270.36	1.0	3089458.15	94.3	29.5	120.4	
Y	89	He	602368.19	3.6	678154.65	88.82	29.5	120.4	
Tb	159	No Gas	7970968.21	2.6	7727080.72	103.16	29.5	120.4	
Tb	159	He	3262228.63	3.4	3280980.4	99.43	29.5	120.4	
Bi	209	No Gas	4080679.81	1.9	3977089.87	102.6	29.5	120.4	

Sample Report

Sample Name SN5997-001L

File Name 085SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:40:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	106.3	36.67	100	
11	B	6	No Gas	19.818	ppb	5.0	4677.59	1000	
23	Na	45	He	29382.373	ppb	3.8	625444.46	200000	
24	Mg	45	He	19298.504	ppb	3.6	227041.15	200000	
27	Al	45	He	13.930	ppb	51.8	83.34	200000	
28	Si	45	H2	2039.157	ppb	6.6	20189.91	10000	
39	K	45	He	1332.261	ppb	4.5	26247.20	200000	
40	Ca	45	H2	67196.906	ppb	3.9	5811860.40	200000	
51	V	89	He	1.199	ppb	26.2	546.70	1000	
52	Cr	89	He	1.380	ppb	5.2	365.27	2000	
55	Mn	89	He	1.224	ppb	9.4	137.31	2000	
56	Fe	89	H2	10.989	ppb	0.8	6325.14	100000	
59	Co	89	He	0.121	ppb	64.5	60.00	1000	
60	Ni	89	He	-0.705	ppb	N/A	228.90	1000	
63	Cu	89	He	-0.072	ppb	N/A	433.36	2000	
66	Zn	89	He	34.497	ppb	6.3	1354.56	2000	
75	As	89	He	0.089	ppb	71.9	9.33	1000	
78	Se	89	H2	0.459	ppb	31.0	8.67	1000	
88	Sr	89	He	256.390	ppb	4.5	41669.70	2000	
95	Mo	89	He	0.419	ppb	30.1	75.56	1000	
107	Ag	89	He	0.030	ppb	57.2	31.11	100	
111	Cd	89	He	0.092	ppb	48.2	7.41	1000	
118	Sn	159	He	0.278	ppb	60.9	118.90	1000	
121	Sb	159	No Gas	0.050	ppb	52.7	106.79	1000	
137	Ba	159	No Gas	39.046	ppb	6.3	20368.47	2000	
182	W	159	No Gas	0.094	ppb	35.0	116.80	1000	
205	Tl	209	No Gas	-0.030	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.060	ppb	36.4	420.47	2000	
232	Th	209	No Gas	0.026	ppb	9.7	180.21	1000	
238	U	209	No Gas	0.036	ppb	13.5	103.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1671455.22	1.0	1881686.03	88.83	29.5	120.4	
Sc	45	No Gas	3624861.92	1.4	3915123.71	92.59	29.5	120.4	
Sc	45	H2	468759.08	3.5	507902.1	92.29	29.5	120.4	
Sc	45	He	91694.13	2.4	102593	89.38	29.5	120.4	
Ge	72	No Gas	831742.92	1.4	852546.94	97.56	29.5	120.4	
Ge	72	H2	178638.42	2.8	193980.16	92.09	29.5	120.4	
Ge	72	He	72193.88	1.7	77385.19	93.29	29.5	120.4	
Y	89	H2	3035015.53	3.1	3089458.15	98.24	29.5	120.4	
Y	89	He	626303.23	2.9	678154.65	92.35	29.5	120.4	
Tb	159	No Gas	8244397.45	1.2	7727080.72	106.69	29.5	120.4	
Tb	159	He	3351566.62	2.7	3280980.4	102.15	29.5	120.4	
Bi	209	No Gas	4304375.94	1.3	3977089.87	108.23	29.5	120.4	

Sample Report

Sample Name SN5997-001A

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:43:03 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.214	ppb	7.6	3591.68	100	
11	B	6	No Gas	73.594	ppb	2.2	54141.08	1000	
23	Na	45	He	29997.207	ppb	0.8	3025475.94	200000	
24	Mg	45	He	18878.748	ppb	0.7	1062657.88	200000	
27	Al	45	He	282.322	ppb	2.0	6368.31	200000	
28	Si	45	H2	3406.003	ppb	1.6	155267.84	10000	
39	K	45	He	4143.475	ppb	0.9	231888.93	200000	
40	Ca	45	H2	66573.928	ppb	1.7	27109580.71	200000	
51	V	89	He	14.786	ppb	1.4	13049.81	1000	
52	Cr	89	He	15.605	ppb	1.1	16408.52	2000	
55	Mn	89	He	6.502	ppb	3.2	3259.79	2000	
56	Fe	89	H2	298.996	ppb	0.8	501624.52	100000	
59	Co	89	He	3.104	ppb	2.8	5619.29	1000	
60	Ni	89	He	6.634	ppb	2.9	3497.22	1000	
63	Cu	89	He	8.905	ppb	1.1	12645.02	2000	
66	Zn	89	He	61.772	ppb	1.6	11231.54	2000	
75	As	89	He	14.912	ppb	1.3	2328.79	1000	
78	Se	89	H2	14.656	ppb	2.6	1196.67	1000	
88	Sr	89	He	261.385	ppb	0.3	206104.23	2000	
95	Mo	89	He	15.396	ppb	1.3	13031.06	1000	
107	Ag	89	He	3.119	ppb	1.5	8905.43	100	
111	Cd	89	He	3.156	ppb	2.6	1170.44	1000	
118	Sn	159	He	13.944	ppb	1.4	12590.75	1000	
121	Sb	159	No Gas	3.035	ppb	0.7	20284.48	1000	
137	Ba	159	No Gas	40.491	ppb	3.9	103875.87	2000	
182	W	159	No Gas	15.445	ppb	4.3	74076.51	1000	
205	Tl	209	No Gas	3.118	ppb	1.3	32611.41	1000	
208	Pb	209	No Gas	3.133	ppb	3.5	45392.54	2000	
232	Th	209	No Gas	3.283	ppb	2.6	47697.28	1000	
238	U	209	No Gas	3.245	ppb	3.8	44549.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1580180.52	1.5	1881686.03	83.98	29.5	120.4	
Sc	45	No Gas	3472734.46	1.8	3915123.71	88.7	29.5	120.4	
Sc	45	H2	441166.11	2.2	507902.1	86.86	29.5	120.4	
Sc	45	He	87941.91	1.0	102593	85.72	29.5	120.4	
Ge	72	No Gas	801386.33	1.9	852546.94	94	29.5	120.4	
Ge	72	H2	169987.96	1.2	193980.16	87.63	29.5	120.4	
Ge	72	He	69338.62	0.3	77385.19	89.6	29.5	120.4	
Y	89	H2	2880499.85	0.8	3089458.15	93.24	29.5	120.4	
Y	89	He	607290.43	0.0	678154.65	89.55	29.5	120.4	
Tb	159	No Gas	8115805.71	1.3	7727080.72	105.03	29.5	120.4	
Tb	159	He	3296396.62	0.3	3280980.4	100.47	29.5	120.4	
Bi	209	No Gas	4144673.48	1.5	3977089.87	104.21	29.5	120.4	

Sample Report

Sample Name SN5997-001S

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:45:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.608	ppb	10.5	57536.52	100	
11	B	6	No Gas	524.328	ppb	9.7	385095.40	1000	
23	Na	45	He	34950.140	ppb	0.8	3501315.65	200000	
24	Mg	45	He	24276.178	ppb	0.5	1357686.21	200000	
27	Al	45	He	1917.174	ppb	1.3	42877.40	200000	
28	Si	45	H2	3081.521	ppb	2.9	140885.58	10000	
39	K	45	He	11120.400	ppb	0.6	600031.97	200000	
40	Ca	45	H2	70191.509	ppb	4.1	28650325.41	200000	
51	V	89	He	490.563	ppb	0.3	421774.84	1000	
52	Cr	89	He	197.597	ppb	1.0	206638.65	2000	
55	Mn	89	He	497.209	ppb	0.9	248012.82	2000	
56	Fe	89	H2	989.391	ppb	4.9	1667857.66	100000	
59	Co	89	He	487.964	ppb	0.8	879703.15	1000	
60	Ni	89	He	493.486	ppb	0.8	238445.57	1000	
63	Cu	89	He	238.066	ppb	1.1	326107.37	2000	
66	Zn	89	He	499.450	ppb	0.8	90176.24	2000	
75	As	89	He	101.849	ppb	0.6	15841.38	1000	
78	Se	89	H2	97.784	ppb	4.0	8044.96	1000	
88	Sr	89	He	741.775	ppb	0.3	583865.75	2000	
95	Mo	89	He	104.928	ppb	0.3	88642.11	1000	
107	Ag	89	He	51.352	ppb	0.3	146161.04	100	
111	Cd	89	He	259.508	ppb	0.6	96031.75	1000	
118	Sn	159	He	473.366	ppb	0.3	426104.52	1000	
121	Sb	159	No Gas	107.075	ppb	13.2	660576.49	1000	
137	Ba	159	No Gas	2134.176	ppb	13.2	5065763.14	2000	>LDR
182	W	159	No Gas	114.607	ppb	13.2	508422.14	1000	
205	Tl	209	No Gas	108.009	ppb	11.3	1036339.44	1000	
208	Pb	209	No Gas	112.516	ppb	12.3	1494463.78	2000	
232	Th	209	No Gas	116.259	ppb	13.8	1552867.83	1000	
238	U	209	No Gas	114.288	ppb	13.6	1445831.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1620483.27	4.8	1881686.03	86.12	29.5	120.4	
Sc	45	No Gas	3244025.47	7.2	3915123.71	82.86	29.5	120.4	
Sc	45	H2	442439.25	2.8	507902.1	87.11	29.5	120.4	
Sc	45	He	87388.81	1.1	102593	85.18	29.5	120.4	
Ge	72	No Gas	741686.54	5.7	852546.94	87	29.5	120.4	
Ge	72	H2	166921.58	2.5	193980.16	86.05	29.5	120.4	
Ge	72	He	68921.03	1.2	77385.19	89.06	29.5	120.4	
Y	89	H2	2906981.88	3.5	3089458.15	94.09	29.5	120.4	
Y	89	He	606224.61	1.0	678154.65	89.39	29.5	120.4	
Tb	159	No Gas	7542075.44	7.1	7727080.72	97.61	29.5	120.4	
Tb	159	He	3303511.65	1.0	3280980.4	100.69	29.5	120.4	
Bi	209	No Gas	3832003.40	6.5	3977089.87	96.35	29.5	120.4	

Sample Report

Sample Name SN5997-001P

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 8:48:26 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.005	ppb	3.2	58282.47	100	
11	B	6	No Gas	502.406	ppb	3.2	394072.12	1000	
23	Na	45	He	34635.721	ppb	1.8	3555009.55	200000	
24	Mg	45	He	24034.083	ppb	1.7	1377095.10	200000	
27	Al	45	He	1888.471	ppb	2.2	43270.93	200000	
28	Si	45	H2	3080.833	ppb	1.1	141670.98	10000	
39	K	45	He	11015.916	ppb	2.1	609047.09	200000	
40	Ca	45	H2	71111.951	ppb	1.3	29200717.90	200000	
51	V	89	He	484.538	ppb	1.8	424776.91	1000	
52	Cr	89	He	195.312	ppb	1.4	208272.48	2000	
55	Mn	89	He	492.904	ppb	1.5	250703.57	2000	
56	Fe	89	H2	997.722	ppb	0.9	1682419.98	100000	
59	Co	89	He	480.998	ppb	1.2	884218.08	1000	
60	Ni	89	He	487.395	ppb	1.4	240142.18	1000	
63	Cu	89	He	235.404	ppb	1.4	328820.89	2000	
66	Zn	89	He	495.085	ppb	1.9	91149.85	2000	
75	As	89	He	100.849	ppb	1.3	15994.25	1000	
78	Se	89	H2	99.025	ppb	1.0	8147.84	1000	
88	Sr	89	He	740.269	ppb	1.9	594108.49	2000	
95	Mo	89	He	104.005	ppb	1.4	89587.13	1000	
107	Ag	89	He	50.495	ppb	1.6	146546.53	100	
111	Cd	89	He	255.564	ppb	1.5	96432.96	1000	
118	Sn	159	He	473.129	ppb	1.8	431571.89	1000	
121	Sb	159	No Gas	99.674	ppb	3.5	672215.40	1000	
137	Ba	159	No Gas	1979.208	ppb	3.8	5134510.22	2000	
182	W	159	No Gas	106.356	ppb	4.5	515721.34	1000	
205	Tl	209	No Gas	100.163	ppb	3.2	1048607.83	1000	
208	Pb	209	No Gas	104.135	ppb	3.1	1509496.31	2000	
232	Th	209	No Gas	108.882	ppb	4.0	1587195.63	1000	
238	U	209	No Gas	106.548	ppb	3.7	1470784.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1728002.08	0.6	1881686.03	91.83	29.5	120.4	
Sc	45	No Gas	3529564.23	1.7	3915123.71	90.15	29.5	120.4	
Sc	45	H2	444797.73	1.0	507902.1	87.58	29.5	120.4	
Sc	45	He	89540.30	1.2	102593	87.28	29.5	120.4	
Ge	72	No Gas	807054.05	2.5	852546.94	94.66	29.5	120.4	
Ge	72	H2	170288.77	0.3	193980.16	87.79	29.5	120.4	
Ge	72	He	70328.92	0.8	77385.19	90.88	29.5	120.4	
Y	89	H2	2904642.56	0.6	3089458.15	94.02	29.5	120.4	
Y	89	He	618158.23	0.6	678154.65	91.15	29.5	120.4	
Tb	159	No Gas	8208909.39	1.8	7727080.72	106.24	29.5	120.4	
Tb	159	He	3347951.75	1.1	3280980.4	102.04	29.5	120.4	
Bi	209	No Gas	4167360.76	1.7	3977089.87	104.78	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:51:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.504	ppb	8.0	30235.72	25	102.02	89.8	110.2	
11	B	6	No Gas	34.725	ppb	2.4	28202.71	25	138.9	89.8	110.2	> +/- 10%
23	Na	45	He	5207.421	ppb	1.0	545960.66	5000	104.15	89.8	110.2	
24	Mg	45	He	5063.715	ppb	1.0	292591.68	5000	101.27	89.8	110.2	
27	Al	45	He	486.106	ppb	3.2	11220.33	500	97.22	89.8	110.2	
28	Si	45	H2	451.609	ppb	3.4	22028.33	500	90.32	89.8	110.2	
39	K	45	He	4853.426	ppb	1.8	276310.83	5000	97.07	89.8	110.2	
40	Ca	45	H2	4844.792	ppb	0.3	2069823.46	5000	96.9	89.8	110.2	
51	V	89	He	24.507	ppb	0.8	21764.12	25	98.03	89.8	110.2	
52	Cr	89	He	24.822	ppb	1.1	26484.57	25	99.29	89.8	110.2	
55	Mn	89	He	25.389	ppb	1.8	12903.58	25	101.56	89.8	110.2	
56	Fe	89	H2	4770.769	ppb	0.4	8267575.20	5000	95.42	89.8	110.2	
59	Co	89	He	25.066	ppb	0.6	46020.57	25	100.26	89.8	110.2	
60	Ni	89	He	25.094	ppb	1.2	12623.93	25	100.38	89.8	110.2	
63	Cu	89	He	25.044	ppb	0.8	35327.72	25	100.18	89.8	110.2	
66	Zn	89	He	26.426	ppb	3.8	4921.04	25	105.7	89.8	110.2	
75	As	89	He	24.583	ppb	1.4	3897.31	25	98.33	89.8	110.2	
78	Se	89	H2	23.661	ppb	0.9	2003.72	25	94.64	89.8	110.2	
88	Sr	89	He	24.236	ppb	1.7	19426.57	25	96.94	89.8	110.2	
95	Mo	89	He	25.420	ppb	2.0	21862.53	25	101.68	89.8	110.2	
107	Ag	89	He	25.964	ppb	1.1	75240.08	25	103.86	89.8	110.2	
111	Cd	89	He	25.911	ppb	1.2	9761.75	25	103.64	89.8	110.2	
118	Sn	159	He	23.767	ppb	1.1	21690.31	25	95.07	89.8	110.2	
121	Sb	159	No Gas	24.101	ppb	6.3	166752.92	25	96.4	89.8	110.2	
137	Ba	159	No Gas	26.353	ppb	1.3	70251.07	25	105.41	89.8	110.2	
182	W	159	No Gas	24.853	ppb	7.2	123617.26	25	99.41	89.8	110.2	
205	Tl	209	No Gas	24.859	ppb	6.7	273794.59	25	99.44	89.8	110.2	
208	Pb	209	No Gas	25.002	ppb	6.0	381370.66	25	100.01	89.8	110.2	
232	Th	209	No Gas	25.695	ppb	7.2	393936.29	25	102.78	89.8	110.2	
238	U	209	No Gas	25.197	ppb	7.4	365721.53	25	100.79	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1689374.47	3.3	1881686.03	89.78	29.5	120.4	
Sc	45	No Gas	3666704.23	4.4	3915123.71	93.65	29.5	120.4	
Sc	45	H2	462592.23	1.6	507902.1	91.08	29.5	120.4	
Sc	45	He	90097.86	1.0	102593	87.82	29.5	120.4	
Ge	72	No Gas	838932.76	3.9	852546.94	98.4	29.5	120.4	
Ge	72	H2	175320.71	0.5	193980.16	90.38	29.5	120.4	
Ge	72	He	70676.39	0.9	77385.19	91.33	29.5	120.4	
Y	89	H2	2988326.74	0.6	3089458.15	96.73	29.5	120.4	
Y	89	He	617170.41	0.6	678154.65	91.01	29.5	120.4	
Tb	159	No Gas	8431175.29	4.1	7727080.72	109.11	29.5	120.4	
Tb	159	He	3338987.00	0.8	3280980.4	101.77	29.5	120.4	
Bi	209	No Gas	4388291.42	3.9	3977089.87	110.34	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:53:45 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.114	ppb	17.4	161.12	0.2	Failed DoD
11	B	6	No Gas	4.118	ppb	3.0	4762.07	4	Fail All Methods□ Failed DoD
23	Na	45	He	10.403	ppb	51.3	10899.59	200	
24	Mg	45	He	-3.044	ppb	N/A	624.50	20	
27	Al	45	He	0.178	ppb	119.6	22.22	20	
28	Si	45	H2	2.593	ppb	49.0	640.72	100	
39	K	45	He	-5.908	ppb	N/A	11222.68	200	
40	Ca	45	H2	12.785	ppb	6.5	6321.64	20	Failed DoD
51	V	89	He	-0.009	ppb	N/A	328.90	1	
52	Cr	89	He	0.013	ppb	44.2	81.99	1	
55	Mn	89	He	0.076	ppb	25.9	50.66	0.4	
56	Fe	89	H2	1.714	ppb	16.5	5407.05	20	
59	Co	89	He	0.062	ppb	14.9	131.12	0.2	
60	Ni	89	He	-0.320	ppb	N/A	140.01	0.4	Failed DoD
63	Cu	89	He	-0.050	ppb	N/A	386.68	0.6	
66	Zn	89	He	0.134	ppb	44.6	94.45	2	
75	As	89	He	0.028	ppb	75.2	11.00	1	
78	Se	89	H2	0.065	ppb	45.7	6.33	1	
88	Sr	89	He	0.081	ppb	9.3	72.23	1	
95	Mo	89	He	0.095	ppb	13.5	85.56	1	
107	Ag	89	He	0.012	ppb	70.1	50.00	0.2	
111	Cd	89	He	0.031	ppb	7.7	12.22	0.2	
118	Sn	159	He	0.221	ppb	24.7	271.12	1	
121	Sb	159	No Gas	0.037	ppb	5.1	286.99	0.2	
137	Ba	159	No Gas	0.262	ppb	25.6	687.45	0.4	Failed DoD
182	W	159	No Gas	0.098	ppb	7.3	493.89	1	
205	Tl	209	No Gas	0.027	ppb	50.0	447.18	0.2	
208	Pb	209	No Gas	0.032	ppb	2.5	717.49	0.2	
232	Th	209	No Gas	0.079	ppb	6.1	1281.50	1	
238	U	209	No Gas	0.029	ppb	29.5	407.12	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659681.52	2.2	1881686.03	88.2	29.5	120.4	
Sc	45	No Gas	3555937.95	4.0	3915123.71	90.83	29.5	120.4	
Sc	45	H2	467410.62	1.2	507902.1	92.03	29.5	120.4	
Sc	45	He	92610.84	1.9	102593	90.27	29.5	120.4	
Ge	72	No Gas	806969.82	1.1	852546.94	94.65	29.5	120.4	
Ge	72	H2	176723.20	1.1	193980.16	91.1	29.5	120.4	
Ge	72	He	72000.16	1.5	77385.19	93.04	29.5	120.4	
Y	89	H2	2998414.01	0.6	3089458.15	97.05	29.5	120.4	
Y	89	He	630186.83	2.3	678154.65	92.93	29.5	120.4	
Tb	159	No Gas	8112064.74	3.6	7727080.72	104.98	29.5	120.4	
Tb	159	He	3367310.89	1.2	3280980.4	102.63	29.5	120.4	
Bi	209	No Gas	4278121.67	3.3	3977089.87	107.57	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW2
File Name	091_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:56:29 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.255	ppb	30.0	91.12	0.5	
B	11	6	No Gas	14.438	ppb	3.6	3990.69	10	PB 6020 Fails DoD
Na	23	45	He	131.081	ppb	53.1	12392.85	500	
Mg	24	45	He	6.219	ppb	617.3	864.57	50	
Al	27	45	He	6.432	ppb	13.9	47.78	50	
Si	28	45	H2	21.659	ppb	36.5	710.81	250	
K	39	45	He	-18.527	ppb	N/A	11186.10	500	
Ca	40	45	H2	40.332	ppb	2.2	4206.34	50	
V	51	89	He	2.306	ppb	6.9	735.60	2.5	
Cr	52	89	He	0.367	ppb	43.1	144.64	2.5	
Mn	55	89	He	1.059	ppb	31.7	118.64	1	PB 6020 Fails DoD
Fe	56	89	H2	64.214	ppb	0.7	24371.21	50	PB 6020 Fails DoD
Co	59	89	He	0.270	ppb	82.6	113.35	0.5	
Ni	60	89	He	-1.048	ppb	N/A	192.23	1	PB 6020 Fails DoD
Cu	63	89	He	1.147	ppb	16.9	770.05	1.5	
Zn	66	89	He	126.628	ppb	1.3	4736.53	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.103	ppb	48.1	9.67	2.5	
Se	78	89	H2	0.291	ppb	32.8	5.67	2.5	
Sr	88	89	He	0.470	ppb	130.9	81.12	2.5	
Mo	95	89	He	0.356	ppb	16.5	63.34	2.5	
Ag	107	89	He	0.050	ppb	47.5	42.22	0.5	
Cd	111	89	He	0.143	ppb	125.8	11.11	0.5	
Sn	118	159	He	2.240	ppb	10.0	477.81	2.5	
Sb	121	159	No Gas	0.078	ppb	5.3	146.83	0.5	
Ba	137	159	No Gas	0.578	ppb	16.6	320.37	1	
W	182	159	No Gas	0.151	ppb	45.2	173.53	2.5	
Tl	205	209	No Gas	-0.010	ppb	N/A	133.48	0.5	
Pb	208	209	No Gas	0.092	ppb	16.0	530.59	0.5	
Th	232	209	No Gas	0.319	ppb	14.1	1084.60	2.5	
U	238	209	No Gas	0.033	ppb	45.3	96.78	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1726122.26	2.8	1881686.03	91.73	29.5	120.4	
Sc	45	No Gas	3634100.22	3.3	3915123.71	92.82	29.5	120.4	
Sc	45	H2	458596.78	0.6	507902.1	90.29	29.5	120.4	
Sc	45	He	91284.15	0.8	102593	88.98	29.5	120.4	
Ge	72	No Gas	834281.64	3.4	852546.94	97.86	29.5	120.4	
Ge	72	H2	172608.37	0.8	193980.16	88.98	29.5	120.4	
Ge	72	He	70825.28	0.5	77385.19	91.52	29.5	120.4	
Y	89	H2	2952154.91	0.3	3089458.15	95.56	29.5	120.4	
Y	89	He	619349.42	0.8	678154.65	91.33	29.5	120.4	
Tb	159	No Gas	8368407.03	3.0	7727080.72	108.3	29.5	120.4	
Tb	159	He	3353448.01	0.6	3280980.4	102.21	29.5	120.4	
Bi	209	No Gas	4411510.78	3.3	3977089.87	110.92	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW2
File Name	092LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 8:59:09 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.948	ppb	6.8	12446.84	50	19.98	79.5	120.4	
B	11	6	No Gas	522.258	ppb	6.5	85338.80	500	20.89	79.5	120.4	
Na	23	45	He	7779.802	ppb	1.0	173294.13	7500	20.75	79.5	120.4	
Mg	24	45	He	5327.160	ppb	1.9	63447.80	5000	21.31	79.5	120.4	
Al	27	45	He	1937.213	ppb	1.1	9132.10	2000	19.37	79.5	120.4	
Si	28	45	H2	1015.181	ppb	3.9	10048.03	1000	20.3	0	200	
K	39	45	He	10082.115	ppb	1.2	123860.61	10000	20.16	79.5	120.4	
Ca	40	45	H2	2611.345	ppb	1.0	220792.90	2500	20.89	79.5	120.4	
V	51	89	He	508.702	ppb	0.2	89827.23	500	20.35	79.5	120.4	
Cr	52	89	He	208.243	ppb	1.3	44649.93	200	20.82	79.5	120.4	
Mn	55	89	He	518.571	ppb	0.2	52980.45	500	20.74	79.5	120.4	
Fe	56	89	H2	1050.463	ppb	1.0	363468.64	1000	21.01	79.5	120.4	
Co	59	89	He	525.564	ppb	0.2	194046.46	500	21.02	79.5	120.4	
Ni	60	89	He	535.812	ppb	0.8	53249.95	500	21.43	79.5	120.4	
Cu	63	89	He	263.065	ppb	1.0	74147.97	250	21.05	79.5	120.4	
Zn	66	89	He	538.700	ppb	2.4	19972.69	500	21.55	79.5	120.4	
As	75	89	He	105.052	ppb	0.7	3351.11	100	21.01	79.5	120.4	
Se	78	89	H2	101.033	ppb	2.2	1697.53	100	20.21	79.5	120.4	
Sr	88	89	He	509.459	ppb	0.5	82120.75	500	20.38	79.5	120.4	
Mo	95	89	He	110.075	ppb	0.9	19043.86	100	22.02	79.5	120.4	
Ag	107	89	He	55.795	ppb	2.1	32531.97	50	22.32	79.5	120.4	
Cd	111	89	He	274.599	ppb	1.1	20810.15	250	21.97	79.5	120.4	
Sn	118	159	He	489.845	ppb	0.4	89975.23	500	19.59	79.5	120.4	
Sb	121	159	No Gas	100.721	ppb	5.5	142282.35	100	20.14	79.5	120.4	
Ba	137	159	No Gas	1976.448	ppb	7.4	1073294.56	2000	19.76	79.5	120.4	
W	182	159	No Gas	105.587	ppb	6.2	107234.35	100	21.12	79.5	120.4	
Tl	205	209	No Gas	105.862	ppb	6.9	238838.90	100	21.17	79.5	120.4	
[Pb]	206	209	No Gas	106.062	ppb	6.6	82810.59	100	21.21	79.5	120.4	
[Pb]	207	209	No Gas	104.658	ppb	7.5	71609.35	100	20.93	79.5	120.4	
Pb	208	209	No Gas	105.384	ppb	6.8	329238.52	100	21.08	79.5	120.4	
Th	232	209	No Gas	105.279	ppb	8.4	330546.69	100	21.06	79.5	120.4	
U	238	209	No Gas	104.790	ppb	7.8	311519.85	100	20.96	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1772289.94	3.2	1881686.03	94.19	29.5	120.4	
Sc	45	No Gas	3723652.66	3.9	3915123.71	95.11	29.5	120.4	
Sc	45	H2	456294.54	0.8	507902.1	89.84	29.5	120.4	
Sc	45	He	91942.99	1.2	102593	89.62	29.5	120.4	
Ge	72	No Gas	856672.05	3.6	852546.94	100.48	29.5	120.4	
Ge	72	H2	173649.76	0.7	193980.16	89.52	29.5	120.4	
Ge	72	He	71667.31	1.1	77385.19	92.61	29.5	120.4	
Y	89	H2	2964505.21	0.4	3089458.15	95.96	29.5	120.4	
Y	89	He	620709.31	0.3	678154.65	91.53	29.5	120.4	
Tb	159	No Gas	8602978.49	3.6	7727080.72	111.34	29.5	120.4	
Tb	159	He	3368324.60	0.8	3280980.4	102.66	29.5	120.4	
Bi	209	No Gas	4494463.53	3.9	3977089.87	113.01	29.5	120.4	

Sample Report

Sample Name SN5920-004

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:01:53 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.304	ppb	46.7	98.89	100	
11	B	6	No Gas	43.324	ppb	3.5	8137.02	1000	
23	Na	45	He	20403.957	ppb	0.5	429652.56	200000	
24	Mg	45	He	7959.959	ppb	1.2	92465.63	200000	
27	Al	45	He	11.869	ppb	14.6	72.23	200000	
28	Si	45	H2	3909.115	ppb	2.5	36403.17	10000	
39	K	45	He	592.723	ppb	1.7	17709.65	200000	
40	Ca	45	H2	14305.575	ppb	0.9	1178004.94	200000	
51	V	89	He	1.940	ppb	23.1	667.82	1000	
52	Cr	89	He	0.304	ppb	18.7	130.65	2000	
55	Mn	89	He	1428.233	ppb	0.6	144760.30	2000	
56	Fe	89	H2	24313.941	ppb	1.5	8243864.09	100000	
59	Co	89	He	22.459	ppb	1.5	8240.84	1000	
60	Ni	89	He	56.809	ppb	2.9	5864.80	1000	
63	Cu	89	He	1.016	ppb	40.4	728.94	2000	
66	Zn	89	He	83.667	ppb	1.1	3134.93	2000	
75	As	89	He	3.101	ppb	4.2	104.34	1000	
78	Se	89	H2	0.265	ppb	56.2	5.17	1000	
88	Sr	89	He	51.396	ppb	1.9	8224.96	2000	
95	Mo	89	He	0.390	ppb	5.5	68.89	1000	
107	Ag	89	He	0.044	ppb	20.4	38.89	100	
111	Cd	89	He	0.074	ppb	23.3	5.93	1000	
118	Sn	159	He	1.620	ppb	6.5	363.35	1000	
121	Sb	159	No Gas	0.150	ppb	14.4	243.61	1000	
137	Ba	159	No Gas	45.357	ppb	2.9	23824.63	2000	
182	W	159	No Gas	1.955	ppb	1.8	1945.67	1000	
205	Tl	209	No Gas	0.056	ppb	57.6	276.98	1000	
208	Pb	209	No Gas	0.198	ppb	9.4	837.62	2000	
232	Th	209	No Gas	0.826	ppb	16.6	2589.85	1000	
238	U	209	No Gas	0.076	ppb	18.5	216.91	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1653630.46	4.0	1881686.03	87.88	29.5	120.4	
Sc	45	No Gas	3590260.39	3.2	3915123.71	91.7	29.5	120.4	
Sc	45	H2	445711.70	1.7	507902.1	87.76	29.5	120.4	
Sc	45	He	90041.95	0.9	102593	87.77	29.5	120.4	
Ge	72	No Gas	829602.37	5.1	852546.94	97.31	29.5	120.4	
Ge	72	H2	169879.22	1.9	193980.16	87.58	29.5	120.4	
Ge	72	He	71095.26	0.8	77385.19	91.87	29.5	120.4	
Y	89	H2	2923739.03	1.4	3089458.15	94.64	29.5	120.4	
Y	89	He	615868.59	0.5	678154.65	90.82	29.5	120.4	
Tb	159	No Gas	8307877.52	4.2	7727080.72	107.52	29.5	120.4	
Tb	159	He	3341051.37	0.8	3280980.4	101.83	29.5	120.4	
Bi	209	No Gas	4323795.78	4.1	3977089.87	108.72	29.5	120.4	

Sample Report

Sample Name PBSNG23IMS1

File Name 094SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:04:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.157	ppb	20.6	65.56	100	
11	B	6	No Gas	9.893	ppb	9.0	3181.57	1000	
23	Na	45	He	38.818	ppb	30.3	10505.46	200000	
24	Mg	45	He	-14.616	ppb	N/A	624.51	200000	
27	Al	45	He	11.073	ppb	24.6	70.00	200000	
28	Si	45	H2	2.574	ppb	471.8	530.60	10000	
39	K	45	He	-37.979	ppb	N/A	11007.67	200000	
40	Ca	45	H2	58.130	ppb	6.0	5703.58	200000	
51	V	89	He	0.831	ppb	34.7	478.91	1000	
52	Cr	89	He	0.752	ppb	10.4	228.63	2000	
55	Mn	89	He	1.782	ppb	8.3	193.30	2000	
56	Fe	89	H2	23.005	ppb	3.3	10261.83	100000	
59	Co	89	He	0.070	ppb	4.5	40.00	1000	
60	Ni	89	He	-0.090	ppb	N/A	287.79	1000	
63	Cu	89	He	0.843	ppb	24.0	687.82	2000	
66	Zn	89	He	8.915	ppb	11.6	398.91	2000	
75	As	89	He	0.100	ppb	98.4	9.67	1000	
78	Se	89	H2	0.062	ppb	98.9	1.83	1000	
88	Sr	89	He	0.287	ppb	19.6	52.23	2000	
95	Mo	89	He	0.238	ppb	8.6	43.34	1000	
107	Ag	89	He	0.027	ppb	57.5	28.89	100	
111	Cd	89	He	0.010	ppb	148.8	1.11	1000	
118	Sn	159	He	46.460	ppb	4.3	8614.15	1000	
121	Sb	159	No Gas	0.047	ppb	21.1	106.78	1000	
137	Ba	159	No Gas	0.822	ppb	20.1	457.18	2000	
182	W	159	No Gas	0.134	ppb	14.7	160.18	1000	
205	Tl	209	No Gas	-0.037	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	0.319	ppb	15.6	1238.08	2000	
232	Th	209	No Gas	0.146	ppb	18.3	560.64	1000	
238	U	209	No Gas	0.017	ppb	71.5	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673286.51	1.5	1881686.03	88.92	29.5	120.4	
Sc	45	No Gas	3645594.24	1.1	3915123.71	93.12	29.5	120.4	
Sc	45	H2	457643.58	1.2	507902.1	90.1	29.5	120.4	
Sc	45	He	91597.85	3.4	102593	89.28	29.5	120.4	
Ge	72	No Gas	833547.51	1.3	852546.94	97.77	29.5	120.4	
Ge	72	H2	170718.00	0.1	193980.16	88.01	29.5	120.4	
Ge	72	He	71213.69	1.8	77385.19	92.02	29.5	120.4	
Y	89	H2	2950924.68	0.7	3089458.15	95.52	29.5	120.4	
Y	89	He	622686.38	3.0	678154.65	91.82	29.5	120.4	
Tb	159	No Gas	8499403.35	1.4	7727080.72	110	29.5	120.4	
Tb	159	He	3377325.30	2.6	3280980.4	102.94	29.5	120.4	
Bi	209	No Gas	4458705.43	1.2	3977089.87	112.11	29.5	120.4	

Sample Report

Sample Name	LCSONG23IMS1
File Name	095SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 9:07:12 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.876	ppb	6.4	12688.20	100	
11	B	6	No Gas	511.384	ppb	4.7	82075.28	1000	
23	Na	45	He	7557.906	ppb	1.4	168900.08	200000	
24	Mg	45	He	5222.103	ppb	0.9	62316.09	200000	
27	Al	45	He	1903.166	ppb	2.5	8984.24	200000	
28	Si	45	H2	995.609	ppb	4.9	9694.07	10000	
39	K	45	He	9743.795	ppb	0.7	120284.86	200000	
40	Ca	45	H2	2672.831	ppb	6.0	221942.71	200000	
51	V	89	He	489.023	ppb	1.3	86977.37	1000	
52	Cr	89	He	202.153	ppb	1.3	43652.98	2000	
55	Mn	89	He	504.938	ppb	0.8	51957.59	2000	
56	Fe	89	H2	1077.429	ppb	5.7	365120.23	100000	
59	Co	89	He	515.692	ppb	1.9	191737.29	1000	
60	Ni	89	He	518.126	ppb	1.1	51867.86	1000	
63	Cu	89	He	252.161	ppb	1.1	71597.08	2000	
66	Zn	89	He	520.331	ppb	0.7	19430.82	2000	
75	As	89	He	102.066	ppb	2.5	3279.42	1000	
78	Se	89	H2	99.385	ppb	5.8	1635.69	1000	
88	Sr	89	He	489.575	ppb	0.9	79478.51	2000	
95	Mo	89	He	103.631	ppb	2.3	18054.71	1000	
107	Ag	89	He	54.081	ppb	1.0	31756.78	100	
111	Cd	89	He	262.491	ppb	0.3	20034.91	1000	
118	Sn	159	He	517.770	ppb	0.4	95632.31	1000	
121	Sb	159	No Gas	97.946	ppb	5.4	138569.78	1000	
137	Ba	159	No Gas	1949.201	ppb	5.4	1060591.34	2000	
182	W	159	No Gas	104.163	ppb	4.7	105980.41	1000	
205	Tl	209	No Gas	104.704	ppb	4.4	235008.59	1000	
208	Pb	209	No Gas	104.342	ppb	4.5	324293.67	2000	
232	Th	209	No Gas	105.785	ppb	4.7	330531.07	1000	
238	U	209	No Gas	104.281	ppb	4.7	308456.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1738836.59	2.2	1881686.03	92.41	29.5	120.4	
Sc	45	No Gas	3716321.37	3.0	3915123.71	94.92	29.5	120.4	
Sc	45	H2	449060.79	5.1	507902.1	88.41	29.5	120.4	
Sc	45	He	92087.16	0.9	102593	89.76	29.5	120.4	
Ge	72	No Gas	847388.57	2.8	852546.94	99.39	29.5	120.4	
Ge	72	H2	169465.82	3.2	193980.16	87.36	29.5	120.4	
Ge	72	He	71509.08	0.8	77385.19	92.41	29.5	120.4	
Y	89	H2	2908617.19	4.4	3089458.15	94.15	29.5	120.4	
Y	89	He	625172.46	1.4	678154.65	92.19	29.5	120.4	
Tb	159	No Gas	8614581.61	3.2	7727080.72	111.49	29.5	120.4	
Tb	159	He	3387212.21	0.7	3280980.4	103.24	29.5	120.4	
Bi	209	No Gas	4467463.92	3.1	3977089.87	112.33	29.5	120.4	

Sample Report

Sample Name LC2ONG23IMS1

File Name 096SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:09:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.664	ppb	7.0	12623.70	100	
11	B	6	No Gas	525.700	ppb	4.9	84237.57	1000	
23	Na	45	He	7774.186	ppb	1.2	172125.32	200000	
24	Mg	45	He	5406.320	ppb	0.9	63994.60	200000	
27	Al	45	He	1983.993	ppb	4.5	9295.57	200000	
28	Si	45	H2	963.106	ppb	4.4	9567.14	10000	
39	K	45	He	10201.740	ppb	0.8	124438.90	200000	
40	Ca	45	H2	2657.347	ppb	0.5	224886.14	200000	
51	V	89	He	509.427	ppb	0.4	90259.07	1000	
52	Cr	89	He	211.785	ppb	0.5	45560.62	2000	
55	Mn	89	He	523.429	ppb	0.6	53658.34	2000	
56	Fe	89	H2	1077.878	ppb	0.9	373355.45	100000	
59	Co	89	He	529.855	ppb	0.5	196293.77	1000	
60	Ni	89	He	537.945	ppb	0.8	53641.35	1000	
63	Cu	89	He	263.054	ppb	0.5	74394.98	2000	
66	Zn	89	He	531.026	ppb	1.5	19755.67	2000	
75	As	89	He	105.182	ppb	3.8	3366.44	1000	
78	Se	89	H2	99.133	ppb	1.3	1667.69	1000	
88	Sr	89	He	509.971	ppb	0.7	82481.73	2000	
95	Mo	89	He	109.021	ppb	2.4	18925.87	1000	
107	Ag	89	He	55.079	ppb	1.3	32224.62	100	
111	Cd	89	He	273.058	ppb	0.7	20762.66	1000	
118	Sn	159	He	537.814	ppb	0.3	98773.48	1000	
121	Sb	159	No Gas	99.333	ppb	5.4	140360.93	1000	
137	Ba	159	No Gas	1990.937	ppb	5.8	1081859.51	2000	
182	W	159	No Gas	106.065	ppb	7.4	107725.41	1000	
205	Tl	209	No Gas	105.633	ppb	5.4	237779.93	1000	
208	Pb	209	No Gas	105.312	ppb	5.4	328256.88	2000	
232	Th	209	No Gas	107.356	ppb	7.9	336267.11	1000	
238	U	209	No Gas	105.587	ppb	7.6	313105.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1736867.39	1.8	1881686.03	92.3	29.5	120.4	
Sc	45	No Gas	3720985.75	3.1	3915123.71	95.04	29.5	120.4	
Sc	45	H2	456731.87	0.7	507902.1	89.93	29.5	120.4	
Sc	45	He	91385.12	1.0	102593	89.08	29.5	120.4	
Ge	72	No Gas	847855.64	2.5	852546.94	99.45	29.5	120.4	
Ge	72	H2	172703.85	2.2	193980.16	89.03	29.5	120.4	
Ge	72	He	71425.25	1.0	77385.19	92.3	29.5	120.4	
Y	89	H2	2968220.59	0.4	3089458.15	96.08	29.5	120.4	
Y	89	He	622802.44	0.6	678154.65	91.84	29.5	120.4	
Tb	159	No Gas	8602238.55	2.7	7727080.72	111.33	29.5	120.4	
Tb	159	He	3368129.99	0.5	3280980.4	102.66	29.5	120.4	
Bi	209	No Gas	4481055.90	3.0	3977089.87	112.67	29.5	120.4	

Sample Report

Sample Name SN6056-005

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:12:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.242	ppb	10.1	328.90	100	
11	B	6	No Gas	41.368	ppb	4.1	8138.14	1000	
23	Na	45	He	165.189	ppb	2.6	13013.56	200000	
24	Mg	45	He	14986.241	ppb	0.6	174491.74	200000	
27	Al	45	He	19690.082	ppb	1.5	91294.90	200000	
28	Si	45	H2	3646.233	ppb	3.0	34314.54	10000	
39	K	45	He	3835.671	ppb	0.9	53445.25	200000	
40	Ca	45	H2	29789.383	ppb	0.6	2476217.41	200000	
51	V	89	He	40.807	ppb	2.0	7547.84	1000	
52	Cr	89	He	50.885	ppb	1.1	11014.98	2000	
55	Mn	89	He	2631.181	ppb	0.5	270103.11	2000	
56	Fe	89	H2	53417.445	ppb	0.6	18521197.00	100000	
59	Co	89	He	15.360	ppb	3.3	5712.70	1000	
60	Ni	89	He	45.245	ppb	3.3	4790.99	1000	
63	Cu	89	He	84.940	ppb	0.4	24366.33	2000	
66	Zn	89	He	321.668	ppb	0.5	12012.21	2000	
75	As	89	He	30.180	ppb	3.1	972.14	1000	
78	Se	89	H2	1.703	ppb	16.6	29.67	1000	
88	Sr	89	He	40.270	ppb	2.6	6529.56	2000	
95	Mo	89	He	13.966	ppb	3.1	2430.31	1000	
107	Ag	89	He	0.203	ppb	18.0	132.23	100	
111	Cd	89	He	1.785	ppb	4.2	136.30	1000	
118	Sn	159	He	43.999	ppb	4.0	8137.21	1000	
121	Sb	159	No Gas	9.706	ppb	5.0	13742.35	1000	
137	Ba	159	No Gas	195.912	ppb	3.5	106427.46	2000	
182	W	159	No Gas	0.402	ppb	18.8	433.83	1000	
205	Tl	209	No Gas	0.918	ppb	4.0	2262.74	1000	
208	Pb	209	No Gas	439.471	ppb	4.9	1392529.55	2000	
232	Th	209	No Gas	7.959	ppb	6.0	25464.36	1000	
238	U	209	No Gas	3.824	ppb	1.4	11544.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1714775.08	1.8	1881686.03	91.13	29.5	120.4	
Sc	45	No Gas	3688516.51	2.2	3915123.71	94.21	29.5	120.4	
Sc	45	H2	450026.56	1.2	507902.1	88.6	29.5	120.4	
Sc	45	He	90610.18	1.5	102593	88.32	29.5	120.4	
Ge	72	No Gas	851528.79	2.0	852546.94	99.88	29.5	120.4	
Ge	72	H2	170132.53	1.8	193980.16	87.71	29.5	120.4	
Ge	72	He	70639.53	0.9	77385.19	91.28	29.5	120.4	
Y	89	H2	2989976.12	0.6	3089458.15	96.78	29.5	120.4	
Y	89	He	623788.80	0.6	678154.65	91.98	29.5	120.4	
Tb	159	No Gas	8593654.87	2.0	7727080.72	111.21	29.5	120.4	
Tb	159	He	3365674.12	0.4	3280980.4	102.58	29.5	120.4	
Bi	209	No Gas	4556268.14	2.2	3977089.87	114.56	29.5	120.4	

Sample Report

Sample Name SN6056-006

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:15:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.661	ppb	19.6	617.82	100	
11	B	6	No Gas	97.894	ppb	5.7	15583.34	1000	
23	Na	45	He	780.590	ppb	4.7	24628.51	200000	
24	Mg	45	He	182252.786	ppb	0.8	2020188.32	200000	
27	Al	45	He	36844.057	ppb	0.3	163314.39	200000	
28	Si	45	H2	3997.661	ppb	0.8	35928.81	10000	
39	K	45	He	11674.652	ppb	1.1	133414.49	200000	
40	Ca	45	H2	1283456.027	ppb	3.0	101960921.82	200000	>LDR
51	V	89	He	91.048	ppb	1.4	16168.70	1000	
52	Cr	89	He	102.036	ppb	0.6	21670.03	2000	
55	Mn	89	He	3397.687	ppb	0.4	343244.48	2000	
56	Fe	89	H2	225155.499	ppb	2.5	75821730.73	100000	
59	Co	89	He	19.915	ppb	4.5	7284.68	1000	
60	Ni	89	He	87.929	ppb	4.2	8887.58	1000	
63	Cu	89	He	147.773	ppb	1.5	41385.37	2000	
66	Zn	89	He	966.916	ppb	1.2	35396.81	2000	
75	As	89	He	41.922	ppb	2.3	1326.21	1000	
78	Se	89	H2	2.578	ppb	7.5	43.17	1000	
88	Sr	89	He	744.892	ppb	0.4	118745.40	2000	
95	Mo	89	He	5.801	ppb	6.1	994.52	1000	
107	Ag	89	He	1.965	ppb	0.7	1145.65	100	
111	Cd	89	He	2.403	ppb	12.6	180.37	1000	
118	Sn	159	He	53.437	ppb	1.4	9625.99	1000	
121	Sb	159	No Gas	8.425	ppb	4.8	11788.30	1000	
137	Ba	159	No Gas	423.706	ppb	5.2	227298.77	2000	
182	W	159	No Gas	1.321	ppb	12.6	1351.58	1000	
205	Tl	209	No Gas	1.284	ppb	6.6	2930.28	1000	
208	Pb	209	No Gas	988.764	ppb	5.8	2962426.64	2000	
232	Th	209	No Gas	11.671	ppb	8.1	35262.19	1000	
238	U	209	No Gas	5.640	ppb	5.0	16098.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1582390.56	2.7	1881686.03	84.09	29.5	120.4	
Sc	45	No Gas	3568822.71	3.0	3915123.71	91.15	29.5	120.4	
Sc	45	H2	430400.52	1.8	507902.1	84.74	29.5	120.4	
Sc	45	He	86619.69	1.0	102593	84.43	29.5	120.4	
Ge	72	No Gas	810094.40	3.2	852546.94	95.02	29.5	120.4	
Ge	72	H2	158410.88	3.4	193980.16	81.66	29.5	120.4	
Ge	72	He	67286.09	0.8	77385.19	86.95	29.5	120.4	
Y	89	H2	2905327.49	2.2	3089458.15	94.04	29.5	120.4	
Y	89	He	613879.65	1.0	678154.65	90.52	29.5	120.4	
Tb	159	No Gas	8491050.78	2.7	7727080.72	109.89	29.5	120.4	
Tb	159	He	3282628.25	0.9	3280980.4	100.05	29.5	120.4	
Bi	209	No Gas	4310839.65	3.2	3977089.87	108.39	29.5	120.4	

Sample Report

Sample Name SN6056-007

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:17:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.825	ppb	10.4	434.47	100	
11	B	6	No Gas	55.632	ppb	5.4	9595.72	1000	
23	Na	45	He	610.407	ppb	2.3	21596.87	200000	
24	Mg	45	He	70311.402	ppb	0.6	792231.65	200000	
27	Al	45	He	15065.722	ppb	0.6	67849.25	200000	
28	Si	45	H2	3416.974	ppb	2.3	31003.25	10000	
39	K	45	He	4148.867	ppb	1.0	55247.62	200000	
40	Ca	45	H2	1910968.419	ppb	1.5	152982578.83	200000	>LDR
51	V	89	He	60.829	ppb	1.8	11046.91	1000	
52	Cr	89	He	145.390	ppb	1.5	31233.21	2000	
55	Mn	89	He	4130.941	ppb	1.4	422499.18	2000	
56	Fe	89	H2	441167.334	ppb	0.6	151631916.58	100000	
59	Co	89	He	41.670	ppb	2.3	15420.67	1000	
60	Ni	89	He	156.205	ppb	5.8	15749.35	1000	
63	Cu	89	He	275.398	ppb	1.5	77699.70	2000	
66	Zn	89	He	937.939	ppb	2.2	34765.26	2000	
75	As	89	He	59.922	ppb	2.2	1916.68	1000	
78	Se	89	H2	2.028	ppb	9.4	34.83	1000	
88	Sr	89	He	1174.226	ppb	1.5	189509.13	2000	
95	Mo	89	He	29.347	ppb	3.4	5084.47	1000	
107	Ag	89	He	1.436	ppb	2.9	851.17	100	
111	Cd	89	He	3.115	ppb	5.6	236.67	1000	
118	Sn	159	He	75.839	ppb	1.3	13754.13	1000	
121	Sb	159	No Gas	18.876	ppb	4.4	26482.52	1000	
137	Ba	159	No Gas	269.868	ppb	3.9	145444.76	2000	
182	W	159	No Gas	2.586	ppb	11.1	2629.89	1000	
205	Tl	209	No Gas	1.154	ppb	9.7	2659.93	1000	
208	Pb	209	No Gas	1952.879	ppb	3.1	5875377.96	2000	
232	Th	209	No Gas	6.352	ppb	5.6	19323.07	1000	
238	U	209	No Gas	8.376	ppb	2.5	24003.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1589927.02	0.9	1881686.03	84.49	29.5	120.4	
Sc	45	No Gas	3553926.93	0.3	3915123.71	90.77	29.5	120.4	
Sc	45	H2	433589.04	1.5	507902.1	85.37	29.5	120.4	
Sc	45	He	87993.54	0.4	102593	85.77	29.5	120.4	
Ge	72	No Gas	809405.18	1.1	852546.94	94.94	29.5	120.4	
Ge	72	H2	159976.36	1.6	193980.16	82.47	29.5	120.4	
Ge	72	He	67876.83	0.4	77385.19	87.71	29.5	120.4	
Y	89	H2	2964275.52	1.0	3089458.15	95.95	29.5	120.4	
Y	89	He	621552.98	1.1	678154.65	91.65	29.5	120.4	
Tb	159	No Gas	8523378.41	0.5	7727080.72	110.31	29.5	120.4	
Tb	159	He	3311920.82	0.8	3280980.4	100.94	29.5	120.4	
Bi	209	No Gas	4324204.52	0.6	3977089.87	108.73	29.5	120.4	

Sample Report

Sample Name SN6056-008

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:20:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.423	ppb	3.3	128.89	100	
11	B	6	No Gas	27.779	ppb	7.6	5922.53	1000	
23	Na	45	He	40.118	ppb	72.9	10538.96	200000	
24	Mg	45	He	3075.105	ppb	1.7	36845.10	200000	
27	Al	45	He	4724.906	ppb	3.4	22171.19	200000	
28	Si	45	H2	2274.353	ppb	1.4	21972.06	10000	
39	K	45	He	1022.221	ppb	0.9	22796.16	200000	
40	Ca	45	H2	23266.945	ppb	1.0	1968389.29	200000	
51	V	89	He	13.336	ppb	3.3	2705.92	1000	
52	Cr	89	He	14.773	ppb	4.5	3263.13	2000	
55	Mn	89	He	525.311	ppb	2.7	54233.65	2000	
56	Fe	89	H2	28095.673	ppb	1.7	9884839.91	100000	
59	Co	89	He	5.132	ppb	1.0	1929.18	1000	
60	Ni	89	He	21.587	ppb	5.2	2454.75	1000	
63	Cu	89	He	56.182	ppb	3.6	16357.86	2000	
66	Zn	89	He	632.864	ppb	3.1	23695.32	2000	
75	As	89	He	65.296	ppb	1.9	2107.39	1000	
78	Se	89	H2	1.785	ppb	9.3	31.50	1000	
88	Sr	89	He	35.618	ppb	3.6	5806.99	2000	
95	Mo	89	He	10.201	ppb	1.3	1785.74	1000	
107	Ag	89	He	0.189	ppb	30.0	124.45	100	
111	Cd	89	He	2.485	ppb	2.4	190.75	1000	
118	Sn	159	He	42.787	ppb	2.0	8014.89	1000	
121	Sb	159	No Gas	11.969	ppb	6.2	17327.02	1000	
137	Ba	159	No Gas	76.890	ppb	7.6	42723.01	2000	
182	W	159	No Gas	0.402	ppb	13.4	443.84	1000	
205	Tl	209	No Gas	0.244	ppb	32.8	730.84	1000	
208	Pb	209	No Gas	1738.677	ppb	5.5	5619861.37	2000	
232	Th	209	No Gas	1.567	ppb	3.3	5206.92	1000	
238	U	209	No Gas	3.626	ppb	7.2	11160.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1684418.78	2.4	1881686.03	89.52	29.5	120.4	
Sc	45	No Gas	3775837.58	3.0	3915123.71	96.44	29.5	120.4	
Sc	45	H2	458011.18	0.5	507902.1	90.18	29.5	120.4	
Sc	45	He	91640.30	0.6	102593	89.32	29.5	120.4	
Ge	72	No Gas	853009.85	3.0	852546.94	100.05	29.5	120.4	
Ge	72	H2	172488.68	0.1	193980.16	88.92	29.5	120.4	
Ge	72	He	70969.84	1.0	77385.19	91.71	29.5	120.4	
Y	89	H2	3033934.97	1.0	3089458.15	98.2	29.5	120.4	
Y	89	He	627382.22	1.6	678154.65	92.51	29.5	120.4	
Tb	159	No Gas	8797203.55	3.1	7727080.72	113.85	29.5	120.4	
Tb	159	He	3408449.22	1.7	3280980.4	103.89	29.5	120.4	
Bi	209	No Gas	4650314.52	3.0	3977089.87	116.93	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 9:23:27 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.760	ppb	5.6	30222.28	25	103.04	89.8	110.2	
11	B	6	No Gas	26.558	ppb	5.4	21716.91	25	106.23	89.8	110.2	
23	Na	45	He	5139.957	ppb	0.4	557688.13	5000	102.8	89.8	110.2	
24	Mg	45	He	4990.292	ppb	0.2	298349.02	5000	99.81	89.8	110.2	
27	Al	45	He	481.010	ppb	1.5	11489.45	500	96.2	89.8	110.2	
28	Si	45	H2	458.311	ppb	0.9	22713.35	500	91.66	89.8	110.2	
39	K	45	He	4812.529	ppb	1.2	283597.41	5000	96.25	89.8	110.2	
40	Ca	45	H2	4905.797	ppb	1.2	2129522.14	5000	98.12	89.8	110.2	
51	V	89	He	24.408	ppb	1.1	22234.82	25	97.63	89.8	110.2	
52	Cr	89	He	24.882	ppb	1.6	27226.51	25	99.53	89.8	110.2	
55	Mn	89	He	25.227	ppb	0.8	13150.41	25	100.91	89.8	110.2	
56	Fe	89	H2	4861.829	ppb	0.6	8560618.13	5000	97.24	89.8	110.2	
59	Co	89	He	24.880	ppb	1.7	46849.73	25	99.52	89.8	110.2	
60	Ni	89	He	25.225	ppb	1.2	13013.14	25	100.9	89.8	110.2	
63	Cu	89	He	25.505	ppb	1.9	36887.32	25	102.02	89.8	110.2	
66	Zn	89	He	25.582	ppb	3.3	4887.71	25	102.33	89.8	110.2	
75	As	89	He	24.709	ppb	1.9	4018.02	25	98.84	89.8	110.2	
78	Se	89	H2	23.935	ppb	0.6	2059.39	25	95.74	89.8	110.2	
88	Sr	89	He	24.057	ppb	0.9	19775.95	25	96.23	89.8	110.2	
95	Mo	89	He	26.003	ppb	0.9	22936.55	25	104.01	89.8	110.2	
107	Ag	89	He	26.181	ppb	1.0	77810.50	25	104.72	89.8	110.2	
111	Cd	89	He	25.579	ppb	1.4	9883.68	25	102.32	89.8	110.2	
118	Sn	159	He	23.333	ppb	0.4	21780.53	25	93.33	89.8	110.2	
121	Sb	159	No Gas	23.926	ppb	8.0	169871.08	25	95.7	89.8	110.2	
137	Ba	159	No Gas	24.678	ppb	7.2	67411.68	25	98.71	89.8	110.2	
182	W	159	No Gas	24.684	ppb	6.6	126055.00	25	98.74	89.8	110.2	
205	Tl	209	No Gas	24.761	ppb	6.0	279175.38	25	99.04	89.8	110.2	
208	Pb	209	No Gas	25.105	ppb	5.3	392010.35	25	100.42	89.8	110.2	
232	Th	209	No Gas	25.037	ppb	6.7	392957.65	25	100.15	89.8	110.2	
238	U	209	No Gas	25.017	ppb	6.4	371752.40	25	100.07	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1670376.66	2.3	1881686.03	88.77	29.5	120.4	
Sc	45	No Gas	3779929.07	3.3	3915123.71	96.55	29.5	120.4	
Sc	45	H2	470005.40	0.3	507902.1	92.54	29.5	120.4	
Sc	45	He	93214.35	0.6	102593	90.86	29.5	120.4	
Ge	72	No Gas	859263.59	3.2	852546.94	100.79	29.5	120.4	
Ge	72	H2	177623.73	0.8	193980.16	91.57	29.5	120.4	
Ge	72	He	72862.72	0.7	77385.19	94.16	29.5	120.4	
Y	89	H2	3036331.67	0.2	3089458.15	98.28	29.5	120.4	
Y	89	He	632974.98	1.2	678154.65	93.34	29.5	120.4	
Tb	159	No Gas	8651540.01	3.3	7727080.72	111.96	29.5	120.4	
Tb	159	He	3415172.03	0.9	3280980.4	104.09	29.5	120.4	
Bi	209	No Gas	4490715.71	3.4	3977089.87	112.91	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 9:26:04 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.079	ppb	25.8	123.34	0.2	
11	B	6	No Gas	1.034	ppb	6.8	2508.08	4	
23	Na	45	He	-24.951	ppb	N/A	7293.33	200	
24	Mg	45	He	-4.311	ppb	N/A	560.05	20	
27	Al	45	He	1.081	ppb	38.7	44.45	20	
28	Si	45	H2	1.546	ppb	66.7	584.00	100	
39	K	45	He	-13.054	ppb	N/A	11026.01	200	
40	Ca	45	H2	28.158	ppb	7.6	12808.43	20	Fail All Methods□ Failed DoD
51	V	89	He	-0.234	ppb	N/A	131.12	1	
52	Cr	89	He	-0.013	ppb	N/A	54.66	1	
55	Mn	89	He	0.147	ppb	12.2	89.32	0.4	
56	Fe	89	H2	10.360	ppb	3.9	20116.78	20	Failed DoD
59	Co	89	He	0.026	ppb	39.2	64.45	0.2	
60	Ni	89	He	-0.325	ppb	N/A	141.12	0.4	Failed DoD
63	Cu	89	He	-0.094	ppb	N/A	331.13	0.6	
66	Zn	89	He	0.041	ppb	268.2	78.89	2	
75	As	89	He	-0.010	ppb	N/A	5.00	1	
78	Se	89	H2	0.032	ppb	44.4	3.50	1	
88	Sr	89	He	0.022	ppb	74.3	24.45	1	
95	Mo	89	He	0.079	ppb	28.9	73.33	1	
107	Ag	89	He	0.007	ppb	49.8	34.44	0.2	
111	Cd	89	He	0.008	ppb	51.0	3.70	0.2	
118	Sn	159	He	0.066	ppb	26.0	131.12	1	
121	Sb	159	No Gas	0.023	ppb	39.0	200.22	0.2	
137	Ba	159	No Gas	0.109	ppb	3.6	300.34	0.4	
182	W	159	No Gas	0.052	ppb	9.6	280.32	1	
205	Tl	209	No Gas	0.014	ppb	94.7	307.01	0.2	
208	Pb	209	No Gas	0.132	ppb	18.2	2232.59	0.2	Failed DoD
232	Th	209	No Gas	0.071	ppb	18.1	1174.70	1	
238	U	209	No Gas	0.024	ppb	38.3	340.39	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1700512.18	0.6	1881686.03	90.37	29.5	120.4	
Sc	45	No Gas	3738340.21	1.1	3915123.71	95.48	29.5	120.4	
Sc	45	H2	462939.45	4.1	507902.1	91.15	29.5	120.4	
Sc	45	He	94322.98	0.6	102593	91.94	29.5	120.4	
Ge	72	No Gas	849878.94	0.4	852546.94	99.69	29.5	120.4	
Ge	72	H2	175074.37	3.4	193980.16	90.25	29.5	120.4	
Ge	72	He	74067.55	0.3	77385.19	95.71	29.5	120.4	
Y	89	H2	2953551.02	3.4	3089458.15	95.6	29.5	120.4	
Y	89	He	645946.68	0.5	678154.65	95.25	29.5	120.4	
Tb	159	No Gas	8327979.18	1.2	7727080.72	107.78	29.5	120.4	
Tb	159	He	3413818.60	0.4	3280980.4	104.05	29.5	120.4	
Bi	209	No Gas	4327720.90	0.9	3977089.87	108.82	29.5	120.4	

Sample Report

Sample Name SN6056-009

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:28:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.384	ppb	18.4	360.02	100	
11	B	6	No Gas	47.332	ppb	9.4	9010.91	1000	
23	Na	45	He	185.309	ppb	9.1	13862.06	200000	
24	Mg	45	He	17446.475	ppb	1.4	209531.15	200000	
27	Al	45	He	27083.394	ppb	1.2	129620.61	200000	
28	Si	45	H2	3358.929	ppb	2.2	33130.10	10000	
39	K	45	He	5519.992	ppb	1.3	74262.91	200000	
40	Ca	45	H2	42983.212	ppb	0.3	3740240.57	200000	
51	V	89	He	55.934	ppb	0.6	10594.34	1000	
52	Cr	89	He	48.285	ppb	1.3	10835.54	2000	
55	Mn	89	He	886.085	ppb	1.0	94274.81	2000	
56	Fe	89	H2	54767.197	ppb	0.8	19737202.34	100000	
59	Co	89	He	24.395	ppb	0.4	9394.90	1000	
60	Ni	89	He	77.650	ppb	2.4	8300.51	1000	
63	Cu	89	He	156.129	ppb	1.4	46021.10	2000	
66	Zn	89	He	1038.700	ppb	1.4	40039.38	2000	
75	As	89	He	47.100	ppb	1.2	1568.60	1000	
78	Se	89	H2	2.433	ppb	6.2	43.67	1000	
88	Sr	89	He	63.938	ppb	1.1	10740.15	2000	
95	Mo	89	He	11.361	ppb	2.7	2049.11	1000	
107	Ag	89	He	0.444	ppb	15.5	283.35	100	
111	Cd	89	He	4.421	ppb	6.2	349.27	1000	
118	Sn	159	He	47.389	ppb	3.0	8907.71	1000	
121	Sb	159	No Gas	8.533	ppb	11.0	11925.20	1000	
137	Ba	159	No Gas	201.850	ppb	15.0	107899.98	2000	
182	W	159	No Gas	0.594	ppb	14.5	620.71	1000	
205	Tl	209	No Gas	1.404	ppb	8.1	3294.13	1000	
208	Pb	209	No Gas	2390.653	ppb	12.5	7371813.61	2000	
232	Th	209	No Gas	10.257	ppb	15.9	31859.55	1000	
238	U	209	No Gas	4.130	ppb	15.1	12112.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1709425.33	6.1	1881686.03	90.85	29.5	120.4	
Sc	45	No Gas	3783529.96	9.1	3915123.71	96.64	29.5	120.4	
Sc	45	H2	471157.20	0.6	507902.1	92.77	29.5	120.4	
Sc	45	He	93524.95	0.9	102593	91.16	29.5	120.4	
Ge	72	No Gas	850726.88	5.7	852546.94	99.79	29.5	120.4	
Ge	72	H2	176773.40	0.8	193980.16	91.13	29.5	120.4	
Ge	72	He	72937.16	0.6	77385.19	94.25	29.5	120.4	
Y	89	H2	3107755.12	0.5	3089458.15	100.59	29.5	120.4	
Y	89	He	646469.94	0.6	678154.65	95.33	29.5	120.4	
Tb	159	No Gas	8522544.60	8.4	7727080.72	110.29	29.5	120.4	
Tb	159	He	3423105.61	0.8	3280980.4	104.33	29.5	120.4	
Bi	209	No Gas	4462001.90	8.3	3977089.87	112.19	29.5	120.4	

Sample Report

Sample Name SN6056-009L

File Name 104SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:31:29 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.276	ppb	28.3	136.67	100	
11	B	6	No Gas	63.468	ppb	9.5	3642.81	1000	
23	Na	45	He	-336.769	ppb	N/A	8468.59	200000	
24	Mg	45	He	17790.151	ppb	1.1	43434.78	200000	
27	Al	45	He	28003.273	ppb	1.7	26848.22	200000	
28	Si	45	H2	3381.360	ppb	7.1	7179.91	10000	
39	K	45	He	5658.160	ppb	2.9	24531.78	200000	
40	Ca	45	H2	44813.788	ppb	0.3	790790.13	200000	
51	V	89	He	55.303	ppb	2.8	2353.62	1000	
52	Cr	89	He	51.030	ppb	0.6	2327.11	2000	
55	Mn	89	He	929.344	ppb	3.8	19629.39	2000	
56	Fe	89	H2	57254.668	ppb	1.2	4138201.02	100000	
59	Co	89	He	25.270	ppb	6.5	1942.51	1000	
60	Ni	89	He	73.287	ppb	8.4	1803.52	1000	
63	Cu	89	He	161.060	ppb	1.6	9791.54	2000	
66	Zn	89	He	1169.396	ppb	2.1	9000.99	2000	
75	As	89	He	49.354	ppb	4.1	331.37	1000	
78	Se	89	H2	2.973	ppb	21.9	11.33	1000	
88	Sr	89	He	65.866	ppb	3.9	2200.26	2000	
95	Mo	89	He	13.215	ppb	9.2	474.47	1000	
107	Ag	89	He	0.366	ppb	29.2	57.78	100	
111	Cd	89	He	4.826	ppb	15.6	75.93	1000	
118	Sn	159	He	50.154	ppb	1.6	1922.44	1000	
121	Sb	159	No Gas	9.704	ppb	8.9	2669.91	1000	
137	Ba	159	No Gas	215.083	ppb	6.2	22443.83	2000	
182	W	159	No Gas	0.709	ppb	21.6	163.52	1000	
205	Tl	209	No Gas	1.231	ppb	6.1	694.13	1000	
208	Pb	209	No Gas	2689.185	ppb	3.8	1632639.84	2000	
232	Th	209	No Gas	10.807	ppb	9.7	6692.67	1000	
238	U	209	No Gas	4.531	ppb	5.1	2619.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1691616.99	2.3	1881686.03	89.9	29.5	120.4	
Sc	45	No Gas	3694766.82	4.1	3915123.71	94.37	29.5	120.4	
Sc	45	H2	477343.27	0.4	507902.1	93.98	29.5	120.4	
Sc	45	He	93633.81	1.1	102593	91.27	29.5	120.4	
Ge	72	No Gas	847935.33	2.2	852546.94	99.46	29.5	120.4	
Ge	72	H2	182362.48	1.5	193980.16	94.01	29.5	120.4	
Ge	72	He	73458.09	0.6	77385.19	94.93	29.5	120.4	
Y	89	H2	3115087.87	0.8	3089458.15	100.83	29.5	120.4	
Y	89	He	641499.18	0.7	678154.65	94.59	29.5	120.4	
Tb	159	No Gas	8256563.62	3.1	7727080.72	106.85	29.5	120.4	
Tb	159	He	3390739.26	1.3	3280980.4	103.35	29.5	120.4	
Bi	209	No Gas	4365545.50	3.2	3977089.87	109.77	29.5	120.4	

Sample Report

Sample Name SN6056-009A

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:34:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.691	ppb	1.7	2854.83	100	
11	B	6	No Gas	247.733	ppb	6.2	40244.75	1000	
23	Na	45	He	11098.209	ppb	4.8	243029.83	200000	
24	Mg	45	He	19699.254	ppb	5.4	232398.24	200000	
27	Al	45	He	29854.051	ppb	5.8	140390.09	200000	
28	Si	45	H2	8196.040	ppb	0.9	79886.06	10000	
39	K	45	He	16127.874	ppb	5.4	191203.78	200000	
40	Ca	45	H2	45903.769	ppb	0.6	3984125.60	200000	
51	V	89	He	111.111	ppb	4.7	20434.33	1000	
52	Cr	89	He	103.086	ppb	6.4	22740.15	2000	
55	Mn	89	He	964.596	ppb	5.0	101262.25	2000	
56	Fe	89	H2	58208.087	ppb	0.4	20920100.20	100000	
59	Co	89	He	35.461	ppb	5.2	13467.43	1000	
60	Ni	89	He	104.948	ppb	3.4	10970.23	1000	
63	Cu	89	He	195.882	ppb	4.8	56858.84	2000	
66	Zn	89	He	1205.951	ppb	4.8	45860.87	2000	
75	As	89	He	98.862	ppb	6.8	3239.74	1000	
78	Se	89	H2	51.485	ppb	3.0	904.82	1000	
88	Sr	89	He	117.388	ppb	4.2	19454.42	2000	
95	Mo	89	He	63.839	ppb	4.8	11352.87	1000	
107	Ag	89	He	11.766	ppb	3.8	7064.30	100	
111	Cd	89	He	16.340	ppb	4.6	1273.04	1000	
118	Sn	159	He	100.786	ppb	6.1	18537.78	1000	
121	Sb	159	No Gas	18.705	ppb	4.9	26432.24	1000	
137	Ba	159	No Gas	222.037	ppb	6.5	120517.49	2000	
182	W	159	No Gas	50.803	ppb	4.5	51573.47	1000	
205	Tl	209	No Gas	11.727	ppb	5.7	26477.03	1000	
208	Pb	209	No Gas	2432.660	ppb	6.2	7559345.04	2000	
232	Th	209	No Gas	20.719	ppb	5.7	64866.72	1000	
238	U	209	No Gas	14.453	ppb	7.1	42771.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1720776.88	1.5	1881686.03	91.45	29.5	120.4	
Sc	45	No Gas	3837075.69	1.7	3915123.71	98.01	29.5	120.4	
Sc	45	H2	469949.81	0.7	507902.1	92.53	29.5	120.4	
Sc	45	He	92048.91	4.4	102593	89.72	29.5	120.4	
Ge	72	No Gas	866438.17	1.6	852546.94	101.63	29.5	120.4	
Ge	72	H2	177924.58	0.5	193980.16	91.72	29.5	120.4	
Ge	72	He	71725.66	3.7	77385.19	92.69	29.5	120.4	
Y	89	H2	3099331.33	0.6	3089458.15	100.32	29.5	120.4	
Y	89	He	638712.89	4.0	678154.65	94.18	29.5	120.4	
Tb	159	No Gas	8587976.68	1.4	7727080.72	111.14	29.5	120.4	
Tb	159	He	3368812.21	4.3	3280980.4	102.68	29.5	120.4	
Bi	209	No Gas	4469695.37	2.1	3977089.87	112.39	29.5	120.4	

Sample Report

Sample Name SN6056-009S

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:36:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.483	ppb	5.5	12296.72	100	
11	B	6	No Gas	537.816	ppb	5.3	82583.77	1000	
23	Na	45	He	7583.366	ppb	2.1	165913.61	200000	
24	Mg	45	He	34757.297	ppb	1.2	401704.44	200000	
27	Al	45	He	41522.137	ppb	1.2	191590.65	200000	
28	Si	45	H2	3545.999	ppb	3.2	33598.28	10000	
39	K	45	He	17229.525	ppb	0.6	199630.91	200000	
40	Ca	45	H2	180713.085	ppb	0.9	15114731.30	200000	
51	V	89	He	533.408	ppb	1.2	95986.13	1000	
52	Cr	89	He	249.679	ppb	1.0	54550.70	2000	
55	Mn	89	He	1621.165	ppb	1.1	168789.91	2000	
56	Fe	89	H2	67947.517	ppb	0.6	23935734.47	100000	
59	Co	89	He	502.820	ppb	1.4	189216.25	1000	
60	Ni	89	He	575.420	ppb	0.9	58265.20	1000	
63	Cu	89	He	390.376	ppb	1.5	111922.86	2000	
66	Zn	89	He	1512.929	ppb	1.0	57044.03	2000	
75	As	89	He	140.415	ppb	0.8	4563.25	1000	
78	Se	89	H2	92.841	ppb	1.6	1598.52	1000	
88	Sr	89	He	758.949	ppb	1.2	124687.53	2000	
95	Mo	89	He	108.722	ppb	0.3	19172.96	1000	
107	Ag	89	He	50.906	ppb	1.0	30254.46	100	
111	Cd	89	He	251.978	ppb	1.4	19462.57	1000	
118	Sn	159	He	493.103	ppb	0.9	90967.14	1000	
121	Sb	159	No Gas	59.940	ppb	5.7	84692.31	1000	
137	Ba	159	No Gas	2069.876	ppb	6.2	1124438.03	2000	
182	W	159	No Gas	81.471	ppb	6.5	82748.50	1000	
205	Tl	209	No Gas	100.455	ppb	6.0	224296.08	1000	
208	Pb	209	No Gas	2635.536	ppb	6.1	8141986.26	2000	
232	Th	209	No Gas	112.104	ppb	7.0	348362.01	1000	
238	U	209	No Gas	104.344	ppb	6.1	307034.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1665875.60	2.9	1881686.03	88.53	29.5	120.4	
Sc	45	No Gas	3744203.65	4.4	3915123.71	95.63	29.5	120.4	
Sc	45	H2	452978.72	1.1	507902.1	89.19	29.5	120.4	
Sc	45	He	90173.89	0.9	102593	87.89	29.5	120.4	
Ge	72	No Gas	850578.88	3.6	852546.94	99.77	29.5	120.4	
Ge	72	H2	171529.15	1.1	193980.16	88.43	29.5	120.4	
Ge	72	He	70345.95	1.3	77385.19	90.9	29.5	120.4	
Y	89	H2	3037937.34	0.7	3089458.15	98.33	29.5	120.4	
Y	89	He	632685.41	0.9	678154.65	93.3	29.5	120.4	
Tb	159	No Gas	8603735.29	3.6	7727080.72	111.35	29.5	120.4	
Tb	159	He	3383175.05	0.9	3280980.4	103.11	29.5	120.4	
Bi	209	No Gas	4446445.77	3.7	3977089.87	111.8	29.5	120.4	

Sample Report

Sample Name SN6056-009P

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:39:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.677	ppb	5.6	12596.99	100	
11	B	6	No Gas	575.951	ppb	5.6	88469.40	1000	
23	Na	45	He	7818.704	ppb	0.3	173290.42	200000	
24	Mg	45	He	43147.967	ppb	1.2	505839.95	200000	
27	Al	45	He	45683.570	ppb	1.0	213899.92	200000	
28	Si	45	H2	5281.951	ppb	1.6	49900.46	10000	
39	K	45	He	19052.159	ppb	0.7	222790.29	200000	
40	Ca	45	H2	133592.913	ppb	0.6	11196259.83	200000	
51	V	89	He	560.648	ppb	0.3	102495.89	1000	
52	Cr	89	He	264.195	ppb	0.5	58648.08	2000	
55	Mn	89	He	1832.813	ppb	0.3	193901.91	2000	
56	Fe	89	H2	74654.273	ppb	0.4	26540459.52	100000	
59	Co	89	He	515.274	ppb	0.2	197030.43	1000	
60	Ni	89	He	596.319	ppb	0.7	61341.72	1000	
63	Cu	89	He	420.110	ppb	0.4	122356.05	2000	
66	Zn	89	He	1452.777	ppb	1.0	55660.78	2000	
75	As	89	He	145.118	ppb	1.7	4792.02	1000	
78	Se	89	H2	91.748	ppb	1.4	1594.35	1000	
88	Sr	89	He	629.352	ppb	0.3	105064.15	2000	
95	Mo	89	He	112.579	ppb	1.0	20170.98	1000	
107	Ag	89	He	51.701	ppb	0.7	31219.94	100	
111	Cd	89	He	255.821	ppb	1.3	20078.31	1000	
118	Sn	159	He	517.137	ppb	0.5	96488.58	1000	
121	Sb	159	No Gas	60.717	ppb	4.2	87047.40	1000	
137	Ba	159	No Gas	2139.167	ppb	5.4	1179135.09	2000	
182	W	159	No Gas	84.433	ppb	5.3	87018.32	1000	
205	Tl	209	No Gas	103.675	ppb	4.9	234985.44	1000	
208	Pb	209	No Gas	2032.720	ppb	5.5	6374423.04	2000	
232	Th	209	No Gas	118.026	ppb	6.3	372318.20	1000	
238	U	209	No Gas	106.072	ppb	7.1	316733.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1668093.63	1.9	1881686.03	88.65	29.5	120.4	
Sc	45	No Gas	3723935.99	2.2	3915123.71	95.12	29.5	120.4	
Sc	45	H2	453861.06	0.1	507902.1	89.36	29.5	120.4	
Sc	45	He	91503.45	1.0	102593	89.19	29.5	120.4	
Ge	72	No Gas	849300.72	2.6	852546.94	99.62	29.5	120.4	
Ge	72	H2	170283.43	0.9	193980.16	87.78	29.5	120.4	
Ge	72	He	71874.34	0.8	77385.19	92.88	29.5	120.4	
Y	89	H2	3065848.19	0.1	3089458.15	99.24	29.5	120.4	
Y	89	He	642843.97	0.4	678154.65	94.79	29.5	120.4	
Tb	159	No Gas	8723161.47	2.1	7727080.72	112.89	29.5	120.4	
Tb	159	He	3421756.72	0.5	3280980.4	104.29	29.5	120.4	
Bi	209	No Gas	4510594.55	2.4	3977089.87	113.41	29.5	120.4	

Sample Report

Sample Name SN6056-010

File Name 108SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:42:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.859	ppb	21.1	226.68	100	
11	B	6	No Gas	40.573	ppb	7.3	7707.85	1000	
23	Na	45	He	107.589	ppb	24.0	11968.33	200000	
24	Mg	45	He	6366.164	ppb	0.7	75515.25	200000	
27	Al	45	He	11687.477	ppb	1.3	54881.63	200000	
28	Si	45	H2	2991.167	ppb	2.8	28711.89	10000	
39	K	45	He	2550.759	ppb	4.3	39818.96	200000	
40	Ca	45	H2	27408.545	ppb	1.6	2316829.41	200000	
51	V	89	He	25.193	ppb	1.4	4881.01	1000	
52	Cr	89	He	22.756	ppb	3.3	5059.33	2000	
55	Mn	89	He	1046.683	ppb	0.6	109546.30	2000	
56	Fe	89	H2	32705.577	ppb	1.2	11538772.53	100000	
59	Co	89	He	9.467	ppb	8.3	3594.07	1000	
60	Ni	89	He	30.159	ppb	1.3	3357.19	1000	
63	Cu	89	He	103.698	ppb	0.3	30225.67	2000	
66	Zn	89	He	482.156	ppb	1.9	18320.35	2000	
75	As	89	He	32.957	ppb	3.0	1081.50	1000	
78	Se	89	H2	2.108	ppb	9.6	37.17	1000	
88	Sr	89	He	42.248	ppb	2.7	6983.14	2000	
95	Mo	89	He	7.162	ppb	3.1	1271.22	1000	
107	Ag	89	He	0.223	ppb	10.4	146.67	100	
111	Cd	89	He	2.324	ppb	13.7	180.74	1000	
118	Sn	159	He	44.107	ppb	1.4	8338.41	1000	
121	Sb	159	No Gas	7.592	ppb	5.9	11100.24	1000	
137	Ba	159	No Gas	131.611	ppb	6.2	73741.97	2000	
182	W	159	No Gas	0.349	ppb	21.6	393.78	1000	
205	Tl	209	No Gas	0.465	ppb	11.7	1254.82	1000	
208	Pb	209	No Gas	1060.501	ppb	6.0	3433118.61	2000	
232	Th	209	No Gas	4.354	ppb	6.9	14284.21	1000	
238	U	209	No Gas	3.593	ppb	5.1	11080.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1650433.83	2.9	1881686.03	87.71	29.5	120.4	
Sc	45	No Gas	3789014.43	3.2	3915123.71	96.78	29.5	120.4	
Sc	45	H2	457687.23	0.9	507902.1	90.11	29.5	120.4	
Sc	45	He	91749.05	1.0	102593	89.43	29.5	120.4	
Ge	72	No Gas	865949.11	2.8	852546.94	101.57	29.5	120.4	
Ge	72	H2	174474.70	1.2	193980.16	89.94	29.5	120.4	
Ge	72	He	71935.38	0.6	77385.19	92.96	29.5	120.4	
Y	89	H2	3042351.31	0.8	3089458.15	98.48	29.5	120.4	
Y	89	He	635941.41	0.6	678154.65	93.78	29.5	120.4	
Tb	159	No Gas	8870417.16	3.1	7727080.72	114.8	29.5	120.4	
Tb	159	He	3440168.00	0.1	3280980.4	104.85	29.5	120.4	
Bi	209	No Gas	4658170.24	3.2	3977089.87	117.13	29.5	120.4	

Sample Report

Sample Name SN6056-011

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:44:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.037	ppb	8.6	503.36	100	
11	B	6	No Gas	46.938	ppb	3.2	8714.02	1000	
23	Na	45	He	209.287	ppb	10.9	14566.96	200000	
24	Mg	45	He	16676.737	ppb	1.1	203066.41	200000	
27	Al	45	He	35555.260	ppb	1.4	172467.51	200000	
28	Si	45	H2	2528.716	ppb	3.6	25192.24	10000	
39	K	45	He	5105.407	ppb	1.6	70507.60	200000	
40	Ca	45	H2	38017.027	ppb	1.8	3324762.14	200000	
51	V	89	He	72.039	ppb	3.8	13910.69	1000	
52	Cr	89	He	53.684	ppb	2.2	12365.85	2000	
55	Mn	89	He	846.020	ppb	2.2	92453.29	2000	
56	Fe	89	H2	67140.858	ppb	1.0	24805881.46	100000	
59	Co	89	He	30.411	ppb	3.0	12025.99	1000	
60	Ni	89	He	80.245	ppb	4.8	8797.50	1000	
63	Cu	89	He	215.471	ppb	1.4	65061.95	2000	
66	Zn	89	He	406.465	ppb	1.3	16139.84	2000	
75	As	89	He	33.133	ppb	3.9	1135.18	1000	
78	Se	89	H2	1.963	ppb	15.5	36.33	1000	
88	Sr	89	He	60.503	ppb	2.4	10438.75	2000	
95	Mo	89	He	9.681	ppb	3.5	1793.52	1000	
107	Ag	89	He	0.305	ppb	19.7	204.45	100	
111	Cd	89	He	1.777	ppb	1.0	144.45	1000	
118	Sn	159	He	42.953	ppb	3.1	8220.58	1000	
121	Sb	159	No Gas	14.583	ppb	2.1	20852.85	1000	
137	Ba	159	No Gas	242.727	ppb	1.2	133284.30	2000	
182	W	159	No Gas	0.293	ppb	12.2	327.04	1000	
205	Tl	209	No Gas	0.987	ppb	13.5	2422.95	1000	
208	Pb	209	No Gas	2834.067	ppb	1.1	9000626.66	2000	
232	Th	209	No Gas	13.780	ppb	1.6	44123.98	1000	
238	U	209	No Gas	5.362	ppb	3.7	16218.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1659574.96	0.2	1881686.03	88.2	29.5	120.4	
Sc	45	No Gas	3769151.33	1.1	3915123.71	96.27	29.5	120.4	
Sc	45	H2	473624.83	2.1	507902.1	93.25	29.5	120.4	
Sc	45	He	94804.17	1.9	102593	92.41	29.5	120.4	
Ge	72	No Gas	864410.70	0.6	852546.94	101.39	29.5	120.4	
Ge	72	H2	177793.04	2.0	193980.16	91.66	29.5	120.4	
Ge	72	He	74658.17	1.6	77385.19	96.48	29.5	120.4	
Y	89	H2	3186117.86	1.2	3089458.15	103.13	29.5	120.4	
Y	89	He	664195.31	2.3	678154.65	97.94	29.5	120.4	
Tb	159	No Gas	8682097.99	1.0	7727080.72	112.36	29.5	120.4	
Tb	159	He	3483089.26	1.7	3280980.4	106.16	29.5	120.4	
Bi	209	No Gas	4564077.93	0.5	3977089.87	114.76	29.5	120.4	

Sample Report

Sample Name SN6056-012

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:47:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.218	ppb	9.6	816.72	100	
11	B	6	No Gas	61.550	ppb	9.0	11441.57	1000	
23	Na	45	He	295.009	ppb	2.3	17620.47	200000	
24	Mg	45	He	30321.061	ppb	1.9	395194.49	200000	
27	Al	45	He	57869.932	ppb	1.0	301043.94	200000	
28	Si	45	H2	4219.578	ppb	10.5	42299.31	10000	
39	K	45	He	9982.804	ppb	1.0	135737.00	200000	
40	Ca	45	H2	46140.924	ppb	10.3	4093640.67	200000	
51	V	89	He	114.739	ppb	1.7	23249.93	1000	
52	Cr	89	He	84.646	ppb	1.2	20611.90	2000	
55	Mn	89	He	978.081	ppb	1.3	113226.56	2000	
56	Fe	89	H2	106184.358	ppb	9.7	40089943.95	100000	
59	Co	89	He	51.525	ppb	4.0	21566.95	1000	
60	Ni	89	He	130.780	ppb	3.6	14979.60	1000	
63	Cu	89	He	513.366	ppb	2.1	163477.09	2000	
66	Zn	89	He	921.772	ppb	1.9	38668.90	2000	
75	As	89	He	58.033	ppb	3.4	2100.72	1000	
78	Se	89	H2	1.608	ppb	13.1	30.50	1000	
88	Sr	89	He	79.993	ppb	1.7	14617.13	2000	
95	Mo	89	He	12.531	ppb	3.2	2459.20	1000	
107	Ag	89	He	0.790	ppb	1.8	536.70	100	
111	Cd	89	He	2.129	ppb	4.1	183.34	1000	
118	Sn	159	He	62.835	ppb	3.0	12287.14	1000	
121	Sb	159	No Gas	81.665	ppb	8.2	120875.48	1000	
137	Ba	159	No Gas	305.299	ppb	8.8	173778.98	2000	
182	W	159	No Gas	0.269	ppb	14.7	313.68	1000	
205	Tl	209	No Gas	1.647	ppb	6.8	3988.44	1000	
208	Pb	209	No Gas	10176.358	ppb	8.6	32687903.26	2000	>LDR
232	Th	209	No Gas	21.487	ppb	9.4	69526.27	1000	
238	U	209	No Gas	5.843	ppb	6.0	17886.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1742548.82	1.7	1881686.03	92.61	29.5	120.4	
Sc	45	No Gas	4027305.03	1.8	3915123.71	102.87	29.5	120.4	
Sc	45	H2	482668.48	6.9	507902.1	95.03	29.5	120.4	
Sc	45	He	101664.47	0.8	102593	99.09	29.5	120.4	
Ge	72	No Gas	912494.83	1.9	852546.94	107.03	29.5	120.4	
Ge	72	H2	179217.88	6.3	193980.16	92.39	29.5	120.4	
Ge	72	He	78268.83	1.7	77385.19	101.14	29.5	120.4	
Y	89	H2	3268631.14	6.0	3089458.15	105.8	29.5	120.4	
Y	89	He	703468.15	1.3	678154.65	103.73	29.5	120.4	
Tb	159	No Gas	9011153.55	2.2	7727080.72	116.62	29.5	120.4	
Tb	159	He	3568216.85	1.2	3280980.4	108.75	29.5	120.4	
Bi	209	No Gas	4622786.68	2.4	3977089.87	116.24	29.5	120.4	

Sample Report

Sample Name SN6056-013

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:50:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.311	ppb	24.8	107.78	100	
11	B	6	No Gas	34.480	ppb	2.8	7328.78	1000	
23	Na	45	He	-20.689	ppb	N/A	9487.05	200000	
24	Mg	45	He	3084.304	ppb	1.2	37832.03	200000	
27	Al	45	He	5197.598	ppb	1.5	24968.09	200000	
28	Si	45	H2	2423.669	ppb	3.3	24431.39	10000	
39	K	45	He	940.284	ppb	1.7	22405.88	200000	
40	Ca	45	H2	33552.703	ppb	1.3	2966101.73	200000	
51	V	89	He	13.176	ppb	5.4	2751.49	1000	
52	Cr	89	He	57.436	ppb	0.9	12840.17	2000	
55	Mn	89	He	269.176	ppb	1.4	28565.65	2000	
56	Fe	89	H2	25446.578	ppb	0.9	9274215.66	100000	
59	Co	89	He	5.874	ppb	6.5	2267.01	1000	
60	Ni	89	He	33.109	ppb	0.8	3706.18	1000	
63	Cu	89	He	166.345	ppb	0.9	48866.17	2000	
66	Zn	89	He	721.661	ppb	0.7	27763.95	2000	
75	As	89	He	49.275	ppb	1.8	1635.95	1000	
78	Se	89	H2	1.488	ppb	17.3	27.33	1000	
88	Sr	89	He	52.455	ppb	2.1	8786.44	2000	
95	Mo	89	He	8.234	ppb	3.1	1481.25	1000	
107	Ag	89	He	0.190	ppb	24.3	128.89	100	
111	Cd	89	He	7.017	ppb	1.9	552.61	1000	
118	Sn	159	He	44.677	ppb	2.6	8554.16	1000	
121	Sb	159	No Gas	23.273	ppb	5.2	34783.58	1000	
137	Ba	159	No Gas	114.845	ppb	6.7	65943.35	2000	
182	W	159	No Gas	0.369	ppb	12.2	423.81	1000	
205	Tl	209	No Gas	0.171	ppb	19.2	573.99	1000	
208	Pb	209	No Gas	854.746	ppb	6.0	2815324.10	2000	
232	Th	209	No Gas	1.787	ppb	6.0	6031.64	1000	
238	U	209	No Gas	9.179	ppb	4.8	28801.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1777666.33	3.0	1881686.03	94.47	29.5	120.4	
Sc	45	No Gas	4088250.66	3.9	3915123.71	104.42	29.5	120.4	
Sc	45	H2	478649.87	0.5	507902.1	94.24	29.5	120.4	
Sc	45	He	93822.82	1.1	102593	91.45	29.5	120.4	
Ge	72	No Gas	920417.54	3.6	852546.94	107.96	29.5	120.4	
Ge	72	H2	178831.84	1.1	193980.16	92.19	29.5	120.4	
Ge	72	He	73179.56	0.6	77385.19	94.57	29.5	120.4	
Y	89	H2	3142449.40	0.2	3089458.15	101.72	29.5	120.4	
Y	89	He	644679.17	1.0	678154.65	95.06	29.5	120.4	
Tb	159	No Gas	9090359.10	3.0	7727080.72	117.64	29.5	120.4	
Tb	159	He	3484721.41	0.5	3280980.4	106.21	29.5	120.4	
Bi	209	No Gas	4739976.79	3.6	3977089.87	119.18	29.5	120.4	

Sample Report

Sample Name SN6056-014

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 9:52:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.795	ppb	12.9	475.58	100	
11	B	6	No Gas	27.778	ppb	8.2	6219.33	1000	
23	Na	45	He	89.640	ppb	25.7	12683.01	200000	
24	Mg	45	He	6346.974	ppb	5.1	82362.71	200000	
27	Al	45	He	55033.995	ppb	3.3	282724.14	200000	
28	Si	45	H2	4340.616	ppb	2.4	44902.40	10000	
39	K	45	He	4549.267	ppb	2.9	67916.33	200000	
40	Ca	45	H2	6071.747	ppb	0.8	556762.77	200000	
51	V	89	He	82.954	ppb	3.8	16427.87	1000	
52	Cr	89	He	52.990	ppb	1.8	12563.99	2000	
55	Mn	89	He	208.222	ppb	5.5	23412.49	2000	
56	Fe	89	H2	26030.100	ppb	0.6	9854725.00	100000	
59	Co	89	He	10.617	ppb	3.1	4329.88	1000	
60	Ni	89	He	42.799	ppb	3.4	4986.63	1000	
63	Cu	89	He	40.935	ppb	4.4	13116.59	2000	
66	Zn	89	He	203.973	ppb	2.3	8371.69	2000	
75	As	89	He	9.363	ppb	1.5	335.37	1000	
78	Se	89	H2	2.585	ppb	8.0	48.67	1000	
88	Sr	89	He	32.436	ppb	5.1	5759.20	2000	
95	Mo	89	He	3.366	ppb	11.7	644.48	1000	
107	Ag	89	He	0.495	ppb	8.6	332.24	100	
111	Cd	89	He	2.012	ppb	11.0	168.15	1000	
118	Sn	159	He	46.345	ppb	5.4	9143.42	1000	
121	Sb	159	No Gas	0.811	ppb	7.0	1271.47	1000	
137	Ba	159	No Gas	261.717	ppb	8.1	151842.05	2000	
182	W	159	No Gas	0.353	ppb	13.6	410.46	1000	
205	Tl	209	No Gas	2.015	ppb	9.6	4983.25	1000	
208	Pb	209	No Gas	143.453	ppb	6.7	474977.21	2000	
232	Th	209	No Gas	10.963	ppb	8.1	36584.78	1000	
238	U	209	No Gas	2.930	ppb	8.8	9230.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1768852.11	2.1	1881686.03	94	29.5	120.4	
Sc	45	No Gas	4100476.66	3.7	3915123.71	104.73	29.5	120.4	
Sc	45	H2	495860.87	0.5	507902.1	97.63	29.5	120.4	
Sc	45	He	100446.74	2.5	102593	97.91	29.5	120.4	
Ge	72	No Gas	927270.03	4.0	852546.94	108.76	29.5	120.4	
Ge	72	H2	183386.51	1.1	193980.16	94.54	29.5	120.4	
Ge	72	He	77101.92	2.4	77385.19	99.63	29.5	120.4	
Y	89	H2	3264299.11	0.4	3089458.15	105.66	29.5	120.4	
Y	89	He	683630.68	2.9	678154.65	100.81	29.5	120.4	
Tb	159	No Gas	9195380.07	4.3	7727080.72	119	29.5	120.4	
Tb	159	He	3596067.48	3.5	3280980.4	109.6	29.5	120.4	
Bi	209	No Gas	4765732.96	4.6	3977089.87	119.83	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	113_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 9:55:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	26.154	ppb	6.5	31070.76	25	104.62	89.8	110.2	
11	B	6	No Gas	26.049	ppb	4.2	21612.34	25	104.2	89.8	110.2	
23	Na	45	He	5093.963	ppb	0.2	552081.25	5000	101.88	89.8	110.2	
24	Mg	45	He	4955.758	ppb	0.7	295909.28	5000	99.12	89.8	110.2	
27	Al	45	He	492.189	ppb	0.6	11740.76	500	98.44	89.8	110.2	
28	Si	45	H2	445.566	ppb	3.0	21958.00	500	89.11	89.8	110.2	> +/- 10%
39	K	45	He	4826.959	ppb	0.5	284039.95	5000	96.54	89.8	110.2	
40	Ca	45	H2	4872.732	ppb	0.5	2101855.09	5000	97.45	89.8	110.2	
51	V	89	He	24.381	ppb	2.1	22387.28	25	97.52	89.8	110.2	
52	Cr	89	He	24.938	ppb	1.4	27511.00	25	99.75	89.8	110.2	
55	Mn	89	He	25.204	ppb	0.1	13244.49	25	100.82	89.8	110.2	
56	Fe	89	H2	4825.809	ppb	0.1	8559774.99	5000	96.52	89.8	110.2	
59	Co	89	He	24.939	ppb	1.3	47338.34	25	99.76	89.8	110.2	
60	Ni	89	He	25.440	ppb	4.6	13226.72	25	101.76	89.8	110.2	
63	Cu	89	He	24.947	ppb	0.7	36387.15	25	99.79	89.8	110.2	
66	Zn	89	He	24.854	ppb	2.7	4789.87	25	99.42	89.8	110.2	
75	As	89	He	24.272	ppb	3.0	3978.34	25	97.09	89.8	110.2	
78	Se	89	H2	23.689	ppb	0.6	2053.23	25	94.76	89.8	110.2	
88	Sr	89	He	23.665	ppb	1.6	19612.33	25	94.66	89.8	110.2	
95	Mo	89	He	25.621	ppb	0.7	22783.99	25	102.48	89.8	110.2	
107	Ag	89	He	26.343	ppb	1.8	78927.30	25	105.37	89.8	110.2	
111	Cd	89	He	25.574	ppb	1.6	9961.53	25	102.3	89.8	110.2	
118	Sn	159	He	22.810	ppb	0.7	21538.97	25	91.24	89.8	110.2	
121	Sb	159	No Gas	23.754	ppb	6.6	174603.71	25	95.02	89.8	110.2	
137	Ba	159	No Gas	24.513	ppb	7.8	69296.93	25	98.05	89.8	110.2	
182	W	159	No Gas	24.394	ppb	6.6	128935.84	25	97.58	89.8	110.2	
205	Tl	209	No Gas	24.907	ppb	5.7	286671.19	25	99.63	89.8	110.2	
208	Pb	209	No Gas	25.072	ppb	5.7	399584.57	25	100.29	89.8	110.2	
232	Th	209	No Gas	25.009	ppb	7.4	400585.32	25	100.04	89.8	110.2	
238	U	209	No Gas	24.888	ppb	7.4	377407.13	25	99.55	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1692417.51	3.4	1881686.03	89.94	29.5	120.4	
Sc	45	No Gas	3939739.29	3.4	3915123.71	100.63	29.5	120.4	
Sc	45	H2	467054.46	0.8	507902.1	91.96	29.5	120.4	
Sc	45	He	93094.89	0.1	102593	90.74	29.5	120.4	
Ge	72	No Gas	899176.95	3.8	852546.94	105.47	29.5	120.4	
Ge	72	H2	175785.44	1.4	193980.16	90.62	29.5	120.4	
Ge	72	He	73215.99	0.2	77385.19	94.61	29.5	120.4	
Y	89	H2	3058685.27	0.2	3089458.15	99	29.5	120.4	
Y	89	He	638111.75	0.6	678154.65	94.1	29.5	120.4	
Tb	159	No Gas	8955958.27	3.7	7727080.72	115.9	29.5	120.4	
Tb	159	He	3454585.12	0.3	3280980.4	105.29	29.5	120.4	
Bi	209	No Gas	4584751.57	3.9	3977089.87	115.28	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	114_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 9:58:19 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.071	ppb	11.9	114.45	0.2	
11	B	6	No Gas	0.816	ppb	18.6	2346.94	4	
23	Na	45	He	-27.904	ppb	N/A	6999.48	200	
24	Mg	45	He	-4.856	ppb	N/A	528.94	20	
27	Al	45	He	0.754	ppb	32.0	36.67	20	
28	Si	45	H2	-0.356	ppb	N/A	513.92	100	
39	K	45	He	-14.023	ppb	N/A	11009.30	200	
40	Ca	45	H2	6.260	ppb	7.4	3612.82	20	
51	V	89	He	-0.155	ppb	N/A	203.34	1	
52	Cr	89	He	0.012	ppb	95.7	82.65	1	
55	Mn	89	He	0.068	ppb	19.9	47.32	0.4	
56	Fe	89	H2	5.681	ppb	8.7	12763.36	20	
59	Co	89	He	0.015	ppb	106.3	44.45	0.2	
60	Ni	89	He	-0.252	ppb	N/A	178.90	0.4	Failed DoD
63	Cu	89	He	-0.164	ppb	N/A	228.90	0.6	
66	Zn	89	He	0.065	ppb	203.8	83.33	2	
75	As	89	He	-0.010	ppb	N/A	5.00	1	
78	Se	89	H2	0.021	ppb	32.1	2.67	1	
88	Sr	89	He	0.008	ppb	124.7	13.33	1	
95	Mo	89	He	0.074	ppb	30.8	68.89	1	
107	Ag	89	He	0.003	ppb	61.3	22.22	0.2	
111	Cd	89	He	0.006	ppb	57.5	2.59	0.2	
118	Sn	159	He	0.046	ppb	22.1	113.34	1	
121	Sb	159	No Gas	0.028	ppb	16.4	243.60	0.2	
137	Ba	159	No Gas	0.056	ppb	19.9	170.19	0.4	
182	W	159	No Gas	0.049	ppb	20.5	276.98	1	
205	Tl	209	No Gas	0.005	ppb	25.4	220.25	0.2	
208	Pb	209	No Gas	0.188	ppb	14.4	3197.09	0.2	Failed DoD
232	Th	209	No Gas	0.051	ppb	7.3	911.05	1	
238	U	209	No Gas	0.012	ppb	22.0	176.86	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1705997.34	2.3	1881686.03	90.66	29.5	120.4	
Sc	45	No Gas	3892954.51	2.6	3915123.71	99.43	29.5	120.4	
Sc	45	H2	481646.72	1.0	507902.1	94.83	29.5	120.4	
Sc	45	He	94649.65	0.4	102593	92.26	29.5	120.4	
Ge	72	No Gas	885082.52	2.3	852546.94	103.82	29.5	120.4	
Ge	72	H2	184292.62	0.8	193980.16	95.01	29.5	120.4	
Ge	72	He	74416.14	0.2	77385.19	96.16	29.5	120.4	
Y	89	H2	3111556.92	1.0	3089458.15	100.72	29.5	120.4	
Y	89	He	645640.93	0.4	678154.65	95.21	29.5	120.4	
Tb	159	No Gas	8672782.16	3.0	7727080.72	112.24	29.5	120.4	
Tb	159	He	3431209.78	0.9	3280980.4	104.58	29.5	120.4	
Bi	209	No Gas	4502701.14	2.8	3977089.87	113.22	29.5	120.4	

Sample Report

Sample Name SN6056-015

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 10:01:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.860	ppb	5.7	454.47	100	
11	B	6	No Gas	13.034	ppb	14.8	3562.79	1000	
23	Na	45	He	-6.262	ppb	N/A	9867.71	200000	
24	Mg	45	He	1205.503	ppb	1.3	15396.03	200000	
27	Al	45	He	21039.608	ppb	1.0	101749.58	200000	
28	Si	45	H2	2845.428	ppb	5.1	28526.36	10000	
39	K	45	He	672.172	ppb	7.7	19494.50	200000	
40	Ca	45	H2	9315.679	ppb	0.9	822481.64	200000	
51	V	89	He	24.794	ppb	2.3	4904.35	1000	
52	Cr	89	He	14.943	ppb	4.5	3412.47	2000	
55	Mn	89	He	115.979	ppb	0.6	12389.88	2000	
56	Fe	89	H2	7866.288	ppb	0.4	2846875.89	100000	
59	Co	89	He	2.819	ppb	14.8	1102.35	1000	
60	Ni	89	He	16.758	ppb	5.1	2040.23	1000	
63	Cu	89	He	42.104	ppb	3.2	12795.20	2000	
66	Zn	89	He	97.460	ppb	4.5	3834.01	2000	
75	As	89	He	5.710	ppb	10.6	196.69	1000	
78	Se	89	H2	3.132	ppb	4.8	56.17	1000	
88	Sr	89	He	29.507	ppb	2.5	4975.54	2000	
95	Mo	89	He	4.421	ppb	3.3	801.16	1000	
107	Ag	89	He	0.689	ppb	4.1	433.36	100	
111	Cd	89	He	2.769	ppb	4.5	219.63	1000	
118	Sn	159	He	43.490	ppb	3.2	8272.83	1000	
121	Sb	159	No Gas	0.975	ppb	8.6	1321.53	1000	
137	Ba	159	No Gas	164.790	ppb	6.7	83507.63	2000	
182	W	159	No Gas	0.385	ppb	23.6	387.11	1000	
205	Tl	209	No Gas	0.348	ppb	16.1	887.69	1000	
208	Pb	209	No Gas	184.998	ppb	6.5	544165.35	2000	
232	Th	209	No Gas	5.684	ppb	8.3	16907.07	1000	
238	U	209	No Gas	2.625	ppb	12.2	7340.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1631478.67	2.4	1881686.03	86.7	29.5	120.4	
Sc	45	No Gas	3580134.17	3.6	3915123.71	91.44	29.5	120.4	
Sc	45	H2	477698.82	1.2	507902.1	94.05	29.5	120.4	
Sc	45	He	94500.59	0.8	102593	92.11	29.5	120.4	
Ge	72	No Gas	815949.59	3.6	852546.94	95.71	29.5	120.4	
Ge	72	H2	176536.61	0.1	193980.16	91.01	29.5	120.4	
Ge	72	He	72980.70	0.6	77385.19	94.31	29.5	120.4	
Y	89	H2	3118598.75	0.6	3089458.15	100.94	29.5	120.4	
Y	89	He	648565.35	0.2	678154.65	95.64	29.5	120.4	
Tb	159	No Gas	8024614.81	3.4	7727080.72	103.85	29.5	120.4	
Tb	159	He	3461183.35	0.6	3280980.4	105.49	29.5	120.4	
Bi	209	No Gas	4232052.68	3.7	3977089.87	106.41	29.5	120.4	

Sample Report

Sample Name SN6056-016

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 10:03:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.693	ppb	22.7	195.57	100	
11	B	6	No Gas	13.445	ppb	6.1	3806.19	1000	
23	Na	45	He	-9.908	ppb	N/A	9780.89	200000	
24	Mg	45	He	1085.786	ppb	4.3	13936.49	200000	
27	Al	45	He	11398.328	ppb	3.4	55084.77	200000	
28	Si	45	H2	3529.978	ppb	2.4	34830.69	10000	
39	K	45	He	590.569	ppb	4.6	18548.67	200000	
40	Ca	45	H2	8146.528	ppb	0.4	710191.51	200000	
51	V	89	He	21.741	ppb	6.4	4304.16	1000	
52	Cr	89	He	12.935	ppb	1.9	2937.12	2000	
55	Mn	89	He	120.715	ppb	2.0	12782.14	2000	
56	Fe	89	H2	8893.952	ppb	0.3	3206137.12	100000	
59	Co	89	He	3.235	ppb	7.9	1251.26	1000	
60	Ni	89	He	17.466	ppb	1.8	2094.68	1000	
63	Cu	89	He	33.815	ppb	1.8	10277.46	2000	
66	Zn	89	He	172.818	ppb	3.5	6682.96	2000	
75	As	89	He	4.529	ppb	6.7	156.02	1000	
78	Se	89	H2	2.831	ppb	9.7	50.67	1000	
88	Sr	89	He	29.817	ppb	2.4	4983.29	2000	
95	Mo	89	He	3.866	ppb	7.2	694.49	1000	
107	Ag	89	He	0.428	ppb	8.4	272.24	100	
111	Cd	89	He	2.474	ppb	14.1	194.45	1000	
118	Sn	159	He	44.896	ppb	3.2	8580.82	1000	
121	Sb	159	No Gas	0.997	ppb	10.9	1501.76	1000	
137	Ba	159	No Gas	111.424	ppb	4.9	62827.77	2000	
182	W	159	No Gas	0.414	ppb	11.1	463.86	1000	
205	Tl	209	No Gas	0.253	ppb	21.3	757.54	1000	
208	Pb	209	No Gas	126.772	ppb	6.4	412631.22	2000	
232	Th	209	No Gas	2.631	ppb	9.1	8716.24	1000	
238	U	209	No Gas	0.894	ppb	11.2	2766.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1712841.62	2.5	1881686.03	91.03	29.5	120.4	
Sc	45	No Gas	3859788.17	2.3	3915123.71	98.59	29.5	120.4	
Sc	45	H2	471605.87	1.2	507902.1	92.85	29.5	120.4	
Sc	45	He	94451.48	1.7	102593	92.06	29.5	120.4	
Ge	72	No Gas	877127.88	2.3	852546.94	102.88	29.5	120.4	
Ge	72	H2	174478.76	2.0	193980.16	89.95	29.5	120.4	
Ge	72	He	72745.40	0.8	77385.19	94	29.5	120.4	
Y	89	H2	3106569.09	0.5	3089458.15	100.55	29.5	120.4	
Y	89	He	642846.72	0.4	678154.65	94.79	29.5	120.4	
Tb	159	No Gas	8921019.45	2.1	7727080.72	115.45	29.5	120.4	
Tb	159	He	3478227.72	0.5	3280980.4	106.01	29.5	120.4	
Bi	209	No Gas	4679785.25	2.4	3977089.87	117.67	29.5	120.4	

Sample Report

Sample Name SN6056-017

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b

Acq Time 7/24/2020 10:06:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.434	ppb	31.1	133.34	100	
11	B	6	No Gas	9.839	ppb	16.6	3238.26	1000	
23	Na	45	He	17.678	ppb	113.6	10225.08	200000	
24	Mg	45	He	1203.619	ppb	1.1	15131.27	200000	
27	Al	45	He	8802.722	ppb	0.8	41919.94	200000	
28	Si	45	H2	3338.274	ppb	5.6	32189.56	10000	
39	K	45	He	703.446	ppb	3.1	19546.31	200000	
40	Ca	45	H2	12950.052	ppb	1.5	1101989.21	200000	
51	V	89	He	17.825	ppb	1.1	3522.79	1000	
52	Cr	89	He	11.350	ppb	4.7	2536.45	2000	
55	Mn	89	He	176.213	ppb	1.5	18295.23	2000	
56	Fe	89	H2	5680.709	ppb	1.1	2009833.00	100000	
59	Co	89	He	2.278	ppb	9.6	868.98	1000	
60	Ni	89	He	13.253	ppb	9.4	1631.26	1000	
63	Cu	89	He	26.269	ppb	2.3	7933.63	2000	
66	Zn	89	He	143.709	ppb	1.2	5463.49	2000	
75	As	89	He	3.828	ppb	11.2	130.35	1000	
78	Se	89	H2	2.222	ppb	9.2	39.17	1000	
88	Sr	89	He	25.979	ppb	1.9	4259.71	2000	
95	Mo	89	He	2.485	ppb	11.4	438.91	1000	
107	Ag	89	He	0.257	ppb	16.0	165.56	100	
111	Cd	89	He	1.973	ppb	8.2	152.22	1000	
118	Sn	159	He	47.564	ppb	1.9	9008.86	1000	
121	Sb	159	No Gas	0.643	ppb	15.2	1001.15	1000	
137	Ba	159	No Gas	82.565	ppb	8.8	47491.17	2000	
182	W	159	No Gas	0.326	ppb	2.8	380.43	1000	
205	Tl	209	No Gas	0.348	ppb	16.1	997.82	1000	
208	Pb	209	No Gas	91.993	ppb	8.3	304858.67	2000	
232	Th	209	No Gas	2.073	ppb	14.7	6993.18	1000	
238	U	209	No Gas	0.802	ppb	1.8	2539.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710045.60	6.1	1881686.03	90.88	29.5	120.4	
Sc	45	No Gas	3910225.92	8.9	3915123.71	99.87	29.5	120.4	
Sc	45	H2	460518.44	0.2	507902.1	90.67	29.5	120.4	
Sc	45	He	93024.09	0.9	102593	90.67	29.5	120.4	
Ge	72	No Gas	884038.28	5.9	852546.94	103.69	29.5	120.4	
Ge	72	H2	174600.92	0.3	193980.16	90.01	29.5	120.4	
Ge	72	He	72110.30	0.8	77385.19	93.18	29.5	120.4	
Y	89	H2	3047625.59	0.6	3089458.15	98.65	29.5	120.4	
Y	89	He	630564.28	0.6	678154.65	92.98	29.5	120.4	
Tb	159	No Gas	9137437.57	8.8	7727080.72	118.25	29.5	120.4	
Tb	159	He	3449005.92	0.7	3280980.4	105.12	29.5	120.4	
Bi	209	No Gas	4777744.09	7.6	3977089.87	120.13	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	118_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 10:08:56 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.180	ppb	7.5	29002.04	25	100.72	89.8	110.2	
11	B	6	No Gas	25.281	ppb	8.8	20369.41	25	101.12	89.8	110.2	
23	Na	45	He	5137.391	ppb	1.0	548494.93	5000	102.75	89.8	110.2	
24	Mg	45	He	4978.357	ppb	1.8	292865.19	5000	99.57	89.8	110.2	
27	Al	45	He	481.597	ppb	1.3	11320.47	500	96.32	89.8	110.2	
28	Si	45	H2	448.333	ppb	1.0	21516.68	500	89.67	89.8	110.2	> +/- 10%
39	K	45	He	4807.819	ppb	1.3	278789.82	5000	96.16	89.8	110.2	
40	Ca	45	H2	4843.105	ppb	1.2	2034769.47	5000	96.86	89.8	110.2	
51	V	89	He	24.464	ppb	1.2	22043.49	25	97.86	89.8	110.2	
52	Cr	89	He	24.972	ppb	0.7	27033.51	25	99.89	89.8	110.2	
55	Mn	89	He	24.759	ppb	0.4	12767.47	25	99.04	89.8	110.2	
56	Fe	89	H2	4787.068	ppb	1.1	8313453.58	5000	95.74	89.8	110.2	
59	Co	89	He	24.928	ppb	1.6	46432.99	25	99.71	89.8	110.2	
60	Ni	89	He	25.192	ppb	2.1	12856.37	25	100.77	89.8	110.2	
63	Cu	89	He	25.267	ppb	1.2	36158.69	25	101.07	89.8	110.2	
66	Zn	89	He	25.471	ppb	1.3	4815.46	25	101.88	89.8	110.2	
75	As	89	He	24.901	ppb	3.4	4006.02	25	99.6	89.8	110.2	
78	Se	89	H2	24.231	ppb	1.5	2056.23	25	96.92	89.8	110.2	
88	Sr	89	He	24.168	ppb	1.9	19655.76	25	96.67	89.8	110.2	
95	Mo	89	He	25.686	ppb	2.4	22412.40	25	102.74	89.8	110.2	
107	Ag	89	He	26.467	ppb	1.1	77815.33	25	105.87	89.8	110.2	
111	Cd	89	He	25.921	ppb	0.2	9908.53	25	103.68	89.8	110.2	
118	Sn	159	He	22.930	ppb	2.2	21431.04	25	91.72	89.8	110.2	
121	Sb	159	No Gas	23.029	ppb	8.6	167848.96	25	92.12	89.8	110.2	
137	Ba	159	No Gas	23.522	ppb	9.4	65940.18	25	94.09	89.8	110.2	
182	W	159	No Gas	23.547	ppb	8.9	123402.98	25	94.19	89.8	110.2	
205	Tl	209	No Gas	23.874	ppb	8.2	276176.85	25	95.5	89.8	110.2	
208	Pb	209	No Gas	24.066	ppb	7.8	385524.69	25	96.26	89.8	110.2	
232	Th	209	No Gas	23.832	ppb	9.1	383737.06	25	95.33	89.8	110.2	
238	U	209	No Gas	23.871	ppb	8.6	363914.41	25	95.48	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1640939.11	3.1	1881686.03	87.21	29.5	120.4	
Sc	45	No Gas	3802944.50	3.8	3915123.71	97.13	29.5	120.4	
Sc	45	H2	454928.34	0.8	507902.1	89.57	29.5	120.4	
Sc	45	He	91725.98	0.9	102593	89.41	29.5	120.4	
Ge	72	No Gas	871049.26	4.0	852546.94	102.17	29.5	120.4	
Ge	72	H2	172555.53	1.3	193980.16	88.96	29.5	120.4	
Ge	72	He	71970.76	1.2	77385.19	93	29.5	120.4	
Y	89	H2	2994779.10	0.4	3089458.15	96.94	29.5	120.4	
Y	89	He	626172.50	0.6	678154.65	92.33	29.5	120.4	
Tb	159	No Gas	8886081.60	3.9	7727080.72	115	29.5	120.4	
Tb	159	He	3419428.77	0.4	3280980.4	104.22	29.5	120.4	
Bi	209	No Gas	4610497.42	3.8	3977089.87	115.93	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	119_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG24A.b
Acq Time	7/24/2020 10:11:40 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.051	ppb	34.5	90.00	0.2	
11	B	6	No Gas	0.665	ppb	23.5	2214.68	4	
23	Na	45	He	-33.968	ppb	N/A	6274.96	200	
24	Mg	45	He	-3.766	ppb	N/A	588.95	20	
27	Al	45	He	0.862	ppb	56.0	38.89	20	
28	Si	45	H2	1.168	ppb	161.1	577.33	100	
39	K	45	He	-17.120	ppb	N/A	10715.96	200	
40	Ca	45	H2	4.001	ppb	3.5	2554.76	20	
51	V	89	He	-0.163	ppb	N/A	193.34	1	
52	Cr	89	He	-0.020	ppb	N/A	46.66	1	
55	Mn	89	He	0.040	ppb	85.1	31.99	0.4	
56	Fe	89	H2	4.033	ppb	3.4	9664.13	20	
59	Co	89	He	-0.001	ppb	N/A	13.33	0.2	
60	Ni	89	He	-0.302	ppb	N/A	151.12	0.4	Failed DoD
63	Cu	89	He	-0.186	ppb	N/A	195.56	0.6	
66	Zn	89	He	-0.024	ppb	N/A	65.56	2	
75	As	89	He	-0.006	ppb	N/A	5.67	1	
78	Se	89	H2	0.025	ppb	23.4	3.00	1	
88	Sr	89	He	0.007	ppb	128.0	12.22	1	
95	Mo	89	He	0.055	ppb	24.9	51.11	1	
107	Ag	89	He	0.006	ppb	23.4	31.11	0.2	
111	Cd	89	He	0.004	ppb	85.0	1.85	0.2	
118	Sn	159	He	0.025	ppb	91.0	93.34	1	
121	Sb	159	No Gas	0.027	ppb	43.5	230.26	0.2	
137	Ba	159	No Gas	0.021	ppb	67.4	73.41	0.4	
182	W	159	No Gas	0.034	ppb	22.3	200.23	1	
205	Tl	209	No Gas	0.007	ppb	40.0	243.61	0.2	
208	Pb	209	No Gas	0.113	ppb	8.2	2012.33	0.2	Failed DoD
232	Th	209	No Gas	0.047	ppb	13.3	844.31	1	
238	U	209	No Gas	0.009	ppb	42.7	136.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1692227.41	2.4	1881686.03	89.93	29.5	120.4	
Sc	45	No Gas	3819627.41	2.9	3915123.71	97.56	29.5	120.4	
Sc	45	H2	471466.62	0.4	507902.1	92.83	29.5	120.4	
Sc	45	He	93636.91	0.7	102593	91.27	29.5	120.4	
Ge	72	No Gas	871288.26	3.1	852546.94	102.2	29.5	120.4	
Ge	72	H2	180406.95	1.2	193980.16	93	29.5	120.4	
Ge	72	He	72961.33	0.8	77385.19	94.28	29.5	120.4	
Y	89	H2	3069787.68	0.5	3089458.15	99.36	29.5	120.4	
Y	89	He	638194.70	1.0	678154.65	94.11	29.5	120.4	
Tb	159	No Gas	8655324.25	3.1	7727080.72	112.01	29.5	120.4	
Tb	159	He	3415775.15	0.9	3280980.4	104.11	29.5	120.4	
Bi	209	No Gas	4499022.82	3.4	3977089.87	113.12	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/27/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNG27A

REVIEWED 07/30/20 KATAHDIN ANALYTICAL METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by AP (initials) on 7/27/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

AP 7/29/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

50x diln.: 0.20 mL of sample (pipet M27) + 9.8 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG27A	07/27/2020	16:21	AP
CalStd	1	LNG27A	07/27/2020	16:24	AP
ICV	1	LNG27A	07/27/2020	16:27	AP
ICB	1	LNG27A	07/27/2020	16:30	AP
PQL	1	LNG27A	07/27/2020	16:32	AP
ICSA	1	LNG27A	07/27/2020	16:35	AP
ICSAB	1	LNG27A	07/27/2020	16:38	AP
LRS1	1	LNG27A	07/27/2020	16:40	AP
LRS2	1	LNG27A	07/27/2020	16:43	AP
RINSE	1	LNG27A	07/27/2020	16:46	AP
RINSE	1	LNG27A	07/27/2020	16:48	AP
CCV	1	LNG27A	07/27/2020	16:51	AP
CCB	1	LNG27A	07/27/2020	16:54	AP
PBSNG06IMS1	5	LNG27A	07/27/2020	16:57	AP
PBSNG07IMS1	5	LNG27A	07/27/2020	16:59	AP
PBWNF29IMW1	5	LNG27A	07/27/2020	17:02	AP
LCSWNF26IMW2	5	LNG27A	07/27/2020	17:04	AP
SN5124-002	5	LNG27A	07/27/2020	17:07	AP
SN5124-002L	25	LNG27A	07/27/2020	17:10	AP
SN5124-002A	5	LNG27A	07/27/2020	17:12	AP
SN5014-002	5	LNG27A	07/27/2020	17:15	AP
SN5014-002L	25	LNG27A	07/27/2020	17:18	AP
SN5014-002A	5	LNG27A	07/27/2020	17:20	AP
CCV	1	LNG27A	07/27/2020	17:23	AP
CCB	1	LNG27A	07/27/2020	17:26	AP
SN5014-002S	5	LNG27A	07/27/2020	17:28	AP
SN5014-002P	5	LNG27A	07/27/2020	17:31	AP
SN5980-001	1	LNG27A	07/27/2020	17:33	AP
SN5980-002	1	LNG27A	07/27/2020	17:36	AP
SN5980-003	1	LNG27A	07/27/2020	17:39	AP
SN5980-004	1	LNG27A	07/27/2020	17:41	AP
SN5980-005	1	LNG27A	07/27/2020	17:44	AP
SN5980-006	1	LNG27A	07/27/2020	17:47	AP
SN5980-007	1	LNG27A	07/27/2020	17:49	AP
SN5980-008	1	LNG27A	07/27/2020	17:52	AP
CCV	1	LNG27A	07/27/2020	17:55	AP
CCB	1	LNG27A	07/27/2020	17:57	AP
SN5980-009	1	LNG27A	07/27/2020	18:00	AP
SN5980-010	1	LNG27A	07/27/2020	18:03	AP
SN5515-001R	50	LNG27A	07/27/2020	18:05	AP
PBWNG21IMW2	5	LNG27A	07/27/2020	18:08	AP
LCSWNG21IMW2	5	LNG27A	07/27/2020	18:11	AP
SN5717-020	5	LNG27A	07/27/2020	18:13	AP
SN5830-002	5	LNG27A	07/27/2020	18:16	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5832-001	5	LNG27A	07/27/2020	18:19	AP
SN5832-002	5	LNG27A	07/27/2020	18:21	AP
SN5832-003	5	LNG27A	07/27/2020	18:24	AP
CCV	1	LNG27A	07/27/2020	18:27	AP
CCB	1	LNG27A	07/27/2020	18:29	AP
SN5832-004	5	LNG27A	07/27/2020	18:32	AP
SN5897-001	5	LNG27A	07/27/2020	18:35	AP
SN5897-002	5	LNG27A	07/27/2020	18:37	AP
SN5897-002L	25	LNG27A	07/27/2020	18:40	AP
SN5897-002A	5	LNG27A	07/27/2020	18:43	AP
SN5897-002S	5	LNG27A	07/27/2020	18:45	AP
SN5897-002P	5	LNG27A	07/27/2020	18:48	AP
SN5946-001	5	LNG27A	07/27/2020	18:51	AP
PBWNG22IMW1	1	LNG27A	07/27/2020	18:53	AP
LCSWNG22IMW1	5	LNG27A	07/27/2020	18:56	AP
CCV	1	LNG27A	07/27/2020	18:59	AP
CCB	1	LNG27A	07/27/2020	19:01	AP
SN5923-001	1	LNG27A	07/27/2020	19:04	AP
PBSNG23IMS1	5	LNG27A	07/27/2020	19:07	AP
LCSONG23IMS1	5	LNG27A	07/27/2020	19:09	AP
LC2ONG23IMS1	5	LNG27A	07/27/2020	19:12	AP
SN6056-005	5	LNG27A	07/27/2020	19:15	AP
SN6056-006	5	LNG27A	07/27/2020	19:17	AP
SN6056-007	5	LNG27A	07/27/2020	19:20	AP
SN6056-008	5	LNG27A	07/27/2020	19:23	AP
SN6056-009	5	LNG27A	07/27/2020	19:25	AP
SN6056-009L	25	LNG27A	07/27/2020	19:28	AP
CCV	1	LNG27A	07/27/2020	19:31	AP
CCB	1	LNG27A	07/27/2020	19:33	AP
SN6056-009A	5	LNG27A	07/27/2020	19:36	AP
SN6056-009S	5	LNG27A	07/27/2020	19:39	AP
SN6056-009P	5	LNG27A	07/27/2020	19:41	AP
SN6056-010	5	LNG27A	07/27/2020	19:44	AP
SN6056-011	5	LNG27A	07/27/2020	19:47	AP
SN6056-012	5	LNG27A	07/27/2020	19:49	AP
SN6056-013	5	LNG27A	07/27/2020	19:52	AP
SN6056-014	5	LNG27A	07/27/2020	19:54	AP
SN6056-015	5	LNG27A	07/27/2020	19:57	AP
SN6056-016	5	LNG27A	07/27/2020	20:00	AP
CCV	1	LNG27A	07/27/2020	20:02	AP
CCB	1	LNG27A	07/27/2020	20:05	AP
SN6056-017	5	LNG27A	07/27/2020	20:07	AP
PBWNG23IMW1	1	LNG27A	07/27/2020	20:10	AP
LCSWNG23IMW1	5	LNG27A	07/27/2020	20:13	AP
SN5815-002	1	LNG27A	07/27/2020	20:15	AP
SN5815-002R	1	LNG27A	07/27/2020	20:18	AP
SN5815-007	1	LNG27A	07/27/2020	20:20	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-014	1	LNG27A	07/27/2020	20:23	AP
SN6032-001	1	LNG27A	07/27/2020	20:26	AP
RINSE	1	LNG27A	07/27/2020	20:28	AP
RINSE	1	LNG27A	07/27/2020	20:31	AP
CCV	1	LNG27A	07/27/2020	20:34	AP
CCB	1	LNG27A	07/27/2020	20:36	AP
SN6071-001	1	LNG27A	07/27/2020	20:39	AP
PBWNG23IMW2	5	LNG27A	07/27/2020	20:41	AP
LCSWNG23IMW2	5	LNG27A	07/27/2020	20:44	AP
SN5815-004	5	LNG27A	07/27/2020	20:47	AP
SN5815-009	5	LNG27A	07/27/2020	20:50	AP
SN5815-016	5	LNG27A	07/27/2020	20:52	AP
SN5815-036	5	LNG27A	07/27/2020	20:55	AP
SN6059-001	5	LNG27A	07/27/2020	20:58	AP
SN6059-001L	25	LNG27A	07/27/2020	21:00	AP
SN6059-001A	5	LNG27A	07/27/2020	21:03	AP
CCV	1	LNG27A	07/27/2020	21:06	AP
CCB	1	LNG27A	07/27/2020	21:08	AP
SN6059-001S	5	LNG27A	07/27/2020	21:11	AP
SN6059-001P	5	LNG27A	07/27/2020	21:13	AP
SN6059-002	5	LNG27A	07/27/2020	21:16	AP
SN6059-003	5	LNG27A	07/27/2020	21:19	AP
SN6090-001	5	LNG27A	07/27/2020	21:21	AP
PBWNG24IMW1	1	LNG27A	07/27/2020	21:24	AP
LCSWNG24IMW1	5	LNG27A	07/27/2020	21:27	AP
SN6091-001	1	LNG27A	07/27/2020	21:29	AP
SN6091-002	1	LNG27A	07/27/2020	21:32	AP
SN6091-003	1	LNG27A	07/27/2020	21:35	AP
CCV	1	LNG27A	07/27/2020	21:37	AP
CCB	1	LNG27A	07/27/2020	21:40	AP
SN6092-001	1	LNG27A	07/27/2020	21:43	AP
SN6092-001L	5	LNG27A	07/27/2020	21:45	AP
SN6092-001A	1	LNG27A	07/27/2020	21:48	AP
SN6092-001S	1	LNG27A	07/27/2020	21:51	AP
SN6092-001P	1	LNG27A	07/27/2020	21:54	AP
PBWNG24IMW2	5	LNG27A	07/27/2020	21:56	AP
LCSWNG24IMW2	5	LNG27A	07/27/2020	21:59	AP
SN6090-002	5	LNG27A	07/27/2020	22:01	AP
SN6090-003	5	LNG27A	07/27/2020	22:04	AP
SN6090-004	5	LNG27A	07/27/2020	22:07	AP
CCV	1	LNG27A	07/27/2020	22:10	AP
CCB	1	LNG27A	07/27/2020	22:12	AP
SN6090-005	5	LNG27A	07/27/2020	22:15	AP
SN6090-006	5	LNG27A	07/27/2020	22:17	AP
SN6090-007	5	LNG27A	07/27/2020	22:20	AP
SN6090-008	5	LNG27A	07/27/2020	22:23	AP
SN6090-009	5	LNG27A	07/27/2020	22:25	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6090-010S	5	LNG27A	07/27/2020	22:28	AP
SN6090-010P	5	LNG27A	07/27/2020	22:30	AP
PBWNG24IMW3	5	LNG27A	07/27/2020	22:33	AP
LCSWNG24IMW3	5	LNG27A	07/27/2020	22:36	AP
SN6124-001	5	LNG27A	07/27/2020	22:38	AP
CCV	1	LNG27A	07/27/2020	22:41	AP
CCB	1	LNG27A	07/27/2020	22:43	AP
SN6124-003	5	LNG27A	07/27/2020	22:46	AP
SN6124-005	5	LNG27A	07/27/2020	22:49	AP
SN6124-005L	25	LNG27A	07/27/2020	22:52	AP
SN6124-005A	5	LNG27A	07/27/2020	22:54	AP
SN6124-005S	5	LNG27A	07/27/2020	22:57	AP
SN6124-005P	5	LNG27A	07/27/2020	23:00	AP
PBWNG27IMW1	5	LNG27A	07/27/2020	23:02	AP
LCSWNG27IMW1	5	LNG27A	07/27/2020	23:05	AP
SN6146-001	5	LNG27A	07/27/2020	23:08	AP
PBWNG27IMW2	5	LNG27A	07/27/2020	23:10	AP
CCV	1	LNG27A	07/27/2020	23:13	AP
CCB	1	LNG27A	07/27/2020	23:16	AP
LCSWNG27IMW2	5	LNG27A	07/27/2020	23:18	AP
SN6090-010R	5	LNG27A	07/27/2020	23:21	AP
SN6090-010RL	25	LNG27A	07/27/2020	23:24	AP
SN6090-010RA	5	LNG27A	07/27/2020	23:26	AP
SN6146-002	5	LNG27A	07/27/2020	23:29	AP
SN6146-003	5	LNG27A	07/27/2020	23:32	AP
SN6146-004	5	LNG27A	07/27/2020	23:35	AP
SN6146-004L	25	LNG27A	07/27/2020	23:37	AP
SN6146-004A	5	LNG27A	07/27/2020	23:40	AP
SN6146-004S	5	LNG27A	07/27/2020	23:42	AP
CCV	1	LNG27A	07/27/2020	23:45	AP
CCB	1	LNG27A	07/27/2020	23:48	AP
SN6146-004P	5	LNG27A	07/27/2020	23:51	AP
SN6146-005	5	LNG27A	07/27/2020	23:53	AP
SN6146-006	5	LNG27A	07/27/2020	23:56	AP
SN6146-007	5	LNG27A	07/27/2020	23:58	AP
PBSNG27IMS1	5	LNG27A	07/28/2020	00:01	AP
LCSONG27IMS1	5	LNG27A	07/28/2020	00:04	AP
SN6056-018	5	LNG27A	07/28/2020	00:07	AP
SN6056-018L	25	LNG27A	07/28/2020	00:09	AP
SN6056-018A	5	LNG27A	07/28/2020	00:12	AP
SN6056-018S	5	LNG27A	07/28/2020	00:14	AP
CCV	1	LNG27A	07/28/2020	00:17	AP
CCB	1	LNG27A	07/28/2020	00:20	AP
SN6056-018P	5	LNG27A	07/28/2020	00:23	AP
SN6056-019	5	LNG27A	07/28/2020	00:25	AP
SN6056-020	5	LNG27A	07/28/2020	00:28	AP
CCV	1	LNG27A	07/28/2020	00:30	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1	LNG27A	07/28/2020	00:33	AP
PQL	1	LNG27A	07/28/2020	00:36	AP
RINSE	1	LNG27A	07/28/2020	00:38	AP
RINSE	1	LNG27A	07/28/2020	00:41	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG27A.b
Acq. Date-Time	7/27/2020 3:23:34 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

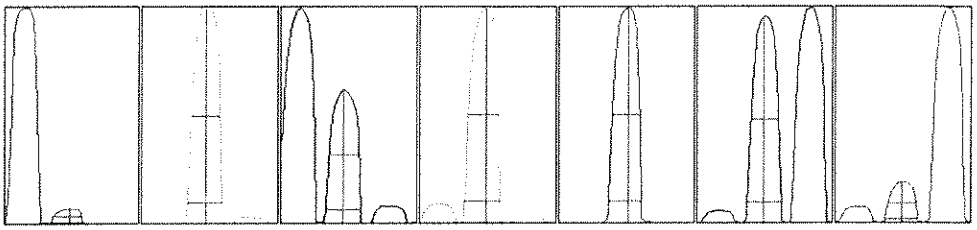
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2553	25527.18	0.536	5.000	
9	842	8418.07	0.581	5.000	
24	33917	339169.64	0.800	5.000	
59	6703	67034.72	0.535	5.000	
115	125260	1252597.85	0.708	5.000	
205	8266	82657.86	0.816	5.000	
208	18460	184597.99	1.075	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2557	2570	2548	2555	2533
9	846	837	839	848	839
24	33464	33914	33956	34104	34147
59	6643	6710	6728	6733	6703
115	123910	125163	125104	126046	126076
205	8167	8242	8262	8329	8328
208	18156	18426	18442	18643	18633

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4187.84	7.00	6.90 - 7.10	
9	1352.67	8.95	8.90 - 9.10	
24	53176.41	23.90	23.90 - 24.10	
59	10625.56	59.00	58.90 - 59.10	
115	210387.17	115.05	114.90 - 115.10	
205	13962.60	205.00	204.90 - 205.10	
208	30859.99	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.718	0.900	
9	0.64	0.751	0.900	
24	0.67	0.775	0.900	
59	0.66	0.765	0.900	
115	0.62	0.728	0.900	
205	0.62	0.762	0.900	
208	0.62	0.733	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	12.4 V
Extract 2	-135.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	412	4119.14	1.159	5.000	
89	63687	636867.78	1.342	5.000	
205	7210	72095.29	0.526	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	404	412	415	415	414
89	62375	63376	63841	64365	64476
205	7149	7208	7228	7211	7252

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.6 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1316	13160.82	0.942	5.000	
89	13812	138121.24	0.918	5.000	
205	4300	42999.01	0.339	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1305	1313	1329	1304	1329
89	13658	13705	13843	13956	13897
205	4287	4296	4286	4316	4315

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	1.2 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:21:17 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	37.78	13.5
11	B	6	No Gas	1447.91	4.9
23	Na	45	He	8642.19	3.3
24	Mg	45	He	615.62	5.1
27	Al	45	He	20.00	44.1
28	Si	45	H2	483.89	8.6
39	K	45	He	10945.99	2.9
40	Ca	45	H2	1101.19	2.8
51	V	89	He	173.34	8.8
52	Cr	89	He	71.32	20.7
55	Mn	89	He	27.33	25.7
56	Fe	89	H2	6431.98	1.8
59	Co	89	He	22.22	45.8
60	Ni	89	He	342.24	10.3
63	Cu	89	He	141.12	19.2
66	Zn	89	He	64.45	37.4
75	As	89	He	3.33	45.8
78	Se	89	H2	0.17	173.2
88	Sr	89	He	6.67	50.0
95	Mo	89	He	11.11	17.3
107	Ag	89	He	16.67	34.6
111	Cd	89	He	0.37	173.2
118	Sn	159	He	56.67	10.2
121	Sb	159	No Gas	26.69	57.3
137	Ba	159	No Gas	13.35	43.3
182	W	159	No Gas	63.40	32.9
205	Tl	209	No Gas	110.12	50.6
208	Pb	209	No Gas	196.88	19.3
232	Th	209	No Gas	100.11	20.0
238	U	209	No Gas	6.67	86.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1483357.64	1.0
Sc	45	No Gas	3141192.51	0.7
Sc	45	H2	418309.46	2.0
Sc	45	He	85440.95	0.7
Ge	72	No Gas	694668.88	1.1
Ge	72	H2	157206.79	1.4
Ge	72	He	64721.85	0.3
Y	89	H2	2572670.23	1.1
Y	89	He	574051.42	0.5
Tb	159	No Gas	6821698.44	0.4
Tb	159	He	2982140.20	0.3
Bi	209	No Gas	3547037.46	0.7

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:24:26 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	53677.02	0.9
11	B	6	No Gas	35620.19	1.8
23	Na	45	He	940406.72	0.2
24	Mg	45	He	519311.68	0.4
27	Al	45	He	21208.56	0.4
28	Si	45	H2	41988.46	1.7
39	K	45	He	495993.07	0.3
40	Ca	45	H2	3687380.64	0.9
51	V	89	He	37980.88	1.1
52	Cr	89	He	46599.76	0.5
55	Mn	89	He	22215.38	1.6
56	Fe	89	H2	14357346.95	0.7
59	Co	89	He	78360.45	1.1
60	Ni	89	He	21464.84	2.2
63	Cu	89	He	60334.39	0.4
66	Zn	89	He	8084.86	1.4
75	As	89	He	6702.69	1.6
78	Se	89	H2	3452.44	1.9
88	Sr	89	He	35176.94	1.2
95	Mo	89	He	37651.45	0.6
107	Ag	89	He	129052.87	0.5
111	Cd	89	He	16995.94	1.1
118	Sn	159	He	37895.22	1.3
121	Sb	159	No Gas	281577.40	0.9
137	Ba	159	No Gas	111276.29	0.5
182	W	159	No Gas	209547.07	0.8
205	Tl	209	No Gas	453668.28	0.3
208	Pb	209	No Gas	625855.81	1.3
232	Th	209	No Gas	643461.33	1.7
238	U	209	No Gas	601070.87	1.6

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1444605.42	1.0	1483357.64	97.39	29.5	120.4	
Sc	45	No Gas	3103944.23	0.7	3141192.51	98.81	29.5	120.4	
Sc	45	H2	404200.40	0.8	418309.46	96.63	29.5	120.4	
Sc	45	He	80155.11	1.6	85440.95	93.81	29.5	120.4	
Ge	72	No Gas	689532.18	1.1	694668.88	99.26	29.5	120.4	
Ge	72	H2	151559.26	1.4	157206.79	96.41	29.5	120.4	
Ge	72	He	61423.83	1.3	64721.85	94.9	29.5	120.4	
Y	89	H2	2522718.20	1.1	2572670.23	98.06	29.5	120.4	
Y	89	He	543887.00	1.4	574051.42	94.75	29.5	120.4	
Tb	159	No Gas	6892845.18	1.2	6821698.44	101.04	29.5	120.4	
Tb	159	He	2893308.43	1.2	2982140.2	97.02	29.5	120.4	
Bi	209	No Gas	3555161.39	1.0	3547037.46	100.23	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:27:28 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.472	ppb	4.8	22462.50	20	102.36	89.6	110.4	
11	B	6	No Gas	18.669	ppb	5.2	14481.04	20	93.34	89.6	110.4	
23	Na	45	He	4031.577	ppb	2.1	400006.44	4000	100.79	89.6	110.4	
24	Mg	45	He	3955.828	ppb	1.8	214375.94	4000	98.9	89.6	110.4	
27	Al	45	He	371.367	ppb	0.5	8218.20	400	92.84	89.6	110.4	
28	Si	45	H2	415.412	ppb	1.5	17891.31	400	103.85	89.6	110.4	
39	K	45	He	3935.044	ppb	0.8	209834.47	4000	98.38	89.6	110.4	
40	Ca	45	H2	4024.591	ppb	0.9	1499462.62	4000	100.61	89.6	110.4	
51	V	89	He	20.142	ppb	1.4	15879.47	20	100.71	89.6	110.4	
52	Cr	89	He	20.013	ppb	1.9	19275.62	20	100.06	89.6	110.4	
55	Mn	89	He	20.197	ppb	1.5	9270.04	20	100.98	89.6	110.4	
56	Fe	89	H2	4035.384	ppb	1.3	5832564.13	4000	100.88	89.6	110.4	
59	Co	89	He	20.514	ppb	3.4	33163.36	20	102.57	89.6	110.4	
60	Ni	89	He	20.313	ppb	2.0	9193.33	20	101.56	89.6	110.4	
63	Cu	89	He	20.217	ppb	1.4	25239.07	20	101.08	89.6	110.4	
66	Zn	89	He	20.854	ppb	1.0	3513.91	20	104.27	89.6	110.4	
75	As	89	He	20.560	ppb	1.9	2843.94	20	102.8	89.6	110.4	
78	Se	89	H2	20.491	ppb	1.1	1423.51	20	102.46	89.6	110.4	
88	Sr	89	He	19.620	ppb	2.9	14238.94	20	98.1	89.6	110.4	
95	Mo	89	He	39.823	ppb	2.2	30924.62	40	99.56	89.6	110.4	
107	Ag	89	He	20.348	ppb	1.5	54163.08	20	101.74	89.6	110.4	
111	Cd	89	He	20.122	ppb	2.5	7053.76	20	100.61	89.6	110.4	
118	Sn	159	He	19.417	ppb	0.8	15115.62	20	97.08	89.6	110.4	
121	Sb	159	No Gas	20.167	ppb	5.9	114847.90	20	100.84	89.6	110.4	
137	Ba	159	No Gas	19.797	ppb	5.9	44560.60	20	98.98	89.6	110.4	
182	W	159	No Gas	19.617	ppb	5.4	83181.91	20	98.08	89.6	110.4	
205	Tl	209	No Gas	20.900	ppb	6.7	193585.02	20	104.5	89.6	110.4	
208	Pb	209	No Gas	20.315	ppb	6.2	259637.01	20	101.58	89.6	110.4	
232	Th	209	No Gas	19.775	ppb	7.5	259699.14	20	98.87	89.6	110.4	
238	U	209	No Gas	19.837	ppb	6.1	243390.95	20	99.18	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1475931.10	2.1	1483357.64	99.5	29.5	120.4	
Sc	45	No Gas	3144287.51	3.2	3141192.51	100.1	29.5	120.4	
Sc	45	H2	408227.63	0.2	418309.46	97.59	29.5	120.4	
Sc	45	He	83500.55	1.2	85440.95	97.73	29.5	120.4	
Ge	72	No Gas	697280.60	3.8	694668.88	100.38	29.5	120.4	
Ge	72	H2	154725.68	1.6	157206.79	98.42	29.5	120.4	
Ge	72	He	62826.50	0.2	64721.85	97.07	29.5	120.4	
Y	89	H2	2538091.94	0.9	2572670.23	98.66	29.5	120.4	
Y	89	He	560794.38	0.8	574051.42	97.69	29.5	120.4	
Tb	159	No Gas	6979373.65	3.8	6821698.44	102.31	29.5	120.4	
Tb	159	He	2964676.17	0.9	2982140.2	99.41	29.5	120.4	
Bi	209	No Gas	3634265.72	4.0	3547037.46	102.46	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:30:08 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.067	ppb	23.6	111.12	0.2	
11	B	6	No Gas	0.528	ppb	40.9	1804.62	4	
23	Na	45	He	-1.170	ppb	N/A	8164.75	200	
24	Mg	45	He	-0.034	ppb	N/A	588.95	20	
27	Al	45	He	0.183	ppb	334.6	23.33	20	
28	Si	45	H2	0.352	ppb	722.6	480.55	100	
39	K	45	He	0.674	ppb	1308.0	10520.87	200	
40	Ca	45	H2	2.301	ppb	40.9	1910.21	20	
51	V	89	He	-0.028	ppb	N/A	145.56	1	
52	Cr	89	He	-0.007	ppb	N/A	62.66	1	
55	Mn	89	He	-0.002	ppb	N/A	25.33	0.4	
56	Fe	89	H2	3.070	ppb	30.4	10612.48	20	
59	Co	89	He	-0.001	ppb	N/A	20.00	0.2	
60	Ni	89	He	-0.076	ppb	N/A	296.68	0.4	
63	Cu	89	He	-0.006	ppb	N/A	128.89	0.6	
66	Zn	89	He	0.026	ppb	328.3	66.67	2	
75	As	89	He	0.031	ppb	77.9	7.33	1	
78	Se	89	H2	0.110	ppb	15.2	7.67	1	
88	Sr	89	He	0.000	ppb	1374.2	6.67	1	
95	Mo	89	He	0.196	ppb	5.7	161.12	1	
107	Ag	89	He	0.005	ppb	146.9	27.78	0.2	
111	Cd	89	He	0.009	ppb	5.9	3.33	0.2	
118	Sn	159	He	0.087	ppb	16.1	122.23	1	
121	Sb	159	No Gas	0.025	ppb	32.1	170.19	0.2	
137	Ba	159	No Gas	0.012	ppb	42.1	40.04	0.4	
182	W	159	No Gas	0.075	ppb	13.0	380.43	1	
205	Tl	209	No Gas	0.026	ppb	29.1	353.73	0.2	
208	Pb	209	No Gas	0.025	ppb	27.9	520.59	0.2	
232	Th	209	No Gas	0.066	ppb	20.8	961.12	1	
238	U	209	No Gas	0.020	ppb	18.9	246.95	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1473623.57	2.8	1483357.64	99.34	29.5	120.4	
Sc	45	No Gas	3109806.18	3.4	3141192.51	99	29.5	120.4	
Sc	45	H2	403252.38	0.7	418309.46	96.4	29.5	120.4	
Sc	45	He	81969.15	5.2	85440.95	95.94	29.5	120.4	
Ge	72	No Gas	691524.97	4.0	694668.88	99.55	29.5	120.4	
Ge	72	H2	152136.00	0.9	157206.79	96.77	29.5	120.4	
Ge	72	He	63117.81	3.9	64721.85	97.52	29.5	120.4	
Y	89	H2	2499411.28	0.2	2572670.23	97.15	29.5	120.4	
Y	89	He	555077.98	5.4	574051.42	96.69	29.5	120.4	
Tb	159	No Gas	6913489.97	4.1	6821698.44	101.35	29.5	120.4	
Tb	159	He	2938186.93	5.5	2982140.2	98.53	29.5	120.4	
Bi	209	No Gas	3596690.18	4.5	3547037.46	101.4	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:32:47 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	0.225	ppb	22.8	283.35	0.2	112.5	79.5	120.4	
11	B	6	No Gas	4.051	ppb	4.6	4259.67	4	101.28	79.5	120.4	
23	Na	45	He	218.829	ppb	5.0	28770.52	200	109.41	79.5	120.4	
24	Mg	45	He	20.501	ppb	7.0	1655.78	20	102.5	79.5	120.4	
27	Al	45	He	18.774	ppb	13.8	420.02	20	93.87	79.5	120.4	
28	Si	45	H2	102.458	ppb	8.4	4645.98	100	102.46	79.5	120.4	
39	K	45	He	201.860	ppb	3.3	20261.94	200	100.93	79.5	120.4	
40	Ca	45	H2	22.187	ppb	1.4	9099.91	20	110.94	79.5	120.4	
51	V	89	He	1.262	ppb	2.1	1118.98	1	126.2	79.5	120.4	Failed DoD
52	Cr	89	He	1.034	ppb	4.6	1029.86	1	103.4	79.5	120.4	
55	Mn	89	He	0.450	ppb	4.6	225.29	0.4	112.5	79.5	120.4	
56	Fe	89	H2	21.675	ppb	4.7	37223.88	20	108.38	79.5	120.4	
59	Co	89	He	0.225	ppb	8.9	373.37	0.2	112.5	79.5	120.4	
60	Ni	89	He	0.410	ppb	21.8	496.69	0.4	102.5	79.5	120.4	
63	Cu	89	He	0.714	ppb	7.6	993.40	0.6	119	79.5	120.4	
66	Zn	89	He	2.193	ppb	9.0	412.24	2	109.65	79.5	120.4	
75	As	89	He	1.067	ppb	4.0	146.02	1	106.7	79.5	120.4	
78	Se	89	H2	1.140	ppb	5.5	78.50	1	114	79.5	120.4	
88	Sr	89	He	1.023	ppb	4.7	725.60	1	102.3	79.5	120.4	
95	Mo	89	He	1.063	ppb	3.0	810.05	1	106.3	79.5	120.4	
107	Ag	89	He	0.197	ppb	5.2	524.48	0.2	98.5	79.5	120.4	
111	Cd	89	He	0.217	ppb	15.5	74.08	0.2	108.5	79.5	120.4	
118	Sn	159	He	1.099	ppb	9.9	885.62	1	109.9	79.5	120.4	
121	Sb	159	No Gas	0.209	ppb	14.6	1218.09	0.2	104.5	79.5	120.4	
137	Ba	159	No Gas	0.412	ppb	11.5	941.11	0.4	103	79.5	120.4	
182	W	159	No Gas	1.033	ppb	8.0	4445.73	1	103.3	79.5	120.4	
205	Tl	209	No Gas	0.209	ppb	2.5	2069.16	0.2	104.5	79.5	120.4	
208	Pb	209	No Gas	0.222	ppb	4.7	3063.60	0.2	111	79.5	120.4	
232	Th	209	No Gas	0.250	ppb	2.1	3424.33	0.2	125	79.5	120.4	Failed DoD
238	U	209	No Gas	0.207	ppb	5.7	2576.55	0.2	103.5	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1471942.98	1.7	1483357.64	99.23	29.5	120.4	
Sc	45	No Gas	3122592.30	2.5	3141192.51	99.41	29.5	120.4	
Sc	45	H2	397940.12	1.0	418309.46	95.13	29.5	120.4	
Sc	45	He	80925.42	2.6	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	695757.14	2.8	694668.88	100.16	29.5	120.4	
Ge	72	H2	150271.07	2.1	157206.79	95.59	29.5	120.4	
Ge	72	He	60991.22	2.1	64721.85	94.24	29.5	120.4	
Y	89	H2	2510863.28	1.5	2572670.23	97.6	29.5	120.4	
Y	89	He	543717.21	2.9	574051.42	94.72	29.5	120.4	
Tb	159	No Gas	6985945.94	2.7	6821698.44	102.41	29.5	120.4	
Tb	159	He	2894083.95	2.8	2982140.2	97.05	29.5	120.4	
Bi	209	No Gas	3669170.08	3.0	3547037.46	103.44	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:35:30 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.022	ppb	25.8	57.78	0.2	-50	50	
B	11	6	No Gas	0.472	ppb	32.4	1656.82	4	-50	100	
Na	23	45	He	98444.567	ppb	1.3	8810681.10	100000	80	120	
Mg	24	45	He	101869.862	ppb	1.2	5068937.29	100000	80	120	
Al	27	45	He	93327.606	ppb	1.2	1896776.48	100000	80	120	
Si	28	45	H2	2.930	ppb	75.6	553.97	100	-50	50	
K	39	45	He	96134.049	ppb	0.9	4488691.56	100000	80	120	
Ca	40	45	H2	101196.788	ppb	1.4	35053500.59	100000	80	120	
V	51	89	He	0.181	ppb	23.2	292.24	1	-50	100	
Cr	52	89	He	0.395	ppb	3.5	422.60	0.78	-100	100	
Mn	55	89	He	0.501	ppb	2.5	241.29	0.0826	100	100	DoD
Fe	56	89	H2	98471.876	ppb	1.4	136756885.40	100000	80	120	
Co	59	89	He	0.298	ppb	12.4	473.37	0.2	-50	100	
Ni	60	89	He	0.323	ppb	32.5	447.80	0.114	100	100	
Cu	63	89	He	0.546	ppb	6.0	768.94	-0.043	100	100	
Zn	66	89	He	0.461	ppb	22.5	131.12	-0.7632	100	100	
As	75	89	He	0.081	ppb	15.4	13.67	1	-50	100	
Se	78	89	H2	0.087	ppb	51.5	6.00	1	-50	100	
Sr	88	89	He	0.812	ppb	7.7	561.14	0.0578	100	100	
Mo	95	89	He	2077.932	ppb	0.9	1520448.95	2000	80	120	
Ag	107	89	He	0.015	ppb	76.0	53.33	0.2	-50	50	
Cd	111	89	He	0.309	ppb	8.7	102.59	0.268	100	100	
Sn	118	159	He	0.366	ppb	8.9	331.13	-0.24	100	100	
Sb	121	159	No Gas	0.158	ppb	16.6	951.10	0.089	100	100	
Ba	137	159	No Gas	0.201	ppb	19.2	477.21	-0.0794	100	100	
W	182	159	No Gas	0.208	ppb	17.4	967.79	0.32	-100	100	
Tl	205	209	No Gas	0.000	ppb	2162.5	110.12	0.2	-50	50	
Pb	208	209	No Gas	0.094	ppb	3.7	1361.56	0.03	100	100	
Th	232	209	No Gas	0.023	ppb	25.0	397.12	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	153.5	16.68	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1381833.79	2.4	1483357.64	93.16	29.5	120.4	
Sc	45	No Gas	3114966.97	3.1	3141192.51	99.17	29.5	120.4	
Sc	45	H2	379841.36	1.1	418309.46	90.8	29.5	120.4	
Sc	45	He	76876.01	1.6	85440.95	89.98	29.5	120.4	
Ge	72	No Gas	693165.86	2.6	694668.88	99.78	29.5	120.4	
Ge	72	H2	141016.09	0.8	157206.79	89.7	29.5	120.4	
Ge	72	He	58437.29	0.9	64721.85	90.29	29.5	120.4	
Y	89	H2	2441381.64	1.0	2572670.23	94.9	29.5	120.4	
Y	89	He	528570.16	1.3	574051.42	92.08	29.5	120.4	
Tb	159	No Gas	7150594.75	2.5	6821698.44	104.82	29.5	120.4	
Tb	159	He	2888153.50	1.0	2982140.2	96.85	29.5	120.4	
Bi	209	No Gas	3510054.33	2.3	3547037.46	98.96	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:38:13 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.179	ppb	4.5	20331.53	20	79.5	120.4	
11	B	6	No Gas	20.377	ppb	5.3	14393.18	20	79.5	120.4	
23	Na	45	He	96442.338	ppb	0.5	8994781.86	100000	79.5	120.4	
24	Mg	45	He	99295.067	ppb	0.2	5148702.98	100000	79.5	120.4	
27	Al	45	He	90492.652	ppb	0.5	1916511.20	100000	79.5	120.4	
28	Si	45	H2	458.887	ppb	6.9	19077.29	500	79.5	120.4	
39	K	45	He	93391.144	ppb	0.3	4544266.59	100000	79.5	120.4	
40	Ca	45	H2	96094.682	ppb	8.3	34583447.26	100000	79.5	120.4	
51	V	89	He	19.818	ppb	1.6	15206.49	20	79.5	120.4	
52	Cr	89	He	19.758	ppb	1.0	18518.06	20	79.5	120.4	
55	Mn	89	He	19.877	ppb	0.8	8877.88	20	79.5	120.4	
56	Fe	89	H2	93815.111	ppb	8.6	134929099.35	100000	79.5	120.4	
59	Co	89	He	20.017	ppb	2.2	31490.60	20	79.5	120.4	
60	Ni	89	He	19.487	ppb	0.4	8594.05	20	79.5	120.4	
63	Cu	89	He	19.031	ppb	0.6	23125.29	20	79.5	120.4	
66	Zn	89	He	20.127	ppb	4.9	3301.62	20	79.5	120.4	
75	As	89	He	20.186	ppb	0.8	2717.23	20	79.5	120.4	
78	Se	89	H2	19.548	ppb	8.7	1352.67	20	79.5	120.4	
88	Sr	89	He	20.343	ppb	1.6	14364.64	20	79.5	120.4	
95	Mo	89	He	2048.571	ppb	0.8	1547482.49	2000	79.5	120.4	
107	Ag	89	He	19.069	ppb	1.2	49390.63	20	79.5	120.4	
111	Cd	89	He	19.433	ppb	1.3	6628.73	20	79.5	120.4	
118	Sn	159	He	19.773	ppb	0.7	15405.99	20	79.5	120.4	
121	Sb	159	No Gas	19.416	ppb	3.5	116650.36	20	79.5	120.4	
137	Ba	159	No Gas	18.804	ppb	5.3	44637.93	20	79.5	120.4	
182	W	159	No Gas	20.344	ppb	5.6	90958.67	20	79.5	120.4	
205	Tl	209	No Gas	19.869	ppb	5.0	184015.18	20	79.5	120.4	
208	Pb	209	No Gas	20.044	ppb	5.2	256094.63	20	79.5	120.4	
232	Th	209	No Gas	20.970	ppb	5.1	275398.65	20	79.5	120.4	
238	U	209	No Gas	20.813	ppb	5.6	255248.09	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1355568.24	2.9	1483357.64	91.39	29.5	120.4	
Sc	45	No Gas	3118878.90	3.2	3141192.51	99.29	29.5	120.4	
Sc	45	H2	395773.34	5.4	418309.46	94.61	29.5	120.4	
Sc	45	He	80100.55	0.7	85440.95	93.75	29.5	120.4	
Ge	72	No Gas	695099.87	2.8	694668.88	100.06	29.5	120.4	
Ge	72	H2	146620.83	5.7	157206.79	93.27	29.5	120.4	
Ge	72	He	60850.84	0.7	64721.85	94.02	29.5	120.4	
Y	89	H2	2536094.13	5.5	2572670.23	98.58	29.5	120.4	
Y	89	He	545661.21	0.9	574051.42	95.05	29.5	120.4	
Tb	159	No Gas	7357603.57	3.1	6821698.44	107.86	29.5	120.4	
Tb	159	He	2967276.38	0.8	2982140.2	99.5	29.5	120.4	
Bi	209	No Gas	3631526.97	3.6	3547037.46	102.38	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:40:55 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	103.193	ppb	3.9	113601.61	100	103.19	89.5	110.4	
11	B	6	No Gas	485.686	ppb	4.3	342281.65	500	97.14	89.5	110.4	
51	V	89	He	1026.250	ppb	0.8	779770.40	1000	102.63	89.5	110.4	
52	Cr	89	He	2036.837	ppb	0.8	1903866.12	2000	101.84	89.5	110.4	
55	Mn	89	He	2071.287	ppb	0.5	923318.66	2000	103.56	89.5	110.4	
59	Co	89	He	1047.676	ppb	0.7	1648733.64	1000	104.77	89.5	110.4	
60	Ni	89	He	1068.844	ppb	1.0	454277.36	1000	106.88	89.5	110.4	
63	Cu	89	He	2009.747	ppb	0.7	2430347.27	2000	100.49	89.5	110.4	
66	Zn	89	He	2089.906	ppb	0.3	336864.60	2000	104.5	89.5	110.4	
75	As	89	He	1038.210	ppb	0.5	139716.58	1000	103.82	89.5	110.4	
78	Se	89	H2	1004.606	ppb	2.9	69632.23	1000	100.46	89.5	110.4	
88	Sr	89	He	2033.521	ppb	0.1	1436732.77	2000	101.68	89.5	110.4	
95	Mo	89	He	1048.213	ppb	0.4	792576.29	1000	104.82	89.5	110.4	
107	Ag	89	He	111.120	ppb	0.6	288009.74	100	111.12	89.5	110.4	> +/- 10%
111	Cd	89	He	1045.135	ppb	0.6	356818.90	1000	104.51	89.5	110.4	
118	Sn	159	He	995.403	ppb	0.4	769801.97	1000	99.54	89.5	110.4	
121	Sb	159	No Gas	953.177	ppb	3.1	5962443.27	1000	95.32	89.5	110.4	
137	Ba	159	No Gas	1901.364	ppb	3.2	4700529.84	2000	95.07	89.5	110.4	
182	W	159	No Gas	993.715	ppb	3.0	4625370.31	1000	99.37	89.5	110.4	
205	Tl	209	No Gas	957.347	ppb	3.0	9799470.69	1000	95.73	89.5	110.4	
208	Pb	209	No Gas	1905.281	ppb	2.9	26901627.29	2000	95.26	89.5	110.4	
232	Th	209	No Gas	962.138	ppb	3.4	13968978.28	1000	96.21	89.5	110.4	
238	U	209	No Gas	958.295	ppb	3.3	12998441.22	1000	95.83	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1482742.95	2.3	1483357.64	99.96	29.5	120.4	
Sc	45	No Gas	3330517.14	1.9	3141192.51	106.03	29.5	120.4	
Ge	72	No Gas	748309.16	1.1	694668.88	107.72	29.5	120.4	
Tb	159	No Gas	7659483.50	1.8	6821698.44	112.28	29.5	120.4	
Bi	209	No Gas	4012855.89	1.8	3547037.46	113.13	29.5	120.4	
Sc	45	H2	399356.89	5.0	418309.46	95.47	29.5	120.4	
Ge	72	H2	148750.93	6.7	157206.79	94.62	29.5	120.4	
Y	89	H2	2530579.34	6.2	2572670.23	98.36	29.5	120.4	
Sc	45	He	80100.29	0.3	85440.95	93.75	29.5	120.4	
Ge	72	He	61909.84	0.3	64721.85	95.66	29.5	120.4	
Y	89	He	546167.43	0.7	574051.42	95.14	29.5	120.4	
Tb	159	He	2955907.21	0.3	2982140.2	99.12	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:43:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.320	ppb	31.4	344.46	100	
11	B	6	No Gas	12.213	ppb	10.1	8840.79	1000	
23	Na	45	He	198790.799	ppb	1.0	19689667.10	200000	
24	Mg	45	He	204836.528	ppb	0.9	11284072.33	200000	>LDR
27	Al	45	He	190726.576	ppb	0.7	4291675.67	200000	
28	Si	45	H2	9656.240	ppb	1.7	397291.33	10000	
39	K	45	He	194451.191	ppb	0.8	10040871.33	200000	
40	Ca	45	H2	203017.403	ppb	1.2	74079842.79	200000	>LDR
51	V	89	He	0.131	ppb	56.3	274.46	1000	
52	Cr	89	He	1.592	ppb	5.5	1616.47	2000	
55	Mn	89	He	7.957	ppb	1.2	3712.49	2000	
56	Fe	89	H2	100320.822	ppb	0.2	143456895.18	100000	>LDR
59	Co	89	He	0.741	ppb	12.4	1233.48	1000	
60	Ni	89	He	2.124	ppb	7.1	1275.66	1000	
63	Cu	89	He	1.244	ppb	9.1	1702.39	2000	
66	Zn	89	He	2.193	ppb	10.4	431.14	2000	
75	As	89	He	0.329	ppb	14.3	49.34	1000	
78	Se	89	H2	1.342	ppb	57.6	93.17	1000	
88	Sr	89	He	1.294	ppb	2.6	956.74	2000	
95	Mo	89	He	1.722	ppb	4.1	1363.45	1000	
107	Ag	89	He	0.112	ppb	19.8	318.90	100	
111	Cd	89	He	0.161	ppb	27.5	57.41	1000	
118	Sn	159	He	1.393	ppb	8.6	1150.09	1000	
121	Sb	159	No Gas	1.277	ppb	39.6	7494.16	1000	
137	Ba	159	No Gas	2.320	ppb	42.2	5373.91	2000	
182	W	159	No Gas	2.519	ppb	21.1	11007.22	1000	
205	Tl	209	No Gas	0.937	ppb	35.0	8392.53	1000	
208	Pb	209	No Gas	2.118	ppb	40.7	26044.70	2000	
232	Th	209	No Gas	3.470	ppb	53.2	43699.74	1000	
238	U	209	No Gas	1.742	ppb	61.1	20475.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1307448.97	0.6	1483357.64	88.14	29.5	120.4	
Sc	45	No Gas	3091077.01	0.7	3141192.51	98.4	29.5	120.4	
Sc	45	H2	400189.76	3.0	418309.46	95.67	29.5	120.4	
Sc	45	He	85102.62	0.4	85440.95	99.6	29.5	120.4	
Ge	72	No Gas	677011.35	0.7	694668.88	97.46	29.5	120.4	
Ge	72	H2	145452.02	2.4	157206.79	92.52	29.5	120.4	
Ge	72	He	63020.80	1.3	64721.85	97.37	29.5	120.4	
Y	89	H2	2513599.37	2.1	2572670.23	97.7	29.5	120.4	
Y	89	He	567513.13	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7132215.80	1.3	6821698.44	104.55	29.5	120.4	
Tb	159	He	2999314.12	0.4	2982140.2	100.58	29.5	120.4	
Bi	209	No Gas	3454647.36	1.5	3547037.46	97.4	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:46:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.094	ppb	27.7	152.23	100	
11	B	6	No Gas	2.517	ppb	5.8	3462.76	1000	
23	Na	45	He	142.693	ppb	10.9	23508.54	200000	
24	Mg	45	He	27.849	ppb	10.2	2220.34	200000	
27	Al	45	He	28.329	ppb	5.2	680.04	200000	
28	Si	45	H2	2.522	ppb	80.2	610.70	10000	
39	K	45	He	55.998	ppb	2.1	14262.43	200000	
40	Ca	45	H2	31.485	ppb	7.9	13535.80	200000	
51	V	89	He	0.223	ppb	13.4	361.13	1000	
52	Cr	89	He	0.114	ppb	21.7	187.97	2000	
55	Mn	89	He	0.114	ppb	10.3	82.65	2000	
56	Fe	89	H2	23.521	ppb	6.8	42588.91	100000	
59	Co	89	He	0.100	ppb	27.0	193.35	1000	
60	Ni	89	He	0.017	ppb	404.3	358.91	1000	
63	Cu	89	He	0.355	ppb	11.6	607.81	2000	
66	Zn	89	He	0.137	ppb	16.2	90.00	2000	
75	As	89	He	0.110	ppb	27.8	19.33	1000	
78	Se	89	H2	0.141	ppb	16.9	10.50	1000	
88	Sr	89	He	0.113	ppb	3.7	93.34	2000	
95	Mo	89	He	0.592	ppb	4.9	494.47	1000	
107	Ag	89	He	0.015	ppb	20.8	58.89	100	
111	Cd	89	He	0.067	ppb	17.8	25.18	1000	
118	Sn	159	He	0.388	ppb	9.9	370.02	1000	
121	Sb	159	No Gas	0.040	ppb	21.0	280.31	1000	
137	Ba	159	No Gas	0.028	ppb	67.6	83.42	2000	
182	W	159	No Gas	0.191	ppb	35.0	951.11	1000	
205	Tl	209	No Gas	0.033	ppb	18.4	450.52	1000	
208	Pb	209	No Gas	0.113	ppb	5.0	1782.05	2000	
232	Th	209	No Gas	0.031	ppb	25.4	550.63	1000	
238	U	209	No Gas	0.019	ppb	9.5	260.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1596645.90	2.8	1483357.64	107.64	29.5	120.4	
Sc	45	No Gas	3482637.18	3.3	3141192.51	110.87	29.5	120.4	
Sc	45	H2	431843.65	0.7	418309.46	103.24	29.5	120.4	
Sc	45	He	88017.99	0.6	85440.95	103.02	29.5	120.4	
Ge	72	No Gas	764489.46	2.8	694668.88	110.05	29.5	120.4	
Ge	72	H2	161437.63	1.9	157206.79	102.69	29.5	120.4	
Ge	72	He	67348.13	0.6	64721.85	104.06	29.5	120.4	
Y	89	H2	2682029.51	0.3	2572670.23	104.25	29.5	120.4	
Y	89	He	589124.14	0.8	574051.42	102.63	29.5	120.4	
Tb	159	No Gas	7626315.86	3.4	6821698.44	111.79	29.5	120.4	
Tb	159	He	3069151.55	0.9	2982140.2	102.92	29.5	120.4	
Bi	209	No Gas	3929717.81	3.5	3547037.46	110.79	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 4:48:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.076	ppb	18.8	127.78	100	
11	B	6	No Gas	1.680	ppb	6.6	2763.69	1000	
23	Na	45	He	52.400	ppb	12.9	14306.40	200000	
24	Mg	45	He	2.055	ppb	55.9	753.41	200000	
27	Al	45	He	3.973	ppb	20.4	113.34	200000	
28	Si	45	H2	0.336	ppb	408.7	517.25	10000	
39	K	45	He	11.512	ppb	37.4	11919.67	200000	
40	Ca	45	H2	5.488	ppb	21.3	3321.63	200000	
51	V	89	He	0.195	ppb	14.5	336.69	1000	
52	Cr	89	He	0.013	ppb	200.5	85.99	2000	
55	Mn	89	He	0.038	ppb	61.9	45.99	2000	
56	Fe	89	H2	8.165	ppb	6.9	19234.54	100000	
59	Co	89	He	0.029	ppb	48.3	71.12	1000	
60	Ni	89	He	-0.054	ppb	N/A	325.57	1000	
63	Cu	89	He	0.242	ppb	14.0	458.91	2000	
66	Zn	89	He	0.106	ppb	54.7	84.45	2000	
75	As	89	He	0.066	ppb	41.6	13.00	1000	
78	Se	89	H2	0.097	ppb	34.8	7.33	1000	
88	Sr	89	He	0.023	ppb	10.8	24.44	2000	
95	Mo	89	He	0.243	ppb	12.8	208.90	1000	
107	Ag	89	He	0.001	ppb	559.1	18.89	100	
111	Cd	89	He	0.024	ppb	7.3	9.26	1000	
118	Sn	159	He	0.119	ppb	42.4	153.34	1000	
121	Sb	159	No Gas	0.114	ppb	106.3	714.31	1000	
137	Ba	159	No Gas	0.213	ppb	110.2	520.70	2000	
182	W	159	No Gas	0.216	ppb	56.9	1031.29	1000	
205	Tl	209	No Gas	0.123	ppb	111.2	1312.08	1000	
208	Pb	209	No Gas	0.252	ppb	86.9	3582.11	2000	
232	Th	209	No Gas	0.097	ppb	103.0	1442.34	1000	
238	U	209	No Gas	0.112	ppb	114.9	1452.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559939.18	1.0	1483357.64	105.16	29.5	120.4	
Sc	45	No Gas	3379704.61	1.2	3141192.51	107.59	29.5	120.4	
Sc	45	H2	434707.92	1.8	418309.46	103.92	29.5	120.4	
Sc	45	He	88239.61	0.3	85440.95	103.28	29.5	120.4	
Ge	72	No Gas	748683.04	0.3	694668.88	107.78	29.5	120.4	
Ge	72	H2	163203.20	0.7	157206.79	103.81	29.5	120.4	
Ge	72	He	67031.14	0.3	64721.85	103.57	29.5	120.4	
Y	89	H2	2693159.39	1.7	2572670.23	104.68	29.5	120.4	
Y	89	He	587753.95	0.1	574051.42	102.39	29.5	120.4	
Tb	159	No Gas	7318490.59	1.1	6821698.44	107.28	29.5	120.4	
Tb	159	He	3057766.00	0.2	2982140.2	102.54	29.5	120.4	
Bi	209	No Gas	3790688.32	0.8	3547037.46	106.87	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:51:39 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.651	ppb	6.2	27129.44	25	94.6	89.8	110.2	
11	B	6	No Gas	24.213	ppb	6.2	19193.30	25	96.85	89.8	110.2	
23	Na	45	He	5007.642	ppb	0.3	502789.59	5000	100.15	89.8	110.2	
24	Mg	45	He	4844.992	ppb	0.5	266655.91	5000	96.9	89.8	110.2	
27	Al	45	He	478.447	ppb	2.4	10752.19	500	95.69	89.8	110.2	
28	Si	45	H2	460.019	ppb	2.9	20423.87	500	92	89.8	110.2	
39	K	45	He	4849.527	ppb	0.2	260218.16	5000	96.99	89.8	110.2	
40	Ca	45	H2	4897.838	ppb	0.9	1885458.03	5000	97.96	89.8	110.2	
51	V	89	He	24.964	ppb	1.3	19989.22	25	99.86	89.8	110.2	
52	Cr	89	He	24.460	ppb	0.9	23961.22	25	97.84	89.8	110.2	
55	Mn	89	He	25.074	ppb	0.5	11706.74	25	100.3	89.8	110.2	
56	Fe	89	H2	4949.127	ppb	0.9	7442020.09	5000	98.98	89.8	110.2	
59	Co	89	He	25.059	ppb	1.3	41231.80	25	100.24	89.8	110.2	
60	Ni	89	He	24.892	ppb	1.3	11388.33	25	99.57	89.8	110.2	
63	Cu	89	He	25.057	ppb	0.4	31802.59	25	100.23	89.8	110.2	
66	Zn	89	He	25.211	ppb	3.3	4309.71	25	100.84	89.8	110.2	
75	As	89	He	24.618	ppb	1.7	3465.15	25	98.47	89.8	110.2	
78	Se	89	H2	25.129	ppb	0.3	1816.54	25	100.52	89.8	110.2	
88	Sr	89	He	23.723	ppb	0.9	17521.74	25	94.89	89.8	110.2	
95	Mo	89	He	25.002	ppb	0.9	19765.98	25	100.01	89.8	110.2	
107	Ag	89	He	24.456	ppb	0.6	66251.96	25	97.82	89.8	110.2	
111	Cd	89	He	24.329	ppb	1.2	8681.01	25	97.32	89.8	110.2	
118	Sn	159	He	23.858	ppb	1.0	18904.89	25	95.43	89.8	110.2	
121	Sb	159	No Gas	23.978	ppb	4.2	145222.85	25	95.91	89.8	110.2	
137	Ba	159	No Gas	23.946	ppb	5.3	57310.75	25	95.78	89.8	110.2	
182	W	159	No Gas	23.496	ppb	5.5	105915.26	25	93.98	89.8	110.2	
205	Tl	209	No Gas	24.074	ppb	5.0	235008.19	25	96.3	89.8	110.2	
208	Pb	209	No Gas	23.898	ppb	5.5	321808.72	25	95.59	89.8	110.2	
232	Th	209	No Gas	23.582	ppb	5.8	326418.18	25	94.33	89.8	110.2	
238	U	209	No Gas	23.578	ppb	6.5	304785.23	25	94.31	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1543934.68	2.5	1483357.64	104.08	29.5	120.4	
Sc	45	No Gas	3369565.07	2.7	3141192.51	107.27	29.5	120.4	
Sc	45	H2	421855.07	0.7	418309.46	100.85	29.5	120.4	
Sc	45	He	84834.37	0.4	85440.95	99.29	29.5	120.4	
Ge	72	No Gas	748315.12	2.9	694668.88	107.72	29.5	120.4	
Ge	72	H2	157744.59	0.5	157206.79	100.34	29.5	120.4	
Ge	72	He	64409.35	1.0	64721.85	99.52	29.5	120.4	
Y	89	H2	2641000.96	0.8	2572670.23	102.66	29.5	120.4	
Y	89	He	570736.37	0.8	574051.42	99.42	29.5	120.4	
Tb	159	No Gas	7416926.70	2.5	6821698.44	108.73	29.5	120.4	
Tb	159	He	3019849.92	0.8	2982140.2	101.26	29.5	120.4	
Bi	209	No Gas	3827007.92	2.6	3547037.46	107.89	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:54:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	48.1	148.89	0.2	
11	B	6	No Gas	1.018	ppb	25.1	2252.48	4	
23	Na	45	He	18.722	ppb	8.3	10826.11	200	
24	Mg	45	He	0.595	ppb	257.1	668.96	20	
27	Al	45	He	1.453	ppb	45.6	54.45	20	
28	Si	45	H2	-1.798	ppb	N/A	417.14	100	
39	K	45	He	3.961	ppb	166.0	11489.50	200	
40	Ca	45	H2	3.591	ppb	18.3	2547.00	20	
51	V	89	He	0.138	ppb	28.0	292.23	1	
52	Cr	89	He	0.008	ppb	107.9	81.32	1	
55	Mn	89	He	0.039	ppb	47.2	46.66	0.4	
56	Fe	89	H2	6.368	ppb	12.3	16414.61	20	
59	Co	89	He	0.005	ppb	187.6	31.11	0.2	
60	Ni	89	He	-0.102	ppb	N/A	305.57	0.4	
63	Cu	89	He	0.158	ppb	19.1	352.24	0.6	
66	Zn	89	He	-0.005	ppb	N/A	65.56	2	
75	As	89	He	0.054	ppb	24.7	11.33	1	
78	Se	89	H2	0.115	ppb	7.9	8.67	1	
88	Sr	89	He	0.010	ppb	64.3	14.44	1	
95	Mo	89	He	0.147	ppb	27.4	132.23	1	
107	Ag	89	He	0.005	ppb	48.8	32.22	0.2	
111	Cd	89	He	0.014	ppb	20.1	5.56	0.2	
118	Sn	159	He	0.087	ppb	22.0	128.89	1	
121	Sb	159	No Gas	0.032	ppb	26.5	220.25	0.2	
137	Ba	159	No Gas	0.034	ppb	21.8	96.77	0.4	
182	W	159	No Gas	0.082	ppb	17.5	437.16	1	
205	Tl	209	No Gas	0.031	ppb	24.8	417.14	0.2	
208	Pb	209	No Gas	0.060	ppb	14.3	1017.84	0.2	
232	Th	209	No Gas	0.147	ppb	9.3	2152.62	1	
238	U	209	No Gas	0.034	ppb	17.4	450.52	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1545827.48	2.5	1483357.64	104.21	29.5	120.4	
Sc	45	No Gas	3395481.43	3.7	3141192.51	108.1	29.5	120.4	
Sc	45	H2	430903.93	6.1	418309.46	103.01	29.5	120.4	
Sc	45	He	88076.74	2.0	85440.95	103.08	29.5	120.4	
Ge	72	No Gas	747880.22	3.1	694668.88	107.66	29.5	120.4	
Ge	72	H2	162797.76	3.9	157206.79	103.56	29.5	120.4	
Ge	72	He	66979.55	0.8	64721.85	103.49	29.5	120.4	
Y	89	H2	2686037.45	5.9	2572670.23	104.41	29.5	120.4	
Y	89	He	591452.08	1.7	574051.42	103.03	29.5	120.4	
Tb	159	No Gas	7413936.97	3.9	6821698.44	108.68	29.5	120.4	
Tb	159	He	3074533.70	2.1	2982140.2	103.1	29.5	120.4	
Bi	209	No Gas	3840482.66	4.1	3547037.46	108.27	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG06IMS1
File Name	019_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:57:00 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.166	ppb	35.3	78.89	0.5	
B	11	6	No Gas	5.252	ppb	3.9	2324.72	10	
Na	23	45	He	162.425	ppb	5.2	11911.56	500	
Mg	24	45	He	15.465	ppb	46.0	788.97	50	
Al	27	45	He	15.453	ppb	39.1	90.00	50	
Si	28	45	H2	11.345	ppb	41.7	580.66	250	
K	39	45	He	59.667	ppb	105.7	11601.18	500	
Ca	40	45	H2	63.707	ppb	7.4	5962.58	50	PB 6020 Fails DoD
V	51	89	He	4.048	ppb	8.3	818.95	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.805	ppb	9.2	229.29	2.5	
Mn	55	89	He	5.639	ppb	6.2	555.25	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Fe	56	89	H2	39.466	ppb	3.0	18506.28	50	
Co	59	89	He	0.148	ppb	8.6	71.12	0.5	
Ni	60	89	He	0.571	ppb	108.5	393.35	1	
Cu	63	89	He	2.916	ppb	13.7	881.17	1.5	PB 6020 Fails DoD
Zn	66	89	He	6.435	ppb	5.0	282.24	5	PB 6020 Fails DoD
As	75	89	He	0.330	ppb	4.8	12.67	2.5	
Se	78	89	H2	0.723	ppb	44.0	10.67	2.5	
Sr	88	89	He	0.225	ppb	36.2	40.00	2.5	
Mo	95	89	He	0.595	ppb	17.8	105.56	2.5	
Ag	107	89	He	0.033	ppb	59.2	34.45	0.5	
Cd	111	89	He	0.135	ppb	35.5	10.00	0.5	
Sn	118	159	He	40.526	ppb	1.6	6472.86	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	32.4	200.23	0.5	
Ba	137	159	No Gas	0.241	ppb	46.2	130.15	1	
W	182	159	No Gas	0.359	ppb	11.9	390.44	2.5	
Tl	205	209	No Gas	0.055	ppb	62.8	226.92	0.5	
Pb	208	209	No Gas	0.459	ppb	1.9	1458.34	0.5	
Th	232	209	No Gas	0.346	ppb	9.6	1074.58	2.5	
U	238	209	No Gas	0.057	ppb	44.3	156.84	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577533.99	1.9	1483357.64	106.35	29.5	120.4	
Sc	45	No Gas	3367926.84	2.6	3141192.51	107.22	29.5	120.4	
Sc	45	H2	418250.64	0.9	418309.46	99.99	29.5	120.4	
Sc	45	He	85721.05	0.8	85440.95	100.33	29.5	120.4	
Ge	72	No Gas	748011.27	2.5	694668.88	107.68	29.5	120.4	
Ge	72	H2	157640.14	0.9	157206.79	100.28	29.5	120.4	
Ge	72	He	64726.67	0.9	64721.85	100.01	29.5	120.4	
Y	89	H2	2647144.81	0.5	2572670.23	102.89	29.5	120.4	
Y	89	He	573743.83	1.0	574051.42	99.95	29.5	120.4	
Tb	159	No Gas	7384013.43	2.5	6821698.44	108.24	29.5	120.4	
Tb	159	He	3025172.32	1.3	2982140.2	101.44	29.5	120.4	
Bi	209	No Gas	3849682.72	2.8	3547037.46	108.53	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	020_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 4:59:38 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.198	ppb	32.3	86.67	0.5	
B	11	6	No Gas	5.098	ppb	9.6	2295.82	10	
Na	23	45	He	113.812	ppb	21.0	10922.94	500	
Mg	24	45	He	13.523	ppb	72.0	766.75	50	
Al	27	45	He	15.205	ppb	20.0	88.89	50	
Si	28	45	H2	3.500	ppb	302.2	513.91	250	
K	39	45	He	77.915	ppb	35.2	11771.31	500	
Ca	40	45	H2	62.345	ppb	3.2	5869.21	50	PB 6020 Fails DoD
V	51	89	He	3.932	ppb	7.6	797.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.901	ppb	12.2	247.29	2.5	
Mn	55	89	He	1.666	ppb	11.2	182.64	1	PB 6020 Fails DoD
Fe	56	89	H2	33.449	ppb	4.4	16578.21	50	
Co	59	89	He	0.081	ppb	14.6	48.89	0.5	
Ni	60	89	He	0.830	ppb	17.7	414.47	1	
Cu	63	89	He	2.558	ppb	7.3	787.83	1.5	PB 6020 Fails DoD
Zn	66	89	He	8.738	ppb	7.2	358.91	5	PB 6020 Fails DoD
As	75	89	He	0.521	ppb	17.8	18.00	2.5	
Se	78	89	H2	0.463	ppb	15.4	6.83	2.5	
Sr	88	89	He	0.286	ppb	16.2	48.89	2.5	
Mo	95	89	He	0.534	ppb	5.9	95.56	2.5	
Ag	107	89	He	0.010	ppb	190.4	22.22	0.5	
Cd	111	89	He	0.093	ppb	9.4	7.04	0.5	
Sn	118	159	He	43.400	ppb	3.0	6905.35	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.076	ppb	48.5	123.47	0.5	
Ba	137	159	No Gas	0.274	ppb	24.7	146.83	1	
W	182	159	No Gas	0.132	ppb	50.2	190.21	2.5	
Tl	205	209	No Gas	0.056	ppb	43.5	230.26	0.5	
Pb	208	209	No Gas	0.714	ppb	9.2	2152.50	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.109	ppb	37.0	413.81	2.5	
U	238	209	No Gas	0.028	ppb	78.1	80.09	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573862.43	2.3	1483357.64	106.1	29.5	120.4	
Sc	45	No Gas	3391258.59	2.7	3141192.51	107.96	29.5	120.4	
Sc	45	H2	419140.15	1.2	418309.46	100.2	29.5	120.4	
Sc	45	He	85583.11	0.2	85440.95	100.17	29.5	120.4	
Ge	72	No Gas	758631.67	1.8	694668.88	109.21	29.5	120.4	
Ge	72	H2	157275.71	1.2	157206.79	100.04	29.5	120.4	
Ge	72	He	65365.19	0.2	64721.85	100.99	29.5	120.4	
Y	89	H2	2629501.00	1.2	2572670.23	102.21	29.5	120.4	
Y	89	He	571551.70	0.2	574051.42	99.56	29.5	120.4	
Tb	159	No Gas	7496627.74	2.9	6821698.44	109.89	29.5	120.4	
Tb	159	He	3015659.68	0.4	2982140.2	101.12	29.5	120.4	
Bi	209	No Gas	3863262.61	3.0	3547037.46	108.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF29IMW1
File Name	021_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:02:20 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.105	ppb	34.3	64.45	0.5	
B	11	6	No Gas	2.453	ppb	4.1	1889.08	10	
Na	23	45	He	103.472	ppb	15.0	10759.31	500	
Mg	24	45	He	61.363	ppb	38.4	1302.38	50	PB 6020 Fails DoD
Al	27	45	He	47.387	ppb	57.8	235.57	50	
Si	28	45	H2	15.206	ppb	92.0	620.71	250	
K	39	45	He	82.467	ppb	26.6	11864.61	500	
Ca	40	45	H2	46.854	ppb	21.7	4732.09	50	
V	51	89	He	3.820	ppb	3.9	784.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.457	ppb	13.8	161.30	2.5	
Mn	55	89	He	1.072	ppb	15.4	127.98	1	PB 6020 Fails DoD
Fe	56	89	H2	28.111	ppb	25.4	15168.64	50	
Co	59	89	He	0.134	ppb	15.0	66.67	0.5	
Ni	60	89	He	-0.514	ppb	N/A	296.68	1	
Cu	63	89	He	1.894	ppb	5.4	623.37	1.5	PB 6020 Fails DoD
Zn	66	89	He	3.306	ppb	23.8	176.67	5	
As	75	89	He	0.506	ppb	22.4	17.67	2.5	
Se	78	89	H2	0.422	ppb	30.0	6.33	2.5	
Sr	88	89	He	0.239	ppb	57.2	42.22	2.5	
Mo	95	89	He	0.789	ppb	34.7	136.67	2.5	
Ag	107	89	He	0.016	ppb	57.5	25.56	0.5	
Cd	111	89	He	0.186	ppb	24.1	13.71	0.5	
Sn	118	159	He	0.939	ppb	12.2	206.68	2.5	
Sb	121	159	No Gas	0.063	ppb	44.2	106.79	0.5	
Ba	137	159	No Gas	0.300	ppb	7.4	160.18	1	
W	182	159	No Gas	0.098	ppb	45.0	160.18	2.5	
Tl	205	209	No Gas	0.021	ppb	13.0	160.18	0.5	
Pb	208	209	No Gas	0.206	ppb	9.3	774.21	0.5	
Th	232	209	No Gas	0.107	ppb	27.8	407.13	2.5	
U	238	209	No Gas	0.023	ppb	37.5	66.74	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562708.37	3.5	1483357.64	105.35	29.5	120.4	
Sc	45	No Gas	3426858.74	3.7	3141192.51	109.09	29.5	120.4	
Sc	45	H2	423208.83	1.4	418309.46	101.17	29.5	120.4	
Sc	45	He	85908.58	0.7	85440.95	100.55	29.5	120.4	
Ge	72	No Gas	756002.16	3.0	694668.88	108.83	29.5	120.4	
Ge	72	H2	158297.10	1.4	157206.79	100.69	29.5	120.4	
Ge	72	He	65520.74	0.2	64721.85	101.23	29.5	120.4	
Y	89	H2	2661227.62	0.8	2572670.23	103.44	29.5	120.4	
Y	89	He	574847.31	0.1	574051.42	100.14	29.5	120.4	
Tb	159	No Gas	7502371.00	3.3	6821698.44	109.98	29.5	120.4	
Tb	159	He	3034186.48	0.2	2982140.2	101.75	29.5	120.4	
Bi	209	No Gas	3862038.39	3.4	3547037.46	108.88	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNF26IMW2
File Name	022LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:04:55 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	38.895	ppb	6.3	9277.72	50	15.56	79.5	120.4	6020□ DoD
B	11	6	No Gas	489.959	ppb	5.0	75775.01	500	19.6	79.5	120.4	
Na	23	45	He	8240.949	ppb	1.1	175753.30	7500	21.98	79.5	120.4	
Mg	24	45	He	5340.001	ppb	1.4	60816.00	5000	21.36	79.5	120.4	
Al	27	45	He	1515.315	ppb	2.0	6997.50	2000	15.15	79.5	120.4	6020□ DoD
Si	28	45	H2	988.428	ppb	6.3	9096.30	1000	19.77	0	200	
K	39	45	He	10632.925	ppb	1.0	123381.84	10000	21.27	79.5	120.4	
Ca	40	45	H2	2798.362	ppb	0.8	217382.19	2500	22.39	79.5	120.4	
V	51	89	He	408.574	ppb	0.5	66717.32	500	16.34	79.5	120.4	DoD
Cr	52	89	He	163.895	ppb	0.7	32914.08	200	16.39	79.5	120.4	DoD
Mn	55	89	He	404.942	ppb	0.9	38725.16	500	16.2	79.5	120.4	DoD
Fe	56	89	H2	902.497	ppb	0.7	281825.65	1000	18.05	79.5	120.4	
Co	59	89	He	416.576	ppb	0.5	140564.86	500	16.66	79.5	120.4	DoD
Ni	60	89	He	419.920	ppb	0.9	38584.05	500	16.8	79.5	120.4	DoD
Cu	63	89	He	208.137	ppb	1.1	54099.79	250	16.65	79.5	120.4	DoD
Zn	66	89	He	413.802	ppb	0.6	14362.29	500	16.55	79.5	120.4	DoD
As	75	89	He	108.779	ppb	2.0	3141.71	100	21.76	79.5	120.4	
Se	78	89	H2	106.903	ppb	3.6	1567.85	100	21.38	79.5	120.4	
Sr	88	89	He	507.563	ppb	1.0	76884.96	500	20.3	79.5	120.4	
Mo	95	89	He	106.261	ppb	2.1	17235.86	100	21.25	79.5	120.4	
Ag	107	89	He	40.694	ppb	1.6	22627.26	50	16.28	79.5	120.4	DoD
Cd	111	89	He	262.299	ppb	0.8	19198.90	250	20.98	79.5	120.4	
Sn	118	159	He	510.921	ppb	0.7	82059.19	500	20.44	79.5	120.4	
Sb	121	159	No Gas	103.605	ppb	4.3	128168.88	100	20.72	79.5	120.4	
Ba	137	159	No Gas	1566.788	ppb	4.1	765879.99	2000	15.67	79.5	120.4	6020□ DoD
W	182	159	No Gas	100.689	ppb	5.7	92717.49	100	20.14	79.5	120.4	
Tl	205	209	No Gas	104.429	ppb	5.0	206861.51	100	20.89	79.5	120.4	
[Pb]	206	209	No Gas	104.114	ppb	5.5	71700.10	100	20.82	79.5	120.4	
[Pb]	207	209	No Gas	106.103	ppb	4.8	63666.32	100	21.22	79.5	120.4	
Pb	208	209	No Gas	105.166	ppb	4.5	287417.74	100	21.03	79.5	120.4	
Th	232	209	No Gas	99.815	ppb	5.2	280400.25	100	19.96	79.5	120.4	
U	238	209	No Gas	100.638	ppb	6.3	263976.09	100	20.13	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1600048.95	1.8	1483357.64	107.87	29.5	120.4	
Sc	45	No Gas	3470176.51	1.6	3141192.51	110.47	29.5	120.4	
Sc	45	H2	423679.82	1.0	418309.46	101.28	29.5	120.4	
Sc	45	He	87072.14	0.7	85440.95	101.91	29.5	120.4	
Ge	72	No Gas	775902.97	1.8	694668.88	111.69	29.5	120.4	
Ge	72	H2	159147.55	1.5	157206.79	101.23	29.5	120.4	
Ge	72	He	66577.52	0.2	64721.85	102.87	29.5	120.4	
Y	89	H2	2679371.26	0.7	2572670.23	104.15	29.5	120.4	
Y	89	He	585431.47	0.2	574051.42	101.98	29.5	120.4	
Tb	159	No Gas	7573021.00	1.7	6821698.44	111.01	29.5	120.4	
Tb	159	He	3067482.98	0.3	2982140.2	102.86	29.5	120.4	
Bi	209	No Gas	3882074.20	2.3	3547037.46	109.45	29.5	120.4	

Sample Report

Sample Name SN5124-002

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:07:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.124	ppb	18.6	65.56	100	
11	B	6	No Gas	113.279	ppb	6.3	17492.24	1000	
23	Na	45	He	212653.052	ppb	1.5	4106232.34	200000	
24	Mg	45	He	15886.014	ppb	1.8	170920.54	200000	
27	Al	45	He	18.381	ppb	32.0	100.00	200000	
28	Si	45	H2	5826.514	ppb	2.2	48633.11	10000	
39	K	45	He	1559.700	ppb	2.2	26268.99	200000	
40	Ca	45	H2	52400.623	ppb	2.2	3847287.10	200000	
51	V	89	He	1.611	ppb	16.7	416.69	1000	
52	Cr	89	He	0.293	ppb	25.0	124.65	2000	
55	Mn	89	He	442.943	ppb	2.1	40195.62	2000	
56	Fe	89	H2	159.964	ppb	2.9	52991.97	100000	
59	Co	89	He	1.757	ppb	11.0	584.50	1000	
60	Ni	89	He	3.435	ppb	16.3	627.82	1000	
63	Cu	89	He	1.733	ppb	12.4	563.37	2000	
66	Zn	89	He	3.585	ppb	30.5	180.01	2000	
75	As	89	He	0.454	ppb	30.5	15.67	1000	
78	Se	89	H2	0.595	ppb	27.1	8.50	1000	
88	Sr	89	He	336.592	ppb	2.7	48384.71	2000	
95	Mo	89	He	0.499	ppb	47.7	87.78	1000	
107	Ag	89	He	0.020	ppb	62.5	26.67	100	
111	Cd	89	He	0.207	ppb	77.2	14.82	1000	
118	Sn	159	He	1.057	ppb	5.1	222.23	1000	
121	Sb	159	No Gas	0.136	ppb	21.3	196.89	1000	
137	Ba	159	No Gas	16.396	ppb	7.7	7991.34	2000	
182	W	159	No Gas	0.224	ppb	32.6	276.98	1000	
205	Tl	209	No Gas	0.042	ppb	101.4	200.23	1000	
208	Pb	209	No Gas	0.187	ppb	2.7	717.48	2000	
232	Th	209	No Gas	0.826	ppb	11.3	2402.92	1000	
238	U	209	No Gas	0.079	ppb	16.2	210.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1496223.31	3.4	1483357.64	100.87	29.5	120.4	
Sc	45	No Gas	3389818.92	4.0	3141192.51	107.92	29.5	120.4	
Sc	45	H2	402494.77	1.5	418309.46	96.22	29.5	120.4	
Sc	45	He	82831.00	1.0	85440.95	96.95	29.5	120.4	
Ge	72	No Gas	756048.82	2.9	694668.88	108.84	29.5	120.4	
Ge	72	H2	151208.54	0.8	157206.79	96.18	29.5	120.4	
Ge	72	He	63365.48	1.1	64721.85	97.9	29.5	120.4	
Y	89	H2	2560357.61	1.0	2572670.23	99.52	29.5	120.4	
Y	89	He	555667.36	1.3	574051.42	96.8	29.5	120.4	
Tb	159	No Gas	7544666.00	3.3	6821698.44	110.6	29.5	120.4	
Tb	159	He	2989196.38	1.6	2982140.2	100.24	29.5	120.4	
Bi	209	No Gas	3831262.17	3.4	3547037.46	108.01	29.5	120.4	

Sample Report

Sample Name SN5124-002L

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:10:13 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.321	ppb	59.7	52.23	100	
11	B	6	No Gas	129.479	ppb	6.9	5101.06	1000	
23	Na	45	He	225928.120	ppb	1.2	891354.27	200000	
24	Mg	45	He	16914.097	ppb	1.2	37379.73	200000	
27	Al	45	He	46.630	ppb	32.4	61.12	200000	
28	Si	45	H2	6025.291	ppb	1.8	10796.27	10000	
39	K	45	He	1595.952	ppb	1.2	14007.24	200000	
40	Ca	45	H2	54238.187	ppb	0.4	825432.68	200000	
51	V	89	He	4.511	ppb	31.0	314.46	1000	
52	Cr	89	He	0.447	ppb	80.4	87.99	2000	
55	Mn	89	He	466.434	ppb	1.7	8684.45	2000	
56	Fe	89	H2	188.761	ppb	3.1	17881.32	100000	
59	Co	89	He	1.258	ppb	4.7	104.46	1000	
60	Ni	89	He	-1.700	ppb	N/A	308.90	1000	
63	Cu	89	He	2.435	ppb	20.3	262.23	2000	
66	Zn	89	He	5.893	ppb	52.1	103.34	2000	
75	As	89	He	0.125	ppb	246.0	4.00	1000	
78	Se	89	H2	0.633	ppb	72.2	2.00	1000	
88	Sr	89	He	362.585	ppb	0.4	10673.42	2000	
95	Mo	89	He	0.603	ppb	46.0	30.00	1000	
107	Ag	89	He	-0.040	ppb	N/A	12.22	100	
111	Cd	89	He	0.183	ppb	89.6	2.96	1000	
118	Sn	159	He	0.827	ppb	59.0	83.33	1000	
121	Sb	159	No Gas	0.219	ppb	28.8	83.43	1000	
137	Ba	159	No Gas	16.653	ppb	9.2	1631.92	2000	
182	W	159	No Gas	0.373	ppb	118.3	136.82	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.218	ppb	26.4	337.05	2000	
232	Th	209	No Gas	0.041	ppb	200.4	133.48	1000	
238	U	209	No Gas	0.081	ppb	23.2	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1488483.13	2.0	1483357.64	100.35	29.5	120.4	
Sc	45	No Gas	3366188.70	3.4	3141192.51	107.16	29.5	120.4	
Sc	45	H2	416625.78	0.7	418309.46	99.6	29.5	120.4	
Sc	45	He	83981.65	1.0	85440.95	98.29	29.5	120.4	
Ge	72	No Gas	751611.50	3.2	694668.88	108.2	29.5	120.4	
Ge	72	H2	157080.72	0.6	157206.79	99.92	29.5	120.4	
Ge	72	He	64851.64	0.8	64721.85	100.2	29.5	120.4	
Y	89	H2	2631164.98	0.6	2572670.23	102.27	29.5	120.4	
Y	89	He	568536.61	0.4	574051.42	99.04	29.5	120.4	
Tb	159	No Gas	7534632.11	3.5	6821698.44	110.45	29.5	120.4	
Tb	159	He	3013423.95	0.1	2982140.2	101.05	29.5	120.4	
Bi	209	No Gas	3902031.19	3.4	3547037.46	110.01	29.5	120.4	

Sample Report

Sample Name SN5124-002A

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:12:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.732	ppb	12.8	2245.81	100	
11	B	6	No Gas	330.979	ppb	8.4	44881.78	1000	
23	Na	45	He	230184.631	ppb	0.8	4380547.63	200000	
24	Mg	45	He	17454.650	ppb	0.3	185064.82	200000	
27	Al	45	He	945.966	ppb	1.1	4102.96	200000	
28	Si	45	H2	10881.110	ppb	2.9	88776.11	10000	
39	K	45	He	11756.971	ppb	0.2	126809.79	200000	
40	Ca	45	H2	54866.307	ppb	1.0	3954952.30	200000	
51	V	89	He	55.177	ppb	2.6	8558.44	1000	
52	Cr	89	He	53.474	ppb	0.4	10076.45	2000	
55	Mn	89	He	480.569	ppb	0.7	42921.08	2000	
56	Fe	89	H2	1240.251	ppb	0.7	362501.19	100000	
59	Co	89	He	12.373	ppb	4.8	3920.84	1000	
60	Ni	89	He	25.510	ppb	5.1	2495.87	1000	
63	Cu	89	He	33.194	ppb	3.0	8172.67	2000	
66	Zn	89	He	112.949	ppb	2.9	3706.18	2000	
75	As	89	He	54.824	ppb	2.7	1480.58	1000	
78	Se	89	H2	52.948	ppb	3.6	731.66	1000	
88	Sr	89	He	401.114	ppb	0.6	56753.36	2000	
95	Mo	89	He	54.272	ppb	2.4	8228.33	1000	
107	Ag	89	He	10.785	ppb	4.8	5613.57	100	
111	Cd	89	He	11.014	ppb	2.7	753.36	1000	
118	Sn	159	He	50.907	ppb	1.8	7945.93	1000	
121	Sb	159	No Gas	11.236	ppb	10.4	12857.14	1000	
137	Ba	159	No Gas	39.068	ppb	12.4	17628.04	2000	
182	W	159	No Gas	54.666	ppb	11.9	46491.84	1000	
205	Tl	209	No Gas	11.241	ppb	12.2	20589.76	1000	
208	Pb	209	No Gas	11.225	ppb	11.2	28407.55	2000	
232	Th	209	No Gas	11.183	ppb	10.2	29029.71	1000	
238	U	209	No Gas	11.375	ppb	13.4	27447.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1391595.30	4.4	1483357.64	93.81	29.5	120.4	
Sc	45	No Gas	3091260.66	7.2	3141192.51	98.41	29.5	120.4	
Sc	45	H2	395090.49	0.6	418309.46	94.45	29.5	120.4	
Sc	45	He	81641.19	0.5	85440.95	95.55	29.5	120.4	
Ge	72	No Gas	692612.33	5.5	694668.88	99.7	29.5	120.4	
Ge	72	H2	149091.57	1.5	157206.79	94.84	29.5	120.4	
Ge	72	He	62069.45	0.2	64721.85	95.9	29.5	120.4	
Y	89	H2	2524125.65	0.4	2572670.23	98.11	29.5	120.4	
Y	89	He	546821.35	0.5	574051.42	95.26	29.5	120.4	
Tb	159	No Gas	7021451.70	6.8	6821698.44	102.93	29.5	120.4	
Tb	159	He	2961970.79	0.3	2982140.2	99.32	29.5	120.4	
Bi	209	No Gas	3587103.36	6.5	3547037.46	101.13	29.5	120.4	

Sample Report

Sample Name SN5014-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:15:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	133.5	47.78	100	
11	B	6	No Gas	54.688	ppb	2.8	9022.00	1000	
23	Na	45	He	131622.315	ppb	1.2	2508685.10	200000	
24	Mg	45	He	8222.772	ppb	0.2	87503.91	200000	
27	Al	45	He	8.947	ppb	35.9	57.78	200000	
28	Si	45	H2	3010.401	ppb	1.0	25270.25	10000	
39	K	45	He	2641.041	ppb	1.7	36598.75	200000	
40	Ca	45	H2	31760.035	ppb	1.6	2324679.69	200000	
51	V	89	He	2.677	ppb	9.3	576.70	1000	
52	Cr	89	He	0.334	ppb	15.0	131.31	2000	
55	Mn	89	He	539.690	ppb	0.5	48566.74	2000	
56	Fe	89	H2	423.047	ppb	1.8	129688.87	100000	
59	Co	89	He	2.529	ppb	14.0	824.53	1000	
60	Ni	89	He	1.820	ppb	30.3	484.47	1000	
63	Cu	89	He	1.412	ppb	8.3	480.03	2000	
66	Zn	89	He	6.089	ppb	20.8	260.01	2000	
75	As	89	He	1.244	ppb	24.9	37.00	1000	
78	Se	89	H2	0.369	ppb	44.0	5.33	1000	
88	Sr	89	He	165.077	ppb	1.6	23540.88	2000	
95	Mo	89	He	0.499	ppb	32.2	86.67	1000	
107	Ag	89	He	0.005	ppb	129.5	18.89	100	
111	Cd	89	He	0.059	ppb	47.7	4.44	1000	
118	Sn	159	He	0.711	ppb	17.6	167.79	1000	
121	Sb	159	No Gas	0.085	ppb	61.8	133.48	1000	
137	Ba	159	No Gas	18.915	ppb	4.2	9126.60	2000	
182	W	159	No Gas	0.121	ppb	47.1	180.21	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	0.113	ppb	31.2	517.25	2000	
232	Th	209	No Gas	0.108	ppb	29.6	407.13	1000	
238	U	209	No Gas	0.055	ppb	9.5	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465918.37	2.1	1483357.64	98.82	29.5	120.4	
Sc	45	No Gas	3253281.84	2.9	3141192.51	103.57	29.5	120.4	
Sc	45	H2	401146.05	1.6	418309.46	95.9	29.5	120.4	
Sc	45	He	81651.32	0.4	85440.95	95.56	29.5	120.4	
Ge	72	No Gas	731819.54	3.1	694668.88	105.35	29.5	120.4	
Ge	72	H2	150214.21	0.8	157206.79	95.55	29.5	120.4	
Ge	72	He	63154.26	0.3	64721.85	97.58	29.5	120.4	
Y	89	H2	2561371.99	0.6	2572670.23	99.56	29.5	120.4	
Y	89	He	551011.08	0.6	574051.42	95.99	29.5	120.4	
Tb	159	No Gas	7463705.72	2.8	6821698.44	109.41	29.5	120.4	
Tb	159	He	2985454.95	0.6	2982140.2	100.11	29.5	120.4	
Bi	209	No Gas	3826044.95	2.8	3547037.46	107.87	29.5	120.4	

Sample Report

Sample Name SN5014-002L

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:18:12 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	999.4	40.00	100	
11	B	6	No Gas	71.322	ppb	9.0	3508.32	1000	
23	Na	45	He	141993.543	ppb	0.4	563741.31	200000	
24	Mg	45	He	8602.027	ppb	0.5	19321.02	200000	
27	Al	45	He	22.866	ppb	50.1	40.00	200000	
28	Si	45	H2	3327.541	ppb	5.2	6068.01	10000	
39	K	45	He	2764.505	ppb	3.2	16397.02	200000	
40	Ca	45	H2	34002.487	ppb	0.9	508605.87	200000	
51	V	89	He	7.240	ppb	5.1	400.02	1000	
52	Cr	89	He	0.451	ppb	20.6	87.99	2000	
55	Mn	89	He	570.010	ppb	1.2	10588.05	2000	
56	Fe	89	H2	450.184	ppb	1.0	33172.55	100000	
59	Co	89	He	3.368	ppb	25.7	242.24	1000	
60	Ni	89	He	-3.051	ppb	N/A	284.46	1000	
63	Cu	89	He	2.090	ppb	29.2	244.46	2000	
66	Zn	89	He	8.898	ppb	4.7	123.34	2000	
75	As	89	He	1.738	ppb	54.9	13.00	1000	
78	Se	89	H2	0.291	ppb	60.2	1.00	1000	
88	Sr	89	He	165.817	ppb	4.3	4875.49	2000	
95	Mo	89	He	0.747	ppb	50.6	34.44	1000	
107	Ag	89	He	-0.060	ppb	N/A	10.00	100	
111	Cd	89	He	0.053	ppb	149.8	1.11	1000	
118	Sn	159	He	0.987	ppb	59.9	88.90	1000	
121	Sb	159	No Gas	0.182	ppb	82.5	73.41	1000	
137	Ba	159	No Gas	19.764	ppb	5.2	1922.29	2000	
182	W	159	No Gas	0.078	ppb	259.8	83.43	1000	
205	Tl	209	No Gas	-0.168	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	0.180	ppb	40.1	313.68	2000	
232	Th	209	No Gas	0.001	ppb	6932.4	110.13	1000	
238	U	209	No Gas	0.037	ppb	80.8	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1508599.55	2.4	1483357.64	101.7	29.5	120.4	
Sc	45	No Gas	3327368.79	2.8	3141192.51	105.93	29.5	120.4	
Sc	45	H2	409159.92	0.5	418309.46	97.81	29.5	120.4	
Sc	45	He	84032.82	0.4	85440.95	98.35	29.5	120.4	
Ge	72	No Gas	739632.75	2.9	694668.88	106.47	29.5	120.4	
Ge	72	H2	156460.76	1.0	157206.79	99.53	29.5	120.4	
Ge	72	He	64949.19	0.2	64721.85	100.35	29.5	120.4	
Y	89	H2	2602890.56	0.2	2572670.23	101.17	29.5	120.4	
Y	89	He	567530.05	0.5	574051.42	98.86	29.5	120.4	
Tb	159	No Gas	7481093.22	3.0	6821698.44	109.67	29.5	120.4	
Tb	159	He	3030525.02	0.4	2982140.2	101.62	29.5	120.4	
Bi	209	No Gas	3881873.01	3.6	3547037.46	109.44	29.5	120.4	

Sample Report

Sample Name SN5014-002A

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:20:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.855	ppb	4.3	2383.61	100	
11	B	6	No Gas	260.792	ppb	0.8	37378.15	1000	
23	Na	45	He	151228.456	ppb	1.4	2856259.65	200000	
24	Mg	45	He	9827.989	ppb	1.6	103568.64	200000	
27	Al	45	He	963.878	ppb	0.5	4145.21	200000	
28	Si	45	H2	8270.520	ppb	2.0	67312.64	10000	
39	K	45	He	13077.225	ppb	2.2	138679.94	200000	
40	Ca	45	H2	35157.349	ppb	1.4	2524520.61	200000	
51	V	89	He	56.848	ppb	1.7	8785.27	1000	
52	Cr	89	He	53.514	ppb	2.1	10052.46	2000	
55	Mn	89	He	601.185	ppb	2.1	53517.75	2000	
56	Fe	89	H2	1536.983	ppb	1.3	444574.53	100000	
59	Co	89	He	14.101	ppb	7.8	4449.92	1000	
60	Ni	89	He	24.781	ppb	3.4	2425.85	1000	
63	Cu	89	He	33.982	ppb	2.7	8336.13	2000	
66	Zn	89	He	115.148	ppb	5.3	3765.08	2000	
75	As	89	He	54.242	ppb	2.2	1460.24	1000	
78	Se	89	H2	52.026	ppb	1.4	713.99	1000	
88	Sr	89	He	227.691	ppb	3.0	32116.15	2000	
95	Mo	89	He	53.517	ppb	2.2	8088.24	1000	
107	Ag	89	He	10.893	ppb	2.3	5652.49	100	
111	Cd	89	He	11.141	ppb	0.6	759.66	1000	
118	Sn	159	He	50.469	ppb	5.3	7901.49	1000	
121	Sb	159	No Gas	10.723	ppb	1.8	12787.00	1000	
137	Ba	159	No Gas	41.439	ppb	0.3	19499.40	2000	
182	W	159	No Gas	52.524	ppb	1.6	46571.95	1000	
205	Tl	209	No Gas	10.801	ppb	2.6	20810.33	1000	
208	Pb	209	No Gas	10.863	ppb	1.2	28918.74	2000	
232	Th	209	No Gas	10.624	ppb	1.9	28978.97	1000	
238	U	209	No Gas	10.893	ppb	2.0	27668.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455655.86	1.2	1483357.64	98.13	29.5	120.4	
Sc	45	No Gas	3183534.86	1.4	3141192.51	101.35	29.5	120.4	
Sc	45	H2	393544.60	1.0	418309.46	94.08	29.5	120.4	
Sc	45	He	80951.33	1.0	85440.95	94.75	29.5	120.4	
Ge	72	No Gas	717928.14	0.9	694668.88	103.35	29.5	120.4	
Ge	72	H2	149191.35	0.6	157206.79	94.9	29.5	120.4	
Ge	72	He	62498.53	0.5	64721.85	96.56	29.5	120.4	
Y	89	H2	2506593.95	0.8	2572670.23	97.43	29.5	120.4	
Y	89	He	545140.63	0.6	574051.42	94.96	29.5	120.4	
Tb	159	No Gas	7281450.59	1.4	6821698.44	106.74	29.5	120.4	
Tb	159	He	2971532.94	0.7	2982140.2	99.64	29.5	120.4	
Bi	209	No Gas	3754206.16	1.2	3547037.46	105.84	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:23:30 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.376	ppb	4.9	26625.20	25	97.5	89.8	110.2	
11	B	6	No Gas	24.562	ppb	6.7	18512.37	25	98.25	89.8	110.2	
23	Na	45	He	5086.074	ppb	0.2	495526.71	5000	101.72	89.8	110.2	
24	Mg	45	He	4923.787	ppb	0.1	263015.04	5000	98.48	89.8	110.2	
27	Al	45	He	468.679	ppb	0.6	10222.87	500	93.74	89.8	110.2	
28	Si	45	H2	467.151	ppb	2.7	19732.15	500	93.43	89.8	110.2	
39	K	45	He	4803.624	ppb	0.7	250273.75	5000	96.07	89.8	110.2	
40	Ca	45	H2	4911.474	ppb	1.0	1799805.51	5000	98.23	89.8	110.2	
51	V	89	He	24.472	ppb	1.6	19148.05	25	97.89	89.8	110.2	
52	Cr	89	He	24.520	ppb	0.2	23466.48	25	98.08	89.8	110.2	
55	Mn	89	He	24.727	ppb	1.1	11278.48	25	98.91	89.8	110.2	
56	Fe	89	H2	4893.385	ppb	1.4	7144235.70	5000	97.87	89.8	110.2	
59	Co	89	He	25.216	ppb	1.0	40532.06	25	100.86	89.8	110.2	
60	Ni	89	He	24.933	ppb	1.8	11142.58	25	99.73	89.8	110.2	
63	Cu	89	He	24.771	ppb	0.9	30715.62	25	99.08	89.8	110.2	
66	Zn	89	He	24.920	ppb	5.1	4161.88	25	99.68	89.8	110.2	
75	As	89	He	24.538	ppb	2.1	3374.11	25	98.15	89.8	110.2	
78	Se	89	H2	24.426	ppb	1.0	1714.53	25	97.7	89.8	110.2	
88	Sr	89	He	23.518	ppb	0.9	16968.79	25	94.07	89.8	110.2	
95	Mo	89	He	25.296	ppb	1.7	19535.62	25	101.18	89.8	110.2	
107	Ag	89	He	25.051	ppb	0.1	66298.90	25	100.2	89.8	110.2	
111	Cd	89	He	24.324	ppb	0.3	8478.29	25	97.3	89.8	110.2	
118	Sn	159	He	23.575	ppb	1.6	18661.25	25	94.3	89.8	110.2	
121	Sb	159	No Gas	23.660	ppb	7.5	144143.92	25	94.64	89.8	110.2	
137	Ba	159	No Gas	23.686	ppb	6.9	57041.62	25	94.74	89.8	110.2	
182	W	159	No Gas	23.465	ppb	6.8	106437.59	25	93.86	89.8	110.2	
205	Tl	209	No Gas	23.898	ppb	6.0	234792.98	25	95.59	89.8	110.2	
208	Pb	209	No Gas	24.109	ppb	6.6	326726.53	25	96.44	89.8	110.2	
232	Th	209	No Gas	23.430	ppb	7.6	326343.21	25	93.72	89.8	110.2	
238	U	209	No Gas	23.997	ppb	7.6	312172.91	25	95.99	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470459.81	3.7	1483357.64	99.13	29.5	120.4	
Sc	45	No Gas	3264973.38	3.5	3141192.51	103.94	29.5	120.4	
Sc	45	H2	401584.48	0.7	418309.46	96	29.5	120.4	
Sc	45	He	82340.75	0.8	85440.95	96.37	29.5	120.4	
Ge	72	No Gas	729974.99	3.2	694668.88	105.08	29.5	120.4	
Ge	72	H2	150071.46	2.0	157206.79	95.46	29.5	120.4	
Ge	72	He	63502.49	0.4	64721.85	98.12	29.5	120.4	
Y	89	H2	2564298.03	1.1	2572670.23	99.67	29.5	120.4	
Y	89	He	557564.15	0.4	574051.42	97.13	29.5	120.4	
Tb	159	No Gas	7468926.35	3.5	6821698.44	109.49	29.5	120.4	
Tb	159	He	3016463.29	0.1	2982140.2	101.15	29.5	120.4	
Bi	209	No Gas	3853138.73	3.1	3547037.46	108.63	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:26:05 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.045	ppb	8.7	90.00	0.2	
11	B	6	No Gas	0.955	ppb	7.8	2179.13	4	
23	Na	45	He	5.411	ppb	89.5	9186.41	200	
24	Mg	45	He	2.573	ppb	65.4	757.85	20	
27	Al	45	He	-0.249	ppb	N/A	14.44	20	
28	Si	45	H2	-0.020	ppb	N/A	480.55	100	
39	K	45	He	-2.925	ppb	N/A	10799.21	200	
40	Ca	45	H2	1.163	ppb	9.2	1539.03	20	
51	V	89	He	0.093	ppb	8.7	246.68	1	
52	Cr	89	He	0.003	ppb	325.8	73.99	1	
55	Mn	89	He	0.003	ppb	1210.2	28.66	0.4	
56	Fe	89	H2	1.251	ppb	20.6	8428.60	20	
59	Co	89	He	0.000	ppb	9781.3	22.22	0.2	
60	Ni	89	He	-0.289	ppb	N/A	212.23	0.4	Failed DoD
63	Cu	89	He	0.035	ppb	43.3	185.56	0.6	
66	Zn	89	He	0.106	ppb	96.1	82.23	2	
75	As	89	He	0.026	ppb	106.9	7.00	1	
78	Se	89	H2	0.065	ppb	16.4	4.83	1	
88	Sr	89	He	0.005	ppb	199.7	10.00	1	
95	Mo	89	He	0.084	ppb	38.7	77.78	1	
107	Ag	89	He	0.001	ppb	201.0	20.00	0.2	
111	Cd	89	He	0.004	ppb	86.6	1.85	0.2	
118	Sn	159	He	0.028	ppb	102.9	80.01	1	
121	Sb	159	No Gas	0.031	ppb	15.6	216.91	0.2	
137	Ba	159	No Gas	0.019	ppb	80.5	60.07	0.4	
182	W	159	No Gas	0.061	ppb	22.0	347.06	1	
205	Tl	209	No Gas	0.013	ppb	24.7	250.28	0.2	
208	Pb	209	No Gas	0.019	ppb	30.4	477.20	0.2	
232	Th	209	No Gas	0.048	ppb	10.4	780.90	1	
238	U	209	No Gas	0.018	ppb	29.8	243.61	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525208.28	1.7	1483357.64	102.82	29.5	120.4	
Sc	45	No Gas	3352657.80	2.6	3141192.51	106.73	29.5	120.4	
Sc	45	H2	416582.72	0.6	418309.46	99.59	29.5	120.4	
Sc	45	He	85478.49	1.0	85440.95	100.04	29.5	120.4	
Ge	72	No Gas	740152.82	2.6	694668.88	106.55	29.5	120.4	
Ge	72	H2	157299.41	1.0	157206.79	100.06	29.5	120.4	
Ge	72	He	65245.14	0.7	64721.85	100.81	29.5	120.4	
Y	89	H2	2623830.54	0.7	2572670.23	101.99	29.5	120.4	
Y	89	He	571782.93	1.5	574051.42	99.6	29.5	120.4	
Tb	159	No Gas	7469585.44	3.1	6821698.44	109.5	29.5	120.4	
Tb	159	He	3025691.76	0.9	2982140.2	101.46	29.5	120.4	
Bi	209	No Gas	3881647.16	3.3	3547037.46	109.43	29.5	120.4	

Sample Report

Sample Name SN5014-002S

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:28:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.325	ppb	3.1	11402.63	100	
11	B	6	No Gas	555.951	ppb	5.3	79927.98	1000	
23	Na	45	He	141739.851	ppb	1.5	2729954.54	200000	
24	Mg	45	He	13552.257	ppb	1.9	145375.46	200000	
27	Al	45	He	1932.853	ppb	3.4	8452.79	200000	
28	Si	45	H2	4219.673	ppb	0.6	34844.64	10000	
39	K	45	He	13225.211	ppb	1.9	142871.41	200000	
40	Ca	45	H2	35516.127	ppb	1.3	2570493.54	200000	
51	V	89	He	535.692	ppb	0.7	82562.97	1000	
52	Cr	89	He	212.012	ppb	0.9	40191.49	2000	
55	Mn	89	He	1090.647	ppb	1.0	98460.07	2000	
56	Fe	89	H2	1536.466	ppb	1.4	449467.75	100000	
59	Co	89	He	546.683	ppb	0.8	174210.54	1000	
60	Ni	89	He	548.640	ppb	1.3	47509.16	1000	
63	Cu	89	He	269.459	ppb	1.0	66108.10	2000	
66	Zn	89	He	546.468	ppb	3.2	17891.98	2000	
75	As	89	He	111.929	ppb	3.3	3053.00	1000	
78	Se	89	H2	106.422	ppb	4.0	1476.51	1000	
88	Sr	89	He	688.979	ppb	0.6	98563.86	2000	
95	Mo	89	He	111.111	ppb	1.1	17021.15	1000	
107	Ag	89	He	54.302	ppb	1.6	28510.67	100	
111	Cd	89	He	271.975	ppb	2.1	18800.17	1000	
118	Sn	159	He	518.952	ppb	1.0	81645.76	1000	
121	Sb	159	No Gas	105.532	ppb	3.9	127310.05	1000	
137	Ba	159	No Gas	2030.708	ppb	4.1	967960.89	2000	
182	W	159	No Gas	105.657	ppb	4.7	94878.17	1000	
205	Tl	209	No Gas	105.239	ppb	4.1	204051.84	1000	
208	Pb	209	No Gas	106.644	ppb	5.1	285230.34	2000	
232	Th	209	No Gas	104.088	ppb	5.3	286161.88	1000	
238	U	209	No Gas	104.934	ppb	5.4	269422.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1491556.97	2.6	1483357.64	100.55	29.5	120.4	
Sc	45	No Gas	3243843.62	2.2	3141192.51	103.27	29.5	120.4	
Sc	45	H2	396681.13	1.4	418309.46	94.83	29.5	120.4	
Sc	45	He	82540.90	1.6	85440.95	96.61	29.5	120.4	
Ge	72	No Gas	729004.30	1.5	694668.88	104.94	29.5	120.4	
Ge	72	H2	149228.81	0.4	157206.79	94.93	29.5	120.4	
Ge	72	He	63390.88	0.4	64721.85	97.94	29.5	120.4	
Y	89	H2	2535125.76	1.1	2572670.23	98.54	29.5	120.4	
Y	89	He	552911.61	0.4	574051.42	96.32	29.5	120.4	
Tb	159	No Gas	7385443.43	2.0	6821698.44	108.26	29.5	120.4	
Tb	159	He	3004838.57	0.7	2982140.2	100.76	29.5	120.4	
Bi	209	No Gas	3799337.43	2.1	3547037.46	107.11	29.5	120.4	

Sample Report

Sample Name SN5014-002P

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:31:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.407	ppb	7.6	11982.02	100	
11	B	6	No Gas	582.863	ppb	6.9	84605.72	1000	
23	Na	45	He	149277.944	ppb	0.4	2911820.93	200000	
24	Mg	45	He	14136.782	ppb	1.2	153578.66	200000	
27	Al	45	He	1982.803	ppb	2.0	8785.23	200000	
28	Si	45	H2	4313.389	ppb	1.5	36182.39	10000	
39	K	45	He	13883.961	ppb	0.8	151394.73	200000	
40	Ca	45	H2	37485.540	ppb	1.0	2756171.77	200000	
51	V	89	He	559.041	ppb	0.7	86760.32	1000	
52	Cr	89	He	224.920	ppb	0.3	42935.63	2000	
55	Mn	89	He	1140.000	ppb	0.9	103636.87	2000	
56	Fe	89	H2	1600.221	ppb	1.0	475028.56	100000	
59	Co	89	He	574.232	ppb	0.5	184283.58	1000	
60	Ni	89	He	568.701	ppb	0.3	49581.83	1000	
63	Cu	89	He	279.963	ppb	1.3	69162.63	2000	
66	Zn	89	He	571.395	ppb	1.8	18837.71	2000	
75	As	89	He	116.596	ppb	1.2	3202.72	1000	
78	Se	89	H2	111.259	ppb	1.4	1567.52	1000	
88	Sr	89	He	719.787	ppb	0.8	103700.63	2000	
95	Mo	89	He	117.208	ppb	2.1	18080.28	1000	
107	Ag	89	He	56.967	ppb	0.4	30120.88	100	
111	Cd	89	He	281.095	ppb	1.0	19569.02	1000	
118	Sn	159	He	543.637	ppb	0.1	85670.50	1000	
121	Sb	159	No Gas	108.063	ppb	6.9	132938.07	1000	
137	Ba	159	No Gas	2086.891	ppb	7.5	1014241.73	2000	
182	W	159	No Gas	107.360	ppb	7.8	98298.45	1000	
205	Tl	209	No Gas	110.651	ppb	6.5	216555.18	1000	
208	Pb	209	No Gas	110.153	ppb	6.5	297415.54	2000	
232	Th	209	No Gas	108.426	ppb	7.2	300875.92	1000	
238	U	209	No Gas	108.381	ppb	7.9	280832.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1507718.12	2.7	1483357.64	101.64	29.5	120.4	
Sc	45	No Gas	3303998.23	4.2	3141192.51	105.18	29.5	120.4	
Sc	45	H2	402994.08	1.6	418309.46	96.34	29.5	120.4	
Sc	45	He	83593.52	0.6	85440.95	97.84	29.5	120.4	
Ge	72	No Gas	740133.13	4.0	694668.88	106.54	29.5	120.4	
Ge	72	H2	151892.24	1.2	157206.79	96.62	29.5	120.4	
Ge	72	He	63504.66	0.5	64721.85	98.12	29.5	120.4	
Y	89	H2	2573955.79	1.5	2572670.23	100.05	29.5	120.4	
Y	89	He	556814.26	0.8	574051.42	97	29.5	120.4	
Tb	159	No Gas	7540987.81	4.0	6821698.44	110.54	29.5	120.4	
Tb	159	He	3009837.24	0.4	2982140.2	100.93	29.5	120.4	
Bi	209	No Gas	3839189.73	3.9	3547037.46	108.24	29.5	120.4	

Sample Report

Sample Name SN5980-001

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:33:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	53.5	68.89	100	
11	B	6	No Gas	22.690	ppb	5.1	17223.03	1000	
23	Na	45	He	43092.060	ppb	0.3	4251486.02	200000	
24	Mg	45	He	7518.450	ppb	0.4	412497.63	200000	
27	Al	45	He	1.543	ppb	48.4	54.45	200000	
28	Si	45	H2	6936.471	ppb	4.7	298214.06	10000	
39	K	45	He	5011.609	ppb	0.4	267933.84	200000	
40	Ca	45	H2	58763.566	ppb	4.9	22394609.11	200000	
51	V	89	He	0.101	ppb	84.9	250.01	1000	
52	Cr	89	He	0.090	ppb	15.4	157.30	2000	
55	Mn	89	He	0.914	ppb	7.3	448.59	2000	
56	Fe	89	H2	44.861	ppb	4.7	74077.02	100000	
59	Co	89	He	0.097	ppb	30.5	180.01	1000	
60	Ni	89	He	18.520	ppb	1.8	8469.51	1000	
63	Cu	89	He	233.196	ppb	1.1	291709.31	2000	
66	Zn	89	He	166.811	ppb	0.7	27860.82	2000	
75	As	89	He	0.674	ppb	8.7	97.01	1000	
78	Se	89	H2	0.058	ppb	16.7	4.33	1000	
88	Sr	89	He	211.879	ppb	1.3	154798.81	2000	
95	Mo	89	He	0.077	ppb	29.5	71.11	1000	
107	Ag	89	He	0.115	ppb	1.5	324.46	100	
111	Cd	89	He	0.058	ppb	38.4	20.74	1000	
118	Sn	159	He	0.247	ppb	33.0	254.46	1000	
121	Sb	159	No Gas	0.738	ppb	11.0	4595.91	1000	
137	Ba	159	No Gas	2.914	ppb	7.5	7149.91	2000	
182	W	159	No Gas	0.094	ppb	24.9	503.91	1000	
205	Tl	209	No Gas	0.019	ppb	19.6	307.01	1000	
208	Pb	209	No Gas	2.882	ppb	6.8	39284.55	2000	
232	Th	209	No Gas	0.131	ppb	7.3	1932.32	1000	
238	U	209	No Gas	0.374	ppb	7.5	4879.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1470646.44	3.1	1483357.64	99.14	29.5	120.4	
Sc	45	No Gas	3378198.26	4.1	3141192.51	107.55	29.5	120.4	
Sc	45	H2	418428.84	4.5	418309.46	100.03	29.5	120.4	
Sc	45	He	84637.25	0.8	85440.95	99.06	29.5	120.4	
Ge	72	No Gas	743519.83	3.2	694668.88	107.03	29.5	120.4	
Ge	72	H2	153306.53	1.9	157206.79	97.52	29.5	120.4	
Ge	72	He	64379.45	0.8	64721.85	99.47	29.5	120.4	
Y	89	H2	2646363.01	3.9	2572670.23	102.86	29.5	120.4	
Y	89	He	564765.30	1.2	574051.42	98.38	29.5	120.4	
Tb	159	No Gas	7598684.19	3.9	6821698.44	111.39	29.5	120.4	
Tb	159	He	3041324.36	1.0	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3858279.84	4.2	3547037.46	108.77	29.5	120.4	

Sample Report

Sample Name SN5980-002

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:36:38 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	88.8	47.78	100	
11	B	6	No Gas	21.085	ppb	3.4	16388.72	1000	
23	Na	45	He	43651.777	ppb	4.0	4380044.63	200000	
24	Mg	45	He	7581.949	ppb	4.6	423019.82	200000	
27	Al	45	He	3.541	ppb	14.9	101.11	200000	
28	Si	45	H2	7050.298	ppb	3.0	303301.31	10000	
39	K	45	He	5069.146	ppb	4.5	275482.41	200000	
40	Ca	45	H2	60001.301	ppb	2.7	22882821.88	200000	
51	V	89	He	0.098	ppb	26.1	251.12	1000	
52	Cr	89	He	0.046	ppb	33.0	115.98	2000	
55	Mn	89	He	0.707	ppb	18.6	357.28	2000	
56	Fe	89	H2	21.844	ppb	4.1	39562.80	100000	
59	Co	89	He	0.056	ppb	37.6	115.57	1000	
60	Ni	89	He	2.193	ppb	11.8	1316.78	1000	
63	Cu	89	He	106.107	ppb	4.9	134636.84	2000	
66	Zn	89	He	50.300	ppb	2.9	8565.11	2000	
75	As	89	He	0.726	ppb	11.2	105.68	1000	
78	Se	89	H2	0.041	ppb	41.8	3.17	1000	
88	Sr	89	He	213.597	ppb	4.4	158212.46	2000	
95	Mo	89	He	0.053	ppb	60.9	53.34	1000	
107	Ag	89	He	0.014	ppb	14.1	54.45	100	
111	Cd	89	He	0.013	ppb	66.1	4.81	1000	
118	Sn	159	He	0.151	ppb	24.4	178.90	1000	
121	Sb	159	No Gas	0.703	ppb	5.3	4345.56	1000	
137	Ba	159	No Gas	2.734	ppb	2.0	6659.13	2000	
182	W	159	No Gas	0.050	ppb	13.3	297.00	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	1.158	ppb	3.7	15831.60	2000	
232	Th	209	No Gas	0.028	ppb	11.4	490.56	1000	
238	U	209	No Gas	0.353	ppb	2.0	4579.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1495463.89	1.7	1483357.64	100.82	29.5	120.4	
Sc	45	No Gas	3355479.42	1.7	3141192.51	106.82	29.5	120.4	
Sc	45	H2	418238.82	1.4	418309.46	99.98	29.5	120.4	
Sc	45	He	86155.77	3.3	85440.95	100.84	29.5	120.4	
Ge	72	No Gas	738161.15	1.8	694668.88	106.26	29.5	120.4	
Ge	72	H2	157301.50	0.9	157206.79	100.06	29.5	120.4	
Ge	72	He	65525.42	1.2	64721.85	101.24	29.5	120.4	
Y	89	H2	2651103.25	1.2	2572670.23	103.05	29.5	120.4	
Y	89	He	573090.07	3.2	574051.42	99.83	29.5	120.4	
Tb	159	No Gas	7523896.48	1.8	6821698.44	110.29	29.5	120.4	
Tb	159	He	3064004.05	2.9	2982140.2	102.75	29.5	120.4	
Bi	209	No Gas	3833975.69	2.0	3547037.46	108.09	29.5	120.4	

Sample Report

Sample Name SN5980-003

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:39:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	56.1	46.67	100	
11	B	6	No Gas	21.176	ppb	4.0	16929.35	1000	
23	Na	45	He	43600.737	ppb	3.7	4364631.98	200000	
24	Mg	45	He	7672.674	ppb	3.7	427119.26	200000	
27	Al	45	He	1.652	ppb	15.3	57.78	200000	
28	Si	45	H2	7034.852	ppb	1.1	309042.87	10000	
39	K	45	He	5091.673	ppb	3.6	276037.69	200000	
40	Ca	45	H2	59529.040	ppb	0.4	23182481.88	200000	
51	V	89	He	0.134	ppb	33.8	280.01	1000	
52	Cr	89	He	0.013	ppb	66.7	83.98	2000	
55	Mn	89	He	0.355	ppb	4.5	192.64	2000	
56	Fe	89	H2	5.214	ppb	4.2	14800.95	100000	
59	Co	89	He	0.022	ppb	87.3	57.78	1000	
60	Ni	89	He	2.812	ppb	12.2	1587.93	1000	
63	Cu	89	He	142.932	ppb	3.3	180929.82	2000	
66	Zn	89	He	96.473	ppb	3.8	16325.66	2000	
75	As	89	He	0.686	ppb	13.5	99.68	1000	
78	Se	89	H2	0.031	ppb	20.7	2.50	1000	
88	Sr	89	He	215.335	ppb	2.6	159167.96	2000	
95	Mo	89	He	0.049	ppb	36.2	50.00	1000	
107	Ag	89	He	0.023	ppb	36.4	80.00	100	
111	Cd	89	He	0.030	ppb	50.4	11.11	1000	
118	Sn	159	He	0.084	ppb	28.9	125.56	1000	
121	Sb	159	No Gas	0.698	ppb	11.8	4388.99	1000	
137	Ba	159	No Gas	2.568	ppb	9.7	6345.24	2000	
182	W	159	No Gas	0.046	ppb	13.5	283.66	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	100.11	1000	
208	Pb	209	No Gas	1.347	ppb	7.8	18632.82	2000	
232	Th	209	No Gas	0.016	ppb	39.5	340.39	1000	
238	U	209	No Gas	0.303	ppb	7.5	3988.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1539151.02	2.4	1483357.64	103.76	29.5	120.4	
Sc	45	No Gas	3444121.79	2.9	3141192.51	109.64	29.5	120.4	
Sc	45	H2	426992.83	1.4	418309.46	102.08	29.5	120.4	
Sc	45	He	85936.17	2.7	85440.95	100.58	29.5	120.4	
Ge	72	No Gas	753331.79	2.6	694668.88	108.44	29.5	120.4	
Ge	72	H2	159910.81	0.5	157206.79	101.72	29.5	120.4	
Ge	72	He	65148.45	2.6	64721.85	100.66	29.5	120.4	
Y	89	H2	2707359.25	0.9	2572670.23	105.24	29.5	120.4	
Y	89	He	571647.39	2.9	574051.42	99.58	29.5	120.4	
Tb	159	No Gas	7647619.82	2.7	6821698.44	112.11	29.5	120.4	
Tb	159	He	3053871.48	2.3	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3891287.19	2.9	3547037.46	109.71	29.5	120.4	

Sample Report

Sample Name SN5980-004

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:41:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	138.5	54.45	100	
11	B	6	No Gas	20.918	ppb	6.5	16957.13	1000	
23	Na	45	He	44228.246	ppb	0.2	4473884.40	200000	
24	Mg	45	He	7850.902	ppb	0.4	441622.91	200000	
27	Al	45	He	1.583	ppb	15.8	56.67	200000	
28	Si	45	H2	7150.341	ppb	1.3	312936.71	10000	
39	K	45	He	5290.212	ppb	0.4	289370.93	200000	
40	Ca	45	H2	62240.388	ppb	1.2	24147967.42	200000	
51	V	89	He	0.230	ppb	25.2	358.91	1000	
52	Cr	89	He	0.029	ppb	28.2	100.65	2000	
55	Mn	89	He	0.559	ppb	2.6	290.62	2000	
56	Fe	89	H2	10.499	ppb	4.9	22610.05	100000	
59	Co	89	He	0.040	ppb	47.0	88.90	1000	
60	Ni	89	He	5.490	ppb	2.0	2807.06	1000	
63	Cu	89	He	264.908	ppb	1.1	338500.64	2000	
66	Zn	89	He	217.264	ppb	1.7	37047.80	2000	
75	As	89	He	0.687	ppb	10.0	101.01	1000	
78	Se	89	H2	0.032	ppb	43.1	2.50	1000	
88	Sr	89	He	219.314	ppb	1.0	163675.74	2000	
95	Mo	89	He	0.083	ppb	19.5	77.78	1000	
107	Ag	89	He	0.031	ppb	11.1	102.23	100	
111	Cd	89	He	0.035	ppb	22.9	12.96	1000	
118	Sn	159	He	0.122	ppb	6.0	156.67	1000	
121	Sb	159	No Gas	0.679	ppb	9.0	4315.52	1000	
137	Ba	159	No Gas	2.556	ppb	7.7	6388.70	2000	
182	W	159	No Gas	0.051	ppb	22.4	310.35	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	1.473	ppb	4.4	20569.56	2000	
232	Th	209	No Gas	0.011	ppb	30.1	266.97	1000	
238	U	209	No Gas	0.328	ppb	8.7	4359.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1559634.16	2.5	1483357.64	105.14	29.5	120.4	
Sc	45	No Gas	3473324.45	3.4	3141192.51	110.57	29.5	120.4	
Sc	45	H2	425405.96	0.3	418309.46	101.7	29.5	120.4	
Sc	45	He	86781.96	0.1	85440.95	101.57	29.5	120.4	
Ge	72	No Gas	759995.55	3.3	694668.88	109.4	29.5	120.4	
Ge	72	H2	159334.68	1.6	157206.79	101.35	29.5	120.4	
Ge	72	He	66059.93	0.3	64721.85	102.07	29.5	120.4	
Y	89	H2	2668555.70	0.3	2572670.23	103.73	29.5	120.4	
Y	89	He	576916.28	0.7	574051.42	100.5	29.5	120.4	
Tb	159	No Gas	7738442.59	3.6	6821698.44	113.44	29.5	120.4	
Tb	159	He	3072288.53	0.5	2982140.2	103.02	29.5	120.4	
Bi	209	No Gas	3928696.86	3.1	3547037.46	110.76	29.5	120.4	

Sample Report

Sample Name SN5980-005

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:44:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	77.0	47.78	100	
11	B	6	No Gas	20.378	ppb	7.4	16633.51	1000	
23	Na	45	He	42484.113	ppb	0.4	4310892.15	200000	
24	Mg	45	He	7627.010	ppb	1.3	430337.73	200000	
27	Al	45	He	3.079	ppb	39.1	91.12	200000	
28	Si	45	H2	7126.674	ppb	2.2	310439.42	10000	
39	K	45	He	5038.751	ppb	1.2	276972.64	200000	
40	Ca	45	H2	60807.361	ppb	1.4	23482037.70	200000	
51	V	89	He	0.201	ppb	32.6	337.80	1000	
52	Cr	89	He	0.017	ppb	127.1	88.65	2000	
55	Mn	89	He	0.565	ppb	18.3	295.28	2000	
56	Fe	89	H2	6.147	ppb	4.9	15973.37	100000	
59	Co	89	He	0.041	ppb	20.0	91.12	1000	
60	Ni	89	He	17.652	ppb	0.5	8313.87	1000	
63	Cu	89	He	170.891	ppb	0.2	219759.83	2000	
66	Zn	89	He	193.066	ppb	1.0	33132.36	2000	
75	As	89	He	0.683	ppb	16.5	101.01	1000	
78	Se	89	H2	0.041	ppb	24.8	3.17	1000	
88	Sr	89	He	212.694	ppb	0.4	159710.38	2000	
95	Mo	89	He	0.044	ppb	24.7	46.67	1000	
107	Ag	89	He	0.064	ppb	17.3	193.34	100	
111	Cd	89	He	0.037	ppb	51.0	13.70	1000	
118	Sn	159	He	0.073	ppb	23.8	117.78	1000	
121	Sb	159	No Gas	0.674	ppb	7.2	4258.81	1000	
137	Ba	159	No Gas	2.613	ppb	3.7	6498.83	2000	
182	W	159	No Gas	0.033	ppb	39.3	226.92	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	1.913	ppb	8.1	26654.08	2000	
232	Th	209	No Gas	0.003	ppb	26.0	160.18	1000	
238	U	209	No Gas	0.348	ppb	8.2	4629.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1567120.63	2.9	1483357.64	105.65	29.5	120.4	
Sc	45	No Gas	3464735.24	4.5	3141192.51	110.3	29.5	120.4	
Sc	45	H2	423434.17	0.6	418309.46	101.23	29.5	120.4	
Sc	45	He	87048.60	1.0	85440.95	101.88	29.5	120.4	
Ge	72	No Gas	757611.02	3.6	694668.88	109.06	29.5	120.4	
Ge	72	H2	158483.47	1.2	157206.79	100.81	29.5	120.4	
Ge	72	He	65826.87	0.5	64721.85	101.71	29.5	120.4	
Y	89	H2	2663518.69	0.6	2572670.23	103.53	29.5	120.4	
Y	89	He	580441.06	0.2	574051.42	101.11	29.5	120.4	
Tb	159	No Gas	7694300.72	4.6	6821698.44	112.79	29.5	120.4	
Tb	159	He	3095687.66	0.2	2982140.2	103.81	29.5	120.4	
Bi	209	No Gas	3935498.90	4.7	3547037.46	110.95	29.5	120.4	

Sample Report

Sample Name SN5980-006

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:47:12 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	217.8	58.89	100	
11	B	6	No Gas	20.477	ppb	6.2	16657.93	1000	
23	Na	45	He	43789.650	ppb	0.5	4414112.76	200000	
24	Mg	45	He	7768.617	ppb	1.0	435467.92	200000	
27	Al	45	He	5.675	ppb	10.6	150.01	200000	
28	Si	45	H2	7153.383	ppb	1.5	312541.08	10000	
39	K	45	He	5162.364	ppb	1.0	281663.99	200000	
40	Ca	45	H2	61772.194	ppb	1.8	23925430.20	200000	
51	V	89	He	0.255	ppb	29.5	380.02	1000	
52	Cr	89	He	0.063	ppb	34.5	133.98	2000	
55	Mn	89	He	0.872	ppb	6.8	439.26	2000	
56	Fe	89	H2	12.447	ppb	2.1	25575.12	100000	
59	Co	89	He	0.047	ppb	23.0	100.01	1000	
60	Ni	89	He	13.929	ppb	2.0	6608.47	1000	
63	Cu	89	He	251.010	ppb	0.6	321494.53	2000	
66	Zn	89	He	228.111	ppb	0.6	38985.37	2000	
75	As	89	He	0.655	ppb	15.0	96.68	1000	
78	Se	89	H2	0.025	ppb	27.9	2.00	1000	
88	Sr	89	He	216.315	ppb	1.0	161811.64	2000	
95	Mo	89	He	0.025	ppb	54.3	31.11	1000	
107	Ag	89	He	0.036	ppb	16.2	116.67	100	
111	Cd	89	He	0.031	ppb	66.8	11.48	1000	
118	Sn	159	He	0.081	ppb	12.3	124.45	1000	
121	Sb	159	No Gas	0.687	ppb	7.1	4295.45	1000	
137	Ba	159	No Gas	2.659	ppb	6.8	6535.58	2000	
182	W	159	No Gas	0.050	ppb	8.7	300.34	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	2.253	ppb	7.4	30949.24	2000	
232	Th	209	No Gas	0.005	ppb	54.4	183.55	1000	
238	U	209	No Gas	0.302	ppb	4.4	3961.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1562077.06	2.6	1483357.64	105.31	29.5	120.4	
Sc	45	No Gas	3433848.65	3.3	3141192.51	109.32	29.5	120.4	
Sc	45	H2	424720.42	1.0	418309.46	101.53	29.5	120.4	
Sc	45	He	86479.88	0.5	85440.95	101.22	29.5	120.4	
Ge	72	No Gas	752457.53	3.5	694668.88	108.32	29.5	120.4	
Ge	72	H2	158583.48	0.8	157206.79	100.88	29.5	120.4	
Ge	72	He	65601.77	0.4	64721.85	101.36	29.5	120.4	
Y	89	H2	2669416.30	0.7	2572670.23	103.76	29.5	120.4	
Y	89	He	578237.50	0.5	574051.42	100.73	29.5	120.4	
Tb	159	No Gas	7606174.96	3.5	6821698.44	111.5	29.5	120.4	
Tb	159	He	3091730.86	0.4	2982140.2	103.67	29.5	120.4	
Bi	209	No Gas	3882593.60	3.4	3547037.46	109.46	29.5	120.4	

Sample Report

Sample Name SN5980-007

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:49:54 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	176.3	46.67	100	
11	B	6	No Gas	22.436	ppb	14.9	16828.60	1000	
23	Na	45	He	43212.238	ppb	0.5	4400880.78	200000	
24	Mg	45	He	7652.978	ppb	0.4	433420.89	200000	
27	Al	45	He	2.628	ppb	55.6	81.12	200000	
28	Si	45	H2	7119.617	ppb	1.3	313170.63	10000	
39	K	45	He	5054.323	ppb	0.6	278836.67	200000	
40	Ca	45	H2	60515.571	ppb	1.1	23597864.92	200000	
51	V	89	He	0.352	ppb	16.7	456.69	1000	
52	Cr	89	He	0.015	ppb	12.5	85.99	2000	
55	Mn	89	He	0.631	ppb	11.5	324.61	2000	
56	Fe	89	H2	10.796	ppb	2.2	23151.35	100000	
59	Co	89	He	0.183	ppb	12.0	326.69	1000	
60	Ni	89	He	13.096	ppb	1.2	6218.27	1000	
63	Cu	89	He	203.414	ppb	0.3	259940.30	2000	
66	Zn	89	He	226.241	ppb	0.6	38574.37	2000	
75	As	89	He	0.708	ppb	5.1	104.01	1000	
78	Se	89	H2	0.038	ppb	76.9	3.00	1000	
88	Sr	89	He	213.219	ppb	0.2	159116.19	2000	
95	Mo	89	He	0.042	ppb	49.9	44.45	1000	
107	Ag	89	He	0.078	ppb	9.8	230.01	100	
111	Cd	89	He	0.047	ppb	33.4	17.41	1000	
118	Sn	159	He	0.120	ppb	26.0	155.56	1000	
121	Sb	159	No Gas	0.722	ppb	21.0	4115.27	1000	
137	Ba	159	No Gas	2.694	ppb	13.0	6084.92	2000	
182	W	159	No Gas	0.053	ppb	49.7	283.66	1000	
205	Tl	209	No Gas	-0.009	ppb	N/A	30.03	1000	
208	Pb	209	No Gas	2.931	ppb	15.3	36916.48	2000	
232	Th	209	No Gas	0.007	ppb	99.7	180.21	1000	
238	U	209	No Gas	0.394	ppb	12.2	4752.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465745.47	12.6	1483357.64	98.81	29.5	120.4	
Sc	45	No Gas	3204044.90	15.9	3141192.51	102	29.5	120.4	
Sc	45	H2	427596.18	1.4	418309.46	102.22	29.5	120.4	
Sc	45	He	87370.81	0.7	85440.95	102.26	29.5	120.4	
Ge	72	No Gas	692318.70	13.0	694668.88	99.66	29.5	120.4	
Ge	72	H2	158932.48	1.1	157206.79	101.1	29.5	120.4	
Ge	72	He	65736.87	0.4	64721.85	101.57	29.5	120.4	
Y	89	H2	2678933.11	1.0	2572670.23	104.13	29.5	120.4	
Y	89	He	576856.57	0.4	574051.42	100.49	29.5	120.4	
Tb	159	No Gas	7070926.49	15.2	6821698.44	103.65	29.5	120.4	
Tb	159	He	3092043.53	0.2	2982140.2	103.69	29.5	120.4	
Bi	209	No Gas	3606655.80	14.2	3547037.46	101.68	29.5	120.4	

Sample Report

Sample Name SN5980-008

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 5:52:29 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	38.89	100	
11	B	6	No Gas	19.656	ppb	8.0	15918.15	1000	
23	Na	45	He	43147.031	ppb	0.3	4343048.21	200000	
24	Mg	45	He	7638.736	ppb	0.6	427570.73	200000	
27	Al	45	He	2.617	ppb	5.6	80.00	200000	
28	Si	45	H2	7043.137	ppb	0.6	308585.64	10000	
39	K	45	He	5081.467	ppb	0.9	277009.90	200000	
40	Ca	45	H2	60365.379	ppb	0.7	23446106.87	200000	
51	V	89	He	0.279	ppb	21.5	395.58	1000	
52	Cr	89	He	0.008	ppb	123.8	79.32	2000	
55	Mn	89	He	0.389	ppb	8.2	209.30	2000	
56	Fe	89	H2	3.909	ppb	3.8	12579.61	100000	
59	Co	89	He	0.026	ppb	18.2	64.45	1000	
60	Ni	89	He	10.196	ppb	2.5	4889.92	1000	
63	Cu	89	He	230.391	ppb	0.4	292731.34	2000	
66	Zn	89	He	219.104	ppb	1.3	37148.18	2000	
75	As	89	He	0.488	ppb	3.6	72.34	1000	
78	Se	89	H2	0.020	ppb	38.6	1.67	1000	
88	Sr	89	He	214.434	ppb	1.1	159117.58	2000	
95	Mo	89	He	0.045	ppb	40.9	46.67	1000	
107	Ag	89	He	0.031	ppb	28.9	100.00	100	
111	Cd	89	He	0.032	ppb	24.3	11.85	1000	
118	Sn	159	He	0.045	ppb	60.6	95.56	1000	
121	Sb	159	No Gas	0.660	ppb	10.1	4118.55	1000	
137	Ba	159	No Gas	2.557	ppb	9.0	6275.12	2000	
182	W	159	No Gas	0.043	ppb	12.9	270.30	1000	
205	Tl	209	No Gas	-0.007	ppb	N/A	50.05	1000	
208	Pb	209	No Gas	1.813	ppb	4.7	24977.56	2000	
232	Th	209	No Gas	0.003	ppb	66.5	150.17	1000	
238	U	209	No Gas	0.312	ppb	9.2	4095.27	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1549510.25	2.5	1483357.64	104.46	29.5	120.4	
Sc	45	No Gas	3401071.37	3.0	3141192.51	108.27	29.5	120.4	
Sc	45	H2	425864.72	0.6	418309.46	101.81	29.5	120.4	
Sc	45	He	86350.90	0.1	85440.95	101.07	29.5	120.4	
Ge	72	No Gas	750431.43	3.0	694668.88	108.03	29.5	120.4	
Ge	72	H2	158486.65	0.6	157206.79	100.81	29.5	120.4	
Ge	72	He	65769.60	0.2	64721.85	101.62	29.5	120.4	
Y	89	H2	2662863.22	0.4	2572670.23	103.51	29.5	120.4	
Y	89	He	573592.62	0.0	574051.42	99.92	29.5	120.4	
Tb	159	No Gas	7599123.91	3.4	6821698.44	111.4	29.5	120.4	
Tb	159	He	3106874.09	0.4	2982140.2	104.18	29.5	120.4	
Bi	209	No Gas	3884142.94	3.0	3547037.46	109.5	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:55:11 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.178	ppb	2.2	27089.42	25	96.71	89.8	110.2	
11	B	6	No Gas	24.445	ppb	2.1	18911.78	25	97.78	89.8	110.2	
23	Na	45	He	5097.356	ppb	1.3	499789.44	5000	101.95	89.8	110.2	
24	Mg	45	He	4938.591	ppb	2.0	265489.90	5000	98.77	89.8	110.2	
27	Al	45	He	466.147	ppb	0.5	10234.01	500	93.23	89.8	110.2	
28	Si	45	H2	464.784	ppb	2.0	19852.57	500	92.96	89.8	110.2	
39	K	45	He	4770.072	ppb	0.9	250204.78	5000	95.4	89.8	110.2	
40	Ca	45	H2	4947.542	ppb	1.9	1832800.67	5000	98.95	89.8	110.2	
51	V	89	He	24.892	ppb	2.2	19396.23	25	99.57	89.8	110.2	
52	Cr	89	He	24.560	ppb	1.3	23413.76	25	98.24	89.8	110.2	
55	Mn	89	He	25.022	ppb	1.2	11369.19	25	100.09	89.8	110.2	
56	Fe	89	H2	4931.121	ppb	1.3	7245162.93	5000	98.62	89.8	110.2	
59	Co	89	He	24.797	ppb	2.6	39702.98	25	99.19	89.8	110.2	
60	Ni	89	He	24.608	ppb	2.2	10960.21	25	98.43	89.8	110.2	
63	Cu	89	He	24.862	ppb	1.0	30708.89	25	99.45	89.8	110.2	
66	Zn	89	He	24.479	ppb	1.2	4074.09	25	97.92	89.8	110.2	
75	As	89	He	24.943	ppb	1.1	3416.80	25	99.77	89.8	110.2	
78	Se	89	H2	24.857	ppb	1.0	1755.70	25	99.43	89.8	110.2	
88	Sr	89	He	23.619	ppb	1.0	16976.52	25	94.48	89.8	110.2	
95	Mo	89	He	24.865	ppb	2.4	19128.36	25	99.46	89.8	110.2	
107	Ag	89	He	25.226	ppb	1.6	66497.67	25	100.9	89.8	110.2	
111	Cd	89	He	24.777	ppb	1.8	8602.07	25	99.11	89.8	110.2	
118	Sn	159	He	23.455	ppb	1.0	18719.11	25	93.82	89.8	110.2	
121	Sb	159	No Gas	24.278	ppb	0.3	145512.83	25	97.11	89.8	110.2	
137	Ba	159	No Gas	24.243	ppb	3.5	57427.53	25	96.97	89.8	110.2	
182	W	159	No Gas	24.110	ppb	1.4	107587.32	25	96.44	89.8	110.2	
205	Tl	209	No Gas	24.755	ppb	1.3	240889.40	25	99.02	89.8	110.2	
208	Pb	209	No Gas	24.614	ppb	1.5	330429.90	25	98.46	89.8	110.2	
232	Th	209	No Gas	24.198	ppb	2.7	333925.35	25	96.79	89.8	110.2	
238	U	209	No Gas	24.670	ppb	1.7	317968.88	25	98.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1506433.84	1.1	1483357.64	101.56	29.5	120.4	
Sc	45	No Gas	3210860.09	0.9	3141192.51	102.22	29.5	120.4	
Sc	45	H2	405987.55	1.0	418309.46	97.05	29.5	120.4	
Sc	45	He	82874.79	0.8	85440.95	97	29.5	120.4	
Ge	72	No Gas	720595.58	0.5	694668.88	103.73	29.5	120.4	
Ge	72	H2	151632.22	1.3	157206.79	96.45	29.5	120.4	
Ge	72	He	63354.81	1.0	64721.85	97.89	29.5	120.4	
Y	89	H2	2580565.66	0.8	2572670.23	100.31	29.5	120.4	
Y	89	He	555403.06	0.5	574051.42	96.75	29.5	120.4	
Tb	159	No Gas	7335263.16	1.2	6821698.44	107.53	29.5	120.4	
Tb	159	He	3041214.16	0.8	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3811544.46	0.7	3547037.46	107.46	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 5:57:52 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.035	ppb	36.1	77.78	0.2	
11	B	6	No Gas	1.045	ppb	15.2	2220.25	4	
23	Na	45	He	27.633	ppb	7.3	11170.15	200	
24	Mg	45	He	1.243	ppb	118.7	671.18	20	
27	Al	45	He	-0.586	ppb	N/A	6.67	20	
28	Si	45	H2	2.047	ppb	121.5	563.97	100	
39	K	45	He	-1.603	ppb	N/A	10652.56	200	
40	Ca	45	H2	7.385	ppb	26.8	3872.92	20	
51	V	89	He	0.232	ppb	9.0	353.35	1	
52	Cr	89	He	-0.014	ppb	N/A	56.66	1	
55	Mn	89	He	-0.009	ppb	N/A	22.67	0.4	
56	Fe	89	H2	1.228	ppb	3.6	8311.74	20	
59	Co	89	He	0.018	ppb	95.0	51.11	0.2	
60	Ni	89	He	-0.286	ppb	N/A	211.12	0.4	Failed DoD
63	Cu	89	He	0.088	ppb	7.9	248.90	0.6	
66	Zn	89	He	0.073	ppb	87.6	75.56	2	
75	As	89	He	0.017	ppb	174.5	5.67	1	
78	Se	89	H2	0.031	ppb	58.8	2.33	1	
88	Sr	89	He	0.011	ppb	88.0	14.45	1	
95	Mo	89	He	0.073	ppb	18.6	67.78	1	
107	Ag	89	He	0.002	ppb	119.2	22.22	0.2	
111	Cd	89	He	0.004	ppb	85.9	1.85	0.2	
118	Sn	159	He	0.035	ppb	49.2	85.56	1	
121	Sb	159	No Gas	0.034	ppb	31.9	230.26	0.2	
137	Ba	159	No Gas	0.024	ppb	65.8	70.08	0.4	
182	W	159	No Gas	0.067	ppb	11.3	367.08	1	
205	Tl	209	No Gas	0.011	ppb	65.6	223.58	0.2	
208	Pb	209	No Gas	0.011	ppb	20.0	363.74	0.2	
232	Th	209	No Gas	0.144	ppb	21.4	2102.53	1	
238	U	209	No Gas	0.020	ppb	58.7	263.63	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509076.00	0.6	1483357.64	101.73	29.5	120.4	
Sc	45	No Gas	3218965.03	0.8	3141192.51	102.48	29.5	120.4	
Sc	45	H2	413103.88	0.6	418309.46	98.76	29.5	120.4	
Sc	45	He	83793.80	0.2	85440.95	98.07	29.5	120.4	
Ge	72	No Gas	717257.62	0.6	694668.88	103.25	29.5	120.4	
Ge	72	H2	155551.14	1.6	157206.79	98.95	29.5	120.4	
Ge	72	He	64244.37	0.4	64721.85	99.26	29.5	120.4	
Y	89	H2	2598508.15	0.8	2572670.23	101	29.5	120.4	
Y	89	He	565297.65	0.5	574051.42	98.48	29.5	120.4	
Tb	159	No Gas	7333279.54	0.9	6821698.44	107.5	29.5	120.4	
Tb	159	He	3052098.25	0.1	2982140.2	102.35	29.5	120.4	
Bi	209	No Gas	3838500.37	0.3	3547037.46	108.22	29.5	120.4	

Sample Report

Sample Name SN5980-009

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:00:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	129.4	46.67	100	
11	B	6	No Gas	19.986	ppb	5.3	15590.02	1000	
23	Na	45	He	44025.706	ppb	1.0	4328422.38	200000	
24	Mg	45	He	7878.685	ppb	1.3	430738.41	200000	
27	Al	45	He	3.894	ppb	13.2	106.67	200000	
28	Si	45	H2	6955.953	ppb	5.3	299481.53	10000	
39	K	45	He	5275.188	ppb	0.9	280484.90	200000	
40	Ca	45	H2	61617.744	ppb	5.4	23515830.21	200000	
51	V	89	He	0.087	ppb	89.6	238.90	1000	
52	Cr	89	He	0.020	ppb	81.4	89.32	2000	
55	Mn	89	He	0.427	ppb	17.8	223.96	2000	
56	Fe	89	H2	6.692	ppb	7.4	16681.91	100000	
59	Co	89	He	0.064	ppb	16.8	126.68	1000	
60	Ni	89	He	6.555	ppb	2.6	3220.50	1000	
63	Cu	89	He	196.590	ppb	0.4	246352.03	2000	
66	Zn	89	He	201.262	ppb	0.4	33656.90	2000	
75	As	89	He	0.718	ppb	8.4	103.34	1000	
78	Se	89	H2	0.028	ppb	41.4	2.17	1000	
88	Sr	89	He	219.380	ppb	0.4	160537.35	2000	
95	Mo	89	He	0.058	ppb	21.9	56.67	1000	
107	Ag	89	He	0.018	ppb	4.3	64.45	100	
111	Cd	89	He	0.070	ppb	24.8	25.19	1000	
118	Sn	159	He	0.052	ppb	16.4	100.00	1000	
121	Sb	159	No Gas	0.646	ppb	5.2	3948.36	1000	
137	Ba	159	No Gas	2.707	ppb	7.9	6505.57	2000	
182	W	159	No Gas	0.040	ppb	15.6	250.29	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.914	ppb	7.7	25745.85	2000	
232	Th	209	No Gas	0.036	ppb	13.9	600.69	1000	
238	U	209	No Gas	0.348	ppb	7.1	4475.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1494212.10	2.5	1483357.64	100.73	29.5	120.4	
Sc	45	No Gas	3265133.09	3.1	3141192.51	103.95	29.5	120.4	
Sc	45	H2	418924.11	3.2	418309.46	100.15	29.5	120.4	
Sc	45	He	84350.10	0.7	85440.95	98.72	29.5	120.4	
Ge	72	No Gas	716388.35	2.0	694668.88	103.13	29.5	120.4	
Ge	72	H2	155753.11	3.4	157206.79	99.08	29.5	120.4	
Ge	72	He	64033.13	0.8	64721.85	98.94	29.5	120.4	
Y	89	H2	2647478.14	3.5	2572670.23	102.91	29.5	120.4	
Y	89	He	565667.84	0.2	574051.42	98.54	29.5	120.4	
Tb	159	No Gas	7436683.01	2.9	6821698.44	109.02	29.5	120.4	
Tb	159	He	3068851.97	0.2	2982140.2	102.91	29.5	120.4	
Bi	209	No Gas	3796119.11	2.9	3547037.46	107.02	29.5	120.4	

Sample Report

Sample Name SN5980-010

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:03:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	58.9	74.45	100	
11	B	6	No Gas	19.627	ppb	3.6	15554.41	1000	
23	Na	45	He	42992.621	ppb	0.3	4212449.90	200000	
24	Mg	45	He	7713.451	ppb	0.3	420266.14	200000	
27	Al	45	He	3.117	ppb	33.4	88.89	200000	
28	Si	45	H2	7120.541	ppb	2.5	299557.57	10000	
39	K	45	He	5068.977	ppb	1.4	269003.28	200000	
40	Ca	45	H2	61133.407	ppb	1.9	22800816.88	200000	
51	V	89	He	0.227	ppb	17.2	348.91	1000	
52	Cr	89	He	0.022	ppb	13.9	91.32	2000	
55	Mn	89	He	0.388	ppb	12.7	205.30	2000	
56	Fe	89	H2	4.445	ppb	3.9	13020.58	100000	
59	Co	89	He	0.054	ppb	15.7	108.90	1000	
60	Ni	89	He	9.073	ppb	4.4	4317.49	1000	
63	Cu	89	He	226.667	ppb	0.8	283321.35	2000	
66	Zn	89	He	216.660	ppb	0.9	36137.67	2000	
75	As	89	He	0.600	ppb	5.3	86.68	1000	
78	Se	89	H2	0.026	ppb	47.4	2.00	1000	
88	Sr	89	He	213.065	ppb	0.7	155537.47	2000	
95	Mo	89	He	0.046	ppb	24.2	46.67	1000	
107	Ag	89	He	0.019	ppb	28.6	67.78	100	
111	Cd	89	He	0.040	ppb	0.6	14.44	1000	
118	Sn	159	He	0.133	ppb	11.1	164.45	1000	
121	Sb	159	No Gas	0.709	ppb	10.3	4388.93	1000	
137	Ba	159	No Gas	2.475	ppb	6.2	6038.19	2000	
182	W	159	No Gas	0.049	ppb	27.4	293.67	1000	
205	Tl	209	No Gas	-0.005	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.270	ppb	6.2	31059.67	2000	
232	Th	209	No Gas	0.015	ppb	15.9	317.03	1000	
238	U	209	No Gas	0.295	ppb	12.6	3848.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1514982.94	2.1	1483357.64	102.13	29.5	120.4	
Sc	45	No Gas	3312721.59	2.8	3141192.51	105.46	29.5	120.4	
Sc	45	H2	408979.59	1.3	418309.46	97.77	29.5	120.4	
Sc	45	He	84054.13	0.6	85440.95	98.38	29.5	120.4	
Ge	72	No Gas	727765.38	2.7	694668.88	104.76	29.5	120.4	
Ge	72	H2	153822.96	0.6	157206.79	97.85	29.5	120.4	
Ge	72	He	64046.95	0.9	64721.85	98.96	29.5	120.4	
Y	89	H2	2589094.63	1.0	2572670.23	100.64	29.5	120.4	
Y	89	He	564286.32	0.6	574051.42	98.3	29.5	120.4	
Tb	159	No Gas	7543199.61	2.5	6821698.44	110.58	29.5	120.4	
Tb	159	He	3061281.65	0.5	2982140.2	102.65	29.5	120.4	
Bi	209	No Gas	3864780.32	2.8	3547037.46	108.96	29.5	120.4	

Sample Report

Sample Name SN5515-001R

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:05:52 PM

Sample Type Sample

Total Dilution 50.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.144	ppb	11.1	110.00	100	
11	B	6	No Gas	401.155	ppb	5.3	7282.09	1000	
23	Na	45	He	3961.468	ppb	4.4	15625.83	200000	
24	Mg	45	He	38841.169	ppb	0.5	41225.86	200000	
27	Al	45	He	45436.693	ppb	0.6	19440.45	200000	
28	Si	45	H2	3341.484	ppb	6.6	3167.20	10000	
39	K	45	He	11837.262	ppb	1.7	21951.98	200000	
40	Ca	45	H2	276497.376	ppb	2.4	1993047.00	200000	
51	V	89	He	99.994	ppb	11.2	1691.27	1000	
52	Cr	89	He	487.477	ppb	0.7	9220.03	2000	
55	Mn	89	He	12465.895	ppb	0.3	111636.40	2000	
56	Fe	89	H2	398359.231	ppb	1.2	11537417.63	100000	
59	Co	89	He	60.223	ppb	5.1	1924.73	1000	
60	Ni	89	He	296.574	ppb	2.1	2857.06	1000	
63	Cu	89	He	4466.919	ppb	0.2	108627.95	2000	
66	Zn	89	He	5277.599	ppb	1.4	17144.41	2000	
75	As	89	He	67.271	ppb	11.0	185.02	1000	
78	Se	89	H2	50.748	ppb	3.5	70.83	1000	
88	Sr	89	He	1847.448	ppb	1.5	26223.50	2000	
95	Mo	89	He	143.963	ppb	2.2	2196.92	1000	
107	Ag	89	He	26.591	ppb	1.6	1400.13	100	
111	Cd	89	He	8.157	ppb	12.9	56.30	1000	
118	Sn	159	He	398.977	ppb	2.1	6337.27	1000	
121	Sb	159	No Gas	15.144	ppb	10.3	1888.91	1000	
137	Ba	159	No Gas	3412.778	ppb	5.2	165760.20	2000	
182	W	159	No Gas	25.928	ppb	1.7	2442.95	1000	
205	Tl	209	No Gas	0.188	ppb	57.2	166.85	1000	
208	Pb	209	No Gas	338.389	ppb	5.4	97728.55	2000	
232	Th	209	No Gas	0.744	ppb	13.4	337.05	1000	
238	U	209	No Gas	27.810	ppb	6.8	7704.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525927.28	3.2	1483357.64	102.87	29.5	120.4	
Sc	45	No Gas	3236322.01	4.2	3141192.51	103.03	29.5	120.4	
Sc	45	H2	395098.03	1.9	418309.46	94.45	29.5	120.4	
Sc	45	He	80829.89	0.6	85440.95	94.6	29.5	120.4	
Ge	72	No Gas	720094.77	2.9	694668.88	103.66	29.5	120.4	
Ge	72	H2	148567.80	0.5	157206.79	94.5	29.5	120.4	
Ge	72	He	61476.50	0.7	64721.85	94.99	29.5	120.4	
Y	89	H2	2544400.33	1.4	2572670.23	98.9	29.5	120.4	
Y	89	He	548497.32	0.2	574051.42	95.55	29.5	120.4	
Tb	159	No Gas	7530227.66	3.6	6821698.44	110.39	29.5	120.4	
Tb	159	He	3008203.18	0.5	2982140.2	100.87	29.5	120.4	
Bi	209	No Gas	4098294.35	3.6	3547037.46	115.54	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	046_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:08:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.058	ppb	124.7	48.89	0.5	
B	11	6	No Gas	5.375	ppb	20.9	2116.89	10	
Na	23	45	He	159.281	ppb	12.5	10989.72	500	
Mg	24	45	He	17.330	ppb	27.5	751.19	50	
Al	27	45	He	6.404	ppb	8.0	45.56	50	
Si	28	45	H2	18.712	ppb	31.2	597.34	250	
K	39	45	He	-2.848	ppb	N/A	10155.72	500	
Ca	40	45	H2	59.747	ppb	4.1	5251.16	50	PB 6020 Fails DoD
V	51	89	He	2.232	ppb	9.8	500.03	2.5	
Cr	52	89	He	0.227	ppb	44.8	109.31	2.5	
Mn	55	89	He	0.523	ppb	4.9	71.99	1	
Fe	56	89	H2	15.264	ppb	9.2	10529.03	50	
Co	59	89	He	-0.032	ppb	N/A	11.11	0.5	
Ni	60	89	He	-1.446	ppb	N/A	201.12	1	PB 6020 Fails DoD
Cu	63	89	He	1.724	ppb	2.6	546.70	1.5	PB 6020 Fails DoD
Zn	66	89	He	16.310	ppb	6.4	582.26	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.207	ppb	27.9	8.67	2.5	
Se	78	89	H2	0.135	ppb	46.3	2.00	2.5	
Sr	88	89	He	0.201	ppb	17.7	34.44	2.5	
Mo	95	89	He	0.071	ppb	78.5	21.11	2.5	
Ag	107	89	He	0.015	ppb	115.9	23.33	0.5	
Cd	111	89	He	0.000	ppb	3608.5	0.37	0.5	
Sn	118	159	He	0.993	ppb	22.4	212.23	2.5	
Sb	121	159	No Gas	0.006	ppb	199.7	36.71	0.5	
Ba	137	159	No Gas	0.285	ppb	17.8	150.17	1	
W	182	159	No Gas	-0.021	ppb	N/A	50.06	2.5	
Tl	205	209	No Gas	-0.037	ppb	N/A	46.72	0.5	
Pb	208	209	No Gas	0.068	ppb	11.9	400.45	0.5	
Th	232	209	No Gas	0.068	ppb	5.8	300.34	2.5	
U	238	209	No Gas	0.002	ppb	254.0	13.35	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1426962.21	3.0	1483357.64	96.2	29.5	120.4	
Sc	45	No Gas	3065488.24	3.0	3141192.51	97.59	29.5	120.4	
Sc	45	H2	388038.63	1.0	418309.46	92.76	29.5	120.4	
Sc	45	He	79501.46	0.6	85440.95	93.05	29.5	120.4	
Ge	72	No Gas	697357.61	2.8	694668.88	100.39	29.5	120.4	
Ge	72	H2	145972.90	0.7	157206.79	92.85	29.5	120.4	
Ge	72	He	61262.19	0.5	64721.85	94.65	29.5	120.4	
Y	89	H2	2485526.69	0.8	2572670.23	96.61	29.5	120.4	
Y	89	He	541739.07	0.3	574051.42	94.37	29.5	120.4	
Tb	159	No Gas	7399363.78	3.2	6821698.44	108.47	29.5	120.4	
Tb	159	He	2992963.74	0.7	2982140.2	100.36	29.5	120.4	
Bi	209	No Gas	3863970.22	3.5	3547037.46	108.94	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	047LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:11:12 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.660	ppb	3.6	11005.64	50	19.86	79.5	120.4	
B	11	6	No Gas	508.438	ppb	2.3	73055.03	500	20.34	79.5	120.4	
Na	23	45	He	8136.904	ppb	4.2	159946.23	7500	21.7	79.5	120.4	
Mg	24	45	He	5517.700	ppb	4.6	57859.63	5000	22.07	79.5	120.4	
Al	27	45	He	2034.151	ppb	3.6	8646.26	2000	20.34	79.5	120.4	
Si	28	45	H2	1063.235	ppb	5.2	9022.98	1000	21.26	0	200	
K	39	45	He	10630.712	ppb	3.3	113640.01	10000	21.26	79.5	120.4	
Ca	40	45	H2	2766.351	ppb	1.0	198945.22	2500	22.13	79.5	120.4	
V	51	89	He	543.740	ppb	3.7	82180.61	500	21.75	79.5	120.4	
Cr	52	89	He	220.136	ppb	2.7	40926.87	200	22.01	79.5	120.4	
Mn	55	89	He	556.612	ppb	2.5	49295.89	500	22.26	79.5	120.4	
Fe	56	89	H2	1118.155	ppb	0.5	327968.23	1000	22.36	79.5	120.4	
Co	59	89	He	567.072	ppb	2.5	177235.67	500	22.68	79.5	120.4	
Ni	60	89	He	568.833	ppb	2.6	48299.66	500	22.75	79.5	120.4	
Cu	63	89	He	278.761	ppb	2.3	67073.85	250	22.3	79.5	120.4	
Zn	66	89	He	573.152	ppb	3.9	18400.51	500	22.93	79.5	120.4	
As	75	89	He	110.211	ppb	1.6	2948.64	100	22.04	79.5	120.4	
Se	78	89	H2	106.480	ppb	3.1	1474.01	100	21.3	79.5	120.4	
Sr	88	89	He	534.206	ppb	2.5	74955.75	500	21.37	79.5	120.4	
Mo	95	89	He	114.361	ppb	3.3	17180.21	100	22.87	79.5	120.4	
Ag	107	89	He	57.431	ppb	2.2	29575.21	50	22.97	79.5	120.4	
Cd	111	89	He	273.458	ppb	3.6	18537.97	250	21.88	79.5	120.4	
Sn	118	159	He	519.176	ppb	3.2	81619.14	500	20.77	79.5	120.4	
Sb	121	159	No Gas	102.898	ppb	2.5	126155.91	100	20.58	79.5	120.4	
Ba	137	159	No Gas	2036.962	ppb	3.3	986807.18	2000	20.37	79.5	120.4	
W	182	159	No Gas	106.263	ppb	2.6	96992.80	100	21.25	79.5	120.4	
Tl	205	209	No Gas	108.399	ppb	1.8	214967.62	100	21.68	79.5	120.4	
[Pb]	206	209	No Gas	106.711	ppb	1.9	73580.46	100	21.34	79.5	120.4	
[Pb]	207	209	No Gas	108.255	ppb	2.9	65031.14	100	21.65	79.5	120.4	
Pb	208	209	No Gas	107.792	ppb	2.2	294915.96	100	21.56	79.5	120.4	
Th	232	209	No Gas	105.666	ppb	3.6	297168.86	100	21.13	79.5	120.4	
U	238	209	No Gas	106.351	ppb	3.6	279339.89	100	21.27	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486545.56	1.2	1483357.64	100.21	29.5	120.4	
Sc	45	No Gas	3127976.75	0.9	3141192.51	99.58	29.5	120.4	
Sc	45	H2	392226.88	0.9	418309.46	93.76	29.5	120.4	
Sc	45	He	80244.55	2.1	85440.95	93.92	29.5	120.4	
Ge	72	No Gas	717576.36	1.0	694668.88	103.3	29.5	120.4	
Ge	72	H2	146644.15	0.4	157206.79	93.28	29.5	120.4	
Ge	72	He	61459.16	1.9	64721.85	94.96	29.5	120.4	
Y	89	H2	2528306.92	0.8	2572670.23	98.28	29.5	120.4	
Y	89	He	542425.58	1.6	574051.42	94.49	29.5	120.4	
Tb	159	No Gas	7502076.07	0.8	6821698.44	109.97	29.5	120.4	
Tb	159	He	3003868.25	2.1	2982140.2	100.73	29.5	120.4	
Bi	209	No Gas	3883617.15	0.5	3547037.46	109.49	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:13:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	27.0	74.45	100	
11	B	6	No Gas	9.994	ppb	6.5	2915.95	1000	
23	Na	45	He	354.568	ppb	9.4	15001.14	200000	
24	Mg	45	He	32.177	ppb	8.1	928.99	200000	
27	Al	45	He	94.667	ppb	11.4	427.80	200000	
28	Si	45	H2	133.570	ppb	17.3	1531.78	10000	
39	K	45	He	96.791	ppb	38.5	11421.20	200000	
40	Ca	45	H2	131.656	ppb	16.9	10457.82	200000	
51	V	89	He	4.474	ppb	13.8	853.39	1000	
52	Cr	89	He	0.894	ppb	6.1	237.29	2000	
55	Mn	89	He	5.149	ppb	4.9	489.92	2000	
56	Fe	89	H2	127.722	ppb	2.8	43505.51	100000	
59	Co	89	He	0.136	ppb	45.8	64.45	1000	
60	Ni	89	He	-0.025	ppb	N/A	326.68	1000	
63	Cu	89	He	2.361	ppb	13.3	712.27	2000	
66	Zn	89	He	25.772	ppb	2.0	901.18	2000	
75	As	89	He	0.531	ppb	28.1	17.67	1000	
78	Se	89	H2	0.406	ppb	42.1	5.83	1000	
88	Sr	89	He	0.500	ppb	16.3	77.78	2000	
95	Mo	89	He	0.228	ppb	27.1	45.56	1000	
107	Ag	89	He	0.020	ppb	137.9	26.67	100	
111	Cd	89	He	0.054	ppb	34.2	4.07	1000	
118	Sn	159	He	1.503	ppb	9.3	297.79	1000	
121	Sb	159	No Gas	0.170	ppb	14.0	250.29	1000	
137	Ba	159	No Gas	2.760	ppb	16.1	1418.33	2000	
182	W	159	No Gas	0.188	ppb	7.9	253.62	1000	
205	Tl	209	No Gas	0.069	ppb	19.2	270.31	1000	
208	Pb	209	No Gas	3.669	ppb	5.7	10773.87	2000	
232	Th	209	No Gas	0.638	ppb	5.5	2002.40	1000	
238	U	209	No Gas	0.071	ppb	12.0	203.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517181.48	2.8	1483357.64	102.28	29.5	120.4	
Sc	45	No Gas	3320380.63	3.5	3141192.51	105.7	29.5	120.4	
Sc	45	H2	392705.09	0.7	418309.46	93.88	29.5	120.4	
Sc	45	He	81680.28	0.8	85440.95	95.6	29.5	120.4	
Ge	72	No Gas	755062.78	2.7	694668.88	108.69	29.5	120.4	
Ge	72	H2	147731.74	0.3	157206.79	93.97	29.5	120.4	
Ge	72	He	62415.42	0.7	64721.85	96.44	29.5	120.4	
Y	89	H2	2554606.37	0.9	2572670.23	99.3	29.5	120.4	
Y	89	He	551781.62	0.7	574051.42	96.12	29.5	120.4	
Tb	159	No Gas	7896363.01	3.1	6821698.44	115.75	29.5	120.4	
Tb	159	He	3050719.50	0.6	2982140.2	102.3	29.5	120.4	
Bi	209	No Gas	4088536.33	3.2	3547037.46	115.27	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:16:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	263.0	42.22	100	
11	B	6	No Gas	381.197	ppb	6.6	54054.15	1000	
23	Na	45	He	116483.088	ppb	1.5	2201145.94	200000	
24	Mg	45	He	14633.841	ppb	1.2	153878.43	200000	
27	Al	45	He	52.176	ppb	2.2	242.23	200000	
28	Si	45	H2	10570.468	ppb	1.1	85878.26	10000	
39	K	45	He	321.162	ppb	15.6	13515.38	200000	
40	Ca	45	H2	137370.084	ppb	0.5	9856997.91	200000	
51	V	89	He	4.922	ppb	4.7	913.39	1000	
52	Cr	89	He	0.496	ppb	14.5	160.64	2000	
55	Mn	89	He	324.990	ppb	1.1	29019.09	2000	
56	Fe	89	H2	17.162	ppb	9.7	11287.17	100000	
59	Co	89	He	0.589	ppb	9.6	206.68	1000	
60	Ni	89	He	1.409	ppb	41.0	445.58	1000	
63	Cu	89	He	2.581	ppb	11.7	758.94	2000	
66	Zn	89	He	27.177	ppb	6.3	937.85	2000	
75	As	89	He	0.501	ppb	36.4	16.67	1000	
78	Se	89	H2	0.337	ppb	17.1	4.83	1000	
88	Sr	89	He	1868.803	ppb	0.5	264257.24	2000	
95	Mo	89	He	0.620	ppb	8.8	104.45	1000	
107	Ag	89	He	-0.001	ppb	N/A	15.56	100	
111	Cd	89	He	0.038	ppb	24.4	2.96	1000	
118	Sn	159	He	1.327	ppb	5.6	268.90	1000	
121	Sb	159	No Gas	0.068	ppb	25.6	116.80	1000	
137	Ba	159	No Gas	33.614	ppb	8.5	16802.68	2000	
182	W	159	No Gas	0.031	ppb	115.7	100.11	1000	
205	Tl	209	No Gas	-0.018	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.364	ppb	5.3	1244.76	2000	
232	Th	209	No Gas	0.127	ppb	10.1	480.55	1000	
238	U	209	No Gas	3.798	ppb	10.0	10235.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1459962.36	3.7	1483357.64	98.42	29.5	120.4	
Sc	45	No Gas	3242420.64	4.4	3141192.51	103.22	29.5	120.4	
Sc	45	H2	393351.07	0.8	418309.46	94.03	29.5	120.4	
Sc	45	He	80931.95	2.0	85440.95	94.72	29.5	120.4	
Ge	72	No Gas	747567.29	3.5	694668.88	107.61	29.5	120.4	
Ge	72	H2	149080.31	1.9	157206.79	94.83	29.5	120.4	
Ge	72	He	62283.45	0.4	64721.85	96.23	29.5	120.4	
Y	89	H2	2534810.53	0.8	2572670.23	98.53	29.5	120.4	
Y	89	He	546536.30	0.2	574051.42	95.21	29.5	120.4	
Tb	159	No Gas	7750824.26	3.9	6821698.44	113.62	29.5	120.4	
Tb	159	He	3041033.84	0.3	2982140.2	101.97	29.5	120.4	
Bi	209	No Gas	3992899.97	4.0	3547037.46	112.57	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:19:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	225.8	41.12	100	
11	B	6	No Gas	2065.242	ppb	6.8	279344.07	1000	
23	Na	45	He	1271367.413	ppb	1.0	24390229.58	200000	>LDR
24	Mg	45	He	270939.058	ppb	1.0	2891580.72	200000	
27	Al	45	He	16.961	ppb	21.8	93.34	200000	
28	Si	45	H2	8912.484	ppb	1.7	72295.79	10000	
39	K	45	He	8147.025	ppb	1.3	91959.96	200000	
40	Ca	45	H2	510901.575	ppb	1.1	36565021.40	200000	
51	V	89	He	6.933	ppb	13.8	1223.43	1000	
52	Cr	89	He	1.074	ppb	15.5	269.29	2000	
55	Mn	89	He	33.030	ppb	1.6	2980.45	2000	
56	Fe	89	H2	175.570	ppb	2.1	56566.33	100000	
59	Co	89	He	0.588	ppb	17.8	206.68	1000	
60	Ni	89	He	8.158	ppb	7.8	1022.30	1000	
63	Cu	89	He	3.240	ppb	7.8	921.18	2000	
66	Zn	89	He	23.973	ppb	4.7	836.72	2000	
75	As	89	He	0.436	ppb	72.8	15.00	1000	
78	Se	89	H2	1.476	ppb	3.5	20.50	1000	
88	Sr	89	He	7213.520	ppb	0.6	1022756.38	2000	
95	Mo	89	He	0.553	ppb	2.1	94.45	1000	
107	Ag	89	He	0.023	ppb	63.2	27.78	100	
111	Cd	89	He	0.233	ppb	15.8	16.30	1000	
118	Sn	159	He	1.301	ppb	13.9	263.35	1000	
121	Sb	159	No Gas	0.128	ppb	3.4	190.21	1000	
137	Ba	159	No Gas	15.089	ppb	4.5	7460.48	2000	
182	W	159	No Gas	0.028	ppb	100.2	96.78	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.896	ppb	3.7	5266.32	2000	
232	Th	209	No Gas	0.092	ppb	45.2	357.07	1000	
238	U	209	No Gas	8.028	ppb	7.6	20543.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1422444.56	2.5	1483357.64	95.89	29.5	120.4	
Sc	45	No Gas	3205186.04	2.8	3141192.51	102.04	29.5	120.4	
Sc	45	H2	392327.32	1.3	418309.46	93.79	29.5	120.4	
Sc	45	He	82430.42	1.3	85440.95	96.48	29.5	120.4	
Ge	72	No Gas	724778.97	2.5	694668.88	104.33	29.5	120.4	
Ge	72	H2	146254.81	0.9	157206.79	93.03	29.5	120.4	
Ge	72	He	62309.91	1.1	64721.85	96.27	29.5	120.4	
Y	89	H2	2516491.61	0.8	2572670.23	97.82	29.5	120.4	
Y	89	He	548030.02	1.2	574051.42	95.47	29.5	120.4	
Tb	159	No Gas	7647927.94	2.9	6821698.44	112.11	29.5	120.4	
Tb	159	He	3023742.53	0.6	2982140.2	101.4	29.5	120.4	
Bi	209	No Gas	3789236.08	3.4	3547037.46	106.83	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:21:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	130.3	50.00	100	
11	B	6	No Gas	2091.223	ppb	5.2	301676.91	1000	
23	Na	45	He	1227892.620	ppb	0.8	23725542.62	200000	>LDR
24	Mg	45	He	231843.398	ppb	1.2	2492127.20	200000	
27	Al	45	He	93.994	ppb	4.8	432.25	200000	
28	Si	45	H2	8767.843	ppb	1.9	73590.70	10000	
39	K	45	He	11114.681	ppb	0.6	122485.91	200000	
40	Ca	45	H2	570965.030	ppb	1.9	42278153.54	200000	
51	V	89	He	8.801	ppb	5.9	1517.92	1000	
52	Cr	89	He	6.448	ppb	2.2	1286.50	2000	
55	Mn	89	He	243.436	ppb	1.0	21955.01	2000	
56	Fe	89	H2	6835.378	ppb	1.8	2021165.73	100000	
59	Co	89	He	2.708	ppb	11.4	882.31	1000	
60	Ni	89	He	10.407	ppb	9.3	1222.32	1000	
63	Cu	89	He	3.693	ppb	9.9	1037.85	2000	
66	Zn	89	He	34.093	ppb	2.1	1172.31	2000	
75	As	89	He	1.096	ppb	23.8	33.00	1000	
78	Se	89	H2	0.388	ppb	20.9	5.67	1000	
88	Sr	89	He	9215.906	ppb	0.5	1315811.38	2000	
95	Mo	89	He	0.599	ppb	42.0	102.23	1000	
107	Ag	89	He	0.003	ppb	479.0	17.78	100	
111	Cd	89	He	0.102	ppb	8.8	7.41	1000	
118	Sn	159	He	1.201	ppb	20.7	248.90	1000	
121	Sb	159	No Gas	0.099	ppb	29.9	156.84	1000	
137	Ba	159	No Gas	18.278	ppb	5.6	9160.08	2000	
182	W	159	No Gas	0.044	ppb	59.1	113.46	1000	
205	Tl	209	No Gas	-0.028	ppb	N/A	63.41	1000	
208	Pb	209	No Gas	3.292	ppb	6.8	9081.47	2000	
232	Th	209	No Gas	0.075	ppb	21.3	317.03	1000	
238	U	209	No Gas	5.640	ppb	8.3	14598.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1516824.15	2.4	1483357.64	102.26	29.5	120.4	
Sc	45	No Gas	3324304.97	4.2	3141192.51	105.83	29.5	120.4	
Sc	45	H2	405969.62	0.5	418309.46	97.05	29.5	120.4	
Sc	45	He	83020.29	1.0	85440.95	97.17	29.5	120.4	
Ge	72	No Gas	745296.44	3.8	694668.88	107.29	29.5	120.4	
Ge	72	H2	149173.78	1.0	157206.79	94.89	29.5	120.4	
Ge	72	He	62739.81	0.5	64721.85	96.94	29.5	120.4	
Y	89	H2	2590649.88	0.4	2572670.23	100.7	29.5	120.4	
Y	89	He	551847.66	0.3	574051.42	96.13	29.5	120.4	
Tb	159	No Gas	7757228.91	3.8	6821698.44	113.71	29.5	120.4	
Tb	159	He	3039832.14	0.3	2982140.2	101.93	29.5	120.4	
Bi	209	No Gas	3833078.18	3.8	3547037.46	108.06	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:24:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	511.5	41.11	100	
11	B	6	No Gas	2178.741	ppb	1.3	314595.47	1000	
23	Na	45	He	1230860.405	ppb	0.6	24131607.42	200000	>LDR
24	Mg	45	He	233340.015	ppb	0.9	2545074.54	200000	
27	Al	45	He	51.950	ppb	9.9	251.12	200000	
28	Si	45	H2	8850.668	ppb	4.4	73187.72	10000	
39	K	45	He	11241.660	ppb	0.7	125581.29	200000	
40	Ca	45	H2	589038.604	ppb	3.5	42983814.64	200000	
51	V	89	He	8.544	ppb	6.5	1483.47	1000	
52	Cr	89	He	3.535	ppb	9.1	739.22	2000	
55	Mn	89	He	260.856	ppb	0.6	23609.41	2000	
56	Fe	89	H2	7533.232	ppb	3.2	2180818.01	100000	
59	Co	89	He	2.829	ppb	2.5	924.55	1000	
60	Ni	89	He	8.749	ppb	11.5	1083.42	1000	
63	Cu	89	He	2.741	ppb	9.1	807.83	2000	
66	Zn	89	He	21.987	ppb	6.8	781.16	2000	
75	As	89	He	1.019	ppb	11.4	31.00	1000	
78	Se	89	H2	0.420	ppb	25.7	6.00	1000	
88	Sr	89	He	9310.040	ppb	0.6	1334048.25	2000	
95	Mo	89	He	0.735	ppb	12.4	123.34	1000	
107	Ag	89	He	0.010	ppb	153.2	21.11	100	
111	Cd	89	He	0.011	ppb	147.1	1.11	1000	
118	Sn	159	He	0.874	ppb	12.4	197.78	1000	
121	Sb	159	No Gas	0.076	ppb	21.4	126.81	1000	
137	Ba	159	No Gas	18.475	ppb	5.0	9246.82	2000	
182	W	159	No Gas	0.023	ppb	188.2	93.44	1000	
205	Tl	209	No Gas	-0.027	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	1.805	ppb	3.9	5082.74	2000	
232	Th	209	No Gas	0.044	ppb	33.2	230.26	1000	
238	U	209	No Gas	6.125	ppb	1.6	15887.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1517338.86	0.8	1483357.64	102.29	29.5	120.4	
Sc	45	No Gas	3297968.82	0.5	3141192.51	104.99	29.5	120.4	
Sc	45	H2	400460.05	4.2	418309.46	95.73	29.5	120.4	
Sc	45	He	84237.56	0.8	85440.95	98.59	29.5	120.4	
Ge	72	No Gas	743080.45	0.1	694668.88	106.97	29.5	120.4	
Ge	72	H2	147104.75	3.8	157206.79	93.57	29.5	120.4	
Ge	72	He	62925.91	0.6	64721.85	97.23	29.5	120.4	
Y	89	H2	2538539.91	2.9	2572670.23	98.67	29.5	120.4	
Y	89	He	553864.06	1.0	574051.42	96.48	29.5	120.4	
Tb	159	No Gas	7738458.77	0.3	6821698.44	113.44	29.5	120.4	
Tb	159	He	3054002.80	0.9	2982140.2	102.41	29.5	120.4	
Bi	209	No Gas	3833726.25	0.3	3547037.46	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:27:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.752	ppb	7.9	27463.52	25	95.01	89.8	110.2	
11	B	6	No Gas	30.570	ppb	5.6	24047.27	25	122.28	89.8	110.2	> +/- 10%
23	Na	45	He	5288.896	ppb	1.2	513909.66	5000	105.78	89.8	110.2	
24	Mg	45	He	5000.003	ppb	1.2	266540.48	5000	100	89.8	110.2	
27	Al	45	He	466.316	ppb	2.7	10150.61	500	93.26	89.8	110.2	
28	Si	45	H2	459.907	ppb	3.6	19812.41	500	91.98	89.8	110.2	
39	K	45	He	4801.272	ppb	0.5	249665.67	5000	96.03	89.8	110.2	
40	Ca	45	H2	4903.876	ppb	1.5	1831592.72	5000	98.08	89.8	110.2	
51	V	89	He	25.307	ppb	0.5	19805.61	25	101.23	89.8	110.2	
52	Cr	89	He	24.483	ppb	0.7	23443.75	25	97.93	89.8	110.2	
55	Mn	89	He	24.347	ppb	1.3	11111.69	25	97.39	89.8	110.2	
56	Fe	89	H2	4828.457	ppb	1.1	7219509.36	5000	96.57	89.8	110.2	
59	Co	89	He	24.730	ppb	2.5	39769.95	25	98.92	89.8	110.2	
60	Ni	89	He	24.457	ppb	3.3	10942.44	25	97.83	89.8	110.2	
63	Cu	89	He	24.841	ppb	1.3	30818.08	25	99.36	89.8	110.2	
66	Zn	89	He	24.777	ppb	3.2	4140.76	25	99.11	89.8	110.2	
75	As	89	He	24.398	ppb	0.5	3356.77	25	97.59	89.8	110.2	
78	Se	89	H2	23.987	ppb	1.5	1724.03	25	95.95	89.8	110.2	
88	Sr	89	He	23.761	ppb	0.5	17153.48	25	95.04	89.8	110.2	
95	Mo	89	He	24.945	ppb	2.5	19277.45	25	99.78	89.8	110.2	
107	Ag	89	He	25.085	ppb	0.4	66421.51	25	100.34	89.8	110.2	
111	Cd	89	He	24.471	ppb	0.9	8533.87	25	97.88	89.8	110.2	
118	Sn	159	He	23.268	ppb	1.3	18942.80	25	93.07	89.8	110.2	
121	Sb	159	No Gas	22.828	ppb	8.8	149497.17	25	91.31	89.8	110.2	
137	Ba	159	No Gas	23.359	ppb	9.8	60438.14	25	93.44	89.8	110.2	
182	W	159	No Gas	23.558	ppb	7.8	114885.12	25	94.23	89.8	110.2	
205	Tl	209	No Gas	23.819	ppb	7.3	252296.05	25	95.28	89.8	110.2	
208	Pb	209	No Gas	24.137	ppb	7.7	352653.96	25	96.55	89.8	110.2	
232	Th	209	No Gas	23.433	ppb	9.6	351695.00	25	93.73	89.8	110.2	
238	U	209	No Gas	23.903	ppb	9.0	335121.49	25	95.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1558652.39	4.8	1483357.64	105.08	29.5	120.4	
Sc	45	No Gas	3422110.17	5.2	3141192.51	108.94	29.5	120.4	
Sc	45	H2	409325.11	0.9	418309.46	97.85	29.5	120.4	
Sc	45	He	82179.98	0.9	85440.95	96.18	29.5	120.4	
Ge	72	No Gas	765434.39	5.7	694668.88	110.19	29.5	120.4	
Ge	72	H2	152951.51	1.4	157206.79	97.29	29.5	120.4	
Ge	72	He	63783.03	0.3	64721.85	98.55	29.5	120.4	
Y	89	H2	2625956.65	0.4	2572670.23	102.07	29.5	120.4	
Y	89	He	557858.18	0.6	574051.42	97.18	29.5	120.4	
Tb	159	No Gas	8040580.92	5.6	6821698.44	117.87	29.5	120.4	
Tb	159	He	3102344.50	0.6	2982140.2	104.03	29.5	120.4	
Bi	209	No Gas	4160696.02	5.8	3547037.46	117.3	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:29:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	3.8	100.00	0.2	
11	B	6	No Gas	3.916	ppb	16.8	3781.74	4	Failed DoD
23	Na	45	He	97.453	ppb	4.9	17647.18	200	
24	Mg	45	He	3.305	ppb	8.7	768.97	20	
27	Al	45	He	-0.274	ppb	N/A	13.33	20	
28	Si	45	H2	0.561	ppb	444.3	493.89	100	
39	K	45	He	-3.225	ppb	N/A	10379.14	200	
40	Ca	45	H2	4.761	ppb	1.1	2841.51	20	
51	V	89	He	0.293	ppb	5.6	395.58	1	
52	Cr	89	He	-0.011	ppb	N/A	58.66	1	
55	Mn	89	He	0.006	ppb	80.4	29.33	0.4	
56	Fe	89	H2	-0.318	ppb	N/A	6041.40	20	
59	Co	89	He	-0.002	ppb	N/A	17.78	0.2	
60	Ni	89	He	-0.395	ppb	N/A	161.12	0.4	Failed DoD
63	Cu	89	He	0.051	ppb	43.1	200.01	0.6	
66	Zn	89	He	-0.029	ppb	N/A	57.78	2	
75	As	89	He	0.003	ppb	352.2	3.67	1	
78	Se	89	H2	0.035	ppb	81.3	2.67	1	
88	Sr	89	He	0.060	ppb	33.2	50.00	1	
95	Mo	89	He	0.046	ppb	31.9	46.67	1	
107	Ag	89	He	0.003	ppb	94.2	24.44	0.2	
111	Cd	89	He	0.001	ppb	169.6	0.74	0.2	
118	Sn	159	He	0.029	ppb	57.1	81.12	1	
121	Sb	159	No Gas	0.034	ppb	49.8	213.58	0.2	
137	Ba	159	No Gas	0.034	ppb	8.8	90.10	0.4	
182	W	159	No Gas	0.068	ppb	19.7	347.06	1	
205	Tl	209	No Gas	0.018	ppb	14.3	276.98	0.2	
208	Pb	209	No Gas	0.019	ppb	45.4	447.17	0.2	
232	Th	209	No Gas	0.140	ppb	13.0	1925.68	1	
238	U	209	No Gas	0.031	ppb	25.6	390.45	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1345088.78	11.6	1483357.64	90.68	29.5	120.4	
Sc	45	No Gas	2910418.83	12.2	3141192.51	92.65	29.5	120.4	
Sc	45	H2	407349.80	1.0	418309.46	97.38	29.5	120.4	
Sc	45	He	82273.95	0.9	85440.95	96.29	29.5	120.4	
Ge	72	No Gas	649818.07	12.4	694668.88	93.54	29.5	120.4	
Ge	72	H2	153809.95	1.0	157206.79	97.84	29.5	120.4	
Ge	72	He	63402.52	1.0	64721.85	97.96	29.5	120.4	
Y	89	H2	2605476.90	0.7	2572670.23	101.28	29.5	120.4	
Y	89	He	557523.34	0.3	574051.42	97.12	29.5	120.4	
Tb	159	No Gas	6907807.74	12.4	6821698.44	101.26	29.5	120.4	
Tb	159	He	3060964.68	0.5	2982140.2	102.64	29.5	120.4	
Bi	209	No Gas	3610906.90	13.2	3547037.46	101.8	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:32:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	121.5	51.11	100	
11	B	6	No Gas	654.040	ppb	7.1	91898.40	1000	
23	Na	45	He	354734.813	ppb	0.9	6734069.25	200000	
24	Mg	45	He	45933.948	ppb	1.4	485147.43	200000	
27	Al	45	He	21.600	ppb	6.5	112.23	200000	
28	Si	45	H2	7689.821	ppb	2.7	62539.56	10000	
39	K	45	He	3361.768	ppb	2.3	43645.05	200000	
40	Ca	45	H2	165006.873	ppb	2.5	11829162.04	200000	
51	V	89	He	8.216	ppb	2.3	1407.90	1000	
52	Cr	89	He	0.808	ppb	2.9	217.96	2000	
55	Mn	89	He	63.999	ppb	1.3	5709.47	2000	
56	Fe	89	H2	196.217	ppb	1.7	62856.79	100000	
59	Co	89	He	0.529	ppb	44.4	186.68	1000	
60	Ni	89	He	-0.865	ppb	N/A	251.12	1000	
63	Cu	89	He	2.016	ppb	8.2	618.93	2000	
66	Zn	89	He	47.146	ppb	4.6	1574.59	2000	
75	As	89	He	0.978	ppb	27.7	29.33	1000	
78	Se	89	H2	0.721	ppb	38.4	10.17	1000	
88	Sr	89	He	1778.897	ppb	0.7	250374.08	2000	
95	Mo	89	He	0.794	ppb	21.7	130.00	1000	
107	Ag	89	He	0.019	ppb	102.0	25.56	100	
111	Cd	89	He	0.066	ppb	28.2	4.82	1000	
118	Sn	159	He	0.984	ppb	20.4	214.45	1000	
121	Sb	159	No Gas	0.179	ppb	27.7	253.62	1000	
137	Ba	159	No Gas	49.883	ppb	6.8	24486.60	2000	
182	W	159	No Gas	0.038	ppb	133.3	106.79	1000	
205	Tl	209	No Gas	-0.012	ppb	N/A	100.12	1000	
208	Pb	209	No Gas	0.196	ppb	25.8	754.19	2000	
232	Th	209	No Gas	0.611	ppb	15.6	1842.20	1000	
238	U	209	No Gas	3.366	ppb	5.5	8889.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1462743.84	3.4	1483357.64	98.61	29.5	120.4	
Sc	45	No Gas	3167897.58	3.1	3141192.51	100.85	29.5	120.4	
Sc	45	H2	393091.36	1.6	418309.46	93.97	29.5	120.4	
Sc	45	He	81493.59	1.0	85440.95	95.38	29.5	120.4	
Ge	72	No Gas	724046.45	2.7	694668.88	104.23	29.5	120.4	
Ge	72	H2	149316.58	0.6	157206.79	94.98	29.5	120.4	
Ge	72	He	62154.63	0.9	64721.85	96.03	29.5	120.4	
Y	89	H2	2532126.39	1.0	2572670.23	98.42	29.5	120.4	
Y	89	He	544011.30	1.1	574051.42	94.77	29.5	120.4	
Tb	159	No Gas	7607566.49	3.1	6821698.44	111.52	29.5	120.4	
Tb	159	He	3041118.08	0.7	2982140.2	101.98	29.5	120.4	
Bi	209	No Gas	3907483.47	3.5	3547037.46	110.16	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:35:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.015	ppb	N/A	35.56	100	
11	B	6	No Gas	18.059	ppb	4.7	4115.17	1000	
23	Na	45	He	489.512	ppb	2.4	17827.56	200000	
24	Mg	45	He	30.240	ppb	48.7	922.32	200000	
27	Al	45	He	19.896	ppb	9.9	106.67	200000	
28	Si	45	H2	13.712	ppb	112.1	584.00	10000	
39	K	45	He	-43.330	ppb	N/A	10184.08	200000	
40	Ca	45	H2	102.242	ppb	5.4	8655.16	200000	
51	V	89	He	8.268	ppb	5.3	1445.68	1000	
52	Cr	89	He	0.486	ppb	21.4	161.31	2000	
55	Mn	89	He	2.304	ppb	7.9	235.29	2000	
56	Fe	89	H2	1.258	ppb	82.2	6855.94	100000	
59	Co	89	He	-0.018	ppb	N/A	15.56	1000	
60	Ni	89	He	-0.926	ppb	N/A	251.12	1000	
63	Cu	89	He	1.591	ppb	7.8	527.81	2000	
66	Zn	89	He	20.235	ppb	7.8	725.60	2000	
75	As	89	He	0.612	ppb	30.9	20.00	1000	
78	Se	89	H2	0.235	ppb	60.8	3.50	1000	
88	Sr	89	He	0.419	ppb	14.0	66.67	2000	
95	Mo	89	He	0.104	ppb	37.3	26.66	1000	
107	Ag	89	He	0.012	ppb	125.4	22.22	100	
111	Cd	89	He	0.000	ppb	8020.9	0.37	1000	
118	Sn	159	He	1.129	ppb	9.1	240.01	1000	
121	Sb	159	No Gas	0.026	ppb	110.8	63.40	1000	
137	Ba	159	No Gas	0.364	ppb	8.3	200.22	2000	
182	W	159	No Gas	0.011	ppb	303.5	83.43	1000	
205	Tl	209	No Gas	-0.040	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.118	ppb	9.6	563.98	2000	
232	Th	209	No Gas	0.070	ppb	23.0	320.37	1000	
238	U	209	No Gas	0.002	ppb	107.3	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1531106.55	3.5	1483357.64	103.22	29.5	120.4	
Sc	45	No Gas	3296267.79	4.5	3141192.51	104.94	29.5	120.4	
Sc	45	H2	406604.06	0.6	418309.46	97.2	29.5	120.4	
Sc	45	He	82897.28	0.4	85440.95	97.02	29.5	120.4	
Ge	72	No Gas	752588.14	4.1	694668.88	108.34	29.5	120.4	
Ge	72	H2	150726.90	1.3	157206.79	95.88	29.5	120.4	
Ge	72	He	62817.25	0.2	64721.85	97.06	29.5	120.4	
Y	89	H2	2593596.50	0.9	2572670.23	100.81	29.5	120.4	
Y	89	He	555512.02	0.6	574051.42	96.77	29.5	120.4	
Tb	159	No Gas	7869614.26	4.2	6821698.44	115.36	29.5	120.4	
Tb	159	He	3075266.38	0.5	2982140.2	103.12	29.5	120.4	
Bi	209	No Gas	4085430.13	4.7	3547037.46	115.18	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:37:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	597.8	41.11	100	
11	B	6	No Gas	10.836	ppb	10.0	3074.89	1000	
23	Na	45	He	355.822	ppb	7.2	15178.31	200000	
24	Mg	45	He	19.428	ppb	23.0	802.30	200000	
27	Al	45	He	14.154	ppb	24.9	81.11	200000	
28	Si	45	H2	15.265	ppb	34.0	587.33	10000	
39	K	45	He	-5.470	ppb	N/A	10515.81	200000	
40	Ca	45	H2	56.230	ppb	4.7	5153.35	200000	
51	V	89	He	8.156	ppb	4.5	1427.91	1000	
52	Cr	89	He	0.549	ppb	14.7	173.30	2000	
55	Mn	89	He	0.899	ppb	6.0	107.98	2000	
56	Fe	89	H2	6.206	ppb	35.4	8291.73	100000	
59	Co	89	He	-0.005	ppb	N/A	20.00	1000	
60	Ni	89	He	-1.453	ppb	N/A	205.56	1000	
63	Cu	89	He	1.374	ppb	6.6	474.47	2000	
66	Zn	89	He	17.789	ppb	10.4	645.59	2000	
75	As	89	He	0.467	ppb	8.3	16.00	1000	
78	Se	89	H2	0.153	ppb	35.4	2.33	1000	
88	Sr	89	He	0.226	ppb	21.2	38.89	2000	
95	Mo	89	He	0.089	ppb	98.0	24.45	1000	
107	Ag	89	He	-0.005	ppb	N/A	13.33	100	
111	Cd	89	He	0.005	ppb	168.4	0.74	1000	
118	Sn	159	He	1.207	ppb	21.5	252.24	1000	
121	Sb	159	No Gas	0.028	ppb	88.0	66.74	1000	
137	Ba	159	No Gas	0.538	ppb	24.5	290.33	2000	
182	W	159	No Gas	-0.014	ppb	N/A	60.07	1000	
205	Tl	209	No Gas	-0.042	ppb	N/A	40.04	1000	
208	Pb	209	No Gas	0.038	ppb	67.2	337.04	2000	
232	Th	209	No Gas	0.037	ppb	33.8	223.59	1000	
238	U	209	No Gas	0.001	ppb	454.9	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1536698.74	3.0	1483357.64	103.6	29.5	120.4	
Sc	45	No Gas	3304872.85	3.3	3141192.51	105.21	29.5	120.4	
Sc	45	H2	399785.53	0.4	418309.46	95.57	29.5	120.4	
Sc	45	He	82519.58	0.3	85440.95	96.58	29.5	120.4	
Ge	72	No Gas	756715.03	2.9	694668.88	108.93	29.5	120.4	
Ge	72	H2	148694.79	0.8	157206.79	94.59	29.5	120.4	
Ge	72	He	63006.18	0.2	64721.85	97.35	29.5	120.4	
Y	89	H2	2586198.48	0.6	2572670.23	100.53	29.5	120.4	
Y	89	He	555409.32	0.4	574051.42	96.75	29.5	120.4	
Tb	159	No Gas	7897487.31	3.5	6821698.44	115.77	29.5	120.4	
Tb	159	He	3070589.02	0.5	2982140.2	102.97	29.5	120.4	
Bi	209	No Gas	4102597.45	3.9	3547037.46	115.66	29.5	120.4	

Sample Report

Sample Name SN5897-002L

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:40:28 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.006	ppb	1660.5	38.89	100	
11	B	6	No Gas	31.741	ppb	15.2	2388.07	1000	
23	Na	45	He	1369.409	ppb	3.8	13608.21	200000	
24	Mg	45	He	139.943	ppb	9.6	893.43	200000	
27	Al	45	He	56.891	ppb	13.3	68.89	200000	
28	Si	45	H2	52.463	ppb	162.7	553.97	10000	
39	K	45	He	-255.386	ppb	N/A	10054.03	200000	
40	Ca	45	H2	160.710	ppb	6.3	3419.43	200000	
51	V	89	He	31.800	ppb	7.4	1150.09	1000	
52	Cr	89	He	1.168	ppb	11.1	113.31	2000	
55	Mn	89	He	4.828	ppb	22.6	113.98	2000	
56	Fe	89	H2	-3.270	ppb	N/A	6271.71	100000	
59	Co	89	He	-0.161	ppb	N/A	11.11	1000	
60	Ni	89	He	-9.575	ppb	N/A	165.56	1000	
63	Cu	89	He	3.758	ppb	18.6	321.13	2000	
66	Zn	89	He	33.905	ppb	10.4	284.46	2000	
75	As	89	He	1.178	ppb	8.9	9.67	1000	
78	Se	89	H2	0.117	ppb	151.7	0.50	1000	
88	Sr	89	He	0.703	ppb	16.2	26.67	2000	
95	Mo	89	He	0.158	ppb	222.5	15.55	1000	
107	Ag	89	He	-0.058	ppb	N/A	10.00	100	
111	Cd	89	He	0.080	ppb	151.2	1.48	1000	
118	Sn	159	He	2.305	ppb	31.2	132.23	1000	
121	Sb	159	No Gas	0.126	ppb	34.1	63.41	1000	
137	Ba	159	No Gas	1.199	ppb	29.8	136.82	2000	
182	W	159	No Gas	-0.088	ppb	N/A	56.73	1000	
205	Tl	209	No Gas	-0.184	ppb	N/A	50.05	1000	
208	Pb	209	No Gas	0.150	ppb	28.9	313.69	2000	
232	Th	209	No Gas	0.091	ppb	58.8	170.19	1000	
238	U	209	No Gas	0.004	ppb	440.3	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1514975.01	3.6	1483357.64	102.13	29.5	120.4	
Sc	45	No Gas	3311499.69	4.0	3141192.51	105.42	29.5	120.4	
Sc	45	H2	402658.38	1.9	418309.46	96.26	29.5	120.4	
Sc	45	He	82514.23	2.6	85440.95	96.57	29.5	120.4	
Ge	72	No Gas	750271.07	4.1	694668.88	108	29.5	120.4	
Ge	72	H2	151267.32	1.6	157206.79	96.22	29.5	120.4	
Ge	72	He	62801.60	1.1	64721.85	97.03	29.5	120.4	
Y	89	H2	2585600.17	0.7	2572670.23	100.5	29.5	120.4	
Y	89	He	555258.70	0.7	574051.42	96.73	29.5	120.4	
Tb	159	No Gas	7896311.27	3.8	6821698.44	115.75	29.5	120.4	
Tb	159	He	3069229.19	0.9	2982140.2	102.92	29.5	120.4	
Bi	209	No Gas	4101705.36	3.5	3547037.46	115.64	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:43:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.844	ppb	8.9	2270.25	100	
11	B	6	No Gas	207.547	ppb	6.0	31510.66	1000	
23	Na	45	He	11308.655	ppb	0.7	224672.56	200000	
24	Mg	45	He	1114.455	ppb	2.6	12455.13	200000	
27	Al	45	He	994.548	ppb	1.6	4344.12	200000	
28	Si	45	H2	4733.549	ppb	3.6	39832.87	10000	
39	K	45	He	10203.037	ppb	0.9	112229.03	200000	
40	Ca	45	H2	1105.704	ppb	2.4	82717.82	200000	
51	V	89	He	59.929	ppb	2.3	9445.73	1000	
52	Cr	89	He	52.772	ppb	2.8	10120.45	2000	
55	Mn	89	He	22.524	ppb	2.3	2072.45	2000	
56	Fe	89	H2	1091.147	ppb	0.8	330307.22	100000	
59	Co	89	He	10.988	ppb	4.3	3545.17	1000	
60	Ni	89	He	21.266	ppb	1.4	2172.48	1000	
63	Cu	89	He	34.106	ppb	0.8	8541.76	2000	
66	Zn	89	He	123.731	ppb	1.8	4126.32	2000	
75	As	89	He	50.323	ppb	2.8	1383.23	1000	
78	Se	89	H2	51.750	ppb	3.2	738.99	1000	
88	Sr	89	He	50.131	ppb	2.6	7224.38	2000	
95	Mo	89	He	52.619	ppb	2.3	8118.23	1000	
107	Ag	89	He	11.199	ppb	1.3	5931.51	100	
111	Cd	89	He	11.541	ppb	0.6	803.37	1000	
118	Sn	159	He	51.350	ppb	3.4	8345.10	1000	
121	Sb	159	No Gas	9.909	ppb	7.4	12777.07	1000	
137	Ba	159	No Gas	20.834	ppb	4.9	10612.78	2000	
182	W	159	No Gas	50.782	ppb	8.2	48665.54	1000	
205	Tl	209	No Gas	10.736	ppb	7.1	22698.78	1000	
208	Pb	209	No Gas	10.404	ppb	7.1	30401.58	2000	
232	Th	209	No Gas	10.464	ppb	7.3	31317.45	1000	
238	U	209	No Gas	10.567	ppb	9.8	29431.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1528726.42	2.9	1483357.64	103.06	29.5	120.4	
Sc	45	No Gas	3304763.11	3.5	3141192.51	105.21	29.5	120.4	
Sc	45	H2	404900.41	1.2	418309.46	96.79	29.5	120.4	
Sc	45	He	82227.93	0.7	85440.95	96.24	29.5	120.4	
Ge	72	No Gas	762093.77	2.6	694668.88	109.71	29.5	120.4	
Ge	72	H2	149245.09	0.7	157206.79	94.94	29.5	120.4	
Ge	72	He	63168.86	0.4	64721.85	97.6	29.5	120.4	
Y	89	H2	2608208.04	1.1	2572670.23	101.38	29.5	120.4	
Y	89	He	556520.65	0.6	574051.42	96.95	29.5	120.4	
Tb	159	No Gas	7886284.74	3.6	6821698.44	115.61	29.5	120.4	
Tb	159	He	3084384.68	0.3	2982140.2	103.43	29.5	120.4	
Bi	209	No Gas	4126427.33	3.5	3547037.46	116.33	29.5	120.4	

Sample Report

Sample Name	SN5897-002S
File Name	060SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:45:46 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.278	ppb	8.8	11046.79	100	
11	B	6	No Gas	507.223	ppb	5.3	75284.26	1000	
23	Na	45	He	8008.287	ppb	1.3	160759.36	200000	
24	Mg	45	He	5415.568	ppb	1.3	57955.64	200000	
27	Al	45	He	2005.095	ppb	1.6	8696.26	200000	
28	Si	45	H2	1040.701	ppb	1.6	9072.95	10000	
39	K	45	He	10276.095	ppb	0.6	112415.57	200000	
40	Ca	45	H2	2688.804	ppb	2.1	198486.94	200000	
51	V	89	He	533.580	ppb	1.1	82410.90	1000	
52	Cr	89	He	215.359	ppb	0.3	40912.68	2000	
55	Mn	89	He	537.687	ppb	0.6	48655.82	2000	
56	Fe	89	H2	1114.256	ppb	0.8	334617.26	100000	
59	Co	89	He	549.119	ppb	0.3	175358.85	1000	
60	Ni	89	He	554.440	ppb	0.1	48110.24	1000	
63	Cu	89	He	272.520	ppb	0.6	66998.89	2000	
66	Zn	89	He	547.103	ppb	1.6	17951.03	2000	
75	As	89	He	108.849	ppb	1.6	2975.31	1000	
78	Se	89	H2	104.358	ppb	1.6	1478.84	1000	
88	Sr	89	He	513.454	ppb	1.1	73608.24	2000	
95	Mo	89	He	107.957	ppb	2.8	16570.56	1000	
107	Ag	89	He	55.416	ppb	0.4	29157.56	100	
111	Cd	89	He	264.171	ppb	0.5	18299.86	1000	
118	Sn	159	He	495.935	ppb	0.7	80154.94	1000	
121	Sb	159	No Gas	97.006	ppb	6.8	126839.67	1000	
137	Ba	159	No Gas	1937.604	ppb	6.9	1001054.61	2000	
182	W	159	No Gas	100.566	ppb	7.8	97876.04	1000	
205	Tl	209	No Gas	103.274	ppb	6.6	217888.45	1000	
208	Pb	209	No Gas	102.452	ppb	6.7	298214.70	2000	
232	Th	209	No Gas	99.695	ppb	8.6	298188.12	1000	
238	U	209	No Gas	99.925	ppb	7.6	279173.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1537040.54	2.4	1483357.64	103.62	29.5	120.4	
Sc	45	No Gas	3319702.06	2.7	3141192.51	105.68	29.5	120.4	
Sc	45	H2	402590.09	1.2	418309.46	96.24	29.5	120.4	
Sc	45	He	81831.20	0.8	85440.95	95.78	29.5	120.4	
Ge	72	No Gas	764546.94	2.4	694668.88	110.06	29.5	120.4	
Ge	72	H2	148692.82	1.1	157206.79	94.58	29.5	120.4	
Ge	72	He	63031.85	0.5	64721.85	97.39	29.5	120.4	
Y	89	H2	2588506.12	1.0	2572670.23	100.62	29.5	120.4	
Y	89	He	554084.15	0.8	574051.42	96.52	29.5	120.4	
Tb	159	No Gas	8010772.24	2.8	6821698.44	117.43	29.5	120.4	
Tb	159	He	3086803.63	0.8	2982140.2	103.51	29.5	120.4	
Bi	209	No Gas	4137104.36	2.9	3547037.46	116.64	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:48:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.353	ppb	12.3	11563.87	100	
11	B	6	No Gas	546.707	ppb	9.8	76806.68	1000	
23	Na	45	He	7997.847	ppb	0.8	161363.40	200000	
24	Mg	45	He	5435.578	ppb	0.5	58466.53	200000	
27	Al	45	He	2012.811	ppb	1.1	8774.11	200000	
28	Si	45	H2	1003.776	ppb	3.5	8729.05	10000	
39	K	45	He	10185.093	ppb	1.0	112074.71	200000	
40	Ca	45	H2	2688.265	ppb	2.2	197625.20	200000	
51	V	89	He	537.641	ppb	0.7	83448.07	1000	
52	Cr	89	He	214.782	ppb	0.2	41005.73	2000	
55	Mn	89	He	541.835	ppb	1.0	49275.10	2000	
56	Fe	89	H2	1103.466	ppb	1.9	332248.40	100000	
59	Co	89	He	555.685	ppb	0.6	178331.99	1000	
60	Ni	89	He	558.226	ppb	1.3	48676.57	1000	
63	Cu	89	He	274.429	ppb	1.6	67797.30	2000	
66	Zn	89	He	555.110	ppb	1.9	18302.55	2000	
75	As	89	He	105.867	ppb	4.0	2907.62	1000	
78	Se	89	H2	103.200	ppb	0.7	1466.18	1000	
88	Sr	89	He	510.667	ppb	0.4	73575.93	2000	
95	Mo	89	He	110.991	ppb	1.4	17122.33	1000	
107	Ag	89	He	55.365	ppb	0.2	29275.65	100	
111	Cd	89	He	262.891	ppb	0.3	18302.45	1000	
118	Sn	159	He	496.249	ppb	0.4	80547.37	1000	
121	Sb	159	No Gas	104.988	ppb	14.4	127766.84	1000	
137	Ba	159	No Gas	2119.801	ppb	14.7	1019186.65	2000	
182	W	159	No Gas	110.181	ppb	14.7	99798.55	1000	
205	Tl	209	No Gas	113.666	ppb	13.2	223233.33	1000	
208	Pb	209	No Gas	112.409	ppb	13.5	304572.58	2000	
232	Th	209	No Gas	111.493	ppb	16.5	310002.78	1000	
238	U	209	No Gas	110.618	ppb	15.3	287401.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1461470.77	6.1	1483357.64	98.52	29.5	120.4	
Sc	45	No Gas	3114270.80	9.4	3141192.51	99.14	29.5	120.4	
Sc	45	H2	400988.97	1.8	418309.46	95.86	29.5	120.4	
Sc	45	He	82250.44	1.5	85440.95	96.27	29.5	120.4	
Ge	72	No Gas	724403.78	7.1	694668.88	104.28	29.5	120.4	
Ge	72	H2	149993.81	1.0	157206.79	95.41	29.5	120.4	
Ge	72	He	63506.28	0.6	64721.85	98.12	29.5	120.4	
Y	89	H2	2595114.09	1.3	2572670.23	100.87	29.5	120.4	
Y	89	He	556837.08	0.9	574051.42	97	29.5	120.4	
Tb	159	No Gas	7509549.75	8.9	6821698.44	110.08	29.5	120.4	
Tb	159	He	3099835.75	0.5	2982140.2	103.95	29.5	120.4	
Bi	209	No Gas	3875569.97	8.7	3547037.46	109.26	29.5	120.4	

Sample Report

Sample Name SN5946-001

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 6:51:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.209	ppb	57.1	81.12	100	
11	B	6	No Gas	647.073	ppb	9.7	89559.55	1000	
23	Na	45	He	154703.007	ppb	0.5	2889034.12	200000	
24	Mg	45	He	49747.654	ppb	0.8	516024.75	200000	
27	Al	45	He	17.603	ppb	14.6	93.34	200000	
28	Si	45	H2	9996.113	ppb	7.5	78717.18	10000	
39	K	45	He	1227.651	ppb	1.9	22163.93	200000	
40	Ca	45	H2	207317.392	ppb	7.7	14413965.34	200000	
51	V	89	He	6.417	ppb	3.7	1142.31	1000	
52	Cr	89	He	0.516	ppb	13.1	164.64	2000	
55	Mn	89	He	930.135	ppb	0.5	83114.80	2000	
56	Fe	89	H2	5758.954	ppb	6.7	1630655.17	100000	
59	Co	89	He	0.349	ppb	36.6	131.12	1000	
60	Ni	89	He	-1.613	ppb	N/A	188.90	1000	
63	Cu	89	He	1.191	ppb	28.3	423.36	2000	
66	Zn	89	He	15.816	ppb	7.1	572.25	2000	
75	As	89	He	1.304	ppb	4.4	38.33	1000	
78	Se	89	H2	0.376	ppb	37.2	5.33	1000	
88	Sr	89	He	1896.023	ppb	0.6	268455.65	2000	
95	Mo	89	He	1.279	ppb	13.7	204.45	1000	
107	Ag	89	He	0.027	ppb	84.4	30.00	100	
111	Cd	89	He	0.087	ppb	84.1	6.30	1000	
118	Sn	159	He	1.880	ppb	19.3	360.02	1000	
121	Sb	159	No Gas	0.210	ppb	23.1	300.35	1000	
137	Ba	159	No Gas	131.460	ppb	12.2	66466.92	2000	
182	W	159	No Gas	0.186	ppb	57.3	246.95	1000	
205	Tl	209	No Gas	0.103	ppb	70.3	330.38	1000	
208	Pb	209	No Gas	0.166	ppb	61.9	677.43	2000	
232	Th	209	No Gas	1.151	ppb	16.2	3461.06	1000	
238	U	209	No Gas	0.848	ppb	19.0	2286.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443357.97	5.5	1483357.64	97.3	29.5	120.4	
Sc	45	No Gas	3243110.78	6.9	3141192.51	103.24	29.5	120.4	
Sc	45	H2	382281.04	5.9	418309.46	91.39	29.5	120.4	
Sc	45	He	80041.03	0.8	85440.95	93.68	29.5	120.4	
Ge	72	No Gas	750245.73	5.8	694668.88	108	29.5	120.4	
Ge	72	H2	142876.47	3.3	157206.79	90.88	29.5	120.4	
Ge	72	He	62311.35	0.1	64721.85	96.28	29.5	120.4	
Y	89	H2	2484047.76	4.4	2572670.23	96.56	29.5	120.4	
Y	89	He	547252.89	0.4	574051.42	95.33	29.5	120.4	
Tb	159	No Gas	7872290.72	7.0	6821698.44	115.4	29.5	120.4	
Tb	159	He	3067660.51	0.3	2982140.2	102.87	29.5	120.4	
Bi	209	No Gas	4000979.35	7.1	3547037.46	112.8	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW1
File Name	063_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:53:50 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.009	ppb	N/A	27.78	0.1	
B	11	6	No Gas	3.403	ppb	4.9	3782.85	2	200.8 PB Fails DoD
Na	23	45	He	38.169	ppb	16.2	12021.75	100	
Mg	24	45	He	6.831	ppb	34.8	960.10	10	
Al	27	45	He	2.629	ppb	48.3	76.67	10	
Si	28	45	H2	12.344	ppb	21.7	994.48	50	
K	39	45	He	-10.738	ppb	N/A	10040.74	100	
Ca	40	45	H2	12.907	ppb	8.4	5905.88	10	200.8 PB Fails DoD
V	51	89	He	0.600	ppb	11.0	636.71	0.5	200.8 PB Fails DoD
Cr	52	89	He	0.310	ppb	13.7	366.61	0.5	
Mn	55	89	He	0.334	ppb	5.9	179.30	0.2	200.8 PB Fails DoD
Fe	56	89	H2	1.067	ppb	16.9	8128.00	10	
Co	59	89	He	0.020	ppb	105.2	53.34	0.1	
Ni	60	89	He	-0.297	ppb	N/A	204.45	0.2	200.8 PB Fails DoD
Cu	63	89	He	0.100	ppb	24.6	261.12	0.3	
Zn	66	89	He	40.150	ppb	1.0	6699.62	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.037	ppb	62.9	8.33	0.5	
Se	78	89	H2	0.019	ppb	65.3	1.50	0.5	
Sr	88	89	He	0.078	ppb	12.2	63.34	0.5	
Mo	95	89	He	0.042	ppb	62.3	43.33	0.5	
Ag	107	89	He	-0.003	ppb	N/A	7.78	0.1	
Cd	111	89	He	0.010	ppb	83.3	3.70	0.1	
Sn	118	159	He	0.244	ppb	16.2	256.68	0.5	
Sb	121	159	No Gas	0.008	ppb	36.0	83.43	0.1	
Ba	137	159	No Gas	0.391	ppb	9.1	997.82	0.2	200.8 PB Fails DoD
W	182	159	No Gas	-0.005	ppb	N/A	50.06	0.5	
Tl	205	209	No Gas	0.000	ppb	17546.5	126.81	0.1	
[Pb]	206	209	No Gas	0.016	ppb	14.8	103.45	0.1	
[Pb]	207	209	No Gas	0.016	ppb	94.2	116.80	0.1	
Pb	208	209	No Gas	0.015	ppb	8.1	447.17	0.1	
Th	232	209	No Gas	0.009	ppb	23.4	250.28	0.5	
U	238	209	No Gas	0.004	ppb	6.3	63.41	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1462701.97	3.4	1483357.64	98.61	29.5	120.4	
Sc	45	No Gas	3257768.64	3.4	3141192.51	103.71	29.5	120.4	
Sc	45	H2	410094.75	0.7	418309.46	98.04	29.5	120.4	
Sc	45	He	82593.26	0.6	85440.95	96.67	29.5	120.4	
Ge	72	No Gas	747623.33	3.3	694668.88	107.62	29.5	120.4	
Ge	72	H2	154660.06	1.6	157206.79	98.38	29.5	120.4	
Ge	72	He	64338.14	0.9	64721.85	99.41	29.5	120.4	
Y	89	H2	2615588.02	0.5	2572670.23	101.67	29.5	120.4	
Y	89	He	560174.56	0.6	574051.42	97.58	29.5	120.4	
Tb	159	No Gas	7799802.45	3.4	6821698.44	114.34	29.5	120.4	
Tb	159	He	3098146.97	0.4	2982140.2	103.89	29.5	120.4	
Bi	209	No Gas	4085099.23	3.5	3547037.46	115.17	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	064_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:56:28 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.472	ppb	7.8	10903.37	50	19.39	79.5	120.4	
B	11	6	No Gas	489.293	ppb	6.8	71433.77	500	19.57	79.5	120.4	
Na	23	45	He	7664.634	ppb	1.8	156656.41	7500	20.44	79.5	120.4	
Mg	24	45	He	5337.617	ppb	1.0	58045.11	5000	21.35	79.5	120.4	
Al	27	45	He	1906.825	ppb	3.1	8401.64	2000	19.07	79.5	120.4	
Si	28	45	H2	1035.528	ppb	3.2	9193.18	1000	20.71	79.5	120.4	
K	39	45	He	10063.343	ppb	1.3	112064.10	10000	20.13	79.5	120.4	
Ca	40	45	H2	2614.962	ppb	1.6	196562.91	2500	20.92	79.5	120.4	
V	51	89	He	507.689	ppb	0.6	79687.75	500	20.31	79.5	120.4	
Cr	52	89	He	202.250	ppb	1.0	39046.44	200	20.23	79.5	120.4	
Mn	55	89	He	518.830	ppb	0.5	47709.46	500	20.75	79.5	120.4	
Fe	56	89	H2	1046.388	ppb	1.2	318177.32	1000	20.93	79.5	120.4	
Co	59	89	He	521.350	ppb	0.2	169181.12	500	20.85	79.5	120.4	
Ni	60	89	He	521.591	ppb	0.7	46010.83	500	20.86	79.5	120.4	
Cu	63	89	He	256.219	ppb	1.2	64019.52	250	20.5	79.5	120.4	
Zn	66	89	He	520.377	ppb	0.6	17353.56	500	20.82	79.5	120.4	
As	75	89	He	105.948	ppb	1.1	2942.97	100	21.19	79.5	120.4	
Se	78	89	H2	102.721	ppb	2.2	1471.84	100	20.54	79.5	120.4	
Sr	88	89	He	507.839	ppb	0.8	73981.38	500	20.31	79.5	120.4	
Mo	95	89	He	105.622	ppb	1.3	16476.04	100	21.12	79.5	120.4	
Ag	107	89	He	52.513	ppb	0.9	28077.51	50	21.01	79.5	120.4	
Cd	111	89	He	261.983	ppb	0.8	18441.53	250	20.96	79.5	120.4	
Sn	118	159	He	488.582	ppb	0.6	79167.55	500	19.54	79.5	120.4	
Sb	121	159	No Gas	98.542	ppb	9.0	124352.61	100	19.71	79.5	120.4	
Ba	137	159	No Gas	1928.923	ppb	8.2	962070.14	2000	19.29	79.5	120.4	
W	182	159	No Gas	99.851	ppb	8.0	93840.08	100	19.97	79.5	120.4	
Tl	205	209	No Gas	102.538	ppb	6.3	210440.16	100	20.51	79.5	120.4	
Pb	208	209	No Gas	102.522	ppb	7.4	290192.27	100	20.5	79.5	120.4	
Th	232	209	No Gas	96.253	ppb	9.0	279929.62	100	19.25	79.5	120.4	
U	238	209	No Gas	99.676	ppb	7.6	270826.01	100	19.93	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1511958.17	3.6	1483357.64	101.93	29.5	120.4	
Sc	45	No Gas	3301695.43	4.9	3141192.51	105.11	29.5	120.4	
Sc	45	H2	409901.03	1.3	418309.46	97.99	29.5	120.4	
Sc	45	He	83141.24	1.1	85440.95	97.31	29.5	120.4	
Ge	72	No Gas	743471.49	4.6	694668.88	107.03	29.5	120.4	
Ge	72	H2	155196.92	0.5	157206.79	98.72	29.5	120.4	
Ge	72	He	64249.71	0.3	64721.85	99.27	29.5	120.4	
Y	89	H2	2617740.56	1.0	2572670.23	101.75	29.5	120.4	
Y	89	He	563029.68	0.4	574051.42	98.08	29.5	120.4	
Tb	159	No Gas	7744531.83	5.0	6821698.44	113.53	29.5	120.4	
Tb	159	He	3094558.91	0.2	2982140.2	103.77	29.5	120.4	
Bi	209	No Gas	4026455.04	4.4	3547037.46	113.52	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 6:59:10 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.777	ppb	7.5	25468.69	25	95.11	89.8	110.2	
11	B	6	No Gas	25.798	ppb	6.7	19010.86	25	103.19	89.8	110.2	
23	Na	45	He	5076.790	ppb	1.3	478295.55	5000	101.54	89.8	110.2	
24	Mg	45	He	4992.979	ppb	1.4	257894.58	5000	99.86	89.8	110.2	
27	Al	45	He	480.854	ppb	2.8	10140.61	500	96.17	89.8	110.2	
28	Si	45	H2	447.573	ppb	3.8	18823.47	500	89.51	89.8	110.2	> +/- 10%
39	K	45	He	4795.559	ppb	1.1	241624.96	5000	95.91	89.8	110.2	
40	Ca	45	H2	4883.228	ppb	0.5	1779945.04	5000	97.66	89.8	110.2	
51	V	89	He	24.730	ppb	0.7	18885.46	25	98.92	89.8	110.2	
52	Cr	89	He	24.640	ppb	0.9	23017.81	25	98.56	89.8	110.2	
55	Mn	89	He	25.213	ppb	1.4	11226.43	25	100.85	89.8	110.2	
56	Fe	89	H2	4889.594	ppb	0.6	7111106.01	5000	97.79	89.8	110.2	
59	Co	89	He	25.216	ppb	0.8	39564.99	25	100.86	89.8	110.2	
60	Ni	89	He	24.208	ppb	3.7	10572.16	25	96.83	89.8	110.2	
63	Cu	89	He	25.068	ppb	0.9	30340.40	25	100.27	89.8	110.2	
66	Zn	89	He	24.640	ppb	4.4	4017.39	25	98.56	89.8	110.2	
75	As	89	He	24.750	ppb	1.0	3322.10	25	99	89.8	110.2	
78	Se	89	H2	24.629	ppb	2.1	1721.86	25	98.52	89.8	110.2	
88	Sr	89	He	23.736	ppb	0.9	16717.36	25	94.94	89.8	110.2	
95	Mo	89	He	25.181	ppb	1.3	18983.80	25	100.72	89.8	110.2	
107	Ag	89	He	25.342	ppb	0.9	65468.36	25	101.37	89.8	110.2	
111	Cd	89	He	25.051	ppb	1.2	8522.75	25	100.2	89.8	110.2	
118	Sn	159	He	24.182	ppb	1.9	19316.74	25	96.73	89.8	110.2	
121	Sb	159	No Gas	23.098	ppb	9.6	142704.36	25	92.39	89.8	110.2	
137	Ba	159	No Gas	23.393	ppb	7.8	57156.04	25	93.57	89.8	110.2	
182	W	159	No Gas	23.536	ppb	7.7	108311.54	25	94.14	89.8	110.2	
205	Tl	209	No Gas	23.908	ppb	7.7	240355.78	25	95.63	89.8	110.2	
208	Pb	209	No Gas	23.709	ppb	7.8	328826.05	25	94.84	89.8	110.2	
232	Th	209	No Gas	23.662	ppb	9.7	337165.35	25	94.65	89.8	110.2	
238	U	209	No Gas	23.759	ppb	9.3	316225.93	25	95.04	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443090.52	4.0	1483357.64	97.29	29.5	120.4	
Sc	45	No Gas	3181100.49	4.7	3141192.51	101.27	29.5	120.4	
Sc	45	H2	399438.73	0.5	418309.46	95.49	29.5	120.4	
Sc	45	He	79626.53	0.9	85440.95	93.19	29.5	120.4	
Ge	72	No Gas	725255.07	3.7	694668.88	104.4	29.5	120.4	
Ge	72	H2	150082.58	1.4	157206.79	95.47	29.5	120.4	
Ge	72	He	61635.70	0.6	64721.85	95.23	29.5	120.4	
Y	89	H2	2554257.34	0.9	2572670.23	99.28	29.5	120.4	
Y	89	He	544254.60	0.7	574051.42	94.81	29.5	120.4	
Tb	159	No Gas	7583110.30	4.6	6821698.44	111.16	29.5	120.4	
Tb	159	He	3044527.45	0.8	2982140.2	102.09	29.5	120.4	
Bi	209	No Gas	3946921.60	4.5	3547037.46	111.27	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:01:48 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.050	ppb	36.5	92.23	0.2	
11	B	6	No Gas	1.463	ppb	8.7	2433.63	4	
23	Na	45	He	16.886	ppb	24.7	9844.27	200	
24	Mg	45	He	2.600	ppb	48.4	724.52	20	
27	Al	45	He	0.762	ppb	22.2	35.55	20	
28	Si	45	H2	0.111	ppb	2181.8	470.53	100	
39	K	45	He	-11.777	ppb	N/A	9857.40	200	
40	Ca	45	H2	5.215	ppb	4.8	2975.98	20	
51	V	89	He	0.215	ppb	18.8	333.35	1	
52	Cr	89	He	-0.013	ppb	N/A	56.66	1	
55	Mn	89	He	0.008	ppb	93.7	30.00	0.4	
56	Fe	89	H2	-0.463	ppb	N/A	5740.86	20	
59	Co	89	He	0.005	ppb	187.5	28.89	0.2	
60	Ni	89	He	-0.434	ppb	N/A	143.34	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.029	ppb	48.7	171.12	0.6	
66	Zn	89	He	0.116	ppb	125.2	81.11	2	
75	As	89	He	0.028	ppb	91.0	7.00	1	
78	Se	89	H2	0.043	ppb	10.5	3.17	1	
88	Sr	89	He	0.070	ppb	18.6	56.67	1	
95	Mo	89	He	0.070	ppb	23.8	64.45	1	
107	Ag	89	He	0.005	ppb	62.7	30.00	0.2	
111	Cd	89	He	0.008	ppb	49.0	2.96	0.2	
118	Sn	159	He	0.109	ppb	42.2	144.45	1	
121	Sb	159	No Gas	0.029	ppb	41.2	203.57	0.2	
137	Ba	159	No Gas	0.056	ppb	29.3	150.17	0.4	
182	W	159	No Gas	0.058	ppb	20.2	333.71	1	
205	Tl	209	No Gas	0.015	ppb	33.9	276.98	0.2	
208	Pb	209	No Gas	0.010	ppb	55.3	357.07	0.2	
232	Th	209	No Gas	0.067	ppb	6.5	1061.24	1	
238	U	209	No Gas	0.014	ppb	38.2	196.89	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1459153.45	4.0	1483357.64	98.37	29.5	120.4	
Sc	45	No Gas	3174237.48	4.7	3141192.51	101.05	29.5	120.4	
Sc	45	H2	402632.49	0.8	418309.46	96.25	29.5	120.4	
Sc	45	He	81500.55	0.6	85440.95	95.39	29.5	120.4	
Ge	72	No Gas	717906.45	4.5	694668.88	103.35	29.5	120.4	
Ge	72	H2	152658.48	0.3	157206.79	97.11	29.5	120.4	
Ge	72	He	62782.92	0.9	64721.85	97	29.5	120.4	
Y	89	H2	2566738.86	0.9	2572670.23	99.77	29.5	120.4	
Y	89	He	554165.11	1.2	574051.42	96.54	29.5	120.4	
Tb	159	No Gas	7543901.49	5.1	6821698.44	110.59	29.5	120.4	
Tb	159	He	3044527.39	0.6	2982140.2	102.09	29.5	120.4	
Bi	209	No Gas	3938723.69	5.0	3547037.46	111.04	29.5	120.4	

Sample Report

Sample Name SN5923-001

File Name 067SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:04:31 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.253	ppb	5.3	283.35	100	
11	B	6	No Gas	78.169	ppb	2.0	50520.34	1000	
23	Na	45	He	152509.335	ppb	1.2	14456053.04	200000	
24	Mg	45	He	12624.272	ppb	0.9	666041.33	200000	
27	Al	45	He	351.068	ppb	2.8	7576.74	200000	
28	Si	45	H2	34394.879	ppb	1.9	1390477.16	10000	>LDR
39	K	45	He	42331.545	ppb	1.3	2099767.25	200000	
40	Ca	45	H2	59301.373	ppb	2.3	21278325.52	200000	
51	V	89	He	6.784	ppb	2.1	5427.90	1000	
52	Cr	89	He	6.703	ppb	1.5	6461.66	2000	
55	Mn	89	He	313.575	ppb	1.4	142646.29	2000	
56	Fe	89	H2	1995.646	ppb	1.8	2887896.73	100000	
59	Co	89	He	1.928	ppb	5.5	3118.35	1000	
60	Ni	89	He	7.229	ppb	1.7	3465.00	1000	
63	Cu	89	He	50.843	ppb	0.7	62869.86	2000	
66	Zn	89	He	73.316	ppb	1.9	12120.14	2000	
75	As	89	He	15.180	ppb	2.4	2087.72	1000	
78	Se	89	H2	0.885	ppb	9.4	61.67	1000	
88	Sr	89	He	295.391	ppb	0.6	212956.62	2000	
95	Mo	89	He	25.541	ppb	3.2	19712.56	1000	
107	Ag	89	He	0.048	ppb	24.8	142.23	100	
111	Cd	89	He	2.675	ppb	1.0	932.27	1000	
118	Sn	159	He	0.454	ppb	4.2	422.24	1000	
121	Sb	159	No Gas	0.811	ppb	1.8	4866.32	1000	
137	Ba	159	No Gas	72.111	ppb	3.0	169961.90	2000	
182	W	159	No Gas	0.443	ppb	7.8	2032.43	1000	
205	Tl	209	No Gas	0.561	ppb	3.2	5390.50	1000	
208	Pb	209	No Gas	13.008	ppb	4.0	169108.14	2000	
232	Th	209	No Gas	0.557	ppb	6.1	7537.43	1000	
238	U	209	No Gas	3.270	ppb	2.3	40798.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1329569.05	1.1	1483357.64	89.63	29.5	120.4	
Sc	45	No Gas	3107728.90	0.8	3141192.51	98.93	29.5	120.4	
Sc	45	H2	393500.24	1.3	418309.46	94.07	29.5	120.4	
Sc	45	He	81444.21	1.8	85440.95	95.32	29.5	120.4	
Ge	72	No Gas	689177.18	0.9	694668.88	99.21	29.5	120.4	
Ge	72	H2	147691.59	1.4	157206.79	93.95	29.5	120.4	
Ge	72	He	62481.87	1.0	64721.85	96.54	29.5	120.4	
Y	89	H2	2538273.08	0.5	2572670.23	98.66	29.5	120.4	
Y	89	He	557295.55	1.0	574051.42	97.08	29.5	120.4	
Tb	159	No Gas	7299134.96	1.0	6821698.44	107	29.5	120.4	
Tb	159	He	3065481.76	0.9	2982140.2	102.79	29.5	120.4	
Bi	209	No Gas	3689421.61	0.7	3547037.46	104.01	29.5	120.4	

Sample Report

Sample Name PBSNG23IMS1

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:07:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.081	ppb	31.9	53.34	100	
11	B	6	No Gas	10.593	ppb	3.0	2817.04	1000	
23	Na	45	He	464.930	ppb	7.1	16908.66	200000	
24	Mg	45	He	14.005	ppb	33.2	728.96	200000	
27	Al	45	He	8.270	ppb	68.8	54.45	200000	
28	Si	45	H2	35.112	ppb	34.3	747.53	10000	
39	K	45	He	25.226	ppb	165.8	10595.90	200000	
40	Ca	45	H2	97.777	ppb	5.4	8160.40	200000	
51	V	89	He	5.146	ppb	5.5	960.07	1000	
52	Cr	89	He	0.748	ppb	17.0	210.63	2000	
55	Mn	89	He	1.691	ppb	7.9	179.30	2000	
56	Fe	89	H2	8.298	ppb	18.7	8872.68	100000	
59	Co	89	He	0.079	ppb	26.3	46.67	1000	
60	Ni	89	He	-1.112	ppb	N/A	234.45	1000	
63	Cu	89	He	1.702	ppb	12.9	553.37	2000	
66	Zn	89	He	9.617	ppb	13.8	376.69	2000	
75	As	89	He	0.298	ppb	71.8	11.33	1000	
78	Se	89	H2	0.141	ppb	56.3	2.17	1000	
88	Sr	89	He	0.428	ppb	30.2	67.78	2000	
95	Mo	89	He	0.357	ppb	30.7	65.56	1000	
107	Ag	89	He	0.001	ppb	1010.5	16.67	100	
111	Cd	89	He	0.016	ppb	228.3	1.48	1000	
118	Sn	159	He	48.228	ppb	2.5	7793.66	1000	
121	Sb	159	No Gas	0.044	ppb	12.8	83.43	1000	
137	Ba	159	No Gas	0.379	ppb	40.9	200.22	2000	
182	W	159	No Gas	0.051	ppb	55.0	116.80	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	0.365	ppb	3.6	1228.08	2000	
232	Th	209	No Gas	0.075	ppb	9.5	323.70	1000	
238	U	209	No Gas	0.031	ppb	29.2	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1422770.13	2.6	1483357.64	95.92	29.5	120.4	
Sc	45	No Gas	3126827.08	2.4	3141192.51	99.54	29.5	120.4	
Sc	45	H2	398916.13	2.0	418309.46	95.36	29.5	120.4	
Sc	45	He	80792.02	1.1	85440.95	94.56	29.5	120.4	
Ge	72	No Gas	718962.22	3.0	694668.88	103.5	29.5	120.4	
Ge	72	H2	151019.38	1.7	157206.79	96.06	29.5	120.4	
Ge	72	He	62818.35	1.3	64721.85	97.06	29.5	120.4	
Y	89	H2	2576984.65	1.2	2572670.23	100.17	29.5	120.4	
Y	89	He	553924.05	0.7	574051.42	96.49	29.5	120.4	
Tb	159	No Gas	7538245.93	2.6	6821698.44	110.5	29.5	120.4	
Tb	159	He	3065596.66	0.8	2982140.2	102.8	29.5	120.4	
Bi	209	No Gas	3931271.42	2.4	3547037.46	110.83	29.5	120.4	

Sample Report

Sample Name	LCSONG23IMS1
File Name	069SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:09:46 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.876	ppb	6.3	10312.93	100	
11	B	6	No Gas	486.274	ppb	5.1	67981.67	1000	
23	Na	45	He	7859.879	ppb	3.4	155534.55	200000	
24	Mg	45	He	5238.002	ppb	3.8	55227.25	200000	
27	Al	45	He	1895.142	ppb	2.7	8097.03	200000	
28	Si	45	H2	967.077	ppb	7.1	8315.08	10000	
39	K	45	He	10012.385	ppb	3.2	108143.15	200000	
40	Ca	45	H2	2673.618	ppb	1.7	193992.31	200000	
51	V	89	He	503.214	ppb	0.7	77465.26	1000	
52	Cr	89	He	204.427	ppb	1.8	38702.95	2000	
55	Mn	89	He	515.466	ppb	0.8	46487.69	2000	
56	Fe	89	H2	1057.655	ppb	0.6	315646.87	100000	
59	Co	89	He	523.081	ppb	0.8	166474.54	1000	
60	Ni	89	He	521.046	ppb	2.3	45074.48	1000	
63	Cu	89	He	255.525	ppb	1.5	62612.95	2000	
66	Zn	89	He	519.236	ppb	2.1	16983.07	2000	
75	As	89	He	105.584	ppb	2.1	2876.62	1000	
78	Se	89	H2	103.585	ppb	0.4	1457.18	1000	
88	Sr	89	He	506.585	ppb	0.1	72379.74	2000	
95	Mo	89	He	106.080	ppb	0.8	16228.96	1000	
107	Ag	89	He	53.273	ppb	1.8	27932.84	100	
111	Cd	89	He	258.480	ppb	1.0	17844.45	1000	
118	Sn	159	He	535.185	ppb	0.6	85991.63	1000	
121	Sb	159	No Gas	97.627	ppb	6.2	120473.64	1000	
137	Ba	159	No Gas	1924.613	ppb	5.5	938547.69	2000	
182	W	159	No Gas	100.195	ppb	6.4	92045.47	1000	
205	Tl	209	No Gas	102.799	ppb	6.7	205140.25	1000	
208	Pb	209	No Gas	102.442	ppb	6.1	282076.96	2000	
232	Th	209	No Gas	100.175	ppb	7.0	283485.93	1000	
238	U	209	No Gas	100.615	ppb	7.6	265898.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1446496.42	2.6	1483357.64	97.52	29.5	120.4	
Sc	45	No Gas	3147170.99	2.8	3141192.51	100.19	29.5	120.4	
Sc	45	H2	395703.33	1.1	418309.46	94.6	29.5	120.4	
Sc	45	He	80614.39	1.2	85440.95	94.35	29.5	120.4	
Ge	72	No Gas	724176.45	2.7	694668.88	104.25	29.5	120.4	
Ge	72	H2	150618.80	1.3	157206.79	95.81	29.5	120.4	
Ge	72	He	62257.42	0.7	64721.85	96.19	29.5	120.4	
Y	89	H2	2569723.70	0.9	2572670.23	99.89	29.5	120.4	
Y	89	He	552197.90	0.9	574051.42	96.19	29.5	120.4	
Tb	159	No Gas	7559678.64	2.9	6821698.44	110.82	29.5	120.4	
Tb	159	He	3068818.60	0.9	2982140.2	102.91	29.5	120.4	
Bi	209	No Gas	3913099.89	3.0	3547037.46	110.32	29.5	120.4	

Sample Report

Sample Name	LC2ONG23IMS1
File Name	070SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:12:23 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.699	ppb	1.5	10610.88	100	
11	B	6	No Gas	500.320	ppb	2.2	70699.10	1000	
23	Na	45	He	7804.934	ppb	1.1	157362.05	200000	
24	Mg	45	He	5318.042	ppb	0.8	57107.60	200000	
27	Al	45	He	1883.714	ppb	1.9	8195.97	200000	
28	Si	45	H2	973.083	ppb	5.5	8445.25	10000	
39	K	45	He	10045.487	ppb	1.4	110464.41	200000	
40	Ca	45	H2	2703.660	ppb	1.7	198081.33	200000	
51	V	89	He	503.023	ppb	1.2	78681.18	1000	
52	Cr	89	He	205.038	ppb	1.3	39444.84	2000	
55	Mn	89	He	521.761	ppb	0.3	47810.38	2000	
56	Fe	89	H2	1080.142	ppb	0.6	323321.55	100000	
59	Co	89	He	527.616	ppb	0.9	170603.91	1000	
60	Ni	89	He	527.818	ppb	0.5	46391.99	1000	
63	Cu	89	He	256.291	ppb	0.3	63810.72	2000	
66	Zn	89	He	514.232	ppb	0.4	17088.77	2000	
75	As	89	He	102.376	ppb	2.7	2833.94	1000	
78	Se	89	H2	104.069	ppb	1.7	1468.84	1000	
88	Sr	89	He	507.694	ppb	0.4	73699.11	2000	
95	Mo	89	He	106.701	ppb	2.3	16585.02	1000	
107	Ag	89	He	53.531	ppb	0.9	28519.61	100	
111	Cd	89	He	260.796	ppb	1.0	18294.30	1000	
118	Sn	159	He	542.659	ppb	1.5	88176.49	1000	
121	Sb	159	No Gas	99.016	ppb	3.7	123338.99	1000	
137	Ba	159	No Gas	1970.530	ppb	3.0	969951.61	2000	
182	W	159	No Gas	102.570	ppb	3.8	95116.27	1000	
205	Tl	209	No Gas	105.552	ppb	3.0	213055.32	1000	
208	Pb	209	No Gas	103.847	ppb	2.9	289194.33	2000	
232	Th	209	No Gas	102.709	ppb	3.5	293998.23	1000	
238	U	209	No Gas	102.272	ppb	4.1	273388.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1461808.61	0.3	1483357.64	98.55	29.5	120.4	
Sc	45	No Gas	3183834.24	1.1	3141192.51	101.36	29.5	120.4	
Sc	45	H2	399609.09	2.0	418309.46	95.53	29.5	120.4	
Sc	45	He	82088.30	1.1	85440.95	96.08	29.5	120.4	
Ge	72	No Gas	727046.40	0.8	694668.88	104.66	29.5	120.4	
Ge	72	H2	150155.12	2.9	157206.79	95.51	29.5	120.4	
Ge	72	He	63383.40	0.7	64721.85	97.93	29.5	120.4	
Y	89	H2	2578556.10	1.4	2572670.23	100.23	29.5	120.4	
Y	89	He	561043.15	0.7	574051.42	97.73	29.5	120.4	
Tb	159	No Gas	7623852.18	1.1	6821698.44	111.76	29.5	120.4	
Tb	159	He	3103778.15	1.1	2982140.2	104.08	29.5	120.4	
Bi	209	No Gas	3953838.41	1.2	3547037.46	111.47	29.5	120.4	

Sample Report

Sample Name	SN6056-005
File Name	071SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:15:04 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.121	ppb	15.6	267.79	100	
11	B	6	No Gas	42.551	ppb	6.4	6989.68	1000	
23	Na	45	He	312.439	ppb	6.1	13878.76	200000	
24	Mg	45	He	14955.974	ppb	1.0	155150.03	200000	
27	Al	45	He	19368.822	ppb	0.6	81793.91	200000	
28	Si	45	H2	3644.666	ppb	0.5	29767.66	10000	
39	K	45	He	3910.243	ppb	1.7	48068.99	200000	
40	Ca	45	H2	30413.985	ppb	1.5	2172896.62	200000	
51	V	89	He	42.319	ppb	0.5	6721.84	1000	
52	Cr	89	He	50.386	ppb	0.7	9669.56	2000	
55	Mn	89	He	2640.298	ppb	0.5	239942.25	2000	
56	Fe	89	H2	54823.230	ppb	0.3	16101592.28	100000	
59	Co	89	He	15.913	ppb	6.1	5125.75	1000	
60	Ni	89	He	43.675	ppb	3.5	4112.97	1000	
63	Cu	89	He	84.263	ppb	1.6	20908.49	2000	
66	Zn	89	He	320.059	ppb	1.0	10576.62	2000	
75	As	89	He	30.637	ppb	8.8	843.45	1000	
78	Se	89	H2	1.640	ppb	18.0	23.33	1000	
88	Sr	89	He	41.608	ppb	2.9	5998.19	2000	
95	Mo	89	He	13.508	ppb	4.2	2092.45	1000	
107	Ag	89	He	0.186	ppb	24.9	114.45	100	
111	Cd	89	He	1.714	ppb	6.5	119.63	1000	
118	Sn	159	He	44.564	ppb	0.9	7288.88	1000	
121	Sb	159	No Gas	10.452	ppb	9.9	12583.32	1000	
137	Ba	159	No Gas	204.532	ppb	6.1	97255.60	2000	
182	W	159	No Gas	0.387	ppb	10.2	417.14	1000	
205	Tl	209	No Gas	0.820	ppb	7.4	1748.76	1000	
208	Pb	209	No Gas	462.581	ppb	7.9	1261088.18	2000	
232	Th	209	No Gas	8.139	ppb	5.3	22946.98	1000	
238	U	209	No Gas	3.913	ppb	11.9	10238.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397558.55	4.1	1483357.64	94.22	29.5	120.4	
Sc	45	No Gas	3039170.44	6.3	3141192.51	96.75	29.5	120.4	
Sc	45	H2	391523.82	0.7	418309.46	93.6	29.5	120.4	
Sc	45	He	79840.91	0.7	85440.95	93.45	29.5	120.4	
Ge	72	No Gas	707054.09	4.9	694668.88	101.78	29.5	120.4	
Ge	72	H2	147532.47	0.9	157206.79	93.85	29.5	120.4	
Ge	72	He	62202.25	0.6	64721.85	96.11	29.5	120.4	
Y	89	H2	2580335.58	0.4	2572670.23	100.3	29.5	120.4	
Y	89	He	556678.56	0.8	574051.42	96.97	29.5	120.4	
Tb	159	No Gas	7380013.71	5.8	6821698.44	108.18	29.5	120.4	
Tb	159	He	3100839.47	0.9	2982140.2	103.98	29.5	120.4	
Bi	209	No Gas	3883774.91	5.7	3547037.46	109.49	29.5	120.4	

Sample Report

Sample Name SN6056-006

File Name 072SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:17:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.473	ppb	13.3	512.25	100	
11	B	6	No Gas	94.060	ppb	7.7	12897.29	1000	
23	Na	45	He	860.918	ppb	1.5	22983.86	200000	
24	Mg	45	He	187365.462	ppb	0.6	1849745.54	200000	
27	Al	45	He	36013.185	ppb	0.7	145211.23	200000	
28	Si	45	H2	4026.852	ppb	1.2	31800.81	10000	
39	K	45	He	11621.887	ppb	0.5	117173.04	200000	
40	Ca	45	H2	1304199.668	ppb	0.5	90181136.44	200000	>LDR
51	V	89	He	92.019	ppb	0.8	14008.56	1000	
52	Cr	89	He	103.189	ppb	0.7	19171.49	2000	
55	Mn	89	He	3454.894	ppb	0.7	305044.64	2000	
56	Fe	89	H2	229586.911	ppb	0.7	66277888.89	100000	
59	Co	89	He	20.170	ppb	5.0	6306.35	1000	
60	Ni	89	He	88.001	ppb	2.8	7724.61	1000	
63	Cu	89	He	149.334	ppb	1.1	35897.99	2000	
66	Zn	89	He	975.723	ppb	0.5	31204.60	2000	
75	As	89	He	42.024	ppb	5.0	1123.50	1000	
78	Se	89	H2	2.893	ppb	5.5	40.33	1000	
88	Sr	89	He	759.671	ppb	0.8	106308.02	2000	
95	Mo	89	He	6.014	ppb	7.8	911.17	1000	
107	Ag	89	He	2.084	ppb	7.0	1085.64	100	
111	Cd	89	He	2.521	ppb	15.6	170.74	1000	
118	Sn	159	He	55.946	ppb	1.7	8779.83	1000	
121	Sb	159	No Gas	8.205	ppb	2.8	10078.35	1000	
137	Ba	159	No Gas	420.858	ppb	5.5	203664.58	2000	
182	W	159	No Gas	1.307	ppb	1.8	1261.48	1000	
205	Tl	209	No Gas	1.285	ppb	9.6	2616.54	1000	
208	Pb	209	No Gas	977.550	ppb	4.4	2618568.83	2000	
232	Th	209	No Gas	11.187	ppb	4.4	30919.36	1000	
238	U	209	No Gas	5.502	ppb	4.8	14163.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1305853.95	2.0	1483357.64	88.03	29.5	120.4	
Sc	45	No Gas	3031357.60	1.9	3141192.51	96.5	29.5	120.4	
Sc	45	H2	379093.99	0.4	418309.46	90.63	29.5	120.4	
Sc	45	He	76240.00	0.4	85440.95	89.23	29.5	120.4	
Ge	72	No Gas	689056.56	2.2	694668.88	99.19	29.5	120.4	
Ge	72	H2	139958.90	0.6	157206.79	89.03	29.5	120.4	
Ge	72	He	58394.36	0.9	64721.85	90.22	29.5	120.4	
Y	89	H2	2537074.15	0.5	2572670.23	98.62	29.5	120.4	
Y	89	He	540876.89	0.7	574051.42	94.22	29.5	120.4	
Tb	159	No Gas	7498224.54	1.7	6821698.44	109.92	29.5	120.4	
Tb	159	He	2979735.97	1.0	2982140.2	99.92	29.5	120.4	
Bi	209	No Gas	3806879.79	1.7	3547037.46	107.33	29.5	120.4	

Sample Report

Sample Name SN6056-007

File Name 073SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:20:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.489	ppb	6.1	324.46	100	
11	B	6	No Gas	53.669	ppb	0.9	7978.03	1000	
23	Na	45	He	667.995	ppb	2.8	19852.60	200000	
24	Mg	45	He	69470.372	ppb	1.4	696430.79	200000	
27	Al	45	He	14748.527	ppb	0.7	60370.34	200000	
28	Si	45	H2	3396.228	ppb	1.5	26701.19	10000	
39	K	45	He	4183.243	ppb	0.5	49155.30	200000	
40	Ca	45	H2	1946021.070	ppb	1.1	133630668.01	200000	>LDR
51	V	89	He	63.142	ppb	1.2	9843.75	1000	
52	Cr	89	He	144.004	ppb	1.1	27223.81	2000	
55	Mn	89	He	4146.348	ppb	0.8	372905.33	2000	
56	Fe	89	H2	450722.524	ppb	0.2	131064416.47	100000	
59	Co	89	He	41.198	ppb	2.9	13102.60	1000	
60	Ni	89	He	153.479	ppb	1.7	13479.14	1000	
63	Cu	89	He	276.678	ppb	1.0	67632.07	2000	
66	Zn	89	He	933.564	ppb	0.6	30416.24	2000	
75	As	89	He	60.453	ppb	1.1	1644.62	1000	
78	Se	89	H2	1.740	ppb	8.0	24.50	1000	
88	Sr	89	He	1190.226	ppb	0.1	169662.49	2000	
95	Mo	89	He	28.605	ppb	1.3	4374.18	1000	
107	Ag	89	He	1.242	ppb	9.3	665.60	100	
111	Cd	89	He	3.263	ppb	7.2	225.19	1000	
118	Sn	159	He	78.443	ppb	1.6	12399.41	1000	
121	Sb	159	No Gas	18.809	ppb	6.8	23078.86	1000	
137	Ba	159	No Gas	266.027	ppb	5.3	128877.27	2000	
182	W	159	No Gas	2.589	ppb	9.9	2432.98	1000	
205	Tl	209	No Gas	1.112	ppb	1.8	2276.10	1000	
208	Pb	209	No Gas	1913.147	ppb	5.4	5118639.25	2000	
232	Th	209	No Gas	6.011	ppb	6.9	16643.04	1000	
238	U	209	No Gas	8.051	ppb	6.5	20697.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1316507.03	1.3	1483357.64	88.75	29.5	120.4	
Sc	45	No Gas	3008539.66	2.6	3141192.51	95.78	29.5	120.4	
Sc	45	H2	376511.11	1.6	418309.46	90.01	29.5	120.4	
Sc	45	He	77389.59	1.7	85440.95	90.58	29.5	120.4	
Ge	72	No Gas	688575.73	2.4	694668.88	99.12	29.5	120.4	
Ge	72	H2	137623.82	0.7	157206.79	87.54	29.5	120.4	
Ge	72	He	59230.16	1.1	64721.85	91.51	29.5	120.4	
Y	89	H2	2555652.51	0.7	2572670.23	99.34	29.5	120.4	
Y	89	He	550948.10	0.8	574051.42	95.98	29.5	120.4	
Tb	159	No Gas	7508416.42	2.7	6821698.44	110.07	29.5	120.4	
Tb	159	He	3007368.25	0.8	2982140.2	100.85	29.5	120.4	
Bi	209	No Gas	3804040.16	2.6	3547037.46	107.25	29.5	120.4	

Sample Report

Sample Name SN6056-008

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:23:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.425	ppb	8.2	122.23	100	
11	B	6	No Gas	27.240	ppb	10.3	4902.10	1000	
23	Na	45	He	95.436	ppb	16.3	9837.63	200000	
24	Mg	45	He	3057.618	ppb	2.1	32138.19	200000	
27	Al	45	He	4587.069	ppb	0.8	19363.70	200000	
28	Si	45	H2	2305.903	ppb	6.3	19354.53	10000	
39	K	45	He	1072.669	ppb	5.5	20582.28	200000	
40	Ca	45	H2	23610.434	ppb	2.0	1719614.47	200000	
51	V	89	He	14.299	ppb	3.9	2359.17	1000	
52	Cr	89	He	14.426	ppb	4.4	2791.78	2000	
55	Mn	89	He	531.179	ppb	0.7	47832.53	2000	
56	Fe	89	H2	28692.266	ppb	2.2	8539223.40	100000	
59	Co	89	He	5.189	ppb	9.1	1669.11	1000	
60	Ni	89	He	21.240	ppb	7.8	2149.14	1000	
63	Cu	89	He	55.838	ppb	2.4	13766.09	2000	
66	Zn	89	He	616.883	ppb	1.9	20131.81	2000	
75	As	89	He	67.118	ppb	5.7	1827.32	1000	
78	Se	89	H2	1.853	ppb	9.9	26.67	1000	
88	Sr	89	He	35.849	ppb	1.5	5120.04	2000	
95	Mo	89	He	9.624	ppb	3.8	1480.14	1000	
107	Ag	89	He	0.203	ppb	24.4	122.23	100	
111	Cd	89	He	2.358	ppb	5.7	162.97	1000	
118	Sn	159	He	44.653	ppb	2.4	7260.01	1000	
121	Sb	159	No Gas	11.680	ppb	8.1	14747.98	1000	
137	Ba	159	No Gas	74.810	ppb	8.3	37270.41	2000	
182	W	159	No Gas	0.305	ppb	24.2	357.07	1000	
205	Tl	209	No Gas	0.242	ppb	37.1	624.05	1000	
208	Pb	209	No Gas	1720.779	ppb	7.0	4901824.03	2000	
232	Th	209	No Gas	1.492	ppb	2.3	4489.23	1000	
238	U	209	No Gas	3.414	ppb	9.1	9347.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1380121.09	2.6	1483357.64	93.04	29.5	120.4	
Sc	45	No Gas	3158257.83	3.3	3141192.51	100.54	29.5	120.4	
Sc	45	H2	399182.16	2.3	418309.46	95.43	29.5	120.4	
Sc	45	He	79756.37	1.3	85440.95	93.35	29.5	120.4	
Ge	72	No Gas	718864.48	3.3	694668.88	103.48	29.5	120.4	
Ge	72	H2	148271.60	1.1	157206.79	94.32	29.5	120.4	
Ge	72	He	61570.15	0.5	64721.85	95.13	29.5	120.4	
Y	89	H2	2614376.39	1.6	2572670.23	101.62	29.5	120.4	
Y	89	He	551368.27	1.1	574051.42	96.05	29.5	120.4	
Tb	159	No Gas	7726787.32	3.6	6821698.44	113.27	29.5	120.4	
Tb	159	He	3082767.70	1.0	2982140.2	103.37	29.5	120.4	
Bi	209	No Gas	4054154.04	4.1	3547037.46	114.3	29.5	120.4	

Sample Report

Sample Name	SN6056-009
File Name	075SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:25:47 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.595	ppb	10.3	360.01	100	
11	B	6	No Gas	46.698	ppb	6.5	7413.23	1000	
23	Na	45	He	235.682	ppb	16.8	12643.08	200000	
24	Mg	45	He	17583.537	ppb	1.0	185095.70	200000	
27	Al	45	He	26609.935	ppb	0.8	114081.60	200000	
28	Si	45	H2	3356.590	ppb	1.7	28092.59	10000	
39	K	45	He	5625.519	ppb	0.3	65662.08	200000	
40	Ca	45	H2	44009.338	ppb	1.0	3217640.54	200000	
51	V	89	He	57.353	ppb	2.4	9157.72	1000	
52	Cr	89	He	48.626	ppb	2.3	9445.48	2000	
55	Mn	89	He	903.943	ppb	0.3	83147.52	2000	
56	Fe	89	H2	56378.634	ppb	1.1	16877586.57	100000	
59	Co	89	He	24.025	ppb	2.9	7820.51	1000	
60	Ni	89	He	77.597	ppb	3.1	7134.29	1000	
63	Cu	89	He	158.557	ppb	1.0	39690.56	2000	
66	Zn	89	He	1041.543	ppb	1.0	34688.40	2000	
75	As	89	He	49.482	ppb	2.0	1376.89	1000	
78	Se	89	H2	2.268	ppb	14.0	32.83	1000	
88	Sr	89	He	64.262	ppb	0.4	9372.43	2000	
95	Mo	89	He	11.776	ppb	9.1	1847.97	1000	
107	Ag	89	He	0.453	ppb	22.5	258.90	100	
111	Cd	89	He	4.407	ppb	5.1	310.75	1000	
118	Sn	159	He	49.867	ppb	2.9	8171.67	1000	
121	Sb	159	No Gas	8.297	ppb	9.9	10432.37	1000	
137	Ba	159	No Gas	191.929	ppb	6.3	95197.35	2000	
182	W	159	No Gas	0.401	ppb	12.8	447.18	1000	
205	Tl	209	No Gas	1.382	ppb	14.9	2943.65	1000	
208	Pb	209	No Gas	2369.662	ppb	6.8	6678914.82	2000	
232	Th	209	No Gas	9.644	ppb	8.2	28052.72	1000	
238	U	209	No Gas	3.980	ppb	9.7	10776.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1373813.52	2.0	1483357.64	92.62	29.5	120.4	
Sc	45	No Gas	3167757.57	3.8	3141192.51	100.85	29.5	120.4	
Sc	45	H2	400695.54	0.5	418309.46	95.79	29.5	120.4	
Sc	45	He	81062.80	0.8	85440.95	94.88	29.5	120.4	
Ge	72	No Gas	722272.14	3.6	694668.88	103.97	29.5	120.4	
Ge	72	H2	150074.47	0.4	157206.79	95.46	29.5	120.4	
Ge	72	He	63201.48	0.6	64721.85	97.65	29.5	120.4	
Y	89	H2	2630049.75	0.4	2572670.23	102.23	29.5	120.4	
Y	89	He	563329.94	0.4	574051.42	98.13	29.5	120.4	
Tb	159	No Gas	7690674.61	3.4	6821698.44	112.74	29.5	120.4	
Tb	159	He	3109257.63	0.2	2982140.2	104.26	29.5	120.4	
Bi	209	No Gas	4010103.79	3.6	3547037.46	113.06	29.5	120.4	

Sample Report

Sample Name SN6056-009L

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:28:26 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.342	ppb	39.9	92.22	100	
11	B	6	No Gas	55.172	ppb	15.3	2847.04	1000	
23	Na	45	He	-14.396	ppb	N/A	8261.57	200000	
24	Mg	45	He	17427.940	ppb	3.0	37671.71	200000	
27	Al	45	He	26094.229	ppb	2.3	22698.75	200000	
28	Si	45	H2	3438.424	ppb	4.3	6228.30	10000	
39	K	45	He	5050.343	ppb	5.6	20590.55	200000	
40	Ca	45	H2	44154.784	ppb	1.0	657439.41	200000	
51	V	89	He	56.270	ppb	9.2	1936.87	1000	
52	Cr	89	He	46.637	ppb	2.4	1871.13	2000	
55	Mn	89	He	897.471	ppb	1.0	16555.37	2000	
56	Fe	89	H2	56266.419	ppb	1.5	3398811.82	100000	
59	Co	89	He	23.489	ppb	0.4	1549.09	1000	
60	Ni	89	He	69.057	ppb	3.3	1547.92	1000	
63	Cu	89	He	160.691	ppb	2.5	8166.01	2000	
66	Zn	89	He	1126.689	ppb	2.1	7564.56	2000	
75	As	89	He	51.510	ppb	4.2	289.70	1000	
78	Se	89	H2	2.241	ppb	31.5	6.67	1000	
88	Sr	89	He	64.375	ppb	7.1	1885.76	2000	
95	Mo	89	He	10.101	ppb	19.9	326.68	1000	
107	Ag	89	He	0.345	ppb	23.5	53.34	100	
111	Cd	89	He	4.124	ppb	6.5	58.52	1000	
118	Sn	159	He	50.276	ppb	10.3	1690.18	1000	
121	Sb	159	No Gas	8.915	ppb	9.6	2259.36	1000	
137	Ba	159	No Gas	190.450	ppb	9.7	18834.36	2000	
182	W	159	No Gas	0.242	ppb	90.9	116.80	1000	
205	Tl	209	No Gas	1.188	ppb	24.8	610.70	1000	
208	Pb	209	No Gas	2480.060	ppb	6.5	1400128.79	2000	
232	Th	209	No Gas	9.502	ppb	5.9	5630.92	1000	
238	U	209	No Gas	3.782	ppb	6.6	2059.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410432.18	2.8	1483357.64	95.08	29.5	120.4	
Sc	45	No Gas	3225097.33	3.9	3141192.51	102.67	29.5	120.4	
Sc	45	H2	407481.41	0.4	418309.46	97.41	29.5	120.4	
Sc	45	He	82204.79	2.1	85440.95	96.21	29.5	120.4	
Ge	72	No Gas	733757.78	3.1	694668.88	105.63	29.5	120.4	
Ge	72	H2	153599.95	1.0	157206.79	97.71	29.5	120.4	
Ge	72	He	63796.83	0.8	64721.85	98.57	29.5	120.4	
Y	89	H2	2649460.36	0.6	2572670.23	102.98	29.5	120.4	
Y	89	He	564122.30	0.6	574051.42	98.27	29.5	120.4	
Tb	159	No Gas	7671432.87	4.1	6821698.44	112.46	29.5	120.4	
Tb	159	He	3099163.67	0.9	2982140.2	103.92	29.5	120.4	
Bi	209	No Gas	4015526.45	3.6	3547037.46	113.21	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	077_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:31:08 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.953	ppb	1.9	25485.32	25	99.81	89.8	110.2	
11	B	6	No Gas	24.515	ppb	7.3	17276.44	25	98.06	89.8	110.2	
23	Na	45	He	4992.109	ppb	1.1	484196.25	5000	99.84	89.8	110.2	
24	Mg	45	He	4881.663	ppb	0.3	259539.49	5000	97.63	89.8	110.2	
27	Al	45	He	466.326	ppb	1.8	10122.80	500	93.27	89.8	110.2	
28	Si	45	H2	463.285	ppb	4.1	19257.69	500	92.66	89.8	110.2	
39	K	45	He	4822.525	ppb	1.3	250017.78	5000	96.45	89.8	110.2	
40	Ca	45	H2	4964.324	ppb	1.4	1790005.03	5000	99.29	89.8	110.2	
51	V	89	He	24.758	ppb	1.8	19456.28	25	99.03	89.8	110.2	
52	Cr	89	He	24.414	ppb	1.1	23470.49	25	97.66	89.8	110.2	
55	Mn	89	He	24.728	ppb	0.9	11330.51	25	98.91	89.8	110.2	
56	Fe	89	H2	4901.985	ppb	1.6	7192386.40	5000	98.04	89.8	110.2	
59	Co	89	He	24.948	ppb	1.8	40282.55	25	99.79	89.8	110.2	
60	Ni	89	He	25.261	ppb	0.9	11336.10	25	101.04	89.8	110.2	
63	Cu	89	He	24.785	ppb	0.7	30871.58	25	99.14	89.8	110.2	
66	Zn	89	He	25.316	ppb	3.7	4246.36	25	101.26	89.8	110.2	
75	As	89	He	24.679	ppb	1.4	3409.13	25	98.72	89.8	110.2	
78	Se	89	H2	24.627	ppb	2.3	1737.20	25	98.51	89.8	110.2	
88	Sr	89	He	24.063	ppb	1.3	17441.55	25	96.25	89.8	110.2	
95	Mo	89	He	25.151	ppb	2.1	19512.22	25	100.6	89.8	110.2	
107	Ag	89	He	25.425	ppb	1.2	67588.76	25	101.7	89.8	110.2	
111	Cd	89	He	24.690	ppb	0.2	8644.69	25	98.76	89.8	110.2	
118	Sn	159	He	23.255	ppb	1.3	18931.64	25	93.02	89.8	110.2	
121	Sb	159	No Gas	23.836	ppb	3.4	147435.83	25	95.34	89.8	110.2	
137	Ba	159	No Gas	24.086	ppb	5.5	58858.88	25	96.34	89.8	110.2	
182	W	159	No Gas	24.106	ppb	4.0	110986.82	25	96.42	89.8	110.2	
205	Tl	209	No Gas	24.269	ppb	4.9	242458.72	25	97.08	89.8	110.2	
208	Pb	209	No Gas	24.726	ppb	5.0	340785.96	25	98.9	89.8	110.2	
232	Th	209	No Gas	24.427	ppb	4.9	346092.02	25	97.71	89.8	110.2	
238	U	209	No Gas	24.565	ppb	4.1	325112.38	25	98.26	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1373589.71	1.6	1483357.64	92.6	29.5	120.4	
Sc	45	No Gas	3168396.91	3.2	3141192.51	100.87	29.5	120.4	
Sc	45	H2	395167.85	1.0	418309.46	94.47	29.5	120.4	
Sc	45	He	81950.95	0.7	85440.95	95.92	29.5	120.4	
Ge	72	No Gas	721857.71	2.8	694668.88	103.91	29.5	120.4	
Ge	72	H2	152073.82	1.2	157206.79	96.73	29.5	120.4	
Ge	72	He	63761.40	0.2	64721.85	98.52	29.5	120.4	
Y	89	H2	2577139.81	1.2	2572670.23	100.17	29.5	120.4	
Y	89	He	560082.08	0.4	574051.42	97.57	29.5	120.4	
Tb	159	No Gas	7574865.93	3.0	6821698.44	111.04	29.5	120.4	
Tb	159	He	3102183.88	0.1	2982140.2	104.03	29.5	120.4	
Bi	209	No Gas	3917228.63	3.1	3547037.46	110.44	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	078_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:33:45 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.056	ppb	5.2	96.67	0.2	
11	B	6	No Gas	0.966	ppb	14.5	2066.89	4	
23	Na	45	He	-9.468	ppb	N/A	7486.97	200	
24	Mg	45	He	-3.531	ppb	N/A	408.92	20	
27	Al	45	He	-0.179	ppb	N/A	15.55	20	
28	Si	45	H2	1.390	ppb	155.1	537.27	100	
39	K	45	He	-14.398	ppb	N/A	9914.03	200	
40	Ca	45	H2	4.596	ppb	10.2	2823.72	20	
51	V	89	He	-0.083	ppb	N/A	106.67	1	
52	Cr	89	He	-0.023	ppb	N/A	48.66	1	
55	Mn	89	He	0.013	ppb	116.8	33.33	0.4	
56	Fe	89	H2	2.485	ppb	24.6	10365.33	20	
59	Co	89	He	0.007	ppb	60.6	33.34	0.2	
60	Ni	89	He	-0.399	ppb	N/A	163.34	0.4	Failed DoD
63	Cu	89	He	0.006	ppb	449.8	147.79	0.6	
66	Zn	89	He	-0.052	ppb	N/A	55.56	2	
75	As	89	He	-0.002	ppb	N/A	3.00	1	
78	Se	89	H2	0.028	ppb	29.7	2.17	1	
88	Sr	89	He	-0.001	ppb	N/A	5.56	1	
95	Mo	89	He	0.060	ppb	56.3	58.89	1	
107	Ag	89	He	0.002	ppb	182.3	22.22	0.2	
111	Cd	89	He	0.007	ppb	25.2	2.96	0.2	
118	Sn	159	He	0.009	ppb	261.3	66.67	1	
121	Sb	159	No Gas	0.030	ppb	29.2	213.57	0.2	
137	Ba	159	No Gas	0.028	ppb	56.0	83.42	0.4	
182	W	159	No Gas	0.035	ppb	53.1	230.26	1	
205	Tl	209	No Gas	0.003	ppb	135.2	150.17	0.2	
208	Pb	209	No Gas	0.068	ppb	13.6	1168.00	0.2	
232	Th	209	No Gas	0.059	ppb	8.7	957.78	1	
238	U	209	No Gas	0.014	ppb	30.2	190.22	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1442509.01	2.7	1483357.64	97.25	29.5	120.4	
Sc	45	No Gas	3257535.49	3.5	3141192.51	103.7	29.5	120.4	
Sc	45	H2	413599.79	0.7	418309.46	98.87	29.5	120.4	
Sc	45	He	83047.12	0.5	85440.95	97.2	29.5	120.4	
Ge	72	No Gas	733492.05	3.3	694668.88	105.59	29.5	120.4	
Ge	72	H2	157549.92	0.9	157206.79	100.22	29.5	120.4	
Ge	72	He	65116.47	0.4	64721.85	100.61	29.5	120.4	
Y	89	H2	2647330.83	0.9	2572670.23	102.9	29.5	120.4	
Y	89	He	572156.33	0.5	574051.42	99.67	29.5	120.4	
Tb	159	No Gas	7543414.82	3.5	6821698.44	110.58	29.5	120.4	
Tb	159	He	3108684.19	0.5	2982140.2	104.24	29.5	120.4	
Bi	209	No Gas	3937999.97	3.7	3547037.46	111.02	29.5	120.4	

Sample Report

Sample Name SN6056-009A

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:36:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.577	ppb	3.7	2423.62	100	
11	B	6	No Gas	244.035	ppb	4.7	33457.27	1000	
23	Na	45	He	10867.968	ppb	0.2	213439.68	200000	
24	Mg	45	He	17611.219	ppb	0.4	185626.16	200000	
27	Al	45	He	26199.019	ppb	0.5	112463.25	200000	
28	Si	45	H2	7998.447	ppb	0.4	65670.27	10000	
39	K	45	He	15424.957	ppb	0.1	162156.13	200000	
40	Ca	45	H2	43334.945	ppb	1.7	3137510.20	200000	
51	V	89	He	106.073	ppb	1.3	16831.72	1000	
52	Cr	89	He	95.116	ppb	0.9	18452.66	2000	
55	Mn	89	He	872.377	ppb	0.6	80431.19	2000	
56	Fe	89	H2	55331.630	ppb	1.0	16393244.75	100000	
59	Co	89	He	33.767	ppb	3.5	11009.58	1000	
60	Ni	89	He	97.527	ppb	2.3	8900.91	1000	
63	Cu	89	He	178.300	ppb	0.5	44718.00	2000	
66	Zn	89	He	1094.762	ppb	0.8	36541.97	2000	
75	As	89	He	96.711	ppb	1.9	2694.23	1000	
78	Se	89	H2	52.824	ppb	2.9	752.82	1000	
88	Sr	89	He	111.684	ppb	1.3	16321.30	2000	
95	Mo	89	He	61.930	ppb	2.2	9692.68	1000	
107	Ag	89	He	10.903	ppb	3.2	5859.26	100	
111	Cd	89	He	14.734	ppb	1.7	1040.42	1000	
118	Sn	159	He	96.579	ppb	2.7	15652.96	1000	
121	Sb	159	No Gas	18.497	ppb	3.9	22714.37	1000	
137	Ba	159	No Gas	208.005	ppb	5.2	100832.13	2000	
182	W	159	No Gas	51.473	ppb	4.2	47044.66	1000	
205	Tl	209	No Gas	12.022	ppb	3.7	24059.26	1000	
208	Pb	209	No Gas	2270.635	ppb	4.7	6236418.46	2000	
232	Th	209	No Gas	20.088	ppb	6.8	56829.14	1000	
238	U	209	No Gas	14.592	ppb	4.7	38505.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1389255.61	1.2	1483357.64	93.66	29.5	120.4	
Sc	45	No Gas	3157979.35	1.5	3141192.51	100.53	29.5	120.4	
Sc	45	H2	396865.22	1.5	418309.46	94.87	29.5	120.4	
Sc	45	He	81163.41	0.2	85440.95	94.99	29.5	120.4	
Ge	72	No Gas	722197.15	1.9	694668.88	103.96	29.5	120.4	
Ge	72	H2	150756.10	1.5	157206.79	95.9	29.5	120.4	
Ge	72	He	62415.12	0.5	64721.85	96.44	29.5	120.4	
Y	89	H2	2603143.18	1.2	2572670.23	101.18	29.5	120.4	
Y	89	He	564629.86	0.2	574051.42	98.36	29.5	120.4	
Tb	159	No Gas	7509155.37	1.6	6821698.44	110.08	29.5	120.4	
Tb	159	He	3086415.86	0.8	2982140.2	103.5	29.5	120.4	
Bi	209	No Gas	3903482.96	1.8	3547037.46	110.05	29.5	120.4	

Sample Report

Sample Name SN6056-009S

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:39:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.506	ppb	7.0	10079.41	100	
11	B	6	No Gas	500.943	ppb	3.8	66176.49	1000	
23	Na	45	He	7456.528	ppb	0.6	146193.50	200000	
24	Mg	45	He	33411.197	ppb	0.3	344973.06	200000	
27	Al	45	He	39364.311	ppb	0.4	165768.43	200000	
28	Si	45	H2	3409.468	ppb	2.8	27527.19	10000	
39	K	45	He	16729.735	ppb	0.6	171678.69	200000	
40	Ca	45	H2	181811.998	ppb	1.0	12823472.86	200000	
51	V	89	He	520.701	ppb	0.7	81033.20	1000	
52	Cr	89	He	242.049	ppb	0.6	46320.32	2000	
55	Mn	89	He	1588.906	ppb	1.4	144813.07	2000	
56	Fe	89	H2	68221.705	ppb	1.0	20090718.55	100000	
59	Co	89	He	497.724	ppb	1.0	160143.73	1000	
60	Ni	89	He	559.486	ppb	1.3	48909.52	1000	
63	Cu	89	He	379.840	ppb	0.9	94036.50	2000	
66	Zn	89	He	1472.010	ppb	1.6	48556.41	2000	
75	As	89	He	139.330	ppb	0.7	3836.29	1000	
78	Se	89	H2	91.333	ppb	2.7	1293.67	1000	
88	Sr	89	He	745.571	ppb	1.0	107690.04	2000	
95	Mo	89	He	105.239	ppb	2.0	16276.88	1000	
107	Ag	89	He	48.066	ppb	0.9	25483.59	100	
111	Cd	89	He	239.317	ppb	1.7	16702.99	1000	
118	Sn	159	He	485.134	ppb	0.8	78336.37	1000	
121	Sb	159	No Gas	58.408	ppb	6.4	72196.98	1000	
137	Ba	159	No Gas	1978.806	ppb	5.6	966470.29	2000	
182	W	159	No Gas	78.263	ppb	5.2	72043.25	1000	
205	Tl	209	No Gas	97.094	ppb	6.6	192996.77	1000	
208	Pb	209	No Gas	2541.306	ppb	6.5	6963916.58	2000	
232	Th	209	No Gas	103.605	ppb	7.4	291999.69	1000	
238	U	209	No Gas	98.857	ppb	7.6	260191.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1367225.81	1.9	1483357.64	92.17	29.5	120.4	
Sc	45	No Gas	3120903.19	3.1	3141192.51	99.35	29.5	120.4	
Sc	45	H2	386678.53	1.0	418309.46	92.44	29.5	120.4	
Sc	45	He	79625.54	0.3	85440.95	93.19	29.5	120.4	
Ge	72	No Gas	714949.73	3.5	694668.88	102.92	29.5	120.4	
Ge	72	H2	146944.32	1.2	157206.79	93.47	29.5	120.4	
Ge	72	He	61551.24	0.1	64721.85	95.1	29.5	120.4	
Y	89	H2	2587648.00	1.1	2572670.23	100.58	29.5	120.4	
Y	89	He	558266.27	0.5	574051.42	97.25	29.5	120.4	
Tb	159	No Gas	7572508.01	3.3	6821698.44	111.01	29.5	120.4	
Tb	159	He	3083865.13	0.3	2982140.2	103.41	29.5	120.4	
Bi	209	No Gas	3897920.75	3.2	3547037.46	109.89	29.5	120.4	

Sample Report

Sample Name SN6056-009P

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:41:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.808	ppb	7.8	9958.23	100	
11	B	6	No Gas	528.193	ppb	5.6	69847.22	1000	
23	Na	45	He	7582.296	ppb	0.8	148797.56	200000	
24	Mg	45	He	41766.011	ppb	0.8	431883.90	200000	
27	Al	45	He	43599.629	ppb	0.5	183941.59	200000	
28	Si	45	H2	5046.427	ppb	0.7	40422.18	10000	
39	K	45	He	18402.515	ppb	1.1	188164.80	200000	
40	Ca	45	H2	132776.275	ppb	0.8	9338809.79	200000	
51	V	89	He	551.015	ppb	0.5	85611.40	1000	
52	Cr	89	He	256.814	ppb	0.6	49067.68	2000	
55	Mn	89	He	1789.931	ppb	0.3	162888.99	2000	
56	Fe	89	H2	74613.247	ppb	0.8	21976157.67	100000	
59	Co	89	He	511.580	ppb	0.8	164358.12	1000	
60	Ni	89	He	579.227	ppb	1.9	50546.43	1000	
63	Cu	89	He	409.145	ppb	0.8	101125.49	2000	
66	Zn	89	He	1416.367	ppb	0.2	46654.44	2000	
75	As	89	He	145.246	ppb	1.5	3993.02	1000	
78	Se	89	H2	93.313	ppb	3.8	1321.84	1000	
88	Sr	89	He	625.299	ppb	1.5	90180.76	2000	
95	Mo	89	He	111.149	ppb	2.1	17164.72	1000	
107	Ag	89	He	49.445	ppb	2.8	26172.67	100	
111	Cd	89	He	242.134	ppb	0.8	16874.31	1000	
118	Sn	159	He	518.616	ppb	0.6	83534.81	1000	
121	Sb	159	No Gas	57.302	ppb	6.4	72063.35	1000	
137	Ba	159	No Gas	2008.127	ppb	5.5	997873.48	2000	
182	W	159	No Gas	80.357	ppb	6.8	75231.83	1000	
205	Tl	209	No Gas	99.331	ppb	5.3	201098.22	1000	
208	Pb	209	No Gas	1934.683	ppb	6.6	5398250.25	2000	
232	Th	209	No Gas	110.037	ppb	7.5	315757.70	1000	
238	U	209	No Gas	99.998	ppb	7.2	268006.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1370607.19	2.5	1483357.64	92.4	29.5	120.4	
Sc	45	No Gas	3128109.17	2.6	3141192.51	99.58	29.5	120.4	
Sc	45	H2	385592.70	1.3	418309.46	92.18	29.5	120.4	
Sc	45	He	79774.07	0.6	85440.95	93.37	29.5	120.4	
Ge	72	No Gas	717706.94	2.8	694668.88	103.32	29.5	120.4	
Ge	72	H2	145897.11	0.5	157206.79	92.81	29.5	120.4	
Ge	72	He	61313.56	0.6	64721.85	94.73	29.5	120.4	
Y	89	H2	2588023.01	0.7	2572670.23	100.6	29.5	120.4	
Y	89	He	557413.45	0.3	574051.42	97.1	29.5	120.4	
Tb	159	No Gas	7702798.08	2.8	6821698.44	112.92	29.5	120.4	
Tb	159	He	3076368.53	0.6	2982140.2	103.16	29.5	120.4	
Bi	209	No Gas	3969169.86	3.3	3547037.46	111.9	29.5	120.4	

Sample Report

Sample Name SN6056-010

File Name 082SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:44:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.668	ppb	31.2	168.90	100	
11	B	6	No Gas	40.092	ppb	3.5	6482.79	1000	
23	Na	45	He	143.601	ppb	6.3	10665.82	200000	
24	Mg	45	He	6410.953	ppb	1.1	66345.79	200000	
27	Al	45	He	11466.022	ppb	0.8	48072.83	200000	
28	Si	45	H2	2969.688	ppb	1.4	24247.59	10000	
39	K	45	He	2540.413	ppb	2.8	34557.74	200000	
40	Ca	45	H2	27719.370	ppb	0.9	1972918.60	200000	
51	V	89	He	25.928	ppb	6.0	4152.99	1000	
52	Cr	89	He	21.564	ppb	1.6	4149.21	2000	
55	Mn	89	He	1058.207	ppb	1.9	95515.31	2000	
56	Fe	89	H2	33167.931	ppb	1.0	9689953.15	100000	
59	Co	89	He	9.789	ppb	1.9	3140.58	1000	
60	Ni	89	He	29.709	ppb	2.6	2884.85	1000	
63	Cu	89	He	104.136	ppb	1.5	25628.66	2000	
66	Zn	89	He	466.702	ppb	4.7	15284.42	2000	
75	As	89	He	32.820	ppb	0.9	897.46	1000	
78	Se	89	H2	2.452	ppb	25.0	34.67	1000	
88	Sr	89	He	43.504	ppb	2.4	6228.28	2000	
95	Mo	89	He	7.062	ppb	6.7	1091.20	1000	
107	Ag	89	He	0.243	ppb	20.9	143.34	100	
111	Cd	89	He	2.368	ppb	5.0	164.08	1000	
118	Sn	159	He	42.936	ppb	2.7	7045.43	1000	
121	Sb	159	No Gas	7.457	ppb	6.3	9397.07	1000	
137	Ba	159	No Gas	129.116	ppb	6.7	64088.94	2000	
182	W	159	No Gas	0.342	ppb	13.8	390.44	1000	
205	Tl	209	No Gas	0.521	ppb	6.6	1208.08	1000	
208	Pb	209	No Gas	1044.566	ppb	5.6	2990008.94	2000	
232	Th	209	No Gas	4.243	ppb	6.8	12600.39	1000	
238	U	209	No Gas	3.581	ppb	11.0	9844.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1358088.76	2.0	1483357.64	91.56	29.5	120.4	
Sc	45	No Gas	3130470.05	2.4	3141192.51	99.66	29.5	120.4	
Sc	45	H2	390020.00	0.9	418309.46	93.24	29.5	120.4	
Sc	45	He	79258.70	1.0	85440.95	92.76	29.5	120.4	
Ge	72	No Gas	716659.06	2.2	694668.88	103.17	29.5	120.4	
Ge	72	H2	147939.66	1.8	157206.79	94.11	29.5	120.4	
Ge	72	He	62009.88	0.7	64721.85	95.81	29.5	120.4	
Y	89	H2	2566210.65	1.2	2572670.23	99.75	29.5	120.4	
Y	89	He	552892.03	1.2	574051.42	96.31	29.5	120.4	
Tb	159	No Gas	7693969.68	2.7	6821698.44	112.79	29.5	120.4	
Tb	159	He	3110156.03	0.9	2982140.2	104.29	29.5	120.4	
Bi	209	No Gas	4069556.29	2.4	3547037.46	114.73	29.5	120.4	

Sample Report

Sample Name SN6056-011

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:47:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.907	ppb	9.5	418.91	100	
11	B	6	No Gas	45.592	ppb	9.0	7179.82	1000	
23	Na	45	He	232.138	ppb	6.2	12739.85	200000	
24	Mg	45	He	16142.324	ppb	0.6	172160.43	200000	
27	Al	45	He	34074.366	ppb	0.9	147952.19	200000	
28	Si	45	H2	2577.780	ppb	6.7	21261.89	10000	
39	K	45	He	4963.308	ppb	0.6	59916.01	200000	
40	Ca	45	H2	38931.635	ppb	2.3	2791628.57	200000	
51	V	89	He	70.610	ppb	3.9	11510.65	1000	
52	Cr	89	He	52.060	ppb	1.0	10357.94	2000	
55	Mn	89	He	830.742	ppb	1.7	78301.84	2000	
56	Fe	89	H2	68963.953	ppb	2.3	20701128.31	100000	
59	Co	89	He	29.494	ppb	5.0	9830.86	1000	
60	Ni	89	He	78.562	ppb	2.3	7396.68	1000	
63	Cu	89	He	210.923	ppb	0.5	54058.78	2000	
66	Zn	89	He	385.911	ppb	1.0	13211.17	2000	
75	As	89	He	32.697	ppb	4.7	933.47	1000	
78	Se	89	H2	2.098	ppb	12.2	30.50	1000	
88	Sr	89	He	61.450	ppb	1.6	9183.60	2000	
95	Mo	89	He	10.279	ppb	6.1	1654.61	1000	
107	Ag	89	He	0.318	ppb	9.1	191.12	100	
111	Cd	89	He	1.901	ppb	19.3	137.41	1000	
118	Sn	159	He	43.387	ppb	4.3	7205.52	1000	
121	Sb	159	No Gas	14.267	ppb	9.8	17577.67	1000	
137	Ba	159	No Gas	233.266	ppb	11.1	113327.39	2000	
182	W	159	No Gas	0.292	ppb	13.9	337.05	1000	
205	Tl	209	No Gas	0.963	ppb	8.1	2062.47	1000	
208	Pb	209	No Gas	2780.778	ppb	10.1	7715863.44	2000	
232	Th	209	No Gas	13.199	ppb	9.1	37789.33	1000	
238	U	209	No Gas	5.227	ppb	12.9	13923.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1358674.19	4.6	1483357.64	91.59	29.5	120.4	
Sc	45	No Gas	3106059.10	6.7	3141192.51	98.88	29.5	120.4	
Sc	45	H2	393037.47	1.1	418309.46	93.96	29.5	120.4	
Sc	45	He	82105.94	1.2	85440.95	96.1	29.5	120.4	
Ge	72	No Gas	710847.70	5.5	694668.88	102.33	29.5	120.4	
Ge	72	H2	147328.68	1.7	157206.79	93.72	29.5	120.4	
Ge	72	He	63413.65	1.3	64721.85	97.98	29.5	120.4	
Y	89	H2	2637925.15	1.3	2572670.23	102.54	29.5	120.4	
Y	89	He	577289.42	1.2	574051.42	100.56	29.5	120.4	
Tb	159	No Gas	7561873.85	7.0	6821698.44	110.85	29.5	120.4	
Tb	159	He	3148244.53	1.4	2982140.2	105.57	29.5	120.4	
Bi	209	No Gas	3959827.06	6.9	3547037.46	111.64	29.5	120.4	

Sample Report

Sample Name SN6056-012

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:49:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.357	ppb	20.3	665.59	100	
11	B	6	No Gas	64.989	ppb	26.3	9024.25	1000	
23	Na	45	He	335.731	ppb	0.8	15168.27	200000	
24	Mg	45	He	30346.587	ppb	0.6	333000.78	200000	
27	Al	45	He	56929.302	ppb	0.8	254730.16	200000	
28	Si	45	H2	4026.085	ppb	5.0	35081.14	10000	
39	K	45	He	10046.599	ppb	0.9	113878.41	200000	
40	Ca	45	H2	44109.771	ppb	2.1	3367002.07	200000	
51	V	89	He	113.988	ppb	1.3	19100.22	1000	
52	Cr	89	He	83.221	ppb	3.3	17068.53	2000	
55	Mn	89	He	968.518	ppb	1.2	94349.90	2000	
56	Fe	89	H2	102856.881	ppb	2.3	32669526.29	100000	
59	Co	89	He	52.192	ppb	3.2	17972.77	1000	
60	Ni	89	He	128.837	ppb	1.6	12310.29	1000	
63	Cu	89	He	507.875	ppb	0.9	134321.47	2000	
66	Zn	89	He	904.829	ppb	1.3	31925.08	2000	
75	As	89	He	57.549	ppb	6.4	1694.96	1000	
78	Se	89	H2	1.734	ppb	14.5	26.67	1000	
88	Sr	89	He	81.713	ppb	0.3	12620.70	2000	
95	Mo	89	He	12.152	ppb	2.9	2019.11	1000	
107	Ag	89	He	0.836	ppb	7.7	491.14	100	
111	Cd	89	He	1.980	ppb	3.1	148.15	1000	
118	Sn	159	He	62.895	ppb	1.4	10497.81	1000	
121	Sb	159	No Gas	89.268	ppb	24.8	102519.24	1000	
137	Ba	159	No Gas	323.015	ppb	24.8	146590.26	2000	
182	W	159	No Gas	0.214	ppb	22.2	250.28	1000	
205	Tl	209	No Gas	1.770	ppb	26.2	3384.21	1000	
208	Pb	209	No Gas	11080.802	ppb	24.9	28238222.33	2000	>LDR
232	Th	209	No Gas	22.253	ppb	25.3	58395.29	1000	
238	U	209	No Gas	6.326	ppb	26.8	15464.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1294868.47	15.1	1483357.64	87.29	29.5	120.4	
Sc	45	No Gas	3038881.69	15.2	3141192.51	96.74	29.5	120.4	
Sc	45	H2	418411.04	1.0	418309.46	100.02	29.5	120.4	
Sc	45	He	84613.11	0.9	85440.95	99.03	29.5	120.4	
Ge	72	No Gas	685190.07	16.4	694668.88	98.64	29.5	120.4	
Ge	72	H2	156400.69	1.0	157206.79	99.49	29.5	120.4	
Ge	72	He	65787.81	1.0	64721.85	101.65	29.5	120.4	
Y	89	H2	2791371.17	0.9	2572670.23	108.5	29.5	120.4	
Y	89	He	596649.64	1.1	574051.42	103.94	29.5	120.4	
Tb	159	No Gas	7214064.82	15.7	6821698.44	105.75	29.5	120.4	
Tb	159	He	3171609.95	0.4	2982140.2	106.35	29.5	120.4	
Bi	209	No Gas	3720263.75	16.2	3547037.46	104.88	29.5	120.4	

Sample Report

Sample Name	SN6056-013
File Name	085SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 7:52:20 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.294	ppb	50.2	98.89	100	
11	B	6	No Gas	34.244	ppb	6.9	5990.34	1000	
23	Na	45	He	38.373	ppb	33.0	8889.30	200000	
24	Mg	45	He	3142.722	ppb	2.7	33427.57	200000	
27	Al	45	He	5062.686	ppb	2.2	21633.65	200000	
28	Si	45	H2	2447.549	ppb	1.0	20614.70	10000	
39	K	45	He	930.918	ppb	7.0	19452.82	200000	
40	Ca	45	H2	34620.114	ppb	0.6	2531863.82	200000	
51	V	89	He	14.058	ppb	4.0	2355.84	1000	
52	Cr	89	He	56.701	ppb	3.6	10920.91	2000	
55	Mn	89	He	270.633	ppb	0.3	24730.46	2000	
56	Fe	89	H2	26134.444	ppb	1.1	7811392.11	100000	
59	Co	89	He	5.848	ppb	9.6	1906.94	1000	
60	Ni	89	He	31.034	ppb	2.4	3032.66	1000	
63	Cu	89	He	164.387	ppb	2.0	40841.66	2000	
66	Zn	89	He	710.245	ppb	1.0	23501.58	2000	
75	As	89	He	47.427	ppb	2.6	1310.21	1000	
78	Se	89	H2	1.867	ppb	17.1	27.00	1000	
88	Sr	89	He	53.952	ppb	1.7	7812.50	2000	
95	Mo	89	He	8.600	ppb	6.1	1342.34	1000	
107	Ag	89	He	0.181	ppb	13.4	112.22	100	
111	Cd	89	He	6.919	ppb	3.2	484.09	1000	
118	Sn	159	He	44.384	ppb	1.2	7300.00	1000	
121	Sb	159	No Gas	24.435	ppb	5.8	30481.69	1000	
137	Ba	159	No Gas	117.720	ppb	6.9	57977.87	2000	
182	W	159	No Gas	0.209	ppb	52.6	263.63	1000	
205	Tl	209	No Gas	0.178	ppb	40.0	487.23	1000	
208	Pb	209	No Gas	884.597	ppb	5.4	2498651.68	2000	
232	Th	209	No Gas	1.722	ppb	6.0	5116.78	1000	
238	U	209	No Gas	9.719	ppb	7.1	26367.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1420860.01	3.1	1483357.64	95.79	29.5	120.4	
Sc	45	No Gas	3222766.01	3.8	3141192.51	102.6	29.5	120.4	
Sc	45	H2	400779.37	0.8	418309.46	95.81	29.5	120.4	
Sc	45	He	80751.91	1.3	85440.95	94.51	29.5	120.4	
Ge	72	No Gas	730992.70	3.0	694668.88	105.23	29.5	120.4	
Ge	72	H2	151263.54	1.4	157206.79	96.22	29.5	120.4	
Ge	72	He	62729.65	1.0	64721.85	96.92	29.5	120.4	
Y	89	H2	2624914.87	1.0	2572670.23	102.03	29.5	120.4	
Y	89	He	559204.82	0.6	574051.42	97.41	29.5	120.4	
Tb	159	No Gas	7637798.01	3.9	6821698.44	111.96	29.5	120.4	
Tb	159	He	3117698.63	1.0	2982140.2	104.55	29.5	120.4	
Bi	209	No Gas	4017342.49	3.8	3547037.46	113.26	29.5	120.4	

Sample Report

Sample Name SN6056-014

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:54:53 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.707	ppb	8.3	394.46	100	
11	B	6	No Gas	28.248	ppb	8.1	5163.33	1000	
23	Na	45	He	150.176	ppb	1.8	11383.80	200000	
24	Mg	45	He	6701.112	ppb	2.0	73150.01	200000	
27	Al	45	He	56753.352	ppb	1.1	251028.81	200000	
28	Si	45	H2	4187.031	ppb	3.5	37103.28	10000	
39	K	45	He	4793.464	ppb	2.6	59317.34	200000	
40	Ca	45	H2	6017.456	ppb	3.6	468270.55	200000	
51	V	89	He	86.890	ppb	3.0	14186.50	1000	
52	Cr	89	He	55.448	ppb	3.1	11071.68	2000	
55	Mn	89	He	216.518	ppb	2.0	20513.84	2000	
56	Fe	89	H2	25863.596	ppb	4.5	8196654.59	100000	
59	Co	89	He	11.326	ppb	1.2	3807.45	1000	
60	Ni	89	He	41.681	ppb	0.9	4104.08	1000	
63	Cu	89	He	43.130	ppb	2.3	11212.62	2000	
66	Zn	89	He	210.069	ppb	0.2	7253.26	2000	
75	As	89	He	8.922	ppb	7.0	258.03	1000	
78	Se	89	H2	2.562	ppb	13.5	39.17	1000	
88	Sr	89	He	33.342	ppb	5.4	5004.44	2000	
95	Mo	89	He	3.423	ppb	8.5	561.15	1000	
107	Ag	89	He	0.431	ppb	9.1	254.46	100	
111	Cd	89	He	2.043	ppb	14.2	148.15	1000	
118	Sn	159	He	48.516	ppb	1.1	8024.88	1000	
121	Sb	159	No Gas	0.786	ppb	11.6	1041.20	1000	
137	Ba	159	No Gas	254.870	ppb	5.9	129610.53	2000	
182	W	159	No Gas	0.326	ppb	29.6	383.77	1000	
205	Tl	209	No Gas	1.874	ppb	2.3	4048.55	1000	
208	Pb	209	No Gas	141.792	ppb	6.3	408968.13	2000	
232	Th	209	No Gas	10.847	ppb	6.9	32264.50	1000	
238	U	209	No Gas	3.009	ppb	5.7	8342.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1414904.67	1.9	1483357.64	95.39	29.5	120.4	
Sc	45	No Gas	3283280.17	2.7	3141192.51	104.52	29.5	120.4	
Sc	45	H2	425909.58	2.9	418309.46	101.82	29.5	120.4	
Sc	45	He	83648.49	1.8	85440.95	97.9	29.5	120.4	
Ge	72	No Gas	747413.28	2.3	694668.88	107.59	29.5	120.4	
Ge	72	H2	157352.03	3.6	157206.79	100.09	29.5	120.4	
Ge	72	He	64498.97	2.4	64721.85	99.66	29.5	120.4	
Y	89	H2	2786321.93	3.9	2572670.23	108.3	29.5	120.4	
Y	89	He	579814.85	2.3	574051.42	101	29.5	120.4	
Tb	159	No Gas	7882567.94	2.9	6821698.44	115.55	29.5	120.4	
Tb	159	He	3138289.40	2.1	2982140.2	105.24	29.5	120.4	
Bi	209	No Gas	4100594.77	3.3	3547037.46	115.61	29.5	120.4	

Sample Report

Sample Name SN6056-015

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 7:57:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.849	ppb	17.1	410.02	100	
11	B	6	No Gas	12.977	ppb	6.1	3024.87	1000	
23	Na	45	He	48.254	ppb	16.7	9313.44	200000	
24	Mg	45	He	1198.289	ppb	3.9	13449.55	200000	
27	Al	45	He	20907.723	ppb	0.6	91635.47	200000	
28	Si	45	H2	2753.672	ppb	2.6	23833.10	10000	
39	K	45	He	691.651	ppb	7.4	17561.29	200000	
40	Ca	45	H2	9526.854	ppb	1.5	718548.83	200000	
51	V	89	He	25.829	ppb	4.8	4268.57	1000	
52	Cr	89	He	14.767	ppb	4.0	2952.45	2000	
55	Mn	89	He	117.132	ppb	0.7	10927.59	2000	
56	Fe	89	H2	8091.488	ppb	2.4	2486935.73	100000	
59	Co	89	He	3.052	ppb	12.2	1024.56	1000	
60	Ni	89	He	15.755	ppb	4.5	1736.84	1000	
63	Cu	89	He	42.410	ppb	2.0	10846.80	2000	
66	Zn	89	He	97.484	ppb	1.6	3343.86	2000	
75	As	89	He	5.411	ppb	10.4	155.35	1000	
78	Se	89	H2	3.401	ppb	3.7	50.33	1000	
88	Sr	89	He	29.498	ppb	4.5	4357.52	2000	
95	Mo	89	He	4.415	ppb	12.1	707.82	1000	
107	Ag	89	He	0.612	ppb	8.2	347.80	100	
111	Cd	89	He	2.681	ppb	4.7	191.48	1000	
118	Sn	159	He	44.487	ppb	1.4	7356.73	1000	
121	Sb	159	No Gas	0.963	ppb	5.7	1181.38	1000	
137	Ba	159	No Gas	156.745	ppb	7.4	74048.75	2000	
182	W	159	No Gas	0.264	ppb	29.2	300.34	1000	
205	Tl	209	No Gas	0.304	ppb	6.0	717.49	1000	
208	Pb	209	No Gas	175.072	ppb	6.9	475082.63	2000	
232	Th	209	No Gas	5.000	ppb	9.7	14033.53	1000	
238	U	209	No Gas	2.346	ppb	0.4	6141.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1373115.76	6.0	1483357.64	92.57	29.5	120.4	
Sc	45	No Gas	3087991.01	8.1	3141192.51	98.31	29.5	120.4	
Sc	45	H2	412878.57	0.3	418309.46	98.7	29.5	120.4	
Sc	45	He	82867.32	0.8	85440.95	96.99	29.5	120.4	
Ge	72	No Gas	708548.43	6.2	694668.88	102	29.5	120.4	
Ge	72	H2	153765.88	0.7	157206.79	97.81	29.5	120.4	
Ge	72	He	63913.73	0.3	64721.85	98.75	29.5	120.4	
Y	89	H2	2694153.72	0.3	2572670.23	104.72	29.5	120.4	
Y	89	He	570112.31	0.2	574051.42	99.31	29.5	120.4	
Tb	159	No Gas	7343650.86	8.2	6821698.44	107.65	29.5	120.4	
Tb	159	He	3134974.99	0.4	2982140.2	105.13	29.5	120.4	
Bi	209	No Gas	3867156.37	8.0	3547037.46	109.02	29.5	120.4	

Sample Report

Sample Name SN6056-016

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:00:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.542	ppb	25.9	147.78	100	
11	B	6	No Gas	13.102	ppb	14.4	3094.89	1000	
23	Na	45	He	65.336	ppb	12.7	9443.70	200000	
24	Mg	45	He	1100.803	ppb	2.8	12150.44	200000	
27	Al	45	He	11224.262	ppb	1.7	48190.70	200000	
28	Si	45	H2	3549.361	ppb	1.8	29591.75	10000	
39	K	45	He	653.185	ppb	5.0	16822.26	200000	
40	Ca	45	H2	8432.141	ppb	1.0	615495.76	200000	
51	V	89	He	23.546	ppb	2.8	3848.45	1000	
52	Cr	89	He	12.829	ppb	6.1	2535.77	2000	
55	Mn	89	He	124.704	ppb	1.5	11457.23	2000	
56	Fe	89	H2	9308.562	ppb	0.6	2768680.67	100000	
59	Co	89	He	3.449	ppb	5.0	1137.91	1000	
60	Ni	89	He	17.846	ppb	1.8	1893.53	1000	
63	Cu	89	He	34.197	ppb	3.2	8640.73	2000	
66	Zn	89	He	172.923	ppb	2.7	5793.65	2000	
75	As	89	He	4.956	ppb	8.2	140.35	1000	
78	Se	89	H2	3.023	ppb	3.6	43.33	1000	
88	Sr	89	He	30.431	ppb	4.1	4427.54	2000	
95	Mo	89	He	3.917	ppb	4.2	620.04	1000	
107	Ag	89	He	0.351	ppb	18.3	203.35	100	
111	Cd	89	He	2.286	ppb	15.4	160.74	1000	
118	Sn	159	He	46.780	ppb	3.7	7721.39	1000	
121	Sb	159	No Gas	1.002	ppb	24.1	1308.20	1000	
137	Ba	159	No Gas	105.254	ppb	8.8	53211.49	2000	
182	W	159	No Gas	0.307	ppb	33.5	363.75	1000	
205	Tl	209	No Gas	0.236	ppb	9.3	620.71	1000	
208	Pb	209	No Gas	122.206	ppb	9.4	352665.89	2000	
232	Th	209	No Gas	2.419	ppb	10.9	7286.99	1000	
238	U	209	No Gas	0.953	ppb	9.5	2649.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397096.51	2.3	1483357.64	94.18	29.5	120.4	
Sc	45	No Gas	3240713.57	3.0	3141192.51	103.17	29.5	120.4	
Sc	45	H2	399512.06	0.6	418309.46	95.51	29.5	120.4	
Sc	45	He	81159.49	0.2	85440.95	94.99	29.5	120.4	
Ge	72	No Gas	741072.33	3.2	694668.88	106.68	29.5	120.4	
Ge	72	H2	147913.19	0.6	157206.79	94.09	29.5	120.4	
Ge	72	He	62896.51	0.6	64721.85	97.18	29.5	120.4	
Y	89	H2	2608044.07	0.4	2572670.23	101.37	29.5	120.4	
Y	89	He	561566.20	0.6	574051.42	97.83	29.5	120.4	
Tb	159	No Gas	7839427.38	2.9	6821698.44	114.92	29.5	120.4	
Tb	159	He	3130377.21	0.5	2982140.2	104.97	29.5	120.4	
Bi	209	No Gas	4105864.57	3.5	3547037.46	115.75	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:02:42 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.438	ppb	11.3	23448.60	25	93.75	89.8	110.2	
11	B	6	No Gas	23.415	ppb	10.8	16235.22	25	93.66	89.8	110.2	
23	Na	45	He	5013.309	ppb	0.7	472470.17	5000	100.27	89.8	110.2	
24	Mg	45	He	4912.164	ppb	1.2	253751.32	5000	98.24	89.8	110.2	
27	Al	45	He	469.513	ppb	1.2	9903.79	500	93.9	89.8	110.2	
28	Si	45	H2	458.004	ppb	4.9	18743.29	500	91.6	89.8	110.2	
39	K	45	He	4819.568	ppb	1.1	242804.15	5000	96.39	89.8	110.2	
40	Ca	45	H2	4919.822	ppb	0.9	1745227.32	5000	98.4	89.8	110.2	
51	V	89	He	24.315	ppb	0.5	18902.16	25	97.26	89.8	110.2	
52	Cr	89	He	24.400	ppb	0.7	23200.75	25	97.6	89.8	110.2	
55	Mn	89	He	24.399	ppb	1.3	11057.00	25	97.6	89.8	110.2	
56	Fe	89	H2	4847.038	ppb	1.1	7074388.98	5000	96.94	89.8	110.2	
59	Co	89	He	24.645	ppb	1.3	39357.62	25	98.58	89.8	110.2	
60	Ni	89	He	24.054	ppb	1.6	10692.22	25	96.22	89.8	110.2	
63	Cu	89	He	24.837	ppb	0.4	30597.55	25	99.35	89.8	110.2	
66	Zn	89	He	24.791	ppb	4.6	4114.08	25	99.16	89.8	110.2	
75	As	89	He	24.445	ppb	1.9	3339.77	25	97.78	89.8	110.2	
78	Se	89	H2	24.205	ppb	1.4	1698.20	25	96.82	89.8	110.2	
88	Sr	89	He	23.573	ppb	1.8	16897.52	25	94.29	89.8	110.2	
95	Mo	89	He	24.719	ppb	1.2	18968.26	25	98.88	89.8	110.2	
107	Ag	89	He	25.315	ppb	0.9	66563.85	25	101.26	89.8	110.2	
111	Cd	89	He	24.845	ppb	0.3	8603.56	25	99.38	89.8	110.2	
118	Sn	159	He	23.223	ppb	1.0	18961.71	25	92.89	89.8	110.2	
121	Sb	159	No Gas	22.019	ppb	9.6	139724.89	25	88.08	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.473	ppb	11.1	56338.94	25	89.89	89.8	110.2	
182	W	159	No Gas	22.631	ppb	10.5	106873.46	25	90.52	89.8	110.2	
205	Tl	209	No Gas	23.104	ppb	10.2	237172.85	25	92.42	89.8	110.2	
208	Pb	209	No Gas	23.343	ppb	10.0	330592.86	25	93.37	89.8	110.2	
232	Th	209	No Gas	22.263	ppb	11.7	323993.09	25	89.05	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.762	ppb	10.8	309457.02	25	91.05	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1348695.74	3.5	1483357.64	90.92	29.5	120.4	
Sc	45	No Gas	3195726.84	3.9	3141192.51	101.74	29.5	120.4	
Sc	45	H2	388706.28	1.2	418309.46	92.92	29.5	120.4	
Sc	45	He	79633.13	0.9	85440.95	93.2	29.5	120.4	
Ge	72	No Gas	732734.95	3.6	694668.88	105.48	29.5	120.4	
Ge	72	H2	148610.25	0.8	157206.79	94.53	29.5	120.4	
Ge	72	He	62717.13	0.3	64721.85	96.9	29.5	120.4	
Y	89	H2	2563249.85	0.8	2572670.23	99.63	29.5	120.4	
Y	89	He	553943.91	0.5	574051.42	96.5	29.5	120.4	
Tb	159	No Gas	7785966.00	4.2	6821698.44	114.14	29.5	120.4	
Tb	159	He	3111392.98	0.4	2982140.2	104.33	29.5	120.4	
Bi	209	No Gas	4032223.41	4.2	3547037.46	113.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:05:15 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.070	ppb	14.9	107.78	0.2	
11	B	6	No Gas	0.711	ppb	15.8	1823.52	4	
23	Na	45	He	-21.297	ppb	N/A	6321.76	200	
24	Mg	45	He	-2.460	ppb	N/A	464.49	20	
27	Al	45	He	1.347	ppb	17.6	48.89	20	
28	Si	45	H2	-2.778	ppb	N/A	353.73	100	
39	K	45	He	-21.834	ppb	N/A	9507.26	200	
40	Ca	45	H2	3.241	ppb	9.6	2271.38	20	
51	V	89	He	-0.035	ppb	N/A	143.34	1	
52	Cr	89	He	-0.016	ppb	N/A	55.32	1	
55	Mn	89	He	0.012	ppb	191.5	32.66	0.4	
56	Fe	89	H2	2.009	ppb	7.2	9553.84	20	
59	Co	89	He	0.000	ppb	3825.7	22.23	0.2	
60	Ni	89	He	-0.482	ppb	N/A	125.56	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.018	ppb	82.9	162.23	0.6	
66	Zn	89	He	0.004	ppb	2868.6	64.45	2	
75	As	89	He	0.008	ppb	333.4	4.33	1	
78	Se	89	H2	0.051	ppb	16.5	3.83	1	
88	Sr	89	He	0.011	ppb	49.0	14.45	1	
95	Mo	89	He	0.068	ppb	42.7	64.45	1	
107	Ag	89	He	0.000	ppb	N/A	15.56	0.2	
111	Cd	89	He	0.004	ppb	156.5	1.85	0.2	
118	Sn	159	He	0.031	ppb	69.9	84.45	1	
121	Sb	159	No Gas	0.047	ppb	45.0	327.03	0.2	
137	Ba	159	No Gas	0.045	ppb	26.6	126.81	0.4	
182	W	159	No Gas	0.068	ppb	12.1	390.44	1	
205	Tl	209	No Gas	0.029	ppb	51.2	413.80	0.2	
208	Pb	209	No Gas	0.179	ppb	18.7	2716.48	0.2	Failed DoD
232	Th	209	No Gas	0.167	ppb	23.7	2513.08	1	
238	U	209	No Gas	0.047	ppb	68.9	650.75	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1389559.91	2.8	1483357.64	93.68	29.5	120.4	
Sc	45	No Gas	3227500.49	3.9	3141192.51	102.75	29.5	120.4	
Sc	45	H2	406324.47	0.2	418309.46	97.13	29.5	120.4	
Sc	45	He	82771.50	0.4	85440.95	96.88	29.5	120.4	
Ge	72	No Gas	737287.45	3.8	694668.88	106.14	29.5	120.4	
Ge	72	H2	154571.40	1.5	157206.79	98.32	29.5	120.4	
Ge	72	He	64323.87	0.9	64721.85	99.39	29.5	120.4	
Y	89	H2	2622708.01	0.7	2572670.23	101.94	29.5	120.4	
Y	89	He	567459.31	1.0	574051.42	98.85	29.5	120.4	
Tb	159	No Gas	7649443.08	3.6	6821698.44	112.13	29.5	120.4	
Tb	159	He	3126349.36	1.0	2982140.2	104.84	29.5	120.4	
Bi	209	No Gas	3954976.87	3.6	3547037.46	111.5	29.5	120.4	

Sample Report

Sample Name SN6056-017

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:07:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.354	ppb	32.0	107.78	100	
11	B	6	No Gas	10.429	ppb	10.5	2708.13	1000	
23	Na	45	He	78.225	ppb	34.7	9560.55	200000	
24	Mg	45	He	1217.516	ppb	1.8	13207.00	200000	
27	Al	45	He	8786.098	ppb	1.6	37246.01	200000	
28	Si	45	H2	3299.564	ppb	9.1	27838.55	10000	
39	K	45	He	689.507	ppb	4.0	16964.18	200000	
40	Ca	45	H2	12703.727	ppb	8.3	936991.31	200000	
51	V	89	He	18.013	ppb	4.7	2923.74	1000	
52	Cr	89	He	11.446	ppb	2.4	2224.45	2000	
55	Mn	89	He	175.569	ppb	1.7	15800.64	2000	
56	Fe	89	H2	5554.550	ppb	7.4	1682034.12	100000	
59	Co	89	He	1.951	ppb	7.2	640.06	1000	
60	Ni	89	He	12.590	ppb	5.8	1405.67	1000	
63	Cu	89	He	27.188	ppb	2.7	6760.75	2000	
66	Zn	89	He	143.789	ppb	3.5	4733.20	2000	
75	As	89	He	3.874	ppb	15.1	108.34	1000	
78	Se	89	H2	2.179	ppb	19.1	31.67	1000	
88	Sr	89	He	26.047	ppb	4.5	3716.21	2000	
95	Mo	89	He	2.380	ppb	7.4	373.35	1000	
107	Ag	89	He	0.308	ppb	19.4	176.67	100	
111	Cd	89	He	2.007	ppb	10.8	138.52	1000	
118	Sn	159	He	48.277	ppb	1.1	7873.68	1000	
121	Sb	159	No Gas	0.714	ppb	13.9	911.06	1000	
137	Ba	159	No Gas	81.888	ppb	6.5	39917.58	2000	
182	W	159	No Gas	0.251	ppb	25.4	300.34	1000	
205	Tl	209	No Gas	0.350	ppb	10.0	837.63	1000	
208	Pb	209	No Gas	90.421	ppb	8.0	254266.03	2000	
232	Th	209	No Gas	2.447	ppb	7.5	7183.46	1000	
238	U	209	No Gas	0.784	ppb	15.9	2122.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1379415.77	2.1	1483357.64	92.99	29.5	120.4	
Sc	45	No Gas	3138525.86	1.7	3141192.51	99.92	29.5	120.4	
Sc	45	H2	405260.18	6.1	418309.46	96.88	29.5	120.4	
Sc	45	He	80139.72	1.7	85440.95	93.8	29.5	120.4	
Ge	72	No Gas	719982.83	1.9	694668.88	103.64	29.5	120.4	
Ge	72	H2	150446.97	3.8	157206.79	95.7	29.5	120.4	
Ge	72	He	61540.47	0.7	64721.85	95.08	29.5	120.4	
Y	89	H2	2657889.36	5.3	2572670.23	103.31	29.5	120.4	
Y	89	He	550419.31	0.8	574051.42	95.88	29.5	120.4	
Tb	159	No Gas	7550030.93	1.4	6821698.44	110.68	29.5	120.4	
Tb	159	He	3094004.12	0.9	2982140.2	103.75	29.5	120.4	
Bi	209	No Gas	3994654.18	1.7	3547037.46	112.62	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW1
File Name	092_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:10:30 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.000	ppb	N/A	34.44	0.1	
B	11	6	No Gas	-0.102	ppb	N/A	1261.21	2	
Na	23	45	He	-11.141	ppb	N/A	7092.91	100	
Mg	24	45	He	3.724	ppb	16.2	773.41	10	
Al	27	45	He	3.031	ppb	13.2	83.34	10	
Si	28	45	H2	6.440	ppb	21.1	724.16	50	
K	39	45	He	-15.686	ppb	N/A	9537.22	100	
Ca	40	45	H2	7.395	ppb	3.8	3736.17	10	
V	51	89	He	0.024	ppb	84.3	185.56	0.5	
Cr	52	89	He	0.183	ppb	20.0	241.96	0.5	
Mn	55	89	He	0.173	ppb	5.7	104.65	0.2	
Fe	56	89	H2	2.854	ppb	8.6	10639.28	10	
Co	59	89	He	0.001	ppb	2091.8	22.22	0.1	
Ni	60	89	He	-0.379	ppb	N/A	166.67	0.2	200.8 PB Fails DoD
Cu	63	89	He	0.066	ppb	39.8	216.68	0.3	
Zn	66	89	He	7.727	ppb	2.5	1324.56	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.006	ppb	1.4	4.00	0.5	
Se	78	89	H2	0.012	ppb	59.8	1.00	0.5	
Sr	88	89	He	0.014	ppb	0.5	16.67	0.5	
Mo	95	89	He	0.035	ppb	93.5	37.78	0.5	
Ag	107	89	He	-0.001	ppb	N/A	13.33	0.1	
Cd	111	89	He	0.010	ppb	38.6	3.70	0.1	
Sn	118	159	He	0.115	ppb	14.7	151.12	0.5	
Sb	121	159	No Gas	0.003	ppb	144.2	50.06	0.1	
Ba	137	159	No Gas	0.047	ppb	55.9	133.48	0.2	
W	182	159	No Gas	-0.009	ppb	N/A	30.03	0.5	
Tl	205	209	No Gas	-0.007	ppb	N/A	56.73	0.1	
[Pb]	206	209	No Gas	0.106	ppb	13.8	420.48	0.1	200.8 PB Fails DoD
[Pb]	207	209	No Gas	0.108	ppb	39.1	397.12	0.1	200.8 PB Fails DoD
Pb	208	209	No Gas	0.103	ppb	16.0	1661.91	0.1	200.8 PB Fails DoD
Th	232	209	No Gas	0.010	ppb	73.1	250.29	0.5	
U	238	209	No Gas	0.001	ppb	139.6	20.02	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1358256.97	4.2	1483357.64	91.57	29.5	120.4	
Sc	45	No Gas	3179103.94	4.4	3141192.51	101.21	29.5	120.4	
Sc	45	H2	398449.61	1.2	418309.46	95.25	29.5	120.4	
Sc	45	He	80423.14	0.4	85440.95	94.13	29.5	120.4	
Ge	72	No Gas	727030.77	3.4	694668.88	104.66	29.5	120.4	
Ge	72	H2	150255.83	1.9	157206.79	95.58	29.5	120.4	
Ge	72	He	62679.98	0.6	64721.85	96.85	29.5	120.4	
Y	89	H2	2579388.86	1.0	2572670.23	100.26	29.5	120.4	
Y	89	He	553684.59	0.3	574051.42	96.45	29.5	120.4	
Tb	159	No Gas	7661039.96	4.3	6821698.44	112.3	29.5	120.4	
Tb	159	He	3085192.76	0.1	2982140.2	103.46	29.5	120.4	
Bi	209	No Gas	3986390.86	4.2	3547037.46	112.39	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW1
File Name	093_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:13:09 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.179	ppb	8.7	10069.43	50	19.27	79.5	120.4	
B	11	6	No Gas	494.695	ppb	9.4	67063.09	500	19.79	79.5	120.4	
Na	23	45	He	7486.624	ppb	1.1	152039.47	7500	19.96	79.5	120.4	
Mg	24	45	He	5349.943	ppb	1.6	57725.68	5000	21.4	79.5	120.4	
Al	27	45	He	1889.802	ppb	2.8	8262.66	2000	18.9	79.5	120.4	
Si	28	45	H2	1004.632	ppb	3.2	8739.13	1000	20.09	79.5	120.4	
K	39	45	He	10309.538	ppb	1.3	113660.04	10000	20.62	79.5	120.4	
Ca	40	45	H2	2713.597	ppb	1.2	199499.26	2500	21.71	79.5	120.4	
V	51	89	He	510.535	ppb	1.4	80115.47	500	20.42	79.5	120.4	
Cr	52	89	He	205.588	ppb	1.4	39681.48	200	20.56	79.5	120.4	
Mn	55	89	He	523.979	ppb	1.7	48170.19	500	20.96	79.5	120.4	
Fe	56	89	H2	1082.030	ppb	1.6	327117.96	1000	21.64	79.5	120.4	
Co	59	89	He	531.028	ppb	0.6	172290.67	500	21.24	79.5	120.4	
Ni	60	89	He	532.739	ppb	0.9	46977.38	500	21.31	79.5	120.4	
Cu	63	89	He	259.478	ppb	0.7	64819.71	250	20.76	79.5	120.4	
Zn	66	89	He	537.884	ppb	2.8	17932.09	500	21.52	79.5	120.4	
As	75	89	He	105.721	ppb	1.1	2935.97	100	21.14	79.5	120.4	
Se	78	89	H2	103.501	ppb	3.2	1475.51	100	20.7	79.5	120.4	
Sr	88	89	He	522.055	ppb	1.8	76032.57	500	20.88	79.5	120.4	
Mo	95	89	He	108.881	ppb	1.5	16981.12	100	21.78	79.5	120.4	
Ag	107	89	He	53.595	ppb	0.8	28650.96	50	21.44	79.5	120.4	
Cd	111	89	He	271.991	ppb	1.9	19141.00	250	21.76	79.5	120.4	
Sn	118	159	He	501.641	ppb	2.2	81937.74	500	20.07	79.5	120.4	
Sb	121	159	No Gas	98.616	ppb	8.0	121130.40	100	19.72	79.5	120.4	
Ba	137	159	No Gas	1943.137	ppb	8.1	943006.47	2000	19.43	79.5	120.4	
W	182	159	No Gas	100.479	ppb	7.6	91884.08	100	20.1	79.5	120.4	
Tl	205	209	No Gas	102.983	ppb	7.6	204655.34	100	20.6	79.5	120.4	
Pb	208	209	No Gas	103.118	ppb	8.3	282680.85	100	20.62	79.5	120.4	
Th	232	209	No Gas	97.192	ppb	9.6	273827.47	100	19.44	79.5	120.4	
U	238	209	No Gas	100.368	ppb	8.3	264135.88	100	20.07	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1404591.28	3.0	1483357.64	94.69	29.5	120.4	
Sc	45	No Gas	3187711.14	3.2	3141192.51	101.48	29.5	120.4	
Sc	45	H2	400972.95	1.5	418309.46	95.86	29.5	120.4	
Sc	45	He	82499.58	1.0	85440.95	96.56	29.5	120.4	
Ge	72	No Gas	726332.61	2.9	694668.88	104.56	29.5	120.4	
Ge	72	H2	153971.81	2.0	157206.79	97.94	29.5	120.4	
Ge	72	He	64057.29	0.8	64721.85	98.97	29.5	120.4	
Y	89	H2	2604488.46	1.0	2572670.23	101.24	29.5	120.4	
Y	89	He	562950.09	1.1	574051.42	98.07	29.5	120.4	
Tb	159	No Gas	7527167.74	3.0	6821698.44	110.34	29.5	120.4	
Tb	159	He	3119916.86	1.1	2982140.2	104.62	29.5	120.4	
Bi	209	No Gas	3897415.85	2.9	3547037.46	109.88	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 094SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:15:43 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	217.876	ppb	6.8	219250.51	100	>LDR
11	B	6	No Gas	1690.464	ppb	7.7	1085848.76	1000	>LDR
23	Na	45	He	31.502	ppb	7.5	11103.28	200000	
24	Mg	45	He	3.741	ppb	40.1	775.64	200000	
27	Al	45	He	1004.117	ppb	2.2	21411.13	200000	
28	Si	45	H2	101.595	ppb	1.9	4619.23	10000	
39	K	45	He	-12.413	ppb	N/A	9713.95	200000	
40	Ca	45	H2	20.620	ppb	3.3	8542.86	200000	
51	V	89	He	353.561	ppb	0.5	274181.40	1000	
52	Cr	89	He	657.259	ppb	0.7	626810.30	2000	
55	Mn	89	He	1643.139	ppb	0.5	747249.89	2000	
56	Fe	89	H2	3093.132	ppb	0.8	4559860.48	100000	
59	Co	89	He	718.610	ppb	0.7	1153727.45	1000	
60	Ni	89	He	1580.104	ppb	0.5	684986.72	1000	>LDR
63	Cu	89	He	291.337	ppb	0.6	359541.16	2000	
66	Zn	89	He	1017.732	ppb	0.7	167386.06	2000	
75	As	89	He	205.721	ppb	0.2	28246.29	1000	
78	Se	89	H2	479.633	ppb	0.6	33968.98	1000	
88	Sr	89	He	99.676	ppb	1.1	71850.13	2000	
95	Mo	89	He	337.639	ppb	0.4	260455.51	1000	
107	Ag	89	He	183.568	ppb	5.1	485358.50	100	>LDR
111	Cd	89	He	707.546	ppb	0.6	246440.99	1000	
118	Sn	159	He	1.363	ppb	9.9	1164.54	1000	
121	Sb	159	No Gas	249.733	ppb	7.3	1513475.15	1000	
137	Ba	159	No Gas	1645.100	ppb	7.2	3940287.26	2000	
182	W	159	No Gas	0.085	ppb	32.6	450.52	1000	
205	Tl	209	No Gas	478.721	ppb	7.1	4706327.31	1000	
208	Pb	209	No Gas	866.123	ppb	7.6	11744489.05	2000	
232	Th	209	No Gas	0.348	ppb	14.8	4976.57	1000	
238	U	209	No Gas	0.026	ppb	15.7	350.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1356168.84	2.2	1483357.64	91.43	29.5	120.4	
Sc	45	No Gas	3130666.02	1.9	3141192.51	99.66	29.5	120.4	
Sc	45	H2	398460.03	0.9	418309.46	95.25	29.5	120.4	
Sc	45	He	80580.72	1.0	85440.95	94.31	29.5	120.4	
Ge	72	No Gas	714618.26	2.2	694668.88	102.87	29.5	120.4	
Ge	72	H2	152404.10	1.4	157206.79	96.94	29.5	120.4	
Ge	72	He	63005.07	0.7	64721.85	97.35	29.5	120.4	
Y	89	H2	2587731.23	0.6	2572670.23	100.59	29.5	120.4	
Y	89	He	557182.32	0.2	574051.42	97.06	29.5	120.4	
Tb	159	No Gas	7424516.90	1.8	6821698.44	108.84	29.5	120.4	
Tb	159	He	3098753.91	0.7	2982140.2	103.91	29.5	120.4	
Bi	209	No Gas	3856575.97	2.2	3547037.46	108.73	29.5	120.4	

Sample Report

Sample Name SN5815-002R

File Name 095SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:18:21 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	22.443	ppb	9.5	22908.89	100	
11	B	6	No Gas	192.472	ppb	7.2	126475.61	1000	
23	Na	45	He	-4.585	ppb	N/A	7693.92	200000	
24	Mg	45	He	3.407	ppb	15.8	755.63	200000	
27	Al	45	He	112.818	ppb	3.7	2413.62	200000	
28	Si	45	H2	12.877	ppb	8.3	987.80	10000	
39	K	45	He	-14.130	ppb	N/A	9597.34	200000	
40	Ca	45	H2	17.447	ppb	3.8	7388.85	200000	
51	V	89	He	36.955	ppb	0.8	28769.00	1000	
52	Cr	89	He	69.604	ppb	0.4	66350.32	2000	
55	Mn	89	He	172.815	ppb	0.7	78506.82	2000	
56	Fe	89	H2	341.023	ppb	1.3	507660.00	100000	
59	Co	89	He	76.360	ppb	0.4	122448.33	1000	
60	Ni	89	He	167.392	ppb	0.4	72762.87	1000	
63	Cu	89	He	30.631	ppb	1.0	37872.02	2000	
66	Zn	89	He	117.874	ppb	2.2	19415.21	2000	
75	As	89	He	21.785	ppb	1.8	2989.99	1000	
78	Se	89	H2	51.430	ppb	0.4	3636.64	1000	
88	Sr	89	He	10.568	ppb	2.3	7613.50	2000	
95	Mo	89	He	35.696	ppb	1.5	27508.40	1000	
107	Ag	89	He	77.624	ppb	0.5	204978.65	100	
111	Cd	89	He	75.136	ppb	0.6	26134.87	1000	
118	Sn	159	He	0.404	ppb	17.9	384.53	1000	
121	Sb	159	No Gas	26.921	ppb	10.5	164416.06	1000	
137	Ba	159	No Gas	173.432	ppb	11.5	418453.16	2000	
182	W	159	No Gas	0.007	ppb	42.8	100.11	1000	
205	Tl	209	No Gas	51.878	ppb	9.7	514901.81	1000	
208	Pb	209	No Gas	93.981	ppb	10.4	1286392.16	2000	
232	Th	209	No Gas	0.020	ppb	34.6	390.44	1000	
238	U	209	No Gas	0.003	ppb	39.2	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1374310.89	2.3	1483357.64	92.65	29.5	120.4	
Sc	45	No Gas	3164554.96	4.2	3141192.51	100.74	29.5	120.4	
Sc	45	H2	398472.63	0.7	418309.46	95.26	29.5	120.4	
Sc	45	He	80301.53	1.0	85440.95	93.98	29.5	120.4	
Ge	72	No Gas	718809.32	3.8	694668.88	103.48	29.5	120.4	
Ge	72	H2	154235.16	1.1	157206.79	98.11	29.5	120.4	
Ge	72	He	63098.47	0.2	64721.85	97.49	29.5	120.4	
Y	89	H2	2583472.65	0.5	2572670.23	100.42	29.5	120.4	
Y	89	He	556419.20	0.1	574051.42	96.93	29.5	120.4	
Tb	159	No Gas	7496287.11	4.3	6821698.44	109.89	29.5	120.4	
Tb	159	He	3082937.80	0.0	2982140.2	103.38	29.5	120.4	
Bi	209	No Gas	3898692.67	4.0	3547037.46	109.91	29.5	120.4	

Sample Report

Sample Name SN5815-007

File Name 096SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:20:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.285	ppb	58.8	345.58	100	
11	B	6	No Gas	178.704	ppb	8.1	123909.52	1000	
23	Na	45	He	232.120	ppb	1.9	30158.58	200000	
24	Mg	45	He	4.715	ppb	36.5	833.42	200000	
27	Al	45	He	64.889	ppb	5.1	1412.35	200000	
28	Si	45	H2	1318.761	ppb	2.4	54862.44	10000	
39	K	45	He	4.310	ppb	166.8	10619.23	200000	
40	Ca	45	H2	62.605	ppb	2.3	23985.45	200000	
51	V	89	He	0.887	ppb	8.8	848.95	1000	
52	Cr	89	He	0.952	ppb	7.7	967.86	2000	
55	Mn	89	He	2.713	ppb	3.8	1249.84	2000	
56	Fe	89	H2	505.499	ppb	0.7	760375.90	100000	
59	Co	89	He	0.146	ppb	9.6	253.35	1000	
60	Ni	89	He	0.881	ppb	14.1	707.83	1000	
63	Cu	89	He	2.126	ppb	7.8	2733.70	2000	
66	Zn	89	He	11.520	ppb	4.8	1939.10	2000	
75	As	89	He	0.121	ppb	6.8	19.67	1000	
78	Se	89	H2	0.311	ppb	11.7	22.50	1000	
88	Sr	89	He	0.981	ppb	2.0	707.82	2000	
95	Mo	89	He	0.701	ppb	13.9	547.81	1000	
107	Ag	89	He	0.246	ppb	4.1	662.26	100	
111	Cd	89	He	0.073	ppb	29.8	25.55	1000	
118	Sn	159	He	1493.889	ppb	2.4	1196794.46	1000	>LDR
121	Sb	159	No Gas	0.287	ppb	55.1	1835.61	1000	
137	Ba	159	No Gas	2.240	ppb	63.0	5595.31	2000	
182	W	159	No Gas	0.017	ppb	45.7	150.17	1000	
205	Tl	209	No Gas	0.310	ppb	125.1	3365.56	1000	
208	Pb	209	No Gas	2.034	ppb	24.4	28974.58	2000	
232	Th	209	No Gas	0.076	ppb	5.7	1214.76	1000	
238	U	209	No Gas	0.011	ppb	74.6	153.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1449073.94	2.4	1483357.64	97.69	29.5	120.4	
Sc	45	No Gas	3208181.09	3.2	3141192.51	102.13	29.5	120.4	
Sc	45	H2	401582.30	0.9	418309.46	96	29.5	120.4	
Sc	45	He	81264.92	2.2	85440.95	95.11	29.5	120.4	
Ge	72	No Gas	738003.53	2.4	694668.88	106.24	29.5	120.4	
Ge	72	H2	150699.56	0.9	157206.79	95.86	29.5	120.4	
Ge	72	He	62453.36	3.6	64721.85	96.5	29.5	120.4	
Y	89	H2	2621402.82	0.7	2572670.23	101.89	29.5	120.4	
Y	89	He	552404.92	2.1	574051.42	96.23	29.5	120.4	
Tb	159	No Gas	7620792.32	3.1	6821698.44	111.71	29.5	120.4	
Tb	159	He	3063459.74	2.7	2982140.2	102.73	29.5	120.4	
Bi	209	No Gas	3993619.36	3.4	3547037.46	112.59	29.5	120.4	

Sample Report

Sample Name SN5815-014

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:23:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.118	ppb	7.1	153.34	100	
11	B	6	No Gas	6.410	ppb	2.6	5441.21	1000	
23	Na	45	He	90821.163	ppb	10.9	8902322.95	200000	
24	Mg	45	He	25925.370	ppb	11.4	1412766.02	200000	
27	Al	45	He	10.258	ppb	6.2	248.90	200000	
28	Si	45	H2	4.485	ppb	30.2	667.43	10000	
39	K	45	He	16242.992	ppb	11.0	839475.27	200000	
40	Ca	45	H2	44728.450	ppb	1.2	16847162.67	200000	
51	V	89	He	0.082	ppb	60.0	238.90	1000	
52	Cr	89	He	0.196	ppb	9.8	261.96	2000	
55	Mn	89	He	0.546	ppb	25.7	278.62	2000	
56	Fe	89	H2	5.302	ppb	5.5	14550.29	100000	
59	Co	89	He	0.036	ppb	66.7	80.01	1000	
60	Ni	89	He	-0.310	ppb	N/A	203.34	1000	
63	Cu	89	He	0.164	ppb	17.4	346.68	2000	
66	Zn	89	He	10.905	ppb	10.5	1893.54	2000	
75	As	89	He	0.043	ppb	5.8	9.33	1000	
78	Se	89	H2	0.074	ppb	42.3	5.50	1000	
88	Sr	89	He	4.767	ppb	8.6	3516.15	2000	
95	Mo	89	He	0.775	ppb	12.8	620.04	1000	
107	Ag	89	He	0.036	ppb	16.6	114.45	100	
111	Cd	89	He	0.024	ppb	35.2	8.89	1000	
118	Sn	159	He	0.878	ppb	20.6	766.72	1000	
121	Sb	159	No Gas	0.018	ppb	9.3	143.49	1000	
137	Ba	159	No Gas	0.328	ppb	11.3	824.28	2000	
182	W	159	No Gas	-0.005	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	0.023	ppb	22.7	340.38	1000	
208	Pb	209	No Gas	0.256	ppb	11.4	3650.97	2000	
232	Th	209	No Gas	0.005	ppb	49.0	183.54	1000	
238	U	209	No Gas	0.001	ppb	38.9	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1356222.65	1.3	1483357.64	91.43	29.5	120.4	
Sc	45	No Gas	3259454.32	2.9	3141192.51	103.76	29.5	120.4	
Sc	45	H2	412979.14	0.7	418309.46	98.73	29.5	120.4	
Sc	45	He	84677.76	8.2	85440.95	99.11	29.5	120.4	
Ge	72	No Gas	731040.44	2.2	694668.88	105.24	29.5	120.4	
Ge	72	H2	153484.57	1.8	157206.79	97.63	29.5	120.4	
Ge	72	He	64325.35	6.2	64721.85	99.39	29.5	120.4	
Y	89	H2	2638323.10	1.7	2572670.23	102.55	29.5	120.4	
Y	89	He	571185.31	6.8	574051.42	99.5	29.5	120.4	
Tb	159	No Gas	7670136.62	3.6	6821698.44	112.44	29.5	120.4	
Tb	159	He	3109941.72	6.7	2982140.2	104.29	29.5	120.4	
Bi	209	No Gas	3821465.60	3.8	3547037.46	107.74	29.5	120.4	

Sample Report

Sample Name SN6032-001

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:26:08 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.174	ppb	8.9	201.12	100	
11	B	6	No Gas	26.963	ppb	2.1	17911.69	1000	
23	Na	45	He	23167817.259	ppb	1.5	2417720008.18	200000	>LDR
24	Mg	45	He	2631.263	ppb	0.4	153410.53	200000	
27	Al	45	He	72.211	ppb	6.5	1734.62	200000	
28	Si	45	H2	3426.285	ppb	1.3	143927.33	10000	
39	K	45	He	4480.219	ppb	0.2	255038.66	200000	
40	Ca	45	H2	14125.318	ppb	1.1	5251985.23	200000	
51	V	89	He	0.938	ppb	5.7	830.06	1000	
52	Cr	89	He	141.653	ppb	0.3	125274.69	2000	
55	Mn	89	He	22.777	ppb	2.0	9625.57	2000	
56	Fe	89	H2	1593.484	ppb	1.3	2049913.28	100000	
59	Co	89	He	1.045	ppb	4.1	1575.76	1000	
60	Ni	89	He	71.633	ppb	0.7	29077.61	1000	
63	Cu	89	He	41.633	ppb	1.6	47725.77	2000	
66	Zn	89	He	75.493	ppb	1.9	11560.69	2000	
75	As	89	He	0.870	ppb	15.8	113.68	1000	
78	Se	89	H2	2.113	ppb	6.2	130.49	1000	
88	Sr	89	He	129.135	ppb	1.3	86296.32	2000	
95	Mo	89	He	12.374	ppb	1.9	8856.53	1000	
107	Ag	89	He	0.060	ppb	24.5	161.12	100	
111	Cd	89	He	0.194	ppb	8.1	62.96	1000	
118	Sn	159	He	1.724	ppb	13.9	1022.32	1000	
121	Sb	159	No Gas	43.189	ppb	3.8	191291.25	1000	
137	Ba	159	No Gas	7.283	ppb	4.4	12760.29	2000	
182	W	159	No Gas	0.573	ppb	8.0	1938.99	1000	
205	Tl	209	No Gas	0.013	ppb	26.0	160.18	1000	
208	Pb	209	No Gas	0.883	ppb	4.8	7876.45	2000	
232	Th	209	No Gas	0.035	ppb	9.3	387.11	1000	
238	U	209	No Gas	0.381	ppb	5.5	3214.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1303167.05	1.0	1483357.64	87.85	29.5	120.4	
Sc	45	No Gas	3108827.34	1.3	3141192.51	98.97	29.5	120.4	
Sc	45	H2	407584.79	1.5	418309.46	97.44	29.5	120.4	
Sc	45	He	89692.06	1.5	85440.95	104.98	29.5	120.4	
Ge	72	No Gas	713329.30	1.0	694668.88	102.69	29.5	120.4	
Ge	72	H2	127771.41	1.7	157206.79	81.28	29.5	120.4	
Ge	72	He	59471.26	2.0	64721.85	91.89	29.5	120.4	
Y	89	H2	2254952.69	1.2	2572670.23	87.65	29.5	120.4	
Y	89	He	516482.70	1.9	574051.42	89.97	29.5	120.4	
Tb	159	No Gas	5422444.71	1.1	6821698.44	79.49	29.5	120.4	
Tb	159	He	2176454.66	1.0	2982140.2	72.98	29.5	120.4	
Bi	209	No Gas	2491024.14	3.1	3547037.46	70.23	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	099SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:28:47 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.026	ppb	27.7	102.22	100	
11	B	6	No Gas	3.366	ppb	10.1	5848.05	1000	
23	Na	45	He	12766.642	ppb	10.0	1824386.04	200000	
24	Mg	45	He	-3.514	ppb	N/A	602.28	200000	
27	Al	45	He	-0.166	ppb	N/A	23.33	200000	
28	Si	45	H2	0.611	ppb	225.9	737.50	10000	
39	K	45	He	188.713	ppb	11.0	29598.84	200000	
40	Ca	45	H2	4.583	ppb	16.7	4124.09	200000	
51	V	89	He	-0.121	ppb	N/A	100.00	1000	
52	Cr	89	He	0.139	ppb	18.0	272.62	2000	
55	Mn	89	He	0.086	ppb	28.0	88.65	2000	
56	Fe	89	H2	-1.710	ppb	N/A	5460.49	100000	
59	Co	89	He	0.002	ppb	273.1	33.33	1000	
60	Ni	89	He	-0.609	ppb	N/A	92.22	1000	
63	Cu	89	He	0.040	ppb	26.1	251.12	2000	
66	Zn	89	He	0.211	ppb	63.2	131.11	2000	
75	As	89	He	0.036	ppb	40.0	11.00	1000	
78	Se	89	H2	0.073	ppb	7.3	7.33	1000	
88	Sr	89	He	0.021	ppb	59.0	28.89	2000	
95	Mo	89	He	0.044	ppb	28.6	60.00	1000	
107	Ag	89	He	0.016	ppb	33.3	77.78	100	
111	Cd	89	He	0.001	ppb	179.1	1.11	1000	
118	Sn	159	He	0.066	ppb	42.6	130.00	1000	
121	Sb	159	No Gas	0.293	ppb	57.9	2115.89	1000	
137	Ba	159	No Gas	0.057	ppb	54.9	176.87	2000	
182	W	159	No Gas	-0.003	ppb	N/A	63.41	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	130.15	1000	
208	Pb	209	No Gas	0.018	ppb	57.9	500.56	2000	
232	Th	209	No Gas	0.001	ppb	189.2	140.16	1000	
238	U	209	No Gas	0.001	ppb	134.4	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2275705.99	2.3	1483357.64	153.42	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4797804.09	1.9	3141192.51	152.74	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	605593.35	1.6	418309.46	144.77	29.5	120.4	6020/DoD□ EPA
Sc	45	He	122135.95	1.6	85440.95	142.95	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	975414.17	1.1	694668.88	140.41	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	217120.30	0.2	157206.79	138.11	29.5	120.4	6020/DoD□ EPA
Ge	72	He	89004.83	0.8	64721.85	137.52	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3574212.21	0.8	2572670.23	138.93	29.5	120.4	6020/DoD□ EPA
Y	89	He	752004.77	0.9	574051.42	131	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	8661031.12	1.9	6821698.44	126.96	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3571145.33	0.9	2982140.2	119.75	29.5	120.4	
Bi	209	No Gas	4244688.13	2.1	3547037.46	119.67	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	100SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:31:22 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	27.5	92.23	100	
11	B	6	No Gas	1.943	ppb	1.4	4450.84	1000	
23	Na	45	He	7221.369	ppb	5.7	1037870.93	200000	
24	Mg	45	He	-4.385	ppb	N/A	533.38	200000	
27	Al	45	He	0.146	ppb	73.8	33.33	200000	
28	Si	45	H2	1.912	ppb	60.4	810.93	10000	
39	K	45	He	101.294	ppb	7.4	23134.91	200000	
40	Ca	45	H2	1.655	ppb	18.4	2484.76	200000	
51	V	89	He	-0.099	ppb	N/A	123.34	1000	
52	Cr	89	He	0.049	ppb	22.8	156.64	2000	
55	Mn	89	He	0.056	ppb	52.9	69.99	2000	
56	Fe	89	H2	-2.210	ppb	N/A	4385.56	100000	
59	Co	89	He	0.000	ppb	N/A	28.89	1000	
60	Ni	89	He	-0.541	ppb	N/A	132.23	1000	
63	Cu	89	He	0.018	ppb	26.4	215.56	2000	
66	Zn	89	He	0.105	ppb	67.6	107.78	2000	
75	As	89	He	0.029	ppb	30.0	9.67	1000	
78	Se	89	H2	0.037	ppb	35.6	3.83	1000	
88	Sr	89	He	0.004	ppb	57.9	12.22	2000	
95	Mo	89	He	0.013	ppb	89.3	27.78	1000	
107	Ag	89	He	0.017	ppb	29.2	81.12	100	
111	Cd	89	He	0.005	ppb	69.0	2.96	1000	
118	Sn	159	He	0.084	ppb	12.1	145.56	1000	
121	Sb	159	No Gas	0.019	ppb	6.3	173.53	1000	
137	Ba	159	No Gas	0.038	ppb	10.7	123.47	2000	
182	W	159	No Gas	-0.010	ppb	N/A	26.70	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	130.15	1000	
208	Pb	209	No Gas	0.016	ppb	19.8	480.55	2000	
232	Th	209	No Gas	0.002	ppb	279.3	146.83	1000	
238	U	209	No Gas	0.000	ppb	592.2	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2346466.54	2.6	1483357.64	158.19	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4782966.03	3.0	3141192.51	152.27	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	599778.88	0.6	418309.46	143.38	29.5	120.4	6020/DoD□ EPA
Sc	45	He	122093.04	0.4	85440.95	142.9	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	979374.79	1.7	694668.88	140.98	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	213026.75	1.2	157206.79	135.51	29.5	120.4	6020/DoD□ EPA
Ge	72	He	88913.53	0.8	64721.85	137.38	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3528946.61	0.8	2572670.23	137.17	29.5	120.4	6020/DoD□ EPA
Y	89	He	753115.32	0.8	574051.42	131.19	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	8746855.98	3.1	6821698.44	128.22	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3546354.50	1.0	2982140.2	118.92	29.5	120.4	
Bi	209	No Gas	4368905.37	3.6	3547037.46	123.17	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:34:02 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.320	ppb	8.7	37891.58	25	89.28	89.8	110.2	> +/- 10%
11	B	6	No Gas	24.233	ppb	8.1	28427.67	25	96.93	89.8	110.2	
23	Na	45	He	9817.937	ppb	2.2	1363269.39	5000	196.36	89.8	110.2	> +/- 10%
24	Mg	45	He	4999.881	ppb	0.8	383777.27	5000	100	89.8	110.2	
27	Al	45	He	481.396	ppb	2.1	15087.32	500	96.28	89.8	110.2	
28	Si	45	H2	475.097	ppb	2.4	29439.67	500	95.02	89.8	110.2	
39	K	45	He	4960.865	ppb	0.5	370925.78	5000	99.22	89.8	110.2	
40	Ca	45	H2	5007.881	ppb	1.3	2693174.61	5000	100.16	89.8	110.2	
51	V	89	He	26.689	ppb	1.1	27252.64	25	106.76	89.8	110.2	
52	Cr	89	He	26.441	ppb	0.8	33043.03	25	105.76	89.8	110.2	
55	Mn	89	He	26.894	ppb	1.9	16017.54	25	107.58	89.8	110.2	
56	Fe	89	H2	5163.217	ppb	1.5	10239955.43	5000	103.26	89.8	110.2	
59	Co	89	He	26.425	ppb	1.2	55474.80	25	105.7	89.8	110.2	
60	Ni	89	He	25.641	ppb	1.4	14954.02	25	102.56	89.8	110.2	
63	Cu	89	He	25.707	ppb	1.1	41624.00	25	102.83	89.8	110.2	
66	Zn	89	He	24.449	ppb	4.9	5335.68	25	97.8	89.8	110.2	
75	As	89	He	25.518	ppb	1.9	4582.59	25	102.07	89.8	110.2	
78	Se	89	H2	24.798	ppb	1.6	2364.26	25	99.19	89.8	110.2	
88	Sr	89	He	23.757	ppb	1.8	22386.71	25	95.03	89.8	110.2	
95	Mo	89	He	24.701	ppb	1.1	24915.63	25	98.8	89.8	110.2	
107	Ag	89	He	23.888	ppb	0.2	82566.73	25	95.55	89.8	110.2	
111	Cd	89	He	23.371	ppb	0.7	10638.72	25	93.48	89.8	110.2	
118	Sn	159	He	25.774	ppb	1.7	23721.59	25	103.1	89.8	110.2	
121	Sb	159	No Gas	23.464	ppb	10.1	167903.71	25	93.86	89.8	110.2	
137	Ba	159	No Gas	23.387	ppb	10.9	66138.03	25	93.55	89.8	110.2	
182	W	159	No Gas	21.744	ppb	9.8	115840.75	25	86.98	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.544	ppb	9.1	251153.61	25	90.18	89.8	110.2	
208	Pb	209	No Gas	22.964	ppb	9.4	352943.69	25	91.86	89.8	110.2	
232	Th	209	No Gas	21.784	ppb	10.0	344125.74	25	87.14	89.8	110.2	> +/- 10%
238	U	209	No Gas	21.919	ppb	10.6	323330.74	25	87.68	89.8	110.2	> +/- 10%

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2285028.96	2.0	1483357.64	154.04	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4729899.06	3.3	3141192.51	150.58	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	589386.79	1.0	418309.46	140.9	29.5	120.4	6020/DoD□ EPA
Sc	45	He	118326.96	0.9	85440.95	138.49	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	961777.74	2.9	694668.88	138.45	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	207662.85	1.2	157206.79	132.1	29.5	120.4	6020/DoD□ EPA
Ge	72	He	85235.25	0.1	64721.85	131.69	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3483492.02	0.7	2572670.23	135.4	29.5	120.4	6020/DoD□ EPA
Y	89	He	728193.63	0.4	574051.42	126.85	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	8773805.77	2.8	6821698.44	128.62	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3508241.89	0.5	2982140.2	117.64	29.5	120.4	
Bi	209	No Gas	4371494.47	3.0	3547037.46	123.24	29.5	120.4	6020/DoD

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:36:34 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.077	ppb	54.7	187.79	0.2	
11	B	6	No Gas	1.650	ppb	15.5	3995.12	4	
23	Na	45	He	3642.513	ppb	2.0	510609.95	200	Fail All Methods□ Failed DoD
24	Mg	45	He	-3.869	ppb	N/A	553.38	20	
27	Al	45	He	-0.103	ppb	N/A	24.45	20	
28	Si	45	H2	-0.062	ppb	N/A	667.43	100	
39	K	45	He	38.814	ppb	0.2	17844.72	200	
40	Ca	45	H2	0.895	ppb	22.0	2005.77	20	
51	V	89	He	-0.094	ppb	N/A	125.56	1	
52	Cr	89	He	0.007	ppb	317.0	99.32	1	
55	Mn	89	He	0.020	ppb	86.3	46.66	0.4	
56	Fe	89	H2	-0.713	ppb	N/A	7163.11	20	
59	Co	89	He	0.000	ppb	2064.0	28.89	0.2	
60	Ni	89	He	-0.539	ppb	N/A	130.01	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.007	ppb	401.6	191.12	0.6	
66	Zn	89	He	0.010	ppb	1604.2	84.45	2	
75	As	89	He	0.015	ppb	96.7	7.00	1	
78	Se	89	H2	0.078	ppb	45.6	7.50	1	
88	Sr	89	He	0.004	ppb	104.6	12.22	1	
95	Mo	89	He	0.064	ppb	16.5	78.89	1	
107	Ag	89	He	0.021	ppb	5.2	94.45	0.2	
111	Cd	89	He	0.006	ppb	0.2	3.33	0.2	
118	Sn	159	He	0.083	ppb	52.0	142.23	1	
121	Sb	159	No Gas	0.041	ppb	49.8	320.36	0.2	
137	Ba	159	No Gas	0.023	ppb	101.7	80.09	0.4	
182	W	159	No Gas	0.053	ppb	38.7	357.07	1	
205	Tl	209	No Gas	0.025	ppb	54.1	407.13	0.2	
208	Pb	209	No Gas	0.044	ppb	43.9	911.04	0.2	
232	Th	209	No Gas	0.131	ppb	23.4	2195.98	1	
238	U	209	No Gas	0.035	ppb	79.9	517.26	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2277914.97	4.9	1483357.64	153.56	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4636332.58	7.2	3141192.51	147.6	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	581035.45	2.1	418309.46	138.9	29.5	120.4	6020/DoD□ EPA
Sc	45	He	117689.76	0.6	85440.95	137.74	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	953827.10	4.4	694668.88	137.31	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	207154.96	1.1	157206.79	131.77	29.5	120.4	6020/DoD□ EPA
Ge	72	He	86133.42	0.5	64721.85	133.08	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3419646.06	2.5	2572670.23	132.92	29.5	120.4	6020/DoD□ EPA
Y	89	He	733775.35	0.2	574051.42	127.82	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	8777162.16	7.7	6821698.44	128.67	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3495503.56	0.3	2982140.2	117.21	29.5	120.4	
Bi	209	No Gas	4395010.95	6.9	3547037.46	123.91	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6071-001

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:39:19 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.038	ppb	56.3	115.56	100	
11	B	6	No Gas	46.832	ppb	6.7	49591.60	1000	
23	Na	45	He	90480.477	ppb	0.4	11711643.84	200000	
24	Mg	45	He	5551.982	ppb	0.4	400266.24	200000	
27	Al	45	He	23.083	ppb	1.7	704.49	200000	
28	Si	45	H2	2652.849	ppb	0.9	151124.71	10000	
39	K	45	He	10779.836	ppb	0.4	740504.94	200000	
40	Ca	45	H2	20198.740	ppb	0.3	10174246.03	200000	
51	V	89	He	1.042	ppb	6.8	1217.87	1000	
52	Cr	89	He	0.657	ppb	8.5	867.87	2000	
55	Mn	89	He	9.791	ppb	3.8	5587.44	2000	
56	Fe	89	H2	69.390	ppb	0.6	138232.52	100000	
59	Co	89	He	0.149	ppb	21.6	324.48	1000	
60	Ni	89	He	3.707	ppb	0.9	2418.08	1000	
63	Cu	89	He	14.707	ppb	0.8	22805.89	2000	
66	Zn	89	He	70.891	ppb	2.1	14618.12	2000	
75	As	89	He	0.469	ppb	20.5	84.34	1000	
78	Se	89	H2	0.197	ppb	12.8	18.00	1000	
88	Sr	89	He	88.918	ppb	0.9	79964.81	2000	
95	Mo	89	He	12.557	ppb	1.4	12097.97	1000	
107	Ag	89	He	0.033	ppb	7.3	128.90	100	
111	Cd	89	He	0.045	ppb	22.8	20.00	1000	
118	Sn	159	He	0.257	ppb	8.8	293.35	1000	
121	Sb	159	No Gas	0.428	ppb	9.2	3063.77	1000	
137	Ba	159	No Gas	6.727	ppb	10.0	18800.83	2000	
182	W	159	No Gas	0.079	ppb	24.3	493.90	1000	
205	Tl	209	No Gas	0.014	ppb	44.4	283.66	1000	
208	Pb	209	No Gas	0.337	ppb	8.1	5239.63	2000	
232	Th	209	No Gas	0.071	ppb	8.6	1214.76	1000	
238	U	209	No Gas	0.010	ppb	4.1	156.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2144378.18	3.0	1483357.64	144.56	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4514538.49	4.8	3141192.51	143.72	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	552224.46	0.7	418309.46	132.01	29.5	120.4	6020/DoD□ EPA
Sc	45	He	111158.77	0.1	85440.95	130.1	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	929933.10	3.4	694668.88	133.87	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	198195.43	0.6	157206.79	126.07	29.5	120.4	6020/DoD□ EPA
Ge	72	He	81385.84	0.3	64721.85	125.75	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3293186.32	0.3	2572670.23	128.01	29.5	120.4	6020/DoD□ EPA
Y	89	He	695139.63	0.4	574051.42	121.09	29.5	120.4	6020/DoD
Tb	159	No Gas	8670754.31	4.0	6821698.44	127.11	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3402170.33	0.7	2982140.2	114.08	29.5	120.4	
Bi	209	No Gas	4231023.95	3.5	3547037.46	119.28	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW2
File Name	104_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:41:59 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.116	ppb	50.0	93.34	0.5	
B	11	6	No Gas	8.669	ppb	22.8	3916.22	10	
Na	23	45	He	17008.756	ppb	2.3	448854.54	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	-0.436	ppb	N/A	791.19	50	
Al	27	45	He	7.907	ppb	17.0	72.23	50	
Si	28	45	H2	10.078	ppb	53.1	750.86	250	
K	39	45	He	155.212	ppb	11.4	16250.30	500	
Ca	40	45	H2	64.954	ppb	11.6	7980.32	50	PB 6020 Fails DoD
V	51	89	He	2.862	ppb	7.9	767.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.334	ppb	15.9	166.64	2.5	
Mn	55	89	He	0.795	ppb	17.4	123.98	1	
Fe	56	89	H2	-3.811	ppb	N/A	6862.71	50	
Co	59	89	He	0.021	ppb	252.1	35.56	0.5	
Ni	60	89	He	-2.474	ppb	N/A	147.78	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	5.486	ppb	3.2	1870.20	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	5.315	ppb	12.6	297.79	5	PB 6020 Fails DoD
As	75	89	He	0.356	ppb	12.2	16.33	2.5	
Se	78	89	H2	0.245	ppb	36.6	4.67	2.5	
Sr	88	89	He	0.115	ppb	18.2	28.89	2.5	
Mo	95	89	He	0.309	ppb	29.2	73.34	2.5	
Ag	107	89	He	0.231	ppb	9.4	173.34	0.5	
Cd	111	89	He	0.046	ppb	48.2	4.45	0.5	
Sn	118	159	He	1.373	ppb	9.8	312.24	2.5	
Sb	121	159	No Gas	0.143	ppb	29.4	236.93	0.5	
Ba	137	159	No Gas	0.653	ppb	24.5	383.77	1	
W	182	159	No Gas	-0.024	ppb	N/A	56.73	2.5	
Tl	205	209	No Gas	-0.004	ppb	N/A	130.14	0.5	
Pb	208	209	No Gas	1.079	ppb	15.4	3597.58	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.046	ppb	55.7	270.31	2.5	
U	238	209	No Gas	0.009	ppb	45.4	36.71	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2187757.78	7.7	1483357.64	147.49	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4510418.49	11.1	3141192.51	143.59	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	551170.28	0.8	418309.46	131.76	29.5	120.4	6020/DoD□ EPA
Sc	45	He	110607.86	0.8	85440.95	129.46	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	939703.99	7.2	694668.88	135.27	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	196788.12	0.5	157206.79	125.18	29.5	120.4	6020/DoD
Ge	72	He	82100.67	0.4	64721.85	126.85	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3320861.99	0.4	2572670.23	129.08	29.5	120.4	6020/DoD□ EPA
Y	89	He	699140.72	0.2	574051.42	121.79	29.5	120.4	6020/DoD
Tb	159	No Gas	8835075.98	9.9	6821698.44	129.51	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3437364.01	0.7	2982140.2	115.27	29.5	120.4	
Bi	209	No Gas	4458061.71	10.2	3547037.46	125.68	29.5	120.4	6020/DoD□ EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	105LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 8:44:40 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.212	ppb	6.7	16266.28	50	20.48	79.5	120.4	
B	11	6	No Gas	533.248	ppb	6.0	109741.36	500	21.33	79.5	120.4	
Na	23	45	He	22775.935	ppb	1.9	589399.36	7500	60.74	79.5	120.4	6020□ DoD
Mg	24	45	He	5772.655	ppb	0.7	82350.93	5000	23.09	79.5	120.4	
Al	27	45	He	2040.962	ppb	0.9	11805.29	2000	20.41	79.5	120.4	
Si	28	45	H2	1124.128	ppb	2.3	13087.14	1000	22.48	0	200	
K	39	45	He	11243.977	ppb	1.3	162741.56	10000	22.49	79.5	120.4	
Ca	40	45	H2	2894.673	ppb	1.0	286352.31	2500	23.16	79.5	120.4	
V	51	89	He	581.997	ppb	0.2	112275.55	500	23.28	79.5	120.4	DoD
Cr	52	89	He	233.091	ppb	0.4	55309.91	200	23.31	79.5	120.4	DoD
Mn	55	89	He	585.613	ppb	0.2	66199.30	500	23.42	79.5	120.4	DoD
Fe	56	89	H2	1203.456	ppb	0.5	457139.81	1000	24.07	79.5	120.4	DoD
Co	59	89	He	595.160	ppb	0.4	237425.53	500	23.81	79.5	120.4	DoD
Ni	60	89	He	584.268	ppb	2.2	63307.08	500	23.37	79.5	120.4	
Cu	63	89	He	288.428	ppb	1.4	88569.31	250	23.07	79.5	120.4	
Zn	66	89	He	573.363	ppb	2.0	23498.29	500	22.93	79.5	120.4	
As	75	89	He	118.038	ppb	3.0	4030.03	100	23.61	79.5	120.4	DoD
Se	78	89	H2	113.821	ppb	0.5	2042.89	100	22.76	79.5	120.4	
Sr	88	89	He	549.514	ppb	1.2	98410.35	500	21.98	79.5	120.4	
Mo	95	89	He	113.353	ppb	1.9	21735.71	100	22.67	79.5	120.4	
Ag	107	89	He	54.893	ppb	1.7	36079.99	50	21.96	79.5	120.4	
Cd	111	89	He	269.731	ppb	0.3	23342.02	250	21.58	79.5	120.4	
Sn	118	159	He	569.528	ppb	0.8	102878.51	500	22.78	79.5	120.4	
Sb	121	159	No Gas	109.094	ppb	6.7	156204.35	100	21.82	79.5	120.4	
Ba	137	159	No Gas	2120.017	ppb	6.2	1199604.54	2000	21.2	79.5	120.4	
W	182	159	No Gas	106.434	ppb	6.2	113465.20	100	21.29	79.5	120.4	
Tl	205	209	No Gas	112.049	ppb	6.1	249721.44	100	22.41	79.5	120.4	
[Pb]	206	209	No Gas	112.837	ppb	6.3	87426.40	100	22.57	79.5	120.4	
[Pb]	207	209	No Gas	112.097	ppb	6.3	75672.71	100	22.42	79.5	120.4	
Pb	208	209	No Gas	112.047	ppb	6.7	344446.34	100	22.41	79.5	120.4	
Th	232	209	No Gas	108.925	ppb	7.5	344142.29	100	21.78	79.5	120.4	
U	238	209	No Gas	107.875	ppb	6.7	318377.14	100	21.58	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2134270.16	3.3	1483357.64	143.88	29.5	120.4	6020/DoD EPA
Sc	45	No Gas	4414035.50	3.5	3141192.51	140.52	29.5	120.4	6020/DoD EPA
Sc	45	H2	539640.24	0.5	418309.46	129.01	29.5	120.4	6020/DoD EPA
Sc	45	He	109149.42	0.7	85440.95	127.75	29.5	120.4	6020/DoD EPA
Ge	72	No Gas	923069.07	2.4	694668.88	132.88	29.5	120.4	6020/DoD EPA
Ge	72	H2	194211.12	1.3	157206.79	123.54	29.5	120.4	6020/DoD
Ge	72	He	80761.48	0.3	64721.85	124.78	29.5	120.4	6020/DoD
Y	89	H2	3278644.78	0.7	2572670.23	127.44	29.5	120.4	6020/DoD EPA
Y	89	He	692174.93	0.7	574051.42	120.58	29.5	120.4	6020/DoD
Tb	159	No Gas	8775033.69	3.5	6821698.44	128.63	29.5	120.4	6020/DoD EPA
Tb	159	He	3450265.71	0.5	2982140.2	115.7	29.5	120.4	
Bi	209	No Gas	4371132.33	3.7	3547037.46	123.23	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5815-004

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:47:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	229.236	ppb	5.0	70345.66	100	
11	B	6	No Gas	1793.434	ppb	4.7	352728.04	1000	
23	Na	45	He	12911.312	ppb	4.2	333761.09	200000	
24	Mg	45	He	-4.668	ppb	N/A	708.96	200000	
27	Al	45	He	1076.389	ppb	2.5	6144.88	200000	
28	Si	45	H2	116.935	ppb	11.5	1912.25	10000	
39	K	45	He	72.275	ppb	55.4	14711.05	200000	
40	Ca	45	H2	30.920	ppb	2.7	4447.52	200000	
51	V	89	He	403.628	ppb	3.6	76863.16	1000	
52	Cr	89	He	745.117	ppb	4.7	174156.08	2000	
55	Mn	89	He	1860.535	ppb	4.2	207338.11	2000	
56	Fe	89	H2	3348.013	ppb	0.6	1256704.25	100000	
59	Co	89	He	804.392	ppb	4.4	316433.95	1000	
60	Ni	89	He	1759.360	ppb	4.5	187178.90	1000	
63	Cu	89	He	318.817	ppb	4.9	96519.35	2000	
66	Zn	89	He	1110.221	ppb	5.2	44789.46	2000	
75	As	89	He	224.177	ppb	4.4	7544.54	1000	
78	Se	89	H2	505.060	ppb	0.9	9061.36	1000	
88	Sr	89	He	106.535	ppb	2.6	18830.14	2000	
95	Mo	89	He	354.408	ppb	4.3	66995.60	1000	
107	Ag	89	He	755.391	ppb	4.3	489387.87	100	>LDR
111	Cd	89	He	731.106	ppb	4.3	62391.92	1000	
118	Sn	159	He	2.392	ppb	14.4	488.92	1000	
121	Sb	159	No Gas	290.220	ppb	5.7	413611.86	1000	
137	Ba	159	No Gas	1826.413	ppb	5.4	1028713.58	2000	
182	W	159	No Gas	0.175	ppb	30.8	266.97	1000	
205	Tl	209	No Gas	515.973	ppb	4.9	1154839.47	1000	
208	Pb	209	No Gas	967.726	ppb	4.6	2987691.47	2000	
232	Th	209	No Gas	1.010	ppb	19.7	3344.19	1000	
238	U	209	No Gas	0.100	ppb	15.5	307.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2065933.44	2.1	1483357.64	139.27	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4332331.82	2.8	3141192.51	137.92	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	537557.88	0.9	418309.46	128.51	29.5	120.4	6020/DoD□ EPA
Sc	45	He	107561.48	2.9	85440.95	125.89	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	919816.80	2.8	694668.88	132.41	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	191153.26	0.5	157206.79	121.59	29.5	120.4	6020/DoD
Ge	72	He	78899.10	3.1	64721.85	121.9	29.5	120.4	6020/DoD
Y	89	H2	3277586.90	0.3	2572670.23	127.4	29.5	120.4	6020/DoD□ EPA
Y	89	He	683283.36	3.6	574051.42	119.03	29.5	120.4	
Tb	159	No Gas	8730199.38	2.6	6821698.44	127.98	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3398136.44	2.8	2982140.2	113.95	29.5	120.4	
Bi	209	No Gas	4388936.96	2.7	3547037.46	123.74	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5815-009

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:50:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.488	ppb	22.7	203.34	100	
11	B	6	No Gas	205.327	ppb	4.0	42359.48	1000	
23	Na	45	He	12269.302	ppb	1.8	315597.21	200000	
24	Mg	45	He	2.056	ppb	134.8	797.85	200000	
27	Al	45	He	74.505	ppb	8.1	445.58	200000	
28	Si	45	H2	1386.363	ppb	2.5	15626.01	10000	
39	K	45	He	53.411	ppb	57.3	14367.52	200000	
40	Ca	45	H2	46.747	ppb	2.7	5884.77	200000	
51	V	89	He	2.946	ppb	8.0	761.16	1000	
52	Cr	89	He	1.241	ppb	15.7	372.60	2000	
55	Mn	89	He	2.447	ppb	3.3	303.28	2000	
56	Fe	89	H2	644.472	ppb	1.0	242846.95	100000	
59	Co	89	He	0.205	ppb	21.4	106.67	1000	
60	Ni	89	He	-1.044	ppb	N/A	294.46	1000	
63	Cu	89	He	2.052	ppb	5.1	783.38	2000	
66	Zn	89	He	5.590	ppb	12.3	300.02	2000	
75	As	89	He	0.550	ppb	22.4	22.33	1000	
78	Se	89	H2	0.948	ppb	17.0	16.83	1000	
88	Sr	89	He	0.853	ppb	13.0	157.78	2000	
95	Mo	89	He	1.740	ppb	15.5	340.02	1000	
107	Ag	89	He	0.404	ppb	10.9	280.02	100	
111	Cd	89	He	0.113	ppb	30.6	10.00	1000	
118	Sn	159	He	1627.381	ppb	0.3	291059.35	1000	
121	Sb	159	No Gas	0.437	ppb	9.9	664.10	1000	
137	Ba	159	No Gas	2.561	ppb	2.7	1471.71	2000	
182	W	159	No Gas	0.030	ppb	104.5	113.46	1000	
205	Tl	209	No Gas	0.326	ppb	14.6	874.34	1000	
208	Pb	209	No Gas	1.776	ppb	2.1	5787.03	2000	
232	Th	209	No Gas	0.179	ppb	13.9	697.48	1000	
238	U	209	No Gas	0.011	ppb	65.2	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2075470.45	2.9	1483357.64	139.92	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4338250.02	3.4	3141192.51	138.11	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	527238.16	0.5	418309.46	126.04	29.5	120.4	6020/DoD□ EPA
Sc	45	He	106777.54	0.8	85440.95	124.97	29.5	120.4	6020/DoD
Ge	72	No Gas	931431.90	3.2	694668.88	134.08	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	188715.58	0.5	157206.79	120.04	29.5	120.4	
Ge	72	He	79034.49	0.3	64721.85	122.11	29.5	120.4	6020/DoD
Y	89	H2	3202709.96	0.3	2572670.23	124.49	29.5	120.4	6020/DoD
Y	89	He	678643.59	0.4	574051.42	118.22	29.5	120.4	
Tb	159	No Gas	8793227.79	3.3	6821698.44	128.9	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3417482.48	0.0	2982140.2	114.6	29.5	120.4	
Bi	209	No Gas	4433189.96	3.2	3547037.46	124.98	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5815-016

File Name 108SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:52:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.222	ppb	20.5	116.67	100	
11	B	6	No Gas	13.517	ppb	9.6	4498.64	1000	
23	Na	45	He	108889.353	ppb	1.0	2693065.44	200000	
24	Mg	45	He	27126.690	ppb	0.7	372576.59	200000	
27	Al	45	He	8.467	ppb	23.0	72.22	200000	
28	Si	45	H2	8.204	ppb	122.5	690.78	10000	
39	K	45	He	17648.286	ppb	1.3	240072.63	200000	
40	Ca	45	H2	47199.457	ppb	2.7	4494598.02	200000	
51	V	89	He	3.707	ppb	4.7	895.62	1000	
52	Cr	89	He	0.327	ppb	23.5	158.64	2000	
55	Mn	89	He	0.675	ppb	16.8	105.98	2000	
56	Fe	89	H2	-4.961	ppb	N/A	6158.17	100000	
59	Co	89	He	0.185	ppb	18.5	97.78	1000	
60	Ni	89	He	-1.864	ppb	N/A	205.56	1000	
63	Cu	89	He	0.742	ppb	5.5	385.57	2000	
66	Zn	89	He	2.047	ppb	27.2	156.68	2000	
75	As	89	He	0.405	ppb	48.8	17.33	1000	
78	Se	89	H2	0.265	ppb	21.2	4.83	1000	
88	Sr	89	He	4.956	ppb	3.5	868.95	2000	
95	Mo	89	He	0.927	ppb	28.4	185.56	1000	
107	Ag	89	He	0.210	ppb	11.7	153.34	100	
111	Cd	89	He	0.105	ppb	72.0	9.26	1000	
118	Sn	159	He	2.266	ppb	12.6	468.91	1000	
121	Sb	159	No Gas	0.084	ppb	28.6	153.51	1000	
137	Ba	159	No Gas	0.526	ppb	13.4	313.69	2000	
182	W	159	No Gas	-0.055	ppb	N/A	23.36	1000	
205	Tl	209	No Gas	0.035	ppb	76.4	213.57	1000	
208	Pb	209	No Gas	0.223	ppb	18.4	927.73	2000	
232	Th	209	No Gas	0.036	ppb	11.1	236.94	1000	
238	U	209	No Gas	0.005	ppb	97.7	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1992001.98	1.9	1483357.64	134.29	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4267908.59	2.7	3141192.51	135.87	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	522057.99	1.5	418309.46	124.8	29.5	120.4	6020/DoD
Sc	45	He	105882.98	1.0	85440.95	123.93	29.5	120.4	6020/DoD
Ge	72	No Gas	913384.20	2.5	694668.88	131.48	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	186446.71	1.1	157206.79	118.6	29.5	120.4	
Ge	72	He	77726.12	0.7	64721.85	120.09	29.5	120.4	
Y	89	H2	3180929.93	1.2	2572670.23	123.64	29.5	120.4	6020/DoD
Y	89	He	671684.42	0.7	574051.42	117.01	29.5	120.4	
Tb	159	No Gas	8747776.88	2.6	6821698.44	128.23	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3408287.41	0.3	2982140.2	114.29	29.5	120.4	
Bi	209	No Gas	4373813.66	3.1	3547037.46	123.31	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5815-036

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:55:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.108	ppb	37.5	83.34	100	
11	B	6	No Gas	33.535	ppb	6.9	8348.25	1000	
23	Na	45	He	8822.668	ppb	1.4	226981.06	200000	
24	Mg	45	He	8.204	ppb	92.9	871.20	200000	
27	Al	45	He	9.917	ppb	42.0	80.00	200000	
28	Si	45	H2	60.252	ppb	2.6	1244.76	10000	
39	K	45	He	30.377	ppb	2.5	13887.23	200000	
40	Ca	45	H2	39.435	ppb	5.0	5111.11	200000	
51	V	89	He	3.596	ppb	7.6	875.61	1000	
52	Cr	89	He	0.335	ppb	17.8	160.64	2000	
55	Mn	89	He	0.662	ppb	12.0	104.65	2000	
56	Fe	89	H2	-3.606	ppb	N/A	6639.01	100000	
59	Co	89	He	0.053	ppb	112.1	46.67	1000	
60	Ni	89	He	-0.931	ppb	N/A	303.35	1000	
63	Cu	89	He	0.841	ppb	14.2	415.58	2000	
66	Zn	89	He	5.574	ppb	6.5	296.68	2000	
75	As	89	He	0.245	ppb	12.8	12.00	1000	
78	Se	89	H2	0.170	ppb	9.0	3.17	1000	
88	Sr	89	He	0.057	ppb	20.3	17.78	2000	
95	Mo	89	He	0.067	ppb	40.1	25.56	1000	
107	Ag	89	He	0.187	ppb	34.9	138.90	100	
111	Cd	89	He	0.074	ppb	88.6	6.67	1000	
118	Sn	159	He	1.985	ppb	9.2	418.91	1000	
121	Sb	159	No Gas	0.078	ppb	3.5	146.83	1000	
137	Ba	159	No Gas	0.507	ppb	31.4	303.67	2000	
182	W	159	No Gas	-0.027	ppb	N/A	53.39	1000	
205	Tl	209	No Gas	0.011	ppb	171.1	163.52	1000	
208	Pb	209	No Gas	0.262	ppb	14.4	1071.22	2000	
232	Th	209	No Gas	0.029	ppb	98.5	220.25	1000	
238	U	209	No Gas	61.675	ppb	7.7	186360.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2012358.81	3.0	1483357.64	135.66	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4259792.51	3.4	3141192.51	135.61	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	520058.57	0.9	418309.46	124.32	29.5	120.4	6020/DoD
Sc	45	He	105379.96	0.2	85440.95	123.34	29.5	120.4	6020/DoD
Ge	72	No Gas	909692.40	2.1	694668.88	130.95	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	186195.28	0.7	157206.79	118.44	29.5	120.4	
Ge	72	He	78252.45	1.0	64721.85	120.91	29.5	120.4	6020/DoD
Y	89	H2	3176413.36	0.7	2572670.23	123.47	29.5	120.4	6020/DoD
Y	89	He	672357.51	0.7	574051.42	117.12	29.5	120.4	
Tb	159	No Gas	8819041.47	3.5	6821698.44	129.28	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3409496.17	0.7	2982140.2	114.33	29.5	120.4	
Bi	209	No Gas	4475420.57	3.4	3547037.46	126.17	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6059-001

File Name 110SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 8:58:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.112	ppb	31.8	80.00	100	
11	B	6	No Gas	982.716	ppb	4.8	178814.09	1000	
23	Na	45	He	512683.389	ppb	0.8	12414285.41	200000	
24	Mg	45	He	62661.313	ppb	0.6	844258.19	200000	
27	Al	45	He	13.336	ppb	24.4	97.78	200000	
28	Si	45	H2	8632.099	ppb	1.2	89448.25	10000	
39	K	45	He	930.773	ppb	3.0	25052.34	200000	
40	Ca	45	H2	335470.702	ppb	1.5	30664849.54	200000	
51	V	89	He	3.557	ppb	11.6	851.17	1000	
52	Cr	89	He	1.446	ppb	1.7	407.93	2000	
55	Mn	89	He	1333.937	ppb	1.6	143485.44	2000	
56	Fe	89	H2	9124.134	ppb	1.5	3204709.60	100000	
59	Co	89	He	0.196	ppb	58.0	100.01	1000	
60	Ni	89	He	-0.330	ppb	N/A	358.91	1000	
63	Cu	89	He	1.198	ppb	25.4	511.14	2000	
66	Zn	89	He	6.331	ppb	12.6	320.01	2000	
75	As	89	He	0.446	ppb	33.2	18.33	1000	
78	Se	89	H2	0.461	ppb	67.5	8.00	1000	
88	Sr	89	He	3559.167	ppb	0.2	606716.56	2000	
95	Mo	89	He	0.606	ppb	16.3	123.34	1000	
107	Ag	89	He	0.143	ppb	35.6	108.89	100	
111	Cd	89	He	0.053	ppb	53.0	4.82	1000	
118	Sn	159	He	0.976	ppb	4.1	236.68	1000	
121	Sb	159	No Gas	0.119	ppb	14.9	203.56	1000	
137	Ba	159	No Gas	74.191	ppb	6.5	41722.01	2000	
182	W	159	No Gas	-0.023	ppb	N/A	56.73	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	0.236	ppb	12.2	954.41	2000	
232	Th	209	No Gas	0.029	ppb	53.4	210.24	1000	
238	U	209	No Gas	1.860	ppb	5.4	5410.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1902602.04	2.5	1483357.64	128.26	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4144846.52	3.1	3141192.51	131.95	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	501195.08	1.6	418309.46	119.81	29.5	120.4	
Sc	45	He	103987.69	0.5	85440.95	121.71	29.5	120.4	6020/DoD
Ge	72	No Gas	889483.93	2.8	694668.88	128.04	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	179859.97	1.8	157206.79	114.41	29.5	120.4	
Ge	72	He	76582.51	0.8	64721.85	118.33	29.5	120.4	
Y	89	H2	3079957.14	1.3	2572670.23	119.72	29.5	120.4	
Y	89	He	658875.05	0.7	574051.42	114.78	29.5	120.4	
Tb	159	No Gas	8714165.36	2.5	6821698.44	127.74	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3377080.92	0.3	2982140.2	113.24	29.5	120.4	
Bi	209	No Gas	4300445.35	3.0	3547037.46	121.24	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6059-001L

File Name 111SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:00:44 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.390	ppb	68.0	73.34	100	
11	B	6	No Gas	1043.421	ppb	5.8	41092.66	1000	
23	Na	45	He	557044.255	ppb	0.4	2764698.71	200000	
24	Mg	45	He	63213.482	ppb	0.6	174649.45	200000	
27	Al	45	He	28.295	ppb	48.8	56.67	200000	
28	Si	45	H2	8996.176	ppb	0.8	19916.10	10000	
39	K	45	He	983.420	ppb	7.7	16143.59	200000	
40	Ca	45	H2	344469.195	ppb	1.0	6566651.50	200000	
51	V	89	He	6.660	ppb	15.7	455.58	1000	
52	Cr	89	He	1.145	ppb	26.2	137.31	2000	
55	Mn	89	He	1387.444	ppb	1.7	30721.03	2000	
56	Fe	89	H2	9740.328	ppb	1.3	716144.95	100000	
59	Co	89	He	0.404	ppb	32.7	57.78	1000	
60	Ni	89	He	-10.257	ppb	N/A	187.79	1000	
63	Cu	89	He	1.799	ppb	8.1	274.46	2000	
66	Zn	89	He	10.052	ppb	28.8	156.67	2000	
75	As	89	He	1.210	ppb	14.1	12.00	1000	
78	Se	89	H2	0.992	ppb	60.8	3.67	1000	
88	Sr	89	He	3654.863	ppb	1.2	128146.08	2000	
95	Mo	89	He	0.981	ppb	22.1	50.00	1000	
107	Ag	89	He	0.322	ppb	9.0	61.12	100	
111	Cd	89	He	0.062	ppb	163.9	1.48	1000	
118	Sn	159	He	0.732	ppb	17.4	91.11	1000	
121	Sb	159	No Gas	0.121	ppb	52.4	70.08	1000	
137	Ba	159	No Gas	76.379	ppb	6.6	8809.40	2000	
182	W	159	No Gas	-0.275	ppb	N/A	23.36	1000	
205	Tl	209	No Gas	-0.122	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	0.496	ppb	19.7	567.31	2000	
232	Th	209	No Gas	-0.007	ppb	N/A	123.47	1000	
238	U	209	No Gas	1.947	ppb	7.4	1198.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1983063.08	2.9	1483357.64	133.69	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4298068.80	4.0	3141192.51	136.83	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	522497.54	1.4	418309.46	124.91	29.5	120.4	6020/DoD
Sc	45	He	106245.27	0.5	85440.95	124.35	29.5	120.4	6020/DoD
Ge	72	No Gas	930818.96	3.2	694668.88	133.99	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	191023.20	2.4	157206.79	121.51	29.5	120.4	6020/DoD
Ge	72	He	79470.31	0.9	64721.85	122.79	29.5	120.4	6020/DoD
Y	89	H2	3195386.81	1.5	2572670.23	124.21	29.5	120.4	6020/DoD
Y	89	He	677614.31	1.2	574051.42	118.04	29.5	120.4	
Tb	159	No Gas	8926936.81	4.0	6821698.44	130.86	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3416897.52	0.6	2982140.2	114.58	29.5	120.4	
Bi	209	No Gas	4517946.12	4.4	3547037.46	127.37	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6059-001A

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:03:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.462	ppb	4.4	3058.21	100	
11	B	6	No Gas	1195.805	ppb	3.4	221207.91	1000	
23	Na	45	He	513541.297	ppb	1.8	12459060.08	200000	
24	Mg	45	He	62450.310	ppb	2.1	843019.52	200000	
27	Al	45	He	982.904	ppb	2.1	5440.10	200000	
28	Si	45	H2	13488.568	ppb	0.7	140619.28	10000	
39	K	45	He	10990.855	ppb	1.5	152162.77	200000	
40	Ca	45	H2	332928.637	ppb	0.4	30689242.32	200000	
51	V	89	He	57.788	ppb	2.8	10825.60	1000	
52	Cr	89	He	55.239	ppb	1.1	12578.65	2000	
55	Mn	89	He	1328.223	ppb	0.2	143329.81	2000	
56	Fe	89	H2	10044.685	ppb	0.3	3560172.76	100000	
59	Co	89	He	11.173	ppb	3.7	4280.97	1000	
60	Ni	89	He	21.119	ppb	4.6	2564.77	1000	
63	Cu	89	He	31.705	ppb	1.4	9441.28	2000	
66	Zn	89	He	111.812	ppb	1.6	4435.31	2000	
75	As	89	He	53.817	ppb	3.2	1756.64	1000	
78	Se	89	H2	52.551	ppb	2.3	894.32	1000	
88	Sr	89	He	3528.157	ppb	0.4	603316.79	2000	
95	Mo	89	He	53.647	ppb	0.8	9830.54	1000	
107	Ag	89	He	10.414	ppb	1.5	6551.81	100	
111	Cd	89	He	10.955	ppb	4.2	905.60	1000	
118	Sn	159	He	52.367	ppb	4.4	9333.55	1000	
121	Sb	159	No Gas	11.147	ppb	4.8	15666.74	1000	
137	Ba	159	No Gas	96.037	ppb	4.1	53249.39	2000	
182	W	159	No Gas	51.700	ppb	5.7	54025.83	1000	
205	Tl	209	No Gas	10.657	ppb	5.5	23066.90	1000	
208	Pb	209	No Gas	10.834	ppb	6.0	32398.71	2000	
232	Th	209	No Gas	10.924	ppb	5.1	33468.59	1000	
238	U	209	No Gas	12.744	ppb	5.2	36356.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1936767.74	1.2	1483357.64	130.57	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4146126.40	1.4	3141192.51	131.99	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	505347.45	0.2	418309.46	120.81	29.5	120.4	6020/DoD
Sc	45	He	104202.48	1.3	85440.95	121.96	29.5	120.4	6020/DoD
Ge	72	No Gas	895025.82	1.6	694668.88	128.84	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	178516.51	0.5	157206.79	113.56	29.5	120.4	
Ge	72	He	76996.87	0.5	64721.85	118.97	29.5	120.4	
Y	89	H2	3108334.29	0.3	2572670.23	120.82	29.5	120.4	6020/DoD
Y	89	He	660943.51	0.4	574051.42	115.14	29.5	120.4	
Tb	159	No Gas	8586417.44	1.2	6821698.44	125.87	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3383370.96	0.6	2982140.2	113.45	29.5	120.4	
Bi	209	No Gas	4220007.98	1.8	3547037.46	118.97	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	113_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:06:05 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.381	ppb	5.7	34045.27	25	93.52	89.8	110.2	
11	B	6	No Gas	27.485	ppb	5.8	27400.05	25	109.94	89.8	110.2	
23	Na	45	He	6082.594	ppb	1.6	750771.93	5000	121.65	89.8	110.2	> +/- 10%
24	Mg	45	He	5016.511	ppb	1.5	340418.68	5000	100.33	89.8	110.2	
27	Al	45	He	467.183	ppb	2.6	12947.41	500	93.44	89.8	110.2	
28	Si	45	H2	446.014	ppb	0.3	24050.36	500	89.2	89.8	110.2	> +/- 10%
39	K	45	He	4866.995	ppb	1.2	321980.52	5000	97.34	89.8	110.2	
40	Ca	45	H2	4969.808	ppb	1.4	2322103.28	5000	99.4	89.8	110.2	
51	V	89	He	26.264	ppb	0.4	24547.59	25	105.06	89.8	110.2	
52	Cr	89	He	25.655	ppb	0.8	29344.96	25	102.62	89.8	110.2	
55	Mn	89	He	25.546	ppb	1.0	13927.01	25	102.18	89.8	110.2	
56	Fe	89	H2	5035.276	ppb	1.2	9039116.19	5000	100.71	89.8	110.2	
59	Co	89	He	26.187	ppb	1.5	50314.96	25	104.75	89.8	110.2	
60	Ni	89	He	25.518	ppb	1.0	13622.62	25	102.07	89.8	110.2	
63	Cu	89	He	25.601	ppb	0.7	37939.00	25	102.4	89.8	110.2	
66	Zn	89	He	25.881	ppb	2.0	5164.48	25	103.52	89.8	110.2	
75	As	89	He	25.237	ppb	0.6	4148.08	25	100.95	89.8	110.2	
78	Se	89	H2	24.743	ppb	1.0	2135.40	25	98.97	89.8	110.2	
88	Sr	89	He	24.198	ppb	0.4	20869.75	25	96.79	89.8	110.2	
95	Mo	89	He	24.972	ppb	1.7	23052.32	25	99.89	89.8	110.2	
107	Ag	89	He	24.883	ppb	1.5	78717.03	25	99.53	89.8	110.2	
111	Cd	89	He	23.953	ppb	0.3	9979.69	25	95.81	89.8	110.2	
118	Sn	159	He	24.922	ppb	0.5	22299.11	25	99.69	89.8	110.2	
121	Sb	159	No Gas	23.974	ppb	7.3	173376.85	25	95.9	89.8	110.2	
137	Ba	159	No Gas	24.120	ppb	8.3	68924.69	25	96.48	89.8	110.2	
182	W	159	No Gas	23.300	ppb	8.5	125400.57	25	93.2	89.8	110.2	
205	Tl	209	No Gas	24.274	ppb	7.7	277538.85	25	97.1	89.8	110.2	
208	Pb	209	No Gas	24.195	ppb	7.8	381635.06	25	96.78	89.8	110.2	
232	Th	209	No Gas	23.371	ppb	9.1	378806.72	25	93.48	89.8	110.2	
238	U	209	No Gas	23.801	ppb	7.9	360419.09	25	95.2	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1960340.24	3.4	1483357.64	132.16	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4234344.30	4.2	3141192.51	134.8	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	512025.27	0.8	418309.46	122.4	29.5	120.4	6020/DoD
Sc	45	He	104616.68	1.1	85440.95	122.44	29.5	120.4	6020/DoD
Ge	72	No Gas	910686.69	3.7	694668.88	131.1	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	183779.66	1.2	157206.79	116.9	29.5	120.4	
Ge	72	He	77360.90	0.5	64721.85	119.53	29.5	120.4	
Y	89	H2	3152994.34	0.9	2572670.23	122.56	29.5	120.4	6020/DoD
Y	89	He	666452.26	0.3	574051.42	116.1	29.5	120.4	
Tb	159	No Gas	8866346.26	3.8	6821698.44	129.97	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3410216.27	0.2	2982140.2	114.35	29.5	120.4	
Bi	209	No Gas	4488576.60	4.4	3547037.46	126.54	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	114_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:08:41 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.079	ppb	58.6	164.45	0.2	
11	B	6	No Gas	2.028	ppb	6.3	3781.73	4	Failed DoD
23	Na	45	He	829.802	ppb	1.3	113562.26	200	Fail All Methods□ Failed DoD
24	Mg	45	He	2.473	ppb	25.4	937.88	20	
27	Al	45	He	0.296	ppb	78.4	33.33	20	
28	Si	45	H2	2.377	ppb	135.7	717.50	100	
39	K	45	He	-1.600	ppb	N/A	13537.07	200	
40	Ca	45	H2	6.863	ppb	32.9	4558.69	20	
51	V	89	He	0.092	ppb	71.4	292.24	1	
52	Cr	89	He	0.000	ppb	N/A	83.99	1	
55	Mn	89	He	0.021	ppb	124.4	43.99	0.4	
56	Fe	89	H2	0.082	ppb	487.1	8024.55	20	
59	Co	89	He	0.010	ppb	1.2	46.67	0.2	
60	Ni	89	He	-0.491	ppb	N/A	145.56	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.023	ppb	45.2	202.23	0.6	
66	Zn	89	He	0.018	ppb	478.0	80.00	2	
75	As	89	He	0.016	ppb	55.0	6.67	1	
78	Se	89	H2	0.063	ppb	18.7	5.67	1	
88	Sr	89	He	0.044	ppb	44.4	46.67	1	
95	Mo	89	He	0.054	ppb	28.6	64.45	1	
107	Ag	89	He	0.012	ppb	30.0	60.00	0.2	
111	Cd	89	He	0.003	ppb	46.0	1.85	0.2	
118	Sn	159	He	0.042	ppb	31.1	103.34	1	
121	Sb	159	No Gas	0.036	ppb	25.6	293.67	0.2	
137	Ba	159	No Gas	0.036	ppb	51.2	120.14	0.4	
182	W	159	No Gas	0.050	ppb	59.5	347.06	1	
205	Tl	209	No Gas	0.031	ppb	60.3	497.24	0.2	
208	Pb	209	No Gas	0.038	ppb	41.6	847.61	0.2	
232	Th	209	No Gas	0.128	ppb	13.4	2199.32	1	
238	U	209	No Gas	0.052	ppb	75.7	794.26	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1952440.51	1.2	1483357.64	131.62	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4169181.43	0.6	3141192.51	132.73	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	512767.46	1.3	418309.46	122.58	29.5	120.4	6020/DoD
Sc	45	He	106479.35	0.4	85440.95	124.62	29.5	120.4	6020/DoD
Ge	72	No Gas	905743.51	0.6	694668.88	130.38	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	186199.96	2.1	157206.79	118.44	29.5	120.4	
Ge	72	He	79239.47	0.9	64721.85	122.43	29.5	120.4	6020/DoD
Y	89	H2	3152353.02	1.0	2572670.23	122.53	29.5	120.4	6020/DoD
Y	89	He	679953.90	0.5	574051.42	118.45	29.5	120.4	
Tb	159	No Gas	8785013.97	0.6	6821698.44	128.78	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3435434.88	0.2	2982140.2	115.2	29.5	120.4	
Bi	209	No Gas	4458555.27	1.1	3547037.46	125.7	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6059-001S

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:11:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.928	ppb	8.0	13663.50	100	
11	B	6	No Gas	1424.363	ppb	5.9	265444.93	1000	
23	Na	45	He	512313.463	ppb	0.8	12465485.46	200000	
24	Mg	45	He	67696.166	ppb	1.0	916443.94	200000	
27	Al	45	He	1867.298	ppb	1.4	10341.86	200000	
28	Si	45	H2	9643.400	ppb	0.5	101588.55	10000	
39	K	45	He	10885.434	ppb	0.7	151271.96	200000	
40	Ca	45	H2	337153.250	ppb	0.7	31352169.53	200000	
51	V	89	He	543.340	ppb	1.4	100738.96	1000	
52	Cr	89	He	213.666	ppb	0.9	48731.15	2000	
55	Mn	89	He	1839.524	ppb	0.9	199767.20	2000	
56	Fe	89	H2	10139.795	ppb	0.6	3609616.86	100000	
59	Co	89	He	529.061	ppb	1.0	202830.54	1000	
60	Ni	89	He	523.167	ppb	1.9	54516.91	1000	
63	Cu	89	He	257.419	ppb	0.8	75987.94	2000	
66	Zn	89	He	524.097	ppb	1.1	20648.15	2000	
75	As	89	He	106.187	ppb	0.2	3484.83	1000	
78	Se	89	H2	104.202	ppb	1.9	1780.87	1000	
88	Sr	89	He	3983.045	ppb	0.7	685480.33	2000	
95	Mo	89	He	106.963	ppb	1.6	19713.73	1000	
107	Ag	89	He	49.714	ppb	0.6	31406.00	100	
111	Cd	89	He	245.654	ppb	0.9	20429.57	1000	
118	Sn	159	He	518.902	ppb	0.5	92144.03	1000	
121	Sb	159	No Gas	98.986	ppb	5.7	140104.14	1000	
137	Ba	159	No Gas	1933.387	ppb	7.4	1081162.96	2000	
182	W	159	No Gas	99.380	ppb	6.7	104708.98	1000	
205	Tl	209	No Gas	100.681	ppb	7.5	219617.22	1000	
208	Pb	209	No Gas	99.880	ppb	7.6	300584.19	2000	
232	Th	209	No Gas	99.712	ppb	8.5	308415.46	1000	
238	U	209	No Gas	100.969	ppb	9.1	291632.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1954081.03	1.2	1483357.64	131.73	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4149262.81	1.2	3141192.51	132.09	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	509808.76	0.7	418309.46	121.87	29.5	120.4	6020/DoD
Sc	45	He	104494.95	0.9	85440.95	122.3	29.5	120.4	6020/DoD
Ge	72	No Gas	896657.43	1.8	694668.88	129.08	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	181938.61	1.4	157206.79	115.73	29.5	120.4	
Ge	72	He	77247.21	1.2	64721.85	119.35	29.5	120.4	
Y	89	H2	3122097.95	0.6	2572670.23	121.36	29.5	120.4	6020/DoD
Y	89	He	665217.48	1.1	574051.42	115.88	29.5	120.4	
Tb	159	No Gas	8663523.13	1.2	6821698.44	127	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3391506.86	1.0	2982140.2	113.73	29.5	120.4	
Bi	209	No Gas	4276250.21	2.2	3547037.46	120.56	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6059-001P

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:13:53 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.714	ppb	8.0	13969.43	100	
11	B	6	No Gas	1442.783	ppb	9.0	270284.49	1000	
23	Na	45	He	520202.614	ppb	0.8	12578693.35	200000	
24	Mg	45	He	68601.279	ppb	0.7	922937.19	200000	
27	Al	45	He	1999.987	ppb	3.0	11007.91	200000	
28	Si	45	H2	9752.372	ppb	1.4	101586.23	10000	
39	K	45	He	11294.117	ppb	0.4	155470.82	200000	
40	Ca	45	H2	339004.271	ppb	1.3	31171051.20	200000	
51	V	89	He	568.070	ppb	0.8	104105.54	1000	
52	Cr	89	He	221.857	ppb	1.1	50014.12	2000	
55	Mn	89	He	1891.381	ppb	0.1	203027.61	2000	
56	Fe	89	H2	10255.940	ppb	0.9	3618645.81	100000	
59	Co	89	He	552.424	ppb	0.5	209350.55	1000	
60	Ni	89	He	549.187	ppb	1.0	56554.01	1000	
63	Cu	89	He	266.770	ppb	0.4	77833.50	2000	
66	Zn	89	He	534.001	ppb	0.7	20793.98	2000	
75	As	89	He	111.688	ppb	1.4	3622.54	1000	
78	Se	89	H2	104.181	ppb	2.8	1765.03	1000	
88	Sr	89	He	4082.649	ppb	0.3	694523.01	2000	
95	Mo	89	He	110.985	ppb	1.5	20217.88	1000	
107	Ag	89	He	51.701	ppb	0.9	32281.39	100	
111	Cd	89	He	255.470	ppb	0.6	21000.79	1000	
118	Sn	159	He	535.219	ppb	1.2	94635.51	1000	
121	Sb	159	No Gas	100.016	ppb	10.0	143375.82	1000	
137	Ba	159	No Gas	1959.881	ppb	10.1	1110121.60	2000	
182	W	159	No Gas	100.890	ppb	10.9	107650.18	1000	
205	Tl	209	No Gas	102.648	ppb	10.1	225366.77	1000	
208	Pb	209	No Gas	101.698	ppb	9.9	308090.59	2000	
232	Th	209	No Gas	102.589	ppb	11.3	319355.38	1000	
238	U	209	No Gas	102.688	ppb	10.2	298625.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1967030.45	2.9	1483357.64	132.61	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4195278.41	3.5	3141192.51	133.56	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	504118.16	1.2	418309.46	120.51	29.5	120.4	6020/DoD
Sc	45	He	103844.46	0.8	85440.95	121.54	29.5	120.4	6020/DoD
Ge	72	No Gas	908942.31	3.3	694668.88	130.85	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	179576.69	1.5	157206.79	114.23	29.5	120.4	
Ge	72	He	76960.88	1.2	64721.85	118.91	29.5	120.4	
Y	89	H2	3094631.35	1.0	2572670.23	120.29	29.5	120.4	
Y	89	He	657512.69	0.8	574051.42	114.54	29.5	120.4	
Tb	159	No Gas	8788887.16	3.2	6821698.44	128.84	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3376981.10	0.3	2982140.2	113.24	29.5	120.4	
Bi	209	No Gas	4310171.27	3.8	3547037.46	121.51	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6059-002

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:16:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.255	ppb	35.7	123.34	100	
11	B	6	No Gas	980.275	ppb	8.6	182085.08	1000	
23	Na	45	He	515448.320	ppb	0.5	12473200.16	200000	
24	Mg	45	He	63749.281	ppb	0.5	858353.20	200000	
27	Al	45	He	68.776	ppb	15.5	402.24	200000	
28	Si	45	H2	8583.982	ppb	1.2	90512.52	10000	
39	K	45	He	879.736	ppb	3.7	24394.76	200000	
40	Ca	45	H2	334473.830	ppb	1.3	31110552.04	200000	
51	V	89	He	3.937	ppb	10.0	920.07	1000	
52	Cr	89	He	1.571	ppb	8.6	435.93	2000	
55	Mn	89	He	1349.118	ppb	0.3	145059.05	2000	
56	Fe	89	H2	9320.850	ppb	1.8	3318000.91	100000	
59	Co	89	He	0.290	ppb	33.0	135.57	1000	
60	Ni	89	He	-0.838	ppb	N/A	306.68	1000	
63	Cu	89	He	1.282	ppb	4.8	535.59	2000	
66	Zn	89	He	4.788	ppb	26.5	260.01	2000	
75	As	89	He	0.519	ppb	41.8	20.67	1000	
78	Se	89	H2	0.524	ppb	23.1	9.17	1000	
88	Sr	89	He	3582.342	ppb	0.1	610376.71	2000	
95	Mo	89	He	0.655	ppb	29.5	132.23	1000	
107	Ag	89	He	0.110	ppb	21.7	87.78	100	
111	Cd	89	He	0.071	ppb	61.0	6.30	1000	
118	Sn	159	He	1.237	ppb	13.1	283.35	1000	
121	Sb	159	No Gas	0.234	ppb	33.4	370.42	1000	
137	Ba	159	No Gas	75.482	ppb	8.1	43027.33	2000	
182	W	159	No Gas	0.199	ppb	28.8	297.00	1000	
205	Tl	209	No Gas	0.097	ppb	55.7	353.74	1000	
208	Pb	209	No Gas	0.127	ppb	14.9	630.71	2000	
232	Th	209	No Gas	0.804	ppb	21.9	2673.32	1000	
238	U	209	No Gas	1.819	ppb	7.5	5353.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1944708.25	3.7	1483357.64	131.1	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4215581.32	3.8	3141192.51	134.2	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	509928.53	1.0	418309.46	121.9	29.5	120.4	6020/DoD
Sc	45	He	103919.53	0.2	85440.95	121.63	29.5	120.4	6020/DoD
Ge	72	No Gas	908783.15	3.6	694668.88	130.82	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	181680.28	0.6	157206.79	115.57	29.5	120.4	
Ge	72	He	76627.95	0.2	64721.85	118.4	29.5	120.4	
Y	89	H2	3121519.35	1.0	2572670.23	121.33	29.5	120.4	6020/DoD
Y	89	He	658556.90	0.3	574051.42	114.72	29.5	120.4	
Tb	159	No Gas	8841662.71	3.8	6821698.44	129.61	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3385378.73	0.1	2982140.2	113.52	29.5	120.4	
Bi	209	No Gas	4354676.92	4.3	3547037.46	122.77	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6059-003

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:19:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.074	ppb	87.6	73.34	100	
11	B	6	No Gas	439.480	ppb	10.3	85654.76	1000	
23	Na	45	He	135940.946	ppb	1.3	3324191.94	200000	
24	Mg	45	He	19604.050	ppb	1.4	266626.88	200000	
27	Al	45	He	11.005	ppb	10.8	85.56	200000	
28	Si	45	H2	8534.885	ppb	0.9	90357.98	10000	
39	K	45	He	560.620	ppb	4.4	20540.56	200000	
40	Ca	45	H2	76863.500	ppb	0.0	7178544.96	200000	
51	V	89	He	4.621	ppb	5.2	1058.97	1000	
52	Cr	89	He	0.358	ppb	14.7	164.64	2000	
55	Mn	89	He	713.250	ppb	0.7	77689.87	2000	
56	Fe	89	H2	3164.729	ppb	0.1	1149473.85	100000	
59	Co	89	He	0.135	ppb	64.8	77.79	1000	
60	Ni	89	He	-2.097	ppb	N/A	180.01	1000	
63	Cu	89	He	1.018	ppb	6.8	464.47	2000	
66	Zn	89	He	4.843	ppb	8.7	265.57	2000	
75	As	89	He	3.432	ppb	2.3	116.68	1000	
78	Se	89	H2	0.296	ppb	71.1	5.33	1000	
88	Sr	89	He	660.608	ppb	0.3	114010.50	2000	
95	Mo	89	He	2.728	ppb	1.6	516.69	1000	
107	Ag	89	He	0.099	ppb	26.9	82.22	100	
111	Cd	89	He	0.048	ppb	48.2	4.45	1000	
118	Sn	159	He	1.048	ppb	9.2	251.12	1000	
121	Sb	159	No Gas	0.046	ppb	25.9	103.45	1000	
137	Ba	159	No Gas	14.176	ppb	6.6	8265.09	2000	
182	W	159	No Gas	-0.040	ppb	N/A	40.05	1000	
205	Tl	209	No Gas	-0.029	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	0.071	ppb	36.8	477.21	2000	
232	Th	209	No Gas	0.086	ppb	33.8	407.13	1000	
238	U	209	No Gas	0.214	ppb	25.3	657.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2014904.95	3.3	1483357.64	135.83	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4311950.18	3.9	3141192.51	137.27	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	511928.99	0.9	418309.46	122.38	29.5	120.4	6020/DoD
Sc	45	He	104775.60	1.2	85440.95	122.63	29.5	120.4	6020/DoD
Ge	72	No Gas	929864.38	2.3	694668.88	133.86	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	185210.40	2.2	157206.79	117.81	29.5	120.4	
Ge	72	He	77809.15	0.1	64721.85	120.22	29.5	120.4	
Y	89	H2	3170305.74	0.6	2572670.23	123.23	29.5	120.4	6020/DoD
Y	89	He	667023.13	0.3	574051.42	116.2	29.5	120.4	
Tb	159	No Gas	9023583.96	3.6	6821698.44	132.28	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3400337.14	0.3	2982140.2	114.02	29.5	120.4	
Bi	209	No Gas	4510552.37	3.7	3547037.46	127.16	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-001

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:21:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.082	ppb	16.5	75.56	100	
11	B	6	No Gas	226.739	ppb	5.5	44941.83	1000	
23	Na	45	He	44955.614	ppb	4.8	1077727.24	200000	
24	Mg	45	He	19471.648	ppb	5.8	257899.00	200000	
27	Al	45	He	45.260	ppb	14.1	267.79	200000	
28	Si	45	H2	5658.539	ppb	2.0	59764.66	10000	
39	K	45	He	13820.280	ppb	6.6	183958.30	200000	
40	Ca	45	H2	115261.704	ppb	0.8	10704027.20	200000	
51	V	89	He	5.013	ppb	12.5	1103.41	1000	
52	Cr	89	He	1.223	ppb	18.6	352.61	2000	
55	Mn	89	He	180.351	ppb	7.1	19190.20	2000	
56	Fe	89	H2	523.310	ppb	1.0	195389.99	100000	
59	Co	89	He	0.491	ppb	22.7	208.91	1000	
60	Ni	89	He	5.038	ppb	4.8	898.95	1000	
63	Cu	89	He	19.403	ppb	7.3	5751.39	2000	
66	Zn	89	He	140.107	ppb	6.0	5455.70	2000	
75	As	89	He	2.249	ppb	25.7	76.01	1000	
78	Se	89	H2	0.220	ppb	13.5	4.00	1000	
88	Sr	89	He	507.969	ppb	5.4	85574.16	2000	
95	Mo	89	He	2.396	ppb	8.4	444.47	1000	
107	Ag	89	He	0.208	ppb	3.4	147.78	100	
111	Cd	89	He	0.921	ppb	3.2	75.56	1000	
118	Sn	159	He	1.329	ppb	13.6	294.46	1000	
121	Sb	159	No Gas	0.324	ppb	12.3	513.92	1000	
137	Ba	159	No Gas	343.046	ppb	6.7	200090.61	2000	
182	W	159	No Gas	-0.007	ppb	N/A	76.75	1000	
205	Tl	209	No Gas	-0.020	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	1.116	ppb	4.6	3784.50	2000	
232	Th	209	No Gas	0.066	ppb	16.0	343.73	1000	
238	U	209	No Gas	2.087	ppb	10.9	6348.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2003572.56	3.0	1483357.64	135.07	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4305338.73	3.5	3141192.51	137.06	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	509093.63	0.7	418309.46	121.7	29.5	120.4	6020/DoD
Sc	45	He	102189.69	4.3	85440.95	119.6	29.5	120.4	
Ge	72	No Gas	931834.92	1.8	694668.88	134.14	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	184386.25	0.9	157206.79	117.29	29.5	120.4	
Ge	72	He	76163.72	2.6	64721.85	117.68	29.5	120.4	
Y	89	H2	3149513.65	0.8	2572670.23	122.42	29.5	120.4	6020/DoD
Y	89	He	651884.07	3.5	574051.42	113.56	29.5	120.4	
Tb	159	No Gas	9045281.11	3.4	6821698.44	132.6	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3331615.89	3.0	2982140.2	111.72	29.5	120.4	
Bi	209	No Gas	4504883.42	3.6	3547037.46	127	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG24IMW1
File Name	120_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:24:24 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.003	ppb	N/A	46.67	0.1	
B	11	6	No Gas	1.540	ppb	6.0	3381.62	2	
Na	23	45	He	543.385	ppb	1.9	77481.47	100	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Mg	24	45	He	6.291	ppb	18.6	1191.25	10	
Al	27	45	He	5.729	ppb	27.5	184.45	10	
Si	28	45	H2	-0.191	ppb	N/A	597.36	50	
K	39	45	He	2.696	ppb	170.8	13707.10	100	
Ca	40	45	H2	10.114	ppb	4.3	6237.15	10	200.8 PB Fails DoD
V	51	89	He	0.490	ppb	2.1	665.60	0.5	
Cr	52	89	He	0.027	ppb	52.0	115.31	0.5	
Mn	55	89	He	0.291	ppb	9.7	193.30	0.2	200.8 PB Fails DoD
Fe	56	89	H2	-1.297	ppb	N/A	5677.48	10	
Co	59	89	He	0.006	ppb	89.5	37.78	0.1	
Ni	60	89	He	-0.458	ppb	N/A	162.23	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Cu	63	89	He	0.087	ppb	38.1	296.68	0.3	
Zn	66	89	He	0.549	ppb	36.9	185.57	1	
As	75	89	He	0.022	ppb	66.2	7.67	0.5	
Se	78	89	H2	0.022	ppb	29.6	2.17	0.5	
Sr	88	89	He	0.090	ppb	29.7	86.67	0.5	
Mo	95	89	He	0.013	ppb	54.4	25.55	0.5	
Ag	107	89	He	0.008	ppb	27.5	44.45	0.1	
Cd	111	89	He	0.003	ppb	45.3	1.85	0.1	
Sn	118	159	He	0.087	ppb	44.9	143.34	0.5	
Sb	121	159	No Gas	0.004	ppb	116.9	63.40	0.1	
Ba	137	159	No Gas	0.067	ppb	40.3	213.58	0.2	
W	182	159	No Gas	-0.006	ppb	N/A	50.06	0.5	
Tl	205	209	No Gas	-0.007	ppb	N/A	60.07	0.1	
[Pb]	206	209	No Gas	0.010	ppb	44.8	93.44	0.1	
[Pb]	207	209	No Gas	0.004	ppb	424.2	90.10	0.1	
Pb	208	209	No Gas	0.009	ppb	29.0	403.79	0.1	
Th	232	209	No Gas	0.005	ppb	69.7	206.90	0.5	
U	238	209	No Gas	0.000	ppb	N/A	6.67	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1982588.43	2.7	1483357.64	133.66	29.5	120.4	6020/DoD EPA
Sc	45	No Gas	4300468.81	3.5	3141192.51	136.91	29.5	120.4	6020/DoD EPA
Sc	45	H2	526016.17	0.7	418309.46	125.75	29.5	120.4	6020/DoD EPA
Sc	45	He	105676.56	1.4	85440.95	123.68	29.5	120.4	6020/DoD
Ge	72	No Gas	922505.55	2.0	694668.88	132.8	29.5	120.4	6020/DoD EPA
Ge	72	H2	186904.88	0.6	157206.79	118.89	29.5	120.4	
Ge	72	He	79135.48	1.0	64721.85	122.27	29.5	120.4	6020/DoD
Y	89	H2	3221406.29	0.2	2572670.23	125.22	29.5	120.4	6020/DoD
Y	89	He	677137.07	0.6	574051.42	117.96	29.5	120.4	
Tb	159	No Gas	8997015.84	3.8	6821698.44	131.89	29.5	120.4	6020/DoD EPA
Tb	159	He	3431249.25	0.8	2982140.2	115.06	29.5	120.4	
Bi	209	No Gas	4587978.49	3.7	3547037.46	129.35	29.5	120.4	6020/DoD EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW1
File Name	121_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:27:08 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High
Be	9	6	No Gas	50.227	ppb	6.4	15166.21	50	20.09	79.5	120.4
B	11	6	No Gas	506.173	ppb	6.0	99120.15	500	20.25	79.5	120.4
Na	23	45	He	10293.627	ppb	0.8	269408.91	7500	27.45	79.5	120.4
Mg	24	45	He	5512.496	ppb	1.0	77796.60	5000	22.05	79.5	120.4
Al	27	45	He	1933.695	ppb	1.6	11061.27	2000	19.34	79.5	120.4
Si	28	45	H2	1000.080	ppb	9.2	11714.56	1000	20	79.5	120.4
K	39	45	He	10426.270	ppb	0.7	150231.00	10000	20.85	79.5	120.4
Ca	40	45	H2	2631.139	ppb	6.5	260685.84	2500	21.05	79.5	120.4
V	51	89	He	554.419	ppb	0.3	105480.60	500	22.18	79.5	120.4
Cr	52	89	He	222.690	ppb	0.6	52111.19	200	22.27	79.5	120.4
Mn	55	89	He	559.843	ppb	0.6	62407.57	500	22.39	79.5	120.4
Fe	56	89	H2	1076.827	ppb	7.2	414425.60	1000	21.54	79.5	120.4
Co	59	89	He	565.217	ppb	0.6	222353.39	500	22.61	79.5	120.4
Ni	60	89	He	566.417	ppb	1.3	60534.81	500	22.66	79.5	120.4
Cu	63	89	He	275.267	ppb	1.2	83362.81	250	22.02	79.5	120.4
Zn	66	89	He	555.047	ppb	1.1	22436.52	500	22.2	79.5	120.4
As	75	89	He	110.473	ppb	1.7	3719.58	100	22.1	79.5	120.4
Se	78	89	H2	103.679	ppb	7.3	1881.38	100	20.74	79.5	120.4
Sr	88	89	He	524.389	ppb	0.7	92609.98	500	20.98	79.5	120.4
Mo	95	89	He	107.663	ppb	1.3	20361.32	100	21.53	79.5	120.4
Ag	107	89	He	54.158	ppb	1.0	35105.15	50	21.66	79.5	120.4
Cd	111	89	He	262.005	ppb	1.0	22358.16	250	20.96	79.5	120.4
Sn	118	159	He	535.270	ppb	0.7	96880.20	500	21.41	79.5	120.4
Sb	121	159	No Gas	102.607	ppb	6.8	150500.70	100	20.52	79.5	120.4
Ba	137	159	No Gas	2001.089	ppb	6.8	1159749.81	2000	20.01	79.5	120.4
W	182	159	No Gas	100.166	ppb	5.5	109415.34	100	20.03	79.5	120.4
Tl	205	209	No Gas	104.898	ppb	5.3	243480.18	100	20.98	79.5	120.4
Pb	208	209	No Gas	104.715	ppb	5.5	335319.15	100	20.94	79.5	120.4
Th	232	209	No Gas	98.312	ppb	7.5	323489.90	100	19.66	79.5	120.4
U	238	209	No Gas	100.043	ppb	6.6	307468.30	100	20.01	79.5	120.4

QC Flag

Laboratory Control Sample (LCS) Report

QC Flag
> +/- 20% (6020)□ > +/- 15% (EPA)

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2028099.46	2.5	1483357.64	136.72	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4349310.82	3.4	3141192.51	138.46	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	541663.43	6.2	418309.46	129.49	29.5	120.4	6020/DoD□ EPA
Sc	45	He	107929.99	0.5	85440.95	126.32	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	926809.20	1.9	694668.88	133.42	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	194394.27	3.3	157206.79	123.66	29.5	120.4	6020/DoD
Ge	72	He	80101.35	0.8	64721.85	123.76	29.5	120.4	6020/DoD
Y	89	H2	3323257.41	5.4	2572670.23	129.18	29.5	120.4	6020/DoD□ EPA
Y	89	He	682579.29	0.9	574051.42	118.91	29.5	120.4	
Tb	159	No Gas	8988098.82	3.3	6821698.44	131.76	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3456946.44	0.8	2982140.2	115.92	29.5	120.4	
Bi	209	No Gas	4550508.68	3.1	3547037.46	128.29	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6091-001

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:29:48 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.028	ppb	137.2	88.89	100	
11	B	6	No Gas	8.533	ppb	3.3	9713.58	1000	
23	Na	45	He	12235.310	ppb	0.7	1493050.55	200000	
24	Mg	45	He	3156.148	ppb	1.3	213520.30	200000	
27	Al	45	He	3.033	ppb	31.7	107.78	200000	
28	Si	45	H2	6677.543	ppb	1.9	348443.62	10000	
39	K	45	He	1402.482	ppb	1.1	101875.56	200000	
40	Ca	45	H2	14202.837	ppb	1.7	6570438.37	200000	
51	V	89	He	0.855	ppb	8.5	1001.18	1000	
52	Cr	89	He	0.228	ppb	14.0	345.28	2000	
55	Mn	89	He	3.326	ppb	0.3	1854.46	2000	
56	Fe	89	H2	128.659	ppb	0.6	239326.00	100000	
59	Co	89	He	0.023	ppb	76.1	71.12	1000	
60	Ni	89	He	-0.343	ppb	N/A	221.12	1000	
63	Cu	89	He	42.364	ppb	0.5	63131.89	2000	
66	Zn	89	He	2.615	ppb	9.7	593.37	2000	
75	As	89	He	0.609	ppb	8.8	104.68	1000	
78	Se	89	H2	0.150	ppb	21.2	13.17	1000	
88	Sr	89	He	43.667	ppb	0.8	37928.73	2000	
95	Mo	89	He	1.221	ppb	3.6	1147.87	1000	
107	Ag	89	He	0.012	ppb	23.4	58.89	100	
111	Cd	89	He	0.024	ppb	57.8	10.37	1000	
118	Sn	159	He	0.798	ppb	14.2	781.16	1000	
121	Sb	159	No Gas	0.037	ppb	26.4	307.01	1000	
137	Ba	159	No Gas	1.844	ppb	3.5	5320.34	2000	
182	W	159	No Gas	0.107	ppb	14.9	664.10	1000	
205	Tl	209	No Gas	0.008	ppb	94.3	233.60	1000	
208	Pb	209	No Gas	0.245	ppb	10.5	4148.27	2000	
232	Th	209	No Gas	0.353	ppb	13.6	5931.44	1000	
238	U	209	No Gas	0.244	ppb	7.2	3744.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1936958.29	2.9	1483357.64	130.58	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4285124.24	3.3	3141192.51	136.42	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	507224.26	1.3	418309.46	121.26	29.5	120.4	6020/DoD
Sc	45	He	104160.11	1.1	85440.95	121.91	29.5	120.4	6020/DoD
Ge	72	No Gas	924427.45	2.7	694668.88	133.07	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	185318.19	0.6	157206.79	117.88	29.5	120.4	
Ge	72	He	78478.13	0.8	64721.85	121.25	29.5	120.4	6020/DoD
Y	89	H2	3161896.81	0.9	2572670.23	122.9	29.5	120.4	6020/DoD
Y	89	He	671327.04	0.6	574051.42	116.95	29.5	120.4	
Tb	159	No Gas	8908679.10	2.4	6821698.44	130.59	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3430068.77	0.5	2982140.2	115.02	29.5	120.4	
Bi	209	No Gas	4530457.28	3.2	3547037.46	127.73	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6091-002

File Name 123SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:32:32 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.061	ppb	20.8	134.45	100	
11	B	6	No Gas	6.726	ppb	6.3	7921.33	1000	
23	Na	45	He	27570.343	ppb	0.8	3308407.19	200000	
24	Mg	45	He	7741.951	ppb	0.6	516028.29	200000	
27	Al	45	He	15.020	ppb	11.8	432.25	200000	
28	Si	45	H2	7854.646	ppb	0.7	411240.72	10000	
39	K	45	He	2026.355	ppb	0.5	139462.29	200000	
40	Ca	45	H2	14644.376	ppb	0.7	6798988.58	200000	
51	V	89	He	0.719	ppb	9.6	864.50	1000	
52	Cr	89	He	0.188	ppb	5.1	295.95	2000	
55	Mn	89	He	742.093	ppb	0.4	401954.38	2000	
56	Fe	89	H2	1787.356	ppb	0.2	3210976.18	100000	
59	Co	89	He	0.185	ppb	0.3	380.03	1000	
60	Ni	89	He	0.140	ppb	33.0	467.80	1000	
63	Cu	89	He	2.678	ppb	5.0	4097.43	2000	
66	Zn	89	He	1644.274	ppb	0.9	322036.30	2000	
75	As	89	He	1.145	ppb	9.6	191.02	1000	
78	Se	89	H2	0.032	ppb	18.2	3.00	1000	
88	Sr	89	He	76.087	ppb	0.8	65323.54	2000	
95	Mo	89	He	1.262	ppb	1.7	1172.32	1000	
107	Ag	89	He	0.008	ppb	23.9	43.33	100	
111	Cd	89	He	0.029	ppb	5.5	12.59	1000	
118	Sn	159	He	0.246	ppb	11.3	284.46	1000	
121	Sb	159	No Gas	0.028	ppb	28.9	236.93	1000	
137	Ba	159	No Gas	12.366	ppb	8.0	35466.65	2000	
182	W	159	No Gas	0.040	ppb	23.4	300.34	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	2.317	ppb	8.5	36515.05	2000	
232	Th	209	No Gas	0.040	ppb	5.8	767.56	1000	
238	U	209	No Gas	0.202	ppb	14.9	3033.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1904915.38	2.5	1483357.64	128.42	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4211007.42	4.2	3141192.51	134.06	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	508973.56	0.2	418309.46	121.67	29.5	120.4	6020/DoD
Sc	45	He	102830.67	0.8	85440.95	120.35	29.5	120.4	
Ge	72	No Gas	916001.93	4.2	694668.88	131.86	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	184480.23	0.9	157206.79	117.35	29.5	120.4	
Ge	72	He	77497.85	1.0	64721.85	119.74	29.5	120.4	
Y	89	H2	3150185.83	0.4	2572670.23	122.45	29.5	120.4	6020/DoD
Y	89	He	663602.55	0.3	574051.42	115.6	29.5	120.4	
Tb	159	No Gas	8897500.28	4.0	6821698.44	130.43	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3417902.31	0.5	2982140.2	114.61	29.5	120.4	
Bi	209	No Gas	4456250.10	3.8	3547037.46	125.63	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6091-003

File Name 124SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:35:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.004	ppb	122.9	53.33	100	
11	B	6	No Gas	18.572	ppb	4.6	18391.09	1000	
23	Na	45	He	60939.973	ppb	0.9	7316774.12	200000	
24	Mg	45	He	651.289	ppb	2.0	44183.81	200000	
27	Al	45	He	10.192	ppb	21.6	302.23	200000	
28	Si	45	H2	7003.333	ppb	1.0	363241.20	10000	
39	K	45	He	614.145	ppb	2.2	51559.30	200000	
40	Ca	45	H2	3837.231	ppb	0.8	1765494.69	200000	
51	V	89	He	0.781	ppb	4.7	916.73	1000	
52	Cr	89	He	0.093	ppb	8.8	187.30	2000	
55	Mn	89	He	8.205	ppb	3.0	4454.57	2000	
56	Fe	89	H2	12.246	ppb	0.6	29371.50	100000	
59	Co	89	He	0.005	ppb	78.5	35.56	1000	
60	Ni	89	He	-0.479	ppb	N/A	147.78	1000	
63	Cu	89	He	0.335	ppb	13.9	652.26	2000	
66	Zn	89	He	11.606	ppb	6.5	2336.95	2000	
75	As	89	He	1.027	ppb	6.2	171.02	1000	
78	Se	89	H2	0.025	ppb	13.3	2.33	1000	
88	Sr	89	He	33.721	ppb	1.1	28823.19	2000	
95	Mo	89	He	2.373	ppb	7.6	2182.48	1000	
107	Ag	89	He	0.005	ppb	60.9	35.56	100	
111	Cd	89	He	0.003	ppb	121.7	1.48	1000	
118	Sn	159	He	0.218	ppb	4.7	257.79	1000	
121	Sb	159	No Gas	0.015	ppb	33.2	143.50	1000	
137	Ba	159	No Gas	0.516	ppb	10.0	1485.08	2000	
182	W	159	No Gas	1.132	ppb	8.6	6151.66	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	46.72	1000	
208	Pb	209	No Gas	0.075	ppb	11.7	1411.62	2000	
232	Th	209	No Gas	0.039	ppb	2.3	750.87	1000	
238	U	209	No Gas	0.345	ppb	9.2	5170.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1883611.79	3.3	1483357.64	126.98	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4176014.10	4.3	3141192.51	132.94	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	504128.24	0.9	418309.46	120.52	29.5	120.4	6020/DoD
Sc	45	He	103067.95	1.6	85440.95	120.63	29.5	120.4	6020/DoD
Ge	72	No Gas	894009.49	2.8	694668.88	128.7	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	182150.39	1.9	157206.79	115.87	29.5	120.4	
Ge	72	He	77264.35	0.7	64721.85	119.38	29.5	120.4	
Y	89	H2	3102498.33	0.5	2572670.23	120.59	29.5	120.4	6020/DoD
Y	89	He	660550.28	0.9	574051.42	115.07	29.5	120.4	
Tb	159	No Gas	8841595.08	4.5	6821698.44	129.61	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3394664.95	0.6	2982140.2	113.83	29.5	120.4	
Bi	209	No Gas	4431329.51	4.4	3547037.46	124.93	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	125_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:37:55 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.030	ppb	5.6	33094.09	25	92.12	89.8	110.2	
11	B	6	No Gas	24.703	ppb	7.1	24490.25	25	98.81	89.8	110.2	
23	Na	45	He	5693.686	ppb	2.6	681109.96	5000	113.87	89.8	110.2	> +/- 10%
24	Mg	45	He	5133.711	ppb	3.4	337243.72	5000	102.67	89.8	110.2	
27	Al	45	He	486.139	ppb	2.9	13041.96	500	97.23	89.8	110.2	
28	Si	45	H2	456.054	ppb	1.9	23846.71	500	91.21	89.8	110.2	
39	K	45	He	4938.550	ppb	2.9	316128.99	5000	98.77	89.8	110.2	
40	Ca	45	H2	5070.192	ppb	1.7	2298500.28	5000	101.4	89.8	110.2	
51	V	89	He	26.614	ppb	4.3	24153.62	25	106.46	89.8	110.2	
52	Cr	89	He	26.356	ppb	3.5	29275.49	25	105.42	89.8	110.2	
55	Mn	89	He	26.402	ppb	3.2	13978.41	25	105.61	89.8	110.2	
56	Fe	89	H2	5119.474	ppb	2.4	9026489.09	5000	102.39	89.8	110.2	
59	Co	89	He	26.563	ppb	3.2	49568.08	25	106.25	89.8	110.2	
60	Ni	89	He	26.475	ppb	3.9	13712.69	25	105.9	89.8	110.2	
63	Cu	89	He	26.198	ppb	3.9	37699.37	25	104.79	89.8	110.2	
66	Zn	89	He	26.106	ppb	2.5	5062.22	25	104.42	89.8	110.2	
75	As	89	He	25.587	ppb	3.8	4084.72	25	102.35	89.8	110.2	
78	Se	89	H2	25.144	ppb	3.0	2131.07	25	100.58	89.8	110.2	
88	Sr	89	He	24.520	ppb	1.0	20549.32	25	98.08	89.8	110.2	
95	Mo	89	He	25.613	ppb	3.2	22964.36	25	102.45	89.8	110.2	
107	Ag	89	He	25.412	ppb	2.8	78080.19	25	101.65	89.8	110.2	
111	Cd	89	He	24.735	ppb	4.0	10007.49	25	98.94	89.8	110.2	
118	Sn	159	He	24.926	ppb	2.0	21863.93	25	99.7	89.8	110.2	
121	Sb	159	No Gas	23.047	ppb	6.7	171446.38	25	92.19	89.8	110.2	
137	Ba	159	No Gas	23.140	ppb	7.5	68035.40	25	92.56	89.8	110.2	
182	W	159	No Gas	22.672	ppb	6.2	125563.50	25	90.69	89.8	110.2	
205	Tl	209	No Gas	23.471	ppb	5.9	274638.04	25	93.88	89.8	110.2	
208	Pb	209	No Gas	23.655	ppb	6.1	381821.36	25	94.62	89.8	110.2	
232	Th	209	No Gas	22.739	ppb	7.0	377216.71	25	90.96	89.8	110.2	
238	U	209	No Gas	23.100	ppb	7.6	357848.01	25	92.4	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1934280.44	3.2	1483357.64	130.4	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4302406.06	5.0	3141192.51	136.97	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	496864.07	1.3	418309.46	118.78	29.5	120.4	
Sc	45	He	101321.66	2.2	85440.95	118.59	29.5	120.4	
Ge	72	No Gas	919992.52	2.8	694668.88	132.44	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	177918.95	1.6	157206.79	113.18	29.5	120.4	
Ge	72	He	75795.81	1.8	64721.85	117.11	29.5	120.4	
Y	89	H2	3097792.84	2.3	2572670.23	120.41	29.5	120.4	6020/DoD
Y	89	He	647602.60	2.3	574051.42	112.81	29.5	120.4	
Tb	159	No Gas	9121527.92	4.8	6821698.44	133.71	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3343935.75	1.8	2982140.2	112.13	29.5	120.4	
Bi	209	No Gas	4590628.75	4.2	3547037.46	129.42	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	126_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:40:35 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.036	ppb	15.6	98.89	0.2	
11	B	6	No Gas	1.228	ppb	15.8	2941.51	4	
23	Na	45	He	361.921	ppb	2.3	53635.87	200	Fail All Methods□ Failed DoD
24	Mg	45	He	1.678	ppb	91.4	851.20	20	
27	Al	45	He	-0.354	ppb	N/A	14.44	20	
28	Si	45	H2	-1.482	ppb	N/A	503.90	100	
39	K	45	He	-1.513	ppb	N/A	13061.76	200	
40	Ca	45	H2	1.645	ppb	17.4	2078.01	20	
51	V	89	He	0.262	ppb	12.0	441.13	1	
52	Cr	89	He	-0.019	ppb	N/A	60.66	1	
55	Mn	89	He	0.021	ppb	73.3	42.66	0.4	
56	Fe	89	H2	-0.504	ppb	N/A	6882.64	20	
59	Co	89	He	0.002	ppb	818.9	28.89	0.2	
60	Ni	89	He	-0.473	ppb	N/A	151.12	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.003	ppb	231.2	166.67	0.6	
66	Zn	89	He	0.046	ppb	85.7	83.34	2	
75	As	89	He	0.034	ppb	73.7	9.33	1	
78	Se	89	H2	0.033	ppb	47.1	3.00	1	
88	Sr	89	He	0.007	ppb	119.8	13.33	1	
95	Mo	89	He	0.055	ppb	19.0	63.34	1	
107	Ag	89	He	0.003	ppb	56.5	30.00	0.2	
111	Cd	89	He	0.008	ppb	85.5	3.70	0.2	
118	Sn	159	He	0.040	ppb	68.7	100.01	1	
121	Sb	159	No Gas	0.015	ppb	75.3	146.83	0.2	
137	Ba	159	No Gas	0.032	ppb	26.1	110.12	0.4	
182	W	159	No Gas	0.041	ppb	30.6	303.68	1	
205	Tl	209	No Gas	0.013	ppb	38.0	290.33	0.2	
208	Pb	209	No Gas	0.014	ppb	21.5	477.21	0.2	
232	Th	209	No Gas	0.074	ppb	1.2	1348.27	1	
238	U	209	No Gas	0.017	ppb	62.9	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1889573.99	2.4	1483357.64	127.38	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4163710.18	4.1	3141192.51	132.55	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	502709.75	0.6	418309.46	120.18	29.5	120.4	
Sc	45	He	102737.21	2.1	85440.95	120.24	29.5	120.4	
Ge	72	No Gas	903694.19	3.7	694668.88	130.09	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	181400.35	1.1	157206.79	115.39	29.5	120.4	
Ge	72	He	77493.65	0.8	64721.85	119.73	29.5	120.4	
Y	89	H2	3109129.78	0.6	2572670.23	120.85	29.5	120.4	6020/DoD
Y	89	He	661620.02	1.3	574051.42	115.25	29.5	120.4	
Tb	159	No Gas	8886695.56	4.4	6821698.44	130.27	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3396754.74	1.8	2982140.2	113.9	29.5	120.4	
Bi	209	No Gas	4526756.13	4.4	3547037.46	127.62	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6092-001

File Name 127SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:43:19 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	54.3	67.78	100	
11	B	6	No Gas	24.276	ppb	3.4	23007.84	1000	
23	Na	45	He	110025.001	ppb	5.6	12739722.92	200000	
24	Mg	45	He	74.930	ppb	10.2	5534.81	200000	
27	Al	45	He	7.600	ppb	4.2	223.34	200000	
28	Si	45	H2	6190.690	ppb	1.1	320225.65	10000	
39	K	45	He	470.844	ppb	6.9	41135.48	200000	
40	Ca	45	H2	413.941	ppb	0.6	191084.98	200000	
51	V	89	He	0.677	ppb	3.1	797.83	1000	
52	Cr	89	He	0.112	ppb	12.3	201.97	2000	
55	Mn	89	He	1.890	ppb	3.1	1018.52	2000	
56	Fe	89	H2	43.829	ppb	1.3	85175.83	100000	
59	Co	89	He	0.006	ppb	121.8	35.56	1000	
60	Ni	89	He	-0.321	ppb	N/A	221.12	1000	
63	Cu	89	He	2.607	ppb	6.4	3850.68	2000	
66	Zn	89	He	8.891	ppb	7.7	1750.18	2000	
75	As	89	He	0.504	ppb	20.5	83.68	1000	
78	Se	89	H2	0.025	ppb	13.8	2.33	1000	
88	Sr	89	He	2.326	ppb	1.8	1935.76	2000	
95	Mo	89	He	0.075	ppb	35.0	78.89	1000	
107	Ag	89	He	0.006	ppb	99.0	36.67	100	
111	Cd	89	He	0.006	ppb	83.2	2.59	1000	
118	Sn	159	He	0.086	ppb	18.5	136.67	1000	
121	Sb	159	No Gas	0.499	ppb	12.2	3564.45	1000	
137	Ba	159	No Gas	0.079	ppb	16.7	236.93	2000	
182	W	159	No Gas	0.030	ppb	23.4	236.93	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	0.048	ppb	6.0	967.77	2000	
232	Th	209	No Gas	0.047	ppb	4.2	864.32	1000	
238	U	209	No Gas	0.004	ppb	52.7	60.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1845289.10	1.9	1483357.64	124.4	29.5	120.4	6020/DoD
Sc	45	No Gas	4103805.85	2.0	3141192.51	130.64	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	502667.49	0.7	418309.46	120.17	29.5	120.4	
Sc	45	He	99633.96	4.9	85440.95	116.61	29.5	120.4	
Ge	72	No Gas	892656.32	2.6	694668.88	128.5	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	181133.25	0.3	157206.79	115.22	29.5	120.4	
Ge	72	He	75261.10	4.4	64721.85	116.28	29.5	120.4	
Y	89	H2	3104788.54	0.3	2572670.23	120.68	29.5	120.4	6020/DoD
Y	89	He	641096.89	4.7	574051.42	111.68	29.5	120.4	
Tb	159	No Gas	8667332.92	2.1	6821698.44	127.06	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3295924.95	4.1	2982140.2	110.52	29.5	120.4	
Bi	209	No Gas	4334483.91	2.3	3547037.46	122.2	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6092-001L

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:45:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.032	ppb	16.8	58.89	100	
11	B	6	No Gas	27.230	ppb	8.7	6914.12	1000	
23	Na	45	He	108189.127	ppb	1.0	2640645.06	200000	
24	Mg	45	He	81.736	ppb	8.4	1858.03	200000	
27	Al	45	He	5.838	ppb	43.3	56.67	200000	
28	Si	45	H2	6439.249	ppb	2.6	68111.10	10000	
39	K	45	He	425.408	ppb	4.5	18772.21	200000	
40	Ca	45	H2	444.643	ppb	9.1	42730.44	200000	
51	V	89	He	2.113	ppb	0.4	597.81	1000	
52	Cr	89	He	0.069	ppb	80.4	99.31	2000	
55	Mn	89	He	1.861	ppb	4.6	235.96	2000	
56	Fe	89	H2	46.519	ppb	29.5	24541.02	100000	
59	Co	89	He	-0.010	ppb	N/A	22.23	1000	
60	Ni	89	He	-2.089	ppb	N/A	182.23	1000	
63	Cu	89	He	2.877	ppb	12.7	1020.08	2000	
66	Zn	89	He	9.261	ppb	16.3	442.25	2000	
75	As	89	He	0.537	ppb	29.2	21.67	1000	
78	Se	89	H2	0.133	ppb	65.9	2.50	1000	
88	Sr	89	He	2.162	ppb	16.5	383.35	2000	
95	Mo	89	He	0.115	ppb	46.6	34.44	1000	
107	Ag	89	He	0.011	ppb	92.1	26.67	100	
111	Cd	89	He	0.012	ppb	60.5	1.48	1000	
118	Sn	159	He	0.122	ppb	40.6	86.67	1000	
121	Sb	159	No Gas	0.522	ppb	13.5	794.24	1000	
137	Ba	159	No Gas	0.085	ppb	36.4	66.74	2000	
182	W	159	No Gas	-0.008	ppb	N/A	73.41	1000	
205	Tl	209	No Gas	-0.045	ppb	N/A	36.71	1000	
208	Pb	209	No Gas	0.048	ppb	64.1	407.12	2000	
232	Th	209	No Gas	0.013	ppb	117.4	170.19	1000	
238	U	209	No Gas	0.004	ppb	82.6	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1946995.23	3.4	1483357.64	131.26	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4230532.21	4.3	3141192.51	134.68	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	510452.50	0.7	418309.46	122.03	29.5	120.4	6020/DoD
Sc	45	He	104492.38	1.2	85440.95	122.3	29.5	120.4	6020/DoD
Ge	72	No Gas	915663.73	3.1	694668.88	131.81	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	185189.20	1.1	157206.79	117.8	29.5	120.4	
Ge	72	He	78950.40	0.8	64721.85	121.98	29.5	120.4	6020/DoD
Y	89	H2	3151464.56	0.6	2572670.23	122.5	29.5	120.4	6020/DoD
Y	89	He	671711.54	0.9	574051.42	117.01	29.5	120.4	
Tb	159	No Gas	8920792.58	4.2	6821698.44	130.77	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3417312.03	0.0	2982140.2	114.59	29.5	120.4	
Bi	209	No Gas	4553273.74	3.8	3547037.46	128.37	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6092-001A

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:48:40 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.086	ppb	9.7	2935.96	100	
11	B	6	No Gas	64.578	ppb	3.1	58872.78	1000	
23	Na	45	He	105802.839	ppb	0.7	12771342.04	200000	
24	Mg	45	He	280.235	ppb	4.0	19550.13	200000	
27	Al	45	He	200.591	ppb	3.2	5524.60	200000	
28	Si	45	H2	7051.264	ppb	0.6	372032.18	10000	
39	K	45	He	2444.084	ppb	0.6	166879.01	200000	
40	Ca	45	H2	613.234	ppb	0.6	288161.59	200000	
51	V	89	He	11.752	ppb	1.7	10983.56	1000	
52	Cr	89	He	10.736	ppb	0.7	12203.72	2000	
55	Mn	89	He	6.403	ppb	3.9	3478.48	2000	
56	Fe	89	H2	257.416	ppb	0.4	467680.53	100000	
59	Co	89	He	2.329	ppb	2.5	4452.14	1000	
60	Ni	89	He	4.152	ppb	2.6	2523.65	1000	
63	Cu	89	He	9.288	ppb	1.5	13730.52	2000	
66	Zn	89	He	31.297	ppb	2.3	6166.03	2000	
75	As	89	He	11.316	ppb	1.4	1843.33	1000	
78	Se	89	H2	10.192	ppb	1.3	876.16	1000	
88	Sr	89	He	12.203	ppb	0.1	10422.11	2000	
95	Mo	89	He	10.270	ppb	0.7	9392.41	1000	
107	Ag	89	He	2.091	ppb	2.4	6567.37	100	
111	Cd	89	He	2.148	ppb	5.2	886.34	1000	
118	Sn	159	He	10.606	ppb	1.7	9469.24	1000	
121	Sb	159	No Gas	2.640	ppb	8.7	18844.29	1000	
137	Ba	159	No Gas	4.136	ppb	9.7	11661.40	2000	
182	W	159	No Gas	10.045	ppb	6.8	53342.71	1000	
205	Tl	209	No Gas	2.107	ppb	5.4	23470.94	1000	
208	Pb	209	No Gas	2.154	ppb	4.3	33157.22	2000	
232	Th	209	No Gas	2.103	ppb	7.0	33150.76	1000	
238	U	209	No Gas	2.128	ppb	4.3	31244.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1865958.86	1.5	1483357.64	125.79	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4144482.67	2.6	3141192.51	131.94	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	512829.09	0.6	418309.46	122.6	29.5	120.4	6020/DoD
Sc	45	He	103682.68	1.3	85440.95	121.35	29.5	120.4	6020/DoD
Ge	72	No Gas	889447.50	2.1	694668.88	128.04	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	183872.08	0.7	157206.79	116.96	29.5	120.4	
Ge	72	He	76966.72	1.2	64721.85	118.92	29.5	120.4	
Y	89	H2	3140088.89	0.6	2572670.23	122.06	29.5	120.4	6020/DoD
Y	89	He	659751.55	1.0	574051.42	114.93	29.5	120.4	
Tb	159	No Gas	8731954.38	2.4	6821698.44	128	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3389085.89	1.0	2982140.2	113.65	29.5	120.4	
Bi	209	No Gas	4343888.32	2.3	3547037.46	122.47	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6092-001S

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:51:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.056	ppb	5.4	68631.00	100	
11	B	6	No Gas	491.653	ppb	5.5	468806.50	1000	
23	Na	45	He	115407.160	ppb	0.8	13731882.96	200000	
24	Mg	45	He	5372.273	ppb	0.8	356143.25	200000	
27	Al	45	He	1915.917	ppb	0.7	51797.87	200000	
28	Si	45	H2	7596.166	ppb	1.7	391938.99	10000	
39	K	45	He	10489.134	ppb	0.5	662866.60	200000	
40	Ca	45	H2	2989.623	ppb	0.9	1368860.28	200000	
51	V	89	He	536.353	ppb	0.2	490057.29	1000	
52	Cr	89	He	211.377	ppb	0.3	237615.62	2000	
55	Mn	89	He	532.217	ppb	0.5	285251.25	2000	
56	Fe	89	H2	1093.799	ppb	1.5	1934178.12	100000	
59	Co	89	He	530.297	ppb	0.6	1003307.10	1000	
60	Ni	89	He	529.625	ppb	0.7	270823.75	1000	
63	Cu	89	He	261.624	ppb	0.1	380504.47	2000	
66	Zn	89	He	535.967	ppb	0.3	103916.85	2000	
75	As	89	He	106.553	ppb	0.7	17242.86	1000	
78	Se	89	H2	101.350	ppb	2.0	8587.59	1000	
88	Sr	89	He	506.874	ppb	0.4	430551.92	2000	
95	Mo	89	He	105.399	ppb	0.8	95821.92	1000	
107	Ag	89	He	49.828	ppb	0.2	155278.12	100	
111	Cd	89	He	249.510	ppb	0.7	102414.16	1000	
118	Sn	159	He	516.700	ppb	1.1	455586.47	1000	
121	Sb	159	No Gas	100.877	ppb	6.7	720101.32	1000	
137	Ba	159	No Gas	1935.701	ppb	6.9	5460674.70	2000	
182	W	159	No Gas	99.881	ppb	7.2	530528.53	1000	
205	Tl	209	No Gas	98.195	ppb	6.1	1085323.72	1000	
208	Pb	209	No Gas	102.407	ppb	6.5	1561260.33	2000	
232	Th	209	No Gas	100.239	ppb	7.5	1570964.71	1000	
238	U	209	No Gas	99.395	ppb	7.3	1455200.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2006790.44	2.5	1483357.64	135.29	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4135859.67	4.1	3141192.51	131.67	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	501573.90	0.3	418309.46	119.9	29.5	120.4	
Sc	45	He	102209.21	1.2	85440.95	119.63	29.5	120.4	
Ge	72	No Gas	891622.14	3.9	694668.88	128.35	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	182575.70	0.8	157206.79	116.14	29.5	120.4	
Ge	72	He	76680.44	1.1	64721.85	118.48	29.5	120.4	
Y	89	H2	3096150.44	0.7	2572670.23	120.35	29.5	120.4	
Y	89	He	656610.69	0.7	574051.42	114.38	29.5	120.4	
Tb	159	No Gas	8752793.97	3.9	6821698.44	128.31	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3369822.48	0.4	2982140.2	113	29.5	120.4	
Bi	209	No Gas	4337842.17	3.9	3547037.46	122.29	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6092-001P

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 9:54:01 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	45.764	ppb	5.7	68112.88	100	
11	B	6	No Gas	494.955	ppb	4.5	471454.03	1000	
23	Na	45	He	113471.756	ppb	0.8	13505386.58	200000	
24	Mg	45	He	5334.907	ppb	1.2	353752.88	200000	
27	Al	45	He	1894.514	ppb	0.6	51234.75	200000	
28	Si	45	H2	7534.038	ppb	1.0	388873.76	10000	
39	K	45	He	10471.981	ppb	0.4	661970.84	200000	
40	Ca	45	H2	2977.218	ppb	1.1	1363654.51	200000	
51	V	89	He	535.952	ppb	0.5	488288.45	1000	
52	Cr	89	He	211.756	ppb	0.2	237359.34	2000	
55	Mn	89	He	530.267	ppb	0.5	283388.23	2000	
56	Fe	89	H2	1095.473	ppb	0.4	1929302.15	100000	
59	Co	89	He	531.570	ppb	0.4	1002870.68	1000	
60	Ni	89	He	531.298	ppb	0.2	270905.31	1000	
63	Cu	89	He	261.898	ppb	0.5	379810.91	2000	
66	Zn	89	He	535.131	ppb	1.1	103456.63	2000	
75	As	89	He	108.367	ppb	1.1	17485.52	1000	
78	Se	89	H2	102.612	ppb	0.6	8659.79	1000	
88	Sr	89	He	505.650	ppb	0.6	428272.41	2000	
95	Mo	89	He	105.625	ppb	0.7	95751.94	1000	
107	Ag	89	He	49.673	ppb	0.3	154353.82	100	
111	Cd	89	He	249.284	ppb	0.7	102026.87	1000	
118	Sn	159	He	515.325	ppb	0.6	455755.37	1000	
121	Sb	159	No Gas	100.009	ppb	6.3	714696.49	1000	
137	Ba	159	No Gas	1920.820	ppb	6.5	5424679.28	2000	
182	W	159	No Gas	99.622	ppb	5.7	529852.79	1000	
205	Tl	209	No Gas	97.106	ppb	5.4	1073126.53	1000	
208	Pb	209	No Gas	101.669	ppb	5.8	1549746.97	2000	
232	Th	209	No Gas	100.155	ppb	7.1	1569363.81	1000	
238	U	209	No Gas	99.259	ppb	6.9	1453006.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2003998.12	1.8	1483357.64	135.1	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4132478.90	2.9	3141192.51	131.56	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	501763.44	0.8	418309.46	119.95	29.5	120.4	
Sc	45	He	102234.98	0.6	85440.95	119.66	29.5	120.4	
Ge	72	No Gas	897241.05	2.4	694668.88	129.16	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	179359.76	0.1	157206.79	114.09	29.5	120.4	
Ge	72	He	76604.09	0.5	64721.85	118.36	29.5	120.4	
Y	89	H2	3083464.74	0.4	2572670.23	119.85	29.5	120.4	
Y	89	He	654741.49	0.6	574051.42	114.06	29.5	120.4	
Tb	159	No Gas	8757167.51	2.8	6821698.44	128.37	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3380185.72	0.6	2982140.2	113.35	29.5	120.4	
Bi	209	No Gas	4334686.09	2.8	3547037.46	122.21	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBWNG24IMW2
File Name	132_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:56:39 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.719	ppb	25.7	263.35	0.5	PB 6020 Fails DoD
B	11	6	No Gas	45.797	ppb	8.7	10556.42	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	2099.131	ppb	4.5	61258.28	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	12.064	ppb	31.3	911.21	50	
Al	27	45	He	6.102	ppb	59.4	57.78	50	
Si	28	45	H2	13.596	ppb	71.8	730.83	250	
K	39	45	He	-25.543	ppb	N/A	12990.10	500	
Ca	40	45	H2	24.514	ppb	2.1	3616.15	50	
V	51	89	He	6.038	ppb	6.3	1311.22	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	0.467	ppb	9.6	187.97	2.5	
Mn	55	89	He	1.073	ppb	12.0	147.31	1	PB 6020 Fails DoD
Fe	56	89	H2	-6.412	ppb	N/A	5587.30	50	
Co	59	89	He	0.731	ppb	4.7	304.47	0.5	PB 6020 Fails DoD
Ni	60	89	He	-1.229	ppb	N/A	267.79	1	PB 6020 Fails DoD
Cu	63	89	He	1.258	ppb	11.8	531.14	1.5	
Zn	66	89	He	1.940	ppb	21.4	150.00	5	
As	75	89	He	0.629	ppb	16.4	24.33	2.5	
Se	78	89	H2	1.040	ppb	11.7	18.17	2.5	
Sr	88	89	He	0.533	ppb	28.9	98.89	2.5	
Mo	95	89	He	1.022	ppb	7.2	200.01	2.5	
Ag	107	89	He	0.134	ppb	4.2	103.34	0.5	
Cd	111	89	He	0.438	ppb	5.7	36.67	0.5	
Sn	118	159	He	5.759	ppb	4.5	1093.42	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.536	ppb	11.6	824.28	0.5	PB 6020 Fails DoD
Ba	137	159	No Gas	6.822	ppb	26.1	3998.48	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
W	182	159	No Gas	1.314	ppb	10.5	1518.45	2.5	
Tl	205	209	No Gas	0.417	ppb	42.0	1124.65	0.5	
Pb	208	209	No Gas	0.404	ppb	14.1	1558.45	0.5	
Th	232	209	No Gas	2.172	ppb	31.4	7364.00	2.5	
U	238	209	No Gas	0.500	ppb	38.7	1568.54	0.5	PB 6020 Fails DoD

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1984617.32	2.5	1483357.64	133.79	29.5	120.4	6020/DoD EPA
Sc	45	No Gas	4223600.90	2.9	3141192.51	134.46	29.5	120.4	6020/DoD EPA
Sc	45	H2	508897.10	1.1	418309.46	121.66	29.5	120.4	6020/DoD
Sc	45	He	103928.49	1.0	85440.95	121.64	29.5	120.4	6020/DoD
Ge	72	No Gas	923241.36	2.0	694668.88	132.9	29.5	120.4	6020/DoD EPA
Ge	72	H2	183197.46	1.2	157206.79	116.53	29.5	120.4	
Ge	72	He	76925.04	0.2	64721.85	118.85	29.5	120.4	
Y	89	H2	3154928.54	1.1	2572670.23	122.63	29.5	120.4	6020/DoD
Y	89	He	661651.38	0.6	574051.42	115.26	29.5	120.4	
Tb	159	No Gas	8995200.14	3.0	6821698.44	131.86	29.5	120.4	6020/DoD EPA
Tb	159	He	3412942.69	0.5	2982140.2	114.45	29.5	120.4	
Bi	209	No Gas	4575274.70	3.4	3547037.46	128.99	29.5	120.4	6020/DoD EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW2
File Name	133LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 9:59:21 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.205	ppb	5.8	14128.47	50	19.28	79.5	120.4	
B	11	6	No Gas	516.118	ppb	4.5	98058.28	500	20.64	79.5	120.4	
Na	23	45	He	9748.773	ppb	0.6	241567.61	7500	26	79.5	120.4	6020□ DoD
Mg	24	45	He	5516.707	ppb	0.2	73547.71	5000	22.07	79.5	120.4	
Al	27	45	He	1972.793	ppb	0.9	10659.87	2000	19.73	79.5	120.4	
Si	28	45	H2	1037.690	ppb	4.9	11230.27	1000	20.75	0	200	
K	39	45	He	10443.970	ppb	0.7	142138.06	10000	20.89	79.5	120.4	
Ca	40	45	H2	2667.413	ppb	1.3	244486.20	2500	21.34	79.5	120.4	
V	51	89	He	544.691	ppb	0.8	100777.35	500	21.79	79.5	120.4	
Cr	52	89	He	219.444	ppb	0.8	49939.14	200	21.94	79.5	120.4	
Mn	55	89	He	547.041	ppb	0.7	59302.23	500	21.88	79.5	120.4	
Fe	56	89	H2	1105.453	ppb	1.9	397021.82	1000	22.11	79.5	120.4	
Co	59	89	He	556.718	ppb	0.1	212979.86	500	22.27	79.5	120.4	
Ni	60	89	He	555.783	ppb	1.0	57772.34	500	22.23	79.5	120.4	
Cu	63	89	He	270.673	ppb	0.1	79720.76	250	21.65	79.5	120.4	
Zn	66	89	He	540.669	ppb	0.8	21253.44	500	21.63	79.5	120.4	
As	75	89	He	109.857	ppb	2.3	3597.19	100	21.97	79.5	120.4	
Se	78	89	H2	106.099	ppb	2.7	1797.87	100	21.22	79.5	120.4	
Sr	88	89	He	511.352	ppb	1.0	87823.48	500	20.45	79.5	120.4	
Mo	95	89	He	108.405	ppb	0.5	19936.21	100	21.68	79.5	120.4	
Ag	107	89	He	52.882	ppb	1.0	33333.88	50	21.15	79.5	120.4	
Cd	111	89	He	256.835	ppb	0.9	21314.63	250	20.55	79.5	120.4	
Sn	118	159	He	523.036	ppb	0.4	93902.85	500	20.92	79.5	120.4	
Sb	121	159	No Gas	100.933	ppb	7.5	147756.54	100	20.19	79.5	120.4	
Ba	137	159	No Gas	1969.873	ppb	7.1	1139535.23	2000	19.7	79.5	120.4	
W	182	159	No Gas	102.082	ppb	6.2	111283.38	100	20.42	79.5	120.4	
Tl	205	209	No Gas	104.527	ppb	6.7	241518.20	100	20.9	79.5	120.4	
[Pb]	206	209	No Gas	102.866	ppb	6.0	82656.45	100	20.57	79.5	120.4	
[Pb]	207	209	No Gas	105.440	ppb	8.1	73775.44	100	21.09	79.5	120.4	
Pb	208	209	No Gas	104.156	ppb	6.4	332058.64	100	20.83	79.5	120.4	
Th	232	209	No Gas	101.370	ppb	8.2	332064.95	100	20.27	79.5	120.4	
U	238	209	No Gas	100.550	ppb	8.7	307574.32	100	20.11	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1967859.55	2.2	1483357.64	132.66	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4190674.54	4.0	3141192.51	133.41	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	499853.17	1.3	418309.46	119.49	29.5	120.4	
Sc	45	He	101955.15	0.3	85440.95	119.33	29.5	120.4	
Ge	72	No Gas	916536.02	3.7	694668.88	131.94	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	180216.19	1.0	157206.79	114.64	29.5	120.4	
Ge	72	He	77040.35	0.3	64721.85	119.03	29.5	120.4	
Y	89	H2	3095458.66	1.1	2572670.23	120.32	29.5	120.4	
Y	89	He	663767.38	0.4	574051.42	115.63	29.5	120.4	
Tb	159	No Gas	8972758.55	3.5	6821698.44	131.53	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3428896.10	0.2	2982140.2	114.98	29.5	120.4	
Bi	209	No Gas	4532432.64	3.7	3547037.46	127.78	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-002

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:01:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.243	ppb	28.7	116.67	100	
11	B	6	No Gas	230.910	ppb	5.2	43274.50	1000	
23	Na	45	He	41292.317	ppb	1.7	994588.79	200000	
24	Mg	45	He	18473.260	ppb	1.7	245728.13	200000	
27	Al	45	He	14.648	ppb	12.2	103.34	200000	
28	Si	45	H2	5595.469	ppb	2.2	57622.91	10000	
39	K	45	He	13018.409	ppb	1.2	174797.24	200000	
40	Ca	45	H2	113180.518	ppb	0.5	10246384.15	200000	
51	V	89	He	5.890	ppb	2.3	1282.33	1000	
52	Cr	89	He	1.209	ppb	11.1	355.27	2000	
55	Mn	89	He	185.117	ppb	1.2	20000.50	2000	
56	Fe	89	H2	597.021	ppb	0.3	218190.04	100000	
59	Co	89	He	0.529	ppb	18.1	226.68	1000	
60	Ni	89	He	5.041	ppb	3.1	912.28	1000	
63	Cu	89	He	18.363	ppb	2.0	5535.73	2000	
66	Zn	89	He	127.092	ppb	2.8	5029.98	2000	
75	As	89	He	1.655	ppb	11.0	57.68	1000	
78	Se	89	H2	0.450	ppb	25.5	7.83	1000	
88	Sr	89	He	487.224	ppb	1.8	83307.74	2000	
95	Mo	89	He	2.695	ppb	7.2	505.58	1000	
107	Ag	89	He	0.195	ppb	35.6	141.12	100	
111	Cd	89	He	0.950	ppb	10.8	78.89	1000	
118	Sn	159	He	2.022	ppb	9.1	428.91	1000	
121	Sb	159	No Gas	0.437	ppb	28.4	674.10	1000	
137	Ba	159	No Gas	343.270	ppb	6.7	198209.16	2000	
182	W	159	No Gas	0.305	ppb	23.1	417.14	1000	
205	Tl	209	No Gas	0.133	ppb	5.9	443.84	1000	
208	Pb	209	No Gas	1.350	ppb	2.2	4518.68	2000	
232	Th	209	No Gas	0.752	ppb	19.0	2579.89	1000	
238	U	209	No Gas	1.962	ppb	5.5	5964.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1895298.25	2.1	1483357.64	127.77	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4177144.55	3.1	3141192.51	132.98	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	496270.93	0.4	418309.46	118.64	29.5	120.4	
Sc	45	He	102458.97	1.3	85440.95	119.92	29.5	120.4	
Ge	72	No Gas	908927.70	2.1	694668.88	130.84	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	182510.86	2.2	157206.79	116.1	29.5	120.4	
Ge	72	He	77052.64	1.3	64721.85	119.05	29.5	120.4	
Y	89	H2	3098092.41	0.8	2572670.23	120.42	29.5	120.4	6020/DoD
Y	89	He	660935.48	1.6	574051.42	115.14	29.5	120.4	
Tb	159	No Gas	8953912.51	3.3	6821698.44	131.26	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3438439.43	1.3	2982140.2	115.3	29.5	120.4	
Bi	209	No Gas	4490739.18	2.9	3547037.46	126.61	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-003

File Name 135SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:04:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.125	ppb	37.6	82.22	100	
11	B	6	No Gas	150.788	ppb	6.9	28354.11	1000	
23	Na	45	He	96517.285	ppb	3.3	2232732.86	200000	
24	Mg	45	He	64850.769	ppb	3.8	831618.57	200000	
27	Al	45	He	12.553	ppb	18.6	88.89	200000	
28	Si	45	H2	11805.529	ppb	1.5	118402.47	10000	
39	K	45	He	13923.026	ppb	4.4	179709.97	200000	
40	Ca	45	H2	240179.443	ppb	0.8	21287326.90	200000	
51	V	89	He	5.129	ppb	5.0	1101.20	1000	
52	Cr	89	He	0.315	ppb	9.8	147.98	2000	
55	Mn	89	He	3168.485	ppb	3.7	329479.55	2000	
56	Fe	89	H2	13687.230	ppb	0.2	4785949.84	100000	
59	Co	89	He	8.736	ppb	4.0	3233.96	1000	
60	Ni	89	He	7.179	ppb	13.6	1090.09	1000	
63	Cu	89	He	1.070	ppb	19.2	457.80	2000	
66	Zn	89	He	2.255	ppb	20.5	156.67	2000	
75	As	89	He	167.836	ppb	3.7	5272.57	1000	
78	Se	89	H2	0.127	ppb	59.0	2.33	1000	
88	Sr	89	He	1153.405	ppb	3.9	190085.85	2000	
95	Mo	89	He	1.273	ppb	7.9	236.68	1000	
107	Ag	89	He	0.067	ppb	13.3	58.89	100	
111	Cd	89	He	0.133	ppb	62.1	11.11	1000	
118	Sn	159	He	1.510	ppb	10.5	326.69	1000	
121	Sb	159	No Gas	0.081	ppb	70.4	156.84	1000	
137	Ba	159	No Gas	128.303	ppb	7.8	74386.08	2000	
182	W	159	No Gas	0.110	ppb	22.9	203.56	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	120.13	1000	
208	Pb	209	No Gas	0.115	ppb	13.9	607.35	2000	
232	Th	209	No Gas	0.149	ppb	22.1	604.02	1000	
238	U	209	No Gas	92.732	ppb	7.3	278914.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1860838.79	3.3	1483357.64	125.45	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4151906.03	3.6	3141192.51	132.18	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	485922.14	1.7	418309.46	116.16	29.5	120.4	
Sc	45	He	99034.37	2.5	85440.95	115.91	29.5	120.4	
Ge	72	No Gas	914465.74	3.0	694668.88	131.64	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	176680.77	0.8	157206.79	112.39	29.5	120.4	
Ge	72	He	73980.77	3.4	64721.85	114.31	29.5	120.4	
Y	89	H2	3068279.45	1.2	2572670.23	119.26	29.5	120.4	
Y	89	He	637374.91	2.5	574051.42	111.03	29.5	120.4	
Tb	159	No Gas	8992916.88	3.6	6821698.44	131.83	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3338354.01	2.8	2982140.2	111.94	29.5	120.4	
Bi	209	No Gas	4454153.95	3.2	3547037.46	125.57	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-004

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:07:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.110	ppb	41.5	74.45	100	
11	B	6	No Gas	304.106	ppb	2.5	53007.89	1000	
23	Na	45	He	53679.497	ppb	0.2	1225982.70	200000	
24	Mg	45	He	25650.413	ppb	0.4	324035.27	200000	
27	Al	45	He	57.075	ppb	10.6	316.68	200000	
28	Si	45	H2	15289.299	ppb	1.6	150908.16	10000	
39	K	45	He	10314.396	ppb	0.6	134219.50	200000	
40	Ca	45	H2	188800.981	ppb	1.5	16486016.15	200000	
51	V	89	He	3.848	ppb	11.8	871.17	1000	
52	Cr	89	He	0.739	ppb	23.2	239.29	2000	
55	Mn	89	He	9064.211	ppb	0.2	939004.08	2000	
56	Fe	89	H2	37663.760	ppb	0.8	12977002.07	100000	
59	Co	89	He	0.255	ppb	22.4	117.79	1000	
60	Ni	89	He	5.001	ppb	24.1	872.28	1000	
63	Cu	89	He	0.952	ppb	25.2	423.36	2000	
66	Zn	89	He	1.892	ppb	34.4	142.23	2000	
75	As	89	He	207.412	ppb	0.9	6490.56	1000	
78	Se	89	H2	0.250	ppb	42.5	4.33	1000	
88	Sr	89	He	992.709	ppb	0.8	162994.61	2000	
95	Mo	89	He	0.278	ppb	4.3	61.11	1000	
107	Ag	89	He	0.056	ppb	30.8	52.22	100	
111	Cd	89	He	0.032	ppb	109.2	2.96	1000	
118	Sn	159	He	1.330	ppb	5.0	297.80	1000	
121	Sb	159	No Gas	0.083	ppb	14.8	153.51	1000	
137	Ba	159	No Gas	88.732	ppb	1.8	50203.74	2000	
182	W	159	No Gas	0.052	ppb	56.3	136.82	1000	
205	Tl	209	No Gas	-0.036	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	0.093	ppb	8.2	537.27	2000	
232	Th	209	No Gas	0.139	ppb	30.2	570.65	1000	
238	U	209	No Gas	0.447	ppb	11.0	1344.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1780300.89	1.4	1483357.64	120.02	29.5	120.4	
Sc	45	No Gas	3949398.90	2.3	3141192.51	125.73	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	478769.64	1.8	418309.46	114.45	29.5	120.4	
Sc	45	He	97373.38	0.2	85440.95	113.97	29.5	120.4	
Ge	72	No Gas	872418.29	1.4	694668.88	125.59	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	174673.96	0.8	157206.79	111.11	29.5	120.4	
Ge	72	He	73300.99	1.1	64721.85	113.26	29.5	120.4	
Y	89	H2	3026724.58	1.3	2572670.23	117.65	29.5	120.4	
Y	89	He	634627.48	0.8	574051.42	110.55	29.5	120.4	
Tb	159	No Gas	8761090.01	2.3	6821698.44	128.43	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3361739.05	1.0	2982140.2	112.73	29.5	120.4	
Bi	209	No Gas	4432995.24	2.0	3547037.46	124.98	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:10:00 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.834	ppb	4.3	31195.59	25	95.34	89.8	110.2	
11	B	6	No Gas	26.294	ppb	4.7	23634.37	25	105.18	89.8	110.2	
23	Na	45	He	5441.274	ppb	1.0	638182.38	5000	108.83	89.8	110.2	
24	Mg	45	He	5012.139	ppb	0.4	322650.34	5000	100.24	89.8	110.2	
27	Al	45	He	464.714	ppb	1.9	12216.76	500	92.94	89.8	110.2	
28	Si	45	H2	451.966	ppb	0.9	22833.50	500	90.39	89.8	110.2	
39	K	45	He	4838.535	ppb	0.4	303721.84	5000	96.77	89.8	110.2	
40	Ca	45	H2	4992.925	ppb	0.6	2186351.46	5000	99.86	89.8	110.2	
51	V	89	He	25.657	ppb	1.7	23196.51	25	102.63	89.8	110.2	
52	Cr	89	He	25.511	ppb	1.4	28220.20	25	102.04	89.8	110.2	
55	Mn	89	He	25.784	ppb	1.0	13594.11	25	103.14	89.8	110.2	
56	Fe	89	H2	4998.528	ppb	0.9	8634635.89	5000	99.97	89.8	110.2	
59	Co	89	He	25.754	ppb	0.8	47853.57	25	103.02	89.8	110.2	
60	Ni	89	He	25.716	ppb	2.0	13273.36	25	102.86	89.8	110.2	
63	Cu	89	He	25.584	ppb	2.5	36668.98	25	102.34	89.8	110.2	
66	Zn	89	He	24.577	ppb	0.4	4746.53	25	98.31	89.8	110.2	
75	As	89	He	24.715	ppb	0.6	3928.65	25	98.86	89.8	110.2	
78	Se	89	H2	24.882	ppb	2.5	2066.23	25	99.53	89.8	110.2	
88	Sr	89	He	23.930	ppb	1.4	19959.52	25	95.72	89.8	110.2	
95	Mo	89	He	25.275	ppb	1.9	22563.59	25	101.1	89.8	110.2	
107	Ag	89	He	25.095	ppb	0.6	76770.51	25	100.38	89.8	110.2	
111	Cd	89	He	24.332	ppb	1.9	9802.89	25	97.33	89.8	110.2	
118	Sn	159	He	24.164	ppb	2.2	21503.27	25	96.66	89.8	110.2	
121	Sb	159	No Gas	23.449	ppb	5.1	170343.06	25	93.8	89.8	110.2	
137	Ba	159	No Gas	23.511	ppb	5.1	67502.48	25	94.04	89.8	110.2	
182	W	159	No Gas	23.391	ppb	5.8	126478.15	25	93.56	89.8	110.2	
205	Tl	209	No Gas	23.921	ppb	5.4	277585.45	25	95.68	89.8	110.2	
208	Pb	209	No Gas	24.189	ppb	5.6	387235.13	25	96.76	89.8	110.2	
232	Th	209	No Gas	23.371	ppb	7.0	384506.07	25	93.48	89.8	110.2	
238	U	209	No Gas	23.591	ppb	6.0	362554.49	25	94.36	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1760596.29	1.4	1483357.64	118.69	29.5	120.4	
Sc	45	No Gas	4004720.28	1.8	3141192.51	127.49	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	479857.28	1.0	418309.46	114.71	29.5	120.4	
Sc	45	He	99233.80	0.5	85440.95	116.14	29.5	120.4	
Ge	72	No Gas	887955.60	2.4	694668.88	127.82	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175436.25	1.9	157206.79	111.6	29.5	120.4	
Ge	72	He	74752.25	0.6	64721.85	115.5	29.5	120.4	
Y	89	H2	3033835.24	0.8	2572670.23	117.93	29.5	120.4	
Y	89	He	644517.77	0.6	574051.42	112.28	29.5	120.4	
Tb	159	No Gas	8896602.71	2.2	6821698.44	130.42	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3391410.47	0.3	2982140.2	113.72	29.5	120.4	
Bi	209	No Gas	4549040.91	2.3	3547037.46	128.25	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	138_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:12:37 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.077	ppb	44.4	148.89	0.2	
11	B	6	No Gas	1.950	ppb	11.0	3434.97	4	
23	Na	45	He	234.444	ppb	1.9	37078.98	200	Fail All Methods□ Failed DoD
24	Mg	45	He	1.782	ppb	96.7	828.97	20	
27	Al	45	He	0.088	ppb	503.8	25.56	20	
28	Si	45	H2	-1.009	ppb	N/A	517.25	100	
39	K	45	He	-9.563	ppb	N/A	12128.02	200	
40	Ca	45	H2	3.065	ppb	11.9	2677.01	20	
51	V	89	He	0.125	ppb	34.3	307.79	1	
52	Cr	89	He	-0.005	ppb	N/A	74.65	1	
55	Mn	89	He	0.134	ppb	13.6	101.31	0.4	
56	Fe	89	H2	-0.148	ppb	N/A	7466.97	20	
59	Co	89	He	0.023	ppb	57.7	66.67	0.2	
60	Ni	89	He	-0.439	ppb	N/A	164.45	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.011	ppb	54.1	174.45	0.6	
66	Zn	89	He	-0.036	ppb	N/A	65.56	2	
75	As	89	He	0.042	ppb	100.9	10.33	1	
78	Se	89	H2	0.025	ppb	12.3	2.33	1	
88	Sr	89	He	0.028	ppb	94.9	31.11	1	
95	Mo	89	He	0.078	ppb	31.9	82.23	1	
107	Ag	89	He	0.009	ppb	70.9	45.56	0.2	
111	Cd	89	He	0.012	ppb	48.5	5.18	0.2	
118	Sn	159	He	0.055	ppb	48.0	111.12	1	
121	Sb	159	No Gas	0.024	ppb	12.6	206.90	0.2	
137	Ba	159	No Gas	0.042	ppb	46.2	140.16	0.4	
182	W	159	No Gas	0.041	ppb	17.0	307.02	1	
205	Tl	209	No Gas	0.015	ppb	71.5	317.03	0.2	
208	Pb	209	No Gas	0.019	ppb	27.7	563.97	0.2	
232	Th	209	No Gas	0.054	ppb	7.0	1021.19	1	
238	U	209	No Gas	0.021	ppb	3.0	333.72	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1810144.91	3.3	1483357.64	122.03	29.5	120.4	6020/DoD
Sc	45	No Gas	4097092.73	3.1	3141192.51	130.43	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	493496.08	2.2	418309.46	117.97	29.5	120.4	
Sc	45	He	99183.30	1.9	85440.95	116.08	29.5	120.4	
Ge	72	No Gas	902558.73	3.2	694668.88	129.93	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	179337.70	2.5	157206.79	114.08	29.5	120.4	
Ge	72	He	74886.98	1.2	64721.85	115.71	29.5	120.4	
Y	89	H2	3091993.66	1.5	2572670.23	120.19	29.5	120.4	
Y	89	He	645331.08	1.4	574051.42	112.42	29.5	120.4	
Tb	159	No Gas	8913980.77	2.9	6821698.44	130.67	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3335675.71	1.2	2982140.2	111.86	29.5	120.4	
Bi	209	No Gas	4574136.32	3.7	3547037.46	128.96	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-005

File Name 139SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:15:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.080	ppb	3.3	67.78	100	
11	B	6	No Gas	286.330	ppb	9.8	50797.01	1000	
23	Na	45	He	54340.580	ppb	0.6	1238006.03	200000	
24	Mg	45	He	26111.835	ppb	0.3	329073.25	200000	
27	Al	45	He	64.171	ppb	12.5	352.24	200000	
28	Si	45	H2	15593.632	ppb	0.5	152789.67	10000	
39	K	45	He	10327.358	ppb	0.8	134051.52	200000	
40	Ca	45	H2	192715.576	ppb	0.3	16705121.28	200000	
51	V	89	He	3.163	ppb	3.7	745.60	1000	
52	Cr	89	He	0.810	ppb	5.1	253.29	2000	
55	Mn	89	He	9260.628	ppb	0.1	953530.25	2000	
56	Fe	89	H2	38415.485	ppb	0.7	13126621.68	100000	
59	Co	89	He	0.343	ppb	15.6	148.90	1000	
60	Ni	89	He	4.809	ppb	11.2	847.84	1000	
63	Cu	89	He	0.866	ppb	22.9	396.69	2000	
66	Zn	89	He	1.530	ppb	19.1	127.78	2000	
75	As	89	He	210.575	ppb	1.7	6549.26	1000	
78	Se	89	H2	0.313	ppb	4.7	5.33	1000	
88	Sr	89	He	1007.105	ppb	0.5	164361.35	2000	
95	Mo	89	He	0.223	ppb	21.6	51.11	1000	
107	Ag	89	He	0.081	ppb	20.8	66.67	100	
111	Cd	89	He	0.075	ppb	10.8	6.30	1000	
118	Sn	159	He	1.255	ppb	12.3	282.23	1000	
121	Sb	159	No Gas	0.054	ppb	39.9	113.46	1000	
137	Ba	159	No Gas	84.050	ppb	10.6	48053.55	2000	
182	W	159	No Gas	0.076	ppb	72.5	163.51	1000	
205	Tl	209	No Gas	-0.038	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	0.116	ppb	10.4	617.37	2000	
232	Th	209	No Gas	0.271	ppb	3.0	1011.19	1000	
238	U	209	No Gas	0.301	ppb	7.9	924.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1811197.79	2.9	1483357.64	122.1	29.5	120.4	6020/DoD
Sc	45	No Gas	4027344.84	3.9	3141192.51	128.21	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	475204.12	1.4	418309.46	113.6	29.5	120.4	
Sc	45	He	97144.31	0.7	85440.95	113.7	29.5	120.4	
Ge	72	No Gas	886242.89	3.5	694668.88	127.58	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	173046.26	1.0	157206.79	110.08	29.5	120.4	
Ge	72	He	72930.90	1.0	64721.85	112.68	29.5	120.4	
Y	89	H2	3001660.67	0.9	2572670.23	116.67	29.5	120.4	
Y	89	He	630771.29	0.1	574051.42	109.88	29.5	120.4	
Tb	159	No Gas	8871971.05	3.5	6821698.44	130.06	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3332570.16	0.1	2982140.2	111.75	29.5	120.4	
Bi	209	No Gas	4508295.38	3.6	3547037.46	127.1	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-006

File Name 140SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:17:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.132	ppb	20.0	77.78	100	
11	B	6	No Gas	5815.583	ppb	9.0	949250.53	1000	>LDR
23	Na	45	He	552997.266	ppb	0.6	12606283.55	200000	
24	Mg	45	He	56586.975	ppb	0.6	717879.43	200000	
27	Al	45	He	78.420	ppb	2.7	428.91	200000	
28	Si	45	H2	8458.012	ppb	0.9	82784.25	10000	
39	K	45	He	184059.524	ppb	0.5	2196881.52	200000	
40	Ca	45	H2	71115.398	ppb	0.2	6140535.26	200000	
51	V	89	He	10.019	ppb	5.5	1952.43	1000	
52	Cr	89	He	37.038	ppb	2.6	8089.53	2000	
55	Mn	89	He	793.917	ppb	0.6	81916.04	2000	
56	Fe	89	H2	11809.173	ppb	0.5	3999618.02	100000	
59	Co	89	He	9.977	ppb	6.9	3656.32	1000	
60	Ni	89	He	118.477	ppb	0.9	12020.02	1000	
63	Cu	89	He	3.266	ppb	4.0	1068.97	2000	
66	Zn	89	He	39.064	ppb	5.0	1527.92	2000	
75	As	89	He	80.168	ppb	1.1	2499.83	1000	
78	Se	89	H2	0.562	ppb	33.2	9.33	1000	
88	Sr	89	He	654.106	ppb	0.3	106938.63	2000	
95	Mo	89	He	2.484	ppb	3.1	446.69	1000	
107	Ag	89	He	0.057	ppb	25.4	52.23	100	
111	Cd	89	He	0.056	ppb	64.2	4.81	1000	
118	Sn	159	He	9.633	ppb	1.8	1750.18	1000	
121	Sb	159	No Gas	1.994	ppb	13.4	2913.57	1000	
137	Ba	159	No Gas	134.469	ppb	11.4	76767.35	2000	
182	W	159	No Gas	2.952	ppb	8.1	3257.40	1000	
205	Tl	209	No Gas	-0.013	ppb	N/A	106.79	1000	
208	Pb	209	No Gas	1.245	ppb	13.7	4054.79	2000	
232	Th	209	No Gas	0.172	ppb	19.8	664.09	1000	
238	U	209	No Gas	0.553	ppb	18.0	1635.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1722885.05	2.8	1483357.64	116.15	29.5	120.4	
Sc	45	No Gas	3979822.96	3.6	3141192.51	126.7	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	473297.59	0.8	418309.46	113.15	29.5	120.4	
Sc	45	He	97904.51	0.8	85440.95	114.59	29.5	120.4	
Ge	72	No Gas	872631.81	3.5	694668.88	125.62	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	170209.87	0.5	157206.79	108.27	29.5	120.4	
Ge	72	He	73324.70	0.8	64721.85	113.29	29.5	120.4	
Y	89	H2	2971239.65	1.0	2572670.23	115.49	29.5	120.4	
Y	89	He	631872.00	0.8	574051.42	110.07	29.5	120.4	
Tb	159	No Gas	8863386.74	3.7	6821698.44	129.93	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3346029.71	0.4	2982140.2	112.2	29.5	120.4	
Bi	209	No Gas	4364711.75	4.0	3547037.46	123.05	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6090-007

File Name 141SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:20:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.091	ppb	33.2	66.67	100	
11	B	6	No Gas	759.913	ppb	11.8	124677.64	1000	
23	Na	45	He	74216.472	ppb	1.6	1661530.37	200000	
24	Mg	45	He	48767.719	ppb	1.9	604607.11	200000	
27	Al	45	He	7.633	ppb	17.8	61.11	200000	
28	Si	45	H2	12843.288	ppb	1.2	121802.23	10000	
39	K	45	He	41302.413	ppb	1.6	491200.00	200000	
40	Ca	45	H2	182252.505	ppb	1.7	15279117.83	200000	
51	V	89	He	3.240	ppb	11.0	757.82	1000	
52	Cr	89	He	1.671	ppb	8.4	437.93	2000	
55	Mn	89	He	1607.077	ppb	1.3	165106.01	2000	
56	Fe	89	H2	54203.512	ppb	1.5	17982070.40	100000	
59	Co	89	He	14.217	ppb	8.8	5176.88	1000	
60	Ni	89	He	26.706	ppb	2.7	2989.32	1000	
63	Cu	89	He	0.603	ppb	27.5	322.24	2000	
66	Zn	89	He	2.444	ppb	54.0	161.12	2000	
75	As	89	He	124.688	ppb	3.2	3869.63	1000	
78	Se	89	H2	0.260	ppb	14.6	4.33	1000	
88	Sr	89	He	1121.541	ppb	1.9	182597.52	2000	
95	Mo	89	He	0.656	ppb	26.6	126.67	1000	
107	Ag	89	He	0.053	ppb	44.7	50.00	100	
111	Cd	89	He	0.023	ppb	62.6	2.22	1000	
118	Sn	159	He	1.227	ppb	10.1	277.79	1000	
121	Sb	159	No Gas	0.118	ppb	51.3	196.89	1000	
137	Ba	159	No Gas	232.767	ppb	14.7	128604.39	2000	
182	W	159	No Gas	0.052	ppb	49.7	133.48	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.021	ppb	105.9	297.00	2000	
232	Th	209	No Gas	0.030	ppb	42.9	216.91	1000	
238	U	209	No Gas	3.250	ppb	13.0	9330.66	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1719204.44	7.7	1483357.64	115.9	29.5	120.4	
Sc	45	No Gas	3891651.67	8.6	3141192.51	123.89	29.5	120.4	6020/DoD
Sc	45	H2	459649.55	1.2	418309.46	109.88	29.5	120.4	
Sc	45	He	95677.82	1.6	85440.95	111.98	29.5	120.4	
Ge	72	No Gas	849780.33	8.6	694668.88	122.33	29.5	120.4	6020/DoD
Ge	72	H2	169424.46	0.2	157206.79	107.77	29.5	120.4	
Ge	72	He	72997.24	1.2	64721.85	112.79	29.5	120.4	
Y	89	H2	2914787.86	0.8	2572670.23	113.3	29.5	120.4	
Y	89	He	629346.77	1.3	574051.42	109.63	29.5	120.4	
Tb	159	No Gas	8627947.10	8.7	6821698.44	126.48	29.5	120.4	6020/DoD EPA
Tb	159	He	3339357.00	1.6	2982140.2	111.98	29.5	120.4	
Bi	209	No Gas	4274799.54	9.2	3547037.46	120.52	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6090-008

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:23:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	158.7	54.45	100	
11	B	6	No Gas	153.622	ppb	7.1	26993.73	1000	
23	Na	45	He	51484.736	ppb	0.4	1174679.90	200000	
24	Mg	45	He	40258.523	ppb	0.8	507492.53	200000	
27	Al	45	He	23.202	ppb	20.2	142.23	200000	
28	Si	45	H2	8684.770	ppb	2.6	85036.87	10000	
39	K	45	He	21165.199	ppb	1.2	261942.45	200000	
40	Ca	45	H2	186541.973	ppb	2.0	16112659.48	200000	
51	V	89	He	2.889	ppb	6.1	711.16	1000	
52	Cr	89	He	0.307	ppb	24.0	147.31	2000	
55	Mn	89	He	4640.748	ppb	0.9	487132.93	2000	
56	Fe	89	H2	3711.654	ppb	1.5	1283224.39	100000	
59	Co	89	He	20.137	ppb	1.2	7487.02	1000	
60	Ni	89	He	6.491	ppb	10.4	1032.30	1000	
63	Cu	89	He	2.872	ppb	1.7	975.63	2000	
66	Zn	89	He	4.043	ppb	25.8	225.57	2000	
75	As	89	He	4.090	ppb	10.2	133.35	1000	
78	Se	89	H2	0.209	ppb	15.3	3.67	1000	
88	Sr	89	He	372.628	ppb	1.5	62000.63	2000	
95	Mo	89	He	0.186	ppb	20.4	45.56	1000	
107	Ag	89	He	0.073	ppb	32.8	63.34	100	
111	Cd	89	He	0.018	ppb	161.0	1.85	1000	
118	Sn	159	He	1.411	ppb	11.6	313.35	1000	
121	Sb	159	No Gas	0.074	ppb	26.4	143.49	1000	
137	Ba	159	No Gas	48.492	ppb	12.3	27860.15	2000	
182	W	159	No Gas	-0.012	ppb	N/A	70.08	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	46.72	1000	
208	Pb	209	No Gas	0.238	ppb	25.6	994.47	2000	
232	Th	209	No Gas	0.046	ppb	38.6	276.98	1000	
238	U	209	No Gas	18.662	ppb	11.5	56296.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1741140.77	3.4	1483357.64	117.38	29.5	120.4	
Sc	45	No Gas	3979582.49	4.9	3141192.51	126.69	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	473628.78	1.9	418309.46	113.22	29.5	120.4	
Sc	45	He	97244.11	0.7	85440.95	113.81	29.5	120.4	
Ge	72	No Gas	887369.87	4.3	694668.88	127.74	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	173217.80	0.6	157206.79	110.18	29.5	120.4	
Ge	72	He	74316.03	0.5	64721.85	114.82	29.5	120.4	
Y	89	H2	3021152.53	1.4	2572670.23	117.43	29.5	120.4	
Y	89	He	643008.26	0.4	574051.42	112.01	29.5	120.4	
Tb	159	No Gas	8924609.24	4.9	6821698.44	130.83	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3376434.26	0.3	2982140.2	113.22	29.5	120.4	
Bi	209	No Gas	4475340.60	4.8	3547037.46	126.17	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-009

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:25:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	214.3	53.34	100	
11	B	6	No Gas	121.608	ppb	9.9	22016.33	1000	
23	Na	45	He	89850.680	ppb	1.2	2080970.64	200000	
24	Mg	45	He	36712.465	ppb	1.0	471533.79	200000	
27	Al	45	He	75.434	ppb	21.5	417.80	200000	
28	Si	45	H2	10877.578	ppb	0.4	106428.32	10000	
39	K	45	He	24243.174	ppb	1.6	303803.94	200000	
40	Ca	45	H2	209643.281	ppb	1.3	18118327.92	200000	
51	V	89	He	2.633	ppb	7.4	666.71	1000	
52	Cr	89	He	0.519	ppb	17.6	194.63	2000	
55	Mn	89	He	7208.992	ppb	0.4	758552.13	2000	
56	Fe	89	H2	4936.346	ppb	0.8	1715473.97	100000	
59	Co	89	He	3.713	ppb	9.1	1404.61	1000	
60	Ni	89	He	2.806	ppb	1.5	665.59	1000	
63	Cu	89	He	1.501	ppb	4.1	586.70	2000	
66	Zn	89	He	6.274	ppb	8.4	311.13	2000	
75	As	89	He	7.503	ppb	7.5	242.03	1000	
78	Se	89	H2	0.168	ppb	46.7	3.00	1000	
88	Sr	89	He	415.073	ppb	0.2	69230.38	2000	
95	Mo	89	He	1.373	ppb	23.3	257.79	1000	
107	Ag	89	He	0.048	ppb	24.2	47.78	100	
111	Cd	89	He	0.013	ppb	120.6	1.48	1000	
118	Sn	159	He	1.118	ppb	14.3	263.35	1000	
121	Sb	159	No Gas	0.042	ppb	8.9	96.77	1000	
137	Ba	159	No Gas	41.385	ppb	11.8	23871.35	2000	
182	W	159	No Gas	-0.015	ppb	N/A	66.74	1000	
205	Tl	209	No Gas	-0.045	ppb	N/A	36.71	1000	
208	Pb	209	No Gas	0.316	ppb	10.1	1241.42	2000	
232	Th	209	No Gas	0.123	ppb	16.4	523.93	1000	
238	U	209	No Gas	46.220	ppb	11.6	139419.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1765827.20	3.9	1483357.64	119.04	29.5	120.4	
Sc	45	No Gas	4056171.63	4.0	3141192.51	129.13	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	473803.18	1.1	418309.46	113.27	29.5	120.4	
Sc	45	He	99074.09	1.3	85440.95	115.96	29.5	120.4	
Ge	72	No Gas	897068.59	3.6	694668.88	129.14	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	173309.73	2.7	157206.79	110.24	29.5	120.4	
Ge	72	He	74669.31	0.3	64721.85	115.37	29.5	120.4	
Y	89	H2	3040974.90	1.1	2572670.23	118.2	29.5	120.4	
Y	89	He	644600.59	0.5	574051.42	112.29	29.5	120.4	
Tb	159	No Gas	8951885.28	3.8	6821698.44	131.23	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3396739.77	0.5	2982140.2	113.9	29.5	120.4	
Bi	209	No Gas	4472631.44	4.0	3547037.46	126.09	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-010S

File Name 144SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:28:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.663	ppb	4.3	12953.99	100	
11	B	6	No Gas	501.238	ppb	7.1	88342.53	1000	
23	Na	45	He	8975.816	ppb	0.8	219373.51	200000	
24	Mg	45	He	5441.274	ppb	1.3	71298.06	200000	
27	Al	45	He	1923.206	ppb	1.5	10212.89	200000	
28	Si	45	H2	1025.665	ppb	3.1	10782.70	10000	
39	K	45	He	10310.170	ppb	1.5	138052.08	200000	
40	Ca	45	H2	2790.277	ppb	6.6	247729.99	200000	
51	V	89	He	540.289	ppb	0.7	98225.82	1000	
52	Cr	89	He	218.655	ppb	0.1	48894.37	2000	
55	Mn	89	He	543.926	ppb	1.3	57940.29	2000	
56	Fe	89	H2	1125.226	ppb	6.8	399987.25	100000	
59	Co	89	He	555.791	ppb	0.8	208922.77	1000	
60	Ni	89	He	553.797	ppb	0.4	56566.21	1000	
63	Cu	89	He	273.447	ppb	0.3	79136.43	2000	
66	Zn	89	He	541.740	ppb	1.2	20924.15	2000	
75	As	89	He	109.016	ppb	3.3	3507.17	1000	
78	Se	89	H2	105.283	ppb	6.0	1766.70	1000	
88	Sr	89	He	508.547	ppb	1.1	85818.79	2000	
95	Mo	89	He	107.769	ppb	3.3	19474.47	1000	
107	Ag	89	He	53.569	ppb	1.2	33178.03	100	
111	Cd	89	He	260.157	ppb	0.2	21214.47	1000	
118	Sn	159	He	516.515	ppb	1.1	92228.96	1000	
121	Sb	159	No Gas	97.545	ppb	6.2	140753.62	1000	
137	Ba	159	No Gas	1903.979	ppb	7.5	1085547.87	2000	
182	W	159	No Gas	97.854	ppb	7.0	105116.08	1000	
205	Tl	209	No Gas	101.385	ppb	6.4	232074.75	1000	
208	Pb	209	No Gas	101.531	ppb	6.5	320643.34	2000	
232	Th	209	No Gas	95.732	ppb	8.2	310790.18	1000	
238	U	209	No Gas	97.070	ppb	6.3	294284.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1823138.36	0.3	1483357.64	122.91	29.5	120.4	6020/DoD
Sc	45	No Gas	4024935.37	1.2	3141192.51	128.13	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	485305.78	5.0	418309.46	116.02	29.5	120.4	
Sc	45	He	100192.54	0.2	85440.95	117.27	29.5	120.4	
Ge	72	No Gas	891688.36	0.8	694668.88	128.36	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	176473.21	3.3	157206.79	112.26	29.5	120.4	
Ge	72	He	75630.92	0.2	64721.85	116.86	29.5	120.4	
Y	89	H2	3071122.21	4.9	2572670.23	119.37	29.5	120.4	
Y	89	He	652224.10	0.7	574051.42	113.62	29.5	120.4	
Tb	159	No Gas	8828069.59	1.2	6821698.44	129.41	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3410444.01	0.7	2982140.2	114.36	29.5	120.4	
Bi	209	No Gas	4482341.09	1.1	3547037.46	126.37	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-010P

File Name 145SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:30:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.667	ppb	9.3	14372.05	100	
11	B	6	No Gas	548.503	ppb	8.7	98815.17	1000	
23	Na	45	He	9549.960	ppb	0.9	233340.33	200000	
24	Mg	45	He	5903.463	ppb	1.4	77483.98	200000	
27	Al	45	He	2058.701	ppb	1.8	10957.90	200000	
28	Si	45	H2	1119.582	ppb	6.8	11804.77	10000	
39	K	45	He	11115.205	ppb	2.4	148197.88	200000	
40	Ca	45	H2	2939.846	ppb	1.0	263381.09	200000	
51	V	89	He	584.814	ppb	1.7	106744.82	1000	
52	Cr	89	He	236.188	ppb	1.3	53027.73	2000	
55	Mn	89	He	587.258	ppb	1.0	62813.99	2000	
56	Fe	89	H2	1197.185	ppb	0.7	428495.05	100000	
59	Co	89	He	602.738	ppb	1.0	227522.70	1000	
60	Ni	89	He	606.111	ppb	1.5	62129.60	1000	
63	Cu	89	He	294.660	ppb	1.3	85617.72	2000	
66	Zn	89	He	573.697	ppb	1.9	22247.30	2000	
75	As	89	He	117.771	ppb	2.0	3804.61	1000	
78	Se	89	H2	111.870	ppb	3.0	1891.54	1000	
88	Sr	89	He	546.700	ppb	1.4	92644.87	2000	
95	Mo	89	He	115.991	ppb	0.9	21046.82	1000	
107	Ag	89	He	56.935	ppb	2.1	35407.01	100	
111	Cd	89	He	278.701	ppb	2.0	22819.66	1000	
118	Sn	159	He	554.478	ppb	1.3	100107.12	1000	
121	Sb	159	No Gas	105.529	ppb	9.0	155075.63	1000	
137	Ba	159	No Gas	2064.280	ppb	10.0	1198379.00	2000	
182	W	159	No Gas	107.192	ppb	9.7	117256.60	1000	
205	Tl	209	No Gas	109.193	ppb	9.2	254111.52	1000	
208	Pb	209	No Gas	109.601	ppb	9.1	351870.16	2000	
232	Th	209	No Gas	105.606	ppb	9.9	348497.88	1000	
238	U	209	No Gas	104.077	ppb	10.5	320711.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1869766.50	2.8	1483357.64	126.05	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	4125564.27	3.6	3141192.51	131.34	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	488778.96	0.5	418309.46	116.85	29.5	120.4	
Sc	45	He	100449.36	1.1	85440.95	117.57	29.5	120.4	
Ge	72	No Gas	907068.85	1.9	694668.88	130.58	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	179571.23	0.3	157206.79	114.23	29.5	120.4	
Ge	72	He	75713.32	0.1	64721.85	116.98	29.5	120.4	
Y	89	H2	3089150.87	1.1	2572670.23	120.08	29.5	120.4	
Y	89	He	654987.50	1.0	574051.42	114.1	29.5	120.4	
Tb	159	No Gas	9010471.81	3.5	6821698.44	132.09	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3448625.02	1.2	2982140.2	115.64	29.5	120.4	
Bi	209	No Gas	4567234.99	3.6	3547037.46	128.76	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG24IMW3
File Name	146_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:33:29 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.142	ppb	34.6	85.56	0.5	
B	11	6	No Gas	20.957	ppb	7.8	5425.66	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	1105.494	ppb	6.8	35620.23	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	6.677	ppb	57.0	802.30	50	
Al	27	45	He	2.742	ppb	64.3	37.78	50	
Si	28	45	H2	11.911	ppb	55.7	680.78	250	
K	39	45	He	-2.403	ppb	N/A	12700.01	500	
Ca	40	45	H2	111.504	ppb	118.1	11196.33	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
V	51	89	He	2.613	ppb	7.8	665.60	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.206	ppb	12.9	125.98	2.5	
Mn	55	89	He	1.563	ppb	55.2	195.97	1	PB 6020 Fails DoD
Fe	56	89	H2	-0.223	ppb	N/A	7614.53	50	
Co	59	89	He	0.159	ppb	55.0	84.45	0.5	
Ni	60	89	He	-2.397	ppb	N/A	144.45	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.679	ppb	27.2	353.35	1.5	
Zn	66	89	He	2.841	ppb	8.2	181.12	5	
As	75	89	He	0.385	ppb	64.3	16.00	2.5	
Se	78	89	H2	0.384	ppb	50.9	6.67	2.5	
Sr	88	89	He	0.220	ppb	108.9	44.44	2.5	
Mo	95	89	He	0.240	ppb	24.2	55.56	2.5	
Ag	107	89	He	0.058	ppb	55.4	54.45	0.5	
Cd	111	89	He	0.100	ppb	20.5	8.52	0.5	
Sn	118	159	He	1.753	ppb	23.4	376.69	2.5	
Sb	121	159	No Gas	0.151	ppb	55.7	260.29	0.5	
Ba	137	159	No Gas	1.928	ppb	18.9	1144.67	1	PB 6020 Fails DoD
W	182	159	No Gas	0.200	ppb	22.5	303.67	2.5	
Tl	205	209	No Gas	0.135	ppb	27.0	460.52	0.5	
Pb	208	209	No Gas	0.143	ppb	22.0	717.48	0.5	
Th	232	209	No Gas	0.984	ppb	21.6	3410.99	2.5	
U	238	209	No Gas	0.105	ppb	38.1	337.05	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1831521.78	2.7	1483357.64	123.47	29.5	120.4	6020/DoD
Sc	45	No Gas	4128936.92	3.7	3141192.51	131.44	29.5	120.4	6020/DoD EPA
Sc	45	H2	486155.63	0.8	418309.46	116.22	29.5	120.4	
Sc	45	He	99375.67	1.2	85440.95	116.31	29.5	120.4	
Ge	72	No Gas	911569.99	1.7	694668.88	131.22	29.5	120.4	6020/DoD EPA
Ge	72	H2	176263.94	0.1	157206.79	112.12	29.5	120.4	
Ge	72	He	74882.99	0.7	64721.85	115.7	29.5	120.4	
Y	89	H2	3073101.02	0.5	2572670.23	119.45	29.5	120.4	
Y	89	He	646820.86	0.4	574051.42	112.68	29.5	120.4	
Tb	159	No Gas	9010463.89	3.6	6821698.44	132.09	29.5	120.4	6020/DoD EPA
Tb	159	He	3398903.53	0.8	2982140.2	113.98	29.5	120.4	
Bi	209	No Gas	4590583.60	3.6	3547037.46	129.42	29.5	120.4	6020/DoD EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW3
File Name	147LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:36:07 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.166	ppb	7.5	13838.15	50	20.07	79.5	120.4	
B	11	6	No Gas	518.925	ppb	5.7	92792.95	500	20.76	79.5	120.4	
Na	23	45	He	9083.662	ppb	1.4	221174.65	7500	24.22	79.5	120.4	6020□ DoD
Mg	24	45	He	5562.198	ppb	1.8	72628.68	5000	22.25	79.5	120.4	
Al	27	45	He	2011.888	ppb	3.0	10651.01	2000	20.12	79.5	120.4	
Si	28	45	H2	1032.747	ppb	5.8	10949.71	1000	20.65	0	200	
K	39	45	He	10586.678	ppb	1.5	140957.75	10000	21.17	79.5	120.4	
Ca	40	45	H2	2736.626	ppb	1.7	245534.18	2500	21.89	79.5	120.4	
V	51	89	He	561.207	ppb	1.5	102063.86	500	22.45	79.5	120.4	
Cr	52	89	He	224.987	ppb	0.6	50331.16	200	22.5	79.5	120.4	
Mn	55	89	He	560.522	ppb	1.2	59732.47	500	22.42	79.5	120.4	
Fe	56	89	H2	1116.605	ppb	1.2	401353.98	1000	22.33	79.5	120.4	
Co	59	89	He	576.294	ppb	0.6	216732.56	500	23.05	79.5	120.4	DoD
Ni	60	89	He	578.973	ppb	1.2	59145.73	500	23.16	79.5	120.4	
Cu	63	89	He	280.908	ppb	0.1	81330.89	250	22.47	79.5	120.4	
Zn	66	89	He	563.449	ppb	2.7	21768.77	500	22.54	79.5	120.4	
As	75	89	He	111.754	ppb	3.9	3596.53	100	22.35	79.5	120.4	
Se	78	89	H2	105.480	ppb	2.2	1789.03	100	21.1	79.5	120.4	
Sr	88	89	He	526.291	ppb	0.8	88856.66	500	21.05	79.5	120.4	
Mo	95	89	He	112.647	ppb	2.3	20362.54	100	22.53	79.5	120.4	
Ag	107	89	He	55.310	ppb	1.7	34269.68	50	22.12	79.5	120.4	
Cd	111	89	He	268.591	ppb	0.5	21912.24	250	21.49	79.5	120.4	
Sn	118	159	He	532.777	ppb	1.5	95498.54	500	21.31	79.5	120.4	
Sb	121	159	No Gas	100.805	ppb	5.9	148105.32	100	20.16	79.5	120.4	
Ba	137	159	No Gas	1955.118	ppb	6.7	1134987.20	2000	19.55	79.5	120.4	
W	182	159	No Gas	101.688	ppb	5.7	111223.95	100	20.34	79.5	120.4	
Tl	205	209	No Gas	104.463	ppb	7.5	243734.40	100	20.89	79.5	120.4	
[Pb]	206	209	No Gas	103.754	ppb	8.0	84164.93	100	20.75	79.5	120.4	
[Pb]	207	209	No Gas	104.828	ppb	7.2	74094.93	100	20.97	79.5	120.4	
Pb	208	209	No Gas	104.324	ppb	8.5	335777.40	100	20.86	79.5	120.4	
Th	232	209	No Gas	99.696	ppb	8.8	329830.00	100	19.94	79.5	120.4	
U	238	209	No Gas	99.551	ppb	7.6	307632.93	100	19.91	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1852094.42	1.6	1483357.64	124.86	29.5	120.4	6020/DoD
Sc	45	No Gas	4101321.54	1.9	3141192.51	130.57	29.5	120.4	6020/DoD EPA
Sc	45	H2	489360.29	1.2	418309.46	116.99	29.5	120.4	
Sc	45	He	99880.01	1.2	85440.95	116.9	29.5	120.4	
Ge	72	No Gas	911054.73	2.0	694668.88	131.15	29.5	120.4	6020/DoD EPA
Ge	72	H2	178037.52	0.2	157206.79	113.25	29.5	120.4	
Ge	72	He	75587.20	0.9	64721.85	116.79	29.5	120.4	
Y	89	H2	3098308.35	0.5	2572670.23	120.43	29.5	120.4	6020/DoD
Y	89	He	652546.52	1.0	574051.42	113.67	29.5	120.4	
Tb	159	No Gas	8995638.27	1.9	6821698.44	131.87	29.5	120.4	6020/DoD EPA
Tb	159	He	3423707.35	0.9	2982140.2	114.81	29.5	120.4	
Bi	209	No Gas	4573983.98	2.2	3547037.46	128.95	29.5	120.4	6020/DoD EPA

Sample Report

Sample Name SN6124-001

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:38:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.134	ppb	32.2	82.23	100	
11	B	6	No Gas	24.186	ppb	2.2	5912.53	1000	
23	Na	45	He	20174.897	ppb	2.4	462075.41	200000	
24	Mg	45	He	6036.927	ppb	2.5	76003.36	200000	
27	Al	45	He	4.762	ppb	67.6	46.67	200000	
28	Si	45	H2	4909.889	ppb	1.4	49822.23	10000	
39	K	45	He	1563.805	ppb	2.5	30617.15	200000	
40	Ca	45	H2	30384.669	ppb	1.5	2707693.81	200000	
51	V	89	He	2.993	ppb	3.5	712.27	1000	
52	Cr	89	He	0.403	ppb	9.5	164.64	2000	
55	Mn	89	He	227.645	ppb	2.0	23357.11	2000	
56	Fe	89	H2	21.777	ppb	6.8	15361.99	100000	
59	Co	89	He	0.355	ppb	30.5	153.34	1000	
60	Ni	89	He	4.265	ppb	23.0	790.05	1000	
63	Cu	89	He	4.941	ppb	1.9	1527.92	2000	
66	Zn	89	He	5.685	ppb	13.4	281.12	2000	
75	As	89	He	1.645	ppb	22.6	54.67	1000	
78	Se	89	H2	0.392	ppb	14.6	6.83	1000	
88	Sr	89	He	154.098	ppb	1.9	25034.65	2000	
95	Mo	89	He	0.377	ppb	16.7	77.78	1000	
107	Ag	89	He	0.051	ppb	47.8	48.89	100	
111	Cd	89	He	0.065	ppb	77.9	5.55	1000	
118	Sn	159	He	2.458	ppb	4.7	485.58	1000	
121	Sb	159	No Gas	0.139	ppb	1.3	240.27	1000	
137	Ba	159	No Gas	11.003	ppb	10.7	6428.75	2000	
182	W	159	No Gas	0.195	ppb	26.2	297.00	1000	
205	Tl	209	No Gas	0.091	ppb	31.2	353.74	1000	
208	Pb	209	No Gas	0.616	ppb	10.8	2235.93	2000	
232	Th	209	No Gas	1.090	ppb	22.5	3754.84	1000	
238	U	209	No Gas	0.215	ppb	15.1	674.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809894.40	1.6	1483357.64	122.01	29.5	120.4	6020/DoD
Sc	45	No Gas	4124771.60	3.3	3141192.51	131.31	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	488377.48	1.3	418309.46	116.75	29.5	120.4	
Sc	45	He	96401.00	2.6	85440.95	112.83	29.5	120.4	
Ge	72	No Gas	914114.55	3.2	694668.88	131.59	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	177394.76	1.9	157206.79	112.84	29.5	120.4	
Ge	72	He	73068.81	2.7	64721.85	112.9	29.5	120.4	
Y	89	H2	3085964.37	1.1	2572670.23	119.95	29.5	120.4	
Y	89	He	627967.99	2.8	574051.42	109.39	29.5	120.4	
Tb	159	No Gas	9041513.55	3.2	6821698.44	132.54	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3289958.46	3.5	2982140.2	110.32	29.5	120.4	
Bi	209	No Gas	4575100.93	3.0	3547037.46	128.98	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	149_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:41:20 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.971	ppb	8.3	30606.43	25	91.88	89.8	110.2	
11	B	6	No Gas	24.942	ppb	7.7	22914.38	25	99.77	89.8	110.2	
23	Na	45	He	5378.060	ppb	1.8	629218.79	5000	107.56	89.8	110.2	
24	Mg	45	He	5028.295	ppb	2.5	322805.91	5000	100.57	89.8	110.2	
27	Al	45	He	478.096	ppb	2.7	12533.71	500	95.62	89.8	110.2	
28	Si	45	H2	454.298	ppb	3.4	23404.92	500	90.86	89.8	110.2	
39	K	45	He	4925.577	ppb	2.0	308139.64	5000	98.51	89.8	110.2	
40	Ca	45	H2	4911.274	ppb	2.0	2193479.06	5000	98.23	89.8	110.2	
51	V	89	He	25.656	ppb	4.1	23452.41	25	102.62	89.8	110.2	
52	Cr	89	He	25.666	ppb	3.0	28703.80	25	102.66	89.8	110.2	
55	Mn	89	He	25.534	ppb	1.8	13612.79	25	102.14	89.8	110.2	
56	Fe	89	H2	4912.434	ppb	1.8	8687022.55	5000	98.25	89.8	110.2	
59	Co	89	He	26.514	ppb	2.6	49811.24	25	106.06	89.8	110.2	
60	Ni	89	He	26.279	ppb	0.9	13709.40	25	105.12	89.8	110.2	
63	Cu	89	He	25.688	ppb	2.9	37221.55	25	102.75	89.8	110.2	
66	Zn	89	He	25.287	ppb	3.6	4936.60	25	101.15	89.8	110.2	
75	As	89	He	24.864	ppb	0.5	3997.01	25	99.46	89.8	110.2	
78	Se	89	H2	24.041	ppb	2.7	2043.56	25	96.16	89.8	110.2	
88	Sr	89	He	23.374	ppb	1.1	19716.97	25	93.5	89.8	110.2	
95	Mo	89	He	25.219	ppb	0.4	22769.57	25	100.88	89.8	110.2	
107	Ag	89	He	25.285	ppb	1.9	78215.55	25	101.14	89.8	110.2	
111	Cd	89	He	24.149	ppb	1.8	9838.47	25	96.6	89.8	110.2	
118	Sn	159	He	24.279	ppb	2.6	21631.29	25	97.12	89.8	110.2	
121	Sb	159	No Gas	23.086	ppb	7.1	168599.97	25	92.34	89.8	110.2	
137	Ba	159	No Gas	22.751	ppb	6.1	65681.30	25	91	89.8	110.2	
182	W	159	No Gas	22.729	ppb	8.2	123561.89	25	90.92	89.8	110.2	
205	Tl	209	No Gas	23.268	ppb	6.9	268512.55	25	93.07	89.8	110.2	
208	Pb	209	No Gas	23.352	ppb	8.4	371726.43	25	93.41	89.8	110.2	
232	Th	209	No Gas	22.173	ppb	8.9	362843.44	25	88.69	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.729	ppb	7.0	347439.11	25	90.92	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794175.08	3.1	1483357.64	120.95	29.5	120.4	6020/DoD
Sc	45	No Gas	4091661.15	1.8	3141192.51	130.26	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	489490.66	1.0	418309.46	117.02	29.5	120.4	
Sc	45	He	98993.67	1.9	85440.95	115.86	29.5	120.4	
Ge	72	No Gas	897432.86	2.0	694668.88	129.19	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	178655.69	0.2	157206.79	113.64	29.5	120.4	
Ge	72	He	75492.95	1.3	64721.85	116.64	29.5	120.4	
Y	89	H2	3105970.73	1.0	2572670.23	120.73	29.5	120.4	6020/DoD
Y	89	He	651809.91	1.4	574051.42	113.55	29.5	120.4	
Tb	159	No Gas	8946055.84	2.2	6821698.44	131.14	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3396247.94	1.6	2982140.2	113.89	29.5	120.4	
Bi	209	No Gas	4524436.93	2.3	3547037.46	127.56	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	150_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:43:53 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.065	ppb	44.4	134.45	0.2	
11	B	6	No Gas	1.922	ppb	14.0	3424.98	4	
23	Na	45	He	162.167	ppb	3.3	29646.86	200	Failed DoD
24	Mg	45	He	-0.793	ppb	N/A	684.51	20	
27	Al	45	He	0.058	ppb	445.1	25.56	20	
28	Si	45	H2	1.797	ppb	17.7	667.43	100	
39	K	45	He	-7.287	ppb	N/A	12654.99	200	
40	Ca	45	H2	3.919	ppb	5.4	3092.67	20	
51	V	89	He	0.072	ppb	40.4	267.79	1	
52	Cr	89	He	-0.012	ppb	N/A	69.32	1	
55	Mn	89	He	0.061	ppb	49.8	64.66	0.4	
56	Fe	89	H2	-0.244	ppb	N/A	7346.80	20	
59	Co	89	He	0.007	ppb	140.1	40.00	0.2	
60	Ni	89	He	-0.496	ppb	N/A	140.01	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.007	ppb	N/A	153.34	0.6	
66	Zn	89	He	0.106	ppb	120.8	95.56	2	
75	As	89	He	0.017	ppb	89.1	6.67	1	
78	Se	89	H2	0.035	ppb	42.2	3.17	1	
88	Sr	89	He	0.017	ppb	70.3	22.22	1	
95	Mo	89	He	0.040	ppb	23.7	50.00	1	
107	Ag	89	He	0.004	ppb	90.8	31.11	0.2	
111	Cd	89	He	0.012	ppb	0.4	5.56	0.2	
118	Sn	159	He	0.036	ppb	57.4	97.78	1	
121	Sb	159	No Gas	0.025	ppb	36.8	216.91	0.2	
137	Ba	159	No Gas	0.072	ppb	5.6	226.92	0.4	
182	W	159	No Gas	0.056	ppb	14.1	387.11	1	
205	Tl	209	No Gas	0.028	ppb	32.3	467.20	0.2	
208	Pb	209	No Gas	0.023	ppb	40.8	630.71	0.2	
232	Th	209	No Gas	0.075	ppb	8.7	1374.97	1	
238	U	209	No Gas	0.030	ppb	31.7	477.21	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1818042.09	3.5	1483357.64	122.56	29.5	120.4	6020/DoD
Sc	45	No Gas	4156186.88	4.4	3141192.51	132.31	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	497985.20	1.5	418309.46	119.05	29.5	120.4	
Sc	45	He	102307.66	0.7	85440.95	119.74	29.5	120.4	
Ge	72	No Gas	913732.89	3.5	694668.88	131.54	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	181594.89	1.6	157206.79	115.51	29.5	120.4	
Ge	72	He	77451.63	0.5	64721.85	119.67	29.5	120.4	
Y	89	H2	3111442.48	1.2	2572670.23	120.94	29.5	120.4	6020/DoD
Y	89	He	664912.69	0.4	574051.42	115.83	29.5	120.4	
Tb	159	No Gas	8957247.43	4.4	6821698.44	131.31	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3438990.37	0.5	2982140.2	115.32	29.5	120.4	
Bi	209	No Gas	4551057.57	4.6	3547037.46	128.31	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6124-003

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:46:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.117	ppb	62.2	76.67	100	
11	B	6	No Gas	9.461	ppb	3.5	3367.18	1000	
23	Na	45	He	60989.034	ppb	0.7	1414849.33	200000	
24	Mg	45	He	7942.403	ppb	1.3	102502.67	200000	
27	Al	45	He	15.079	ppb	40.3	102.23	200000	
28	Si	45	H2	6277.133	ppb	1.7	63173.10	10000	
39	K	45	He	1907.169	ppb	2.8	35568.14	200000	
40	Ca	45	H2	37183.180	ppb	0.4	3294149.19	200000	
51	V	89	He	2.881	ppb	7.6	712.27	1000	
52	Cr	89	He	0.365	ppb	20.8	160.64	2000	
55	Mn	89	He	3.876	ppb	12.4	439.26	2000	
56	Fe	89	H2	-7.030	ppb	N/A	5193.44	100000	
59	Co	89	He	0.022	ppb	136.7	33.34	1000	
60	Ni	89	He	5.565	ppb	4.2	943.40	1000	
63	Cu	89	He	9.893	ppb	0.6	2985.98	2000	
66	Zn	89	He	7.963	ppb	15.1	375.58	2000	
75	As	89	He	2.085	ppb	17.9	70.01	1000	
78	Se	89	H2	0.198	ppb	45.7	3.50	1000	
88	Sr	89	He	221.479	ppb	1.1	36991.75	2000	
95	Mo	89	He	0.216	ppb	12.5	51.11	1000	
107	Ag	89	He	0.036	ppb	42.0	41.11	100	
111	Cd	89	He	0.031	ppb	90.7	2.96	1000	
118	Sn	159	He	1.112	ppb	4.2	262.23	1000	
121	Sb	159	No Gas	0.075	ppb	63.1	143.49	1000	
137	Ba	159	No Gas	5.433	ppb	10.1	3150.55	2000	
182	W	159	No Gas	0.016	ppb	238.8	100.11	1000	
205	Tl	209	No Gas	-0.035	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	1.015	ppb	4.0	3490.79	2000	
232	Th	209	No Gas	0.357	ppb	1.9	1301.54	1000	
238	U	209	No Gas	0.266	ppb	18.1	820.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1798497.06	2.7	1483357.64	121.25	29.5	120.4	6020/DoD
Sc	45	No Gas	4084954.55	3.6	3141192.51	130.04	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	485517.65	0.2	418309.46	116.07	29.5	120.4	
Sc	45	He	99004.66	0.7	85440.95	115.87	29.5	120.4	
Ge	72	No Gas	909396.52	2.4	694668.88	130.91	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175519.16	1.2	157206.79	111.65	29.5	120.4	
Ge	72	He	74831.19	0.8	64721.85	115.62	29.5	120.4	
Y	89	H2	3054484.95	0.4	2572670.23	118.73	29.5	120.4	
Y	89	He	645401.83	0.7	574051.42	112.43	29.5	120.4	
Tb	159	No Gas	8946905.15	3.6	6821698.44	131.15	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3396673.59	0.5	2982140.2	113.9	29.5	120.4	
Bi	209	No Gas	4534410.08	3.4	3547037.46	127.84	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name	SN6124-005
File Name	152SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:49:18 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	18.2	61.11	100	
11	B	6	No Gas	7.399	ppb	9.0	2990.42	1000	
23	Na	45	He	54036.050	ppb	0.7	1263238.00	200000	
24	Mg	45	He	6866.798	ppb	0.7	89325.81	200000	
27	Al	45	He	7.575	ppb	21.2	63.34	200000	
28	Si	45	H2	5462.632	ppb	3.4	54789.11	10000	
39	K	45	He	1599.656	ppb	2.5	32099.92	200000	
40	Ca	45	H2	32535.747	ppb	1.9	2869073.50	200000	
51	V	89	He	2.754	ppb	8.5	695.60	1000	
52	Cr	89	He	0.167	ppb	32.7	117.98	2000	
55	Mn	89	He	1.034	ppb	18.1	140.64	2000	
56	Fe	89	H2	-6.927	ppb	N/A	5233.76	100000	
59	Co	89	He	0.016	ppb	233.4	31.11	1000	
60	Ni	89	He	-1.891	ppb	N/A	196.67	1000	
63	Cu	89	He	0.994	ppb	20.1	446.69	2000	
66	Zn	89	He	7.783	ppb	8.0	372.24	2000	
75	As	89	He	0.381	ppb	22.2	16.00	1000	
78	Se	89	H2	0.197	ppb	51.8	3.50	1000	
88	Sr	89	He	192.783	ppb	0.8	32474.69	2000	
95	Mo	89	He	0.090	ppb	45.8	28.89	1000	
107	Ag	89	He	0.065	ppb	20.5	58.89	100	
111	Cd	89	He	0.045	ppb	46.0	4.07	1000	
118	Sn	159	He	1.290	ppb	11.0	295.57	1000	
121	Sb	159	No Gas	0.080	ppb	14.7	153.51	1000	
137	Ba	159	No Gas	4.146	ppb	14.0	2426.29	2000	
182	W	159	No Gas	-0.025	ppb	N/A	56.73	1000	
205	Tl	209	No Gas	-0.028	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.379	ppb	9.8	1468.34	2000	
232	Th	209	No Gas	0.073	ppb	9.8	370.42	1000	
238	U	209	No Gas	0.015	ppb	70.2	53.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1784408.87	3.7	1483357.64	120.3	29.5	120.4	
Sc	45	No Gas	4088208.82	4.0	3141192.51	130.15	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	483255.42	0.4	418309.46	115.53	29.5	120.4	
Sc	45	He	99679.20	0.8	85440.95	116.66	29.5	120.4	
Ge	72	No Gas	912502.63	3.9	694668.88	131.36	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175866.11	0.3	157206.79	111.87	29.5	120.4	
Ge	72	He	75732.40	0.9	64721.85	117.01	29.5	120.4	
Y	89	H2	3057996.48	0.7	2572670.23	118.86	29.5	120.4	
Y	89	He	650984.98	1.2	574051.42	113.4	29.5	120.4	
Tb	159	No Gas	9025610.42	3.7	6821698.44	132.31	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3416320.68	0.5	2982140.2	114.56	29.5	120.4	
Bi	209	No Gas	4562129.94	3.8	3547037.46	128.62	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6124-005L

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:52:04 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.085	ppb	N/A	41.11	100	
11	B	6	No Gas	29.140	ppb	4.2	2742.58	1000	
23	Na	45	He	58060.211	ppb	1.1	285625.97	200000	
24	Mg	45	He	7042.126	ppb	0.8	19314.30	200000	
27	Al	45	He	10.851	ppb	88.6	35.56	200000	
28	Si	45	H2	5564.520	ppb	1.9	11881.44	10000	
39	K	45	He	1499.004	ppb	9.0	16755.72	200000	
40	Ca	45	H2	33199.954	ppb	3.1	600213.57	200000	
51	V	89	He	5.594	ppb	10.7	406.69	1000	
52	Cr	89	He	-0.098	ppb	N/A	77.98	2000	
55	Mn	89	He	1.411	ppb	64.2	61.99	2000	
56	Fe	89	H2	-59.896	ppb	N/A	3547.73	100000	
59	Co	89	He	-0.017	ppb	N/A	24.45	1000	
60	Ni	89	He	-12.979	ppb	N/A	127.78	1000	
63	Cu	89	He	1.198	ppb	3.7	233.35	2000	
66	Zn	89	He	7.086	ppb	20.1	130.00	2000	
75	As	89	He	0.991	ppb	21.9	10.33	1000	
78	Se	89	H2	0.235	ppb	64.3	1.00	1000	
88	Sr	89	He	194.122	ppb	3.5	6671.87	2000	
95	Mo	89	He	0.044	ppb	321.0	14.44	1000	
107	Ag	89	He	0.120	ppb	62.8	34.44	100	
111	Cd	89	He	0.107	ppb	60.8	2.22	1000	
118	Sn	159	He	0.718	ppb	66.2	91.12	1000	
121	Sb	159	No Gas	0.130	ppb	63.9	73.42	1000	
137	Ba	159	No Gas	4.525	ppb	11.5	540.61	2000	
182	W	159	No Gas	-0.090	ppb	N/A	63.40	1000	
205	Tl	209	No Gas	-0.253	ppb	N/A	23.36	1000	
208	Pb	209	No Gas	0.264	ppb	11.7	423.81	2000	
232	Th	209	No Gas	0.037	ppb	126.8	153.51	1000	
238	U	209	No Gas	0.018	ppb	86.7	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1794558.74	1.5	1483357.64	120.98	29.5	120.4	6020/DoD
Sc	45	No Gas	4106830.33	1.7	3141192.51	130.74	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	494711.18	2.1	418309.46	118.26	29.5	120.4	
Sc	45	He	101905.47	0.8	85440.95	119.27	29.5	120.4	
Ge	72	No Gas	906961.00	1.5	694668.88	130.56	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	180120.82	2.1	157206.79	114.58	29.5	120.4	
Ge	72	He	77436.93	0.6	64721.85	119.65	29.5	120.4	
Y	89	H2	3118609.46	1.6	2572670.23	121.22	29.5	120.4	6020/DoD
Y	89	He	663430.95	1.1	574051.42	115.57	29.5	120.4	
Tb	159	No Gas	8958014.31	1.2	6821698.44	131.32	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3439428.94	0.9	2982140.2	115.33	29.5	120.4	
Bi	209	No Gas	4571789.23	1.1	3547037.46	128.89	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6124-005A

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 10:54:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.291	ppb	7.2	3022.64	100	
11	B	6	No Gas	234.495	ppb	2.6	41178.31	1000	
23	Na	45	He	72254.597	ppb	1.4	1671663.70	200000	
24	Mg	45	He	8946.382	ppb	1.0	115192.42	200000	
27	Al	45	He	1051.435	ppb	1.1	5519.05	200000	
28	Si	45	H2	11236.328	ppb	1.9	111722.67	10000	
39	K	45	He	12944.942	ppb	1.7	167759.84	200000	
40	Ca	45	H2	37223.017	ppb	1.3	3271009.47	200000	
51	V	89	He	63.776	ppb	1.7	11631.92	1000	
52	Cr	89	He	59.848	ppb	0.6	13286.51	2000	
55	Mn	89	He	25.103	ppb	4.8	2671.77	2000	
56	Fe	89	H2	1173.226	ppb	1.7	414505.25	100000	
59	Co	89	He	12.000	ppb	3.0	4483.25	1000	
60	Ni	89	He	23.738	ppb	5.1	2764.81	1000	
63	Cu	89	He	36.797	ppb	2.0	10662.21	2000	
66	Zn	89	He	132.078	ppb	4.0	5096.66	2000	
75	As	89	He	57.736	ppb	0.9	1837.99	1000	
78	Se	89	H2	57.352	ppb	1.4	957.16	1000	
88	Sr	89	He	266.897	ppb	0.9	44524.04	2000	
95	Mo	89	He	58.074	ppb	2.7	10377.63	1000	
107	Ag	89	He	12.049	ppb	3.9	7390.04	100	
111	Cd	89	He	12.066	ppb	4.7	973.01	1000	
118	Sn	159	He	58.194	ppb	4.7	10389.97	1000	
121	Sb	159	No Gas	11.447	ppb	3.3	16705.69	1000	
137	Ba	159	No Gas	27.380	ppb	5.5	15773.70	2000	
182	W	159	No Gas	55.335	ppb	4.1	60045.96	1000	
205	Tl	209	No Gas	11.820	ppb	5.0	27359.97	1000	
208	Pb	209	No Gas	11.949	ppb	4.6	38201.62	2000	
232	Th	209	No Gas	11.625	ppb	2.4	38106.82	1000	
238	U	209	No Gas	11.486	ppb	5.0	35055.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1776356.41	1.6	1483357.64	119.75	29.5	120.4	
Sc	45	No Gas	4076878.61	1.2	3141192.51	129.79	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	481609.71	0.7	418309.46	115.13	29.5	120.4	
Sc	45	He	98857.71	1.6	85440.95	115.7	29.5	120.4	
Ge	72	No Gas	913064.72	1.2	694668.88	131.44	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175008.03	0.7	157206.79	111.32	29.5	120.4	
Ge	72	He	74807.21	0.9	64721.85	115.58	29.5	120.4	
Y	89	H2	3048314.67	1.0	2572670.23	118.49	29.5	120.4	
Y	89	He	644707.10	0.8	574051.42	112.31	29.5	120.4	
Tb	159	No Gas	8915227.85	1.1	6821698.44	130.69	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3392168.84	1.0	2982140.2	113.75	29.5	120.4	
Bi	209	No Gas	4514139.66	1.6	3547037.46	127.27	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name	SN6124-005S
File Name	155SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 10:57:28 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	54.259	ppb	6.4	14612.25	100	
11	B	6	No Gas	570.488	ppb	5.4	99436.72	1000	
23	Na	45	He	67189.160	ppb	1.5	1554197.46	200000	
24	Mg	45	He	13355.558	ppb	0.7	171506.70	200000	
27	Al	45	He	2117.933	ppb	1.2	11086.90	200000	
28	Si	45	H2	6948.560	ppb	2.6	69734.47	10000	
39	K	45	He	13054.211	ppb	0.8	168972.82	200000	
40	Ca	45	H2	37417.989	ppb	0.8	3308928.35	200000	
51	V	89	He	597.923	ppb	0.8	108106.79	1000	
52	Cr	89	He	238.990	ppb	1.7	53150.22	2000	
55	Mn	89	He	595.747	ppb	0.9	63118.54	2000	
56	Fe	89	H2	1192.179	ppb	1.0	423981.03	100000	
59	Co	89	He	604.892	ppb	1.0	226169.47	1000	
60	Ni	89	He	606.323	ppb	0.4	61567.27	1000	
63	Cu	89	He	296.119	ppb	1.2	85225.07	2000	
66	Zn	89	He	598.404	ppb	2.6	22980.77	2000	
75	As	89	He	117.404	ppb	3.9	3756.26	1000	
78	Se	89	H2	115.330	ppb	1.6	1937.88	1000	
88	Sr	89	He	768.050	ppb	1.6	128912.84	2000	
95	Mo	89	He	119.570	ppb	1.7	21490.82	1000	
107	Ag	89	He	58.379	ppb	2.0	35961.63	100	
111	Cd	89	He	285.095	ppb	1.0	23123.88	1000	
118	Sn	159	He	572.950	ppb	0.5	102461.30	1000	
121	Sb	159	No Gas	109.862	ppb	7.0	161907.19	1000	
137	Ba	159	No Gas	2150.669	ppb	7.6	1252184.16	2000	
182	W	159	No Gas	110.764	ppb	7.6	121504.61	1000	
205	Tl	209	No Gas	113.543	ppb	6.3	262811.27	1000	
208	Pb	209	No Gas	113.627	ppb	7.0	362770.24	2000	
232	Th	209	No Gas	110.970	ppb	7.8	364126.11	1000	
238	U	209	No Gas	110.427	ppb	7.6	338417.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809379.68	2.9	1483357.64	121.98	29.5	120.4	6020/DoD
Sc	45	No Gas	4081418.33	4.0	3141192.51	129.93	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	484656.40	0.9	418309.46	115.86	29.5	120.4	
Sc	45	He	98789.55	1.0	85440.95	115.62	29.5	120.4	
Ge	72	No Gas	912012.27	3.7	694668.88	131.29	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	174922.59	1.6	157206.79	111.27	29.5	120.4	
Ge	72	He	75206.24	0.8	64721.85	116.2	29.5	120.4	
Y	89	H2	3069259.96	0.9	2572670.23	119.3	29.5	120.4	
Y	89	He	648790.10	1.2	574051.42	113.02	29.5	120.4	
Tb	159	No Gas	9034981.67	4.2	6821698.44	132.44	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3415743.01	1.0	2982140.2	114.54	29.5	120.4	
Bi	209	No Gas	4539679.42	3.6	3547037.46	127.99	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6124-005P

File Name 156SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:00:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.444	ppb	7.3	13850.35	100	
11	B	6	No Gas	546.210	ppb	6.7	95245.35	1000	
23	Na	45	He	62591.386	ppb	3.0	1455642.44	200000	
24	Mg	45	He	12474.828	ppb	2.3	161038.17	200000	
27	Al	45	He	1929.978	ppb	4.7	10151.73	200000	
28	Si	45	H2	6668.907	ppb	1.9	66250.46	10000	
39	K	45	He	12152.837	ppb	2.9	158957.52	200000	
40	Ca	45	H2	35594.204	ppb	1.6	3114472.35	200000	
51	V	89	He	561.894	ppb	2.3	101400.68	1000	
52	Cr	89	He	223.361	ppb	2.8	49575.91	2000	
55	Mn	89	He	558.344	ppb	1.9	59043.31	2000	
56	Fe	89	H2	1113.499	ppb	1.1	395219.65	100000	
59	Co	89	He	567.952	ppb	2.7	211923.89	1000	
60	Ni	89	He	569.479	ppb	2.1	57735.26	1000	
63	Cu	89	He	279.224	ppb	2.2	80212.35	2000	
66	Zn	89	He	555.482	ppb	3.5	21293.54	2000	
75	As	89	He	111.198	ppb	3.2	3551.18	1000	
78	Se	89	H2	108.169	ppb	0.8	1811.54	1000	
88	Sr	89	He	722.659	ppb	2.9	121054.33	2000	
95	Mo	89	He	113.729	ppb	3.2	20399.16	1000	
107	Ag	89	He	55.160	ppb	2.3	33914.28	100	
111	Cd	89	He	266.082	ppb	2.9	21537.60	1000	
118	Sn	159	He	537.248	ppb	3.3	96185.85	1000	
121	Sb	159	No Gas	104.593	ppb	7.3	153862.78	1000	
137	Ba	159	No Gas	2025.256	ppb	7.0	1177307.40	2000	
182	W	159	No Gas	107.042	ppb	8.1	117202.40	1000	
205	Tl	209	No Gas	108.221	ppb	7.5	250236.40	1000	
208	Pb	209	No Gas	107.599	ppb	7.4	343262.00	2000	
232	Th	209	No Gas	106.110	ppb	7.6	347941.00	1000	
238	U	209	No Gas	105.534	ppb	8.4	323122.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1809099.95	3.0	1483357.64	121.96	29.5	120.4	6020/DoD
Sc	45	No Gas	4074555.79	3.5	3141192.51	129.71	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	479578.06	1.2	418309.46	114.65	29.5	120.4	
Sc	45	He	99310.26	2.3	85440.95	116.23	29.5	120.4	
Ge	72	No Gas	910138.85	3.4	694668.88	131.02	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175980.89	0.9	157206.79	111.94	29.5	120.4	
Ge	72	He	75249.17	1.5	64721.85	116.27	29.5	120.4	
Y	89	H2	3059218.36	0.3	2572670.23	118.91	29.5	120.4	
Y	89	He	647648.76	2.1	574051.42	112.82	29.5	120.4	
Tb	159	No Gas	9017127.78	3.6	6821698.44	132.18	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3420999.70	2.2	2982140.2	114.72	29.5	120.4	
Bi	209	No Gas	4537627.36	4.1	3547037.46	127.93	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG27IMW1
File Name	157_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:02:52 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.105	ppb	100.9	73.33	0.5	
B	11	6	No Gas	12.908	ppb	3.6	3910.69	10	PB 6020 Fails DoD
Na	23	45	He	814.653	ppb	2.4	28623.58	500	PB 6020 Fails DoD
Mg	24	45	He	0.826	ppb	554.1	720.07	50	
Al	27	45	He	7.728	ppb	21.7	63.34	50	
Si	28	45	H2	-1.105	ppb	N/A	540.62	250	
K	39	45	He	-54.182	ppb	N/A	11966.33	500	
Ca	40	45	H2	30.376	ppb	6.6	3904.01	50	
V	51	89	He	3.468	ppb	6.1	814.50	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.165	ppb	50.2	115.98	2.5	
Mn	55	89	He	0.548	ppb	22.3	87.98	1	
Fe	56	89	H2	-9.601	ppb	N/A	4258.73	50	
Co	59	89	He	0.143	ppb	5.8	77.79	0.5	
Ni	60	89	He	-2.476	ppb	N/A	135.56	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.460	ppb	21.4	288.90	1.5	
Zn	66	89	He	1.473	ppb	69.2	127.78	5	
As	75	89	He	0.272	ppb	38.9	12.33	2.5	
Se	78	89	H2	0.250	ppb	18.2	4.33	2.5	
Sr	88	89	He	0.135	ppb	24.7	30.00	2.5	
Mo	95	89	He	0.286	ppb	18.1	63.34	2.5	
Ag	107	89	He	0.042	ppb	55.7	44.44	0.5	
Cd	111	89	He	0.059	ppb	48.1	5.18	0.5	
Sn	118	159	He	1.401	ppb	12.2	311.13	2.5	
Sb	121	159	No Gas	0.108	ppb	34.5	193.55	0.5	
Ba	137	159	No Gas	1.326	ppb	2.3	784.23	1	PB 6020 Fails DoD
W	182	159	No Gas	0.172	ppb	29.6	270.31	2.5	
Tl	205	209	No Gas	0.065	ppb	27.5	293.66	0.5	
Pb	208	209	No Gas	0.108	ppb	14.2	600.68	0.5	
Th	232	209	No Gas	1.357	ppb	25.2	4649.48	2.5	
U	238	209	No Gas	0.100	ppb	40.4	320.36	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1778115.71	2.5	1483357.64	119.87	29.5	120.4	
Sc	45	No Gas	4061307.21	3.0	3141192.51	129.29	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	477576.82	1.2	418309.46	114.17	29.5	120.4	
Sc	45	He	98463.04	0.2	85440.95	115.24	29.5	120.4	
Ge	72	No Gas	906678.45	2.1	694668.88	130.52	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172913.95	0.5	157206.79	109.99	29.5	120.4	
Ge	72	He	74516.60	0.7	64721.85	115.13	29.5	120.4	
Y	89	H2	3025302.46	0.5	2572670.23	117.59	29.5	120.4	
Y	89	He	642699.05	1.1	574051.42	111.96	29.5	120.4	
Tb	159	No Gas	8948072.30	3.1	6821698.44	131.17	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3370180.75	0.2	2982140.2	113.01	29.5	120.4	
Bi	209	No Gas	4576976.97	3.6	3547037.46	129.04	29.5	120.4	6020/DoD□ EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG27IMW1
File Name	158LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:05:31 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.163	ppb	5.4	13793.69	50	20.47	79.5	120.4	
B	11	6	No Gas	520.494	ppb	5.0	90962.26	500	20.82	79.5	120.4	
Na	23	45	He	8614.715	ppb	0.7	208423.46	7500	22.97	79.5	120.4	
Mg	24	45	He	5473.595	ppb	1.7	70851.37	5000	21.89	79.5	120.4	
Al	27	45	He	1967.775	ppb	1.1	10324.06	2000	19.68	79.5	120.4	
Si	28	45	H2	980.360	ppb	3.0	10271.78	1000	19.61	0	200	
K	39	45	He	10371.873	ppb	0.9	137142.81	10000	20.74	79.5	120.4	
Ca	40	45	H2	2706.961	ppb	2.2	239427.21	2500	21.66	79.5	120.4	
V	51	89	He	547.865	ppb	1.2	99042.59	500	21.91	79.5	120.4	
Cr	52	89	He	221.059	ppb	1.6	49153.26	200	22.11	79.5	120.4	
Mn	55	89	He	547.621	ppb	0.9	58007.10	500	21.9	79.5	120.4	
Fe	56	89	H2	1100.653	ppb	0.7	391237.70	1000	22.01	79.5	120.4	
Co	59	89	He	559.194	ppb	1.5	209028.22	500	22.37	79.5	120.4	
Ni	60	89	He	559.947	ppb	0.9	56872.98	500	22.4	79.5	120.4	
Cu	63	89	He	274.485	ppb	1.2	78988.94	250	21.96	79.5	120.4	
Zn	66	89	He	547.924	ppb	0.8	21045.38	500	21.92	79.5	120.4	
As	75	89	He	111.277	ppb	1.4	3560.18	100	22.26	79.5	120.4	
Se	78	89	H2	106.167	ppb	2.0	1780.03	100	21.23	79.5	120.4	
Sr	88	89	He	513.615	ppb	1.4	86191.09	500	20.54	79.5	120.4	
Mo	95	89	He	108.195	ppb	1.7	19441.00	100	21.64	79.5	120.4	
Ag	107	89	He	55.120	ppb	0.4	33949.95	50	22.05	79.5	120.4	
Cd	111	89	He	263.949	ppb	0.3	21404.39	250	21.12	79.5	120.4	
Sn	118	159	He	522.684	ppb	0.9	93324.46	500	20.91	79.5	120.4	
Sb	121	159	No Gas	102.480	ppb	6.3	151903.82	100	20.5	79.5	120.4	
Ba	137	159	No Gas	1990.354	ppb	5.6	1165925.40	2000	19.9	79.5	120.4	
W	182	159	No Gas	103.938	ppb	5.2	114733.85	100	20.79	79.5	120.4	
Tl	205	209	No Gas	105.612	ppb	6.1	248999.25	100	21.12	79.5	120.4	
[Pb]	206	209	No Gas	104.184	ppb	6.3	85399.54	100	20.84	79.5	120.4	
[Pb]	207	209	No Gas	105.895	ppb	5.5	75638.25	100	21.18	79.5	120.4	
Pb	208	209	No Gas	105.455	ppb	5.2	343076.99	100	21.09	79.5	120.4	
Th	232	209	No Gas	102.446	ppb	6.5	342501.69	100	20.49	79.5	120.4	
U	238	209	No Gas	102.274	ppb	5.9	319376.97	100	20.45	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1810808.69	2.7	1483357.64	122.07	29.5	120.4	6020/DoD
Sc	45	No Gas	4095699.25	3.0	3141192.51	130.39	29.5	120.4	6020/DoD EPA
Sc	45	H2	482517.35	2.5	418309.46	115.35	29.5	120.4	
Sc	45	He	98995.03	1.2	85440.95	115.86	29.5	120.4	
Ge	72	No Gas	910529.28	2.9	694668.88	131.07	29.5	120.4	6020/DoD EPA
Ge	72	H2	175778.09	1.7	157206.79	111.81	29.5	120.4	
Ge	72	He	74919.73	1.4	64721.85	115.76	29.5	120.4	
Y	89	H2	3063225.35	1.6	2572670.23	119.07	29.5	120.4	
Y	89	He	648617.32	1.1	574051.42	112.99	29.5	120.4	
Tb	159	No Gas	9081170.21	3.0	6821698.44	133.12	29.5	120.4	6020/DoD EPA
Tb	159	He	3410340.33	1.2	2982140.2	114.36	29.5	120.4	
Bi	209	No Gas	4623201.58	3.2	3547037.46	130.34	29.5	120.4	6020/DoD EPA

Sample Report

Sample Name SN6146-001

File Name 159SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:08:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.183	ppb	29.2	93.34	100	
11	B	6	No Gas	32.923	ppb	3.2	7270.94	1000	
23	Na	45	He	2519.533	ppb	1.4	67362.11	200000	
24	Mg	45	He	1899.692	ppb	2.7	24803.09	200000	
27	Al	45	He	133.394	ppb	11.2	714.49	200000	
28	Si	45	H2	1495.127	ppb	7.8	14433.50	10000	
39	K	45	He	9352.761	ppb	0.5	123655.58	200000	
40	Ca	45	H2	9895.420	ppb	9.9	817522.33	200000	
51	V	89	He	4.715	ppb	14.2	1041.19	1000	
52	Cr	89	He	0.624	ppb	17.4	217.96	2000	
55	Mn	89	He	34.799	ppb	2.5	3695.83	2000	
56	Fe	89	H2	213.864	ppb	11.6	76855.98	100000	
59	Co	89	He	0.889	ppb	8.5	355.59	1000	
60	Ni	89	He	-1.740	ppb	N/A	210.01	1000	
63	Cu	89	He	6.232	ppb	5.8	1939.09	2000	
66	Zn	89	He	69.304	ppb	6.5	2711.47	2000	
75	As	89	He	1.350	ppb	9.3	46.67	1000	
78	Se	89	H2	0.821	ppb	27.9	13.00	1000	
88	Sr	89	He	25.426	ppb	1.5	4251.93	2000	
95	Mo	89	He	0.757	ppb	16.8	147.78	1000	
107	Ag	89	He	0.053	ppb	53.0	51.11	100	
111	Cd	89	He	0.077	ppb	17.6	6.67	1000	
118	Sn	159	He	1.890	ppb	10.8	400.02	1000	
121	Sb	159	No Gas	0.409	ppb	21.7	634.06	1000	
137	Ba	159	No Gas	26.435	ppb	4.1	15325.90	2000	
182	W	159	No Gas	0.180	ppb	16.5	280.32	1000	
205	Tl	209	No Gas	0.063	ppb	12.3	286.99	1000	
208	Pb	209	No Gas	0.290	ppb	5.8	1184.69	2000	
232	Th	209	No Gas	0.966	ppb	12.5	3327.53	1000	
238	U	209	No Gas	0.181	ppb	18.3	563.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1776239.85	2.5	1483357.64	119.74	29.5	120.4	
Sc	45	No Gas	4043277.59	3.1	3141192.51	128.72	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	454497.90	7.4	418309.46	108.65	29.5	120.4	
Sc	45	He	97995.06	0.7	85440.95	114.69	29.5	120.4	
Ge	72	No Gas	911885.08	2.8	694668.88	131.27	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	163753.76	7.3	157206.79	104.16	29.5	120.4	
Ge	72	He	74588.20	0.2	64721.85	115.24	29.5	120.4	
Y	89	H2	2878417.85	7.2	2572670.23	111.88	29.5	120.4	
Y	89	He	645221.92	0.1	574051.42	112.4	29.5	120.4	
Tb	159	No Gas	8974116.88	2.8	6821698.44	131.55	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3394494.85	0.5	2982140.2	113.83	29.5	120.4	
Bi	209	No Gas	4562735.65	3.2	3547037.46	128.64	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG27IMW2
File Name	160_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:10:53 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.027	ppb	311.4	52.22	0.5	
B	11	6	No Gas	6.799	ppb	0.4	2860.38	10	
Na	23	45	He	736.217	ppb	1.8	26533.87	500	PB 6020 Fails DoD
Mg	24	45	He	0.562	ppb	602.1	708.96	50	
Al	27	45	He	5.075	ppb	54.4	48.89	50	
Si	28	45	H2	5.073	ppb	104.8	600.68	250	
K	39	45	He	-60.963	ppb	N/A	11754.59	500	
Ca	40	45	H2	26.396	ppb	1.6	3550.57	50	
V	51	89	He	3.065	ppb	14.8	737.83	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.149	ppb	25.9	111.98	2.5	
Mn	55	89	He	0.949	ppb	5.9	129.31	1	
Fe	56	89	H2	-12.323	ppb	N/A	3330.76	50	
Co	59	89	He	0.096	ppb	50.0	60.00	0.5	
Ni	60	89	He	-2.569	ppb	N/A	125.56	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.435	ppb	29.4	280.02	1.5	
Zn	66	89	He	3.140	ppb	22.4	190.01	5	
As	75	89	He	0.190	ppb	63.9	9.67	2.5	
Se	78	89	H2	0.129	ppb	49.1	2.33	2.5	
Sr	88	89	He	0.123	ppb	58.1	27.78	2.5	
Mo	95	89	He	0.112	ppb	50.2	32.22	2.5	
Ag	107	89	He	0.021	ppb	41.5	31.11	0.5	
Cd	111	89	He	0.041	ppb	70.0	3.70	0.5	
Sn	118	159	He	1.079	ppb	12.8	254.46	2.5	
Sb	121	159	No Gas	0.034	ppb	75.1	83.43	0.5	
Ba	137	159	No Gas	0.307	ppb	19.9	193.55	1	
W	182	159	No Gas	0.000	ppb	1366.8	83.43	2.5	
Tl	205	209	No Gas	-0.032	ppb	N/A	66.74	0.5	
Pb	208	209	No Gas	0.071	ppb	33.0	480.54	0.5	
Th	232	209	No Gas	0.105	ppb	9.7	473.87	2.5	
U	238	209	No Gas	0.006	ppb	29.6	26.69	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1765177.47	2.9	1483357.64	119	29.5	120.4	
Sc	45	No Gas	4024052.14	3.2	3141192.51	128.11	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	476696.48	1.0	418309.46	113.96	29.5	120.4	
Sc	45	He	97390.02	1.3	85440.95	113.99	29.5	120.4	
Ge	72	No Gas	903090.51	2.1	694668.88	130	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172822.01	0.4	157206.79	109.93	29.5	120.4	
Ge	72	He	73684.74	0.2	64721.85	113.85	29.5	120.4	
Y	89	H2	3033372.20	0.8	2572670.23	117.91	29.5	120.4	
Y	89	He	638844.69	0.7	574051.42	111.29	29.5	120.4	
Tb	159	No Gas	8922846.18	2.8	6821698.44	130.8	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3372353.39	0.7	2982140.2	113.09	29.5	120.4	
Bi	209	No Gas	4561500.09	3.6	3547037.46	128.6	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	161_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:13:36 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.366	ppb	6.5	31312.39	25	97.46	89.8	110.2	
11	B	6	No Gas	25.282	ppb	4.6	22385.68	25	101.13	89.8	110.2	
23	Na	45	He	5336.705	ppb	0.9	610336.29	5000	106.73	89.8	110.2	
24	Mg	45	He	5037.719	ppb	0.6	316127.97	5000	100.75	89.8	110.2	
27	Al	45	He	475.495	ppb	1.7	12184.49	500	95.1	89.8	110.2	
28	Si	45	H2	458.092	ppb	3.1	22833.60	500	91.62	89.8	110.2	
39	K	45	He	4894.479	ppb	1.5	299341.69	5000	97.89	89.8	110.2	
40	Ca	45	H2	4970.587	ppb	1.8	2148151.96	5000	99.41	89.8	110.2	
51	V	89	He	25.719	ppb	0.9	22930.34	25	102.88	89.8	110.2	
52	Cr	89	He	25.784	ppb	1.7	28126.13	25	103.14	89.8	110.2	
55	Mn	89	He	25.637	ppb	0.4	13330.56	25	102.55	89.8	110.2	
56	Fe	89	H2	4978.151	ppb	1.3	8584665.61	5000	99.56	89.8	110.2	
59	Co	89	He	26.033	ppb	0.5	47706.02	25	104.13	89.8	110.2	
60	Ni	89	He	25.711	ppb	2.8	13086.57	25	102.84	89.8	110.2	
63	Cu	89	He	25.916	ppb	0.9	36628.89	25	103.66	89.8	110.2	
66	Zn	89	He	25.645	ppb	2.2	4882.14	25	102.58	89.8	110.2	
75	As	89	He	24.956	ppb	1.9	3911.99	25	99.82	89.8	110.2	
78	Se	89	H2	24.769	ppb	2.1	2053.39	25	99.08	89.8	110.2	
88	Sr	89	He	23.859	ppb	0.5	19625.70	25	95.44	89.8	110.2	
95	Mo	89	He	25.676	ppb	1.1	22608.19	25	102.7	89.8	110.2	
107	Ag	89	He	25.451	ppb	1.0	76786.33	25	101.8	89.8	110.2	
111	Cd	89	He	24.846	ppb	1.3	9872.56	25	99.38	89.8	110.2	
118	Sn	159	He	24.332	ppb	2.0	21525.61	25	97.33	89.8	110.2	
121	Sb	159	No Gas	23.436	ppb	7.3	171083.41	25	93.74	89.8	110.2	
137	Ba	159	No Gas	23.830	ppb	7.3	68760.57	25	95.32	89.8	110.2	
182	W	159	No Gas	23.649	ppb	6.2	128544.15	25	94.6	89.8	110.2	
205	Tl	209	No Gas	24.005	ppb	6.6	277093.56	25	96.02	89.8	110.2	
208	Pb	209	No Gas	24.108	ppb	6.5	383931.99	25	96.43	89.8	110.2	
232	Th	209	No Gas	23.411	ppb	6.7	383247.07	25	93.64	89.8	110.2	
238	U	209	No Gas	23.665	ppb	7.7	361728.24	25	94.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1730009.10	2.9	1483357.64	116.63	29.5	120.4	
Sc	45	No Gas	4036648.17	3.7	3141192.51	128.51	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	473647.16	1.1	418309.46	113.23	29.5	120.4	
Sc	45	He	96737.76	0.9	85440.95	113.22	29.5	120.4	
Ge	72	No Gas	893564.13	3.3	694668.88	128.63	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	173410.84	1.4	157206.79	110.31	29.5	120.4	
Ge	72	He	73933.56	0.6	64721.85	114.23	29.5	120.4	
Y	89	H2	3028813.97	0.7	2572670.23	117.73	29.5	120.4	
Y	89	He	635657.71	0.9	574051.42	110.73	29.5	120.4	
Tb	159	No Gas	8948631.60	3.4	6821698.44	131.18	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3371750.78	0.9	2982140.2	113.06	29.5	120.4	
Bi	209	No Gas	4528909.06	3.7	3547037.46	127.68	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	162_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:16:14 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.036	ppb	10.0	91.11	0.2	
11	B	6	No Gas	1.396	ppb	15.2	2862.61	4	
23	Na	45	He	121.164	ppb	1.6	24020.19	200	Failed DoD
24	Mg	45	He	-1.581	ppb	N/A	613.39	20	
27	Al	45	He	-0.082	ppb	N/A	21.11	20	
28	Si	45	H2	0.764	ppb	129.3	597.34	100	
39	K	45	He	-9.202	ppb	N/A	12154.75	200	
40	Ca	45	H2	1.312	ppb	36.0	1853.52	20	
51	V	89	He	0.047	ppb	86.1	238.90	1	
52	Cr	89	He	-0.019	ppb	N/A	59.99	1	
55	Mn	89	He	0.004	ppb	316.4	33.33	0.4	
56	Fe	89	H2	-1.147	ppb	N/A	5640.74	20	
59	Co	89	He	0.006	ppb	35.8	35.56	0.2	
60	Ni	89	He	-0.529	ppb	N/A	120.01	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.023	ppb	N/A	126.67	0.6	
66	Zn	89	He	0.013	ppb	267.1	75.56	2	
75	As	89	He	0.014	ppb	44.1	6.00	1	
78	Se	89	H2	0.038	ppb	56.5	3.33	1	
88	Sr	89	He	0.004	ppb	195.7	11.11	1	
95	Mo	89	He	0.035	ppb	25.7	44.45	1	
107	Ag	89	He	0.004	ppb	105.2	30.00	0.2	
111	Cd	89	He	0.007	ppb	37.7	3.33	0.2	
118	Sn	159	He	0.035	ppb	32.1	95.56	1	
121	Sb	159	No Gas	0.025	ppb	55.2	216.92	0.2	
137	Ba	159	No Gas	0.045	ppb	68.9	146.84	0.4	
182	W	159	No Gas	0.043	ppb	33.6	310.35	1	
205	Tl	209	No Gas	0.020	ppb	56.7	370.42	0.2	
208	Pb	209	No Gas	0.014	ppb	62.0	473.87	0.2	
232	Th	209	No Gas	0.077	ppb	20.2	1388.32	1	
238	U	209	No Gas	0.028	ppb	41.9	433.83	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1749061.80	1.9	1483357.64	117.91	29.5	120.4	
Sc	45	No Gas	4009217.41	2.6	3141192.51	127.63	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	484066.33	0.4	418309.46	115.72	29.5	120.4	
Sc	45	He	99212.73	0.6	85440.95	116.12	29.5	120.4	
Ge	72	No Gas	880532.96	2.1	694668.88	126.76	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	177172.05	0.6	157206.79	112.7	29.5	120.4	
Ge	72	He	75297.12	0.3	64721.85	116.34	29.5	120.4	
Y	89	H2	3053432.39	1.0	2572670.23	118.69	29.5	120.4	
Y	89	He	650664.26	0.5	574051.42	113.35	29.5	120.4	
Tb	159	No Gas	8817336.26	2.7	6821698.44	129.25	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3398382.45	0.4	2982140.2	113.96	29.5	120.4	
Bi	209	No Gas	4517514.80	2.1	3547037.46	127.36	29.5	120.4	6020/DoD□ EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG27IMW2
File Name	163LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:18:59 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.011	ppb	2.7	13755.90	50	20.8	79.5	120.4	
B	11	6	No Gas	552.887	ppb	3.8	94666.82	500	22.12	79.5	120.4	
Na	23	45	He	8971.524	ppb	0.5	211062.97	7500	23.92	79.5	120.4	DoD
Mg	24	45	He	5741.631	ppb	1.4	72374.72	5000	22.97	79.5	120.4	
Al	27	45	He	2056.472	ppb	3.1	10509.79	2000	20.56	79.5	120.4	
Si	28	45	H2	972.485	ppb	4.2	10472.24	1000	19.45	0	200	
K	39	45	He	10865.539	ppb	1.3	139371.21	10000	21.73	79.5	120.4	
Ca	40	45	H2	2648.180	ppb	2.1	240505.28	2500	21.19	79.5	120.4	
V	51	89	He	570.039	ppb	1.4	100523.03	500	22.8	79.5	120.4	
Cr	52	89	He	228.223	ppb	1.5	49502.37	200	22.82	79.5	120.4	
Mn	55	89	He	570.859	ppb	1.6	58987.61	500	22.83	79.5	120.4	
Fe	56	89	H2	1069.128	ppb	3.1	390390.19	1000	21.38	79.5	120.4	
Co	59	89	He	583.900	ppb	1.0	212928.56	500	23.36	79.5	120.4	DoD
Ni	60	89	He	586.152	ppb	1.5	58057.56	500	23.45	79.5	120.4	DoD
Cu	63	89	He	289.331	ppb	1.0	81218.24	250	23.15	79.5	120.4	
Zn	66	89	He	571.460	ppb	0.9	21409.27	500	22.86	79.5	120.4	
As	75	89	He	115.647	ppb	1.9	3609.54	100	23.13	79.5	120.4	
Se	78	89	H2	104.772	ppb	2.5	1803.71	100	20.95	79.5	120.4	
Sr	88	89	He	543.674	ppb	1.7	89001.17	500	21.75	79.5	120.4	
Mo	95	89	He	115.964	ppb	0.2	20329.05	100	23.19	79.5	120.4	DoD
Ag	107	89	He	56.933	ppb	0.9	34207.27	50	22.77	79.5	120.4	
Cd	111	89	He	278.891	ppb	1.3	22061.74	250	22.31	79.5	120.4	
Sn	118	159	He	543.062	ppb	1.0	96209.71	500	21.72	79.5	120.4	
Sb	121	159	No Gas	107.414	ppb	5.2	155580.06	100	21.48	79.5	120.4	
Ba	137	159	No Gas	2084.315	ppb	4.3	1193027.45	2000	20.84	79.5	120.4	
W	182	159	No Gas	110.072	ppb	4.5	118695.77	100	22.01	79.5	120.4	
Tl	205	209	No Gas	112.256	ppb	4.7	258631.00	100	22.45	79.5	120.4	
[Pb]	206	209	No Gas	110.580	ppb	5.0	88574.90	100	22.12	79.5	120.4	
[Pb]	207	209	No Gas	110.339	ppb	4.3	77011.59	100	22.07	79.5	120.4	
Pb	208	209	No Gas	110.806	ppb	4.7	352202.68	100	22.16	79.5	120.4	
Th	232	209	No Gas	108.308	ppb	5.9	353820.96	100	21.66	79.5	120.4	
U	238	209	No Gas	107.649	ppb	5.2	328469.63	100	21.53	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1775265.67	1.5	1483357.64	119.68	29.5	120.4	
Sc	45	No Gas	3965832.98	2.1	3141192.51	126.25	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	495309.42	1.7	418309.46	118.41	29.5	120.4	
Sc	45	He	96441.28	0.6	85440.95	112.87	29.5	120.4	
Ge	72	No Gas	885482.96	1.9	694668.88	127.47	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	177570.32	0.3	157206.79	112.95	29.5	120.4	
Ge	72	He	73650.95	0.7	64721.85	113.8	29.5	120.4	
Y	89	H2	3145875.79	2.2	2572670.23	122.28	29.5	120.4	6020/DoD
Y	89	He	632748.46	0.9	574051.42	110.23	29.5	120.4	
Tb	159	No Gas	8867732.37	1.6	6821698.44	129.99	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3383934.36	1.1	2982140.2	113.47	29.5	120.4	
Bi	209	No Gas	4515294.82	2.3	3547037.46	127.3	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-010R

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:21:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.109	ppb	8.8	71.11	100	
11	B	6	No Gas	12.138	ppb	2.8	3625.02	1000	
23	Na	45	He	679.738	ppb	4.4	24752.05	200000	
24	Mg	45	He	0.990	ppb	315.0	700.07	200000	
27	Al	45	He	27.248	ppb	17.8	160.01	200000	
28	Si	45	H2	15.436	ppb	98.1	690.79	10000	
39	K	45	He	-35.791	ppb	N/A	11814.56	200000	
40	Ca	45	H2	53.947	ppb	1.2	5861.40	200000	
51	V	89	He	2.791	ppb	11.5	683.38	1000	
52	Cr	89	He	0.274	ppb	38.8	137.98	2000	
55	Mn	89	He	1.062	ppb	32.6	139.97	2000	
56	Fe	89	H2	-0.953	ppb	N/A	7139.78	100000	
59	Co	89	He	0.316	ppb	64.2	140.01	1000	
60	Ni	89	He	-2.007	ppb	N/A	180.01	1000	
63	Cu	89	He	0.657	ppb	25.8	340.02	2000	
66	Zn	89	He	4.601	ppb	20.5	243.35	2000	
75	As	89	He	0.459	ppb	30.3	18.00	1000	
78	Se	89	H2	0.317	ppb	57.8	5.33	1000	
88	Sr	89	He	0.327	ppb	43.2	61.11	2000	
95	Mo	89	He	0.196	ppb	15.8	46.67	1000	
107	Ag	89	He	0.091	ppb	48.9	73.34	100	
111	Cd	89	He	0.144	ppb	78.4	11.85	1000	
118	Sn	159	He	1.418	ppb	23.6	313.35	1000	
121	Sb	159	No Gas	0.122	ppb	49.0	210.24	1000	
137	Ba	159	No Gas	1.328	ppb	18.3	767.55	2000	
182	W	159	No Gas	0.246	ppb	10.0	343.72	1000	
205	Tl	209	No Gas	0.091	ppb	44.1	347.06	1000	
208	Pb	209	No Gas	0.082	ppb	14.5	510.57	2000	
232	Th	209	No Gas	0.819	ppb	16.3	2796.82	1000	
238	U	209	No Gas	0.102	ppb	17.1	317.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1705290.57	1.6	1483357.64	114.96	29.5	120.4	
Sc	45	No Gas	3902358.31	2.6	3141192.51	124.23	29.5	120.4	6020/DoD
Sc	45	H2	469919.39	1.4	418309.46	112.34	29.5	120.4	
Sc	45	He	95461.79	0.5	85440.95	111.73	29.5	120.4	
Ge	72	No Gas	875604.95	2.7	694668.88	126.05	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	169116.55	2.1	157206.79	107.58	29.5	120.4	
Ge	72	He	72328.73	0.8	64721.85	111.75	29.5	120.4	
Y	89	H2	2985837.48	2.1	2572670.23	116.06	29.5	120.4	
Y	89	He	633551.15	0.8	574051.42	110.36	29.5	120.4	
Tb	159	No Gas	8761606.12	2.3	6821698.44	128.44	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3359978.94	0.6	2982140.2	112.67	29.5	120.4	
Bi	209	No Gas	4493372.12	2.4	3547037.46	126.68	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6090-010RL

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:24:20 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.060	ppb	N/A	40.00	100	
11	B	6	No Gas	31.070	ppb	16.7	2643.67	1000	
23	Na	45	He	2779.149	ppb	3.1	22489.45	200000	
24	Mg	45	He	-47.589	ppb	N/A	582.28	200000	
27	Al	45	He	141.835	ppb	26.7	168.89	200000	
28	Si	45	H2	54.888	ppb	44.7	647.40	10000	
39	K	45	He	-264.235	ppb	N/A	11871.32	200000	
40	Ca	45	H2	63.979	ppb	13.8	2330.28	200000	
51	V	89	He	4.135	ppb	17.6	340.02	1000	
52	Cr	89	He	-0.124	ppb	N/A	73.99	2000	
55	Mn	89	He	1.321	ppb	25.7	57.99	2000	
56	Fe	89	H2	-54.171	ppb	N/A	3774.70	100000	
59	Co	89	He	0.087	ppb	159.6	31.11	1000	
60	Ni	89	He	-12.904	ppb	N/A	124.45	1000	
63	Cu	89	He	-0.260	ppb	N/A	142.23	2000	
66	Zn	89	He	19.496	ppb	1.9	218.90	2000	
75	As	89	He	0.417	ppb	95.1	6.33	1000	
78	Se	89	H2	0.094	ppb	164.8	0.50	1000	
88	Sr	89	He	-0.057	ppb	N/A	5.56	2000	
95	Mo	89	He	0.501	ppb	77.3	30.00	1000	
107	Ag	89	He	0.004	ppb	3538.4	18.89	100	
111	Cd	89	He	0.066	ppb	59.1	1.48	1000	
118	Sn	159	He	0.554	ppb	63.0	83.34	1000	
121	Sb	159	No Gas	0.094	ppb	36.5	60.07	1000	
137	Ba	159	No Gas	0.568	ppb	40.9	80.09	2000	
182	W	159	No Gas	-0.064	ppb	N/A	66.74	1000	
205	Tl	209	No Gas	-0.222	ppb	N/A	36.71	1000	
208	Pb	209	No Gas	-0.120	ppb	N/A	170.19	2000	
232	Th	209	No Gas	0.203	ppb	43.2	253.62	1000	
238	U	209	No Gas	0.025	ppb	100.5	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1689347.47	0.1	1483357.64	113.89	29.5	120.4	
Sc	45	No Gas	3876040.07	0.5	3141192.51	123.39	29.5	120.4	6020/DoD
Sc	45	H2	469007.36	1.4	418309.46	112.12	29.5	120.4	
Sc	45	He	97597.17	2.2	85440.95	114.23	29.5	120.4	
Ge	72	No Gas	866631.23	0.9	694668.88	124.75	29.5	120.4	6020/DoD
Ge	72	H2	172271.64	1.8	157206.79	109.58	29.5	120.4	
Ge	72	He	74006.52	1.0	64721.85	114.35	29.5	120.4	
Y	89	H2	2977465.25	1.2	2572670.23	115.73	29.5	120.4	
Y	89	He	639258.31	1.2	574051.42	111.36	29.5	120.4	
Tb	159	No Gas	8607030.98	0.7	6821698.44	126.17	29.5	120.4	6020/DoD EPA
Tb	159	He	3355878.94	1.6	2982140.2	112.53	29.5	120.4	
Bi	209	No Gas	4396012.06	0.7	3547037.46	123.93	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6090-010RA

File Name 166SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:26:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.912	ppb	7.7	2612.55	100	
11	B	6	No Gas	205.602	ppb	5.8	35679.24	1000	
23	Na	45	He	11551.262	ppb	1.9	266624.80	200000	
24	Mg	45	He	1043.821	ppb	6.0	13614.11	200000	
27	Al	45	He	973.666	ppb	0.7	4945.48	200000	
28	Si	45	H2	4681.800	ppb	3.3	45486.28	10000	
39	K	45	He	10053.678	ppb	1.1	128772.43	200000	
40	Ca	45	H2	1089.829	ppb	2.7	94133.96	200000	
51	V	89	He	56.499	ppb	2.4	10088.39	1000	
52	Cr	89	He	53.495	ppb	1.0	11609.31	2000	
55	Mn	89	He	22.561	ppb	7.5	2349.11	2000	
56	Fe	89	H2	1073.973	ppb	2.0	371312.88	100000	
59	Co	89	He	11.398	ppb	2.2	4160.91	1000	
60	Ni	89	He	20.174	ppb	5.5	2351.39	1000	
63	Cu	89	He	33.205	ppb	0.5	9414.60	2000	
66	Zn	89	He	111.452	ppb	1.9	4213.01	2000	
75	As	89	He	53.048	ppb	3.4	1649.95	1000	
78	Se	89	H2	50.115	ppb	2.5	817.16	1000	
88	Sr	89	He	49.296	ppb	4.4	8039.32	2000	
95	Mo	89	He	53.214	ppb	0.3	9291.24	1000	
107	Ag	89	He	11.289	ppb	3.6	6765.26	100	
111	Cd	89	He	11.175	ppb	6.6	880.41	1000	
118	Sn	159	He	51.140	ppb	1.2	9054.44	1000	
121	Sb	159	No Gas	10.442	ppb	3.8	15078.48	1000	
137	Ba	159	No Gas	20.435	ppb	6.1	11651.49	2000	
182	W	159	No Gas	48.389	ppb	4.7	51952.25	1000	
205	Tl	209	No Gas	10.135	ppb	4.9	23708.53	1000	
208	Pb	209	No Gas	10.370	ppb	3.5	33525.08	2000	
232	Th	209	No Gas	10.154	ppb	4.4	33622.70	1000	
238	U	209	No Gas	9.814	ppb	8.5	30237.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1745882.22	1.9	1483357.64	117.7	29.5	120.4	
Sc	45	No Gas	3952753.55	1.9	3141192.51	125.84	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	467495.29	1.9	418309.46	111.76	29.5	120.4	
Sc	45	He	95620.02	1.1	85440.95	111.91	29.5	120.4	
Ge	72	No Gas	882087.54	1.9	694668.88	126.98	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	169678.14	0.9	157206.79	107.93	29.5	120.4	
Ge	72	He	72720.68	0.3	64721.85	112.36	29.5	120.4	
Y	89	H2	2978268.11	1.3	2572670.23	115.77	29.5	120.4	
Y	89	He	629774.41	0.3	574051.42	109.71	29.5	120.4	
Tb	159	No Gas	8821910.91	1.8	6821698.44	129.32	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3360102.24	0.4	2982140.2	112.67	29.5	120.4	
Bi	209	No Gas	4559886.44	2.2	3547037.46	128.55	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-002

File Name 167SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:29:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.014	ppb	N/A	40.00	100	
11	B	6	No Gas	19.586	ppb	7.4	4830.97	1000	
23	Na	45	He	9382.626	ppb	1.6	217311.27	200000	
24	Mg	45	He	7530.437	ppb	1.0	93432.16	200000	
27	Al	45	He	15.003	ppb	13.0	97.78	200000	
28	Si	45	H2	5092.983	ppb	1.3	50006.38	10000	
39	K	45	He	5750.861	ppb	2.1	78507.05	200000	
40	Ca	45	H2	36863.217	ppb	1.1	3179621.24	200000	
51	V	89	He	3.560	ppb	13.9	811.17	1000	
52	Cr	89	He	0.439	ppb	24.5	172.64	2000	
55	Mn	89	He	6.529	ppb	3.3	699.23	2000	
56	Fe	89	H2	17.416	ppb	7.0	13568.26	100000	
59	Co	89	He	0.222	ppb	6.4	104.46	1000	
60	Ni	89	He	-1.693	ppb	N/A	208.90	1000	
63	Cu	89	He	3.645	ppb	5.9	1167.88	2000	
66	Zn	89	He	10.027	ppb	2.0	442.25	2000	
75	As	89	He	0.754	ppb	9.8	27.00	1000	
78	Se	89	H2	0.571	ppb	15.6	9.67	1000	
88	Sr	89	He	116.487	ppb	2.3	18935.89	2000	
95	Mo	89	He	0.683	ppb	19.5	131.12	1000	
107	Ag	89	He	0.018	ppb	107.6	28.89	100	
111	Cd	89	He	0.014	ppb	119.7	1.48	1000	
118	Sn	159	He	1.059	ppb	13.2	248.90	1000	
121	Sb	159	No Gas	0.278	ppb	30.4	437.16	1000	
137	Ba	159	No Gas	71.361	ppb	4.8	40808.31	2000	
182	W	159	No Gas	0.039	ppb	205.8	123.47	1000	
205	Tl	209	No Gas	-0.020	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	0.200	ppb	3.7	884.34	2000	
232	Th	209	No Gas	0.097	ppb	27.2	443.85	1000	
238	U	209	No Gas	0.217	ppb	5.5	670.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1707403.60	2.4	1483357.64	115.1	29.5	120.4	
Sc	45	No Gas	3932366.84	2.9	3141192.51	125.19	29.5	120.4	6020/DoD
Sc	45	H2	472735.85	1.3	418309.46	113.01	29.5	120.4	
Sc	45	He	95144.72	1.0	85440.95	111.36	29.5	120.4	
Ge	72	No Gas	885657.13	2.2	694668.88	127.49	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172489.19	0.8	157206.79	109.72	29.5	120.4	
Ge	72	He	72766.35	0.7	64721.85	112.43	29.5	120.4	
Y	89	H2	3027632.68	0.7	2572670.23	117.68	29.5	120.4	
Y	89	He	628181.72	1.3	574051.42	109.43	29.5	120.4	
Tb	159	No Gas	8858743.27	2.5	6821698.44	129.86	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3343048.08	1.3	2982140.2	112.1	29.5	120.4	
Bi	209	No Gas	4507920.37	2.9	3547037.46	127.09	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-003

File Name 168SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:32:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	189.3	51.11	100	
11	B	6	No Gas	24.965	ppb	9.7	5711.32	1000	
23	Na	45	He	2938.761	ppb	2.9	74982.34	200000	
24	Mg	45	He	2658.063	ppb	0.7	33563.50	200000	
27	Al	45	He	36.019	ppb	8.5	204.45	200000	
28	Si	45	H2	2054.038	ppb	2.2	20307.00	10000	
39	K	45	He	6172.199	ppb	1.8	83715.69	200000	
40	Ca	45	H2	9313.400	ppb	1.8	796728.21	200000	
51	V	89	He	4.076	ppb	7.3	907.84	1000	
52	Cr	89	He	0.743	ppb	10.9	239.29	2000	
55	Mn	89	He	40.555	ppb	5.2	4217.21	2000	
56	Fe	89	H2	117.229	ppb	3.7	47613.90	100000	
59	Co	89	He	0.353	ppb	18.0	153.35	1000	
60	Ni	89	He	-1.323	ppb	N/A	246.68	1000	
63	Cu	89	He	28.502	ppb	2.5	8137.06	2000	
66	Zn	89	He	11.106	ppb	5.9	485.58	2000	
75	As	89	He	1.422	ppb	16.6	48.01	1000	
78	Se	89	H2	0.221	ppb	35.4	3.83	1000	
88	Sr	89	He	30.638	ppb	1.8	5019.99	2000	
95	Mo	89	He	0.660	ppb	12.9	127.78	1000	
107	Ag	89	He	0.051	ppb	43.3	48.89	100	
111	Cd	89	He	0.032	ppb	50.2	2.96	1000	
118	Sn	159	He	1.050	ppb	18.5	248.90	1000	
121	Sb	159	No Gas	5.210	ppb	8.6	7617.35	1000	
137	Ba	159	No Gas	33.270	ppb	4.5	19168.60	2000	
182	W	159	No Gas	0.040	ppb	97.0	126.81	1000	
205	Tl	209	No Gas	-0.033	ppb	N/A	63.40	1000	
208	Pb	209	No Gas	25.399	ppb	5.5	81485.69	2000	
232	Th	209	No Gas	0.081	ppb	14.1	393.79	1000	
238	U	209	No Gas	0.067	ppb	16.7	213.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710909.83	2.2	1483357.64	115.34	29.5	120.4	
Sc	45	No Gas	3965229.57	3.1	3141192.51	126.23	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	468336.25	1.2	418309.46	111.96	29.5	120.4	
Sc	45	He	95539.95	0.7	85440.95	111.82	29.5	120.4	
Ge	72	No Gas	896045.15	2.8	694668.88	128.99	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	171989.13	2.2	157206.79	109.4	29.5	120.4	
Ge	72	He	73169.12	1.1	64721.85	113.05	29.5	120.4	
Y	89	H2	3007174.99	1.6	2572670.23	116.89	29.5	120.4	
Y	89	He	632387.52	0.8	574051.42	110.16	29.5	120.4	
Tb	159	No Gas	8922465.35	3.1	6821698.44	130.8	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3366576.79	1.0	2982140.2	112.89	29.5	120.4	
Bi	209	No Gas	4547167.48	2.4	3547037.46	128.2	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-004

File Name 169SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:35:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.063	ppb	45.7	60.00	100	
11	B	6	No Gas	14.248	ppb	9.1	3990.69	1000	
23	Na	45	He	11087.422	ppb	0.6	257581.23	200000	
24	Mg	45	He	6938.563	ppb	1.4	86996.47	200000	
27	Al	45	He	8.469	ppb	23.8	65.56	200000	
28	Si	45	H2	8705.897	ppb	2.2	84348.50	10000	
39	K	45	He	3267.625	ppb	0.6	50366.99	200000	
40	Ca	45	H2	20547.423	ppb	1.3	1757466.95	200000	
51	V	89	He	4.235	ppb	11.1	935.62	1000	
52	Cr	89	He	0.707	ppb	18.6	231.30	2000	
55	Mn	89	He	12.320	ppb	3.3	1301.16	2000	
56	Fe	89	H2	3.871	ppb	23.1	8829.29	100000	
59	Co	89	He	0.079	ppb	100.2	53.34	1000	
60	Ni	89	He	-1.877	ppb	N/A	192.23	1000	
63	Cu	89	He	5.809	ppb	0.7	1781.29	2000	
66	Zn	89	He	6.107	ppb	22.3	298.90	2000	
75	As	89	He	0.664	ppb	16.0	24.33	1000	
78	Se	89	H2	0.475	ppb	7.0	8.00	1000	
88	Sr	89	He	74.168	ppb	2.1	12135.77	2000	
95	Mo	89	He	0.203	ppb	14.1	47.78	1000	
107	Ag	89	He	0.012	ppb	187.1	25.55	100	
111	Cd	89	He	0.018	ppb	44.2	1.85	1000	
118	Sn	159	He	0.831	ppb	16.2	211.12	1000	
121	Sb	159	No Gas	1.699	ppb	5.5	2543.08	1000	
137	Ba	159	No Gas	50.155	ppb	8.7	29237.98	2000	
182	W	159	No Gas	-0.030	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	-0.038	ppb	N/A	53.40	1000	
208	Pb	209	No Gas	0.808	ppb	5.3	2876.69	2000	
232	Th	209	No Gas	0.038	ppb	5.3	256.96	1000	
238	U	209	No Gas	0.052	ppb	34.9	170.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1717583.80	3.3	1483357.64	115.79	29.5	120.4	
Sc	45	No Gas	4005108.51	4.2	3141192.51	127.5	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	468631.33	0.8	418309.46	112.03	29.5	120.4	
Sc	45	He	96084.14	0.4	85440.95	112.46	29.5	120.4	
Ge	72	No Gas	899901.33	2.8	694668.88	129.54	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172517.17	1.8	157206.79	109.74	29.5	120.4	
Ge	72	He	73488.05	0.8	64721.85	113.54	29.5	120.4	
Y	89	H2	3002250.06	1.2	2572670.23	116.7	29.5	120.4	
Y	89	He	632084.73	0.3	574051.42	110.11	29.5	120.4	
Tb	159	No Gas	9041735.35	3.9	6821698.44	132.54	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3378219.81	0.4	2982140.2	113.28	29.5	120.4	
Bi	209	No Gas	4607920.52	3.6	3547037.46	129.91	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-004L

File Name 170SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:37:40 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.091	ppb	N/A	38.89	100	
11	B	6	No Gas	26.772	ppb	8.2	2534.75	1000	
23	Na	45	He	12522.072	ppb	3.0	66842.97	200000	
24	Mg	45	He	6802.711	ppb	2.9	17919.19	200000	
27	Al	45	He	14.176	ppb	150.1	37.78	200000	
28	Si	45	H2	8891.036	ppb	0.7	17941.41	10000	
39	K	45	He	2850.065	ppb	4.8	19276.04	200000	
40	Ca	45	H2	20421.706	ppb	1.5	355892.75	200000	
51	V	89	He	7.410	ppb	15.5	457.80	1000	
52	Cr	89	He	0.189	ppb	121.9	87.98	2000	
55	Mn	89	He	10.888	ppb	9.8	258.62	2000	
56	Fe	89	H2	-56.839	ppb	N/A	3637.88	100000	
59	Co	89	He	0.147	ppb	157.0	35.56	1000	
60	Ni	89	He	-12.708	ppb	N/A	128.89	1000	
63	Cu	89	He	4.427	ppb	27.7	408.91	2000	
66	Zn	89	He	4.738	ppb	40.4	107.78	2000	
75	As	89	He	1.307	ppb	29.9	12.00	1000	
78	Se	89	H2	0.546	ppb	47.9	2.00	1000	
88	Sr	89	He	73.076	ppb	4.6	2431.41	2000	
95	Mo	89	He	0.183	ppb	108.6	18.89	1000	
107	Ag	89	He	-0.044	ppb	N/A	13.33	100	
111	Cd	89	He	0.089	ppb	44.3	1.85	1000	
118	Sn	159	He	0.349	ppb	101.1	76.67	1000	
121	Sb	159	No Gas	1.639	ppb	7.2	507.24	1000	
137	Ba	159	No Gas	50.912	ppb	5.4	5821.12	2000	
182	W	159	No Gas	-0.181	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	-0.209	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.671	ppb	16.0	677.43	2000	
232	Th	209	No Gas	0.009	ppb	254.0	133.48	1000	
238	U	209	No Gas	0.052	ppb	31.9	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1708622.14	0.4	1483357.64	115.19	29.5	120.4	
Sc	45	No Gas	3951707.66	0.7	3141192.51	125.8	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	476052.92	0.5	418309.46	113.8	29.5	120.4	
Sc	45	He	97761.46	1.6	85440.95	114.42	29.5	120.4	
Ge	72	No Gas	882981.59	0.5	694668.88	127.11	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	175972.71	0.8	157206.79	111.94	29.5	120.4	
Ge	72	He	74821.77	1.6	64721.85	115.61	29.5	120.4	
Y	89	H2	3014293.02	0.8	2572670.23	117.17	29.5	120.4	
Y	89	He	641240.07	1.3	574051.42	111.7	29.5	120.4	
Tb	159	No Gas	8824273.96	0.8	6821698.44	129.36	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3386796.17	1.6	2982140.2	113.57	29.5	120.4	
Bi	209	No Gas	4516175.13	0.2	3547037.46	127.32	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-004A

File Name 171SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:40:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.917	ppb	8.9	2837.06	100	
11	B	6	No Gas	221.352	ppb	4.4	37820.20	1000	
23	Na	45	He	21639.125	ppb	1.2	492810.97	200000	
24	Mg	45	He	7826.482	ppb	1.0	97913.08	200000	
27	Al	45	He	954.213	ppb	1.6	4864.34	200000	
28	Si	45	H2	13417.888	ppb	1.4	129437.81	10000	
39	K	45	He	13408.905	ppb	1.7	168267.20	200000	
40	Ca	45	H2	21424.093	ppb	1.8	1828481.17	200000	
51	V	89	He	58.564	ppb	1.7	10503.18	1000	
52	Cr	89	He	54.102	ppb	2.2	11799.44	2000	
55	Mn	89	He	34.168	ppb	0.6	3560.48	2000	
56	Fe	89	H2	1066.933	ppb	1.2	374560.63	100000	
59	Co	89	He	11.512	ppb	4.0	4223.16	1000	
60	Ni	89	He	22.007	ppb	3.8	2543.65	1000	
63	Cu	89	He	38.439	ppb	1.8	10929.07	2000	
66	Zn	89	He	118.323	ppb	1.7	4490.88	2000	
75	As	89	He	53.266	ppb	4.0	1664.95	1000	
78	Se	89	H2	49.599	ppb	1.7	820.99	1000	
88	Sr	89	He	122.757	ppb	1.9	20110.91	2000	
95	Mo	89	He	53.734	ppb	2.2	9431.31	1000	
107	Ag	89	He	10.999	ppb	3.7	6627.41	100	
111	Cd	89	He	10.651	ppb	2.0	843.37	1000	
118	Sn	159	He	51.612	ppb	2.6	9162.36	1000	
121	Sb	159	No Gas	12.393	ppb	2.1	18095.74	1000	
137	Ba	159	No Gas	72.556	ppb	1.7	41808.68	2000	
182	W	159	No Gas	51.776	ppb	3.3	56220.82	1000	
205	Tl	209	No Gas	10.541	ppb	3.4	24631.41	1000	
208	Pb	209	No Gas	11.586	ppb	2.4	37389.93	2000	
232	Th	209	No Gas	10.685	ppb	3.2	35342.64	1000	
238	U	209	No Gas	10.632	ppb	3.5	32746.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1724684.36	2.3	1483357.64	116.27	29.5	120.4	
Sc	45	No Gas	3963260.78	1.8	3141192.51	126.17	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	467614.55	0.3	418309.46	111.79	29.5	120.4	
Sc	45	He	95958.88	0.7	85440.95	112.31	29.5	120.4	
Ge	72	No Gas	899231.58	2.0	694668.88	129.45	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172340.55	1.0	157206.79	109.63	29.5	120.4	
Ge	72	He	73105.68	0.5	64721.85	112.95	29.5	120.4	
Y	89	H2	3023451.49	0.8	2572670.23	117.52	29.5	120.4	
Y	89	He	633005.03	0.9	574051.42	110.27	29.5	120.4	
Tb	159	No Gas	8921075.70	1.6	6821698.44	130.77	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3368814.15	0.9	2982140.2	112.97	29.5	120.4	
Bi	209	No Gas	4555024.29	2.3	3547037.46	128.42	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-004S

File Name 172SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:42:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.463	ppb	2.3	12562.53	100	
11	B	6	No Gas	552.257	ppb	2.3	89008.90	1000	
23	Na	45	He	17762.643	ppb	1.0	407393.76	200000	
24	Mg	45	He	11669.826	ppb	0.5	146058.30	200000	
27	Al	45	He	1876.583	ppb	0.5	9571.29	200000	
28	Si	45	H2	9315.143	ppb	1.4	89300.16	10000	
39	K	45	He	13007.109	ppb	0.3	164042.49	200000	
40	Ca	45	H2	22007.860	ppb	0.9	1863206.43	200000	
51	V	89	He	524.601	ppb	0.3	92999.99	1000	
52	Cr	89	He	212.156	ppb	0.7	46258.06	2000	
55	Mn	89	He	533.246	ppb	1.1	55382.55	2000	
56	Fe	89	H2	1095.093	ppb	2.0	376534.61	100000	
59	Co	89	He	538.990	ppb	1.0	197548.25	1000	
60	Ni	89	He	536.727	ppb	0.4	53466.21	1000	
63	Cu	89	He	265.970	ppb	1.4	75054.32	2000	
66	Zn	89	He	525.893	ppb	0.4	19807.97	2000	
75	As	89	He	105.523	ppb	1.4	3310.76	1000	
78	Se	89	H2	103.642	ppb	0.9	1681.03	1000	
88	Sr	89	He	567.188	ppb	0.5	93327.38	2000	
95	Mo	89	He	107.745	ppb	1.3	18983.79	1000	
107	Ag	89	He	52.355	ppb	1.0	31617.60	100	
111	Cd	89	He	256.973	ppb	0.2	20431.42	1000	
118	Sn	159	He	506.485	ppb	0.3	89973.00	1000	
121	Sb	159	No Gas	106.974	ppb	4.1	148753.19	1000	
137	Ba	159	No Gas	2093.653	ppb	2.7	1150831.79	2000	
182	W	159	No Gas	106.878	ppb	3.0	110674.01	1000	
205	Tl	209	No Gas	108.420	ppb	2.7	239442.70	1000	
208	Pb	209	No Gas	109.048	ppb	3.5	332181.99	2000	
232	Th	209	No Gas	105.707	ppb	2.2	331132.24	1000	
238	U	209	No Gas	106.258	ppb	3.3	310763.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1671255.56	3.4	1483357.64	112.67	29.5	120.4	
Sc	45	No Gas	3764384.22	4.4	3141192.51	119.84	29.5	120.4	
Sc	45	H2	463847.73	0.5	418309.46	110.89	29.5	120.4	
Sc	45	He	96224.16	0.6	85440.95	112.62	29.5	120.4	
Ge	72	No Gas	854821.20	2.9	694668.88	123.05	29.5	120.4	6020/DoD
Ge	72	H2	169104.50	1.7	157206.79	107.57	29.5	120.4	
Ge	72	He	73538.22	0.2	64721.85	113.62	29.5	120.4	
Y	89	H2	2963022.06	1.3	2572670.23	115.17	29.5	120.4	
Y	89	He	635936.66	0.4	574051.42	110.78	29.5	120.4	
Tb	159	No Gas	8518386.96	4.2	6821698.44	124.87	29.5	120.4	6020/DoD
Tb	159	He	3392738.98	0.7	2982140.2	113.77	29.5	120.4	
Bi	209	No Gas	4328164.26	4.0	3547037.46	122.02	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	173_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:45:43 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.364	ppb	5.1	30213.52	25	97.46	89.8	110.2	
11	B	6	No Gas	26.073	ppb	5.9	22216.55	25	104.29	89.8	110.2	
23	Na	45	He	5263.360	ppb	0.4	591298.20	5000	105.27	89.8	110.2	
24	Mg	45	He	4975.549	ppb	0.5	306636.51	5000	99.51	89.8	110.2	
27	Al	45	He	475.214	ppb	3.6	11958.73	500	95.04	89.8	110.2	
28	Si	45	H2	435.614	ppb	2.5	21406.41	500	87.12	89.8	110.2	> +/- 10%
39	K	45	He	4852.739	ppb	0.6	291581.49	5000	97.05	89.8	110.2	
40	Ca	45	H2	4903.024	ppb	1.8	2086656.26	5000	98.06	89.8	110.2	
51	V	89	He	25.456	ppb	2.4	22501.93	25	101.82	89.8	110.2	
52	Cr	89	He	25.494	ppb	0.9	27571.75	25	101.98	89.8	110.2	
55	Mn	89	He	25.644	ppb	1.6	13219.79	25	102.58	89.8	110.2	
56	Fe	89	H2	4867.965	ppb	1.8	8350428.05	5000	97.36	89.8	110.2	
59	Co	89	He	25.907	ppb	1.1	47061.67	25	103.63	89.8	110.2	
60	Ni	89	He	25.005	ppb	1.7	12628.33	25	100.02	89.8	110.2	
63	Cu	89	He	25.367	ppb	1.4	35543.77	25	101.47	89.8	110.2	
66	Zn	89	He	25.682	ppb	1.7	4846.56	25	102.73	89.8	110.2	
75	As	89	He	25.087	ppb	1.1	3898.64	25	100.35	89.8	110.2	
78	Se	89	H2	24.287	ppb	0.3	2002.89	25	97.15	89.8	110.2	
88	Sr	89	He	23.572	ppb	0.4	19221.80	25	94.29	89.8	110.2	
95	Mo	89	He	25.529	ppb	2.9	22284.45	25	102.12	89.8	110.2	
107	Ag	89	He	25.562	ppb	0.2	76457.80	25	102.25	89.8	110.2	
111	Cd	89	He	24.571	ppb	1.1	9679.10	25	98.28	89.8	110.2	
118	Sn	159	He	23.881	ppb	1.1	21220.60	25	95.52	89.8	110.2	
121	Sb	159	No Gas	23.451	ppb	7.0	170114.58	25	93.8	89.8	110.2	
137	Ba	159	No Gas	23.803	ppb	6.6	68250.74	25	95.21	89.8	110.2	
182	W	159	No Gas	23.185	ppb	7.2	125197.66	25	92.74	89.8	110.2	
205	Tl	209	No Gas	23.838	ppb	6.7	275833.31	25	95.35	89.8	110.2	
208	Pb	209	No Gas	24.001	ppb	5.9	383184.60	25	96	89.8	110.2	
232	Th	209	No Gas	23.402	ppb	7.0	383978.49	25	93.61	89.8	110.2	
238	U	209	No Gas	23.610	ppb	6.8	361841.47	25	94.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1669240.76	3.2	1483357.64	112.53	29.5	120.4	
Sc	45	No Gas	3929152.30	3.7	3141192.51	125.08	29.5	120.4	6020/DoD
Sc	45	H2	466438.66	1.3	418309.46	111.51	29.5	120.4	
Sc	45	He	94999.52	0.7	85440.95	111.19	29.5	120.4	
Ge	72	No Gas	884181.97	3.1	694668.88	127.28	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	171378.30	0.6	157206.79	109.01	29.5	120.4	
Ge	72	He	72152.04	0.7	64721.85	111.48	29.5	120.4	
Y	89	H2	3012914.42	0.8	2572670.23	117.11	29.5	120.4	
Y	89	He	630145.58	0.8	574051.42	109.77	29.5	120.4	
Tb	159	No Gas	8891745.01	3.5	6821698.44	130.35	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3386522.20	0.9	2982140.2	113.56	29.5	120.4	
Bi	209	No Gas	4538556.00	3.3	3547037.46	127.95	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	174_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/27/2020 11:48:18 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	6.9	122.23	0.2	
11	B	6	No Gas	1.355	ppb	7.0	2762.58	4	
23	Na	45	He	84.462	ppb	6.9	19544.98	200	
24	Mg	45	He	-2.897	ppb	N/A	522.27	20	
27	Al	45	He	-0.159	ppb	N/A	18.89	20	
28	Si	45	H2	0.511	ppb	153.6	570.64	100	
39	K	45	He	-15.259	ppb	N/A	11647.95	200	
40	Ca	45	H2	1.534	ppb	14.4	1904.64	20	
51	V	89	He	0.092	ppb	43.3	275.57	1	
52	Cr	89	He	-0.020	ppb	N/A	57.32	1	
55	Mn	89	He	0.000	ppb	4746.1	30.66	0.4	
56	Fe	89	H2	-0.987	ppb	N/A	5851.02	20	
59	Co	89	He	0.008	ppb	1.8	40.00	0.2	
60	Ni	89	He	-0.562	ppb	N/A	102.23	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.023	ppb	N/A	124.45	0.6	
66	Zn	89	He	0.001	ppb	7164.5	72.23	2	
75	As	89	He	0.014	ppb	86.4	6.00	1	
78	Se	89	H2	0.050	ppb	19.4	4.33	1	
88	Sr	89	He	0.004	ppb	54.0	11.11	1	
95	Mo	89	He	0.079	ppb	23.2	82.22	1	
107	Ag	89	He	0.007	ppb	70.3	40.00	0.2	
111	Cd	89	He	0.007	ppb	114.8	3.33	0.2	
118	Sn	159	He	0.045	ppb	53.3	104.45	1	
121	Sb	159	No Gas	0.033	ppb	15.1	273.64	0.2	
137	Ba	159	No Gas	0.045	ppb	50.5	146.83	0.4	
182	W	159	No Gas	0.057	ppb	10.8	390.44	1	
205	Tl	209	No Gas	0.029	ppb	30.6	480.55	0.2	
208	Pb	209	No Gas	0.018	ppb	9.7	547.29	0.2	
232	Th	209	No Gas	0.087	ppb	9.6	1558.51	1	
238	U	209	No Gas	0.024	ppb	15.0	380.43	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1707384.80	1.5	1483357.64	115.1	29.5	120.4	
Sc	45	No Gas	3984925.57	0.8	3141192.51	126.86	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	472360.02	0.7	418309.46	112.92	29.5	120.4	
Sc	45	He	98006.09	0.5	85440.95	114.71	29.5	120.4	
Ge	72	No Gas	883474.00	1.6	694668.88	127.18	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	174762.45	1.4	157206.79	111.17	29.5	120.4	
Ge	72	He	74702.61	0.5	64721.85	115.42	29.5	120.4	
Y	89	H2	3017574.94	1.0	2572670.23	117.29	29.5	120.4	
Y	89	He	641789.30	0.7	574051.42	111.8	29.5	120.4	
Tb	159	No Gas	8865047.65	0.8	6821698.44	129.95	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3390417.52	0.6	2982140.2	113.69	29.5	120.4	
Bi	209	No Gas	4548783.36	1.4	3547037.46	128.24	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-004P

File Name 175SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:51:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.276	ppb	6.5	12886.18	100	
11	B	6	No Gas	527.842	ppb	5.5	87675.34	1000	
23	Na	45	He	18363.677	ppb	0.9	410478.08	200000	
24	Mg	45	He	12019.314	ppb	1.2	146713.31	200000	
27	Al	45	He	1901.317	ppb	2.8	9456.79	200000	
28	Si	45	H2	9412.405	ppb	2.3	89861.47	10000	
39	K	45	He	13394.168	ppb	0.6	164407.02	200000	
40	Ca	45	H2	22429.911	ppb	2.0	1891246.88	200000	
51	V	89	He	537.702	ppb	0.8	93569.26	1000	
52	Cr	89	He	216.655	ppb	0.7	46372.44	2000	
55	Mn	89	He	548.444	ppb	0.9	55917.81	2000	
56	Fe	89	H2	1087.307	ppb	2.7	375333.20	100000	
59	Co	89	He	552.234	ppb	1.4	198688.56	1000	
60	Ni	89	He	552.037	ppb	0.9	53975.86	1000	
63	Cu	89	He	273.929	ppb	0.4	75880.61	2000	
66	Zn	89	He	536.557	ppb	1.9	19836.95	2000	
75	As	89	He	108.861	ppb	3.5	3352.11	1000	
78	Se	89	H2	104.023	ppb	0.9	1693.70	1000	
88	Sr	89	He	580.778	ppb	1.7	93809.31	2000	
95	Mo	89	He	110.219	ppb	1.0	19063.80	1000	
107	Ag	89	He	54.648	ppb	0.9	32397.32	100	
111	Cd	89	He	261.539	ppb	0.5	20413.62	1000	
118	Sn	159	He	513.509	ppb	1.8	89922.35	1000	
121	Sb	159	No Gas	103.896	ppb	5.1	149483.50	1000	
137	Ba	159	No Gas	2032.694	ppb	5.6	1155498.75	2000	
182	W	159	No Gas	103.906	ppb	6.7	111280.07	1000	
205	Tl	209	No Gas	104.352	ppb	6.7	239959.50	1000	
208	Pb	209	No Gas	105.319	ppb	6.3	334153.67	2000	
232	Th	209	No Gas	101.967	ppb	6.5	332534.07	1000	
238	U	209	No Gas	101.864	ppb	6.6	310236.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1722013.36	3.2	1483357.64	116.09	29.5	120.4	
Sc	45	No Gas	3896285.39	3.2	3141192.51	124.04	29.5	120.4	6020/DoD
Sc	45	H2	462076.72	1.9	418309.46	110.46	29.5	120.4	
Sc	45	He	93855.37	1.0	85440.95	109.85	29.5	120.4	
Ge	72	No Gas	880137.67	2.7	694668.88	126.7	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	169863.42	2.5	157206.79	108.05	29.5	120.4	
Ge	72	He	71955.41	0.4	64721.85	111.18	29.5	120.4	
Y	89	H2	2974355.11	1.1	2572670.23	115.61	29.5	120.4	
Y	89	He	624296.86	0.8	574051.42	108.75	29.5	120.4	
Tb	159	No Gas	8812864.87	3.1	6821698.44	129.19	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3344648.84	0.7	2982140.2	112.16	29.5	120.4	
Bi	209	No Gas	4510188.63	3.5	3547037.46	127.15	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-005

File Name 176SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:53:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.153	ppb	10.0	81.11	100	
11	B	6	No Gas	32.433	ppb	3.6	6799.60	1000	
23	Na	45	He	2693.066	ppb	0.4	68421.56	200000	
24	Mg	45	He	1916.091	ppb	0.6	23999.43	200000	
27	Al	45	He	63.289	ppb	14.9	336.69	200000	
28	Si	45	H2	1916.440	ppb	2.3	18656.19	10000	
39	K	45	He	7430.897	ppb	0.8	96730.86	200000	
40	Ca	45	H2	6283.593	ppb	0.3	528871.31	200000	
51	V	89	He	4.489	ppb	6.4	973.41	1000	
52	Cr	89	He	0.423	ppb	4.5	168.64	2000	
55	Mn	89	He	47.490	ppb	1.4	4893.31	2000	
56	Fe	89	H2	123.349	ppb	0.2	49083.99	100000	
59	Co	89	He	0.461	ppb	5.6	191.13	1000	
60	Ni	89	He	-1.533	ppb	N/A	224.46	1000	
63	Cu	89	He	46.971	ppb	2.0	13205.56	2000	
66	Zn	89	He	14.843	ppb	9.4	620.04	2000	
75	As	89	He	0.896	ppb	9.7	31.33	1000	
78	Se	89	H2	0.378	ppb	26.0	6.33	1000	
88	Sr	89	He	23.460	ppb	2.5	3815.13	2000	
95	Mo	89	He	0.998	ppb	7.8	185.56	1000	
107	Ag	89	He	0.044	ppb	50.1	44.45	100	
111	Cd	89	He	0.113	ppb	53.0	9.26	1000	
118	Sn	159	He	2.262	ppb	9.7	460.02	1000	
121	Sb	159	No Gas	8.205	ppb	10.2	11908.55	1000	
137	Ba	159	No Gas	36.843	ppb	6.2	21107.04	2000	
182	W	159	No Gas	0.348	ppb	33.5	457.19	1000	
205	Tl	209	No Gas	0.103	ppb	9.7	380.43	1000	
208	Pb	209	No Gas	78.178	ppb	5.9	250384.66	2000	
232	Th	209	No Gas	0.799	ppb	10.4	2766.78	1000	
238	U	209	No Gas	0.103	ppb	13.8	323.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1680006.80	1.8	1483357.64	113.26	29.5	120.4	
Sc	45	No Gas	3892818.41	2.9	3141192.51	123.93	29.5	120.4	6020/DoD
Sc	45	H2	460387.29	0.7	418309.46	110.06	29.5	120.4	
Sc	45	He	94019.39	0.9	85440.95	110.04	29.5	120.4	
Ge	72	No Gas	879067.09	3.0	694668.88	126.54	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	168492.22	0.2	157206.79	107.18	29.5	120.4	
Ge	72	He	72007.93	0.5	64721.85	111.26	29.5	120.4	
Y	89	H2	2968600.53	1.1	2572670.23	115.39	29.5	120.4	
Y	89	He	627435.17	0.9	574051.42	109.3	29.5	120.4	
Tb	159	No Gas	8875114.38	3.0	6821698.44	130.1	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3348240.44	0.8	2982140.2	112.28	29.5	120.4	
Bi	209	No Gas	4550407.90	3.0	3547037.46	128.29	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-006

File Name 177SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:56:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	78.4	54.44	100	
11	B	6	No Gas	15.643	ppb	7.2	4130.74	1000	
23	Na	45	He	6579.900	ppb	1.4	153316.37	200000	
24	Mg	45	He	2963.325	ppb	1.5	36711.50	200000	
27	Al	45	He	12.565	ppb	16.2	84.45	200000	
28	Si	45	H2	8726.924	ppb	2.0	82277.57	10000	
39	K	45	He	2396.184	ppb	1.3	39317.66	200000	
40	Ca	45	H2	8453.097	ppb	0.7	704298.20	200000	
51	V	89	He	4.573	ppb	0.6	983.40	1000	
52	Cr	89	He	0.376	ppb	19.3	157.97	2000	
55	Mn	89	He	9.153	ppb	0.8	963.19	2000	
56	Fe	89	H2	19.594	ppb	4.8	13945.81	100000	
59	Co	89	He	0.075	ppb	13.9	51.12	1000	
60	Ni	89	He	-2.129	ppb	N/A	165.57	1000	
63	Cu	89	He	5.715	ppb	2.4	1734.62	2000	
66	Zn	89	He	7.410	ppb	6.5	343.35	2000	
75	As	89	He	0.456	ppb	8.1	17.67	1000	
78	Se	89	H2	0.526	ppb	27.9	8.67	1000	
88	Sr	89	He	38.943	ppb	1.5	6301.68	2000	
95	Mo	89	He	0.110	ppb	89.8	31.11	1000	
107	Ag	89	He	0.042	ppb	34.9	43.34	100	
111	Cd	89	He	0.023	ppb	61.0	2.22	1000	
118	Sn	159	He	0.963	ppb	4.1	232.23	1000	
121	Sb	159	No Gas	1.382	ppb	6.0	2049.12	1000	
137	Ba	159	No Gas	44.259	ppb	6.3	25502.82	2000	
182	W	159	No Gas	0.009	ppb	18.3	93.44	1000	
205	Tl	209	No Gas	-0.014	ppb	N/A	110.12	1000	
208	Pb	209	No Gas	2.431	ppb	10.6	8066.73	2000	
232	Th	209	No Gas	0.162	ppb	13.2	667.44	1000	
238	U	209	No Gas	0.032	ppb	42.6	106.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682374.28	4.5	1483357.64	113.42	29.5	120.4	
Sc	45	No Gas	3907595.53	5.0	3141192.51	124.4	29.5	120.4	6020/DoD
Sc	45	H2	456025.91	0.9	418309.46	109.02	29.5	120.4	
Sc	45	He	93937.98	0.7	85440.95	109.94	29.5	120.4	
Ge	72	No Gas	891825.78	4.1	694668.88	128.38	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	168391.06	1.5	157206.79	107.11	29.5	120.4	
Ge	72	He	72465.51	0.8	64721.85	111.96	29.5	120.4	
Y	89	H2	2948989.15	1.0	2572670.23	114.63	29.5	120.4	
Y	89	He	624752.01	0.2	574051.42	108.83	29.5	120.4	
Tb	159	No Gas	8932498.83	4.3	6821698.44	130.94	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3347868.87	0.5	2982140.2	112.26	29.5	120.4	
Bi	209	No Gas	4580412.59	4.9	3547037.46	129.13	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6146-007

File Name 178SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/27/2020 11:58:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.001	ppb	1000.2	43.34	100	
11	B	6	No Gas	13.833	ppb	3.4	3860.66	1000	
23	Na	45	He	6609.426	ppb	1.4	154700.76	200000	
24	Mg	45	He	3048.615	ppb	1.9	37930.07	200000	
27	Al	45	He	57.906	ppb	4.2	311.13	200000	
28	Si	45	H2	8678.204	ppb	1.3	82469.22	10000	
39	K	45	He	2383.143	ppb	0.8	39359.51	200000	
40	Ca	45	H2	8564.069	ppb	0.8	719094.17	200000	
51	V	89	He	5.057	ppb	6.3	1068.97	1000	
52	Cr	89	He	0.400	ppb	36.1	163.31	2000	
55	Mn	89	He	9.741	ppb	1.1	1024.52	2000	
56	Fe	89	H2	18.055	ppb	4.7	13427.99	100000	
59	Co	89	He	0.130	ppb	54.5	71.12	1000	
60	Ni	89	He	-2.496	ppb	N/A	130.01	1000	
63	Cu	89	He	3.910	ppb	2.5	1236.77	2000	
66	Zn	89	He	4.994	ppb	24.5	254.46	2000	
75	As	89	He	0.434	ppb	33.2	17.00	1000	
78	Se	89	H2	0.598	ppb	14.0	9.83	1000	
88	Sr	89	He	38.863	ppb	3.6	6296.11	2000	
95	Mo	89	He	0.199	ppb	15.9	46.67	1000	
107	Ag	89	He	0.016	ppb	106.4	27.78	100	
111	Cd	89	He	0.061	ppb	128.5	5.18	1000	
118	Sn	159	He	1.105	ppb	26.1	257.79	1000	
121	Sb	159	No Gas	1.289	ppb	10.1	1915.62	1000	
137	Ba	159	No Gas	39.849	ppb	2.9	22975.30	2000	
182	W	159	No Gas	-0.021	ppb	N/A	60.07	1000	
205	Tl	209	No Gas	-0.032	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	2.353	ppb	3.2	7866.38	2000	
232	Th	209	No Gas	0.057	ppb	9.4	320.36	1000	
238	U	209	No Gas	0.015	ppb	112.0	56.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1688773.52	2.3	1483357.64	113.85	29.5	120.4	
Sc	45	No Gas	3909492.11	2.8	3141192.51	124.46	29.5	120.4	6020/DoD
Sc	45	H2	459555.73	0.9	418309.46	109.86	29.5	120.4	
Sc	45	He	94394.45	0.9	85440.95	110.48	29.5	120.4	
Ge	72	No Gas	889709.66	2.0	694668.88	128.08	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	168252.46	2.5	157206.79	107.03	29.5	120.4	
Ge	72	He	72620.72	0.4	64721.85	112.2	29.5	120.4	
Y	89	H2	2947847.06	1.0	2572670.23	114.58	29.5	120.4	
Y	89	He	625563.34	0.6	574051.42	108.97	29.5	120.4	
Tb	159	No Gas	8926246.26	2.6	6821698.44	130.85	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3359223.42	0.7	2982140.2	112.64	29.5	120.4	
Bi	209	No Gas	4597624.39	2.8	3547037.46	129.62	29.5	120.4	6020/DoD□ EPA

Prep Blank (PB) Report

Sample Name	PBWNG27IMS1
File Name	179_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:01:40 AM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.039	ppb	N/A	33.33	0.5	
B	11	6	No Gas	3.953	ppb	2.5	2295.81	10	
Na	23	45	He	502.493	ppb	3.5	20677.88	500	PB 6020 Fails DoD
Mg	24	45	He	-1.351	ppb	N/A	666.74	50	
Al	27	45	He	9.747	ppb	28.4	71.11	50	
Si	28	45	H2	3.576	ppb	105.5	570.65	250	
K	39	45	He	-14.274	ppb	N/A	11983.05	500	
Ca	40	45	H2	31.959	ppb	4.2	3927.35	50	
V	51	89	He	3.836	ppb	2.7	860.06	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.859	ppb	9.1	262.62	2.5	
Mn	55	89	He	1.068	ppb	20.7	139.31	1	PB 6020 Fails DoD
Fe	56	89	H2	-3.729	ppb	N/A	6228.32	50	
Co	59	89	He	0.031	ppb	171.1	35.56	0.5	
Ni	60	89	He	-2.161	ppb	N/A	163.34	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.504	ppb	17.1	294.46	1.5	
Zn	66	89	He	2.683	ppb	8.3	170.01	5	
As	75	89	He	0.259	ppb	50.9	11.67	2.5	
Se	78	89	H2	0.049	ppb	62.8	1.00	2.5	
Sr	88	89	He	0.085	ppb	118.7	21.11	2.5	
Mo	95	89	He	0.103	ppb	0.8	30.00	2.5	
Ag	107	89	He	0.003	ppb	647.0	20.00	0.5	
Cd	111	89	He	0.004	ppb	193.1	0.74	0.5	
Sn	118	159	He	53.339	ppb	1.2	9446.95	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.017	ppb	70.6	60.07	0.5	
Ba	137	159	No Gas	0.173	ppb	42.0	116.80	1	
W	182	159	No Gas	0.001	ppb	2317.5	83.43	2.5	
Tl	205	209	No Gas	-0.039	ppb	N/A	50.06	0.5	
Pb	208	209	No Gas	0.125	ppb	17.3	657.41	0.5	
Th	232	209	No Gas	0.035	ppb	32.5	243.61	2.5	
U	238	209	No Gas	0.003	ppb	70.8	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1699337.09	2.2	1483357.64	114.56	29.5	120.4	
Sc	45	No Gas	3895561.52	2.2	3141192.51	124.02	29.5	120.4	6020/DoD
Sc	45	H2	464093.75	0.7	418309.46	110.95	29.5	120.4	
Sc	45	He	94823.87	0.1	85440.95	110.98	29.5	120.4	
Ge	72	No Gas	881568.30	2.2	694668.88	126.9	29.5	120.4	6020/DoD EPA
Ge	72	H2	168784.86	0.7	157206.79	107.36	29.5	120.4	
Ge	72	He	72280.83	0.1	64721.85	111.68	29.5	120.4	
Y	89	H2	3000413.80	0.5	2572670.23	116.63	29.5	120.4	
Y	89	He	628179.88	0.4	574051.42	109.43	29.5	120.4	
Tb	159	No Gas	8908608.75	1.7	6821698.44	130.59	29.5	120.4	6020/DoD EPA
Tb	159	He	3362140.02	0.4	2982140.2	112.74	29.5	120.4	
Bi	209	No Gas	4571695.28	2.2	3547037.46	128.89	29.5	120.4	6020/DoD EPA

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG27IMS1
File Name	180LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:04:18 AM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.549	ppb	3.7	13423.33	50	21.02	79.5	120.4	
B	11	6	No Gas	539.583	ppb	5.1	89270.82	500	21.58	79.5	120.4	
Na	23	45	He	8634.954	ppb	1.7	199284.04	7500	23.03	79.5	120.4	
Mg	24	45	He	5664.000	ppb	0.8	69933.60	5000	22.66	79.5	120.4	
Al	27	45	He	2017.791	ppb	1.3	10099.49	2000	20.18	79.5	120.4	
Si	28	45	H2	916.971	ppb	3.3	9259.99	1000	18.34	79.5	120.4	
K	39	45	He	10717.253	ppb	1.0	134789.03	10000	21.43	79.5	120.4	
Ca	40	45	H2	2721.327	ppb	0.3	231087.90	2500	21.77	79.5	120.4	
V	51	89	He	551.613	ppb	0.4	96151.91	500	22.06	79.5	120.4	
Cr	52	89	He	225.373	ppb	0.8	48317.09	200	22.54	79.5	120.4	
Mn	55	89	He	555.630	ppb	1.3	56744.96	500	22.23	79.5	120.4	
Fe	56	89	H2	1107.666	ppb	1.8	383530.20	1000	22.15	79.5	120.4	
Co	59	89	He	574.389	ppb	0.1	207026.73	500	22.98	79.5	120.4	
Ni	60	89	He	576.416	ppb	0.9	56434.49	500	23.06	79.5	120.4	
Cu	63	89	He	281.899	ppb	0.7	78219.18	250	22.55	79.5	120.4	
Zn	66	89	He	549.715	ppb	2.2	20355.45	500	21.99	79.5	120.4	
As	75	89	He	113.858	ppb	0.3	3512.50	100	22.77	79.5	120.4	
Se	78	89	H2	107.712	ppb	0.9	1759.70	100	21.54	79.5	120.4	
Sr	88	89	He	530.306	ppb	0.3	85807.23	500	21.21	79.5	120.4	
Mo	95	89	He	114.042	ppb	1.8	19757.12	100	22.81	79.5	120.4	DoD
Ag	107	89	He	56.665	ppb	1.4	33650.18	50	22.67	79.5	120.4	
Cd	111	89	He	271.156	ppb	1.1	21199.65	250	21.69	79.5	120.4	
Sn	118	159	He	584.904	ppb	0.3	103122.68	500	23.4	79.5	120.4	
Sb	121	159	No Gas	97.967	ppb	4.8	143576.99	100	19.59	79.5	120.4	
Ba	137	159	No Gas	2034.247	ppb	4.9	1177990.44	2000	20.34	79.5	120.4	
W	182	159	No Gas	106.980	ppb	5.0	116713.65	100	21.4	79.5	120.4	
Tl	205	209	No Gas	107.476	ppb	4.3	250967.06	100	21.5	79.5	120.4	
[Pb]	206	209	No Gas	106.745	ppb	4.5	86663.30	100	21.35	79.5	120.4	
[Pb]	207	209	No Gas	109.109	ppb	4.8	77173.29	100	21.82	79.5	120.4	
Pb	208	209	No Gas	108.428	ppb	4.9	349280.30	100	21.69	79.5	120.4	
Th	232	209	No Gas	104.931	ppb	4.8	347462.09	100	20.99	79.5	120.4	
U	238	209	No Gas	106.162	ppb	5.1	328296.00	100	21.23	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1715086.37	2.1	1483357.64	115.62	29.5	120.4	
Sc	45	No Gas	3906947.23	2.0	3141192.51	124.38	29.5	120.4	6020/DoD
Sc	45	H2	463101.79	0.4	418309.46	110.71	29.5	120.4	
Sc	45	He	94446.13	0.9	85440.95	110.54	29.5	120.4	
Ge	72	No Gas	886104.34	0.8	694668.88	127.56	29.5	120.4	6020/DoD EPA
Ge	72	H2	169352.05	1.6	157206.79	107.73	29.5	120.4	
Ge	72	He	71766.00	0.4	64721.85	110.88	29.5	120.4	
Y	89	H2	2984382.06	1.0	2572670.23	116	29.5	120.4	
Y	89	He	625366.88	0.8	574051.42	108.94	29.5	120.4	
Tb	159	No Gas	8972857.02	1.9	6821698.44	131.53	29.5	120.4	6020/DoD EPA
Tb	159	He	3367507.66	0.4	2982140.2	112.92	29.5	120.4	
Bi	209	No Gas	4575975.34	2.2	3547037.46	129.01	29.5	120.4	6020/DoD EPA

Sample Report

Sample Name SN6056-018

File Name 181SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:07:01 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.701	ppb	4.9	220.01	100	
11	B	6	No Gas	19.145	ppb	1.3	4735.37	1000	
23	Na	45	He	564.950	ppb	3.2	22021.30	200000	
24	Mg	45	He	1661.554	ppb	0.7	21045.80	200000	
27	Al	45	He	10977.303	ppb	1.4	54974.38	200000	
28	Si	45	H2	3121.683	ppb	3.9	30179.11	10000	
39	K	45	He	704.158	ppb	1.5	20208.52	200000	
40	Ca	45	H2	15578.035	ppb	1.2	1314858.32	200000	
51	V	89	He	26.085	ppb	1.2	4755.40	1000	
52	Cr	89	He	18.285	ppb	1.7	4015.85	2000	
55	Mn	89	He	243.941	ppb	1.1	25081.64	2000	
56	Fe	89	H2	7447.464	ppb	0.4	2561364.27	100000	
59	Co	89	He	3.384	ppb	2.7	1251.26	1000	
60	Ni	89	He	52.596	ppb	2.6	5521.30	1000	
63	Cu	89	He	60.070	ppb	1.2	16889.64	2000	
66	Zn	89	He	168.655	ppb	1.0	6332.76	2000	
75	As	89	He	7.323	ppb	5.0	230.70	1000	
78	Se	89	H2	4.818	ppb	6.2	79.67	1000	
88	Sr	89	He	47.046	ppb	2.0	7665.77	2000	
95	Mo	89	He	7.981	ppb	2.6	1402.35	1000	
107	Ag	89	He	0.835	ppb	6.7	516.70	100	
111	Cd	89	He	2.598	ppb	7.5	204.82	1000	
118	Sn	159	He	60.523	ppb	1.9	10745.78	1000	
121	Sb	159	No Gas	4.191	ppb	3.7	6221.73	1000	
137	Ba	159	No Gas	147.918	ppb	6.8	86214.11	2000	
182	W	159	No Gas	0.961	ppb	8.8	1141.32	1000	
205	Tl	209	No Gas	0.416	ppb	4.1	1137.98	1000	
208	Pb	209	No Gas	243.330	ppb	7.0	800487.76	2000	
232	Th	209	No Gas	3.388	ppb	4.4	11598.44	1000	
238	U	209	No Gas	1.617	ppb	3.0	5123.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1697531.22	3.1	1483357.64	114.44	29.5	120.4	
Sc	45	No Gas	3951242.09	4.2	3141192.51	125.79	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	462351.34	1.0	418309.46	110.53	29.5	120.4	
Sc	45	He	94670.53	0.5	85440.95	110.8	29.5	120.4	
Ge	72	No Gas	893329.20	3.7	694668.88	128.6	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	167819.57	1.5	157206.79	106.75	29.5	120.4	
Ge	72	He	72071.96	0.5	64721.85	111.36	29.5	120.4	
Y	89	H2	3013952.73	0.7	2572670.23	117.15	29.5	120.4	
Y	89	He	629163.79	0.6	574051.42	109.6	29.5	120.4	
Tb	159	No Gas	9039619.17	3.8	6821698.44	132.51	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3373225.33	0.3	2982140.2	113.11	29.5	120.4	
Bi	209	No Gas	4680288.25	3.9	3547037.46	131.95	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6056-018L

File Name 182SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:09:40 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.769	ppb	16.8	81.11	100	
11	B	6	No Gas	33.280	ppb	15.3	2693.68	1000	
23	Na	45	He	1797.614	ppb	2.0	17673.93	200000	
24	Mg	45	He	1659.601	ppb	6.1	4798.95	200000	
27	Al	45	He	11064.505	ppb	3.4	11214.79	200000	
28	Si	45	H2	3027.718	ppb	5.9	6305.25	10000	
39	K	45	He	293.968	ppb	39.2	12931.76	200000	
40	Ca	45	H2	15787.776	ppb	0.7	268402.93	200000	
51	V	89	He	31.181	ppb	4.2	1286.78	1000	
52	Cr	89	He	18.439	ppb	3.6	875.87	2000	
55	Mn	89	He	244.445	ppb	1.7	5071.33	2000	
56	Fe	89	H2	7657.555	ppb	1.4	527746.43	100000	
59	Co	89	He	3.725	ppb	19.0	295.58	1000	
60	Ni	89	He	42.869	ppb	8.1	1218.99	1000	
63	Cu	89	He	57.782	ppb	4.0	3388.31	2000	
66	Zn	89	He	175.447	ppb	5.1	1379.01	2000	
75	As	89	He	8.516	ppb	6.4	56.68	1000	
78	Se	89	H2	4.379	ppb	19.1	14.50	1000	
88	Sr	89	He	47.912	ppb	0.9	1573.48	2000	
95	Mo	89	He	7.209	ppb	7.5	264.46	1000	
107	Ag	89	He	0.709	ppb	20.2	103.34	100	
111	Cd	89	He	2.931	ppb	24.5	46.67	1000	
118	Sn	159	He	61.018	ppb	2.3	2235.81	1000	
121	Sb	159	No Gas	3.619	ppb	6.3	1087.92	1000	
137	Ba	159	No Gas	148.400	ppb	6.6	17039.95	2000	
182	W	159	No Gas	0.787	ppb	22.5	253.62	1000	
205	Tl	209	No Gas	0.199	ppb	22.1	236.93	1000	
208	Pb	209	No Gas	244.134	ppb	6.5	158671.67	2000	
232	Th	209	No Gas	2.721	ppb	3.9	1949.01	1000	
238	U	209	No Gas	1.927	ppb	4.0	1211.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1677232.54	2.8	1483357.64	113.07	29.5	120.4	
Sc	45	No Gas	3912530.28	3.1	3141192.51	124.56	29.5	120.4	6020/DoD
Sc	45	H2	463916.37	1.0	418309.46	110.9	29.5	120.4	
Sc	45	He	95633.80	0.6	85440.95	111.93	29.5	120.4	
Ge	72	No Gas	879103.18	2.7	694668.88	126.55	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	171523.31	1.1	157206.79	109.11	29.5	120.4	
Ge	72	He	73493.39	0.9	64721.85	113.55	29.5	120.4	
Y	89	H2	2985967.22	0.6	2572670.23	116.06	29.5	120.4	
Y	89	He	631708.38	0.5	574051.42	110.04	29.5	120.4	
Tb	159	No Gas	8893092.64	3.0	6821698.44	130.36	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3400750.36	0.9	2982140.2	114.04	29.5	120.4	
Bi	209	No Gas	4615995.05	3.6	3547037.46	130.14	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6056-018A

File Name 183SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:12:22 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.606	ppb	3.2	2931.50	100	
11	B	6	No Gas	233.735	ppb	4.3	38731.63	1000	
23	Na	45	He	12069.879	ppb	0.3	273496.85	200000	
24	Mg	45	He	2916.604	ppb	0.5	36170.17	200000	
27	Al	45	He	12883.587	ppb	0.9	64065.51	200000	
28	Si	45	H2	8250.995	ppb	0.7	78135.48	10000	
39	K	45	He	11486.110	ppb	1.1	142922.04	200000	
40	Ca	45	H2	18081.301	ppb	0.7	1511127.95	200000	
51	V	89	He	83.004	ppb	1.2	14663.64	1000	
52	Cr	89	He	76.845	ppb	2.5	16564.88	2000	
55	Mn	89	He	286.325	ppb	1.1	29327.05	2000	
56	Fe	89	H2	9150.741	ppb	0.8	3098916.70	100000	
59	Co	89	He	15.728	ppb	2.8	5706.06	1000	
60	Ni	89	He	78.982	ppb	2.1	8073.72	1000	
63	Cu	89	He	97.326	ppb	0.7	27170.45	2000	
66	Zn	89	He	290.556	ppb	0.8	10819.03	2000	
75	As	89	He	61.402	ppb	2.3	1900.34	1000	
78	Se	89	H2	57.368	ppb	2.9	932.66	1000	
88	Sr	89	He	103.942	ppb	3.2	16864.25	2000	
95	Mo	89	He	64.948	ppb	3.5	11283.93	1000	
107	Ag	89	He	12.402	ppb	1.5	7396.72	100	
111	Cd	89	He	14.186	ppb	2.2	1112.28	1000	
118	Sn	159	He	116.855	ppb	1.8	20625.29	1000	
121	Sb	159	No Gas	13.598	ppb	2.1	19833.53	1000	
137	Ba	159	No Gas	181.627	ppb	6.6	104490.92	2000	
182	W	159	No Gas	53.298	ppb	5.2	57809.77	1000	
205	Tl	209	No Gas	11.602	ppb	6.8	27313.35	1000	
208	Pb	209	No Gas	275.473	ppb	5.4	890245.29	2000	
232	Th	209	No Gas	13.821	ppb	5.4	46045.84	1000	
238	U	209	No Gas	12.519	ppb	6.1	38860.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1676346.40	1.8	1483357.64	113.01	29.5	120.4	
Sc	45	No Gas	3882904.43	1.6	3141192.51	123.61	29.5	120.4	6020/DoD
Sc	45	H2	457819.53	0.6	418309.46	109.45	29.5	120.4	
Sc	45	He	94005.44	0.7	85440.95	110.02	29.5	120.4	
Ge	72	No Gas	882490.37	1.8	694668.88	127.04	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	167373.46	0.6	157206.79	106.47	29.5	120.4	
Ge	72	He	71136.11	0.4	64721.85	109.91	29.5	120.4	
Y	89	H2	2969258.92	0.4	2572670.23	115.42	29.5	120.4	
Y	89	He	626862.47	0.4	574051.42	109.2	29.5	120.4	
Tb	159	No Gas	8913236.11	1.5	6821698.44	130.66	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3362987.55	0.2	2982140.2	112.77	29.5	120.4	
Bi	209	No Gas	4592055.23	1.6	3547037.46	129.46	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6056-018S

File Name 184SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:14:59 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.472	ppb	6.3	11616.13	100	
11	B	6	No Gas	494.531	ppb	5.3	80188.16	1000	
23	Na	45	He	7587.438	ppb	1.8	176361.10	200000	
24	Mg	45	He	6917.759	ppb	0.6	85300.89	200000	
27	Al	45	He	17858.416	ppb	0.6	89253.15	200000	
28	Si	45	H2	3835.778	ppb	9.6	36480.88	10000	
39	K	45	He	10550.736	ppb	0.8	132949.10	200000	
40	Ca	45	H2	20142.842	ppb	2.2	1677710.63	200000	
51	V	89	He	507.884	ppb	0.8	89433.26	1000	
52	Cr	89	He	212.953	ppb	1.3	46116.90	2000	
55	Mn	89	He	743.650	ppb	0.8	76703.06	2000	
56	Fe	89	H2	8617.534	ppb	1.4	2922644.18	100000	
59	Co	89	He	505.843	ppb	0.7	184152.55	1000	
60	Ni	89	He	529.322	ppb	1.2	52375.17	1000	
63	Cu	89	He	307.138	ppb	0.5	86062.59	2000	
66	Zn	89	He	630.534	ppb	2.0	23572.77	2000	
75	As	89	He	102.639	ppb	1.3	3198.39	1000	
78	Se	89	H2	97.433	ppb	2.7	1586.02	1000	
88	Sr	89	He	516.559	ppb	0.6	84423.27	2000	
95	Mo	89	He	106.264	ppb	1.1	18597.67	1000	
107	Ag	89	He	49.363	ppb	1.4	29611.94	100	
111	Cd	89	He	243.156	ppb	0.6	19203.33	1000	
118	Sn	159	He	515.652	ppb	0.6	91670.82	1000	
121	Sb	159	No Gas	77.468	ppb	5.6	113566.98	1000	
137	Ba	159	No Gas	1967.522	ppb	5.3	1139656.18	2000	
182	W	159	No Gas	92.132	ppb	5.5	100554.50	1000	
205	Tl	209	No Gas	96.697	ppb	4.4	228260.09	1000	
208	Pb	209	No Gas	257.110	ppb	5.1	836839.96	2000	
232	Th	209	No Gas	88.052	ppb	6.6	294697.63	1000	
238	U	209	No Gas	94.097	ppb	5.5	294137.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1678210.35	2.2	1483357.64	113.14	29.5	120.4	
Sc	45	No Gas	3866599.69	1.9	3141192.51	123.09	29.5	120.4	6020/DoD
Sc	45	H2	456358.50	1.3	418309.46	109.1	29.5	120.4	
Sc	45	He	94489.42	0.4	85440.95	110.59	29.5	120.4	
Ge	72	No Gas	878168.42	2.3	694668.88	126.42	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	167132.77	1.2	157206.79	106.31	29.5	120.4	
Ge	72	He	71553.20	1.0	64721.85	110.55	29.5	120.4	
Y	89	H2	2973427.93	0.9	2572670.23	115.58	29.5	120.4	
Y	89	He	631668.04	1.0	574051.42	110.04	29.5	120.4	
Tb	159	No Gas	8974906.53	1.7	6821698.44	131.56	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3395400.64	1.0	2982140.2	113.86	29.5	120.4	
Bi	209	No Gas	4625036.23	1.8	3547037.46	130.39	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	185_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:17:41 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.490	ppb	3.3	29096.58	25	97.96	89.8	110.2	
11	B	6	No Gas	26.970	ppb	2.5	21965.14	25	107.88	89.8	110.2	
23	Na	45	He	5251.652	ppb	2.8	574479.07	5000	105.03	89.8	110.2	
24	Mg	45	He	5011.798	ppb	3.3	300713.29	5000	100.24	89.8	110.2	
27	Al	45	He	476.383	ppb	2.9	11672.91	500	95.28	89.8	110.2	
28	Si	45	H2	433.978	ppb	3.6	20918.43	500	86.8	89.8	110.2	> +/- 10%
39	K	45	He	4889.402	ppb	2.5	285985.67	5000	97.79	89.8	110.2	
40	Ca	45	H2	4884.361	ppb	0.2	2038972.33	5000	97.69	89.8	110.2	
51	V	89	He	25.711	ppb	2.3	22240.41	25	102.84	89.8	110.2	
52	Cr	89	He	25.754	ppb	3.0	27254.59	25	103.02	89.8	110.2	
55	Mn	89	He	25.499	ppb	2.9	12862.89	25	102	89.8	110.2	
56	Fe	89	H2	4892.668	ppb	0.8	8224605.36	5000	97.85	89.8	110.2	
59	Co	89	He	26.415	ppb	1.7	46963.72	25	105.66	89.8	110.2	
60	Ni	89	He	26.254	ppb	2.8	12957.54	25	105.02	89.8	110.2	
63	Cu	89	He	26.199	ppb	2.9	35920.35	25	104.8	89.8	110.2	
66	Zn	89	He	26.167	ppb	2.6	4832.13	25	104.67	89.8	110.2	
75	As	89	He	24.967	ppb	2.1	3797.27	25	99.87	89.8	110.2	
78	Se	89	H2	24.515	ppb	0.3	1981.05	25	98.06	89.8	110.2	
88	Sr	89	He	23.813	ppb	1.3	19006.01	25	95.25	89.8	110.2	
95	Mo	89	He	26.289	ppb	1.3	22457.98	25	105.16	89.8	110.2	
107	Ag	89	He	25.885	ppb	2.8	75764.98	25	103.54	89.8	110.2	
111	Cd	89	He	25.255	ppb	2.0	9736.54	25	101.02	89.8	110.2	
118	Sn	159	He	24.542	ppb	3.3	21437.70	25	98.17	89.8	110.2	
121	Sb	159	No Gas	24.064	ppb	2.5	172937.55	25	96.26	89.8	110.2	
137	Ba	159	No Gas	24.207	ppb	2.4	68760.52	25	96.83	89.8	110.2	
182	W	159	No Gas	23.773	ppb	1.2	127184.39	25	95.09	89.8	110.2	
205	Tl	209	No Gas	24.635	ppb	1.5	281899.71	25	98.54	89.8	110.2	
208	Pb	209	No Gas	24.622	ppb	2.1	388679.90	25	98.49	89.8	110.2	
232	Th	209	No Gas	24.110	ppb	2.8	391244.88	25	96.44	89.8	110.2	
238	U	209	No Gas	24.122	ppb	3.2	365580.22	25	96.49	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1597639.98	0.4	1483357.64	107.7	29.5	120.4	
Sc	45	No Gas	3795008.16	0.3	3141192.51	120.81	29.5	120.4	6020/DoD
Sc	45	H2	457459.52	0.8	418309.46	109.36	29.5	120.4	
Sc	45	He	92534.96	2.1	85440.95	108.3	29.5	120.4	
Ge	72	No Gas	861025.46	1.3	694668.88	123.95	29.5	120.4	6020/DoD
Ge	72	H2	168859.20	1.1	157206.79	107.41	29.5	120.4	
Ge	72	He	71402.80	0.4	64721.85	110.32	29.5	120.4	
Y	89	H2	2952265.23	0.1	2572670.23	114.75	29.5	120.4	
Y	89	He	616819.20	1.5	574051.42	107.45	29.5	120.4	
Tb	159	No Gas	8795241.47	0.2	6821698.44	128.93	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3329817.59	1.2	2982140.2	111.66	29.5	120.4	
Bi	209	No Gas	4482430.19	0.5	3547037.46	126.37	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	186_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:20:16 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.060	ppb	21.3	115.56	0.2	
11	B	6	No Gas	1.367	ppb	10.2	2690.35	4	
23	Na	45	He	61.197	ppb	0.3	16327.49	200	
24	Mg	45	He	-3.887	ppb	N/A	444.49	20	
27	Al	45	He	0.132	ppb	145.6	25.56	20	
28	Si	45	H2	1.159	ppb	20.9	594.01	100	
39	K	45	He	-16.263	ppb	N/A	11202.71	200	
40	Ca	45	H2	1.385	ppb	16.6	1815.74	20	
51	V	89	He	0.092	ppb	15.7	270.02	1	
52	Cr	89	He	-0.012	ppb	N/A	65.32	1	
55	Mn	89	He	-0.004	ppb	N/A	28.00	0.4	
56	Fe	89	H2	-0.537	ppb	N/A	6552.21	20	
59	Co	89	He	0.005	ppb	127.9	33.33	0.2	
60	Ni	89	He	-0.573	ppb	N/A	94.45	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.027	ppb	N/A	116.67	0.6	
66	Zn	89	He	0.034	ppb	353.5	76.67	2	
75	As	89	He	0.022	ppb	32.3	7.00	1	
78	Se	89	H2	0.038	ppb	45.7	3.33	1	
88	Sr	89	He	0.006	ppb	102.3	12.22	1	
95	Mo	89	He	0.077	ppb	29.4	78.89	1	
107	Ag	89	He	0.003	ppb	176.2	25.56	0.2	
111	Cd	89	He	0.004	ppb	117.7	1.85	0.2	
118	Sn	159	He	0.036	ppb	28.4	94.45	1	
121	Sb	159	No Gas	0.056	ppb	25.4	440.50	0.2	
137	Ba	159	No Gas	0.053	ppb	29.2	170.19	0.4	
182	W	159	No Gas	0.068	ppb	35.1	443.84	1	
205	Tl	209	No Gas	0.037	ppb	20.7	577.33	0.2	
208	Pb	209	No Gas	0.034	ppb	18.0	794.23	0.2	
232	Th	209	No Gas	0.127	ppb	12.9	2222.70	1	
238	U	209	No Gas	0.033	ppb	36.2	520.60	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1657707.36	3.1	1483357.64	111.75	29.5	120.4	
Sc	45	No Gas	3900699.55	3.3	3141192.51	124.18	29.5	120.4	6020/DoD
Sc	45	H2	465962.45	0.6	418309.46	111.39	29.5	120.4	
Sc	45	He	94736.10	1.2	85440.95	110.88	29.5	120.4	
Ge	72	No Gas	876516.96	3.4	694668.88	126.18	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	172615.95	0.7	157206.79	109.8	29.5	120.4	
Ge	72	He	72737.40	1.2	64721.85	112.38	29.5	120.4	
Y	89	H2	2986026.47	0.7	2572670.23	116.07	29.5	120.4	
Y	89	He	627666.57	2.0	574051.42	109.34	29.5	120.4	
Tb	159	No Gas	8862625.21	4.0	6821698.44	129.92	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3338126.51	1.7	2982140.2	111.94	29.5	120.4	
Bi	209	No Gas	4548614.44	4.1	3547037.46	128.24	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6056-018P

File Name 187SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:23:01 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.212	ppb	6.8	12813.86	100	
11	B	6	No Gas	545.158	ppb	5.7	88353.42	1000	
23	Na	45	He	8456.043	ppb	1.6	192295.60	200000	
24	Mg	45	He	7197.664	ppb	1.5	87282.06	200000	
27	Al	45	He	14954.698	ppb	1.1	73532.85	200000	
28	Si	45	H2	3633.572	ppb	2.0	33759.06	10000	
39	K	45	He	11409.248	ppb	0.7	140483.03	200000	
40	Ca	45	H2	20494.817	ppb	1.3	1665797.87	200000	
51	V	89	He	561.679	ppb	0.4	97316.22	1000	
52	Cr	89	He	237.062	ppb	1.0	50515.69	2000	
55	Mn	89	He	804.576	ppb	0.3	81668.15	2000	
56	Fe	89	H2	9103.702	ppb	0.4	3042597.86	100000	
59	Co	89	He	568.072	ppb	0.3	203522.37	1000	
60	Ni	89	He	605.278	ppb	0.3	58889.12	1000	
63	Cu	89	He	341.179	ppb	0.4	94064.89	2000	
66	Zn	89	He	706.892	ppb	1.5	26000.49	2000	
75	As	89	He	117.935	ppb	1.7	3616.21	1000	
78	Se	89	H2	110.402	ppb	1.8	1771.03	1000	
88	Sr	89	He	572.784	ppb	0.1	92125.71	2000	
95	Mo	89	He	119.862	ppb	1.2	20641.77	1000	
107	Ag	89	He	55.921	ppb	1.1	33008.69	100	
111	Cd	89	He	270.367	ppb	1.3	21011.94	1000	
118	Sn	159	He	581.390	ppb	1.2	102274.29	1000	
121	Sb	159	No Gas	90.842	ppb	6.2	131369.86	1000	
137	Ba	159	No Gas	2185.313	ppb	5.3	1248850.30	2000	
182	W	159	No Gas	103.415	ppb	6.0	111337.21	1000	
205	Tl	209	No Gas	106.380	ppb	6.6	249180.94	1000	
208	Pb	209	No Gas	370.410	ppb	5.4	1196634.87	2000	
232	Th	209	No Gas	99.880	ppb	6.3	331808.17	1000	
238	U	209	No Gas	104.867	ppb	6.4	325338.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1681268.31	3.1	1483357.64	113.34	29.5	120.4	
Sc	45	No Gas	3836787.59	2.5	3141192.51	122.14	29.5	120.4	6020/DoD
Sc	45	H2	445349.31	1.4	418309.46	106.46	29.5	120.4	
Sc	45	He	92962.67	1.0	85440.95	108.8	29.5	120.4	
Ge	72	No Gas	871237.55	2.0	694668.88	125.42	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	165403.00	0.9	157206.79	105.21	29.5	120.4	
Ge	72	He	71008.01	0.7	64721.85	109.71	29.5	120.4	
Y	89	H2	2930405.41	0.4	2572670.23	113.91	29.5	120.4	
Y	89	He	621618.98	0.5	574051.42	108.29	29.5	120.4	
Tb	159	No Gas	8856888.76	2.3	6821698.44	129.83	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3360048.91	0.8	2982140.2	112.67	29.5	120.4	
Bi	209	No Gas	4592777.35	2.8	3547037.46	129.48	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN6056-019

File Name 188SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:25:36 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.287	ppb	8.3	355.57	100	
11	B	6	No Gas	34.873	ppb	1.3	7024.16	1000	
23	Na	45	He	540.252	ppb	4.5	21283.00	200000	
24	Mg	45	He	3446.326	ppb	2.2	42529.92	200000	
27	Al	45	He	26623.878	ppb	0.5	132110.07	200000	
28	Si	45	H2	3156.795	ppb	17.8	29779.81	10000	
39	K	45	He	1976.898	ppb	0.4	34501.62	200000	
40	Ca	45	H2	17160.682	ppb	0.5	1414666.28	200000	
51	V	89	He	50.495	ppb	2.7	8959.84	1000	
52	Cr	89	He	32.621	ppb	5.3	7048.50	2000	
55	Mn	89	He	333.145	ppb	1.2	33988.50	2000	
56	Fe	89	H2	8009.076	ppb	0.6	2717523.50	100000	
59	Co	89	He	3.732	ppb	9.4	1366.84	1000	
60	Ni	89	He	17.901	ppb	3.0	2111.34	1000	
63	Cu	89	He	53.058	ppb	0.9	14827.24	2000	
66	Zn	89	He	570.824	ppb	0.6	21107.71	2000	
75	As	89	He	11.271	ppb	5.7	350.38	1000	
78	Se	89	H2	4.748	ppb	4.9	77.50	1000	
88	Sr	89	He	54.028	ppb	3.7	8736.51	2000	
95	Mo	89	He	10.107	ppb	6.8	1759.07	1000	
107	Ag	89	He	1.158	ppb	9.9	704.49	100	
111	Cd	89	He	4.527	ppb	6.2	353.71	1000	
118	Sn	159	He	60.279	ppb	2.3	10692.38	1000	
121	Sb	159	No Gas	1.961	ppb	5.3	2900.24	1000	
137	Ba	159	No Gas	317.016	ppb	4.6	183063.98	2000	
182	W	159	No Gas	0.599	ppb	20.8	734.18	1000	
205	Tl	209	No Gas	2.565	ppb	3.3	6231.82	1000	
208	Pb	209	No Gas	101.186	ppb	5.0	331456.30	2000	
232	Th	209	No Gas	8.860	ppb	6.1	29946.57	1000	
238	U	209	No Gas	2.668	ppb	10.7	8392.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1641346.24	1.8	1483357.64	110.65	29.5	120.4	
Sc	45	No Gas	3858324.83	1.9	3141192.51	122.83	29.5	120.4	6020/DoD
Sc	45	H2	451584.29	0.8	418309.46	107.95	29.5	120.4	
Sc	45	He	93820.67	0.6	85440.95	109.81	29.5	120.4	
Ge	72	No Gas	866885.72	2.0	694668.88	124.79	29.5	120.4	6020/DoD
Ge	72	H2	164544.47	1.5	157206.79	104.67	29.5	120.4	
Ge	72	He	71066.15	0.1	64721.85	109.8	29.5	120.4	
Y	89	H2	2973999.70	0.4	2572670.23	115.6	29.5	120.4	
Y	89	He	624517.02	1.0	574051.42	108.79	29.5	120.4	
Tb	159	No Gas	8946020.84	1.8	6821698.44	131.14	29.5	120.4	6020/DoD EPA
Tb	159	He	3369951.90	0.2	2982140.2	113	29.5	120.4	
Bi	209	No Gas	4653105.39	2.2	3547037.46	131.18	29.5	120.4	6020/DoD EPA

Sample Report

Sample Name SN6056-020

File Name 189SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b

Acq Time 7/28/2020 12:28:17 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.524	ppb	16.9	168.90	100	
11	B	6	No Gas	18.394	ppb	11.6	4438.64	1000	
23	Na	45	He	455.117	ppb	1.4	19267.64	200000	
24	Mg	45	He	2667.470	ppb	1.7	32806.28	200000	
27	Al	45	He	15465.028	ppb	0.2	76126.09	200000	
28	Si	45	H2	3169.007	ppb	5.3	29881.86	10000	
39	K	45	He	1567.289	ppb	1.2	29601.11	200000	
40	Ca	45	H2	12051.936	ppb	1.2	992483.46	200000	
51	V	89	He	31.882	ppb	3.2	5674.69	1000	
52	Cr	89	He	20.450	ppb	1.1	4407.23	2000	
55	Mn	89	He	205.229	ppb	0.6	20755.45	2000	
56	Fe	89	H2	8806.780	ppb	1.5	2971509.01	100000	
59	Co	89	He	4.850	ppb	9.4	1753.57	1000	
60	Ni	89	He	21.756	ppb	3.6	2462.53	1000	
63	Cu	89	He	37.502	ppb	1.6	10426.45	2000	
66	Zn	89	He	187.146	ppb	2.2	6901.93	2000	
75	As	89	He	7.153	ppb	9.6	221.69	1000	
78	Se	89	H2	2.818	ppb	2.0	45.83	1000	
88	Sr	89	He	30.854	ppb	1.6	4945.52	2000	
95	Mo	89	He	4.302	ppb	2.8	748.94	1000	
107	Ag	89	He	0.503	ppb	8.7	313.35	100	
111	Cd	89	He	2.088	ppb	6.6	161.85	1000	
118	Sn	159	He	54.479	ppb	1.2	9653.77	1000	
121	Sb	159	No Gas	0.777	ppb	10.7	1178.04	1000	
137	Ba	159	No Gas	145.730	ppb	7.4	84599.42	2000	
182	W	159	No Gas	0.346	ppb	36.8	460.53	1000	
205	Tl	209	No Gas	0.900	ppb	31.5	2282.79	1000	
208	Pb	209	No Gas	114.874	ppb	7.9	378218.58	2000	
232	Th	209	No Gas	4.008	ppb	10.4	13682.87	1000	
238	U	209	No Gas	1.346	ppb	14.2	4255.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1635251.24	3.4	1483357.64	110.24	29.5	120.4	
Sc	45	No Gas	3851220.10	3.5	3141192.51	122.6	29.5	120.4	6020/DoD
Sc	45	H2	450944.32	0.3	418309.46	107.8	29.5	120.4	
Sc	45	He	93059.99	0.2	85440.95	108.92	29.5	120.4	
Ge	72	No Gas	873497.03	3.4	694668.88	125.74	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	165519.19	0.8	157206.79	105.29	29.5	120.4	
Ge	72	He	70813.69	0.4	64721.85	109.41	29.5	120.4	
Y	89	H2	2958279.32	0.4	2572670.23	114.99	29.5	120.4	
Y	89	He	618675.31	0.6	574051.42	107.77	29.5	120.4	
Tb	159	No Gas	9003411.95	3.5	6821698.44	131.98	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3364308.11	0.4	2982140.2	112.82	29.5	120.4	
Bi	209	No Gas	4683647.70	4.0	3547037.46	132.04	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	190_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:30:54 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.998	ppb	6.6	29619.92	25	99.99	89.8	110.2	
11	B	6	No Gas	25.478	ppb	4.7	20787.70	25	101.91	89.8	110.2	
23	Na	45	He	5204.005	ppb	0.2	568729.01	5000	104.08	89.8	110.2	
24	Mg	45	He	4971.579	ppb	0.3	298002.76	5000	99.43	89.8	110.2	
27	Al	45	He	466.669	ppb	2.3	11422.72	500	93.33	89.8	110.2	
28	Si	45	H2	429.041	ppb	1.1	20236.84	500	85.81	89.8	110.2	> +/- 10%
39	K	45	He	4844.036	ppb	0.2	283113.86	5000	96.88	89.8	110.2	
40	Ca	45	H2	4966.437	ppb	1.5	2027775.68	5000	99.33	89.8	110.2	
51	V	89	He	25.215	ppb	0.9	21829.74	25	100.86	89.8	110.2	
52	Cr	89	He	25.548	ppb	0.6	27057.56	25	102.19	89.8	110.2	
55	Mn	89	He	25.275	ppb	1.1	12758.78	25	101.1	89.8	110.2	
56	Fe	89	H2	4916.176	ppb	0.7	8174904.41	5000	98.32	89.8	110.2	
59	Co	89	He	25.890	ppb	0.3	46060.82	25	103.56	89.8	110.2	
60	Ni	89	He	25.585	ppb	2.9	12645.02	25	102.34	89.8	110.2	
63	Cu	89	He	25.707	ppb	0.4	35275.45	25	102.83	89.8	110.2	
66	Zn	89	He	26.063	ppb	2.8	4815.46	25	104.25	89.8	110.2	
75	As	89	He	25.035	ppb	1.2	3810.28	25	100.14	89.8	110.2	
78	Se	89	H2	24.339	ppb	2.1	1945.55	25	97.36	89.8	110.2	
88	Sr	89	He	23.560	ppb	0.6	18814.58	25	94.24	89.8	110.2	
95	Mo	89	He	25.619	ppb	1.0	21898.18	25	102.48	89.8	110.2	
107	Ag	89	He	25.722	ppb	0.6	75341.58	25	102.89	89.8	110.2	
111	Cd	89	He	24.624	ppb	1.0	9499.34	25	98.5	89.8	110.2	
118	Sn	159	He	23.885	ppb	0.8	21002.56	25	95.54	89.8	110.2	
121	Sb	159	No Gas	23.303	ppb	7.4	169146.46	25	93.21	89.8	110.2	
137	Ba	159	No Gas	23.624	ppb	6.8	67784.53	25	94.5	89.8	110.2	
182	W	159	No Gas	23.751	ppb	5.6	128404.08	25	95	89.8	110.2	
205	Tl	209	No Gas	24.379	ppb	5.9	283185.07	25	97.52	89.8	110.2	
208	Pb	209	No Gas	24.319	ppb	4.8	389834.44	25	97.28	89.8	110.2	
232	Th	209	No Gas	23.740	ppb	6.9	391003.74	25	94.96	89.8	110.2	
238	U	209	No Gas	24.037	ppb	6.7	369766.53	25	96.15	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1595151.59	2.8	1483357.64	107.54	29.5	120.4	
Sc	45	No Gas	3813751.87	3.9	3141192.51	121.41	29.5	120.4	6020/DoD
Sc	45	H2	447456.92	0.7	418309.46	106.97	29.5	120.4	
Sc	45	He	92399.26	0.3	85440.95	108.14	29.5	120.4	
Ge	72	No Gas	862114.57	3.3	694668.88	124.1	29.5	120.4	6020/DoD
Ge	72	H2	166094.46	1.4	157206.79	105.65	29.5	120.4	
Ge	72	He	71292.15	0.7	64721.85	110.15	29.5	120.4	
Y	89	H2	2920437.71	0.7	2572670.23	113.52	29.5	120.4	
Y	89	He	617102.83	0.4	574051.42	107.5	29.5	120.4	
Tb	159	No Gas	8900725.77	4.1	6821698.44	130.48	29.5	120.4	6020/DoD□ EPA
Tb	159	He	3350862.97	0.2	2982140.2	112.36	29.5	120.4	
Bi	209	No Gas	4556562.86	3.6	3547037.46	128.46	29.5	120.4	6020/DoD□ EPA

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	191_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28A_#2.b
Acq Time	7/28/2020 12:33:36 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.081	ppb	17.6	133.34	0.2	
11	B	6	No Gas	1.373	ppb	20.7	2519.20	4	
23	Na	45	He	54.699	ppb	14.1	15599.15	200	
24	Mg	45	He	-3.586	ppb	N/A	462.26	20	
27	Al	45	He	0.270	ppb	128.6	28.89	20	
28	Si	45	H2	1.929	ppb	26.4	627.38	100	
39	K	45	He	-11.450	ppb	N/A	11472.84	200	
40	Ca	45	H2	0.596	ppb	24.6	1472.35	20	
51	V	89	He	0.029	ppb	142.1	216.68	1	
52	Cr	89	He	-0.015	ppb	N/A	61.99	1	
55	Mn	89	He	-0.014	ppb	N/A	22.66	0.4	
56	Fe	89	H2	-1.484	ppb	N/A	4933.00	20	
59	Co	89	He	0.006	ppb	209.2	35.56	0.2	
60	Ni	89	He	-0.529	ppb	N/A	116.67	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.016	ppb	N/A	132.23	0.6	
66	Zn	89	He	0.026	ppb	339.3	75.56	2	
75	As	89	He	0.011	ppb	241.1	5.33	1	
78	Se	89	H2	0.041	ppb	40.7	3.50	1	
88	Sr	89	He	0.001	ppb	869.0	7.78	1	
95	Mo	89	He	0.056	ppb	15.0	61.11	1	
107	Ag	89	He	0.006	ppb	31.0	35.56	0.2	
111	Cd	89	He	0.009	ppb	46.4	4.07	0.2	
118	Sn	159	He	0.018	ppb	64.5	80.00	1	
121	Sb	159	No Gas	0.025	ppb	47.0	200.23	0.2	
137	Ba	159	No Gas	0.038	ppb	52.0	120.13	0.4	
182	W	159	No Gas	0.051	ppb	12.8	337.05	1	
205	Tl	209	No Gas	0.017	ppb	72.5	323.70	0.2	
208	Pb	209	No Gas	0.017	ppb	61.6	497.23	0.2	
232	Th	209	No Gas	0.080	ppb	20.8	1354.92	1	
238	U	209	No Gas	0.021	ppb	74.7	320.37	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1554047.77	6.3	1483357.64	104.77	29.5	120.4	
Sc	45	No Gas	3639170.55	6.4	3141192.51	115.85	29.5	120.4	
Sc	45	H2	463381.34	0.6	418309.46	110.77	29.5	120.4	
Sc	45	He	94700.01	1.3	85440.95	110.84	29.5	120.4	
Ge	72	No Gas	811824.52	8.2	694668.88	116.86	29.5	120.4	
Ge	72	H2	172761.39	2.6	157206.79	109.89	29.5	120.4	
Ge	72	He	73257.11	0.9	64721.85	113.19	29.5	120.4	
Y	89	H2	2978236.73	0.7	2572670.23	115.76	29.5	120.4	
Y	89	He	631283.87	0.9	574051.42	109.97	29.5	120.4	
Tb	159	No Gas	8283574.32	6.6	6821698.44	121.43	29.5	120.4	6020/DoD
Tb	159	He	3360019.39	0.8	2982140.2	112.67	29.5	120.4	
Bi	209	No Gas	4279947.06	6.7	3547037.46	120.66	29.5	120.4	6020/DoD

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/28/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
07/30/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNG28B

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (12:44) fails high for V (1.312 ug/L) Cu (DoD) (0.745 ug/L) Th (0.276 ug/L)

Closing PQL (20:49) fails low for Ni and high for Na (1201.719 ug/L) V (1.458 ug/L) Th (0.296 ug/L)

ICSA (12:47) fails high (DoD) for Ni (0.105 ug/L)

CCBs fail low at concentrations no less these for Ni (-0.323 ug/L) Na (-104.211 ug/L)

CCBs fail high at concentrations no greater than these for Be (0.125 ug/L) Ca (13.746 ug/L) Pb (0.820 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element

concentrations. Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

25x serial diln.: 2.0 mL of 5x diln. of sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 5x diln. of sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG28B	07/28/2020	12:33	AP
CalStd	1	LNG28B	07/28/2020	12:36	AP
ICV	1	LNG28B	07/28/2020	12:39	AP
ICB	1	LNG28B	07/28/2020	12:42	AP
PQL	1	LNG28B	07/28/2020	12:44	AP
ICSA	1	LNG28B	07/28/2020	12:47	AP
ICSAB	1	LNG28B	07/28/2020	12:50	AP
LRS1	1	LNG28B	07/28/2020	12:53	AP
LRS2	1	LNG28B	07/28/2020	12:55	AP
RINSE	1	LNG28B	07/28/2020	12:58	AP
RINSE	1	LNG28B	07/28/2020	13:00	AP
CCV	1	LNG28B	07/28/2020	13:03	AP
CCB	1	LNG28B	07/28/2020	13:06	AP
LCS TEST	1	LNG28B	07/28/2020	13:09	AP
PBSNG06IMS1	5	LNG28B	07/28/2020	13:11	AP
PBSNG07IMS1	5	LNG28B	07/28/2020	13:14	AP
PBWNF29IMW1	5	LNG28B	07/28/2020	13:16	AP
SN5124-002	5	LNG28B	07/28/2020	13:19	AP
SN5124-002L	25	LNG28B	07/28/2020	13:22	AP
SN5124-002A	5	LNG28B	07/28/2020	13:24	AP
PBWNG21IMW2	5	LNG28B	07/28/2020	13:27	AP
LCSWNG21IMW2	5	LNG28B	07/28/2020	13:30	AP
SN5717-020	5	LNG28B	07/28/2020	13:32	AP
CCV	1	LNG28B	07/28/2020	13:35	AP
CCB	1	LNG28B	07/28/2020	13:38	AP
SN5830-002	5	LNG28B	07/28/2020	13:40	AP
SN5832-001	5	LNG28B	07/28/2020	13:43	AP
SN5832-002	5	LNG28B	07/28/2020	13:46	AP
SN5832-003	5	LNG28B	07/28/2020	13:48	AP
SN5832-004	5	LNG28B	07/28/2020	13:51	AP
SN5897-001	5	LNG28B	07/28/2020	13:54	AP
SN5897-002	5	LNG28B	07/28/2020	13:56	AP
SN5897-002L	25	LNG28B	07/28/2020	13:59	AP
SN5897-002A	5	LNG28B	07/28/2020	14:01	AP
SN5897-002S	5	LNG28B	07/28/2020	14:04	AP
CCV	1	LNG28B	07/28/2020	14:07	AP
CCB	1	LNG28B	07/28/2020	14:09	AP
SN5897-002P	5	LNG28B	07/28/2020	14:12	AP
SN5946-001	5	LNG28B	07/28/2020	14:15	AP
PBWNG22IMW1	1	LNG28B	07/28/2020	14:17	AP
LCSWNG22IMW1	5	LNG28B	07/28/2020	14:20	AP
SN5923-001	1	LNG28B	07/28/2020	14:23	AP
PBSNG23IMS1	5	LNG28B	07/28/2020	14:25	AP
LCSONG23IMS1	5	LNG28B	07/28/2020	14:28	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
LC2ONG23IMS1	5	LNG28B	07/28/2020	14:31	AP
SN6056-005	5	LNG28B	07/28/2020	14:33	AP
SN6056-006	5	LNG28B	07/28/2020	14:36	AP
CCV	1	LNG28B	07/28/2020	14:39	AP
CCB	1	LNG28B	07/28/2020	14:41	AP
SN6056-007	5	LNG28B	07/28/2020	14:44	AP
SN6056-008	5	LNG28B	07/28/2020	14:47	AP
SN6056-009	5	LNG28B	07/28/2020	14:49	AP
SN6056-009L	25	LNG28B	07/28/2020	14:52	AP
SN6056-009A	5	LNG28B	07/28/2020	14:55	AP
SN6056-009S	5	LNG28B	07/28/2020	14:57	AP
SN6056-009P	5	LNG28B	07/28/2020	15:00	AP
SN6056-010	5	LNG28B	07/28/2020	15:03	AP
SN6056-011	5	LNG28B	07/28/2020	15:05	AP
SN6056-012	5	LNG28B	07/28/2020	15:08	AP
CCV	1	LNG28B	07/28/2020	15:11	AP
CCB	1	LNG28B	07/28/2020	15:13	AP
SN6056-013	5	LNG28B	07/28/2020	15:16	AP
SN6056-014	5	LNG28B	07/28/2020	15:18	AP
SN6056-015	5	LNG28B	07/28/2020	15:21	AP
SN6056-016	5	LNG28B	07/28/2020	15:24	AP
SN6056-017	5	LNG28B	07/28/2020	15:26	AP
PBWNG23IMW1	1	LNG28B	07/28/2020	15:29	AP
LCSWNG23IMW1	5	LNG28B	07/28/2020	15:32	AP
SN5815-002	1	LNG28B	07/28/2020	15:34	AP
SN5815-002R	1	LNG28B	07/28/2020	15:37	AP
SN5815-007	1	LNG28B	07/28/2020	15:40	AP
CCV	1	LNG28B	07/28/2020	15:42	AP
CCB	1	LNG28B	07/28/2020	15:45	AP
SN5815-014	1	LNG28B	07/28/2020	15:48	AP
SN6071-001	1	LNG28B	07/28/2020	15:50	AP
PBWNG23IMW2	5	LNG28B	07/28/2020	15:53	AP
LCSWNG23IMW2	5	LNG28B	07/28/2020	15:56	AP
SN5815-004	5	LNG28B	07/28/2020	15:58	AP
SN5815-009	5	LNG28B	07/28/2020	16:01	AP
SN5815-016	5	LNG28B	07/28/2020	16:04	AP
SN5815-036	5	LNG28B	07/28/2020	16:06	AP
SN6059-001	5	LNG28B	07/28/2020	16:09	AP
SN6059-001L	25	LNG28B	07/28/2020	16:12	AP
CCV	1	LNG28B	07/28/2020	16:14	AP
CCB	1	LNG28B	07/28/2020	16:17	AP
SN6059-001A	5	LNG28B	07/28/2020	16:20	AP
SN6059-001S	5	LNG28B	07/28/2020	16:22	AP
SN6059-001P	5	LNG28B	07/28/2020	16:25	AP
SN6059-002	5	LNG28B	07/28/2020	16:28	AP
SN6059-003	5	LNG28B	07/28/2020	16:30	AP
lcs test re	1	LNG28B	07/28/2020	16:33	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6090-001	5	LNG28B	07/28/2020	16:35	AP
PBWNG24IMW1	1	LNG28B	07/28/2020	16:38	AP
LCSWNG24IMW1	5	LNG28B	07/28/2020	16:41	AP
SN6091-001	1	LNG28B	07/28/2020	16:43	AP
CCV	1	LNG28B	07/28/2020	16:46	AP
CCB	1	LNG28B	07/28/2020	16:49	AP
SN6091-002	1	LNG28B	07/28/2020	16:51	AP
SN6091-003	1	LNG28B	07/28/2020	16:54	AP
SN6092-001	1	LNG28B	07/28/2020	16:57	AP
SN6092-001L	5	LNG28B	07/28/2020	16:59	AP
SN6092-001A	1	LNG28B	07/28/2020	17:02	AP
SN6092-001S	1	LNG28B	07/28/2020	17:05	AP
SN6092-001P	1	LNG28B	07/28/2020	17:07	AP
PBWNG24IMW2	5	LNG28B	07/28/2020	17:10	AP
LCSWNG24IMW2	5	LNG28B	07/28/2020	17:13	AP
SN6090-002	5	LNG28B	07/28/2020	17:15	AP
CCV	1	LNG28B	07/28/2020	17:18	AP
CCB	1	LNG28B	07/28/2020	17:21	AP
SN6090-003	5	LNG28B	07/28/2020	17:23	AP
SN6090-004	5	LNG28B	07/28/2020	17:26	AP
SN6090-005	5	LNG28B	07/28/2020	17:29	AP
SN6090-006	5	LNG28B	07/28/2020	17:31	AP
SN6090-007	5	LNG28B	07/28/2020	17:35	AP
SN6090-008	5	LNG28B	07/28/2020	17:38	AP
SN6090-009	5	LNG28B	07/28/2020	17:40	AP
SN6090-010S	5	LNG28B	07/28/2020	17:43	AP
SN6090-010P	5	LNG28B	07/28/2020	17:46	AP
PBWNG24IMW3	5	LNG28B	07/28/2020	17:48	AP
CCV	1	LNG28B	07/28/2020	17:51	AP
CCB	1	LNG28B	07/28/2020	17:54	AP
LCSWNG24IMW3	5	LNG28B	07/28/2020	17:56	AP
SN6124-001	5	LNG28B	07/28/2020	17:59	AP
SN6124-003	5	LNG28B	07/28/2020	18:02	AP
SN6124-005	5	LNG28B	07/28/2020	18:04	AP
SN6124-005L	25	LNG28B	07/28/2020	18:07	AP
SN6124-005A	5	LNG28B	07/28/2020	18:10	AP
SN6124-005S	5	LNG28B	07/28/2020	18:12	AP
SN6124-005P	5	LNG28B	07/28/2020	18:15	AP
PBWNG27IMW1	5	LNG28B	07/28/2020	18:18	AP
LCSWNG27IMW1	5	LNG28B	07/28/2020	18:20	AP
CCV	1	LNG28B	07/28/2020	18:23	AP
CCB	1	LNG28B	07/28/2020	18:26	AP
SN6146-001	5	LNG28B	07/28/2020	18:28	AP
PBWNG27IMW2	5	LNG28B	07/28/2020	18:31	AP
LCSWNG27IMW2	5	LNG28B	07/28/2020	18:34	AP
SN6090-010R	5	LNG28B	07/28/2020	18:36	AP
SN6090-010RL	25	LNG28B	07/28/2020	18:39	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6090-010RA	5	LNG28B	07/28/2020	18:42	AP
SN6146-002	5	LNG28B	07/28/2020	18:44	AP
SN6146-003	5	LNG28B	07/28/2020	18:47	AP
SN6146-004	5	LNG28B	07/28/2020	18:50	AP
SN6146-004L	25	LNG28B	07/28/2020	18:52	AP
CCV	1	LNG28B	07/28/2020	18:55	AP
CCB	1	LNG28B	07/28/2020	18:58	AP
SN6146-004A	5	LNG28B	07/28/2020	19:00	AP
SN6146-004S	5	LNG28B	07/28/2020	19:03	AP
SN6146-004P	5	LNG28B	07/28/2020	19:06	AP
SN6146-005	5	LNG28B	07/28/2020	19:08	AP
SN6146-006	5	LNG28B	07/28/2020	19:11	AP
SN6146-007	5	LNG28B	07/28/2020	19:13	AP
PBSNG27IMS1	5	LNG28B	07/28/2020	19:16	AP
LCSONG27IMS1	5	LNG28B	07/28/2020	19:19	AP
SN6056-018	5	LNG28B	07/28/2020	19:22	AP
SN6056-018L	25	LNG28B	07/28/2020	19:24	AP
CCV	1	LNG28B	07/28/2020	19:27	AP
CCB	1	LNG28B	07/28/2020	19:29	AP
SN6056-018A	5	LNG28B	07/28/2020	19:32	AP
SN6056-018S	5	LNG28B	07/28/2020	19:35	AP
SN6056-018P	5	LNG28B	07/28/2020	19:37	AP
SN6056-019	5	LNG28B	07/28/2020	19:40	AP
SN6056-020	5	LNG28B	07/28/2020	19:43	AP
SN5897-002	5	LNG28B	07/28/2020	19:45	AP
SN5311-003	5	LNG28B	07/28/2020	19:48	AP
SN5311-003L	25	LNG28B	07/28/2020	19:51	AP
SN5311-003A	5	LNG28B	07/28/2020	19:53	AP
SN5311-003S	5	LNG28B	07/28/2020	19:56	AP
CCV	1	LNG28B	07/28/2020	19:59	AP
CCB	1	LNG28B	07/28/2020	20:01	AP
SN5311-003P	5	LNG28B	07/28/2020	20:04	AP
PBWNG09IMW2	1	LNG28B	07/28/2020	20:07	AP
LCSWNG09IMW2	5	LNG28B	07/28/2020	20:09	AP
SN5540-001	1	LNG28B	07/28/2020	20:12	AP
SN5540-001L	5	LNG28B	07/28/2020	20:15	AP
SN5540-001A	1	LNG28B	07/28/2020	20:17	AP
SN5540-001S	5	LNG28B	07/28/2020	20:20	AP
SN5540-001P	5	LNG28B	07/28/2020	20:23	AP
SN5435-002	5	LNG28B	07/28/2020	20:25	AP
SN5435-003	5	LNG28B	07/28/2020	20:28	AP
CCV	1	LNG28B	07/28/2020	20:31	AP
CCB	1	LNG28B	07/28/2020	20:33	AP
SN6032-001	5	LNG28B	07/28/2020	20:36	AP
RINSE	1	LNG28B	07/28/2020	20:39	AP
RINSE	1	LNG28B	07/28/2020	20:41	AP
CCV	1	LNG28B	07/28/2020	20:44	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1	LNG28B	07/28/2020	20:46	AP
PQL	1	LNG28B	07/28/2020	20:49	AP
RINSE	1	LNG28B	07/28/2020	20:52	AP
RINSE	1	LNG28B	07/28/2020	20:54	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq. Date-Time	7/28/2020 12:09:55 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

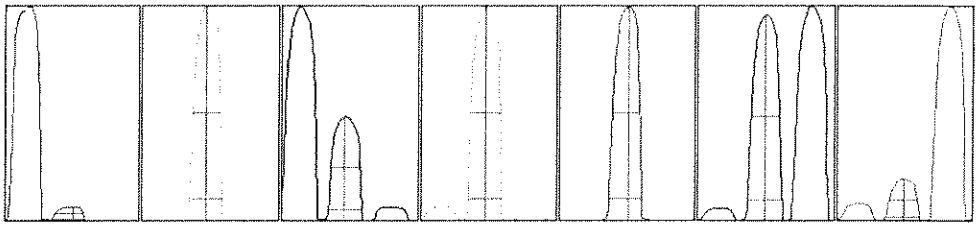
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2876	28755.81	0.874	5.000	
9	1084	10840.83	1.221	5.000	
24	47840	478402.07	0.402	5.000	
59	9097	90967.85	0.156	5.000	
115	158579	1585789.43	0.190	5.000	
205	10904	109036.92	0.573	5.000	
208	23833	238330.75	0.217	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2920	2861	2864	2863	2870
9	1093	1098	1088	1065	1077
24	47697	47587	47943	48056	47919
59	9081	9086	9098	9103	9117
115	158798	158712	158161	158365	158858
205	10816	10959	10910	10964	10869
208	23755	23829	23851	23899	23831

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4816.83	7.05	6.90 - 7.10	
9	1847.84	8.95	8.90 - 9.10	
24	76072.06	23.90	23.90 - 24.10	
59	14420.55	58.95	58.90 - 59.10	
115	267029.38	115.05	114.90 - 115.10	
205	17959.19	205.00	204.90 - 205.10	
208	39343.00	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.61	0.706	0.900	
9	0.61	0.721	0.900	
24	0.66	0.736	0.900	
59	0.66	0.735	0.900	
115	0.62	0.728	0.900	
205	0.63	0.765	0.900	
208	0.63	0.742	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	12.4 V
Extract 2	-115.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	505	5045.63	1.385	5.000	
89	78895	788953.03	1.381	5.000	
205	8762	87616.85	0.564	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	495	501	504	509	514
89	77294	78690	78769	79504	80220
205	8695	8739	8756	8800	8819

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.6 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1660	16603.19	0.976	5.000	
89	16798	167982.98	0.265	5.000	
205	4976	49762.96	0.852	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1647	1639	1669	1674	1673
89	16772	16782	16753	16819	16865
205	4929	4940	4976	5028	5009

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	1.2 V
Extract 2	-115.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.3 mV	Analog HV	2428 V	Pulse HV	1186 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:33:16 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	60.00	48.4
11	B	6	No Gas	2010.21	3.5
23	Na	45	He	19872.48	1.7
24	Mg	45	He	997.89	6.2
27	Al	45	He	16.67	52.9
28	Si	45	H2	557.30	13.2
39	K	45	He	11701.26	2.4
40	Ca	45	H2	883.39	2.9
51	V	89	He	278.90	14.3
52	Cr	89	He	74.66	13.5
55	Mn	89	He	24.00	33.3
56	Fe	89	H2	2492.99	9.4
59	Co	89	He	24.44	56.8
60	Ni	89	He	268.90	21.7
63	Cu	89	He	137.79	16.5
66	Zn	89	He	88.89	9.4
75	As	89	He	4.33	35.3
78	Se	89	H2	0.67	43.3
88	Sr	89	He	6.67	50.0
95	Mo	89	He	4.45	86.6
107	Ag	89	He	3.33	0.0
111	Cd	89	He	0.37	173.2
118	Sn	159	He	50.00	24.0
121	Sb	159	No Gas	36.70	15.7
137	Ba	159	No Gas	20.02	50.0
182	W	159	No Gas	33.37	75.5
205	Tl	209	No Gas	313.69	13.3
208	Pb	209	No Gas	253.62	25.1
232	Th	209	No Gas	133.48	11.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1745272.14	1.1
Sc	45	No Gas	3932582.94	0.8
Sc	45	H2	485269.91	2.7
Sc	45	He	96164.21	1.1
Ge	72	No Gas	877152.82	0.8
Ge	72	H2	182501.50	3.0
Ge	72	He	74687.17	1.0
Y	89	H2	3060772.30	2.5
Y	89	He	649886.70	1.5
Tb	159	No Gas	8413567.03	0.7
Tb	159	He	3319571.76	1.1
Bi	209	No Gas	4391152.66	0.8

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:36:25 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	65381.61	2.2
11	B	6	No Gas	43982.16	1.8
23	Na	45	He	1102778.09	0.8
24	Mg	45	He	602727.54	0.3
27	Al	45	He	23752.58	1.2
28	Si	45	H2	46473.21	1.6
39	K	45	He	571640.35	0.6
40	Ca	45	H2	4282871.85	0.8
51	V	89	He	45246.70	1.4
52	Cr	89	He	54989.51	0.6
55	Mn	89	He	25995.78	0.2
56	Fe	89	H2	17050439.63	0.7
59	Co	89	He	94624.65	0.6
60	Ni	89	He	25693.10	1.6
63	Cu	89	He	72202.46	1.5
66	Zn	89	He	9533.57	0.9
75	As	89	He	8104.92	2.1
78	Se	89	H2	4200.61	1.1
88	Sr	89	He	40380.15	1.1
95	Mo	89	He	45765.03	1.2
107	Ag	89	He	155135.19	0.6
111	Cd	89	He	20051.96	0.8
118	Sn	159	He	43601.47	1.8
121	Sb	159	No Gas	349436.66	1.7
137	Ba	159	No Gas	136879.81	1.0
182	W	159	No Gas	262693.23	1.6
205	Tl	209	No Gas	568128.76	1.2
208	Pb	209	No Gas	787137.04	1.1
232	Th	209	No Gas	801782.29	2.5
238	U	209	No Gas	755796.96	1.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1700278.73	0.9	1745272.14	97.42	29.5	120.4	
Sc	45	No Gas	3892151.39	1.1	3932582.94	98.97	29.5	120.4	
Sc	45	H2	463160.44	0.8	485269.91	95.44	29.5	120.4	
Sc	45	He	92732.56	1.1	96164.21	96.43	29.5	120.4	
Ge	72	No Gas	876239.57	1.5	877152.82	99.9	29.5	120.4	
Ge	72	H2	171919.37	0.2	182501.5	94.2	29.5	120.4	
Ge	72	He	71774.86	0.5	74687.17	96.1	29.5	120.4	
Y	89	H2	2953623.91	1.0	3060772.3	96.5	29.5	120.4	
Y	89	He	631276.72	1.2	649886.7	97.14	29.5	120.4	
Tb	159	No Gas	8538987.23	0.7	8413567.03	101.49	29.5	120.4	
Tb	159	He	3304359.85	1.1	3319571.76	99.54	29.5	120.4	
Bi	209	No Gas	4427595.67	0.6	4391152.66	100.83	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:39:31 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.410	ppb	5.1	27169.41	20	102.05	89.6	110.4	
11	B	6	No Gas	19.370	ppb	6.3	18542.47	20	96.85	89.6	110.4	
23	Na	45	He	4043.303	ppb	1.3	469843.53	4000	101.08	89.6	110.4	
24	Mg	45	He	3977.050	ppb	0.7	246880.28	4000	99.43	89.6	110.4	
27	Al	45	He	381.242	ppb	3.2	9312.24	400	95.31	89.6	110.4	
28	Si	45	H2	413.996	ppb	2.9	19929.59	400	103.5	89.6	110.4	
39	K	45	He	3955.179	ppb	1.7	239295.97	4000	98.88	89.6	110.4	
40	Ca	45	H2	3955.468	ppb	4.5	1726752.14	4000	98.89	89.6	110.4	
51	V	89	He	20.080	ppb	1.4	18605.06	20	100.4	89.6	110.4	
52	Cr	89	He	20.302	ppb	0.9	22705.36	20	101.51	89.6	110.4	
55	Mn	89	He	20.242	ppb	1.2	10694.11	20	101.21	89.6	110.4	
56	Fe	89	H2	3968.366	ppb	4.7	6884950.18	4000	99.21	89.6	110.4	
59	Co	89	He	20.554	ppb	1.9	39486.79	20	102.77	89.6	110.4	
60	Ni	89	He	20.740	ppb	1.9	10972.42	20	103.7	89.6	110.4	
63	Cu	89	He	20.719	ppb	2.3	30445.08	20	103.6	89.6	110.4	
66	Zn	89	He	20.552	ppb	2.8	4029.62	20	102.76	89.6	110.4	
75	As	89	He	20.190	ppb	1.0	3324.77	20	100.95	89.6	110.4	
78	Se	89	H2	19.995	ppb	4.5	1709.53	20	99.98	89.6	110.4	
88	Sr	89	He	20.132	ppb	1.4	16507.07	20	100.66	89.6	110.4	
95	Mo	89	He	39.578	ppb	0.3	36769.13	40	98.94	89.6	110.4	
107	Ag	89	He	20.520	ppb	0.6	64619.95	20	102.6	89.6	110.4	
111	Cd	89	He	20.583	ppb	2.3	8377.11	20	102.92	89.6	110.4	
118	Sn	159	He	20.153	ppb	0.9	17672.11	20	100.76	89.6	110.4	
121	Sb	159	No Gas	19.979	ppb	6.2	143539.00	20	99.9	89.6	110.4	
137	Ba	159	No Gas	19.899	ppb	4.7	56026.31	20	99.5	89.6	110.4	
182	W	159	No Gas	19.358	ppb	6.1	104560.26	20	96.79	89.6	110.4	
205	Tl	209	No Gas	20.848	ppb	5.3	243359.30	20	104.24	89.6	110.4	
208	Pb	209	No Gas	20.083	ppb	5.6	324678.07	20	100.42	89.6	110.4	
232	Th	209	No Gas	20.013	ppb	5.7	329477.82	20	100.06	89.6	110.4	
238	U	209	No Gas	19.805	ppb	6.7	307194.68	20	99.02	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1729948.24	2.5	1745272.14	99.12	29.5	120.4	
Sc	45	No Gas	4018293.83	4.0	3932582.94	102.18	29.5	120.4	
Sc	45	H2	472421.38	3.3	485269.91	97.35	29.5	120.4	
Sc	45	He	95274.78	1.7	96164.21	99.08	29.5	120.4	
Ge	72	No Gas	891261.28	3.1	877152.82	101.61	29.5	120.4	
Ge	72	H2	175847.43	4.0	182501.5	96.35	29.5	120.4	
Ge	72	He	73453.22	1.2	74687.17	98.35	29.5	120.4	
Y	89	H2	3008051.62	3.5	3060772.3	98.28	29.5	120.4	
Y	89	He	640617.95	1.0	649886.7	98.57	29.5	120.4	
Tb	159	No Gas	8790757.92	3.9	8413567.03	104.48	29.5	120.4	
Tb	159	He	3317023.81	0.9	3319571.76	99.92	29.5	120.4	
Bi	209	No Gas	4550885.57	3.8	4391152.66	103.64	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:42:11 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.115	ppb	50.6	210.01	0.2	Fail 6020/DoD
11	B	6	No Gas	0.587	ppb	16.0	2468.08	4	
23	Na	45	He	-15.582	ppb	N/A	17977.93	200	
24	Mg	45	He	-3.775	ppb	N/A	755.64	20	
27	Al	45	He	0.006	ppb	2175.3	16.67	20	
28	Si	45	H2	0.956	ppb	266.0	587.33	100	
39	K	45	He	4.855	ppb	95.6	11886.34	200	
40	Ca	45	H2	0.946	ppb	28.4	1275.66	20	
51	V	89	He	-0.058	ppb	N/A	223.34	1	
52	Cr	89	He	-0.010	ppb	N/A	63.32	1	
55	Mn	89	He	0.001	ppb	816.0	24.66	0.4	
56	Fe	89	H2	2.473	ppb	5.5	6732.39	20	
59	Co	89	He	0.001	ppb	280.6	26.67	0.2	
60	Ni	89	He	-0.022	ppb	N/A	255.57	0.4	
63	Cu	89	He	-0.012	ppb	N/A	118.89	0.6	
66	Zn	89	He	-0.142	ppb	N/A	61.12	2	
75	As	89	He	0.014	ppb	22.5	6.67	1	
78	Se	89	H2	0.035	ppb	42.8	3.67	1	
88	Sr	89	He	-0.004	ppb	N/A	3.33	1	
95	Mo	89	He	0.203	ppb	14.0	194.45	1	
107	Ag	89	He	0.008	ppb	57.0	30.00	0.2	
111	Cd	89	He	0.007	ppb	37.0	3.33	0.2	
118	Sn	159	He	0.082	ppb	23.0	121.12	1	
121	Sb	159	No Gas	0.050	ppb	90.2	383.78	0.2	
137	Ba	159	No Gas	0.055	ppb	68.7	170.20	0.4	
182	W	159	No Gas	0.135	ppb	28.3	740.85	1	
205	Tl	209	No Gas	0.038	ppb	67.8	750.88	0.2	
208	Pb	209	No Gas	0.044	ppb	86.6	957.77	0.2	
232	Th	209	No Gas	0.094	ppb	43.3	1642.04	1	
238	U	209	No Gas	0.046	ppb	79.4	697.54	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1711989.57	0.9	1745272.14	98.09	29.5	120.4	
Sc	45	No Gas	3922755.22	1.7	3932582.94	99.75	29.5	120.4	
Sc	45	H2	473455.25	0.7	485269.91	97.57	29.5	120.4	
Sc	45	He	95389.86	1.0	96164.21	99.19	29.5	120.4	
Ge	72	No Gas	874293.64	1.8	877152.82	99.67	29.5	120.4	
Ge	72	H2	177537.20	1.4	182501.5	97.28	29.5	120.4	
Ge	72	He	74002.77	1.3	74687.17	99.08	29.5	120.4	
Y	89	H2	3003913.21	1.3	3060772.3	98.14	29.5	120.4	
Y	89	He	645804.47	0.8	649886.7	99.37	29.5	120.4	
Tb	159	No Gas	8533928.83	1.8	8413567.03	101.43	29.5	120.4	
Tb	159	He	3314287.66	0.5	3319571.76	99.84	29.5	120.4	
Bi	209	No Gas	4454231.68	1.8	4391152.66	101.44	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:44:51 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.232	ppb	9.7	370.02	0.2	116	79.5	120.4
11	B	6	No Gas	4.091	ppb	6.3	5513.46	4	102.28	79.5	120.4
23	Na	45	He	204.371	ppb	5.3	42365.94	200	102.19	79.5	120.4
24	Mg	45	He	18.301	ppb	15.9	2115.87	20	91.5	79.5	120.4
27	Al	45	He	18.549	ppb	9.4	467.80	20	92.74	79.5	120.4
28	Si	45	H2	98.176	ppb	5.0	5059.87	100	98.18	79.5	120.4
39	K	45	He	206.381	ppb	2.4	23437.02	200	103.19	79.5	120.4
40	Ca	45	H2	22.038	ppb	2.3	10317.47	20	110.19	79.5	120.4
51	V	89	He	1.312	ppb	2.1	1472.35	1	131.2	79.5	120.4
52	Cr	89	He	1.037	ppb	1.4	1229.84	1	103.7	79.5	120.4
55	Mn	89	He	0.421	ppb	18.5	245.96	0.4	105.25	79.5	120.4
56	Fe	89	H2	23.615	ppb	0.5	42759.17	20	118.08	79.5	120.4
59	Co	89	He	0.208	ppb	10.4	424.48	0.2	104	79.5	120.4
60	Ni	89	He	0.324	ppb	10.4	432.25	0.4	81	79.5	120.4
63	Cu	89	He	0.745	ppb	6.1	1225.66	0.6	124.17	79.5	120.4
66	Zn	89	He	2.053	ppb	8.8	481.14	2	102.65	79.5	120.4
75	As	89	He	1.024	ppb	7.4	172.69	1	102.4	79.5	120.4
78	Se	89	H2	1.008	ppb	2.4	85.50	1	100.8	79.5	120.4
88	Sr	89	He	1.098	ppb	1.1	906.73	1	109.8	79.5	120.4
95	Mo	89	He	1.007	ppb	4.8	938.96	1	100.7	79.5	120.4
107	Ag	89	He	0.228	ppb	1.0	722.27	0.2	114	79.5	120.4
111	Cd	89	He	0.236	ppb	1.3	96.30	0.2	118	79.5	120.4
118	Sn	159	He	1.072	ppb	5.9	986.74	1	107.2	79.5	120.4
121	Sb	159	No Gas	0.224	ppb	8.1	1621.90	0.2	112	79.5	120.4
137	Ba	159	No Gas	0.415	ppb	11.0	1171.36	0.4	103.75	79.5	120.4
182	W	159	No Gas	1.033	ppb	8.5	5527.40	1	103.3	79.5	120.4
205	Tl	209	No Gas	0.198	ppb	8.8	2619.85	0.2	99	79.5	120.4
208	Pb	209	No Gas	0.221	ppb	9.0	3807.84	0.2	110.5	79.5	120.4
232	Th	209	No Gas	0.276	ppb	16.7	4649.46	0.2	138	79.5	120.4
238	U	209	No Gas	0.202	ppb	7.1	3117.23	0.2	101	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD
Failed DoD □ Failed 6020/EPA

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1737149.23	1.4	1745272.14	99.53	29.5	120.4	
Sc	45	No Gas	3977907.90	2.2	3932582.94	101.15	29.5	120.4	
Sc	45	H2	464854.92	1.1	485269.91	95.79	29.5	120.4	
Sc	45	He	95118.05	1.3	96164.21	98.91	29.5	120.4	
Ge	72	No Gas	884814.94	2.4	877152.82	100.87	29.5	120.4	
Ge	72	H2	173462.77	1.2	182501.5	95.05	29.5	120.4	
Ge	72	He	72876.99	1.1	74687.17	97.58	29.5	120.4	
Y	89	H2	2960140.63	0.9	3060772.3	96.71	29.5	120.4	
Y	89	He	640595.50	1.6	649886.7	98.57	29.5	120.4	
Tb	159	No Gas	8655395.78	2.3	8413567.03	102.87	29.5	120.4	
Tb	159	He	3316295.82	1.3	3319571.76	99.9	29.5	120.4	
Bi	209	No Gas	4525874.10	2.8	4391152.66	103.07	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:47:30 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.011	ppb	152.9	67.78	0.2	-50	50	
B	11	6	No Gas	0.387	ppb	23.7	2143.56	4	-50	100	
Na	23	45	He	99437.426	ppb	0.8	10217213.21	100000	80	120	
Mg	24	45	He	99189.399	ppb	1.0	5650358.67	100000	80	120	
Al	27	45	He	95079.389	ppb	0.9	2136217.12	100000	80	120	
Si	28	45	H2	2.104	ppb	80.0	594.01	100	-50	50	
K	39	45	He	96004.632	ppb	1.0	5102635.61	100000	80	120	
Ca	40	45	H2	98439.821	ppb	0.2	39888484.96	100000	80	120	
V	51	89	He	0.115	ppb	25.3	356.69	1	-50	100	
Cr	52	89	He	0.327	ppb	9.6	411.27	0.78	-100	100	
Mn	55	89	He	0.429	ppb	9.4	234.63	0.0826	100	100	
Fe	56	89	H2	96748.494	ppb	0.3	158409825.91	100000	80	120	
Co	59	89	He	0.262	ppb	23.9	495.61	0.2	-50	100	
Ni	60	89	He	0.105	ppb	27.9	300.01	0.114	100	100	DoD
Cu	63	89	He	0.424	ppb	9.5	710.04	-0.043	100	100	
Zn	66	89	He	0.418	ppb	31.3	157.79	-0.7632	100	100	
As	75	89	He	0.052	ppb	21.1	12.00	1	-50	100	
Se	78	89	H2	0.112	ppb	41.7	9.67	1	-50	100	
Sr	88	89	He	0.806	ppb	1.0	626.70	0.0578	100	100	
Mo	95	89	He	2046.826	ppb	1.5	1786135.01	2000	80	120	
Ag	107	89	He	0.021	ppb	12.8	64.45	0.2	-50	50	
Cd	111	89	He	0.347	ppb	3.1	132.97	0.268	100	100	
Sn	118	159	He	0.363	ppb	8.2	361.13	-0.24	100	100	
Sb	121	159	No Gas	0.155	ppb	15.7	1144.65	0.089	100	100	
Ba	137	159	No Gas	0.177	ppb	22.4	513.92	-0.0794	100	100	
W	182	159	No Gas	0.207	ppb	19.0	1141.33	0.32	-100	100	
Tl	205	209	No Gas	-0.005	ppb	N/A	253.62	0.2	-50	50	
Pb	208	209	No Gas	0.096	ppb	4.9	1721.98	0.03	100	100	
Th	232	209	No Gas	0.034	ppb	12.4	667.44	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	98.0	20.02	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1597066.93	3.1	1745272.14	91.51	29.5	120.4	
Sc	45	No Gas	3822366.89	4.2	3932582.94	97.2	29.5	120.4	
Sc	45	H2	438276.37	0.3	485269.91	90.32	29.5	120.4	
Sc	45	He	87763.25	0.4	96164.21	91.26	29.5	120.4	
Ge	72	No Gas	855663.51	4.3	877152.82	97.55	29.5	120.4	
Ge	72	H2	161121.88	1.1	182501.5	88.29	29.5	120.4	
Ge	72	He	67313.97	0.3	74687.17	90.13	29.5	120.4	
Y	89	H2	2836625.98	0.2	3060772.3	92.68	29.5	120.4	
Y	89	He	601853.31	0.8	649886.7	92.61	29.5	120.4	
Tb	159	No Gas	8730585.08	3.5	8413567.03	103.77	29.5	120.4	
Tb	159	He	3259363.14	0.6	3319571.76	98.19	29.5	120.4	
Bi	209	No Gas	4322733.83	3.7	4391152.66	98.44	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:50:14 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	19.860	ppb	6.2	23755.76	20	79.5	120.4	
11	B	6	No Gas	20.447	ppb	5.7	17491.12	20	79.5	120.4	
23	Na	45	He	98453.338	ppb	1.1	10172006.23	100000	79.5	120.4	
24	Mg	45	He	98090.795	ppb	1.1	5618516.44	100000	79.5	120.4	
27	Al	45	He	93668.594	ppb	0.8	2116202.10	100000	79.5	120.4	
28	Si	45	H2	469.181	ppb	1.2	21099.00	500	79.5	120.4	
39	K	45	He	95042.433	ppb	0.8	5079675.21	100000	79.5	120.4	
40	Ca	45	H2	97020.858	ppb	0.7	39692319.97	100000	79.5	120.4	
51	V	89	He	20.196	ppb	3.4	17567.09	20	79.5	120.4	
52	Cr	89	He	20.186	ppb	1.5	21190.63	20	79.5	120.4	
55	Mn	89	He	20.498	ppb	0.8	10166.49	20	79.5	120.4	
56	Fe	89	H2	95582.534	ppb	1.4	157755818.59	100000	79.5	120.4	
59	Co	89	He	20.005	ppb	1.3	36082.07	20	79.5	120.4	
60	Ni	89	He	19.615	ppb	3.2	9753.74	20	79.5	120.4	
63	Cu	89	He	19.613	ppb	1.5	27063.47	20	79.5	120.4	
66	Zn	89	He	20.384	ppb	1.3	3751.74	20	79.5	120.4	
75	As	89	He	20.552	ppb	2.3	3177.05	20	79.5	120.4	
78	Se	89	H2	19.325	ppb	2.0	1572.19	20	79.5	120.4	
88	Sr	89	He	20.705	ppb	2.0	15936.43	20	79.5	120.4	
95	Mo	89	He	2056.448	ppb	0.2	1793177.04	2000	79.5	120.4	
107	Ag	89	He	19.596	ppb	0.5	57928.94	20	79.5	120.4	
111	Cd	89	He	20.284	ppb	0.8	7750.44	20	79.5	120.4	
118	Sn	159	He	19.948	ppb	0.6	17207.11	20	79.5	120.4	
121	Sb	159	No Gas	19.043	ppb	6.5	139227.78	20	79.5	120.4	
137	Ba	159	No Gas	19.495	ppb	6.5	55828.28	20	79.5	120.4	
182	W	159	No Gas	19.959	ppb	8.4	109669.01	20	79.5	120.4	
205	Tl	209	No Gas	19.961	ppb	6.3	227154.27	20	79.5	120.4	
208	Pb	209	No Gas	20.050	ppb	7.2	315966.29	20	79.5	120.4	
232	Th	209	No Gas	21.009	ppb	7.9	337106.88	20	79.5	120.4	
238	U	209	No Gas	20.748	ppb	7.5	313774.00	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1554763.58	2.9	1745272.14	89.08	29.5	120.4	
Sc	45	No Gas	3785046.43	3.4	3932582.94	96.25	29.5	120.4	
Sc	45	H2	442491.00	0.6	485269.91	91.18	29.5	120.4	
Sc	45	He	88252.95	1.7	96164.21	91.77	29.5	120.4	
Ge	72	No Gas	852597.17	3.2	877152.82	97.2	29.5	120.4	
Ge	72	H2	163035.20	0.8	182501.5	89.33	29.5	120.4	
Ge	72	He	67737.59	1.8	74687.17	90.7	29.5	120.4	
Y	89	H2	2859385.14	0.1	3060772.3	93.42	29.5	120.4	
Y	89	He	601353.19	0.7	649886.7	92.53	29.5	120.4	
Tb	159	No Gas	8942745.28	3.2	8413567.03	106.29	29.5	120.4	
Tb	159	He	3262522.80	0.7	3319571.76	98.28	29.5	120.4	
Bi	209	No Gas	4436547.54	3.4	4391152.66	101.03	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 12:53:00 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	102.781	ppb	3.1	131669.02	100	102.78	89.5	110.4	
11	B	6	No Gas	490.376	ppb	3.9	405869.75	500	98.08	89.5	110.4	
51	V	89	He	1022.628	ppb	1.4	892230.29	1000	102.26	89.5	110.4	
52	Cr	89	He	2046.989	ppb	0.8	2180261.21	2000	102.35	89.5	110.4	
55	Mn	89	He	2029.786	ppb	1.0	1022399.88	2000	101.49	89.5	110.4	
59	Co	89	He	1031.148	ppb	1.0	1891789.97	1000	103.11	89.5	110.4	
60	Ni	89	He	1065.442	ppb	0.8	525725.86	1000	106.54	89.5	110.4	
63	Cu	89	He	2010.382	ppb	0.9	2810243.39	2000	100.52	89.5	110.4	
66	Zn	89	He	2119.377	ppb	1.2	388403.80	2000	105.97	89.5	110.4	
75	As	89	He	1023.460	ppb	0.9	160815.39	1000	102.35	89.5	110.4	
78	Se	89	H2	985.488	ppb	2.6	84065.03	1000	98.55	89.5	110.4	
88	Sr	89	He	2024.792	ppb	1.2	1585507.68	2000	101.24	89.5	110.4	
95	Mo	89	He	1030.335	ppb	1.2	914436.32	1000	103.03	89.5	110.4	
107	Ag	89	He	111.347	ppb	1.0	335012.19	100	111.35	89.5	110.4	> +/- 10%
111	Cd	89	He	1053.604	ppb	0.7	409743.17	1000	105.36	89.5	110.4	
118	Sn	159	He	993.225	ppb	1.4	864151.32	1000	99.32	89.5	110.4	
121	Sb	159	No Gas	940.461	ppb	3.2	7052602.40	1000	94.05	89.5	110.4	
137	Ba	159	No Gas	1903.116	ppb	3.6	5589554.30	2000	95.16	89.5	110.4	
182	W	159	No Gas	985.033	ppb	3.7	5552667.00	1000	98.5	89.5	110.4	
205	Tl	209	No Gas	953.681	ppb	3.5	11874130.59	1000	95.37	89.5	110.4	
208	Pb	209	No Gas	1904.895	ppb	3.8	32865716.85	2000	95.24	89.5	110.4	
232	Th	209	No Gas	971.475	ppb	5.0	17071843.95	1000	97.15	89.5	110.4	
238	U	209	No Gas	949.333	ppb	4.9	15728351.13	1000	94.93	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1666961.62	1.9	1745272.14	95.51	29.5	120.4	
Sc	45	No Gas	3983874.70	2.3	3932582.94	101.3	29.5	120.4	
Ge	72	No Gas	901111.93	2.5	877152.82	102.73	29.5	120.4	
Tb	159	No Gas	9168004.65	2.5	8413567.03	108.97	29.5	120.4	
Bi	209	No Gas	4857328.88	3.1	4391152.66	110.62	29.5	120.4	
Sc	45	H2	459768.61	1.1	485269.91	94.74	29.5	120.4	
Ge	72	H2	173559.47	0.4	182501.5	95.1	29.5	120.4	
Y	89	H2	2999723.24	0.9	3060772.3	98.01	29.5	120.4	
Sc	45	He	89935.63	1.1	96164.21	93.52	29.5	120.4	
Ge	72	He	70161.30	1.4	74687.17	93.94	29.5	120.4	
Y	89	He	612097.27	0.7	649886.7	94.19	29.5	120.4	
Tb	159	He	3300353.77	1.2	3319571.76	99.42	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 12:55:34 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.296	ppb	8.5	387.80	100	
11	B	6	No Gas	10.971	ppb	6.1	9740.28	1000	
23	Na	45	He	203183.995	ppb	1.4	21690456.57	200000	>LDR
24	Mg	45	He	202679.720	ppb	1.5	12005431.63	200000	>LDR
27	Al	45	He	198117.998	ppb	1.4	4629002.50	200000	
28	Si	45	H2	9973.941	ppb	2.3	436064.60	10000	
39	K	45	He	198461.497	ppb	1.5	10957928.99	200000	
40	Ca	45	H2	203309.594	ppb	1.6	82759260.43	200000	>LDR
51	V	89	He	0.110	ppb	33.5	358.91	1000	
52	Cr	89	He	1.712	ppb	4.6	1894.46	2000	
55	Mn	89	He	7.954	ppb	3.1	4029.87	2000	
56	Fe	89	H2	99845.282	ppb	1.1	163148282.54	100000	
59	Co	89	He	0.730	ppb	8.7	1362.38	1000	
60	Ni	89	He	2.335	ppb	9.3	1404.57	1000	
63	Cu	89	He	1.356	ppb	2.5	2025.78	2000	
66	Zn	89	He	2.176	ppb	8.5	482.25	2000	
75	As	89	He	0.492	ppb	2.2	81.34	1000	
78	Se	89	H2	0.824	ppb	4.8	67.00	1000	
88	Sr	89	He	1.409	ppb	4.9	1110.09	2000	
95	Mo	89	He	2.147	ppb	6.4	1911.33	1000	
107	Ag	89	He	0.137	ppb	6.8	416.69	100	
111	Cd	89	He	0.224	ppb	14.1	87.41	1000	
118	Sn	159	He	1.469	ppb	5.9	1303.45	1000	
121	Sb	159	No Gas	0.975	ppb	20.7	6899.57	1000	
137	Ba	159	No Gas	1.934	ppb	12.2	5343.76	2000	
182	W	159	No Gas	2.413	ppb	5.1	12760.52	1000	
205	Tl	209	No Gas	0.772	ppb	24.0	8642.79	1000	
208	Pb	209	No Gas	1.728	ppb	21.0	26130.22	2000	
232	Th	209	No Gas	2.265	ppb	21.4	34698.65	1000	
238	U	209	No Gas	1.162	ppb	24.5	16727.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1480129.45	2.5	1745272.14	84.81	29.5	120.4	
Sc	45	No Gas	3684714.51	2.5	3932582.94	93.7	29.5	120.4	
Sc	45	H2	440311.05	1.3	485269.91	90.74	29.5	120.4	
Sc	45	He	91268.32	1.2	96164.21	94.91	29.5	120.4	
Ge	72	No Gas	809792.27	1.7	877152.82	92.32	29.5	120.4	
Ge	72	H2	159825.25	1.3	182501.5	87.57	29.5	120.4	
Ge	72	He	69001.08	1.6	74687.17	92.39	29.5	120.4	
Y	89	H2	2830899.58	1.1	3060772.3	92.49	29.5	120.4	
Y	89	He	612355.50	1.9	649886.7	94.22	29.5	120.4	
Tb	159	No Gas	8569069.87	2.5	8413567.03	101.85	29.5	120.4	
Tb	159	He	3238663.15	1.3	3319571.76	97.56	29.5	120.4	
Bi	209	No Gas	4195698.31	3.2	4391152.66	95.55	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 12:58:22 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.074	ppb	27.5	164.45	100	
11	B	6	No Gas	2.222	ppb	11.4	4036.25	1000	
23	Na	45	He	123.582	ppb	9.4	34576.64	200000	
24	Mg	45	He	12.372	ppb	52.1	1811.35	200000	
27	Al	45	He	19.758	ppb	39.8	514.47	200000	
28	Si	45	H2	1.709	ppb	138.9	644.07	10000	
39	K	45	He	34.541	ppb	19.6	14040.67	200000	
40	Ca	45	H2	43.736	ppb	14.3	20734.97	200000	
51	V	89	He	0.094	ppb	19.6	371.13	1000	
52	Cr	89	He	0.041	ppb	25.5	122.65	2000	
55	Mn	89	He	0.058	ppb	28.6	55.99	2000	
56	Fe	89	H2	33.663	ppb	10.3	62878.14	100000	
59	Co	89	He	0.058	ppb	46.4	140.01	1000	
60	Ni	89	He	0.082	ppb	130.1	316.68	1000	
63	Cu	89	He	0.200	ppb	27.4	441.13	2000	
66	Zn	89	He	0.027	ppb	135.7	95.56	2000	
75	As	89	He	0.073	ppb	75.9	16.67	1000	
78	Se	89	H2	0.159	ppb	10.1	14.67	1000	
88	Sr	89	He	0.032	ppb	57.9	33.33	2000	
95	Mo	89	He	0.451	ppb	7.8	435.58	1000	
107	Ag	89	He	0.012	ppb	25.8	42.22	100	
111	Cd	89	He	0.043	ppb	21.8	18.52	1000	
118	Sn	159	He	0.314	ppb	18.6	333.35	1000	
121	Sb	159	No Gas	0.046	ppb	12.5	380.42	1000	
137	Ba	159	No Gas	0.035	ppb	25.9	123.47	2000	
182	W	159	No Gas	0.262	ppb	11.0	1501.76	1000	
205	Tl	209	No Gas	0.040	ppb	23.3	820.95	1000	
208	Pb	209	No Gas	0.106	ppb	9.4	2055.72	2000	
232	Th	209	No Gas	0.037	ppb	10.4	770.88	1000	
238	U	209	No Gas	0.027	ppb	24.7	433.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1796789.10	4.7	1745272.14	102.95	29.5	120.4	
Sc	45	No Gas	4180457.50	5.6	3932582.94	106.3	29.5	120.4	
Sc	45	H2	490287.19	2.5	485269.91	101.03	29.5	120.4	
Sc	45	He	98500.24	0.6	96164.21	102.43	29.5	120.4	
Ge	72	No Gas	925783.88	4.9	877152.82	105.54	29.5	120.4	
Ge	72	H2	182443.39	2.5	182501.5	99.97	29.5	120.4	
Ge	72	He	76363.93	0.5	74687.17	102.25	29.5	120.4	
Y	89	H2	3104602.38	1.2	3060772.3	101.43	29.5	120.4	
Y	89	He	659245.35	0.5	649886.7	101.44	29.5	120.4	
Tb	159	No Gas	9139505.98	5.3	8413567.03	108.63	29.5	120.4	
Tb	159	He	3404353.80	0.4	3319571.76	102.55	29.5	120.4	
Bi	209	No Gas	4729313.31	4.7	4391152.66	107.7	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:00:58 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	33.4	125.56	100	
11	B	6	No Gas	1.371	ppb	13.6	3279.38	1000	
23	Na	45	He	62.206	ppb	74.8	27249.01	200000	
24	Mg	45	He	22.198	ppb	195.0	2429.34	200000	
27	Al	45	He	24.379	ppb	156.1	630.31	200000	
28	Si	45	H2	2.471	ppb	45.4	697.46	10000	
39	K	45	He	37.467	ppb	97.4	14075.53	200000	
40	Ca	45	H2	9.321	ppb	7.2	5236.73	200000	
51	V	89	He	0.191	ppb	65.3	458.91	1000	
52	Cr	89	He	0.132	ppb	152.8	225.97	2000	
55	Mn	89	He	0.132	ppb	115.5	95.32	2000	
56	Fe	89	H2	11.819	ppb	8.3	24254.71	100000	
59	Co	89	He	0.084	ppb	97.7	188.92	1000	
60	Ni	89	He	0.094	ppb	107.1	320.02	1000	
63	Cu	89	He	0.265	ppb	72.3	534.50	2000	
66	Zn	89	He	0.042	ppb	303.9	97.78	2000	
75	As	89	He	0.105	ppb	91.2	22.00	1000	
78	Se	89	H2	0.101	ppb	35.5	9.83	1000	
88	Sr	89	He	0.125	ppb	151.4	111.12	2000	
95	Mo	89	He	0.460	ppb	66.0	441.17	1000	
107	Ag	89	He	0.014	ppb	101.4	50.00	100	
111	Cd	89	He	0.078	ppb	119.2	32.96	1000	
118	Sn	159	He	0.244	ppb	39.2	267.80	1000	
121	Sb	159	No Gas	0.030	ppb	2.6	263.63	1000	
137	Ba	159	No Gas	0.036	ppb	46.8	126.81	2000	
182	W	159	No Gas	0.143	ppb	16.7	830.95	1000	
205	Tl	209	No Gas	0.014	ppb	17.6	503.91	1000	
208	Pb	209	No Gas	0.069	ppb	11.0	1421.62	2000	
232	Th	209	No Gas	0.025	ppb	25.8	563.98	1000	
238	U	209	No Gas	0.024	ppb	16.1	390.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1792511.00	0.9	1745272.14	102.71	29.5	120.4	
Sc	45	No Gas	4156969.58	0.3	3932582.94	105.71	29.5	120.4	
Sc	45	H2	501597.79	1.4	485269.91	103.36	29.5	120.4	
Sc	45	He	97439.87	1.3	96164.21	101.33	29.5	120.4	
Ge	72	No Gas	922365.75	1.0	877152.82	105.15	29.5	120.4	
Ge	72	H2	186253.24	1.6	182501.5	102.06	29.5	120.4	
Ge	72	He	75253.91	0.6	74687.17	100.76	29.5	120.4	
Y	89	H2	3175179.57	1.4	3060772.3	103.74	29.5	120.4	
Y	89	He	654243.47	0.6	649886.7	100.67	29.5	120.4	
Tb	159	No Gas	9020592.92	0.5	8413567.03	107.21	29.5	120.4	
Tb	159	He	3374400.78	1.2	3319571.76	101.65	29.5	120.4	
Bi	209	No Gas	4692971.35	1.1	4391152.66	106.87	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:03:41 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.958	ppb	7.0	31918.19	25	95.83	89.8	110.2	
11	B	6	No Gas	24.583	ppb	7.2	23025.66	25	98.33	89.8	110.2	
23	Na	45	He	4985.444	ppb	1.2	574599.70	5000	99.71	89.8	110.2	
24	Mg	45	He	4839.396	ppb	1.2	300105.67	5000	96.79	89.8	110.2	
27	Al	45	He	480.698	ppb	0.7	11737.42	500	96.14	89.8	110.2	
28	Si	45	H2	474.707	ppb	3.2	22757.05	500	94.94	89.8	110.2	
39	K	45	He	4815.584	ppb	0.7	288779.13	5000	96.31	89.8	110.2	
40	Ca	45	H2	4838.414	ppb	1.9	2111541.93	5000	96.77	89.8	110.2	
51	V	89	He	24.489	ppb	0.8	22565.40	25	97.96	89.8	110.2	
52	Cr	89	He	24.791	ppb	0.8	27628.57	25	99.16	89.8	110.2	
55	Mn	89	He	24.920	ppb	1.3	13123.05	25	99.68	89.8	110.2	
56	Fe	89	H2	4873.090	ppb	1.7	8485715.31	5000	97.46	89.8	110.2	
59	Co	89	He	24.788	ppb	0.5	47483.12	25	99.15	89.8	110.2	
60	Ni	89	He	24.841	ppb	2.4	13048.73	25	99.36	89.8	110.2	
63	Cu	89	He	25.008	ppb	0.6	36615.38	25	100.03	89.8	110.2	
66	Zn	89	He	25.071	ppb	0.7	4881.02	25	100.28	89.8	110.2	
75	As	89	He	24.446	ppb	1.9	4012.36	25	97.78	89.8	110.2	
78	Se	89	H2	24.349	ppb	3.3	2089.06	25	97.4	89.8	110.2	
88	Sr	89	He	24.389	ppb	1.2	19937.37	25	97.56	89.8	110.2	
95	Mo	89	He	24.519	ppb	1.2	22713.95	25	98.08	89.8	110.2	
107	Ag	89	He	24.842	ppb	0.6	78000.66	25	99.37	89.8	110.2	
111	Cd	89	He	24.429	ppb	1.3	9915.19	25	97.72	89.8	110.2	
118	Sn	159	He	24.110	ppb	1.9	21567.86	25	96.44	89.8	110.2	
121	Sb	159	No Gas	24.135	ppb	5.3	174688.49	25	96.54	89.8	110.2	
137	Ba	159	No Gas	24.455	ppb	4.4	69347.25	25	97.82	89.8	110.2	
182	W	159	No Gas	23.830	ppb	6.0	129653.52	25	95.32	89.8	110.2	
205	Tl	209	No Gas	24.240	ppb	5.9	288339.01	25	96.96	89.8	110.2	
208	Pb	209	No Gas	24.525	ppb	5.6	404092.70	25	98.1	89.8	110.2	
232	Th	209	No Gas	24.349	ppb	5.8	408574.07	25	97.4	89.8	110.2	
238	U	209	No Gas	24.154	ppb	5.5	382022.02	25	96.62	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1733182.17	3.6	1745272.14	99.31	29.5	120.4	
Sc	45	No Gas	4000011.75	2.9	3932582.94	101.71	29.5	120.4	
Sc	45	H2	471889.45	0.7	485269.91	97.24	29.5	120.4	
Sc	45	He	95248.07	1.3	96164.21	99.05	29.5	120.4	
Ge	72	No Gas	890072.65	2.7	877152.82	101.47	29.5	120.4	
Ge	72	H2	175005.48	1.1	182501.5	95.89	29.5	120.4	
Ge	72	He	73762.70	0.3	74687.17	98.76	29.5	120.4	
Y	89	H2	3016251.72	0.9	3060772.3	98.55	29.5	120.4	
Y	89	He	638741.90	0.6	649886.7	98.29	29.5	120.4	
Tb	159	No Gas	8850879.66	2.8	8413567.03	105.2	29.5	120.4	
Tb	159	He	3385642.24	1.1	3319571.76	101.99	29.5	120.4	
Bi	209	No Gas	4637471.47	3.0	4391152.66	105.61	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:06:20 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.076	ppb	24.7	161.12	0.2	
11	B	6	No Gas	0.932	ppb	1.9	2810.37	4	
23	Na	45	He	-12.824	ppb	N/A	18559.47	200	
24	Mg	45	He	-1.935	ppb	N/A	882.32	20	
27	Al	45	He	1.561	ppb	59.7	55.56	20	
28	Si	45	H2	0.628	ppb	196.8	580.66	100	
39	K	45	He	9.744	ppb	89.6	12349.81	200	
40	Ca	45	H2	3.175	ppb	10.9	2284.71	20	
51	V	89	He	0.076	ppb	32.0	348.90	1	
52	Cr	89	He	0.006	ppb	170.3	81.32	1	
55	Mn	89	He	0.029	ppb	53.6	39.32	0.4	
56	Fe	89	H2	7.659	ppb	4.5	16033.72	20	
59	Co	89	He	0.034	ppb	32.3	91.12	0.2	
60	Ni	89	He	0.005	ppb	1675.5	271.13	0.4	
63	Cu	89	He	0.107	ppb	12.5	295.57	0.6	
66	Zn	89	He	-0.154	ppb	N/A	58.89	2	
75	As	89	He	0.024	ppb	112.1	8.33	1	
78	Se	89	H2	0.094	ppb	18.5	8.83	1	
88	Sr	89	He	0.004	ppb	263.8	10.00	1	
95	Mo	89	He	0.155	ppb	6.4	150.01	1	
107	Ag	89	He	0.011	ppb	27.5	38.89	0.2	
111	Cd	89	He	0.011	ppb	87.7	4.81	0.2	
118	Sn	159	He	0.085	ppb	29.8	125.56	1	
121	Sb	159	No Gas	0.037	ppb	36.7	313.69	0.2	
137	Ba	159	No Gas	0.030	ppb	38.0	106.79	0.4	
182	W	159	No Gas	0.122	ppb	23.5	704.14	1	
205	Tl	209	No Gas	0.021	ppb	27.0	587.34	0.2	
208	Pb	209	No Gas	0.040	ppb	11.5	941.07	0.2	
232	Th	209	No Gas	0.061	ppb	11.4	1174.72	1	
238	U	209	No Gas	0.024	ppb	28.5	393.78	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1743477.79	4.1	1745272.14	99.9	29.5	120.4	
Sc	45	No Gas	4086374.54	5.6	3932582.94	103.91	29.5	120.4	
Sc	45	H2	480364.99	1.0	485269.91	98.99	29.5	120.4	
Sc	45	He	96829.50	1.1	96164.21	100.69	29.5	120.4	
Ge	72	No Gas	909015.97	5.0	877152.82	103.63	29.5	120.4	
Ge	72	H2	180569.74	1.0	182501.5	98.94	29.5	120.4	
Ge	72	He	75225.50	0.8	74687.17	100.72	29.5	120.4	
Y	89	H2	3062778.11	0.3	3060772.3	100.07	29.5	120.4	
Y	89	He	649111.13	0.4	649886.7	99.88	29.5	120.4	
Tb	159	No Gas	8974590.28	5.5	8413567.03	106.67	29.5	120.4	
Tb	159	He	3361298.21	0.7	3319571.76	101.26	29.5	120.4	
Bi	209	No Gas	4669337.56	5.8	4391152.66	106.34	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCS TEST
File Name	019LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:09:00 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	206.159	ppb	7.2	62898.36	50	82.46	79.5	120.4	6020□ DoD
B	11	6	No Gas	2243.947	ppb	6.4	442348.85	500	89.76	79.5	120.4	6020□ DoD
Na	23	45	He	39700.586	ppb	1.3	858640.75	7500	105.87	79.5	120.4	6020□ DoD
Mg	24	45	He	25973.875	ppb	1.8	306075.39	5000	103.9	79.5	120.4	6020□ DoD
Al	27	45	He	9426.802	ppb	1.3	43703.19	2000	94.27	79.5	120.4	6020□ DoD
Si	28	45	H2	5868.592	ppb	26.4	45894.68	1000	117.37	0	200	6020□ DoD
K	39	45	He	50984.950	ppb	1.6	568791.41	10000	101.97	79.5	120.4	6020□ DoD
Ca	40	45	H2	15324.407	ppb	26.3	1106673.17	2500	122.6	79.5	120.4	6020□ DoD
V	51	89	He	2568.539	ppb	1.3	445705.31	500	102.74	79.5	120.4	6020□ DoD
Cr	52	89	He	1047.511	ppb	1.6	221883.19	200	104.75	79.5	120.4	6020□ DoD
Mn	55	89	He	2574.089	ppb	1.7	257793.27	500	102.96	79.5	120.4	6020□ DoD
Fe	56	89	H2	6123.277	ppb	25.9	1780277.34	1000	122.47	79.5	120.4	6020□ DoD
Co	59	89	He	2579.481	ppb	1.3	940936.41	500	103.18	79.5	120.4	6020□ DoD
Ni	60	89	He	2631.445	ppb	1.9	258269.95	500	105.26	79.5	120.4	6020□ DoD
Cu	63	89	He	1288.605	ppb	1.5	358240.68	250	103.09	79.5	120.4	6020□ DoD
Zn	66	89	He	2550.349	ppb	2.0	92985.04	500	102.01	79.5	120.4	6020□ DoD
As	75	89	He	512.721	ppb	2.3	16019.95	100	102.54	79.5	120.4	6020□ DoD
Se	78	89	H2	597.367	ppb	25.9	8548.07	100	119.47	79.5	120.4	6020□ DoD
Sr	88	89	He	2533.276	ppb	1.8	394398.23	500	101.33	79.5	120.4	6020□ DoD
Mo	95	89	He	533.433	ppb	0.9	94137.09	100	106.69	79.5	120.4	6020□ DoD
Ag	107	89	He	264.722	ppb	1.6	158354.11	50	105.89	79.5	120.4	6020□ DoD
Cd	111	89	He	1292.602	ppb	1.3	99944.86	250	103.41	79.5	120.4	6020□ DoD
Sn	118	159	He	2447.642	ppb	1.9	426675.12	500	97.91	79.5	120.4	6020□ DoD
Sb	121	159	No Gas	463.582	ppb	6.7	711711.67	100	92.72	79.5	120.4	6020□ DoD
Ba	137	159	No Gas	9115.986	ppb	7.5	5480326.33	2000	91.16	79.5	120.4	6020□ DoD
W	182	159	No Gas	478.890	ppb	7.8	552559.99	100	95.78	79.5	120.4	6020□ DoD
Tl	205	209	No Gas	465.048	ppb	8.4	1148449.55	100	93.01	79.5	120.4	6020□ DoD
[Pb]	206	209	No Gas	482.644	ppb	7.8	414359.51	100	96.53	79.5	120.4	6020□ DoD
[Pb]	207	209	No Gas	480.633	ppb	8.6	361817.77	100	96.13	79.5	120.4	6020□ DoD
Pb	208	209	No Gas	484.618	ppb	8.0	1658537.10	100	96.92	79.5	120.4	6020□ DoD
Th	232	209	No Gas	480.443	ppb	9.1	1674334.90	100	96.09	79.5	120.4	6020□ DoD
U	238	209	No Gas	476.420	ppb	9.0	1565280.34	100	95.28	79.5	120.4	6020□ DoD

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1986519.78	3.7	1745272.14	113.82	29.5	120.4	
Sc	45	No Gas	4102921.84	4.3	3932582.94	104.33	29.5	120.4	
Sc	45	H2	404170.04	19.6	485269.91	83.29	29.5	120.4	
Sc	45	He	90524.70	1.5	96164.21	94.14	29.5	120.4	
Ge	72	No Gas	958434.98	2.9	877152.82	109.27	29.5	120.4	
Ge	72	H2	150341.21	18.3	182501.5	82.38	29.5	120.4	
Ge	72	He	70190.01	1.3	74687.17	93.98	29.5	120.4	
Y	89	H2	2602537.18	19.4	3060772.3	85.03	29.5	120.4	
Y	89	He	608546.56	1.5	649886.7	93.64	29.5	120.4	
Tb	159	No Gas	9394894.79	3.8	8413567.03	111.66	29.5	120.4	
Tb	159	He	3306415.75	1.7	3319571.76	99.6	29.5	120.4	
Bi	209	No Gas	4825438.55	4.8	4391152.66	109.89	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG06IMS1
File Name	020_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:11:38 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.642	ppb	32.3	224.45	0.5	PB 6020 Fails DoD
B	11	6	No Gas	32.918	ppb	6.5	7459.93	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	-26.509	ppb	N/A	18529.22	500	
Mg	24	45	He	13.757	ppb	60.5	1124.57	50	
Al	27	45	He	29.260	ppb	6.4	154.45	50	
Si	28	45	H2	6.521	ppb	170.7	587.34	250	
K	39	45	He	100.871	ppb	53.8	12373.15	500	
Ca	40	45	H2	70.916	ppb	3.6	6883.04	50	PB 6020 Fails DoD
V	51	89	He	3.838	ppb	8.7	958.96	2.5	PB 6020 Fails DoD
Cr	52	89	He	1.078	ppb	9.4	308.62	2.5	
Mn	55	89	He	6.338	ppb	12.9	680.56	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Fe	56	89	H2	48.549	ppb	4.7	19141.05	50	
Co	59	89	He	0.701	ppb	20.2	288.91	0.5	PB 6020 Fails DoD
Ni	60	89	He	1.253	ppb	11.9	387.80	1	PB 6020 Fails DoD
Cu	63	89	He	2.724	ppb	10.6	916.73	1.5	PB 6020 Fails DoD
Zn	66	89	He	7.670	ppb	8.2	375.58	5	PB 6020 Fails DoD
As	75	89	He	0.468	ppb	14.9	19.33	2.5	
Se	78	89	H2	0.729	ppb	19.1	13.00	2.5	
Sr	88	89	He	0.608	ppb	16.1	104.45	2.5	
Mo	95	89	He	0.828	ppb	5.4	155.56	2.5	
Ag	107	89	He	0.121	ppb	46.3	77.78	0.5	
Cd	111	89	He	0.306	ppb	7.8	24.81	0.5	
Sn	118	159	He	40.983	ppb	4.8	7297.80	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.373	ppb	22.1	610.70	0.5	
Ba	137	159	No Gas	3.570	ppb	13.0	2155.91	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
W	182	159	No Gas	0.878	ppb	11.5	1041.21	2.5	
Tl	205	209	No Gas	0.289	ppb	25.4	1067.92	0.5	
Pb	208	209	No Gas	0.477	ppb	6.6	1925.55	0.5	
Th	232	209	No Gas	1.123	ppb	18.3	4108.65	2.5	
U	238	209	No Gas	0.271	ppb	12.5	901.06	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1691832.76	2.8	1745272.14	96.94	29.5	120.4	
Sc	45	No Gas	4015676.03	3.8	3932582.94	102.11	29.5	120.4	
Sc	45	H2	461025.20	1.1	485269.91	95	29.5	120.4	
Sc	45	He	92447.16	0.9	96164.21	96.13	29.5	120.4	
Ge	72	No Gas	914008.67	3.6	877152.82	104.2	29.5	120.4	
Ge	72	H2	171957.56	1.3	182501.5	94.22	29.5	120.4	
Ge	72	He	71937.63	0.7	74687.17	96.32	29.5	120.4	
Y	89	H2	2983187.35	1.5	3060772.3	97.47	29.5	120.4	
Y	89	He	629925.60	1.0	649886.7	96.93	29.5	120.4	
Tb	159	No Gas	9291890.56	3.9	8413567.03	110.44	29.5	120.4	
Tb	159	He	3354263.29	0.7	3319571.76	101.05	29.5	120.4	
Bi	209	No Gas	4848709.74	4.0	4391152.66	110.42	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG07IMS1
File Name	021_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:14:18 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.341	ppb	7.2	145.56	0.5	
B	11	6	No Gas	16.085	ppb	4.0	4591.99	10	PB 6020 Fails DoD
Na	23	45	He	-38.405	ppb	N/A	18459.27	500	
Mg	24	45	He	20.512	ppb	21.4	1217.92	50	
Al	27	45	He	23.334	ppb	25.7	127.78	50	
Si	28	45	H2	2.810	ppb	195.4	553.97	250	
K	39	45	He	78.519	ppb	38.8	12249.78	500	
Ca	40	45	H2	69.772	ppb	2.8	6787.44	50	PB 6020 Fails DoD
V	51	89	He	3.894	ppb	6.6	977.85	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.921	ppb	14.4	276.62	2.5	
Mn	55	89	He	1.962	ppb	15.3	228.63	1	PB 6020 Fails DoD
Fe	56	89	H2	42.079	ppb	2.2	16949.13	50	
Co	59	89	He	0.503	ppb	16.7	215.58	0.5	PB 6020 Fails DoD
Ni	60	89	He	1.066	ppb	14.0	372.24	1	PB 6020 Fails DoD
Cu	63	89	He	2.232	ppb	1.9	782.27	1.5	PB 6020 Fails DoD
Zn	66	89	He	8.114	ppb	13.3	395.57	5	PB 6020 Fails DoD
As	75	89	He	0.329	ppb	32.5	15.00	2.5	
Se	78	89	H2	0.461	ppb	12.3	8.50	2.5	
Sr	88	89	He	0.425	ppb	8.4	75.56	2.5	
Mo	95	89	He	0.591	ppb	14.3	113.34	2.5	
Ag	107	89	He	0.069	ppb	46.3	46.67	0.5	
Cd	111	89	He	0.151	ppb	10.1	12.59	0.5	
Sn	118	159	He	40.142	ppb	2.7	7198.86	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.146	ppb	38.7	256.95	0.5	
Ba	137	159	No Gas	1.271	ppb	17.7	760.88	1	PB 6020 Fails DoD
W	182	159	No Gas	0.392	ppb	8.8	473.87	2.5	
Tl	205	209	No Gas	0.039	ppb	102.7	433.83	0.5	
Pb	208	209	No Gas	0.703	ppb	7.6	2639.72	0.5	PB 6020 Fails DoD
Th	232	209	No Gas	0.284	ppb	17.9	1117.97	2.5	
U	238	209	No Gas	0.099	ppb	24.2	320.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1675062.33	1.8	1745272.14	95.98	29.5	120.4	
Sc	45	No Gas	3981752.06	1.4	3932582.94	101.25	29.5	120.4	
Sc	45	H2	461116.58	1.0	485269.91	95.02	29.5	120.4	
Sc	45	He	93397.88	1.1	96164.21	97.12	29.5	120.4	
Ge	72	No Gas	904981.47	1.6	877152.82	103.17	29.5	120.4	
Ge	72	H2	171070.11	1.1	182501.5	93.74	29.5	120.4	
Ge	72	He	72822.65	1.4	74687.17	97.5	29.5	120.4	
Y	89	H2	2987978.99	0.8	3060772.3	97.62	29.5	120.4	
Y	89	He	635412.23	1.0	649886.7	97.77	29.5	120.4	
Tb	159	No Gas	9071888.82	1.3	8413567.03	107.82	29.5	120.4	
Tb	159	He	3377901.82	1.1	3319571.76	101.76	29.5	120.4	
Bi	209	No Gas	4729574.98	1.6	4391152.66	107.71	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNF29IMW1
File Name	022_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:16:53 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.182	ppb	34.0	106.67	0.5	
B	11	6	No Gas	9.162	ppb	8.2	3515.00	10	
Na	23	45	He	-141.353	ppb	N/A	16497.83	500	
Mg	24	45	He	4.938	ppb	82.6	1046.78	50	
Al	27	45	He	16.037	ppb	12.9	94.45	50	
Si	28	45	H2	10.140	ppb	71.5	627.38	250	
K	39	45	He	11.148	ppb	239.1	11692.88	500	
Ca	40	45	H2	30.589	ppb	4.8	3480.56	50	
V	51	89	He	3.436	ppb	3.1	902.29	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.422	ppb	18.8	167.97	2.5	
Mn	55	89	He	0.749	ppb	22.3	102.65	1	
Fe	56	89	H2	26.786	ppb	5.2	11764.65	50	
Co	59	89	He	0.111	ppb	40.1	66.67	0.5	
Ni	60	89	He	0.082	ppb	307.8	273.35	1	
Cu	63	89	He	1.217	ppb	20.1	492.25	1.5	
Zn	66	89	He	2.609	ppb	27.7	187.79	5	
As	75	89	He	0.336	ppb	12.4	15.33	2.5	
Se	78	89	H2	0.185	ppb	32.7	3.83	2.5	
Sr	88	89	He	0.048	ppb	108.2	14.44	2.5	
Mo	95	89	He	0.329	ppb	21.0	65.56	2.5	
Ag	107	89	He	0.039	ppb	16.1	27.78	0.5	
Cd	111	89	He	0.037	ppb	75.9	3.33	0.5	
Sn	118	159	He	0.690	ppb	10.6	174.45	2.5	
Sb	121	159	No Gas	0.055	ppb	12.4	123.47	0.5	
Ba	137	159	No Gas	0.501	ppb	16.3	317.03	1	
W	182	159	No Gas	0.206	ppb	7.6	270.30	2.5	
Tl	205	209	No Gas	-0.038	ppb	N/A	246.95	0.5	
Pb	208	209	No Gas	0.104	ppb	4.9	627.38	0.5	
Th	232	209	No Gas	0.110	ppb	13.1	523.93	2.5	
U	238	209	No Gas	0.005	ppb	34.2	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1708482.03	1.1	1745272.14	97.89	29.5	120.4	
Sc	45	No Gas	4070035.88	0.9	3932582.94	103.5	29.5	120.4	
Sc	45	H2	465619.07	0.9	485269.91	95.95	29.5	120.4	
Sc	45	He	95029.46	0.5	96164.21	98.82	29.5	120.4	
Ge	72	No Gas	919791.46	0.9	877152.82	104.86	29.5	120.4	
Ge	72	H2	171632.81	0.8	182501.5	94.04	29.5	120.4	
Ge	72	He	73569.34	1.0	74687.17	98.5	29.5	120.4	
Y	89	H2	3011073.31	0.9	3060772.3	98.38	29.5	120.4	
Y	89	He	640576.23	1.2	649886.7	98.57	29.5	120.4	
Tb	159	No Gas	9201887.36	1.1	8413567.03	109.37	29.5	120.4	
Tb	159	He	3391252.42	0.5	3319571.76	102.16	29.5	120.4	
Bi	209	No Gas	4770240.70	0.8	4391152.66	108.63	29.5	120.4	

Sample Report

Sample Name SN5124-002

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:19:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.179	ppb	26.5	102.23	100	
11	B	6	No Gas	113.791	ppb	6.2	20352.65	1000	
23	Na	45	He	217172.686	ppb	1.4	4555072.57	200000	
24	Mg	45	He	16279.918	ppb	1.6	189777.62	200000	
27	Al	45	He	15.765	ppb	43.1	87.78	200000	
28	Si	45	H2	5817.892	ppb	0.3	52113.05	10000	
39	K	45	He	1567.877	ppb	4.0	27811.23	200000	
40	Ca	45	H2	50932.051	ppb	1.3	4210577.02	200000	
51	V	89	He	1.125	ppb	18.1	455.58	1000	
52	Cr	89	He	0.417	ppb	6.0	157.97	2000	
55	Mn	89	He	448.001	ppb	1.6	44823.20	2000	
56	Fe	89	H2	163.563	ppb	3.2	57300.32	100000	
59	Co	89	He	1.486	ppb	6.0	564.50	1000	
60	Ni	89	He	3.994	ppb	11.7	642.26	1000	
63	Cu	89	He	1.395	ppb	8.9	515.59	2000	
66	Zn	89	He	3.146	ppb	17.0	197.79	2000	
75	As	89	He	0.502	ppb	32.5	19.67	1000	
78	Se	89	H2	0.222	ppb	25.6	4.33	1000	
88	Sr	89	He	341.929	ppb	2.6	53162.51	2000	
95	Mo	89	He	0.361	ppb	20.8	67.78	1000	
107	Ag	89	He	0.041	ppb	7.5	27.78	100	
111	Cd	89	He	0.148	ppb	68.0	11.85	1000	
118	Sn	159	He	0.727	ppb	10.8	176.67	1000	
121	Sb	159	No Gas	0.065	ppb	57.4	136.82	1000	
137	Ba	159	No Gas	15.882	ppb	10.5	9307.06	2000	
182	W	159	No Gas	0.172	ppb	18.1	230.26	1000	
205	Tl	209	No Gas	-0.073	ppb	N/A	160.18	1000	
208	Pb	209	No Gas	0.092	ppb	28.5	580.65	2000	
232	Th	209	No Gas	0.085	ppb	23.1	433.83	1000	
238	U	209	No Gas	0.035	ppb	16.5	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1642841.06	3.1	1745272.14	94.13	29.5	120.4	
Sc	45	No Gas	3983231.74	3.3	3932582.94	101.29	29.5	120.4	
Sc	45	H2	447071.74	1.5	485269.91	92.13	29.5	120.4	
Sc	45	He	89377.79	1.1	96164.21	92.94	29.5	120.4	
Ge	72	No Gas	906332.21	3.2	877152.82	103.33	29.5	120.4	
Ge	72	H2	166918.46	1.3	182501.5	91.46	29.5	120.4	
Ge	72	He	69919.63	0.3	74687.17	93.62	29.5	120.4	
Y	89	H2	2909984.07	2.1	3060772.3	95.07	29.5	120.4	
Y	89	He	607669.32	1.1	649886.7	93.5	29.5	120.4	
Tb	159	No Gas	9137568.13	2.9	8413567.03	108.61	29.5	120.4	
Tb	159	He	3307289.32	1.1	3319571.76	99.63	29.5	120.4	
Bi	209	No Gas	4701220.80	3.2	4391152.66	107.06	29.5	120.4	

Sample Report

Sample Name SN5124-002L

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:22:13 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.696	ppb	24.5	93.34	100	
11	B	6	No Gas	140.151	ppb	6.2	6536.14	1000	
23	Na	45	He	220385.399	ppb	2.2	960358.24	200000	
24	Mg	45	He	16892.618	ppb	2.0	41021.59	200000	
27	Al	45	He	35.211	ppb	65.6	48.89	200000	
28	Si	45	H2	5793.626	ppb	3.0	11140.09	10000	
39	K	45	He	1727.456	ppb	7.7	14936.08	200000	
40	Ca	45	H2	50106.900	ppb	2.7	856323.54	200000	
51	V	89	He	3.472	ppb	48.3	391.13	1000	
52	Cr	89	He	0.557	ppb	68.6	95.98	2000	
55	Mn	89	He	450.012	ppb	1.9	9263.37	2000	
56	Fe	89	H2	212.211	ppb	4.0	17039.39	100000	
59	Co	89	He	1.654	ppb	42.3	146.68	1000	
60	Ni	89	He	0.932	ppb	154.8	276.68	1000	
63	Cu	89	He	2.315	ppb	38.5	264.46	2000	
66	Zn	89	He	0.622	ppb	443.2	90.00	2000	
75	As	89	He	1.063	ppb	50.9	11.00	1000	
78	Se	89	H2	0.399	ppb	66.5	2.00	1000	
88	Sr	89	He	344.516	ppb	3.9	11001.44	2000	
95	Mo	89	He	0.926	ppb	7.3	37.78	1000	
107	Ag	89	He	0.129	ppb	63.0	18.89	100	
111	Cd	89	He	0.234	ppb	45.1	4.07	1000	
118	Sn	159	He	1.400	ppb	40.5	98.90	1000	
121	Sb	159	No Gas	0.179	ppb	40.4	93.44	1000	
137	Ba	159	No Gas	15.810	ppb	8.2	1875.57	2000	
182	W	159	No Gas	0.610	ppb	24.9	173.53	1000	
205	Tl	209	No Gas	-0.334	ppb	N/A	180.20	1000	
208	Pb	209	No Gas	0.268	ppb	29.6	460.52	2000	
232	Th	209	No Gas	0.016	ppb	305.2	156.84	1000	
238	U	209	No Gas	0.077	ppb	74.8	50.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1667322.18	2.9	1745272.14	95.53	29.5	120.4	
Sc	45	No Gas	3996394.25	3.5	3932582.94	101.62	29.5	120.4	
Sc	45	H2	461782.27	2.1	485269.91	95.16	29.5	120.4	
Sc	45	He	91399.25	1.4	96164.21	95.04	29.5	120.4	
Ge	72	No Gas	909642.53	2.7	877152.82	103.7	29.5	120.4	
Ge	72	H2	173822.52	2.7	182501.5	95.24	29.5	120.4	
Ge	72	He	71964.87	1.3	74687.17	96.36	29.5	120.4	
Y	89	H2	2983382.99	2.0	3060772.3	97.47	29.5	120.4	
Y	89	He	623875.96	1.4	649886.7	96	29.5	120.4	
Tb	159	No Gas	9161213.34	3.4	8413567.03	108.89	29.5	120.4	
Tb	159	He	3321116.96	1.4	3319571.76	100.05	29.5	120.4	
Bi	209	No Gas	4807841.22	3.3	4391152.66	109.49	29.5	120.4	

Sample Report

Sample Name SN5124-002A

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:24:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.353	ppb	3.2	2621.44	100	
11	B	6	No Gas	322.312	ppb	4.2	53237.63	1000	
23	Na	45	He	232675.874	ppb	2.7	4781265.89	200000	
24	Mg	45	He	17843.086	ppb	3.0	203738.84	200000	
27	Al	45	He	988.274	ppb	4.0	4446.40	200000	
28	Si	45	H2	10783.050	ppb	1.6	94859.06	10000	
39	K	45	He	11925.012	ppb	3.1	136891.90	200000	
40	Ca	45	H2	52749.533	ppb	1.6	4303150.25	200000	
51	V	89	He	55.107	ppb	3.4	9507.94	1000	
52	Cr	89	He	55.682	ppb	3.3	11486.59	2000	
55	Mn	89	He	479.632	ppb	3.0	46539.18	2000	
56	Fe	89	H2	1215.293	ppb	1.7	404624.57	100000	
59	Co	89	He	12.863	ppb	9.3	4563.34	1000	
60	Ni	89	He	27.763	ppb	4.5	2880.41	1000	
63	Cu	89	He	33.879	ppb	3.4	9243.37	2000	
66	Zn	89	He	115.660	ppb	4.6	4160.77	2000	
75	As	89	He	53.942	ppb	4.9	1635.61	1000	
78	Se	89	H2	49.779	ppb	3.2	812.49	1000	
88	Sr	89	He	406.680	ppb	3.7	61319.57	2000	
95	Mo	89	He	55.144	ppb	1.9	9429.12	1000	
107	Ag	89	He	11.012	ppb	4.1	6381.73	100	
111	Cd	89	He	11.335	ppb	5.4	848.93	1000	
118	Sn	159	He	52.607	ppb	1.9	8962.19	1000	
121	Sb	159	No Gas	10.636	ppb	4.4	15646.50	1000	
137	Ba	159	No Gas	36.859	ppb	5.8	21203.74	2000	
182	W	159	No Gas	51.812	ppb	6.1	57183.25	1000	
205	Tl	209	No Gas	10.557	ppb	4.5	25487.19	1000	
208	Pb	209	No Gas	10.804	ppb	4.8	35943.43	2000	
232	Th	209	No Gas	10.791	ppb	4.1	36443.74	1000	
238	U	209	No Gas	10.855	ppb	4.6	34425.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1612958.73	1.7	1745272.14	92.42	29.5	120.4	
Sc	45	No Gas	3850324.98	1.8	3932582.94	97.91	29.5	120.4	
Sc	45	H2	441110.51	1.0	485269.91	90.9	29.5	120.4	
Sc	45	He	87603.84	1.5	96164.21	91.1	29.5	120.4	
Ge	72	No Gas	876946.46	0.9	877152.82	99.98	29.5	120.4	
Ge	72	H2	165120.40	1.4	182501.5	90.48	29.5	120.4	
Ge	72	He	68448.63	1.7	74687.17	91.65	29.5	120.4	
Y	89	H2	2867720.93	0.9	3060772.3	93.69	29.5	120.4	
Y	89	He	589449.32	1.5	649886.7	90.7	29.5	120.4	
Tb	159	No Gas	8969267.78	1.5	8413567.03	106.6	29.5	120.4	
Tb	159	He	3214172.56	1.6	3319571.76	96.82	29.5	120.4	
Bi	209	No Gas	4646835.47	1.7	4391152.66	105.82	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	026_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:27:28 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.122	ppb	30.5	87.78	0.5	
B	11	6	No Gas	11.502	ppb	8.2	3766.18	10	PB 6020 Fails DoD
Na	23	45	He	-38.125	ppb	N/A	17597.12	500	
Mg	24	45	He	15.686	ppb	48.5	1104.57	50	
Al	27	45	He	5.153	ppb	35.5	38.89	50	
Si	28	45	H2	28.679	ppb	26.2	764.20	250	
K	39	45	He	25.118	ppb	131.7	11099.35	500	
Ca	40	45	H2	48.657	ppb	26.8	4832.23	50	
V	51	89	He	4.009	ppb	9.3	947.85	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.399	ppb	12.8	153.31	2.5	
Mn	55	89	He	0.474	ppb	18.1	69.32	1	
Fe	56	89	H2	17.757	ppb	12.2	8208.21	50	
Co	59	89	He	0.110	ppb	68.1	62.23	0.5	
Ni	60	89	He	-0.213	ppb	N/A	228.90	1	
Cu	63	89	He	0.891	ppb	4.7	373.35	1.5	
Zn	66	89	He	16.114	ppb	8.4	664.48	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.333	ppb	4.6	14.33	2.5	
Se	78	89	H2	0.248	ppb	20.8	4.67	2.5	
Sr	88	89	He	0.076	ppb	121.3	17.78	2.5	
Mo	95	89	He	0.332	ppb	15.7	62.23	2.5	
Ag	107	89	He	0.045	ppb	56.1	30.00	0.5	
Cd	111	89	He	0.029	ppb	74.9	2.59	0.5	
Sn	118	159	He	1.168	ppb	25.7	250.01	2.5	
Sb	121	159	No Gas	0.034	ppb	36.0	90.10	0.5	
Ba	137	159	No Gas	0.161	ppb	34.4	116.80	1	
W	182	159	No Gas	0.253	ppb	16.5	320.37	2.5	
Tl	205	209	No Gas	-0.043	ppb	N/A	236.94	0.5	
Pb	208	209	No Gas	0.046	ppb	34.5	433.82	0.5	
Th	232	209	No Gas	0.137	ppb	32.5	620.72	2.5	
U	238	209	No Gas	0.026	ppb	51.0	83.43	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1646120.11	2.1	1745272.14	94.32	29.5	120.4	
Sc	45	No Gas	3889530.62	2.9	3932582.94	98.91	29.5	120.4	
Sc	45	H2	445891.98	2.1	485269.91	91.89	29.5	120.4	
Sc	45	He	89016.75	1.3	96164.21	92.57	29.5	120.4	
Ge	72	No Gas	884580.93	2.2	877152.82	100.85	29.5	120.4	
Ge	72	H2	163698.70	1.5	182501.5	89.7	29.5	120.4	
Ge	72	He	69070.81	1.4	74687.17	92.48	29.5	120.4	
Y	89	H2	2868374.05	1.6	3060772.3	93.71	29.5	120.4	
Y	89	He	603305.86	1.3	649886.7	92.83	29.5	120.4	
Tb	159	No Gas	9133509.51	2.5	8413567.03	108.56	29.5	120.4	
Tb	159	He	3266262.07	1.0	3319571.76	98.39	29.5	120.4	
Bi	209	No Gas	4803676.48	2.2	4391152.66	109.39	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	027LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:30:11 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.537	ppb	5.7	13500.03	50	20.61	79.5	120.4	
B	11	6	No Gas	540.946	ppb	5.8	92719.16	500	21.64	79.5	120.4	
Na	23	45	He	8026.958	ppb	0.3	188747.52	7500	21.41	79.5	120.4	
Mg	24	45	He	5563.835	ppb	1.0	66381.04	5000	22.26	79.5	120.4	
Al	27	45	He	2009.687	ppb	1.8	9340.03	2000	20.1	79.5	120.4	
Si	28	45	H2	1075.875	ppb	6.2	10061.36	1000	21.52	0	200	
K	39	45	He	10614.215	ppb	0.9	127283.55	10000	21.23	79.5	120.4	
Ca	40	45	H2	2707.950	ppb	2.6	224886.17	2500	21.66	79.5	120.4	
V	51	89	He	541.211	ppb	1.2	94997.50	500	21.65	79.5	120.4	
Cr	52	89	He	222.092	ppb	0.8	47540.08	200	22.21	79.5	120.4	
Mn	55	89	He	551.173	ppb	0.5	55736.39	500	22.05	79.5	120.4	
Fe	56	89	H2	1118.641	ppb	2.5	380732.52	1000	22.37	79.5	120.4	
Co	59	89	He	560.546	ppb	1.0	206399.38	500	22.42	79.5	120.4	
Ni	60	89	He	569.234	ppb	1.1	56593.99	500	22.77	79.5	120.4	
Cu	63	89	He	280.250	ppb	0.8	78747.38	250	22.42	79.5	120.4	
Zn	66	89	He	568.872	ppb	0.2	21001.98	500	22.75	79.5	120.4	
As	75	89	He	109.890	ppb	1.3	3469.15	100	21.98	79.5	120.4	
Se	78	89	H2	103.502	ppb	2.4	1725.53	100	20.7	79.5	120.4	
Sr	88	89	He	533.732	ppb	2.1	83875.58	500	21.35	79.5	120.4	
Mo	95	89	He	110.288	ppb	1.7	19648.04	100	22.06	79.5	120.4	
Ag	107	89	He	57.095	ppb	0.5	34476.88	50	22.84	79.5	120.4	
Cd	111	89	He	277.499	ppb	1.1	21658.51	250	22.2	79.5	120.4	
Sn	118	159	He	525.123	ppb	1.3	92719.43	500	21.01	79.5	120.4	
Sb	121	159	No Gas	102.711	ppb	6.2	155488.59	100	20.54	79.5	120.4	
Ba	137	159	No Gas	2066.787	ppb	6.2	1225152.58	2000	20.67	79.5	120.4	
W	182	159	No Gas	106.337	ppb	6.2	121018.04	100	21.27	79.5	120.4	
Tl	205	209	No Gas	109.016	ppb	6.0	270351.14	100	21.8	79.5	120.4	
[Pb]	206	209	No Gas	107.913	ppb	6.2	92964.70	100	21.58	79.5	120.4	
[Pb]	207	209	No Gas	108.037	ppb	6.4	81640.94	100	21.61	79.5	120.4	
Pb	208	209	No Gas	108.099	ppb	5.8	371322.22	100	21.62	79.5	120.4	
Th	232	209	No Gas	106.930	ppb	7.7	373927.76	100	21.39	79.5	120.4	
U	238	209	No Gas	106.214	ppb	6.5	350127.41	100	21.24	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1698418.20	2.3	1745272.14	97.32	29.5	120.4	
Sc	45	No Gas	3922310.61	2.6	3932582.94	99.74	29.5	120.4	
Sc	45	H2	447681.15	2.3	485269.91	92.25	29.5	120.4	
Sc	45	He	90618.77	0.4	96164.21	94.23	29.5	120.4	
Ge	72	No Gas	896857.91	2.6	877152.82	102.25	29.5	120.4	
Ge	72	H2	165460.99	2.8	182501.5	90.66	29.5	120.4	
Ge	72	He	70188.77	0.7	74687.17	93.98	29.5	120.4	
Y	89	H2	2930839.67	2.2	3060772.3	95.75	29.5	120.4	
Y	89	He	614171.72	0.5	649886.7	94.5	29.5	120.4	
Tb	159	No Gas	9255970.69	2.6	8413567.03	110.01	29.5	120.4	
Tb	159	He	3346955.61	0.8	3319571.76	100.82	29.5	120.4	
Bi	209	No Gas	4833185.93	2.8	4391152.66	110.07	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:32:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.190	ppb	46.7	105.56	100	
11	B	6	No Gas	14.147	ppb	7.2	4216.31	1000	
23	Na	45	He	113.587	ppb	15.4	21155.63	200000	
24	Mg	45	He	38.623	ppb	12.2	1395.73	200000	
27	Al	45	He	108.571	ppb	12.6	520.03	200000	
28	Si	45	H2	122.595	ppb	13.2	1601.89	10000	
39	K	45	He	129.402	ppb	7.7	12458.27	200000	
40	Ca	45	H2	121.834	ppb	0.6	10896.77	200000	
51	V	89	He	5.038	ppb	6.8	1141.20	1000	
52	Cr	89	He	1.053	ppb	1.1	294.62	2000	
55	Mn	89	He	5.253	ppb	8.6	551.25	2000	
56	Fe	89	H2	136.893	ppb	1.5	48209.22	100000	
59	Co	89	He	0.210	ppb	7.2	100.01	1000	
60	Ni	89	He	0.958	ppb	68.4	347.80	1000	
63	Cu	89	He	1.834	ppb	8.6	642.26	2000	
66	Zn	89	He	25.116	ppb	5.4	1003.41	2000	
75	As	89	He	0.592	ppb	4.5	22.67	1000	
78	Se	89	H2	0.295	ppb	0.8	5.50	1000	
88	Sr	89	He	0.514	ppb	16.1	86.67	2000	
95	Mo	89	He	0.371	ppb	15.9	70.00	1000	
107	Ag	89	He	0.032	ppb	71.5	22.22	100	
111	Cd	89	He	0.029	ppb	103.3	2.59	1000	
118	Sn	159	He	1.672	ppb	18.2	344.46	1000	
121	Sb	159	No Gas	0.169	ppb	12.7	297.00	1000	
137	Ba	159	No Gas	2.346	ppb	17.2	1415.02	2000	
182	W	159	No Gas	0.270	ppb	24.1	343.72	1000	
205	Tl	209	No Gas	0.005	ppb	960.7	360.41	1000	
208	Pb	209	No Gas	3.948	ppb	6.8	13848.47	2000	
232	Th	209	No Gas	1.217	ppb	14.4	4419.11	1000	
238	U	209	No Gas	0.091	ppb	30.8	303.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1652604.38	2.5	1745272.14	94.69	29.5	120.4	
Sc	45	No Gas	3914246.64	2.6	3932582.94	99.53	29.5	120.4	
Sc	45	H2	447541.11	0.7	485269.91	92.23	29.5	120.4	
Sc	45	He	90720.56	0.7	96164.21	94.34	29.5	120.4	
Ge	72	No Gas	897353.64	2.6	877152.82	102.3	29.5	120.4	
Ge	72	H2	162654.66	1.0	182501.5	89.13	29.5	120.4	
Ge	72	He	70061.06	0.9	74687.17	93.81	29.5	120.4	
Y	89	H2	2900983.82	0.7	3060772.3	94.78	29.5	120.4	
Y	89	He	611776.63	1.2	649886.7	94.14	29.5	120.4	
Tb	159	No Gas	9244603.82	2.7	8413567.03	109.88	29.5	120.4	
Tb	159	He	3336754.67	0.8	3319571.76	100.52	29.5	120.4	
Bi	209	No Gas	4839851.92	2.8	4391152.66	110.22	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:35:31 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.755	ppb	10.7	30734.56	25	99.02	89.8	110.2	
11	B	6	No Gas	25.419	ppb	11.4	22126.42	25	101.68	89.8	110.2	
23	Na	45	He	4993.749	ppb	1.4	552152.45	5000	99.87	89.8	110.2	
24	Mg	45	He	4944.062	ppb	1.2	294133.62	5000	98.88	89.8	110.2	
27	Al	45	He	482.030	ppb	1.5	11293.71	500	96.41	89.8	110.2	
28	Si	45	H2	455.783	ppb	4.4	20911.89	500	91.16	89.8	110.2	
39	K	45	He	4781.940	ppb	1.0	275197.98	5000	95.64	89.8	110.2	
40	Ca	45	H2	4771.678	ppb	3.5	1990823.84	5000	95.43	89.8	110.2	
51	V	89	He	24.566	ppb	2.5	21793.11	25	98.26	89.8	110.2	
52	Cr	89	He	24.742	ppb	0.7	26547.99	25	98.97	89.8	110.2	
55	Mn	89	He	24.637	ppb	0.7	12491.27	25	98.55	89.8	110.2	
56	Fe	89	H2	4709.553	ppb	3.6	8045812.61	5000	94.19	89.8	110.2	
59	Co	89	He	24.888	ppb	1.5	45904.46	25	99.55	89.8	110.2	
60	Ni	89	He	25.208	ppb	3.0	12746.17	25	100.83	89.8	110.2	
63	Cu	89	He	25.307	ppb	0.6	35673.12	25	101.23	89.8	110.2	
66	Zn	89	He	25.147	ppb	2.4	4713.20	25	100.59	89.8	110.2	
75	As	89	He	24.525	ppb	1.1	3875.97	25	98.1	89.8	110.2	
78	Se	89	H2	23.420	ppb	3.9	1971.38	25	93.68	89.8	110.2	
88	Sr	89	He	23.968	ppb	2.2	18865.76	25	95.87	89.8	110.2	
95	Mo	89	He	24.896	ppb	1.9	22203.09	25	99.58	89.8	110.2	
107	Ag	89	He	25.242	ppb	1.3	76307.71	25	100.97	89.8	110.2	
111	Cd	89	He	25.012	ppb	0.8	9774.36	25	100.05	89.8	110.2	
118	Sn	159	He	23.635	ppb	1.9	20895.71	25	94.54	89.8	110.2	
121	Sb	159	No Gas	24.235	ppb	9.9	179103.18	25	96.94	89.8	110.2	
137	Ba	159	No Gas	24.448	ppb	10.6	70752.96	25	97.79	89.8	110.2	
182	W	159	No Gas	23.889	ppb	9.2	132764.59	25	95.56	89.8	110.2	
205	Tl	209	No Gas	24.591	ppb	8.4	297559.92	25	98.36	89.8	110.2	
208	Pb	209	No Gas	24.659	ppb	9.2	413183.69	25	98.64	89.8	110.2	
232	Th	209	No Gas	24.263	ppb	10.1	413926.46	25	97.05	89.8	110.2	
238	U	209	No Gas	24.541	ppb	10.1	394595.01	25	98.16	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1619817.38	6.2	1745272.14	92.81	29.5	120.4	
Sc	45	No Gas	3886461.30	5.9	3932582.94	98.83	29.5	120.4	
Sc	45	H2	451197.20	1.2	485269.91	92.98	29.5	120.4	
Sc	45	He	91381.61	1.1	96164.21	95.03	29.5	120.4	
Ge	72	No Gas	883037.67	6.1	877152.82	100.67	29.5	120.4	
Ge	72	H2	169487.65	2.0	182501.5	92.87	29.5	120.4	
Ge	72	He	71212.11	0.3	74687.17	95.35	29.5	120.4	
Y	89	H2	2960116.05	1.8	3060772.3	96.71	29.5	120.4	
Y	89	He	615007.44	0.9	649886.7	94.63	29.5	120.4	
Tb	159	No Gas	9061461.46	5.6	8413567.03	107.7	29.5	120.4	
Tb	159	He	3345889.19	1.1	3319571.76	100.79	29.5	120.4	
Bi	209	No Gas	4725849.85	5.2	4391152.66	107.62	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 1:38:06 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.043	ppb	66.6	114.45	0.2	
11	B	6	No Gas	0.963	ppb	17.1	2757.03	4	
23	Na	45	He	-44.417	ppb	N/A	14523.35	200	
24	Mg	45	He	1.703	ppb	20.3	1077.89	20	
27	Al	45	He	0.476	ppb	85.6	27.78	20	
28	Si	45	H2	1.279	ppb	40.0	590.67	100	
39	K	45	He	4.945	ppb	43.0	11706.27	200	
40	Ca	45	H2	2.672	ppb	13.8	1986.87	20	
51	V	89	He	0.002	ppb	1298.5	273.35	1	
52	Cr	89	He	0.014	ppb	114.8	87.98	1	
55	Mn	89	He	0.024	ppb	38.6	35.99	0.4	
56	Fe	89	H2	3.597	ppb	11.2	8625.61	20	
59	Co	89	He	0.032	ppb	78.6	84.45	0.2	
60	Ni	89	He	-0.093	ppb	N/A	214.46	0.4	
63	Cu	89	He	0.027	ppb	57.3	173.34	0.6	
66	Zn	89	He	-0.019	ppb	N/A	83.34	2	
75	As	89	He	0.019	ppb	52.4	7.33	1	
78	Se	89	H2	0.022	ppb	25.6	2.50	1	
88	Sr	89	He	0.021	ppb	19.1	23.33	1	
95	Mo	89	He	0.085	ppb	19.9	82.23	1	
107	Ag	89	He	0.009	ppb	10.8	30.00	0.2	
111	Cd	89	He	0.014	ppb	30.3	5.93	0.2	
118	Sn	159	He	0.051	ppb	88.4	95.56	1	
121	Sb	159	No Gas	0.027	ppb	14.1	240.27	0.2	
137	Ba	159	No Gas	0.047	ppb	30.4	156.84	0.4	
182	W	159	No Gas	0.074	ppb	3.5	443.84	1	
205	Tl	209	No Gas	0.008	ppb	125.1	437.16	0.2	
208	Pb	209	No Gas	0.019	ppb	33.7	600.68	0.2	
232	Th	209	No Gas	0.055	ppb	18.4	1081.27	1	
238	U	209	No Gas	0.022	ppb	38.3	360.41	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1693085.03	1.9	1745272.14	97.01	29.5	120.4	
Sc	45	No Gas	3983890.21	1.5	3932582.94	101.3	29.5	120.4	
Sc	45	H2	463693.45	2.6	485269.91	95.55	29.5	120.4	
Sc	45	He	93885.56	1.6	96164.21	97.63	29.5	120.4	
Ge	72	No Gas	901574.05	1.8	877152.82	102.78	29.5	120.4	
Ge	72	H2	174064.40	2.8	182501.5	95.38	29.5	120.4	
Ge	72	He	72737.63	1.8	74687.17	97.39	29.5	120.4	
Y	89	H2	2986118.64	1.9	3060772.3	97.56	29.5	120.4	
Y	89	He	633113.61	1.5	649886.7	97.42	29.5	120.4	
Tb	159	No Gas	9004659.10	1.5	8413567.03	107.03	29.5	120.4	
Tb	159	He	3348162.83	0.9	3319571.76	100.86	29.5	120.4	
Bi	209	No Gas	4739514.92	0.6	4391152.66	107.93	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:40:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.134	ppb	23.5	90.00	100	
11	B	6	No Gas	381.254	ppb	3.1	63443.05	1000	
23	Na	45	He	117616.615	ppb	2.4	2389977.42	200000	
24	Mg	45	He	14991.634	ppb	1.6	168813.94	200000	
27	Al	45	He	57.747	ppb	4.6	270.01	200000	
28	Si	45	H2	11044.546	ppb	4.4	93478.46	10000	
39	K	45	He	349.934	ppb	5.9	14150.71	200000	
40	Ca	45	H2	139351.946	ppb	4.3	10937149.70	200000	
51	V	89	He	2.375	ppb	17.1	652.27	1000	
52	Cr	89	He	0.693	ppb	17.4	209.96	2000	
55	Mn	89	He	326.624	ppb	1.8	31720.33	2000	
56	Fe	89	H2	30.134	ppb	8.4	11981.73	100000	
59	Co	89	He	0.642	ppb	17.1	248.91	1000	
60	Ni	89	He	2.682	ppb	32.5	498.92	1000	
63	Cu	89	He	1.909	ppb	3.0	638.93	2000	
66	Zn	89	He	25.025	ppb	5.4	964.52	2000	
75	As	89	He	0.454	ppb	26.2	17.67	1000	
78	Se	89	H2	0.392	ppb	9.7	6.83	1000	
88	Sr	89	He	1894.410	ppb	1.3	285825.55	2000	
95	Mo	89	He	0.848	ppb	25.7	148.90	1000	
107	Ag	89	He	0.025	ppb	26.1	17.78	100	
111	Cd	89	He	0.050	ppb	46.0	4.07	1000	
118	Sn	159	He	1.175	ppb	8.5	252.24	1000	
121	Sb	159	No Gas	0.085	ppb	27.7	166.85	1000	
137	Ba	159	No Gas	34.621	ppb	2.3	20331.74	2000	
182	W	159	No Gas	0.205	ppb	26.7	266.97	1000	
205	Tl	209	No Gas	-0.066	ppb	N/A	180.21	1000	
208	Pb	209	No Gas	0.416	ppb	12.7	1688.61	2000	
232	Th	209	No Gas	0.751	ppb	3.1	2750.05	1000	
238	U	209	No Gas	3.816	ppb	5.1	12473.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1633590.69	1.8	1745272.14	93.6	29.5	120.4	
Sc	45	No Gas	3844228.10	2.4	3932582.94	97.75	29.5	120.4	
Sc	45	H2	424859.18	3.5	485269.91	87.55	29.5	120.4	
Sc	45	He	86303.31	1.7	96164.21	89.75	29.5	120.4	
Ge	72	No Gas	884550.32	2.4	877152.82	100.84	29.5	120.4	
Ge	72	H2	161075.94	3.6	182501.5	88.26	29.5	120.4	
Ge	72	He	68125.33	2.1	74687.17	91.21	29.5	120.4	
Y	89	H2	2795254.40	3.4	3060772.3	91.33	29.5	120.4	
Y	89	He	589707.95	1.1	649886.7	90.74	29.5	120.4	
Tb	159	No Gas	9150913.13	2.7	8413567.03	108.76	29.5	120.4	
Tb	159	He	3274485.58	1.6	3319571.76	98.64	29.5	120.4	
Bi	209	No Gas	4789586.87	2.7	4391152.66	109.07	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:43:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.041	ppb	133.5	64.45	100	
11	B	6	No Gas	2195.707	ppb	3.2	344099.50	1000	
23	Na	45	He	1284938.715	ppb	1.2	27533350.93	200000	>LDR
24	Mg	45	He	263504.106	ppb	1.1	3134222.52	200000	
27	Al	45	He	20.535	ppb	13.5	112.22	200000	
28	Si	45	H2	9048.057	ppb	3.0	81488.94	10000	
39	K	45	He	8266.854	ppb	2.2	102675.73	200000	
40	Ca	45	H2	499999.260	ppb	1.6	41708338.82	200000	
51	V	89	He	5.605	ppb	3.1	1241.21	1000	
52	Cr	89	He	1.072	ppb	13.2	298.62	2000	
55	Mn	89	He	33.874	ppb	2.1	3436.47	2000	
56	Fe	89	H2	193.583	ppb	3.7	67707.75	100000	
59	Co	89	He	0.567	ppb	23.1	231.13	1000	
60	Ni	89	He	9.571	ppb	4.5	1197.87	1000	
63	Cu	89	He	2.560	ppb	4.8	845.61	2000	
66	Zn	89	He	23.938	ppb	8.7	961.18	2000	
75	As	89	He	0.486	ppb	30.8	19.33	1000	
78	Se	89	H2	1.746	ppb	16.5	29.67	1000	
88	Sr	89	He	7318.491	ppb	0.7	1146644.00	2000	
95	Mo	89	He	0.483	ppb	5.7	90.00	1000	
107	Ag	89	He	0.045	ppb	31.7	30.00	100	
111	Cd	89	He	0.120	ppb	39.1	9.63	1000	
118	Sn	159	He	1.844	ppb	2.7	372.24	1000	
121	Sb	159	No Gas	0.136	ppb	21.2	240.27	1000	
137	Ba	159	No Gas	15.941	ppb	2.5	9226.78	2000	
182	W	159	No Gas	0.148	ppb	10.6	200.22	1000	
205	Tl	209	No Gas	-0.067	ppb	N/A	166.86	1000	
208	Pb	209	No Gas	1.988	ppb	8.3	6594.72	2000	
232	Th	209	No Gas	0.161	ppb	16.8	657.42	1000	
238	U	209	No Gas	8.575	ppb	3.9	26253.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1576448.77	0.8	1745272.14	90.33	29.5	120.4	
Sc	45	No Gas	3824533.46	1.0	3932582.94	97.25	29.5	120.4	
Sc	45	H2	451131.15	0.5	485269.91	92.96	29.5	120.4	
Sc	45	He	91621.83	1.7	96164.21	95.28	29.5	120.4	
Ge	72	No Gas	868486.48	0.2	877152.82	99.01	29.5	120.4	
Ge	72	H2	165249.71	0.2	182501.5	90.55	29.5	120.4	
Ge	72	He	70508.93	1.2	74687.17	94.41	29.5	120.4	
Y	89	H2	2923481.48	0.5	3060772.3	95.51	29.5	120.4	
Y	89	He	612359.64	1.1	649886.7	94.23	29.5	120.4	
Tb	159	No Gas	9008219.66	0.5	8413567.03	107.07	29.5	120.4	
Tb	159	He	3315272.14	1.5	3319571.76	99.87	29.5	120.4	
Bi	209	No Gas	4484157.54	0.7	4391152.66	102.12	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:46:06 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.143	ppb	27.7	94.45	100	
11	B	6	No Gas	2170.204	ppb	5.2	360700.30	1000	
23	Na	45	He	1225959.393	ppb	1.3	26409869.15	200000	>LDR
24	Mg	45	He	224023.222	ppb	1.3	2678888.33	200000	
27	Al	45	He	93.946	ppb	5.6	458.91	200000	
28	Si	45	H2	8831.444	ppb	0.9	81163.73	10000	
39	K	45	He	11061.752	ppb	2.4	134341.16	200000	
40	Ca	45	H2	557887.445	ppb	1.2	47480106.52	200000	
51	V	89	He	7.090	ppb	3.2	1501.24	1000	
52	Cr	89	He	6.134	ppb	3.5	1379.16	2000	
55	Mn	89	He	242.292	ppb	2.8	24452.66	2000	
56	Fe	89	H2	6694.468	ppb	1.4	2296676.85	100000	
59	Co	89	He	2.369	ppb	10.5	893.43	1000	
60	Ni	89	He	11.379	ppb	4.3	1376.78	1000	
63	Cu	89	He	2.961	ppb	8.8	957.85	2000	
66	Zn	89	He	34.696	ppb	2.8	1356.78	2000	
75	As	89	He	1.013	ppb	11.6	36.00	1000	
78	Se	89	H2	0.395	ppb	36.2	7.33	1000	
88	Sr	89	He	9264.996	ppb	1.8	1452487.57	2000	
95	Mo	89	He	0.908	ppb	9.9	165.56	1000	
107	Ag	89	He	0.050	ppb	33.7	33.33	100	
111	Cd	89	He	0.081	ppb	29.7	6.67	1000	
118	Sn	159	He	1.559	ppb	27.6	325.57	1000	
121	Sb	159	No Gas	0.138	ppb	23.1	253.62	1000	
137	Ba	159	No Gas	18.566	ppb	11.2	11247.29	2000	
182	W	159	No Gas	0.141	ppb	26.3	200.23	1000	
205	Tl	209	No Gas	-0.074	ppb	N/A	160.18	1000	
208	Pb	209	No Gas	3.271	ppb	6.8	11211.16	2000	
232	Th	209	No Gas	0.113	ppb	25.2	530.61	1000	
238	U	209	No Gas	5.863	ppb	11.4	18795.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673633.29	2.9	1745272.14	95.9	29.5	120.4	
Sc	45	No Gas	4067813.21	3.9	3932582.94	103.44	29.5	120.4	
Sc	45	H2	460267.44	0.4	485269.91	94.85	29.5	120.4	
Sc	45	He	92102.11	0.9	96164.21	95.78	29.5	120.4	
Ge	72	No Gas	916473.35	4.2	877152.82	104.48	29.5	120.4	
Ge	72	H2	167405.02	1.6	182501.5	91.73	29.5	120.4	
Ge	72	He	70379.51	1.6	74687.17	94.23	29.5	120.4	
Y	89	H2	2968847.00	0.9	3060772.3	97	29.5	120.4	
Y	89	He	612822.42	1.8	649886.7	94.3	29.5	120.4	
Tb	159	No Gas	9457594.72	3.9	8413567.03	112.41	29.5	120.4	
Tb	159	He	3348721.65	1.2	3319571.76	100.88	29.5	120.4	
Bi	209	No Gas	4707935.84	3.7	4391152.66	107.21	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:48:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	97.0	68.89	100	
11	B	6	No Gas	2250.626	ppb	3.9	375554.01	1000	
23	Na	45	He	1253648.253	ppb	0.9	26685848.45	200000	>LDR
24	Mg	45	He	229891.025	ppb	0.9	2716465.34	200000	
27	Al	45	He	89.899	ppb	8.3	434.47	200000	
28	Si	45	H2	8827.303	ppb	1.7	79082.64	10000	
39	K	45	He	11366.285	ppb	1.5	136096.26	200000	
40	Ca	45	H2	575228.041	ppb	1.3	47715283.73	200000	
51	V	89	He	8.094	ppb	7.2	1650.16	1000	
52	Cr	89	He	3.759	ppb	5.4	858.54	2000	
55	Mn	89	He	263.248	ppb	1.1	26153.47	2000	
56	Fe	89	H2	7397.638	ppb	1.4	2469753.34	100000	
59	Co	89	He	2.980	ppb	0.7	1100.13	1000	
60	Ni	89	He	10.354	ppb	6.5	1255.66	1000	
63	Cu	89	He	2.258	ppb	5.0	750.05	2000	
66	Zn	89	He	21.347	ppb	5.9	853.39	2000	
75	As	89	He	1.173	ppb	17.9	40.34	1000	
78	Se	89	H2	0.317	ppb	34.2	5.83	1000	
88	Sr	89	He	9422.852	ppb	0.6	1454178.19	2000	
95	Mo	89	He	0.916	ppb	17.6	164.45	1000	
107	Ag	89	He	0.051	ppb	1.0	33.33	100	
111	Cd	89	He	0.044	ppb	18.5	3.70	1000	
118	Sn	159	He	1.466	ppb	2.3	305.57	1000	
121	Sb	159	No Gas	0.074	ppb	49.6	156.84	1000	
137	Ba	159	No Gas	18.523	ppb	7.0	11270.72	2000	
182	W	159	No Gas	0.074	ppb	54.7	123.47	1000	
205	Tl	209	No Gas	-0.082	ppb	N/A	140.16	1000	
208	Pb	209	No Gas	1.792	ppb	3.6	6314.41	2000	
232	Th	209	No Gas	0.091	ppb	15.2	457.19	1000	
238	U	209	No Gas	5.864	ppb	7.9	18975.90	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1679707.17	2.0	1745272.14	96.24	29.5	120.4	
Sc	45	No Gas	4030945.18	2.7	3932582.94	102.5	29.5	120.4	
Sc	45	H2	448606.81	1.4	485269.91	92.44	29.5	120.4	
Sc	45	He	91010.15	1.0	96164.21	94.64	29.5	120.4	
Ge	72	No Gas	906708.06	2.4	877152.82	103.37	29.5	120.4	
Ge	72	H2	160321.01	1.0	182501.5	87.85	29.5	120.4	
Ge	72	He	69675.11	1.0	74687.17	93.29	29.5	120.4	
Y	89	H2	2889292.10	0.7	3060772.3	94.4	29.5	120.4	
Y	89	He	603156.93	0.9	649886.7	92.81	29.5	120.4	
Tb	159	No Gas	9481150.62	2.3	8413567.03	112.69	29.5	120.4	
Tb	159	He	3309439.81	0.4	3319571.76	99.69	29.5	120.4	
Bi	209	No Gas	4744402.46	2.5	4391152.66	108.04	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:51:27 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	817.9	62.23	100	
11	B	6	No Gas	725.571	ppb	1.6	126805.30	1000	
23	Na	45	He	367705.482	ppb	2.5	7820347.26	200000	
24	Mg	45	He	47639.366	ppb	2.4	562231.33	200000	
27	Al	45	He	31.841	ppb	26.8	163.34	200000	
28	Si	45	H2	7781.405	ppb	4.4	70115.12	10000	
39	K	45	He	3543.104	ppb	4.0	49915.88	200000	
40	Ca	45	H2	164238.661	ppb	5.5	13689028.55	200000	
51	V	89	He	10.058	ppb	1.4	1991.32	1000	
52	Cr	89	He	0.988	ppb	18.0	277.29	2000	
55	Mn	89	He	66.119	ppb	4.9	6595.03	2000	
56	Fe	89	H2	209.453	ppb	6.2	72809.28	100000	
59	Co	89	He	0.515	ppb	26.8	208.91	1000	
60	Ni	89	He	0.493	ppb	67.6	297.79	1000	
63	Cu	89	He	1.758	ppb	5.0	613.37	2000	
66	Zn	89	He	50.706	ppb	2.5	1916.87	2000	
75	As	89	He	0.847	ppb	13.3	30.33	1000	
78	Se	89	H2	0.650	ppb	27.1	11.33	1000	
88	Sr	89	He	1821.851	ppb	3.0	281615.12	2000	
95	Mo	89	He	0.836	ppb	34.7	151.12	1000	
107	Ag	89	He	0.032	ppb	25.2	22.22	100	
111	Cd	89	He	0.049	ppb	46.8	4.07	1000	
118	Sn	159	He	1.146	ppb	16.4	251.12	1000	
121	Sb	159	No Gas	0.177	ppb	15.1	323.71	1000	
137	Ba	159	No Gas	51.881	ppb	1.1	32278.54	2000	
182	W	159	No Gas	0.088	ppb	35.9	143.49	1000	
205	Tl	209	No Gas	-0.098	ppb	N/A	106.79	1000	
208	Pb	209	No Gas	0.196	ppb	11.4	981.12	2000	
232	Th	209	No Gas	0.051	ppb	27.8	337.05	1000	
238	U	209	No Gas	3.515	ppb	3.4	11955.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1739656.64	0.6	1745272.14	99.68	29.5	120.4	
Sc	45	No Gas	4093256.97	0.4	3932582.94	104.09	29.5	120.4	
Sc	45	H2	451480.83	4.7	485269.91	93.04	29.5	120.4	
Sc	45	He	90794.55	1.6	96164.21	94.42	29.5	120.4	
Ge	72	No Gas	930408.12	0.5	877152.82	106.07	29.5	120.4	
Ge	72	H2	166145.29	5.0	182501.5	91.04	29.5	120.4	
Ge	72	He	70000.51	1.7	74687.17	93.72	29.5	120.4	
Y	89	H2	2918593.65	4.7	3060772.3	95.35	29.5	120.4	
Y	89	He	604313.30	1.7	649886.7	92.99	29.5	120.4	
Tb	159	No Gas	9697939.85	0.3	8413567.03	115.27	29.5	120.4	
Tb	159	He	3324050.37	1.3	3319571.76	100.13	29.5	120.4	
Bi	209	No Gas	4982031.49	0.4	4391152.66	113.46	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:54:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	129.9	71.11	100	
11	B	6	No Gas	30.747	ppb	6.4	7337.67	1000	
23	Na	45	He	518.171	ppb	5.7	29911.28	200000	
24	Mg	45	He	23.114	ppb	80.1	1222.37	200000	
27	Al	45	He	20.632	ppb	17.3	112.23	200000	
28	Si	45	H2	26.930	ppb	35.7	760.87	10000	
39	K	45	He	40.841	ppb	106.8	11551.21	200000	
40	Ca	45	H2	129.763	ppb	10.8	11690.83	200000	
51	V	89	He	11.215	ppb	5.3	2226.92	1000	
52	Cr	89	He	0.539	ppb	19.8	185.97	2000	
55	Mn	89	He	2.333	ppb	12.7	258.62	2000	
56	Fe	89	H2	14.788	ppb	1.0	7393.55	100000	
59	Co	89	He	0.040	ppb	69.5	37.78	1000	
60	Ni	89	He	0.060	ppb	292.0	260.01	1000	
63	Cu	89	He	1.315	ppb	8.5	498.92	2000	
66	Zn	89	He	21.379	ppb	6.1	870.06	2000	
75	As	89	He	0.547	ppb	13.9	21.33	1000	
78	Se	89	H2	0.072	ppb	25.8	1.83	1000	
88	Sr	89	He	1.033	ppb	38.2	168.89	2000	
95	Mo	89	He	0.101	ppb	39.1	22.22	1000	
107	Ag	89	He	0.030	ppb	28.4	21.11	100	
111	Cd	89	He	0.015	ppb	57.2	1.48	1000	
118	Sn	159	He	1.282	ppb	2.7	276.68	1000	
121	Sb	159	No Gas	0.037	ppb	24.0	100.11	1000	
137	Ba	159	No Gas	0.294	ppb	6.5	203.56	2000	
182	W	159	No Gas	0.058	ppb	9.0	106.79	1000	
205	Tl	209	No Gas	-0.106	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.093	ppb	30.2	624.04	2000	
232	Th	209	No Gas	0.046	ppb	32.7	323.70	1000	
238	U	209	No Gas	0.008	ppb	21.4	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1750391.72	2.5	1745272.14	100.29	29.5	120.4	
Sc	45	No Gas	4033207.47	3.5	3932582.94	102.56	29.5	120.4	
Sc	45	H2	453081.06	1.1	485269.91	93.37	29.5	120.4	
Sc	45	He	91253.72	1.5	96164.21	94.89	29.5	120.4	
Ge	72	No Gas	925585.06	3.4	877152.82	105.52	29.5	120.4	
Ge	72	H2	165017.91	1.5	182501.5	90.42	29.5	120.4	
Ge	72	He	70472.90	1.4	74687.17	94.36	29.5	120.4	
Y	89	H2	2932363.30	1.4	3060772.3	95.8	29.5	120.4	
Y	89	He	614153.00	0.7	649886.7	94.5	29.5	120.4	
Tb	159	No Gas	9614892.56	3.3	8413567.03	114.28	29.5	120.4	
Tb	159	He	3348435.75	1.1	3319571.76	100.87	29.5	120.4	
Bi	209	No Gas	5055379.52	3.4	4391152.66	115.13	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:56:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.053	ppb	N/A	60.00	100	
11	B	6	No Gas	13.635	ppb	26.4	5663.53	1000	
23	Na	45	He	-153.949	ppb	N/A	22242.19	200000	
24	Mg	45	He	32.641	ppb	112.5	1882.50	200000	
27	Al	45	He	4.867	ppb	62.3	56.67	200000	
28	Si	45	H2	-25.833	ppb	N/A	286.99	10000	
39	K	45	He	-536.118	ppb	N/A	7517.15	200000	
40	Ca	45	H2	72.728	ppb	118.2	4503.17	200000	
51	V	89	He	1.770	ppb	52.0	816.73	1000	
52	Cr	89	He	0.074	ppb	146.8	121.98	2000	
55	Mn	89	He	0.347	ppb	106.8	77.99	2000	
56	Fe	89	H2	15.122	ppb	145.2	5160.09	100000	
59	Co	89	He	0.013	ppb	271.7	37.78	1000	
60	Ni	89	He	-0.509	ppb	N/A	290.02	1000	
63	Cu	89	He	0.124	ppb	67.7	237.79	2000	
66	Zn	89	He	3.199	ppb	35.6	291.13	2000	
75	As	89	He	0.034	ppb	89.2	7.33	1000	
78	Se	89	H2	0.165	ppb	106.0	2.50	1000	
88	Sr	89	He	0.361	ppb	35.4	87.78	2000	
95	Mo	89	He	0.083	ppb	99.6	25.56	1000	
107	Ag	89	He	0.020	ppb	90.5	21.11	100	
111	Cd	89	He	0.004	ppb	193.2	1.11	1000	
118	Sn	159	He	0.286	ppb	62.4	141.12	1000	
121	Sb	159	No Gas	0.010	ppb	36.9	73.42	1000	
137	Ba	159	No Gas	0.069	ppb	104.6	86.76	2000	
182	W	159	No Gas	0.133	ppb	64.8	256.96	1000	
205	Tl	209	No Gas	-0.069	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	0.010	ppb	229.7	423.82	2000	
232	Th	209	No Gas	0.009	ppb	239.3	243.61	1000	
238	U	209	No Gas	0.003	ppb	110.4	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2300127.04	18.9	1745272.14	131.79	29.5	120.4	6020/DoD□ EPA
Sc	45	No Gas	5242915.08	13.0	3932582.94	133.32	29.5	120.4	6020/DoD□ EPA
Sc	45	H2	538907.33	69.6	485269.91	111.05	29.5	120.4	
Sc	45	He	136112.79	24.8	96164.21	141.54	29.5	120.4	6020/DoD□ EPA
Ge	72	No Gas	1125887.87	12.6	877152.82	128.36	29.5	120.4	6020/DoD□ EPA
Ge	72	H2	203053.97	71.4	182501.5	111.26	29.5	120.4	
Ge	72	He	104217.32	25.4	74687.17	139.54	29.5	120.4	6020/DoD□ EPA
Y	89	H2	3619460.63	71.1	3060772.3	118.25	29.5	120.4	
Y	89	He	899389.45	24.9	649886.7	138.39	29.5	120.4	6020/DoD□ EPA
Tb	159	No Gas	12195796.34	10.8	8413567.03	144.95	29.5	120.4	6020/DoD□ EPA
Tb	159	He	4921879.37	25.2	3319571.76	148.27	29.5	120.4	6020/DoD□ EPA
Bi	209	No Gas	6420443.50	10.8	4391152.66	146.21	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5897-002L

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 1:59:18 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.089	ppb	N/A	54.45	100	
11	B	6	No Gas	81.713	ppb	6.6	4733.16	1000	
23	Na	45	He	980.984	ppb	29.5	22683.04	200000	
24	Mg	45	He	94.610	ppb	20.1	1153.46	200000	
27	Al	45	He	50.642	ppb	42.1	62.23	200000	
28	Si	45	H2	29.377	ppb	136.2	563.97	10000	
39	K	45	He	132.313	ppb	145.2	11221.12	200000	
40	Ca	45	H2	277.736	ppb	4.3	5397.88	200000	
51	V	89	He	41.258	ppb	6.6	1685.72	1000	
52	Cr	89	He	1.476	ppb	28.2	131.98	2000	
55	Mn	89	He	4.250	ppb	20.6	107.31	2000	
56	Fe	89	H2	59.604	ppb	5.1	6325.14	100000	
59	Co	89	He	0.022	ppb	941.8	24.45	1000	
60	Ni	89	He	-3.273	ppb	N/A	186.68	1000	
63	Cu	89	He	3.904	ppb	11.7	344.46	2000	
66	Zn	89	He	33.584	ppb	3.6	326.68	2000	
75	As	89	He	1.118	ppb	1.0	11.00	1000	
78	Se	89	H2	0.113	ppb	269.7	1.00	1000	
88	Sr	89	He	2.095	ppb	42.1	71.11	2000	
95	Mo	89	He	0.513	ppb	27.8	22.22	1000	
107	Ag	89	He	0.179	ppb	36.8	24.45	100	
111	Cd	89	He	0.050	ppb	145.1	1.11	1000	
118	Sn	159	He	3.437	ppb	7.7	170.01	1000	
121	Sb	159	No Gas	0.171	ppb	57.1	93.44	1000	
137	Ba	159	No Gas	0.873	ppb	31.1	126.81	2000	
182	W	159	No Gas	0.187	ppb	41.3	80.09	1000	
205	Tl	209	No Gas	-0.531	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	0.193	ppb	45.2	417.14	2000	
232	Th	209	No Gas	0.020	ppb	149.4	163.52	1000	
238	U	209	No Gas	0.020	ppb	112.7	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1711215.03	2.2	1745272.14	98.05	29.5	120.4	
Sc	45	No Gas	3919573.83	2.3	3932582.94	99.67	29.5	120.4	
Sc	45	H2	446492.00	1.0	485269.91	92.01	29.5	120.4	
Sc	45	He	89875.50	1.4	96164.21	93.46	29.5	120.4	
Ge	72	No Gas	897262.56	2.4	877152.82	102.29	29.5	120.4	
Ge	72	H2	163842.00	1.2	182501.5	89.78	29.5	120.4	
Ge	72	He	69910.46	0.6	74687.17	93.6	29.5	120.4	
Y	89	H2	2888247.21	1.2	3060772.3	94.36	29.5	120.4	
Y	89	He	606114.05	0.7	649886.7	93.26	29.5	120.4	
Tb	159	No Gas	9343986.95	2.4	8413567.03	111.06	29.5	120.4	
Tb	159	He	3315468.04	0.2	3319571.76	99.88	29.5	120.4	
Bi	209	No Gas	4905400.12	2.5	4391152.66	111.71	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:01:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.568	ppb	9.7	2840.38	100	
11	B	6	No Gas	222.844	ppb	5.1	39733.34	1000	
23	Na	45	He	11329.197	ppb	1.1	258410.75	200000	
24	Mg	45	He	1098.866	ppb	1.1	13849.90	200000	
27	Al	45	He	991.560	ppb	2.6	4610.92	200000	
28	Si	45	H2	4949.539	ppb	2.2	44053.68	10000	
39	K	45	He	10304.628	ppb	1.8	123756.21	200000	
40	Ca	45	H2	1112.067	ppb	0.8	92005.63	200000	
51	V	89	He	63.214	ppb	3.6	11181.50	1000	
52	Cr	89	He	54.459	ppb	1.2	11560.65	2000	
55	Mn	89	He	23.189	ppb	1.4	2336.44	2000	
56	Fe	89	H2	1104.880	ppb	0.3	371200.89	100000	
59	Co	89	He	11.033	ppb	5.5	4032.01	1000	
60	Ni	89	He	22.935	ppb	3.1	2491.42	1000	
63	Cu	89	He	33.818	ppb	1.6	9492.46	2000	
66	Zn	89	He	130.120	ppb	2.3	4806.54	2000	
75	As	89	He	51.993	ppb	2.7	1622.61	1000	
78	Se	89	H2	50.176	ppb	0.3	825.99	1000	
88	Sr	89	He	52.552	ppb	0.5	8158.27	2000	
95	Mo	89	He	53.818	ppb	1.7	9466.93	1000	
107	Ag	89	He	11.856	ppb	1.9	7069.84	100	
111	Cd	89	He	11.262	ppb	7.2	867.81	1000	
118	Sn	159	He	52.617	ppb	0.7	9351.35	1000	
121	Sb	159	No Gas	10.430	ppb	6.8	16184.52	1000	
137	Ba	159	No Gas	20.329	ppb	5.4	12349.58	2000	
182	W	159	No Gas	51.676	ppb	6.0	60176.90	1000	
205	Tl	209	No Gas	10.845	ppb	5.7	28356.58	1000	
208	Pb	209	No Gas	10.674	ppb	7.5	38465.82	2000	
232	Th	209	No Gas	10.607	ppb	7.4	38797.02	1000	
238	U	209	No Gas	10.801	ppb	7.1	37109.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1715020.91	2.4	1745272.14	98.27	29.5	120.4	
Sc	45	No Gas	3944739.65	3.0	3932582.94	100.31	29.5	120.4	
Sc	45	H2	443523.34	0.6	485269.91	91.4	29.5	120.4	
Sc	45	He	90523.79	0.8	96164.21	94.13	29.5	120.4	
Ge	72	No Gas	912971.73	2.5	877152.82	104.08	29.5	120.4	
Ge	72	H2	163783.64	1.2	182501.5	89.74	29.5	120.4	
Ge	72	He	69803.21	1.2	74687.17	93.46	29.5	120.4	
Y	89	H2	2891826.78	0.2	3060772.3	94.48	29.5	120.4	
Y	89	He	606269.63	0.7	649886.7	93.29	29.5	120.4	
Tb	159	No Gas	9469225.83	3.1	8413567.03	112.55	29.5	120.4	
Tb	159	He	3352576.89	0.6	3319571.76	100.99	29.5	120.4	
Bi	209	No Gas	5037875.41	3.0	4391152.66	114.73	29.5	120.4	

Sample Report

Sample Name SN5897-002S

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:04:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.608	ppb	7.9	13094.16	100	
11	B	6	No Gas	527.206	ppb	4.0	91112.03	1000	
23	Na	45	He	8099.207	ppb	2.0	187481.64	200000	
24	Mg	45	He	5515.553	ppb	1.2	64847.65	200000	
27	Al	45	He	2098.872	ppb	2.5	9610.24	200000	
28	Si	45	H2	1037.825	ppb	9.0	9744.24	10000	
39	K	45	He	10311.073	ppb	0.5	122146.30	200000	
40	Ca	45	H2	2616.282	ppb	4.9	217917.96	200000	
51	V	89	He	540.450	ppb	1.6	93403.34	1000	
52	Cr	89	He	219.513	ppb	1.8	46264.79	2000	
55	Mn	89	He	539.281	ppb	1.6	53693.15	2000	
56	Fe	89	H2	1094.646	ppb	5.6	371177.30	100000	
59	Co	89	He	549.882	ppb	1.6	199353.31	1000	
60	Ni	89	He	556.646	ppb	1.4	54496.77	1000	
63	Cu	89	He	272.802	ppb	1.9	75471.66	2000	
66	Zn	89	He	566.078	ppb	0.2	20577.92	2000	
75	As	89	He	104.229	ppb	0.5	3240.07	1000	
78	Se	89	H2	99.470	ppb	5.1	1652.19	1000	
88	Sr	89	He	514.675	ppb	1.7	79637.32	2000	
95	Mo	89	He	108.541	ppb	2.7	19037.20	1000	
107	Ag	89	He	56.293	ppb	2.2	33468.77	100	
111	Cd	89	He	271.887	ppb	1.0	20893.24	1000	
118	Sn	159	He	503.493	ppb	1.5	89042.23	1000	
121	Sb	159	No Gas	98.673	ppb	4.9	154532.88	1000	
137	Ba	159	No Gas	1982.471	ppb	5.1	1215737.60	2000	
182	W	159	No Gas	102.086	ppb	5.5	120195.54	1000	
205	Tl	209	No Gas	105.638	ppb	4.4	270722.89	1000	
208	Pb	209	No Gas	105.266	ppb	5.0	373611.36	2000	
232	Th	209	No Gas	103.664	ppb	5.4	374653.61	1000	
238	U	209	No Gas	104.065	ppb	5.5	354449.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1710349.16	1.0	1745272.14	98	29.5	120.4	
Sc	45	No Gas	3941536.37	2.3	3932582.94	100.23	29.5	120.4	
Sc	45	H2	449305.14	3.9	485269.91	92.59	29.5	120.4	
Sc	45	He	89288.55	0.4	96164.21	92.85	29.5	120.4	
Ge	72	No Gas	912693.02	1.7	877152.82	104.05	29.5	120.4	
Ge	72	H2	165505.04	4.2	182501.5	90.69	29.5	120.4	
Ge	72	He	69684.81	0.9	74687.17	93.3	29.5	120.4	
Y	89	H2	2922795.87	4.2	3060772.3	95.49	29.5	120.4	
Y	89	He	604734.41	0.7	649886.7	93.05	29.5	120.4	
Tb	159	No Gas	9570838.05	2.1	8413567.03	113.75	29.5	120.4	
Tb	159	He	3352379.92	0.7	3319571.76	100.99	29.5	120.4	
Bi	209	No Gas	4991453.62	2.0	4391152.66	113.67	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:07:19 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.949	ppb	4.4	30498.44	25	95.8	89.8	110.2	
11	B	6	No Gas	26.407	ppb	2.8	23504.18	25	105.63	89.8	110.2	
23	Na	45	He	5214.802	ppb	1.9	542505.98	5000	104.3	89.8	110.2	
24	Mg	45	He	5070.098	ppb	1.7	284187.57	5000	101.4	89.8	110.2	
27	Al	45	He	482.468	ppb	1.2	10649.91	500	96.49	89.8	110.2	
28	Si	45	H2	456.630	ppb	1.8	20116.38	500	91.33	89.8	110.2	
39	K	45	He	4804.415	ppb	1.6	260466.86	5000	96.09	89.8	110.2	
40	Ca	45	H2	4849.508	ppb	0.6	1942746.60	5000	96.99	89.8	110.2	
51	V	89	He	24.709	ppb	1.7	20989.66	25	98.84	89.8	110.2	
52	Cr	89	He	24.742	ppb	0.9	25422.14	25	98.97	89.8	110.2	
55	Mn	89	He	24.491	ppb	2.8	11890.18	25	97.96	89.8	110.2	
56	Fe	89	H2	4804.580	ppb	1.4	7860411.44	5000	96.09	89.8	110.2	
59	Co	89	He	25.100	ppb	0.7	44330.48	25	100.4	89.8	110.2	
60	Ni	89	He	24.912	ppb	1.0	12065.60	25	99.65	89.8	110.2	
63	Cu	89	He	24.952	ppb	0.8	33683.67	25	99.81	89.8	110.2	
66	Zn	89	He	25.823	ppb	0.4	4633.17	25	103.29	89.8	110.2	
75	As	89	He	24.306	ppb	0.4	3678.56	25	97.22	89.8	110.2	
78	Se	89	H2	24.304	ppb	1.5	1959.22	25	97.22	89.8	110.2	
88	Sr	89	He	23.779	ppb	2.0	17921.17	25	95.12	89.8	110.2	
95	Mo	89	He	24.868	ppb	0.5	21240.43	25	99.47	89.8	110.2	
107	Ag	89	He	25.663	ppb	1.3	74293.43	25	102.65	89.8	110.2	
111	Cd	89	He	24.940	ppb	0.4	9332.56	25	99.76	89.8	110.2	
118	Sn	159	He	23.576	ppb	1.0	20383.83	25	94.3	89.8	110.2	
121	Sb	159	No Gas	22.972	ppb	6.5	175926.69	25	91.89	89.8	110.2	
137	Ba	159	No Gas	23.562	ppb	5.7	70696.33	25	94.25	89.8	110.2	
182	W	159	No Gas	23.552	ppb	5.1	135647.67	25	94.21	89.8	110.2	
205	Tl	209	No Gas	23.993	ppb	6.2	302978.29	25	95.97	89.8	110.2	
208	Pb	209	No Gas	24.176	ppb	5.6	422926.05	25	96.7	89.8	110.2	
232	Th	209	No Gas	24.077	ppb	7.0	428798.47	25	96.31	89.8	110.2	
238	U	209	No Gas	24.290	ppb	6.9	407734.21	25	97.16	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1654984.84	2.0	1745272.14	94.83	29.5	120.4	
Sc	45	No Gas	3872257.30	3.2	3932582.94	98.47	29.5	120.4	
Sc	45	H2	433146.22	0.8	485269.91	89.26	29.5	120.4	
Sc	45	He	86110.95	1.5	96164.21	89.55	29.5	120.4	
Ge	72	No Gas	886399.13	3.1	877152.82	101.05	29.5	120.4	
Ge	72	H2	159488.25	1.6	182501.5	87.39	29.5	120.4	
Ge	72	He	67892.34	0.5	74687.17	90.9	29.5	120.4	
Y	89	H2	2833989.15	1.7	3060772.3	92.59	29.5	120.4	
Y	89	He	588929.27	0.5	649886.7	90.62	29.5	120.4	
Tb	159	No Gas	9369180.49	3.3	8413567.03	111.36	29.5	120.4	
Tb	159	He	3271577.80	0.2	3319571.76	98.55	29.5	120.4	
Bi	209	No Gas	4924877.20	3.8	4391152.66	112.15	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:09:54 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.043	ppb	55.4	111.12	0.2	
11	B	6	No Gas	1.967	ppb	19.5	3492.77	4	
23	Na	45	He	-19.173	ppb	N/A	15953.32	200	
24	Mg	45	He	-0.552	ppb	N/A	866.76	20	
27	Al	45	He	0.182	ppb	262.5	18.89	20	
28	Si	45	H2	-0.417	ppb	N/A	477.21	100	
39	K	45	He	3.563	ppb	150.2	10725.87	200	
40	Ca	45	H2	2.528	ppb	9.5	1794.62	20	
51	V	89	He	0.132	ppb	25.7	364.46	1	
52	Cr	89	He	-0.004	ppb	N/A	63.99	1	
55	Mn	89	He	-0.001	ppb	N/A	21.33	0.4	
56	Fe	89	H2	2.092	ppb	11.5	5674.13	20	
59	Co	89	He	0.018	ppb	39.5	53.34	0.2	
60	Ni	89	He	-0.188	ppb	N/A	154.45	0.4	
63	Cu	89	He	0.029	ppb	52.8	163.34	0.6	
66	Zn	89	He	-0.092	ppb	N/A	64.45	2	
75	As	89	He	0.001	ppb	1311.0	4.00	1	
78	Se	89	H2	0.051	ppb	41.4	4.67	1	
88	Sr	89	He	0.020	ppb	56.1	21.11	1	
95	Mo	89	He	0.084	ppb	4.6	75.56	1	
107	Ag	89	He	0.009	ppb	9.4	28.89	0.2	
111	Cd	89	He	0.010	ppb	68.0	4.08	0.2	
118	Sn	159	He	0.044	ppb	27.4	86.67	1	
121	Sb	159	No Gas	0.018	ppb	33.6	176.87	0.2	
137	Ba	159	No Gas	0.048	ppb	52.5	160.18	0.4	
182	W	159	No Gas	0.085	ppb	3.5	510.58	1	
205	Tl	209	No Gas	0.004	ppb	280.8	393.79	0.2	
208	Pb	209	No Gas	0.012	ppb	72.9	490.56	0.2	
232	Th	209	No Gas	0.057	ppb	14.7	1141.35	1	
238	U	209	No Gas	0.021	ppb	44.2	353.74	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1646364.95	2.4	1745272.14	94.33	29.5	120.4	
Sc	45	No Gas	3784008.80	3.1	3932582.94	96.22	29.5	120.4	
Sc	45	H2	432038.20	3.0	485269.91	89.03	29.5	120.4	
Sc	45	He	86643.00	2.1	96164.21	90.1	29.5	120.4	
Ge	72	No Gas	857982.76	3.0	877152.82	97.81	29.5	120.4	
Ge	72	H2	160786.31	2.5	182501.5	88.1	29.5	120.4	
Ge	72	He	67647.89	2.0	74687.17	90.57	29.5	120.4	
Y	89	H2	2805097.08	2.7	3060772.3	91.65	29.5	120.4	
Y	89	He	590071.08	2.0	649886.7	90.8	29.5	120.4	
Tb	159	No Gas	9124007.71	3.2	8413567.03	108.44	29.5	120.4	
Tb	159	He	3245511.10	2.0	3319571.76	97.77	29.5	120.4	
Bi	209	No Gas	4864714.86	3.4	4391152.66	110.78	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:12:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.278	ppb	4.6	12889.48	100	
11	B	6	No Gas	513.032	ppb	6.1	87875.80	1000	
23	Na	45	He	8071.351	ppb	1.0	178860.26	200000	
24	Mg	45	He	5578.550	ppb	2.0	62751.65	200000	
27	Al	45	He	2018.861	ppb	2.8	8846.34	200000	
28	Si	45	H2	1097.433	ppb	6.0	9764.20	10000	
39	K	45	He	10461.487	ppb	0.8	118444.28	200000	
40	Ca	45	H2	2669.965	ppb	1.8	211132.98	200000	
51	V	89	He	545.339	ppb	1.9	90319.33	1000	
52	Cr	89	He	222.370	ppb	1.7	44914.06	2000	
55	Mn	89	He	552.191	ppb	1.2	52690.78	2000	
56	Fe	89	H2	1122.608	ppb	2.0	363550.55	100000	
59	Co	89	He	556.776	ppb	1.1	193453.83	1000	
60	Ni	89	He	564.894	ppb	2.0	52993.22	1000	
63	Cu	89	He	279.752	ppb	1.9	74166.03	2000	
66	Zn	89	He	573.288	ppb	1.7	19969.40	2000	
75	As	89	He	109.575	ppb	1.4	3264.07	1000	
78	Se	89	H2	103.101	ppb	2.5	1635.36	1000	
88	Sr	89	He	529.494	ppb	0.6	78525.36	2000	
95	Mo	89	He	111.454	ppb	2.8	18733.44	1000	
107	Ag	89	He	57.853	ppb	2.0	32961.96	100	
111	Cd	89	He	277.553	ppb	0.7	20441.05	1000	
118	Sn	159	He	508.584	ppb	0.5	87309.88	1000	
121	Sb	159	No Gas	97.953	ppb	5.8	148431.08	1000	
137	Ba	159	No Gas	1960.874	ppb	5.1	1163667.30	2000	
182	W	159	No Gas	103.552	ppb	6.2	117961.47	1000	
205	Tl	209	No Gas	104.057	ppb	4.9	262325.58	1000	
208	Pb	209	No Gas	103.738	ppb	5.3	362192.22	2000	
232	Th	209	No Gas	104.314	ppb	6.0	370859.45	1000	
238	U	209	No Gas	103.055	ppb	5.8	345302.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1695403.98	2.4	1745272.14	97.14	29.5	120.4	
Sc	45	No Gas	3772800.92	2.4	3932582.94	95.94	29.5	120.4	
Sc	45	H2	426187.22	2.0	485269.91	87.82	29.5	120.4	
Sc	45	He	85451.47	1.1	96164.21	88.86	29.5	120.4	
Ge	72	No Gas	877017.30	2.1	877152.82	99.98	29.5	120.4	
Ge	72	H2	156485.74	2.0	182501.5	85.74	29.5	120.4	
Ge	72	He	66523.20	1.0	74687.17	89.07	29.5	120.4	
Y	89	H2	2788505.65	2.2	3060772.3	91.1	29.5	120.4	
Y	89	He	579589.86	1.5	649886.7	89.18	29.5	120.4	
Tb	159	No Gas	9263905.97	2.4	8413567.03	110.11	29.5	120.4	
Tb	159	He	3254073.39	1.1	3319571.76	98.03	29.5	120.4	
Bi	209	No Gas	4912239.26	2.9	4391152.66	111.87	29.5	120.4	

Sample Report

Sample Name SN5946-001

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:15:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.165	ppb	33.6	94.45	100	
11	B	6	No Gas	673.724	ppb	5.0	107075.29	1000	
23	Na	45	He	156872.609	ppb	1.7	3168826.01	200000	
24	Mg	45	He	50376.305	ppb	2.1	562797.10	200000	
27	Al	45	He	14.781	ppb	26.2	80.00	200000	
28	Si	45	H2	10113.821	ppb	0.8	84285.95	10000	
39	K	45	He	1288.487	ppb	4.7	23839.29	200000	
40	Ca	45	H2	204282.999	ppb	0.8	15778421.85	200000	
51	V	89	He	6.692	ppb	5.7	1366.78	1000	
52	Cr	89	He	0.638	ppb	8.5	197.30	2000	
55	Mn	89	He	935.577	ppb	1.5	90078.37	2000	
56	Fe	89	H2	5688.119	ppb	0.5	1804813.70	100000	
59	Co	89	He	0.437	ppb	26.8	175.57	1000	
60	Ni	89	He	-0.309	ppb	N/A	213.34	1000	
63	Cu	89	He	1.547	ppb	10.8	536.69	2000	
66	Zn	89	He	15.718	ppb	9.5	630.04	2000	
75	As	89	He	1.479	ppb	14.0	48.34	1000	
78	Se	89	H2	0.292	ppb	41.2	5.17	1000	
88	Sr	89	He	1927.816	ppb	2.1	288479.83	2000	
95	Mo	89	He	1.515	ppb	17.2	261.12	1000	
107	Ag	89	He	0.070	ppb	36.1	43.33	100	
111	Cd	89	He	0.114	ppb	79.5	8.89	1000	
118	Sn	159	He	2.084	ppb	8.7	408.91	1000	
121	Sb	159	No Gas	0.211	ppb	29.3	360.41	1000	
137	Ba	159	No Gas	134.984	ppb	6.6	80414.78	2000	
182	W	159	No Gas	0.351	ppb	20.8	437.16	1000	
205	Tl	209	No Gas	0.051	ppb	210.3	463.88	1000	
208	Pb	209	No Gas	0.178	ppb	74.7	874.33	2000	
232	Th	209	No Gas	1.174	ppb	13.1	4205.46	1000	
238	U	209	No Gas	0.853	ppb	15.1	2780.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1581065.59	2.3	1745272.14	90.59	29.5	120.4	
Sc	45	No Gas	3740188.60	3.1	3932582.94	95.11	29.5	120.4	
Sc	45	H2	417681.42	1.1	485269.91	86.07	29.5	120.4	
Sc	45	He	85951.12	1.6	96164.21	89.38	29.5	120.4	
Ge	72	No Gas	874318.67	2.8	877152.82	99.68	29.5	120.4	
Ge	72	H2	153940.62	2.3	182501.5	84.35	29.5	120.4	
Ge	72	He	67145.07	1.9	74687.17	89.9	29.5	120.4	
Y	89	H2	2745139.55	1.3	3060772.3	89.69	29.5	120.4	
Y	89	He	584936.53	1.6	649886.7	90.01	29.5	120.4	
Tb	159	No Gas	9298898.27	2.6	8413567.03	110.52	29.5	120.4	
Tb	159	He	3272385.71	1.7	3319571.76	98.58	29.5	120.4	
Bi	209	No Gas	4783905.87	3.0	4391152.66	108.94	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG22IMW1
File Name	045_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:17:52 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.001	ppb	N/A	55.56	0.1	
B	11	6	No Gas	3.859	ppb	2.4	5034.39	2	200.8 PB Fails DoD
Na	23	45	He	-14.824	ppb	N/A	16678.16	100	
Mg	24	45	He	6.834	ppb	10.4	1304.59	10	
Al	27	45	He	4.105	ppb	31.3	107.78	10	
Si	28	45	H2	12.765	ppb	19.6	1051.21	50	
K	39	45	He	6.151	ppb	50.8	11047.64	100	
Ca	40	45	H2	11.590	ppb	2.2	5467.91	10	200.8 PB Fails DoD
V	51	89	He	0.480	ppb	3.1	667.82	0.5	
Cr	52	89	He	0.305	ppb	0.9	387.27	0.5	
Mn	55	89	He	0.405	ppb	5.3	221.96	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Fe	56	89	H2	3.539	ppb	10.4	8151.46	10	
Co	59	89	He	0.033	ppb	28.8	82.23	0.1	
Ni	60	89	He	-0.111	ppb	N/A	194.45	0.2	
Cu	63	89	He	0.091	ppb	15.2	251.12	0.3	
Zn	66	89	He	40.457	ppb	1.9	7346.64	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.022	ppb	121.8	7.33	0.5	
Se	78	89	H2	0.023	ppb	71.4	2.50	0.5	
Sr	88	89	He	0.053	ppb	57.3	46.67	0.5	
Mo	95	89	He	0.050	ppb	31.0	47.78	0.5	
Ag	107	89	He	0.003	ppb	112.3	13.34	0.1	
Cd	111	89	He	0.005	ppb	102.8	2.22	0.1	
Sn	118	159	He	0.275	ppb	3.9	288.90	0.5	
Sb	121	159	No Gas	0.008	ppb	27.2	100.11	0.1	
Ba	137	159	No Gas	0.332	ppb	14.0	1011.16	0.2	200.8 PB Fails DoD
W	182	159	No Gas	0.018	ppb	45.0	140.16	0.5	
Tl	205	209	No Gas	-0.013	ppb	N/A	193.55	0.1	
[Pb]	206	209	No Gas	0.029	ppb	18.8	183.54	0.1	
[Pb]	207	209	No Gas	0.019	ppb	30.0	140.16	0.1	
Pb	208	209	No Gas	0.022	ppb	16.0	670.76	0.1	
Th	232	209	No Gas	0.007	ppb	32.4	273.64	0.5	
U	238	209	No Gas	0.002	ppb	60.7	30.03	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1645961.86	3.0	1745272.14	94.31	29.5	120.4	
Sc	45	No Gas	3863056.96	4.2	3932582.94	98.23	29.5	120.4	
Sc	45	H2	436274.52	1.8	485269.91	89.9	29.5	120.4	
Sc	45	He	88103.32	0.8	96164.21	91.62	29.5	120.4	
Ge	72	No Gas	884887.58	3.5	877152.82	100.88	29.5	120.4	
Ge	72	H2	163736.42	1.9	182501.5	89.72	29.5	120.4	
Ge	72	He	69294.76	0.4	74687.17	92.78	29.5	120.4	
Y	89	H2	2854943.51	1.2	3060772.3	93.28	29.5	120.4	
Y	89	He	599857.99	0.6	649886.7	92.3	29.5	120.4	
Tb	159	No Gas	9345759.86	4.7	8413567.03	111.08	29.5	120.4	
Tb	159	He	3298458.32	0.5	3319571.76	99.36	29.5	120.4	
Bi	209	No Gas	4968974.22	4.5	4391152.66	113.16	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG22IMW1
File Name	046_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:20:29 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.761	ppb	5.9	13084.08	50	19.9	79.5	120.4	
B	11	6	No Gas	511.171	ppb	6.5	88024.26	500	20.45	79.5	120.4	
Na	23	45	He	7770.666	ppb	3.9	177138.59	7500	20.72	79.5	120.4	
Mg	24	45	He	5528.848	ppb	4.6	63731.62	5000	22.12	79.5	120.4	
Al	27	45	He	2063.058	ppb	3.1	9265.51	2000	20.63	79.5	120.4	
Si	28	45	H2	1017.196	ppb	3.8	9423.57	1000	20.34	79.5	120.4	
K	39	45	He	10442.851	ppb	4.2	121174.35	10000	20.89	79.5	120.4	
Ca	40	45	H2	2584.102	ppb	0.8	211952.05	2500	20.67	79.5	120.4	
V	51	89	He	522.833	ppb	4.8	88234.76	500	20.91	79.5	120.4	
Cr	52	89	He	212.981	ppb	4.3	43836.86	200	21.3	79.5	120.4	
Mn	55	89	He	536.550	ppb	4.3	52167.58	500	21.46	79.5	120.4	
Fe	56	89	H2	1059.051	ppb	0.3	353506.96	1000	21.18	79.5	120.4	
Co	59	89	He	543.631	ppb	3.9	192477.10	500	21.75	79.5	120.4	
Ni	60	89	He	549.355	ppb	3.7	52529.27	500	21.97	79.5	120.4	
Cu	63	89	He	268.639	ppb	4.4	72576.45	250	21.49	79.5	120.4	
Zn	66	89	He	556.644	ppb	5.0	19756.84	500	22.27	79.5	120.4	
As	75	89	He	107.953	ppb	4.1	3277.08	100	21.59	79.5	120.4	
Se	78	89	H2	102.068	ppb	2.5	1668.36	100	20.41	79.5	120.4	
Sr	88	89	He	527.687	ppb	4.4	79734.78	500	21.11	79.5	120.4	
Mo	95	89	He	106.818	ppb	4.4	18298.39	100	21.36	79.5	120.4	
Ag	107	89	He	54.886	ppb	4.8	31862.66	50	21.95	79.5	120.4	
Cd	111	89	He	277.896	ppb	4.0	20854.28	250	22.23	79.5	120.4	
Sn	118	159	He	511.285	ppb	3.8	87334.55	500	20.45	79.5	120.4	
Sb	121	159	No Gas	100.855	ppb	5.3	150414.62	100	20.17	79.5	120.4	
Ba	137	159	No Gas	1969.329	ppb	5.1	1150163.41	2000	19.69	79.5	120.4	
W	182	159	No Gas	101.050	ppb	6.3	113288.64	100	20.21	79.5	120.4	
Tl	205	209	No Gas	105.116	ppb	4.6	259902.23	100	21.02	79.5	120.4	
Pb	208	209	No Gas	104.347	ppb	5.4	357300.23	100	20.87	79.5	120.4	
Th	232	209	No Gas	100.094	ppb	6.4	348985.60	100	20.02	79.5	120.4	
U	238	209	No Gas	103.457	ppb	6.3	339944.37	100	20.69	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1704625.23	2.6	1745272.14	97.67	29.5	120.4	
Sc	45	No Gas	3843530.48	2.3	3932582.94	97.74	29.5	120.4	
Sc	45	H2	441941.32	1.7	485269.91	91.07	29.5	120.4	
Sc	45	He	87631.60	3.3	96164.21	91.13	29.5	120.4	
Ge	72	No Gas	868568.63	2.0	877152.82	99.02	29.5	120.4	
Ge	72	H2	164583.18	1.1	182501.5	90.18	29.5	120.4	
Ge	72	He	68111.51	3.0	74687.17	91.2	29.5	120.4	
Y	89	H2	2872327.67	0.9	3060772.3	93.84	29.5	120.4	
Y	89	He	591083.69	3.5	649886.7	90.95	29.5	120.4	
Tb	159	No Gas	9116821.32	2.3	8413567.03	108.36	29.5	120.4	
Tb	159	He	3240282.83	3.1	3319571.76	97.61	29.5	120.4	
Bi	209	No Gas	4816820.03	2.4	4391152.66	109.69	29.5	120.4	

Sample Report

Sample Name SN5923-001

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:23:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.266	ppb	8.5	362.24	100	
11	B	6	No Gas	84.264	ppb	8.7	64884.22	1000	
23	Na	45	He	162433.471	ppb	3.1	16057535.83	200000	
24	Mg	45	He	13444.777	ppb	3.0	738140.24	200000	
27	Al	45	He	381.971	ppb	2.0	8278.23	200000	
28	Si	45	H2	35868.838	ppb	1.8	1488855.64	10000	>LDR
39	K	45	He	44141.871	ppb	3.2	2264339.95	200000	
40	Ca	45	H2	59831.423	ppb	1.5	23141388.54	200000	
51	V	89	He	7.292	ppb	3.4	6263.84	1000	
52	Cr	89	He	7.127	ppb	2.9	7245.89	2000	
55	Mn	89	He	324.101	ppb	3.3	154413.31	2000	
56	Fe	89	H2	2018.663	ppb	0.9	3209024.82	100000	
59	Co	89	He	2.011	ppb	2.3	3511.82	1000	
60	Ni	89	He	8.017	ppb	0.7	3980.72	1000	
63	Cu	89	He	53.450	ppb	4.4	70775.23	2000	
66	Zn	89	He	79.963	ppb	3.8	13935.19	2000	
75	As	89	He	15.272	ppb	3.2	2273.44	1000	
78	Se	89	H2	0.900	ppb	8.1	71.00	1000	
88	Sr	89	He	308.690	ppb	2.9	228625.67	2000	
95	Mo	89	He	27.013	ppb	3.8	22677.23	1000	
107	Ag	89	He	0.057	ppb	5.2	164.45	100	
111	Cd	89	He	2.841	ppb	3.4	1045.24	1000	
118	Sn	159	He	1.041	ppb	13.8	926.73	1000	
121	Sb	159	No Gas	0.786	ppb	8.5	5640.73	1000	
137	Ba	159	No Gas	73.540	ppb	7.6	205502.86	2000	
182	W	159	No Gas	0.524	ppb	9.4	2843.49	1000	
205	Tl	209	No Gas	0.584	ppb	4.1	6989.75	1000	
208	Pb	209	No Gas	13.389	ppb	7.7	212097.71	2000	
232	Th	209	No Gas	0.953	ppb	3.4	15517.06	1000	
238	U	209	No Gas	3.459	ppb	7.2	52585.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1518616.35	3.5	1745272.14	87.01	29.5	120.4	
Sc	45	No Gas	3669913.71	3.2	3932582.94	93.32	29.5	120.4	
Sc	45	H2	418333.48	0.7	485269.91	86.21	29.5	120.4	
Sc	45	He	84524.82	1.8	96164.21	87.9	29.5	120.4	
Ge	72	No Gas	811821.81	3.3	877152.82	92.55	29.5	120.4	
Ge	72	H2	153155.45	0.7	182501.5	83.92	29.5	120.4	
Ge	72	He	65990.76	1.1	74687.17	88.36	29.5	120.4	
Y	89	H2	2752138.47	1.0	3060772.3	89.92	29.5	120.4	
Y	89	He	579066.31	1.5	649886.7	89.1	29.5	120.4	
Tb	159	No Gas	8730979.10	3.4	8413567.03	103.77	29.5	120.4	
Tb	159	He	3205633.50	1.6	3319571.76	96.57	29.5	120.4	
Bi	209	No Gas	4458703.39	3.4	4391152.66	101.54	29.5	120.4	

Sample Report

Sample Name PBSNG23IMS1

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:25:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.010	ppb	N/A	54.45	100	
11	B	6	No Gas	14.984	ppb	9.1	4353.02	1000	
23	Na	45	He	319.605	ppb	11.9	24972.89	200000	
24	Mg	45	He	19.795	ppb	13.8	1149.03	200000	
27	Al	45	He	14.703	ppb	22.5	82.23	200000	
28	Si	45	H2	51.535	ppb	9.6	951.09	10000	
39	K	45	He	51.257	ppb	49.3	11351.13	200000	
40	Ca	45	H2	122.999	ppb	5.6	10767.80	200000	
51	V	89	He	4.236	ppb	8.5	983.41	1000	
52	Cr	89	He	0.743	ppb	3.1	224.63	2000	
55	Mn	89	He	1.641	ppb	10.2	184.64	2000	
56	Fe	89	H2	23.981	ppb	3.4	10228.48	100000	
59	Co	89	He	0.104	ppb	55.0	60.00	1000	
60	Ni	89	He	0.068	ppb	738.1	255.57	1000	
63	Cu	89	He	1.276	ppb	9.2	477.80	2000	
66	Zn	89	He	9.286	ppb	5.6	416.69	2000	
75	As	89	He	0.205	ppb	49.8	10.33	1000	
78	Se	89	H2	0.085	ppb	96.4	2.00	1000	
88	Sr	89	He	0.501	ppb	6.8	83.33	2000	
95	Mo	89	He	0.564	ppb	30.5	102.23	1000	
107	Ag	89	He	0.030	ppb	64.1	21.11	100	
111	Cd	89	He	0.015	ppb	147.8	1.48	1000	
118	Sn	159	He	50.085	ppb	1.5	8798.75	1000	
121	Sb	159	No Gas	0.064	ppb	49.5	136.82	1000	
137	Ba	159	No Gas	0.669	ppb	10.0	413.81	2000	
182	W	159	No Gas	0.133	ppb	68.2	183.54	1000	
205	Tl	209	No Gas	-0.087	ppb	N/A	130.14	1000	
208	Pb	209	No Gas	0.344	ppb	8.1	1461.68	2000	
232	Th	209	No Gas	0.168	ppb	18.8	734.18	1000	
238	U	209	No Gas	0.032	ppb	20.8	106.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1654450.40	4.1	1745272.14	94.8	29.5	120.4	
Sc	45	No Gas	3791865.14	4.3	3932582.94	96.42	29.5	120.4	
Sc	45	H2	438548.56	1.2	485269.91	90.37	29.5	120.4	
Sc	45	He	88769.37	0.5	96164.21	92.31	29.5	120.4	
Ge	72	No Gas	865765.47	4.2	877152.82	98.7	29.5	120.4	
Ge	72	H2	163085.27	1.1	182501.5	89.36	29.5	120.4	
Ge	72	He	68899.94	1.6	74687.17	92.25	29.5	120.4	
Y	89	H2	2854755.78	0.4	3060772.3	93.27	29.5	120.4	
Y	89	He	601228.90	1.1	649886.7	92.51	29.5	120.4	
Tb	159	No Gas	9148401.74	4.0	8413567.03	108.73	29.5	120.4	
Tb	159	He	3312736.30	0.7	3319571.76	99.79	29.5	120.4	
Bi	209	No Gas	4839997.48	4.4	4391152.66	110.22	29.5	120.4	

Sample Report

Sample Name LCSONG23IMS1

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:28:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.934	ppb	6.4	12649.24	100	
11	B	6	No Gas	511.819	ppb	6.8	86650.77	1000	
23	Na	45	He	7700.759	ppb	2.0	178185.40	200000	
24	Mg	45	He	5360.361	ppb	1.5	62704.61	200000	
27	Al	45	He	1951.143	ppb	2.1	8886.38	200000	
28	Si	45	H2	1034.834	ppb	5.2	9420.25	10000	
39	K	45	He	10122.302	ppb	1.0	119449.04	200000	
40	Ca	45	H2	2672.616	ppb	4.3	215534.68	200000	
51	V	89	He	508.665	ppb	0.6	87537.12	1000	
52	Cr	89	He	210.776	ppb	0.5	44229.97	2000	
55	Mn	89	He	519.074	ppb	1.5	51452.42	2000	
56	Fe	89	H2	1074.105	ppb	3.1	355063.02	100000	
59	Co	89	He	528.069	ppb	1.7	190589.38	1000	
60	Ni	89	He	536.301	ppb	2.2	52276.19	1000	
63	Cu	89	He	262.644	ppb	1.0	72344.35	2000	
66	Zn	89	He	541.989	ppb	1.4	19616.63	2000	
75	As	89	He	105.945	ppb	1.8	3278.75	1000	
78	Se	89	H2	101.369	ppb	3.5	1641.02	1000	
88	Sr	89	He	511.151	ppb	0.4	78743.55	2000	
95	Mo	89	He	105.731	ppb	3.6	18460.78	1000	
107	Ag	89	He	54.338	ppb	1.4	32162.19	100	
111	Cd	89	He	264.904	ppb	1.0	20265.25	1000	
118	Sn	159	He	538.501	ppb	1.9	94778.60	1000	
121	Sb	159	No Gas	99.205	ppb	5.6	149432.80	1000	
137	Ba	159	No Gas	1948.934	ppb	6.3	1149397.81	2000	
182	W	159	No Gas	102.561	ppb	6.4	116124.76	1000	
205	Tl	209	No Gas	105.114	ppb	5.4	260033.70	1000	
208	Pb	209	No Gas	103.956	ppb	5.5	356194.55	2000	
232	Th	209	No Gas	103.394	ppb	7.1	360668.51	1000	
238	U	209	No Gas	103.979	ppb	5.7	341914.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1676400.10	3.1	1745272.14	96.05	29.5	120.4	
Sc	45	No Gas	3820247.67	3.0	3932582.94	97.14	29.5	120.4	
Sc	45	H2	434909.82	3.0	485269.91	89.62	29.5	120.4	
Sc	45	He	88799.50	0.3	96164.21	92.34	29.5	120.4	
Ge	72	No Gas	871641.66	2.9	877152.82	99.37	29.5	120.4	
Ge	72	H2	162409.46	2.1	182501.5	88.99	29.5	120.4	
Ge	72	He	69046.50	1.2	74687.17	92.45	29.5	120.4	
Y	89	H2	2845791.92	1.7	3060772.3	92.98	29.5	120.4	
Y	89	He	602034.95	0.8	649886.7	92.64	29.5	120.4	
Tb	159	No Gas	9210789.86	3.0	8413567.03	109.48	29.5	120.4	
Tb	159	He	3336683.22	1.0	3319571.76	100.52	29.5	120.4	
Bi	209	No Gas	4820466.39	2.7	4391152.66	109.78	29.5	120.4	

Sample Report

Sample Name LC2ONG23IMS1

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:31:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.939	ppb	5.9	12618.14	100	
11	B	6	No Gas	523.298	ppb	4.8	88342.94	1000	
23	Na	45	He	7791.092	ppb	3.6	178825.73	200000	
24	Mg	45	He	5435.100	ppb	4.2	63117.24	200000	
27	Al	45	He	1969.873	ppb	5.2	8906.42	200000	
28	Si	45	H2	992.979	ppb	2.9	9229.81	10000	
39	K	45	He	10315.145	ppb	4.1	120672.80	200000	
40	Ca	45	H2	2640.268	ppb	1.4	216994.29	200000	
51	V	89	He	520.017	ppb	3.4	88688.79	1000	
52	Cr	89	He	215.205	ppb	3.5	44753.62	2000	
55	Mn	89	He	535.795	ppb	2.7	52643.96	2000	
56	Fe	89	H2	1071.475	ppb	1.8	362516.62	100000	
59	Co	89	He	538.348	ppb	3.3	192579.32	1000	
60	Ni	89	He	544.779	ppb	3.4	52628.50	1000	
63	Cu	89	He	269.869	ppb	3.6	73665.48	2000	
66	Zn	89	He	543.455	ppb	4.7	19489.75	2000	
75	As	89	He	108.148	ppb	2.4	3317.43	1000	
78	Se	89	H2	101.631	ppb	0.9	1683.86	1000	
88	Sr	89	He	526.805	ppb	3.1	80434.08	2000	
95	Mo	89	He	107.701	ppb	4.6	18635.56	1000	
107	Ag	89	He	54.979	ppb	4.2	32251.37	100	
111	Cd	89	He	272.824	ppb	1.8	20691.44	1000	
118	Sn	159	He	553.875	ppb	2.6	96750.47	1000	
121	Sb	159	No Gas	99.524	ppb	4.3	151676.65	1000	
137	Ba	159	No Gas	1967.947	ppb	4.9	1174340.21	2000	
182	W	159	No Gas	104.516	ppb	4.4	119748.33	1000	
205	Tl	209	No Gas	106.033	ppb	4.2	266578.59	1000	
208	Pb	209	No Gas	104.825	ppb	4.5	364999.21	2000	
232	Th	209	No Gas	105.028	ppb	5.3	372382.08	1000	
238	U	209	No Gas	103.878	ppb	4.7	347137.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1671204.10	2.0	1745272.14	95.76	29.5	120.4	
Sc	45	No Gas	3864886.21	2.5	3932582.94	98.28	29.5	120.4	
Sc	45	H2	442864.38	1.1	485269.91	91.26	29.5	120.4	
Sc	45	He	88247.29	3.1	96164.21	91.77	29.5	120.4	
Ge	72	No Gas	883236.77	2.3	877152.82	100.69	29.5	120.4	
Ge	72	H2	165195.39	0.7	182501.5	90.52	29.5	120.4	
Ge	72	He	68657.66	2.5	74687.17	91.93	29.5	120.4	
Y	89	H2	2911797.71	0.6	3060772.3	95.13	29.5	120.4	
Y	89	He	597012.11	2.8	649886.7	91.86	29.5	120.4	
Tb	159	No Gas	9315915.21	2.7	8413567.03	110.72	29.5	120.4	
Tb	159	He	3312738.35	2.7	3319571.76	99.79	29.5	120.4	
Bi	209	No Gas	4897309.64	2.3	4391152.66	111.53	29.5	120.4	

Sample Report

Sample Name SN6056-005

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:33:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.292	ppb	8.4	382.24	100	
11	B	6	No Gas	43.591	ppb	4.0	8954.20	1000	
23	Na	45	He	137.760	ppb	28.4	20420.40	200000	
24	Mg	45	He	15363.342	ppb	2.2	171354.64	200000	
27	Al	45	He	19985.751	ppb	1.2	87500.44	200000	
28	Si	45	H2	3773.008	ppb	2.2	31948.70	10000	
39	K	45	He	3889.666	ppb	1.9	50596.25	200000	
40	Ca	45	H2	30830.451	ppb	3.8	2396316.96	200000	
51	V	89	He	43.099	ppb	1.8	7531.17	1000	
52	Cr	89	He	51.130	ppb	1.1	10611.42	2000	
55	Mn	89	He	2663.488	ppb	1.2	259724.79	2000	
56	Fe	89	H2	55226.273	ppb	3.8	17948367.32	100000	
59	Co	89	He	15.972	ppb	1.0	5694.94	1000	
60	Ni	89	He	44.976	ppb	3.9	4538.68	1000	
63	Cu	89	He	86.030	ppb	3.1	23401.43	2000	
66	Zn	89	He	327.752	ppb	3.9	11704.20	2000	
75	As	89	He	29.469	ppb	3.8	900.13	1000	
78	Se	89	H2	1.633	ppb	10.9	26.83	1000	
88	Sr	89	He	42.393	ppb	0.2	6432.89	2000	
95	Mo	89	He	14.137	ppb	4.5	2432.53	1000	
107	Ag	89	He	0.220	ppb	8.6	131.12	100	
111	Cd	89	He	1.791	ppb	5.3	135.19	1000	
118	Sn	159	He	45.309	ppb	1.6	7976.00	1000	
121	Sb	159	No Gas	10.163	ppb	3.5	15619.76	1000	
137	Ba	159	No Gas	198.199	ppb	3.4	119022.09	2000	
182	W	159	No Gas	0.612	ppb	23.2	744.19	1000	
205	Tl	209	No Gas	0.860	ppb	10.3	2553.12	1000	
208	Pb	209	No Gas	444.334	ppb	3.3	1574861.40	2000	
232	Th	209	No Gas	8.203	ppb	4.1	29761.79	1000	
238	U	209	No Gas	3.889	ppb	7.0	13228.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1639966.55	2.2	1745272.14	93.97	29.5	120.4	
Sc	45	No Gas	3827452.84	3.0	3932582.94	97.33	29.5	120.4	
Sc	45	H2	420531.92	3.0	485269.91	86.66	29.5	120.4	
Sc	45	He	85502.72	1.5	96164.21	88.91	29.5	120.4	
Ge	72	No Gas	882728.33	2.0	877152.82	100.64	29.5	120.4	
Ge	72	H2	156498.61	2.5	182501.5	85.75	29.5	120.4	
Ge	72	He	67396.30	1.0	74687.17	90.24	29.5	120.4	
Y	89	H2	2816804.91	2.7	3060772.3	92.03	29.5	120.4	
Y	89	He	592478.88	1.0	649886.7	91.17	29.5	120.4	
Tb	159	No Gas	9370452.01	2.4	8413567.03	111.37	29.5	120.4	
Tb	159	He	3318087.03	0.9	3319571.76	99.96	29.5	120.4	
Bi	209	No Gas	4987047.86	2.3	4391152.66	113.57	29.5	120.4	

Sample Report

Sample Name SN6056-006

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:36:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.605	ppb	11.0	647.82	100	
11	B	6	No Gas	97.720	ppb	6.2	16121.68	1000	
23	Na	45	He	613.668	ppb	4.9	29225.66	200000	
24	Mg	45	He	182568.102	ppb	0.8	1979227.83	200000	
27	Al	45	He	36688.299	ppb	1.2	156842.73	200000	
28	Si	45	H2	3967.989	ppb	2.9	33433.56	10000	
39	K	45	He	11613.354	ppb	1.1	127351.07	200000	
40	Ca	45	H2	1260456.075	ppb	3.6	97553522.99	200000	>LDR
51	V	89	He	92.617	ppb	2.5	15699.24	1000	
52	Cr	89	He	106.417	ppb	0.7	21742.73	2000	
55	Mn	89	He	3438.525	ppb	0.8	331237.47	2000	
56	Fe	89	H2	221526.238	ppb	3.2	72802170.44	100000	
59	Co	89	He	19.988	ppb	5.7	7033.44	1000	
60	Ni	89	He	89.150	ppb	1.4	8650.73	1000	
63	Cu	89	He	151.472	ppb	0.3	40615.46	2000	
66	Zn	89	He	994.492	ppb	1.3	34926.81	2000	
75	As	89	He	44.160	ppb	1.4	1330.88	1000	
78	Se	89	H2	2.375	ppb	20.7	39.00	1000	
88	Sr	89	He	765.876	ppb	0.8	114697.86	2000	
95	Mo	89	He	6.281	ppb	4.2	1070.09	1000	
107	Ag	89	He	1.985	ppb	3.9	1145.64	100	
111	Cd	89	He	2.570	ppb	11.8	191.49	1000	
118	Sn	159	He	56.845	ppb	3.4	9741.65	1000	
121	Sb	159	No Gas	8.530	ppb	2.5	12596.81	1000	
137	Ba	159	No Gas	420.045	ppb	4.7	242060.17	2000	
182	W	159	No Gas	1.333	ppb	14.6	1508.45	1000	
205	Tl	209	No Gas	1.186	ppb	5.8	3160.58	1000	
208	Pb	209	No Gas	993.346	ppb	4.2	3279575.10	2000	
232	Th	209	No Gas	11.533	ppb	5.8	38920.61	1000	
238	U	209	No Gas	5.782	ppb	6.2	18327.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1491866.47	2.0	1745272.14	85.48	29.5	120.4	
Sc	45	No Gas	3578642.84	2.2	3932582.94	91	29.5	120.4	
Sc	45	H2	418718.70	1.6	485269.91	86.29	29.5	120.4	
Sc	45	He	83488.92	0.7	96164.21	86.82	29.5	120.4	
Ge	72	No Gas	810618.58	2.1	877152.82	92.41	29.5	120.4	
Ge	72	H2	151418.85	0.5	182501.5	82.97	29.5	120.4	
Ge	72	He	64177.93	0.8	74687.17	85.93	29.5	120.4	
Y	89	H2	2847678.20	1.7	3060772.3	93.04	29.5	120.4	
Y	89	He	585284.78	0.7	649886.7	90.06	29.5	120.4	
Tb	159	No Gas	8994453.68	2.2	8413567.03	106.9	29.5	120.4	
Tb	159	He	3234635.33	1.1	3319571.76	97.44	29.5	120.4	
Bi	209	No Gas	4646693.56	2.4	4391152.66	105.82	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:39:05 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.525	ppb	3.0	29511.98	25	98.1	89.8	110.2	
11	B	6	No Gas	25.648	ppb	2.0	21622.34	25	102.59	89.8	110.2	
23	Na	45	He	5141.282	ppb	1.4	530995.07	5000	102.83	89.8	110.2	
24	Mg	45	He	5059.399	ppb	1.2	281410.06	5000	101.19	89.8	110.2	
27	Al	45	He	492.323	ppb	2.8	10783.31	500	98.46	89.8	110.2	
28	Si	45	H2	459.039	ppb	3.7	19922.92	500	91.81	89.8	110.2	
39	K	45	He	4850.965	ppb	1.4	260860.58	5000	97.02	89.8	110.2	
40	Ca	45	H2	4964.109	ppb	0.7	1959493.55	5000	99.28	89.8	110.2	
51	V	89	He	24.362	ppb	2.1	20704.70	25	97.45	89.8	110.2	
52	Cr	89	He	24.841	ppb	1.7	25531.68	25	99.36	89.8	110.2	
55	Mn	89	He	25.220	ppb	0.9	12249.09	25	100.88	89.8	110.2	
56	Fe	89	H2	4808.130	ppb	0.6	7790711.06	5000	96.16	89.8	110.2	
59	Co	89	He	24.793	ppb	1.8	43799.63	25	99.17	89.8	110.2	
60	Ni	89	He	25.451	ppb	1.5	12324.76	25	101.8	89.8	110.2	
63	Cu	89	He	25.116	ppb	1.6	33914.18	25	100.46	89.8	110.2	
66	Zn	89	He	25.433	ppb	3.2	4565.36	25	101.73	89.8	110.2	
75	As	89	He	24.567	ppb	3.2	3719.24	25	98.27	89.8	110.2	
78	Se	89	H2	23.827	ppb	0.4	1902.38	25	95.31	89.8	110.2	
88	Sr	89	He	23.940	ppb	0.6	18050.22	25	95.76	89.8	110.2	
95	Mo	89	He	25.094	ppb	1.3	21439.68	25	100.38	89.8	110.2	
107	Ag	89	He	25.900	ppb	2.0	75001.58	25	103.6	89.8	110.2	
111	Cd	89	He	25.412	ppb	1.4	9511.95	25	101.65	89.8	110.2	
118	Sn	159	He	23.620	ppb	1.1	20620.84	25	94.48	89.8	110.2	
121	Sb	159	No Gas	23.835	ppb	1.9	174714.51	25	95.34	89.8	110.2	
137	Ba	159	No Gas	24.197	ppb	3.7	69471.20	25	96.79	89.8	110.2	
182	W	159	No Gas	24.612	ppb	2.9	135622.16	25	98.45	89.8	110.2	
205	Tl	209	No Gas	24.788	ppb	1.9	302807.82	25	99.15	89.8	110.2	
208	Pb	209	No Gas	25.087	ppb	2.3	424469.83	25	100.35	89.8	110.2	
232	Th	209	No Gas	25.016	ppb	2.6	431065.57	25	100.06	89.8	110.2	
238	U	209	No Gas	25.266	ppb	3.2	410317.68	25	101.06	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1563481.68	1.3	1745272.14	89.58	29.5	120.4	
Sc	45	No Gas	3648115.85	1.0	3932582.94	92.77	29.5	120.4	
Sc	45	H2	426789.75	0.3	485269.91	87.95	29.5	120.4	
Sc	45	He	85440.05	0.9	96164.21	88.85	29.5	120.4	
Ge	72	No Gas	837147.90	1.5	877152.82	95.44	29.5	120.4	
Ge	72	H2	159228.65	1.4	182501.5	87.25	29.5	120.4	
Ge	72	He	67707.28	1.0	74687.17	90.65	29.5	120.4	
Y	89	H2	2806377.45	0.1	3060772.3	91.69	29.5	120.4	
Y	89	He	589136.50	0.8	649886.7	90.65	29.5	120.4	
Tb	159	No Gas	8955820.14	0.8	8413567.03	106.44	29.5	120.4	
Tb	159	He	3303684.15	1.1	3319571.76	99.52	29.5	120.4	
Bi	209	No Gas	4757557.39	1.0	4391152.66	108.34	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 2:41:42 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.060	ppb	59.6	130.01	0.2	
11	B	6	No Gas	1.294	ppb	17.6	2885.95	4	
23	Na	45	He	-51.392	ppb	N/A	12843.34	200	
24	Mg	45	He	-1.285	ppb	N/A	835.65	20	
27	Al	45	He	0.960	ppb	28.5	36.67	20	
28	Si	45	H2	-0.370	ppb	N/A	483.88	100	
39	K	45	He	-2.718	ppb	N/A	10517.52	200	
40	Ca	45	H2	13.764	ppb	6.5	6331.66	20	Failed DoD
51	V	89	He	-0.149	ppb	N/A	130.01	1	
52	Cr	89	He	-0.014	ppb	N/A	53.99	1	
55	Mn	89	He	0.085	ppb	5.9	63.99	0.4	
56	Fe	89	H2	6.964	ppb	1.9	13745.47	20	
59	Co	89	He	0.015	ppb	56.7	48.89	0.2	
60	Ni	89	He	-0.265	ppb	N/A	120.01	0.4	Failed DoD
63	Cu	89	He	0.048	ppb	47.6	192.23	0.6	
66	Zn	89	He	0.100	ppb	153.4	100.01	2	
75	As	89	He	0.005	ppb	337.4	4.67	1	
78	Se	89	H2	0.017	ppb	63.6	2.00	1	
88	Sr	89	He	0.019	ppb	63.6	21.11	1	
95	Mo	89	He	0.080	ppb	29.8	73.34	1	
107	Ag	89	He	0.013	ppb	9.8	42.22	0.2	
111	Cd	89	He	0.014	ppb	42.3	5.56	0.2	
118	Sn	159	He	0.074	ppb	23.4	113.34	1	
121	Sb	159	No Gas	0.029	ppb	16.7	250.28	0.2	
137	Ba	159	No Gas	0.039	ppb	39.6	133.48	0.4	
182	W	159	No Gas	0.067	ppb	22.0	400.45	1	
205	Tl	209	No Gas	0.001	ppb	709.2	347.06	0.2	
208	Pb	209	No Gas	0.056	ppb	5.8	1218.06	0.2	
232	Th	209	No Gas	0.056	ppb	9.5	1114.64	1	
238	U	209	No Gas	0.020	ppb	27.2	327.04	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1611826.18	2.3	1745272.14	92.35	29.5	120.4	
Sc	45	No Gas	3744863.92	3.5	3932582.94	95.23	29.5	120.4	
Sc	45	H2	435672.39	2.5	485269.91	89.78	29.5	120.4	
Sc	45	He	87608.57	1.3	96164.21	91.1	29.5	120.4	
Ge	72	No Gas	848547.83	2.9	877152.82	96.74	29.5	120.4	
Ge	72	H2	161330.54	3.3	182501.5	88.4	29.5	120.4	
Ge	72	He	69039.97	1.8	74687.17	92.44	29.5	120.4	
Y	89	H2	2843969.42	2.0	3060772.3	92.92	29.5	120.4	
Y	89	He	598297.01	1.0	649886.7	92.06	29.5	120.4	
Tb	159	No Gas	8948993.48	3.5	8413567.03	106.36	29.5	120.4	
Tb	159	He	3280519.74	1.5	3319571.76	98.82	29.5	120.4	
Bi	209	No Gas	4761647.57	4.0	4391152.66	108.44	29.5	120.4	

Sample Report

Sample Name SN6056-007

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:44:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.791	ppb	8.6	466.69	100	
11	B	6	No Gas	53.630	ppb	7.6	9726.92	1000	
23	Na	45	He	443.119	ppb	3.1	25825.24	200000	
24	Mg	45	He	70982.533	ppb	1.2	767783.51	200000	
27	Al	45	He	15317.395	ppb	1.4	65297.51	200000	
28	Si	45	H2	3457.689	ppb	3.6	28283.20	10000	
39	K	45	He	4331.056	ppb	1.9	53704.47	200000	
40	Ca	45	H2	1946365.570	ppb	2.2	145977330.05	200000	>LDR
51	V	89	He	63.435	ppb	4.8	10907.94	1000	
52	Cr	89	He	147.514	ppb	1.9	30332.13	2000	
55	Mn	89	He	4189.673	ppb	1.5	406556.14	2000	
56	Fe	89	H2	450337.451	ppb	2.1	144600650.56	100000	
59	Co	89	He	41.649	ppb	4.5	14737.74	1000	
60	Ni	89	He	154.522	ppb	1.8	14925.07	1000	
63	Cu	89	He	278.012	ppb	2.5	74977.75	2000	
66	Zn	89	He	954.977	ppb	2.3	33785.07	2000	
75	As	89	He	61.654	ppb	1.9	1870.00	1000	
78	Se	89	H2	1.984	ppb	10.7	32.00	1000	
88	Sr	89	He	1206.564	ppb	1.1	182029.54	2000	
95	Mo	89	He	29.257	ppb	0.5	5006.66	1000	
107	Ag	89	He	1.395	ppb	6.5	812.28	100	
111	Cd	89	He	3.038	ppb	8.0	227.78	1000	
118	Sn	159	He	80.574	ppb	2.4	13753.03	1000	
121	Sb	159	No Gas	18.889	ppb	7.3	27244.61	1000	
137	Ba	159	No Gas	266.587	ppb	7.0	150419.93	2000	
182	W	159	No Gas	2.752	ppb	9.4	3013.74	1000	
205	Tl	209	No Gas	1.065	ppb	2.7	2813.49	1000	
208	Pb	209	No Gas	1944.119	ppb	7.0	6286888.96	2000	
232	Th	209	No Gas	6.395	ppb	11.4	21184.87	1000	
238	U	209	No Gas	8.284	ppb	7.0	25728.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1508676.55	2.8	1745272.14	86.44	29.5	120.4	
Sc	45	No Gas	3559230.48	3.8	3932582.94	90.51	29.5	120.4	
Sc	45	H2	405682.03	1.4	485269.91	83.6	29.5	120.4	
Sc	45	He	83243.85	1.1	96164.21	86.56	29.5	120.4	
Ge	72	No Gas	807294.45	3.5	877152.82	92.04	29.5	120.4	
Ge	72	H2	147542.98	1.8	182501.5	80.84	29.5	120.4	
Ge	72	He	64242.53	1.5	74687.17	86.02	29.5	120.4	
Y	89	H2	2781796.75	1.0	3060772.3	90.89	29.5	120.4	
Y	89	He	589632.71	1.6	649886.7	90.73	29.5	120.4	
Tb	159	No Gas	8813836.40	3.5	8413567.03	104.76	29.5	120.4	
Tb	159	He	3226400.05	1.3	3319571.76	97.19	29.5	120.4	
Bi	209	No Gas	4556266.57	3.7	4391152.66	103.76	29.5	120.4	

Sample Report

Sample Name SN6056-008

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:47:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.327	ppb	26.0	135.56	100	
11	B	6	No Gas	25.152	ppb	3.3	5802.49	1000	
23	Na	45	He	-168.708	ppb	N/A	14567.08	200000	
24	Mg	45	He	3078.858	ppb	1.9	35717.80	200000	
27	Al	45	He	4725.654	ppb	1.7	21095.01	200000	
28	Si	45	H2	2404.674	ppb	1.7	20607.71	10000	
39	K	45	He	1085.546	ppb	2.2	22033.84	200000	
40	Ca	45	H2	23974.765	ppb	0.9	1870699.76	200000	
51	V	89	He	13.431	ppb	5.8	2542.55	1000	
52	Cr	89	He	14.668	ppb	0.5	3117.12	2000	
55	Mn	89	He	537.049	ppb	1.1	52803.10	2000	
56	Fe	89	H2	29266.867	ppb	1.1	9513236.34	100000	
59	Co	89	He	5.136	ppb	5.2	1860.26	1000	
60	Ni	89	He	22.358	ppb	5.3	2399.18	1000	
63	Cu	89	He	59.879	ppb	1.3	16458.06	2000	
66	Zn	89	He	647.534	ppb	0.6	23232.22	2000	
75	As	89	He	67.085	ppb	1.7	2061.05	1000	
78	Se	89	H2	1.846	ppb	11.8	30.17	1000	
88	Sr	89	He	35.511	ppb	0.5	5432.38	2000	
95	Mo	89	He	10.310	ppb	5.2	1790.18	1000	
107	Ag	89	He	0.264	ppb	20.2	157.79	100	
111	Cd	89	He	2.462	ppb	22.6	187.04	1000	
118	Sn	159	He	43.406	ppb	4.1	7681.36	1000	
121	Sb	159	No Gas	11.488	ppb	3.7	17514.35	1000	
137	Ba	159	No Gas	75.161	ppb	8.0	44755.11	2000	
182	W	159	No Gas	0.339	ppb	27.2	423.82	1000	
205	Tl	209	No Gas	0.161	ppb	2.0	764.21	1000	
208	Pb	209	No Gas	1721.425	ppb	4.9	6075020.49	2000	
232	Th	209	No Gas	1.567	ppb	9.0	5787.84	1000	
238	U	209	No Gas	3.566	ppb	5.3	12086.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1594587.89	2.6	1745272.14	91.37	29.5	120.4	
Sc	45	No Gas	3790755.99	3.3	3932582.94	96.39	29.5	120.4	
Sc	45	H2	421817.46	1.1	485269.91	86.92	29.5	120.4	
Sc	45	He	87124.02	0.9	96164.21	90.6	29.5	120.4	
Ge	72	No Gas	857821.87	2.7	877152.82	97.8	29.5	120.4	
Ge	72	H2	155989.40	0.6	182501.5	85.47	29.5	120.4	
Ge	72	He	68008.50	1.2	74687.17	91.06	29.5	120.4	
Y	89	H2	2814966.79	0.5	3060772.3	91.97	29.5	120.4	
Y	89	He	597176.71	1.0	649886.7	91.89	29.5	120.4	
Tb	159	No Gas	9298201.94	3.0	8413567.03	110.51	29.5	120.4	
Tb	159	He	3333269.22	1.2	3319571.76	100.41	29.5	120.4	
Bi	209	No Gas	4968150.01	2.9	4391152.66	113.14	29.5	120.4	

Sample Report

Sample Name SN6056-009

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:49:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.305	ppb	29.3	336.68	100	
11	B	6	No Gas	41.543	ppb	36.4	7528.96	1000	
23	Na	45	He	-36.280	ppb	N/A	18017.78	200000	
24	Mg	45	He	16806.528	ppb	9.0	199140.69	200000	
27	Al	45	He	25518.027	ppb	9.9	118684.38	200000	
28	Si	45	H2	3619.133	ppb	2.8	30232.18	10000	
39	K	45	He	5218.194	ppb	10.9	68358.31	200000	
40	Ca	45	H2	47415.060	ppb	1.4	3634549.35	200000	
51	V	89	He	53.154	ppb	10.4	9857.11	1000	
52	Cr	89	He	46.774	ppb	10.0	10373.96	2000	
55	Mn	89	He	834.358	ppb	9.0	86950.10	2000	
56	Fe	89	H2	59866.104	ppb	1.8	19301296.24	100000	
59	Co	89	He	22.296	ppb	12.1	8480.94	1000	
60	Ni	89	He	73.362	ppb	9.3	7745.77	1000	
63	Cu	89	He	146.346	ppb	9.6	42436.46	2000	
66	Zn	89	He	978.885	ppb	10.3	37167.24	2000	
75	As	89	He	44.343	ppb	13.5	1443.24	1000	
78	Se	89	H2	2.753	ppb	5.5	44.33	1000	
88	Sr	89	He	60.203	ppb	9.1	9757.11	2000	
95	Mo	89	He	10.374	ppb	10.2	1907.98	1000	
107	Ag	89	He	0.394	ppb	14.5	247.79	100	
111	Cd	89	He	3.914	ppb	6.1	315.93	1000	
118	Sn	159	He	46.868	ppb	7.2	8601.96	1000	
121	Sb	159	No Gas	7.092	ppb	34.8	9918.19	1000	
137	Ba	159	No Gas	168.877	ppb	35.5	92135.58	2000	
182	W	159	No Gas	0.527	ppb	24.7	590.68	1000	
205	Tl	209	No Gas	1.165	ppb	42.5	3033.78	1000	
208	Pb	209	No Gas	2056.931	ppb	36.1	6644183.70	2000	
232	Th	209	No Gas	8.568	ppb	31.4	28432.21	1000	
238	U	209	No Gas	3.417	ppb	33.1	10653.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455109.48	9.3	1745272.14	83.37	29.5	120.4	
Sc	45	No Gas	3596061.45	11.0	3932582.94	91.44	29.5	120.4	
Sc	45	H2	414523.95	1.4	485269.91	85.42	29.5	120.4	
Sc	45	He	91208.63	6.5	96164.21	94.85	29.5	120.4	
Ge	72	No Gas	803218.64	9.9	877152.82	91.57	29.5	120.4	
Ge	72	H2	155160.36	0.6	182501.5	85.02	29.5	120.4	
Ge	72	He	71342.15	6.0	74687.17	95.52	29.5	120.4	
Y	89	H2	2792972.41	1.4	3060772.3	91.25	29.5	120.4	
Y	89	He	635203.81	5.8	649886.7	97.74	29.5	120.4	
Tb	159	No Gas	8717398.41	11.0	8413567.03	103.61	29.5	120.4	
Tb	159	He	3469144.36	5.8	3319571.76	104.51	29.5	120.4	
Bi	209	No Gas	4668436.81	11.8	4391152.66	106.31	29.5	120.4	

Sample Report

Sample Name SN6056-009L

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:52:25 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.816	ppb	25.3	145.56	100	
11	B	6	No Gas	60.542	ppb	14.4	3797.30	1000	
23	Na	45	He	-1479.880	ppb	N/A	12235.38	200000	
24	Mg	45	He	17571.476	ppb	0.5	41513.67	200000	
27	Al	45	He	26825.278	ppb	1.8	24457.17	200000	
28	Si	45	H2	3289.457	ppb	4.7	6408.67	10000	
39	K	45	He	5674.802	ppb	3.1	23033.22	200000	
40	Ca	45	H2	43810.844	ppb	1.6	732263.68	200000	
51	V	89	He	52.096	ppb	4.2	2078.01	1000	
52	Cr	89	He	49.955	ppb	2.0	2195.78	2000	
55	Mn	89	He	907.628	ppb	1.2	18285.85	2000	
56	Fe	89	H2	55932.749	ppb	0.8	3825082.84	100000	
59	Co	89	He	23.238	ppb	6.1	1726.90	1000	
60	Ni	89	He	75.772	ppb	4.3	1745.73	1000	
63	Cu	89	He	162.200	ppb	4.2	9185.58	2000	
66	Zn	89	He	1153.858	ppb	0.9	8530.67	2000	
75	As	89	He	47.925	ppb	7.1	305.04	1000	
78	Se	89	H2	2.828	ppb	7.1	10.17	1000	
88	Sr	89	He	67.649	ppb	1.9	2122.47	2000	
95	Mo	89	He	11.477	ppb	3.3	411.13	1000	
107	Ag	89	He	0.510	ppb	19.8	64.45	100	
111	Cd	89	He	5.031	ppb	3.0	78.52	1000	
118	Sn	159	He	51.093	ppb	3.7	1856.87	1000	
121	Sb	159	No Gas	8.239	ppb	10.7	2533.03	1000	
137	Ba	159	No Gas	201.226	ppb	12.4	23844.77	2000	
182	W	159	No Gas	0.758	ppb	37.5	206.90	1000	
205	Tl	209	No Gas	0.772	ppb	34.8	740.85	1000	
208	Pb	209	No Gas	2473.675	ppb	10.6	1731416.70	2000	
232	Th	209	No Gas	9.269	ppb	15.0	6742.69	1000	
238	U	209	No Gas	3.910	ppb	16.5	2619.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1620784.74	5.4	1745272.14	92.87	29.5	120.4	
Sc	45	No Gas	3902061.35	7.4	3932582.94	99.22	29.5	120.4	
Sc	45	H2	451473.05	1.0	485269.91	93.04	29.5	120.4	
Sc	45	He	88984.47	1.0	96164.21	92.53	29.5	120.4	
Ge	72	No Gas	880538.46	6.1	877152.82	100.39	29.5	120.4	
Ge	72	H2	168611.83	1.2	182501.5	92.39	29.5	120.4	
Ge	72	He	70311.40	0.8	74687.17	94.14	29.5	120.4	
Y	89	H2	2960157.34	1.0	3060772.3	96.71	29.5	120.4	
Y	89	He	611337.44	0.9	649886.7	94.07	29.5	120.4	
Tb	159	No Gas	9290723.96	7.5	8413567.03	110.43	29.5	120.4	
Tb	159	He	3353029.43	0.5	3319571.76	101.01	29.5	120.4	
Bi	209	No Gas	4949933.98	8.1	4391152.66	112.73	29.5	120.4	

Sample Report

Sample Name SN6056-009A

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:55:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	12.320	ppb	8.6	3028.20	100	
11	B	6	No Gas	256.349	ppb	8.1	41629.70	1000	
23	Na	45	He	10755.267	ppb	1.4	242869.31	200000	
24	Mg	45	He	17924.945	ppb	1.3	208626.11	200000	
27	Al	45	He	26624.503	ppb	1.0	121712.36	200000	
28	Si	45	H2	8169.603	ppb	3.8	70698.92	10000	
39	K	45	He	15404.368	ppb	1.8	177075.11	200000	
40	Ca	45	H2	43076.447	ppb	4.0	3450787.73	200000	
51	V	89	He	105.919	ppb	0.5	18847.65	1000	
52	Cr	89	He	98.608	ppb	2.4	21193.35	2000	
55	Mn	89	He	882.156	ppb	1.9	89394.22	2000	
56	Fe	89	H2	54140.114	ppb	3.4	18281440.38	100000	
59	Co	89	He	33.266	ppb	5.9	12295.12	1000	
60	Ni	89	He	98.186	ppb	0.9	9996.12	1000	
63	Cu	89	He	182.263	ppb	2.0	51370.75	2000	
66	Zn	89	He	1110.509	ppb	2.7	41006.69	2000	
75	As	89	He	96.041	ppb	5.3	3038.67	1000	
78	Se	89	H2	51.092	ppb	4.6	850.49	1000	
88	Sr	89	He	113.061	ppb	1.2	17815.43	2000	
95	Mo	89	He	63.322	ppb	3.5	11306.17	1000	
107	Ag	89	He	11.627	ppb	0.3	7039.85	100	
111	Cd	89	He	15.181	ppb	3.6	1188.22	1000	
118	Sn	159	He	99.038	ppb	2.8	17633.22	1000	
121	Sb	159	No Gas	18.904	ppb	8.1	28331.55	1000	
137	Ba	159	No Gas	213.537	ppb	6.8	125235.29	2000	
182	W	159	No Gas	52.998	ppb	6.1	59686.47	1000	
205	Tl	209	No Gas	12.077	ppb	7.2	30169.36	1000	
208	Pb	209	No Gas	2354.763	ppb	7.2	8058815.57	2000	
232	Th	209	No Gas	20.895	ppb	5.3	73023.08	1000	
238	U	209	No Gas	14.728	ppb	8.0	48404.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573877.34	3.6	1745272.14	90.18	29.5	120.4	
Sc	45	No Gas	3829564.74	3.6	3932582.94	97.38	29.5	120.4	
Sc	45	H2	433453.72	2.7	485269.91	89.32	29.5	120.4	
Sc	45	He	89273.66	0.5	96164.21	92.83	29.5	120.4	
Ge	72	No Gas	870279.64	2.6	877152.82	99.22	29.5	120.4	
Ge	72	H2	160370.37	2.4	182501.5	87.87	29.5	120.4	
Ge	72	He	69358.74	0.8	74687.17	92.87	29.5	120.4	
Y	89	H2	2926365.09	2.6	3060772.3	95.61	29.5	120.4	
Y	89	He	615601.04	1.1	649886.7	94.72	29.5	120.4	
Tb	159	No Gas	9158425.14	3.0	8413567.03	108.85	29.5	120.4	
Tb	159	He	3367550.19	0.9	3319571.76	101.45	29.5	120.4	
Bi	209	No Gas	4821200.51	3.3	4391152.66	109.79	29.5	120.4	

Sample Report

Sample Name SN6056-009S

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 2:57:46 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.400	ppb	6.6	11804.08	100	
11	B	6	No Gas	530.990	ppb	6.5	83039.55	1000	
23	Na	45	He	7345.162	ppb	0.9	164534.31	200000	
24	Mg	45	He	34389.293	ppb	0.3	382703.65	200000	
27	Al	45	He	40654.732	ppb	0.7	178069.49	200000	
28	Si	45	H2	3369.681	ppb	5.9	28670.71	10000	
39	K	45	He	16946.044	ppb	0.3	185615.15	200000	
40	Ca	45	H2	179235.275	ppb	1.8	13977520.76	200000	
51	V	89	He	533.995	ppb	0.9	91635.39	1000	
52	Cr	89	He	247.090	ppb	0.6	51699.13	2000	
55	Mn	89	He	1605.312	ppb	0.8	158652.37	2000	
56	Fe	89	H2	67296.543	ppb	1.7	22339903.28	100000	
59	Co	89	He	499.355	ppb	0.1	179754.77	1000	
60	Ni	89	He	571.370	ppb	1.7	55533.07	1000	
63	Cu	89	He	388.856	ppb	0.5	106761.86	2000	
66	Zn	89	He	1524.998	ppb	0.8	54901.24	2000	
75	As	89	He	142.647	ppb	1.4	4401.18	1000	
78	Se	89	H2	93.144	ppb	0.7	1524.18	1000	
88	Sr	89	He	754.266	ppb	0.5	115879.38	2000	
95	Mo	89	He	107.364	ppb	1.9	18698.88	1000	
107	Ag	89	He	49.096	ppb	0.4	28982.78	100	
111	Cd	89	He	245.093	ppb	1.5	18700.03	1000	
118	Sn	159	He	497.587	ppb	1.0	86972.18	1000	
121	Sb	159	No Gas	59.011	ppb	8.6	88175.90	1000	
137	Ba	159	No Gas	2032.822	ppb	7.6	1189570.97	2000	
182	W	159	No Gas	79.713	ppb	8.5	89544.33	1000	
205	Tl	209	No Gas	99.758	ppb	7.1	245313.47	1000	
208	Pb	209	No Gas	2619.590	ppb	7.6	8913709.20	2000	
232	Th	209	No Gas	107.791	ppb	8.8	373679.50	1000	
238	U	209	No Gas	102.533	ppb	8.2	335037.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1550214.78	3.9	1745272.14	88.82	29.5	120.4	
Sc	45	No Gas	3751228.05	4.5	3932582.94	95.39	29.5	120.4	
Sc	45	H2	421777.06	1.4	485269.91	86.92	29.5	120.4	
Sc	45	He	85538.69	0.2	96164.21	88.95	29.5	120.4	
Ge	72	No Gas	853871.17	3.9	877152.82	97.35	29.5	120.4	
Ge	72	H2	154771.03	0.7	182501.5	84.81	29.5	120.4	
Ge	72	He	67001.54	0.9	74687.17	89.71	29.5	120.4	
Y	89	H2	2875592.24	1.1	3060772.3	93.95	29.5	120.4	
Y	89	He	600404.02	0.3	649886.7	92.39	29.5	120.4	
Tb	159	No Gas	9148216.74	4.4	8413567.03	108.73	29.5	120.4	
Tb	159	He	3313108.18	0.4	3319571.76	99.81	29.5	120.4	
Bi	209	No Gas	4795947.44	4.1	4391152.66	109.22	29.5	120.4	

Sample Report

Sample Name SN6056-009P

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:00:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.977	ppb	1.6	12107.68	100	
11	B	6	No Gas	581.571	ppb	1.1	88520.50	1000	
23	Na	45	He	7602.943	ppb	3.3	168089.66	200000	
24	Mg	45	He	42844.589	ppb	2.6	472119.83	200000	
27	Al	45	He	45288.467	ppb	2.8	196502.79	200000	
28	Si	45	H2	5377.341	ppb	7.2	42912.04	10000	
39	K	45	He	18776.523	ppb	3.1	202621.11	200000	
40	Ca	45	H2	139430.279	ppb	7.5	10258653.81	200000	
51	V	89	He	554.674	ppb	3.2	94817.05	1000	
52	Cr	89	He	262.119	ppb	2.9	54636.10	2000	
55	Mn	89	He	1800.490	ppb	3.2	177271.26	2000	
56	Fe	89	H2	77624.064	ppb	7.8	24483031.75	100000	
59	Co	89	He	515.578	ppb	2.4	184917.40	1000	
60	Ni	89	He	592.405	ppb	2.9	57353.88	1000	
63	Cu	89	He	418.901	ppb	3.7	114561.71	2000	
66	Zn	89	He	1449.774	ppb	3.1	52001.11	2000	
75	As	89	He	143.724	ppb	3.0	4417.86	1000	
78	Se	89	H2	97.312	ppb	9.8	1511.85	1000	
88	Sr	89	He	631.723	ppb	2.5	96697.97	2000	
95	Mo	89	He	111.254	ppb	3.0	19303.08	1000	
107	Ag	89	He	51.335	ppb	2.6	30193.28	100	
111	Cd	89	He	249.006	ppb	3.5	18926.63	1000	
118	Sn	159	He	517.991	ppb	2.6	90701.99	1000	
121	Sb	159	No Gas	61.806	ppb	1.1	91458.34	1000	
137	Ba	159	No Gas	2143.942	ppb	0.6	1242212.76	2000	
182	W	159	No Gas	85.782	ppb	0.6	95435.71	1000	
205	Tl	209	No Gas	104.993	ppb	2.5	255281.07	1000	
208	Pb	209	No Gas	2069.232	ppb	1.4	6965120.18	2000	
232	Th	209	No Gas	120.123	ppb	0.5	412147.16	1000	
238	U	209	No Gas	108.655	ppb	0.7	351329.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1509043.63	0.9	1745272.14	86.46	29.5	120.4	
Sc	45	No Gas	3632290.34	2.7	3932582.94	92.36	29.5	120.4	
Sc	45	H2	398915.65	5.2	485269.91	82.2	29.5	120.4	
Sc	45	He	84765.41	2.0	96164.21	88.15	29.5	120.4	
Ge	72	No Gas	833549.51	2.4	877152.82	95.03	29.5	120.4	
Ge	72	H2	149806.61	6.7	182501.5	82.09	29.5	120.4	
Ge	72	He	66856.27	2.0	74687.17	89.52	29.5	120.4	
Y	89	H2	2740040.33	5.7	3060772.3	89.52	29.5	120.4	
Y	89	He	598403.11	2.1	649886.7	92.08	29.5	120.4	
Tb	159	No Gas	9038418.89	3.1	8413567.03	107.43	29.5	120.4	
Tb	159	He	3320230.51	2.0	3319571.76	100.02	29.5	120.4	
Bi	209	No Gas	4735967.83	3.6	4391152.66	107.85	29.5	120.4	

Sample Report

Sample Name SN6056-010

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:03:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.851	ppb	9.6	253.34	100	
11	B	6	No Gas	41.186	ppb	4.9	8012.49	1000	
23	Na	45	He	-91.614	ppb	N/A	15799.58	200000	
24	Mg	45	He	6561.712	ppb	0.8	73540.87	200000	
27	Al	45	He	12025.728	ppb	1.8	52533.74	200000	
28	Si	45	H2	3006.623	ppb	2.7	25925.88	10000	
39	K	45	He	2580.596	ppb	2.1	36985.87	200000	
40	Ca	45	H2	27224.685	ppb	1.5	2147215.47	200000	
51	V	89	He	26.573	ppb	2.1	4757.66	1000	
52	Cr	89	He	22.257	ppb	1.0	4673.27	2000	
55	Mn	89	He	1066.345	ppb	0.7	104359.69	2000	
56	Fe	89	H2	32631.886	ppb	1.9	10735917.83	100000	
59	Co	89	He	10.115	ppb	2.6	3627.43	1000	
60	Ni	89	He	31.765	ppb	2.5	3289.39	1000	
63	Cu	89	He	106.085	ppb	0.4	28931.79	2000	
66	Zn	89	He	483.508	ppb	1.3	17291.20	2000	
75	As	89	He	33.720	ppb	2.2	1033.16	1000	
78	Se	89	H2	2.287	ppb	15.3	37.67	1000	
88	Sr	89	He	43.462	ppb	1.1	6617.39	2000	
95	Mo	89	He	7.331	ppb	7.1	1267.89	1000	
107	Ag	89	He	0.276	ppb	16.9	164.45	100	
111	Cd	89	He	2.168	ppb	8.9	164.08	1000	
118	Sn	159	He	45.089	ppb	2.4	7965.98	1000	
121	Sb	159	No Gas	7.956	ppb	8.7	12189.12	1000	
137	Ba	159	No Gas	129.873	ppb	6.7	77732.25	2000	
182	W	159	No Gas	0.457	ppb	18.4	563.99	1000	
205	Tl	209	No Gas	0.418	ppb	18.2	1431.70	1000	
208	Pb	209	No Gas	1055.260	ppb	7.5	3753534.92	2000	
232	Th	209	No Gas	4.301	ppb	3.4	15754.53	1000	
238	U	209	No Gas	3.544	ppb	4.8	12116.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1535180.84	4.1	1745272.14	87.96	29.5	120.4	
Sc	45	No Gas	3762114.48	3.9	3932582.94	95.67	29.5	120.4	
Sc	45	H2	426425.21	1.1	485269.91	87.87	29.5	120.4	
Sc	45	He	85308.32	1.4	96164.21	88.71	29.5	120.4	
Ge	72	No Gas	863626.44	3.9	877152.82	98.46	29.5	120.4	
Ge	72	H2	158267.13	0.8	182501.5	86.72	29.5	120.4	
Ge	72	He	67646.74	0.7	74687.17	90.57	29.5	120.4	
Y	89	H2	2849700.25	1.2	3060772.3	93.1	29.5	120.4	
Y	89	He	594502.15	0.2	649886.7	91.48	29.5	120.4	
Tb	159	No Gas	9349424.44	3.9	8413567.03	111.12	29.5	120.4	
Tb	159	He	3329650.05	0.0	3319571.76	100.3	29.5	120.4	
Bi	209	No Gas	5013381.33	4.2	4391152.66	114.17	29.5	120.4	

Sample Report

Sample Name SN6056-011

File Name 063SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:05:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.007	ppb	17.8	511.13	100	
11	B	6	No Gas	49.000	ppb	1.4	8930.87	1000	
23	Na	45	He	-7.528	ppb	N/A	17717.30	200000	
24	Mg	45	He	17096.821	ppb	0.4	192795.72	200000	
27	Al	45	He	36372.462	ppb	1.4	161053.65	200000	
28	Si	45	H2	2529.642	ppb	2.2	22215.23	10000	
39	K	45	He	5324.027	ppb	1.0	66169.19	200000	
40	Ca	45	H2	38235.801	ppb	1.0	3061055.72	200000	
51	V	89	He	74.287	ppb	1.8	13138.76	1000	
52	Cr	89	He	55.173	ppb	3.5	11746.77	2000	
55	Mn	89	He	865.577	ppb	1.8	86670.59	2000	
56	Fe	89	H2	67759.507	ppb	0.7	22953854.92	100000	
59	Co	89	He	30.584	ppb	4.3	11171.90	1000	
60	Ni	89	He	80.909	ppb	0.4	8183.79	1000	
63	Cu	89	He	222.359	ppb	1.4	61902.15	2000	
66	Zn	89	He	413.517	ppb	1.3	15142.04	2000	
75	As	89	He	34.749	ppb	5.6	1088.83	1000	
78	Se	89	H2	2.189	ppb	19.3	37.17	1000	
88	Sr	89	He	63.946	ppb	1.3	9958.39	2000	
95	Mo	89	He	9.992	ppb	2.7	1766.85	1000	
107	Ag	89	He	0.321	ppb	15.6	195.56	100	
111	Cd	89	He	2.019	ppb	8.0	156.30	1000	
118	Sn	159	He	44.431	ppb	1.8	7838.12	1000	
121	Sb	159	No Gas	15.011	ppb	2.2	21928.85	1000	
137	Ba	159	No Gas	246.293	ppb	3.1	140660.48	2000	
182	W	159	No Gas	0.291	ppb	17.9	353.73	1000	
205	Tl	209	No Gas	1.005	ppb	3.2	2763.40	1000	
208	Pb	209	No Gas	2937.817	ppb	3.1	9826169.42	2000	
232	Th	209	No Gas	14.250	ppb	3.0	48711.57	1000	
238	U	209	No Gas	5.452	ppb	5.1	17518.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1489269.56	1.4	1745272.14	85.33	29.5	120.4	
Sc	45	No Gas	3628646.62	2.2	3932582.94	92.27	29.5	120.4	
Sc	45	H2	432832.34	0.8	485269.91	89.19	29.5	120.4	
Sc	45	He	86476.62	0.9	96164.21	89.93	29.5	120.4	
Ge	72	No Gas	831684.34	2.5	877152.82	94.82	29.5	120.4	
Ge	72	H2	158861.73	0.4	182501.5	87.05	29.5	120.4	
Ge	72	He	68171.31	1.4	74687.17	91.28	29.5	120.4	
Y	89	H2	2934083.07	0.4	3060772.3	95.86	29.5	120.4	
Y	89	He	608313.02	1.3	649886.7	93.6	29.5	120.4	
Tb	159	No Gas	8909230.35	2.4	8413567.03	105.89	29.5	120.4	
Tb	159	He	3324306.27	1.5	3319571.76	100.14	29.5	120.4	
Bi	209	No Gas	4705670.87	2.8	4391152.66	107.16	29.5	120.4	

Sample Report

Sample Name SN6056-012

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:08:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.192	ppb	4.8	821.16	100	
11	B	6	No Gas	62.085	ppb	7.4	11395.98	1000	
23	Na	45	He	80.346	ppb	8.3	20945.28	200000	
24	Mg	45	He	30795.245	ppb	1.9	372304.31	200000	
27	Al	45	He	58285.906	ppb	1.4	277267.99	200000	
28	Si	45	H2	4306.747	ppb	1.6	38515.35	10000	
39	K	45	He	10231.805	ppb	1.6	126197.29	200000	
40	Ca	45	H2	45903.332	ppb	1.8	3776532.23	200000	
51	V	89	He	115.914	ppb	1.3	21641.69	1000	
52	Cr	89	He	84.609	ppb	1.1	19118.11	2000	
55	Mn	89	He	987.729	ppb	1.1	105153.22	2000	
56	Fe	89	H2	105990.139	ppb	1.8	37076286.65	100000	
59	Co	89	He	52.091	ppb	3.0	20220.47	1000	
60	Ni	89	He	132.581	ppb	3.4	14085.31	1000	
63	Cu	89	He	517.359	ppb	0.5	152950.71	2000	
66	Zn	89	He	932.339	ppb	0.1	36187.76	2000	
75	As	89	He	57.275	ppb	3.6	1905.68	1000	
78	Se	89	H2	1.751	ppb	14.7	30.83	1000	
88	Sr	89	He	81.856	ppb	2.6	13551.62	2000	
95	Mo	89	He	12.550	ppb	5.1	2358.07	1000	
107	Ag	89	He	0.852	ppb	9.5	544.47	100	
111	Cd	89	He	2.136	ppb	10.1	175.93	1000	
118	Sn	159	He	65.642	ppb	0.7	11868.96	1000	
121	Sb	159	No Gas	83.978	ppb	7.1	128614.18	1000	
137	Ba	159	No Gas	308.713	ppb	6.6	185167.89	2000	
182	W	159	No Gas	0.252	ppb	28.7	327.03	1000	
205	Tl	209	No Gas	1.505	ppb	7.2	4121.96	1000	
208	Pb	209	No Gas	10455.689	ppb	5.9	36332442.21	2000	>LDR
232	Th	209	No Gas	21.676	ppb	7.3	76863.58	1000	
238	U	209	No Gas	5.993	ppb	5.9	20001.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1564435.97	2.2	1745272.14	89.64	29.5	120.4	
Sc	45	No Gas	3926158.10	2.5	3932582.94	99.84	29.5	120.4	
Sc	45	H2	444842.76	0.4	485269.91	91.67	29.5	120.4	
Sc	45	He	92910.26	1.2	96164.21	96.62	29.5	120.4	
Ge	72	No Gas	891794.90	2.3	877152.82	101.67	29.5	120.4	
Ge	72	H2	163491.47	1.0	182501.5	89.58	29.5	120.4	
Ge	72	He	71872.83	1.3	74687.17	96.23	29.5	120.4	
Y	89	H2	3030130.54	0.6	3060772.3	99	29.5	120.4	
Y	89	He	646711.90	0.8	649886.7	99.51	29.5	120.4	
Tb	159	No Gas	9366543.68	2.9	8413567.03	111.33	29.5	120.4	
Tb	159	He	3414366.03	0.6	3319571.76	102.86	29.5	120.4	
Bi	209	No Gas	4893237.18	2.9	4391152.66	111.43	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:11:04 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.723	ppb	8.3	30395.92	25	98.89	89.8	110.2	
11	B	6	No Gas	25.211	ppb	8.3	21749.16	25	100.84	89.8	110.2	
23	Na	45	He	5034.855	ppb	1.5	545205.54	5000	100.7	89.8	110.2	
24	Mg	45	He	4938.777	ppb	1.1	287838.54	5000	98.78	89.8	110.2	
27	Al	45	He	468.695	ppb	3.0	10754.37	500	93.74	89.8	110.2	
28	Si	45	H2	454.490	ppb	4.8	20841.52	500	90.9	89.8	110.2	
39	K	45	He	4850.604	ppb	1.5	273290.67	5000	97.01	89.8	110.2	
40	Ca	45	H2	4763.397	ppb	4.2	1986393.42	5000	95.27	89.8	110.2	
51	V	89	He	24.872	ppb	2.7	21921.06	25	99.49	89.8	110.2	
52	Cr	89	He	25.057	ppb	2.4	26714.95	25	100.23	89.8	110.2	
55	Mn	89	He	24.841	ppb	2.2	12515.28	25	99.36	89.8	110.2	
56	Fe	89	H2	4732.672	ppb	4.2	8093739.29	5000	94.65	89.8	110.2	
59	Co	89	He	25.165	ppb	2.5	46118.47	25	100.66	89.8	110.2	
60	Ni	89	He	25.592	ppb	1.5	12856.32	25	102.37	89.8	110.2	
63	Cu	89	He	25.090	ppb	2.3	35144.88	25	100.36	89.8	110.2	
66	Zn	89	He	25.345	ppb	2.0	4720.98	25	101.38	89.8	110.2	
75	As	89	He	24.513	ppb	1.7	3849.96	25	98.05	89.8	110.2	
78	Se	89	H2	23.817	ppb	3.2	2007.39	25	95.27	89.8	110.2	
88	Sr	89	He	24.020	ppb	2.3	18787.87	25	96.08	89.8	110.2	
95	Mo	89	He	24.750	ppb	3.8	21931.55	25	99	89.8	110.2	
107	Ag	89	He	25.619	ppb	2.3	76959.10	25	102.48	89.8	110.2	
111	Cd	89	He	25.110	ppb	2.1	9749.88	25	100.44	89.8	110.2	
118	Sn	159	He	24.050	ppb	2.6	21336.39	25	96.2	89.8	110.2	
121	Sb	159	No Gas	23.469	ppb	9.1	179348.19	25	93.88	89.8	110.2	
137	Ba	159	No Gas	23.612	ppb	9.5	70669.26	25	94.45	89.8	110.2	
182	W	159	No Gas	23.272	ppb	9.0	133708.84	25	93.09	89.8	110.2	
205	Tl	209	No Gas	23.977	ppb	8.1	298492.13	25	95.91	89.8	110.2	
208	Pb	209	No Gas	25.203	ppb	8.7	434483.77	25	100.81	89.8	110.2	
232	Th	209	No Gas	23.912	ppb	10.3	419595.68	25	95.65	89.8	110.2	
238	U	209	No Gas	23.968	ppb	10.8	396321.24	25	95.87	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1601577.15	5.2	1745272.14	91.77	29.5	120.4	
Sc	45	No Gas	4018826.81	5.9	3932582.94	102.19	29.5	120.4	
Sc	45	H2	451179.27	2.5	485269.91	92.97	29.5	120.4	
Sc	45	He	89523.05	1.4	96164.21	93.09	29.5	120.4	
Ge	72	No Gas	902614.49	5.2	877152.82	102.9	29.5	120.4	
Ge	72	H2	168491.33	3.2	182501.5	92.32	29.5	120.4	
Ge	72	He	70052.20	1.3	74687.17	93.79	29.5	120.4	
Y	89	H2	2964183.71	2.7	3060772.3	96.84	29.5	120.4	
Y	89	He	611279.80	1.9	649886.7	94.06	29.5	120.4	
Tb	159	No Gas	9367698.33	5.6	8413567.03	111.34	29.5	120.4	
Tb	159	He	3358314.22	1.9	3319571.76	101.17	29.5	120.4	
Bi	209	No Gas	4861436.89	5.2	4391152.66	110.71	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:13:39 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.078	ppb	45.0	154.45	0.2	
11	B	6	No Gas	0.945	ppb	7.4	2631.45	4	
23	Na	45	He	-78.934	ppb	N/A	10321.91	200	
24	Mg	45	He	-2.022	ppb	N/A	817.86	20	
27	Al	45	He	1.440	ppb	30.6	48.89	20	
28	Si	45	H2	-0.462	ppb	N/A	503.91	100	
39	K	45	He	4.965	ppb	77.3	11252.70	200	
40	Ca	45	H2	6.195	ppb	3.8	3457.22	20	
51	V	89	He	-0.138	ppb	N/A	142.23	1	
52	Cr	89	He	-0.015	ppb	N/A	54.66	1	
55	Mn	89	He	0.042	ppb	33.3	43.99	0.4	
56	Fe	89	H2	7.715	ppb	7.0	15722.92	20	
59	Co	89	He	0.004	ppb	207.1	31.11	0.2	
60	Ni	89	He	-0.224	ppb	N/A	143.34	0.4	Failed DoD
63	Cu	89	He	0.031	ppb	27.1	173.34	0.6	
66	Zn	89	He	0.027	ppb	295.4	88.89	2	
75	As	89	He	0.018	ppb	35.9	7.00	1	
78	Se	89	H2	0.028	ppb	39.5	3.00	1	
88	Sr	89	He	0.005	ppb	310.5	10.00	1	
95	Mo	89	He	0.064	ppb	11.5	61.12	1	
107	Ag	89	He	0.007	ppb	45.9	24.44	0.2	
111	Cd	89	He	0.011	ppb	72.3	4.45	0.2	
118	Sn	159	He	0.072	ppb	21.3	113.34	1	
121	Sb	159	No Gas	0.032	ppb	56.7	280.32	0.2	
137	Ba	159	No Gas	0.088	ppb	118.9	287.00	0.4	
182	W	159	No Gas	0.080	ppb	41.2	490.56	1	
205	Tl	209	No Gas	0.019	ppb	90.0	584.01	0.2	
208	Pb	209	No Gas	0.820	ppb	86.9	14558.16	0.2	Fail All Methods□ Failed DoD
232	Th	209	No Gas	0.093	ppb	21.0	1762.12	1	
238	U	209	No Gas	0.032	ppb	67.2	537.28	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1625461.60	3.0	1745272.14	93.14	29.5	120.4	
Sc	45	No Gas	3975135.83	3.8	3932582.94	101.08	29.5	120.4	
Sc	45	H2	458229.19	2.1	485269.91	94.43	29.5	120.4	
Sc	45	He	90243.24	0.5	96164.21	93.84	29.5	120.4	
Ge	72	No Gas	900020.81	3.1	877152.82	102.61	29.5	120.4	
Ge	72	H2	171756.34	2.6	182501.5	94.11	29.5	120.4	
Ge	72	He	71130.48	0.2	74687.17	95.24	29.5	120.4	
Y	89	H2	2986896.66	2.0	3060772.3	97.59	29.5	120.4	
Y	89	He	614029.30	1.1	649886.7	94.48	29.5	120.4	
Tb	159	No Gas	9149156.39	4.1	8413567.03	108.74	29.5	120.4	
Tb	159	He	3320170.26	0.2	3319571.76	100.02	29.5	120.4	
Bi	209	No Gas	4792366.41	4.1	4391152.66	109.14	29.5	120.4	

Sample Report

Sample Name SN6056-013

File Name 067SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:16:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.288	ppb	10.1	126.67	100	
11	B	6	No Gas	32.456	ppb	6.1	7010.83	1000	
23	Na	45	He	-212.849	ppb	N/A	13528.15	200000	
24	Mg	45	He	3135.939	ppb	1.7	35996.12	200000	
27	Al	45	He	5252.284	ppb	0.4	23208.35	200000	
28	Si	45	H2	2519.557	ppb	3.2	22121.73	10000	
39	K	45	He	1003.616	ppb	4.9	20954.28	200000	
40	Ca	45	H2	34149.411	ppb	2.7	2733046.32	200000	
51	V	89	He	13.992	ppb	1.6	2603.66	1000	
52	Cr	89	He	57.236	ppb	1.9	11809.48	2000	
55	Mn	89	He	273.028	ppb	0.6	26509.99	2000	
56	Fe	89	H2	25756.753	ppb	3.3	8509294.41	100000	
59	Co	89	He	5.860	ppb	10.4	2093.64	1000	
60	Ni	89	He	33.503	ppb	4.3	3426.11	1000	
63	Cu	89	He	169.139	ppb	0.3	45662.12	2000	
66	Zn	89	He	743.469	ppb	1.3	26317.82	2000	
75	As	89	He	48.720	ppb	4.6	1478.58	1000	
78	Se	89	H2	1.730	ppb	6.1	28.83	1000	
88	Sr	89	He	56.899	ppb	2.8	8587.44	2000	
95	Mo	89	He	8.342	ppb	2.6	1430.13	1000	
107	Ag	89	He	0.204	ppb	11.3	121.11	100	
111	Cd	89	He	7.432	ppb	3.1	557.06	1000	
118	Sn	159	He	44.343	ppb	1.3	7760.28	1000	
121	Sb	159	No Gas	23.173	ppb	3.7	34813.93	1000	
137	Ba	159	No Gas	111.856	ppb	4.1	65762.51	2000	
182	W	159	No Gas	0.322	ppb	8.6	400.46	1000	
205	Tl	209	No Gas	0.147	ppb	2.4	720.83	1000	
208	Pb	209	No Gas	836.345	ppb	4.4	2912755.14	2000	
232	Th	209	No Gas	1.951	ppb	5.1	7069.95	1000	
238	U	209	No Gas	9.052	ppb	4.9	30273.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1608511.45	1.7	1745272.14	92.16	29.5	120.4	
Sc	45	No Gas	3854222.53	2.3	3932582.94	98.01	29.5	120.4	
Sc	45	H2	432920.00	2.9	485269.91	89.21	29.5	120.4	
Sc	45	He	86247.37	1.2	96164.21	89.69	29.5	120.4	
Ge	72	No Gas	875560.26	2.6	877152.82	99.82	29.5	120.4	
Ge	72	H2	158736.76	2.1	182501.5	86.98	29.5	120.4	
Ge	72	He	67296.49	1.0	74687.17	90.1	29.5	120.4	
Y	89	H2	2862866.44	3.0	3060772.3	93.53	29.5	120.4	
Y	89	He	589456.20	0.5	649886.7	90.7	29.5	120.4	
Tb	159	No Gas	9171176.04	2.0	8413567.03	109	29.5	120.4	
Tb	159	He	3297933.94	0.3	3319571.76	99.35	29.5	120.4	
Bi	209	No Gas	4901918.88	2.7	4391152.66	111.63	29.5	120.4	

Sample Report

Sample Name SN6056-014

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:18:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.821	ppb	15.3	500.02	100	
11	B	6	No Gas	27.765	ppb	9.1	6203.77	1000	
23	Na	45	He	-112.923	ppb	N/A	16434.25	200000	
24	Mg	45	He	6525.493	ppb	1.2	78167.68	200000	
27	Al	45	He	56678.857	ppb	1.4	264598.55	200000	
28	Si	45	H2	4308.070	ppb	3.3	38775.71	10000	
39	K	45	He	4787.152	ppb	1.7	63847.88	200000	
40	Ca	45	H2	6060.830	ppb	3.2	502553.80	200000	
51	V	89	He	86.743	ppb	2.4	15822.71	1000	
52	Cr	89	He	55.348	ppb	0.5	12191.05	2000	
55	Mn	89	He	209.337	ppb	1.1	21698.71	2000	
56	Fe	89	H2	26124.139	ppb	3.5	8994852.56	100000	
59	Co	89	He	11.341	ppb	3.8	4300.99	1000	
60	Ni	89	He	43.441	ppb	2.5	4664.30	1000	
63	Cu	89	He	42.771	ppb	0.2	12423.74	2000	
66	Zn	89	He	209.213	ppb	3.0	7965.87	2000	
75	As	89	He	9.109	ppb	6.5	298.37	1000	
78	Se	89	H2	2.645	ppb	8.1	45.50	1000	
88	Sr	89	He	33.277	ppb	1.9	5363.46	2000	
95	Mo	89	He	3.264	ppb	7.0	600.04	1000	
107	Ag	89	He	0.585	ppb	10.8	365.57	100	
111	Cd	89	He	2.178	ppb	8.0	174.45	1000	
118	Sn	159	He	48.058	ppb	0.7	8661.98	1000	
121	Sb	159	No Gas	0.836	ppb	10.3	1328.21	1000	
137	Ba	159	No Gas	258.018	ppb	7.4	155710.89	2000	
182	W	159	No Gas	0.427	ppb	45.4	530.61	1000	
205	Tl	209	No Gas	1.830	ppb	8.2	5019.98	1000	
208	Pb	209	No Gas	142.784	ppb	7.8	504686.92	2000	
232	Th	209	No Gas	11.108	ppb	8.9	40122.86	1000	
238	U	209	No Gas	2.869	ppb	5.5	9741.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1593847.86	2.8	1745272.14	91.32	29.5	120.4	
Sc	45	No Gas	3935943.65	3.2	3932582.94	100.09	29.5	120.4	
Sc	45	H2	447857.83	1.6	485269.91	92.29	29.5	120.4	
Sc	45	He	91175.78	0.6	96164.21	94.81	29.5	120.4	
Ge	72	No Gas	895468.91	3.0	877152.82	102.09	29.5	120.4	
Ge	72	H2	163908.98	1.9	182501.5	89.81	29.5	120.4	
Ge	72	He	70672.41	1.2	74687.17	94.62	29.5	120.4	
Y	89	H2	2983149.03	2.0	3060772.3	97.46	29.5	120.4	
Y	89	He	629154.64	0.8	649886.7	96.81	29.5	120.4	
Tb	159	No Gas	9426265.55	3.4	8413567.03	112.04	29.5	120.4	
Tb	159	He	3398094.29	0.9	3319571.76	102.37	29.5	120.4	
Bi	209	No Gas	4978530.80	3.8	4391152.66	113.38	29.5	120.4	

Sample Report

Sample Name SN6056-015

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:21:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.701	ppb	9.4	472.24	100	
11	B	6	No Gas	10.720	ppb	13.3	3528.33	1000	
23	Na	45	He	-226.320	ppb	N/A	13708.42	200000	
24	Mg	45	He	1208.136	ppb	1.4	14906.56	200000	
27	Al	45	He	21206.252	ppb	0.6	96830.39	200000	
28	Si	45	H2	2738.223	ppb	3.1	24571.98	10000	
39	K	45	He	740.097	ppb	7.7	18825.62	200000	
40	Ca	45	H2	9303.109	ppb	1.9	762551.64	200000	
51	V	89	He	25.853	ppb	2.1	4772.10	1000	
52	Cr	89	He	15.210	ppb	2.7	3309.80	2000	
55	Mn	89	He	119.299	ppb	1.3	12038.94	2000	
56	Fe	89	H2	7832.029	ppb	1.7	2669642.02	100000	
59	Co	89	He	3.045	ppb	10.0	1140.13	1000	
60	Ni	89	He	17.296	ppb	2.8	1959.10	1000	
63	Cu	89	He	47.078	ppb	0.3	13288.97	2000	
66	Zn	89	He	104.082	ppb	4.9	3897.35	2000	
75	As	89	He	6.109	ppb	6.6	196.02	1000	
78	Se	89	H2	3.175	ppb	8.5	54.00	1000	
88	Sr	89	He	29.101	ppb	2.9	4563.15	2000	
95	Mo	89	He	3.933	ppb	13.8	702.27	1000	
107	Ag	89	He	0.708	ppb	1.3	428.91	100	
111	Cd	89	He	2.848	ppb	10.7	221.86	1000	
118	Sn	159	He	45.089	ppb	2.7	8031.57	1000	
121	Sb	159	No Gas	0.823	ppb	7.2	1311.54	1000	
137	Ba	159	No Gas	146.498	ppb	4.9	88471.45	2000	
182	W	159	No Gas	0.333	ppb	11.0	423.82	1000	
205	Tl	209	No Gas	0.218	ppb	4.8	914.39	1000	
208	Pb	209	No Gas	166.646	ppb	4.1	591083.70	2000	
232	Th	209	No Gas	4.878	ppb	8.7	17759.07	1000	
238	U	209	No Gas	2.300	ppb	2.5	7834.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1596969.43	2.3	1745272.14	91.5	29.5	120.4	
Sc	45	No Gas	3964951.84	2.7	3932582.94	100.82	29.5	120.4	
Sc	45	H2	442964.03	2.6	485269.91	91.28	29.5	120.4	
Sc	45	He	89164.00	0.6	96164.21	92.72	29.5	120.4	
Ge	72	No Gas	902560.15	2.7	877152.82	102.9	29.5	120.4	
Ge	72	H2	162214.67	2.5	182501.5	88.88	29.5	120.4	
Ge	72	He	68943.83	0.2	74687.17	92.31	29.5	120.4	
Y	89	H2	2950696.09	2.0	3060772.3	96.4	29.5	120.4	
Y	89	He	611996.85	0.1	649886.7	94.17	29.5	120.4	
Tb	159	No Gas	9422670.49	1.7	8413567.03	111.99	29.5	120.4	
Tb	159	He	3357256.86	0.4	3319571.76	101.14	29.5	120.4	
Bi	209	No Gas	4988959.51	1.7	4391152.66	113.61	29.5	120.4	

Sample Report

Sample Name SN6056-016

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:24:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.653	ppb	10.6	211.12	100	
11	B	6	No Gas	12.997	ppb	11.8	3815.09	1000	
23	Na	45	He	-242.916	ppb	N/A	13033.69	200000	
24	Mg	45	He	1128.934	ppb	2.8	13645.26	200000	
27	Al	45	He	11645.645	ppb	0.5	51871.74	200000	
28	Si	45	H2	3444.301	ppb	3.3	30369.98	10000	
39	K	45	He	684.805	ppb	1.8	17781.49	200000	
40	Ca	45	H2	8200.473	ppb	3.7	663559.17	200000	
51	V	89	He	24.610	ppb	2.7	4455.30	1000	
52	Cr	89	He	13.381	ppb	4.1	2855.78	2000	
55	Mn	89	He	125.316	ppb	0.5	12367.87	2000	
56	Fe	89	H2	8989.133	ppb	4.2	3016718.57	100000	
59	Co	89	He	3.517	ppb	1.9	1284.60	1000	
60	Ni	89	He	18.459	ppb	7.8	2028.00	1000	
63	Cu	89	He	35.991	ppb	2.7	9964.99	2000	
66	Zn	89	He	179.192	ppb	2.3	6503.96	2000	
75	As	89	He	4.977	ppb	17.0	157.02	1000	
78	Se	89	H2	2.585	ppb	15.3	43.33	1000	
88	Sr	89	He	31.500	ppb	3.0	4829.91	2000	
95	Mo	89	He	3.971	ppb	3.5	693.38	1000	
107	Ag	89	He	0.414	ppb	10.3	246.68	100	
111	Cd	89	He	2.717	ppb	3.8	207.04	1000	
118	Sn	159	He	48.432	ppb	3.4	8554.10	1000	
121	Sb	159	No Gas	1.114	ppb	8.5	1762.10	1000	
137	Ba	159	No Gas	108.651	ppb	5.4	65823.39	2000	
182	W	159	No Gas	0.379	ppb	11.4	477.22	1000	
205	Tl	209	No Gas	0.177	ppb	24.8	814.28	1000	
208	Pb	209	No Gas	125.852	ppb	7.2	449169.70	2000	
232	Th	209	No Gas	2.456	ppb	8.1	9080.06	1000	
238	U	209	No Gas	1.045	ppb	9.2	3577.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1567258.80	3.1	1745272.14	89.8	29.5	120.4	
Sc	45	No Gas	3891670.49	3.4	3932582.94	98.96	29.5	120.4	
Sc	45	H2	437364.24	2.6	485269.91	90.13	29.5	120.4	
Sc	45	He	86969.75	0.6	96164.21	90.44	29.5	120.4	
Ge	72	No Gas	889478.37	3.4	877152.82	101.41	29.5	120.4	
Ge	72	H2	161930.95	2.6	182501.5	88.73	29.5	120.4	
Ge	72	He	67338.95	0.2	74687.17	90.16	29.5	120.4	
Y	89	H2	2906964.39	2.6	3060772.3	94.97	29.5	120.4	
Y	89	He	598586.15	0.9	649886.7	92.11	29.5	120.4	
Tb	159	No Gas	9457726.53	3.3	8413567.03	112.41	29.5	120.4	
Tb	159	He	3330876.96	1.1	3319571.76	100.34	29.5	120.4	
Bi	209	No Gas	5024710.31	3.3	4391152.66	114.43	29.5	120.4	

Sample Report

Sample Name SN6056-017

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:26:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.331	ppb	38.3	131.11	100	
11	B	6	No Gas	9.408	ppb	16.9	3207.15	1000	
23	Na	45	He	-217.969	ppb	N/A	13304.25	200000	
24	Mg	45	He	1190.896	ppb	3.9	14094.62	200000	
27	Al	45	He	8924.791	ppb	2.0	39047.47	200000	
28	Si	45	H2	3499.244	ppb	5.1	29564.79	10000	
39	K	45	He	784.409	ppb	3.5	18493.71	200000	
40	Ca	45	H2	13261.528	ppb	2.9	1028293.03	200000	
51	V	89	He	18.574	ppb	2.8	3362.74	1000	
52	Cr	89	He	11.744	ppb	0.8	2469.11	2000	
55	Mn	89	He	176.164	ppb	2.7	17056.53	2000	
56	Fe	89	H2	5810.924	ppb	3.1	1878086.82	100000	
59	Co	89	He	2.316	ppb	7.4	837.86	1000	
60	Ni	89	He	13.768	ppb	1.3	1546.82	1000	
63	Cu	89	He	27.096	ppb	3.6	7395.53	2000	
66	Zn	89	He	143.468	ppb	2.6	5127.80	2000	
75	As	89	He	3.969	ppb	11.5	123.68	1000	
78	Se	89	H2	2.173	ppb	9.3	35.17	1000	
88	Sr	89	He	25.744	ppb	3.8	3876.24	2000	
95	Mo	89	He	2.616	ppb	14.5	450.03	1000	
107	Ag	89	He	0.310	ppb	7.1	182.23	100	
111	Cd	89	He	1.851	ppb	6.1	138.52	1000	
118	Sn	159	He	47.419	ppb	2.8	8406.26	1000	
121	Sb	159	No Gas	0.648	ppb	9.8	1031.19	1000	
137	Ba	159	No Gas	87.477	ppb	5.6	52424.56	2000	
182	W	159	No Gas	0.328	ppb	20.2	413.80	1000	
205	Tl	209	No Gas	0.275	ppb	5.5	1061.23	1000	
208	Pb	209	No Gas	95.286	ppb	6.5	338076.05	2000	
232	Th	209	No Gas	2.270	ppb	7.6	8348.74	1000	
238	U	209	No Gas	0.831	ppb	9.4	2830.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1542794.77	3.0	1745272.14	88.4	29.5	120.4	
Sc	45	No Gas	3802771.75	2.4	3932582.94	96.7	29.5	120.4	
Sc	45	H2	419127.71	1.1	485269.91	86.37	29.5	120.4	
Sc	45	He	85432.54	1.3	96164.21	88.84	29.5	120.4	
Ge	72	No Gas	872934.26	2.4	877152.82	99.52	29.5	120.4	
Ge	72	H2	156506.03	1.9	182501.5	85.76	29.5	120.4	
Ge	72	He	67032.67	0.4	74687.17	89.75	29.5	120.4	
Y	89	H2	2797076.87	1.3	3060772.3	91.38	29.5	120.4	
Y	89	He	587576.78	0.4	649886.7	90.41	29.5	120.4	
Tb	159	No Gas	9353945.42	2.8	8413567.03	111.18	29.5	120.4	
Tb	159	He	3342551.17	0.9	3319571.76	100.69	29.5	120.4	
Bi	209	No Gas	4991304.78	2.3	4391152.66	113.67	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW1
File Name	072_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:29:32 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.002	ppb	N/A	48.89	0.1	
B	11	6	No Gas	-0.397	ppb	N/A	1447.90	2	
Na	23	45	He	-73.439	ppb	N/A	10144.81	100	
Mg	24	45	He	1.513	ppb	33.7	953.44	10	
Al	27	45	He	4.235	ppb	3.0	105.56	10	
Si	28	45	H2	3.072	ppb	86.9	604.02	50	
K	39	45	He	-4.910	ppb	N/A	9967.35	100	
Ca	40	45	H2	7.528	ppb	5.1	3662.83	10	
V	51	89	He	0.044	ppb	54.6	284.46	0.5	
Cr	52	89	He	0.187	ppb	13.4	255.29	0.5	
Mn	55	89	He	0.188	ppb	28.3	110.65	0.2	
Fe	56	89	H2	5.189	ppb	3.4	10575.81	10	
Co	59	89	He	0.007	ppb	250.1	33.33	0.1	
Ni	60	89	He	-0.187	ppb	N/A	152.23	0.2	
Cu	63	89	He	0.049	ppb	42.0	187.79	0.3	
Zn	66	89	He	8.270	ppb	2.7	1511.25	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.005	ppb	141.4	4.67	0.5	
Se	78	89	H2	0.005	ppb	251.1	1.00	0.5	
Sr	88	89	He	0.013	ppb	70.9	15.55	0.5	
Mo	95	89	He	0.027	ppb	38.8	26.67	0.5	
Ag	107	89	He	0.004	ppb	54.7	13.33	0.1	
Cd	111	89	He	0.006	ppb	56.1	2.59	0.1	
Sn	118	159	He	0.132	ppb	29.2	162.23	0.5	
Sb	121	159	No Gas	0.005	ppb	109.8	76.75	0.1	
Ba	137	159	No Gas	0.038	ppb	22.8	133.48	0.2	
W	182	159	No Gas	-0.002	ppb	N/A	26.69	0.5	
Tl	205	209	No Gas	-0.021	ppb	N/A	86.76	0.1	
[Pb]	206	209	No Gas	0.108	ppb	11.7	520.59	0.1	200.8 PB Fails DoD
[Pb]	207	209	No Gas	0.093	ppb	20.7	420.48	0.1	
Pb	208	209	No Gas	0.102	ppb	5.5	2039.01	0.1	200.8 PB Fails DoD
Th	232	209	No Gas	0.005	ppb	49.6	240.27	0.5	
U	238	209	No Gas	0.001	ppb	49.1	23.36	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1516879.12	4.0	1745272.14	86.91	29.5	120.4	
Sc	45	No Gas	3737878.58	4.7	3932582.94	95.05	29.5	120.4	
Sc	45	H2	417425.43	2.3	485269.91	86.02	29.5	120.4	
Sc	45	He	83968.01	1.3	96164.21	87.32	29.5	120.4	
Ge	72	No Gas	853915.41	4.9	877152.82	97.35	29.5	120.4	
Ge	72	H2	158454.07	3.4	182501.5	86.82	29.5	120.4	
Ge	72	He	66258.97	0.3	74687.17	88.72	29.5	120.4	
Y	89	H2	2777145.25	1.9	3060772.3	90.73	29.5	120.4	
Y	89	He	578573.60	0.9	649886.7	89.03	29.5	120.4	
Tb	159	No Gas	9168186.32	4.9	8413567.03	108.97	29.5	120.4	
Tb	159	He	3257315.65	0.7	3319571.76	98.12	29.5	120.4	
Bi	209	No Gas	4875882.59	4.7	4391152.66	111.04	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW1
File Name	073_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:32:13 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.359	ppb	4.1	12710.41	50	20.94	79.5	120.4	
B	11	6	No Gas	522.187	ppb	4.5	83002.79	500	20.89	79.5	120.4	
Na	23	45	He	7687.896	ppb	2.7	169821.47	7500	20.5	79.5	120.4	
Mg	24	45	He	5572.157	ppb	4.1	62168.97	5000	22.29	79.5	120.4	
Al	27	45	He	2026.503	ppb	1.4	8810.80	2000	20.27	79.5	120.4	
Si	28	45	H2	1066.251	ppb	2.6	9533.81	1000	21.32	79.5	120.4	
K	39	45	He	10638.911	ppb	2.9	119299.97	10000	21.28	79.5	120.4	
Ca	40	45	H2	2675.813	ppb	4.4	212247.09	2500	21.41	79.5	120.4	
V	51	89	He	532.196	ppb	0.9	87699.15	500	21.29	79.5	120.4	
Cr	52	89	He	217.673	ppb	2.4	43736.60	200	21.77	79.5	120.4	
Mn	55	89	He	543.377	ppb	1.9	51577.61	500	21.74	79.5	120.4	
Fe	56	89	H2	1083.270	ppb	3.8	354239.77	1000	21.67	79.5	120.4	
Co	59	89	He	551.860	ppb	1.7	190742.56	500	22.07	79.5	120.4	
Ni	60	89	He	558.900	ppb	2.9	52157.95	500	22.36	79.5	120.4	
Cu	63	89	He	273.940	ppb	0.6	72259.36	250	21.92	79.5	120.4	
Zn	66	89	He	568.349	ppb	1.4	19696.67	500	22.73	79.5	120.4	
As	75	89	He	112.231	ppb	2.8	3325.43	100	22.45	79.5	120.4	
Se	78	89	H2	104.858	ppb	4.7	1679.03	100	20.97	79.5	120.4	
Sr	88	89	He	544.178	ppb	1.9	80275.36	500	21.77	79.5	120.4	
Mo	95	89	He	109.660	ppb	2.1	18337.32	100	21.93	79.5	120.4	
Ag	107	89	He	56.663	ppb	2.9	32114.26	50	22.67	79.5	120.4	
Cd	111	89	He	286.792	ppb	2.4	21009.34	250	22.94	79.5	120.4	
Sn	118	159	He	529.590	ppb	1.7	89802.97	500	21.18	79.5	120.4	
Sb	121	159	No Gas	103.918	ppb	4.1	153920.14	100	20.78	79.5	120.4	
Ba	137	159	No Gas	2000.552	ppb	4.0	1160364.20	2000	20.01	79.5	120.4	
W	182	159	No Gas	105.359	ppb	6.1	117278.38	100	21.07	79.5	120.4	
Tl	205	209	No Gas	107.483	ppb	4.2	264150.84	100	21.5	79.5	120.4	
Pb	208	209	No Gas	108.091	ppb	4.1	367934.82	100	21.62	79.5	120.4	
Th	232	209	No Gas	105.850	ppb	3.9	366950.76	100	21.17	79.5	120.4	
U	238	209	No Gas	107.395	ppb	4.2	350851.10	100	21.48	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573672.12	2.6	1745272.14	90.17	29.5	120.4	
Sc	45	No Gas	3739375.91	3.1	3932582.94	95.09	29.5	120.4	
Sc	45	H2	427738.07	2.6	485269.91	88.14	29.5	120.4	
Sc	45	He	84788.60	2.3	96164.21	88.17	29.5	120.4	
Ge	72	No Gas	859842.69	3.3	877152.82	98.03	29.5	120.4	
Ge	72	H2	160485.97	1.7	182501.5	87.94	29.5	120.4	
Ge	72	He	66614.33	1.4	74687.17	89.19	29.5	120.4	
Y	89	H2	2816072.67	2.5	3060772.3	92.01	29.5	120.4	
Y	89	He	576573.33	1.2	649886.7	88.72	29.5	120.4	
Tb	159	No Gas	9054911.46	3.2	8413567.03	107.62	29.5	120.4	
Tb	159	He	3214607.28	0.9	3319571.76	96.84	29.5	120.4	
Bi	209	No Gas	4788738.41	3.3	4391152.66	109.05	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:34:52 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	237.937	ppb	5.9	274762.62	100	>LDR
11	B	6	No Gas	1843.361	ppb	5.4	1371103.00	1000	>LDR
23	Na	45	He	-28.563	ppb	N/A	15041.31	200000	
24	Mg	45	He	2.302	ppb	66.2	1031.23	200000	
27	Al	45	He	1004.466	ppb	2.3	22341.33	200000	
28	Si	45	H2	111.913	ppb	1.1	5200.01	10000	
39	K	45	He	-2.029	ppb	N/A	10459.18	200000	
40	Ca	45	H2	22.075	ppb	1.4	9437.87	200000	
51	V	89	He	355.363	ppb	0.6	301110.50	1000	
52	Cr	89	He	666.502	ppb	0.7	689074.89	2000	
55	Mn	89	He	1635.157	ppb	0.8	799420.35	2000	
56	Fe	89	H2	3033.129	ppb	1.8	4916631.93	100000	
59	Co	89	He	720.218	ppb	0.8	1282507.81	1000	
60	Ni	89	He	1591.997	ppb	0.8	762328.36	1000	>LDR
63	Cu	89	He	296.165	ppb	1.1	401929.31	2000	
66	Zn	89	He	1043.378	ppb	1.0	185633.92	2000	
75	As	89	He	204.769	ppb	1.4	31231.63	1000	
78	Se	89	H2	472.910	ppb	2.1	37754.35	1000	
88	Sr	89	He	99.694	ppb	0.8	75777.87	2000	
95	Mo	89	He	335.173	ppb	0.5	288739.94	1000	
107	Ag	89	He	194.374	ppb	0.6	567631.47	100	>LDR
111	Cd	89	He	721.907	ppb	0.7	272493.23	1000	
118	Sn	159	He	1.351	ppb	6.3	1230.11	1000	
121	Sb	159	No Gas	265.547	ppb	6.0	1909392.92	1000	
137	Ba	159	No Gas	1764.824	ppb	6.2	4970014.11	2000	
182	W	159	No Gas	0.170	ppb	11.3	957.77	1000	
205	Tl	209	No Gas	506.722	ppb	5.6	6056390.08	1000	
208	Pb	209	No Gas	924.104	ppb	5.8	15304580.05	2000	
232	Th	209	No Gas	0.410	ppb	23.4	7110.12	1000	
238	U	209	No Gas	0.056	ppb	35.4	907.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1504304.22	3.2	1745272.14	86.19	29.5	120.4	
Sc	45	No Gas	3652683.00	3.9	3932582.94	92.88	29.5	120.4	
Sc	45	H2	424591.79	0.8	485269.91	87.5	29.5	120.4	
Sc	45	He	86836.88	1.2	96164.21	90.3	29.5	120.4	
Ge	72	No Gas	834082.68	3.4	877152.82	95.09	29.5	120.4	
Ge	72	H2	159089.37	2.0	182501.5	87.17	29.5	120.4	
Ge	72	He	67960.25	0.6	74687.17	90.99	29.5	120.4	
Y	89	H2	2807500.01	1.5	3060772.3	91.73	29.5	120.4	
Y	89	He	594104.48	0.7	649886.7	91.42	29.5	120.4	
Tb	159	No Gas	8799443.48	3.9	8413567.03	104.59	29.5	120.4	
Tb	159	He	3313850.75	0.3	3319571.76	99.83	29.5	120.4	
Bi	209	No Gas	4665948.44	3.8	4391152.66	106.26	29.5	120.4	

Sample Report

Sample Name SN5815-002R

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:37:35 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	24.191	ppb	6.4	29203.48	100	
11	B	6	No Gas	210.187	ppb	4.7	164810.56	1000	
23	Na	45	He	-64.710	ppb	N/A	11290.30	200000	
24	Mg	45	He	1.741	ppb	129.5	991.22	200000	
27	Al	45	He	110.459	ppb	5.0	2452.53	200000	
28	Si	45	H2	14.464	ppb	19.4	1101.27	10000	
39	K	45	He	0.275	ppb	1323.1	10504.15	200000	
40	Ca	45	H2	18.018	ppb	2.7	7898.06	200000	
51	V	89	He	38.185	ppb	1.2	32324.48	1000	
52	Cr	89	He	71.910	ppb	0.9	73813.72	2000	
55	Mn	89	He	177.018	ppb	1.1	85874.05	2000	
56	Fe	89	H2	333.210	ppb	3.2	545648.34	100000	
59	Co	89	He	77.986	ppb	1.3	137784.72	1000	
60	Ni	89	He	172.938	ppb	0.8	82369.87	1000	
63	Cu	89	He	31.975	ppb	1.4	43159.70	2000	
66	Zn	89	He	121.837	ppb	0.4	21576.19	2000	
75	As	89	He	22.155	ppb	1.7	3355.78	1000	
78	Se	89	H2	50.037	ppb	4.2	4020.23	1000	
88	Sr	89	He	10.802	ppb	1.8	8150.49	2000	
95	Mo	89	He	35.821	ppb	0.6	30616.24	1000	
107	Ag	89	He	80.088	ppb	0.8	232020.05	100	
111	Cd	89	He	78.122	ppb	1.8	29253.45	1000	
118	Sn	159	He	0.351	ppb	4.2	350.02	1000	
121	Sb	159	No Gas	28.359	ppb	6.3	207633.04	1000	
137	Ba	159	No Gas	183.663	ppb	6.4	526598.29	2000	
182	W	159	No Gas	0.020	ppb	40.9	143.49	1000	
205	Tl	209	No Gas	54.259	ppb	4.9	658478.83	1000	
208	Pb	209	No Gas	98.840	ppb	5.9	1661403.60	2000	
232	Th	209	No Gas	0.016	ppb	21.3	417.14	1000	
238	U	209	No Gas	0.003	ppb	26.0	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1570223.19	3.3	1745272.14	89.97	29.5	120.4	
Sc	45	No Gas	3771506.45	3.0	3932582.94	95.9	29.5	120.4	
Sc	45	H2	427616.68	3.7	485269.91	88.12	29.5	120.4	
Sc	45	He	86199.09	1.0	96164.21	89.64	29.5	120.4	
Ge	72	No Gas	858437.86	3.2	877152.82	97.87	29.5	120.4	
Ge	72	H2	162995.29	3.8	182501.5	89.31	29.5	120.4	
Ge	72	He	67542.87	1.2	74687.17	90.43	29.5	120.4	
Y	89	H2	2826889.97	3.1	3060772.3	92.36	29.5	120.4	
Y	89	He	589368.46	0.6	649886.7	90.69	29.5	120.4	
Tb	159	No Gas	8956618.55	3.2	8413567.03	106.45	29.5	120.4	
Tb	159	He	3250872.73	0.5	3319571.76	97.93	29.5	120.4	
Bi	209	No Gas	4733150.59	2.9	4391152.66	107.79	29.5	120.4	

Sample Report

Sample Name SN5815-007

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:40:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.227	ppb	15.0	343.35	100	
11	B	6	No Gas	196.885	ppb	6.7	161136.12	1000	
23	Na	45	He	181.756	ppb	2.6	36871.47	200000	
24	Mg	45	He	4.923	ppb	20.4	1193.47	200000	
27	Al	45	He	67.928	ppb	1.1	1545.70	200000	
28	Si	45	H2	1313.221	ppb	3.0	57496.56	10000	
39	K	45	He	9.359	ppb	74.0	11202.73	200000	
40	Ca	45	H2	61.849	ppb	1.5	25822.06	200000	
51	V	89	He	0.843	ppb	6.0	973.41	1000	
52	Cr	89	He	0.979	ppb	6.8	1085.18	2000	
55	Mn	89	He	2.870	ppb	5.0	1431.82	2000	
56	Fe	89	H2	498.955	ppb	3.4	827067.37	100000	
59	Co	89	He	0.170	ppb	32.0	326.70	1000	
60	Ni	89	He	0.967	ppb	5.9	712.27	1000	
63	Cu	89	He	2.061	ppb	5.4	2935.97	2000	
66	Zn	89	He	11.730	ppb	6.2	2178.03	2000	
75	As	89	He	0.118	ppb	7.2	22.00	1000	
78	Se	89	H2	0.354	ppb	11.4	29.50	1000	
88	Sr	89	He	1.000	ppb	4.8	770.05	2000	
95	Mo	89	He	0.685	ppb	7.2	597.81	1000	
107	Ag	89	He	0.211	ppb	9.3	623.37	100	
111	Cd	89	He	0.090	ppb	15.3	34.45	1000	
118	Sn	159	He	1491.193	ppb	1.4	1298343.69	1000	>LDR
121	Sb	159	No Gas	0.157	ppb	9.4	1228.10	1000	
137	Ba	159	No Gas	1.463	ppb	4.3	4362.26	2000	
182	W	159	No Gas	0.023	ppb	37.4	170.19	1000	
205	Tl	209	No Gas	0.101	ppb	28.1	1611.92	1000	
208	Pb	209	No Gas	1.766	ppb	5.6	30845.77	2000	
232	Th	209	No Gas	0.084	ppb	12.2	1625.27	1000	
238	U	209	No Gas	0.007	ppb	38.6	123.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1639023.90	4.1	1745272.14	93.91	29.5	120.4	
Sc	45	No Gas	3866758.05	4.0	3932582.94	98.33	29.5	120.4	
Sc	45	H2	437739.20	2.1	485269.91	90.21	29.5	120.4	
Sc	45	He	87996.70	1.7	96164.21	91.51	29.5	120.4	
Ge	72	No Gas	887204.56	3.7	877152.82	101.15	29.5	120.4	
Ge	72	H2	161056.56	0.9	182501.5	88.25	29.5	120.4	
Ge	72	He	68792.25	1.4	74687.17	92.11	29.5	120.4	
Y	89	H2	2865233.47	2.5	3060772.3	93.61	29.5	120.4	
Y	89	He	597075.26	1.4	649886.7	91.87	29.5	120.4	
Tb	159	No Gas	9243861.04	3.4	8413567.03	109.87	29.5	120.4	
Tb	159	He	3302679.74	0.8	3319571.76	99.49	29.5	120.4	
Bi	209	No Gas	4876086.49	3.5	4391152.66	111.04	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	077_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:42:55 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.389	ppb	6.0	29412.81	25	101.56	89.8	110.2	
11	B	6	No Gas	35.540	ppb	3.9	28185.95	25	142.16	89.8	110.2	> +/- 10%
23	Na	45	He	5082.598	ppb	0.5	526326.89	5000	101.65	89.8	110.2	
24	Mg	45	He	4988.040	ppb	0.5	278078.72	5000	99.76	89.8	110.2	
27	Al	45	He	488.602	ppb	0.8	10725.48	500	97.72	89.8	110.2	
28	Si	45	H2	481.427	ppb	2.0	20343.67	500	96.29	89.8	110.2	
39	K	45	He	4851.118	ppb	0.7	261459.79	5000	97.02	89.8	110.2	
40	Ca	45	H2	4908.407	ppb	2.2	1887933.84	5000	98.17	89.8	110.2	
51	V	89	He	24.474	ppb	1.2	20758.12	25	97.9	89.8	110.2	
52	Cr	89	He	25.133	ppb	1.3	25781.38	25	100.53	89.8	110.2	
55	Mn	89	He	24.774	ppb	0.1	12008.93	25	99.1	89.8	110.2	
56	Fe	89	H2	4850.733	ppb	2.4	7718512.72	5000	97.01	89.8	110.2	
59	Co	89	He	25.191	ppb	2.3	44422.01	25	100.76	89.8	110.2	
60	Ni	89	He	25.492	ppb	0.6	12320.29	25	101.97	89.8	110.2	
63	Cu	89	He	25.259	ppb	1.4	34041.12	25	101.04	89.8	110.2	
66	Zn	89	He	25.586	ppb	2.0	4584.26	25	102.34	89.8	110.2	
75	As	89	He	24.894	ppb	0.8	3761.26	25	99.58	89.8	110.2	
78	Se	89	H2	24.296	ppb	1.1	1905.54	25	97.18	89.8	110.2	
88	Sr	89	He	24.281	ppb	1.6	18271.60	25	97.12	89.8	110.2	
95	Mo	89	He	25.336	ppb	2.0	21604.31	25	101.34	89.8	110.2	
107	Ag	89	He	26.083	ppb	0.5	75388.46	25	104.33	89.8	110.2	
111	Cd	89	He	25.688	ppb	1.2	9596.81	25	102.75	89.8	110.2	
118	Sn	159	He	23.894	ppb	2.3	20726.64	25	95.58	89.8	110.2	
121	Sb	159	No Gas	23.570	ppb	5.5	174242.65	25	94.28	89.8	110.2	
137	Ba	159	No Gas	23.653	ppb	5.4	68498.20	25	94.61	89.8	110.2	
182	W	159	No Gas	23.735	ppb	6.5	131893.92	25	94.94	89.8	110.2	
205	Tl	209	No Gas	24.335	ppb	6.5	296330.18	25	97.34	89.8	110.2	
208	Pb	209	No Gas	24.436	ppb	6.7	412158.99	25	97.74	89.8	110.2	
232	Th	209	No Gas	24.182	ppb	7.9	415295.30	25	96.73	89.8	110.2	
238	U	209	No Gas	24.288	ppb	7.7	393132.94	25	97.15	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1506544.23	2.9	1745272.14	86.32	29.5	120.4	
Sc	45	No Gas	3738011.21	3.1	3932582.94	95.05	29.5	120.4	
Sc	45	H2	415965.16	2.0	485269.91	85.72	29.5	120.4	
Sc	45	He	85628.11	0.4	96164.21	89.04	29.5	120.4	
Ge	72	No Gas	853292.75	2.7	877152.82	97.28	29.5	120.4	
Ge	72	H2	154980.88	2.3	182501.5	84.92	29.5	120.4	
Ge	72	He	67657.53	1.1	74687.17	90.59	29.5	120.4	
Y	89	H2	2756657.29	2.0	3060772.3	90.06	29.5	120.4	
Y	89	He	587967.60	0.7	649886.7	90.47	29.5	120.4	
Tb	159	No Gas	9040950.56	3.0	8413567.03	107.46	29.5	120.4	
Tb	159	He	3282355.85	0.6	3319571.76	98.88	29.5	120.4	
Bi	209	No Gas	4747911.23	3.0	4391152.66	108.12	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	078_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:45:33 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.125	ppb	8.3	206.67	0.2	Failed DoD
11	B	6	No Gas	6.101	ppb	4.6	6605.07	4	Fail All Methods□ Failed DoD
23	Na	45	He	-88.467	ppb	N/A	8915.97	200	
24	Mg	45	He	-3.741	ppb	N/A	686.73	20	
27	Al	45	He	0.682	ppb	59.1	30.00	20	
28	Si	45	H2	0.444	ppb	95.8	513.91	100	
39	K	45	He	6.212	ppb	130.9	10830.90	200	
40	Ca	45	H2	1.694	ppb	7.1	1462.35	20	
51	V	89	He	-0.078	ppb	N/A	187.79	1	
52	Cr	89	He	0.019	ppb	35.7	87.98	1	
55	Mn	89	He	0.111	ppb	24.7	75.99	0.4	
56	Fe	89	H2	2.761	ppb	3.4	6819.31	20	
59	Co	89	He	0.050	ppb	24.7	111.12	0.2	
60	Ni	89	He	-0.187	ppb	N/A	155.56	0.4	
63	Cu	89	He	0.028	ppb	12.8	163.34	0.6	
66	Zn	89	He	-0.056	ppb	N/A	71.12	2	
75	As	89	He	0.018	ppb	165.2	6.67	1	
78	Se	89	H2	0.062	ppb	43.1	5.67	1	
88	Sr	89	He	0.008	ppb	82.8	12.22	1	
95	Mo	89	He	0.098	ppb	5.7	87.78	1	
107	Ag	89	He	0.031	ppb	6.2	93.34	0.2	
111	Cd	89	He	0.043	ppb	32.5	16.30	0.2	
118	Sn	159	He	0.218	ppb	20.5	233.34	1	
121	Sb	159	No Gas	0.034	ppb	12.0	290.33	0.2	
137	Ba	159	No Gas	0.088	ppb	28.5	276.98	0.4	
182	W	159	No Gas	0.048	ppb	25.7	300.34	1	
205	Tl	209	No Gas	0.030	ppb	13.4	697.47	0.2	
208	Pb	209	No Gas	0.101	ppb	10.9	1965.60	0.2	Failed DoD
232	Th	209	No Gas	0.052	ppb	6.3	1027.87	1	
238	U	209	No Gas	0.021	ppb	31.7	347.06	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1585704.96	2.7	1745272.14	90.86	29.5	120.4	
Sc	45	No Gas	3816075.16	2.9	3932582.94	97.04	29.5	120.4	
Sc	45	H2	431660.08	1.0	485269.91	88.95	29.5	120.4	
Sc	45	He	86365.94	1.1	96164.21	89.81	29.5	120.4	
Ge	72	No Gas	865091.69	2.9	877152.82	98.62	29.5	120.4	
Ge	72	H2	163061.19	0.5	182501.5	89.35	29.5	120.4	
Ge	72	He	68017.15	0.8	74687.17	91.07	29.5	120.4	
Y	89	H2	2832332.31	1.7	3060772.3	92.54	29.5	120.4	
Y	89	He	591158.05	1.2	649886.7	90.96	29.5	120.4	
Tb	159	No Gas	8970317.58	2.7	8413567.03	106.62	29.5	120.4	
Tb	159	He	3218539.19	0.8	3319571.76	96.96	29.5	120.4	
Bi	209	No Gas	4729686.03	2.7	4391152.66	107.71	29.5	120.4	

Sample Report

Sample Name SN5815-014

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:48:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.092	ppb	14.4	156.68	100	
11	B	6	No Gas	3.516	ppb	2.2	4310.79	1000	
23	Na	45	He	92489.749	ppb	1.6	9528679.60	200000	
24	Mg	45	He	25642.906	ppb	1.4	1465247.08	200000	
27	Al	45	He	18.865	ppb	17.4	440.03	200000	
28	Si	45	H2	4.023	ppb	35.8	664.09	10000	
39	K	45	He	16369.885	ppb	1.5	881174.84	200000	
40	Ca	45	H2	43534.789	ppb	3.8	17310573.77	200000	
51	V	89	He	0.132	ppb	34.0	367.80	1000	
52	Cr	89	He	0.308	ppb	36.4	386.61	2000	
55	Mn	89	He	0.687	ppb	39.1	357.95	2000	
56	Fe	89	H2	7.596	ppb	2.3	14640.65	100000	
59	Co	89	He	0.099	ppb	107.8	197.81	1000	
60	Ni	89	He	0.009	ppb	2486.8	250.01	1000	
63	Cu	89	He	0.185	ppb	25.5	377.80	2000	
66	Zn	89	He	13.113	ppb	4.2	2421.42	2000	
75	As	89	He	0.053	ppb	88.2	12.00	1000	
78	Se	89	H2	0.040	ppb	31.9	3.83	1000	
88	Sr	89	He	5.019	ppb	0.9	3831.80	2000	
95	Mo	89	He	0.751	ppb	16.1	652.26	1000	
107	Ag	89	He	0.064	ppb	52.1	188.90	100	
111	Cd	89	He	0.108	ppb	98.1	40.74	1000	
118	Sn	159	He	0.416	ppb	51.1	405.59	1000	
121	Sb	159	No Gas	0.014	ppb	38.8	140.16	1000	
137	Ba	159	No Gas	0.343	ppb	0.2	981.13	2000	
182	W	159	No Gas	0.016	ppb	81.3	116.80	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	313.69	1000	
208	Pb	209	No Gas	0.244	ppb	1.6	4088.17	2000	
232	Th	209	No Gas	0.038	ppb	17.6	744.19	1000	
238	U	209	No Gas	0.001	ppb	88.1	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1491362.23	2.8	1745272.14	85.45	29.5	120.4	
Sc	45	No Gas	3698756.88	3.5	3932582.94	94.05	29.5	120.4	
Sc	45	H2	430331.14	2.5	485269.91	88.68	29.5	120.4	
Sc	45	He	87996.97	1.8	96164.21	91.51	29.5	120.4	
Ge	72	No Gas	827745.81	2.9	877152.82	94.37	29.5	120.4	
Ge	72	H2	160022.57	1.8	182501.5	87.68	29.5	120.4	
Ge	72	He	68486.83	1.3	74687.17	91.7	29.5	120.4	
Y	89	H2	2816820.24	2.4	3060772.3	92.03	29.5	120.4	
Y	89	He	595854.03	1.4	649886.7	91.69	29.5	120.4	
Tb	159	No Gas	8727269.73	3.3	8413567.03	103.73	29.5	120.4	
Tb	159	He	3264402.80	1.4	3319571.76	98.34	29.5	120.4	
Bi	209	No Gas	4424550.18	3.8	4391152.66	100.76	29.5	120.4	

Sample Report

Sample Name SN6071-001

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:50:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.061	ppb	41.5	127.78	100	
11	B	6	No Gas	50.033	ppb	6.1	40731.58	1000	
23	Na	45	He	84717.960	ppb	0.9	8601537.48	200000	
24	Mg	45	He	5360.261	ppb	0.3	302498.00	200000	
27	Al	45	He	26.403	ppb	3.9	601.15	200000	
28	Si	45	H2	2644.666	ppb	3.2	111673.55	10000	
39	K	45	He	10429.314	ppb	0.9	556981.17	200000	
40	Ca	45	H2	19489.810	ppb	3.2	7637980.44	200000	
51	V	89	He	1.031	ppb	11.7	1111.21	1000	
52	Cr	89	He	0.633	ppb	6.9	711.89	2000	
55	Mn	89	He	9.272	ppb	2.8	4485.91	2000	
56	Fe	89	H2	68.797	ppb	3.4	112537.51	100000	
59	Co	89	He	0.193	ppb	9.0	360.03	1000	
60	Ni	89	He	4.129	ppb	0.2	2189.15	1000	
63	Cu	89	He	14.526	ppb	2.3	19533.17	2000	
66	Zn	89	He	71.125	ppb	2.4	12538.28	2000	
75	As	89	He	0.504	ppb	4.6	79.68	1000	
78	Se	89	H2	0.220	ppb	13.2	18.00	1000	
88	Sr	89	He	88.918	ppb	0.5	66569.52	2000	
95	Mo	89	He	12.432	ppb	2.6	10552.19	1000	
107	Ag	89	He	0.045	ppb	15.3	132.23	100	
111	Cd	89	He	0.067	ppb	19.0	25.19	1000	
118	Sn	159	He	0.320	ppb	4.9	322.24	1000	
121	Sb	159	No Gas	0.440	ppb	9.1	3247.37	1000	
137	Ba	159	No Gas	6.885	ppb	8.1	19666.39	2000	
182	W	159	No Gas	0.096	ppb	23.5	560.65	1000	
205	Tl	209	No Gas	0.001	ppb	196.4	343.72	1000	
208	Pb	209	No Gas	0.356	ppb	6.2	6037.34	2000	
232	Th	209	No Gas	0.028	ppb	6.8	597.35	1000	
238	U	209	No Gas	0.010	ppb	14.7	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1575332.94	3.3	1745272.14	90.26	29.5	120.4	
Sc	45	No Gas	3788401.05	3.7	3932582.94	96.33	29.5	120.4	
Sc	45	H2	424078.02	2.6	485269.91	87.39	29.5	120.4	
Sc	45	He	86697.73	0.7	96164.21	90.16	29.5	120.4	
Ge	72	No Gas	858463.18	4.1	877152.82	97.87	29.5	120.4	
Ge	72	H2	159918.12	3.9	182501.5	87.63	29.5	120.4	
Ge	72	He	67695.83	0.8	74687.17	90.64	29.5	120.4	
Y	89	H2	2778384.85	2.3	3060772.3	90.77	29.5	120.4	
Y	89	He	585147.64	0.4	649886.7	90.04	29.5	120.4	
Tb	159	No Gas	8918165.63	3.5	8413567.03	106	29.5	120.4	
Tb	159	He	3238966.37	0.3	3319571.76	97.57	29.5	120.4	
Bi	209	No Gas	4567739.56	3.7	4391152.66	104.02	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW2
File Name	081_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:53:30 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.226	ppb	11.3	113.34	0.5	
B	11	6	No Gas	13.410	ppb	2.9	4055.15	10	PB 6020 Fails DoD
Na	23	45	He	250.861	ppb	22.4	23615.90	500	
Mg	24	45	He	-4.318	ppb	N/A	873.42	50	
Al	27	45	He	9.251	ppb	29.2	57.78	50	
Si	28	45	H2	14.449	ppb	89.2	634.05	250	
K	39	45	He	15.580	ppb	105.0	11005.96	500	
Ca	40	45	H2	120.265	ppb	4.6	10612.13	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
V	51	89	He	4.255	ppb	9.8	992.30	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.214	ppb	21.8	114.65	2.5	
Mn	55	89	He	0.706	ppb	5.9	92.65	1	
Fe	56	89	H2	16.486	ppb	2.8	7864.30	50	
Co	59	89	He	0.023	ppb	119.2	31.11	0.5	
Ni	60	89	He	-0.928	ppb	N/A	160.01	1	
Cu	63	89	He	5.076	ppb	2.3	1530.14	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	4.106	ppb	25.3	231.12	5	
As	75	89	He	0.256	ppb	31.6	12.00	2.5	
Se	78	89	H2	0.368	ppb	40.5	6.67	2.5	
Sr	88	89	He	0.148	ppb	53.5	28.89	2.5	
Mo	95	89	He	0.275	ppb	16.1	52.22	2.5	
Ag	107	89	He	0.242	ppb	25.9	146.67	0.5	
Cd	111	89	He	0.073	ppb	42.3	5.93	0.5	
Sn	118	159	He	1.275	ppb	9.0	274.46	2.5	
Sb	121	159	No Gas	0.167	ppb	21.3	286.99	0.5	
Ba	137	159	No Gas	1.107	ppb	20.7	664.09	1	PB 6020 Fails DoD
W	182	159	No Gas	0.052	ppb	13.2	93.44	2.5	
Tl	205	209	No Gas	0.043	ppb	69.9	443.84	0.5	
Pb	208	209	No Gas	1.386	ppb	8.9	4945.90	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.065	ppb	20.5	367.08	2.5	
U	238	209	No Gas	0.012	ppb	112.7	40.04	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1636625.27	2.4	1745272.14	93.77	29.5	120.4	
Sc	45	No Gas	3792589.04	2.5	3932582.94	96.44	29.5	120.4	
Sc	45	H2	441394.07	2.5	485269.91	90.96	29.5	120.4	
Sc	45	He	89088.35	2.2	96164.21	92.64	29.5	120.4	
Ge	72	No Gas	866880.35	3.5	877152.82	98.83	29.5	120.4	
Ge	72	H2	163224.10	2.3	182501.5	89.44	29.5	120.4	
Ge	72	He	69402.85	1.5	74687.17	92.92	29.5	120.4	
Y	89	H2	2893209.38	2.3	3060772.3	94.53	29.5	120.4	
Y	89	He	604702.42	1.8	649886.7	93.05	29.5	120.4	
Tb	159	No Gas	9025929.03	2.8	8413567.03	107.28	29.5	120.4	
Tb	159	He	3338278.87	1.9	3319571.76	100.56	29.5	120.4	
Bi	209	No Gas	4748157.73	3.1	4391152.66	108.13	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	082LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 3:56:07 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.871	ppb	6.4	13130.79	50	20.75	79.5	120.4	
B	11	6	No Gas	537.903	ppb	5.5	89132.18	500	21.52	79.5	120.4	
Na	23	45	He	8185.628	ppb	4.4	182177.22	7500	21.83	79.5	120.4	
Mg	24	45	He	5746.482	ppb	3.7	64994.95	5000	22.99	79.5	120.4	
Al	27	45	He	2108.268	ppb	2.0	9294.46	2000	21.08	79.5	120.4	
Si	28	45	H2	1010.850	ppb	4.4	9296.77	1000	20.22	0	200	
K	39	45	He	10939.944	ppb	3.5	124106.02	10000	21.88	79.5	120.4	
Ca	40	45	H2	2770.004	ppb	1.9	225534.31	2500	22.16	79.5	120.4	
V	51	89	He	554.866	ppb	2.8	92819.81	500	22.19	79.5	120.4	
Cr	52	89	He	225.806	ppb	1.5	46074.83	200	22.58	79.5	120.4	
Mn	55	89	He	558.348	ppb	2.6	53812.14	500	22.33	79.5	120.4	
Fe	56	89	H2	1094.482	ppb	5.4	367726.00	1000	21.89	79.5	120.4	
Co	59	89	He	570.042	ppb	3.1	200038.68	500	22.8	79.5	120.4	
Ni	60	89	He	584.040	ppb	3.1	55332.30	500	23.36	79.5	120.4	
Cu	63	89	He	284.931	ppb	3.8	76288.57	250	22.79	79.5	120.4	
Zn	66	89	He	576.513	ppb	3.3	20281.99	500	23.06	79.5	120.4	
As	75	89	He	113.998	ppb	2.2	3430.13	100	22.8	79.5	120.4	
Se	78	89	H2	105.775	ppb	5.8	1740.53	100	21.16	79.5	120.4	
Sr	88	89	He	549.970	ppb	2.5	82377.56	500	22	79.5	120.4	
Mo	95	89	He	114.334	ppb	2.8	19414.34	100	22.87	79.5	120.4	
Ag	107	89	He	58.386	ppb	1.9	33606.88	50	23.35	79.5	120.4	DoD
Cd	111	89	He	286.234	ppb	2.5	21291.64	250	22.9	79.5	120.4	
Sn	118	159	He	532.940	ppb	2.9	91372.14	500	21.32	79.5	120.4	
Sb	121	159	No Gas	103.591	ppb	5.9	156619.11	100	20.72	79.5	120.4	
Ba	137	159	No Gas	2034.403	ppb	6.4	1204353.45	2000	20.34	79.5	120.4	
W	182	159	No Gas	106.735	ppb	8.0	121253.61	100	21.35	79.5	120.4	
Tl	205	209	No Gas	108.859	ppb	6.4	269940.22	100	21.77	79.5	120.4	
[Pb]	206	209	No Gas	109.517	ppb	6.4	94345.17	100	21.9	79.5	120.4	
[Pb]	207	209	No Gas	109.908	ppb	6.8	83044.41	100	21.98	79.5	120.4	
Pb	208	209	No Gas	109.369	ppb	6.8	375596.26	100	21.87	79.5	120.4	
Th	232	209	No Gas	107.321	ppb	7.8	375250.92	100	21.46	79.5	120.4	
U	238	209	No Gas	106.874	ppb	7.9	352164.09	100	21.38	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1642173.44	3.2	1745272.14	94.09	29.5	120.4	
Sc	45	No Gas	3837132.28	3.9	3932582.94	97.57	29.5	120.4	
Sc	45	H2	438960.65	3.5	485269.91	90.46	29.5	120.4	
Sc	45	He	85995.40	2.7	96164.21	89.43	29.5	120.4	
Ge	72	No Gas	880623.59	4.1	877152.82	100.4	29.5	120.4	
Ge	72	H2	162936.82	2.6	182501.5	89.28	29.5	120.4	
Ge	72	He	67181.92	1.6	74687.17	89.95	29.5	120.4	
Y	89	H2	2895142.93	3.3	3060772.3	94.59	29.5	120.4	
Y	89	He	585558.55	2.1	649886.7	90.1	29.5	120.4	
Tb	159	No Gas	9248661.81	3.8	8413567.03	109.93	29.5	120.4	
Tb	159	He	3251053.42	1.9	3319571.76	97.94	29.5	120.4	
Bi	209	No Gas	4835700.53	4.0	4391152.66	110.12	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 3:58:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	229.669	ppb	4.8	55867.34	100	
11	B	6	No Gas	1813.172	ppb	4.0	285318.51	1000	
23	Na	45	He	-206.053	ppb	N/A	13564.88	200000	
24	Mg	45	He	-13.477	ppb	N/A	737.85	200000	
27	Al	45	He	1063.695	ppb	0.9	4676.47	200000	
28	Si	45	H2	112.756	ppb	22.1	1441.68	10000	
39	K	45	He	4.802	ppb	358.7	10465.79	200000	
40	Ca	45	H2	31.789	ppb	5.7	3291.61	200000	
51	V	89	He	368.866	ppb	1.3	61504.85	1000	
52	Cr	89	He	692.167	ppb	0.9	140421.85	2000	
55	Mn	89	He	1703.232	ppb	1.0	163355.14	2000	
56	Fe	89	H2	3034.793	ppb	4.0	997955.79	100000	
59	Co	89	He	749.595	ppb	1.8	261835.66	1000	
60	Ni	89	He	1647.868	ppb	1.2	154971.18	1000	
63	Cu	89	He	305.227	ppb	1.1	81351.12	2000	
66	Zn	89	He	1082.216	ppb	1.5	37830.95	2000	
75	As	89	He	213.318	ppb	0.3	6385.50	1000	
78	Se	89	H2	470.490	ppb	4.5	7605.23	1000	
88	Sr	89	He	100.693	ppb	1.4	15017.57	2000	
95	Mo	89	He	348.241	ppb	1.8	58844.84	1000	
107	Ag	89	He	774.058	ppb	1.9	443381.24	100	>LDR
111	Cd	89	He	745.325	ppb	1.1	55184.22	1000	
118	Sn	159	He	2.267	ppb	6.2	438.92	1000	
121	Sb	159	No Gas	271.184	ppb	3.7	406790.52	1000	
137	Ba	159	No Gas	1729.965	ppb	4.0	1016297.26	2000	
182	W	159	No Gas	0.288	ppb	28.6	360.41	1000	
205	Tl	209	No Gas	499.678	ppb	3.4	1241987.19	1000	
208	Pb	209	No Gas	932.100	ppb	3.8	3209888.45	2000	
232	Th	209	No Gas	0.899	ppb	22.7	3310.84	1000	
238	U	209	No Gas	0.055	ppb	26.0	183.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1581946.76	1.7	1745272.14	90.64	29.5	120.4	
Sc	45	No Gas	3788457.52	2.5	3932582.94	96.34	29.5	120.4	
Sc	45	H2	428150.17	4.8	485269.91	88.23	29.5	120.4	
Sc	45	He	85597.68	0.9	96164.21	89.01	29.5	120.4	
Ge	72	No Gas	867775.51	2.1	877152.82	98.93	29.5	120.4	
Ge	72	H2	158577.58	5.5	182501.5	86.89	29.5	120.4	
Ge	72	He	67039.34	0.9	74687.17	89.76	29.5	120.4	
Y	89	H2	2845084.62	4.2	3060772.3	92.95	29.5	120.4	
Y	89	He	582683.79	0.8	649886.7	89.66	29.5	120.4	
Tb	159	No Gas	9168368.27	2.1	8413567.03	108.97	29.5	120.4	
Tb	159	He	3260774.71	0.9	3319571.76	98.23	29.5	120.4	
Bi	209	No Gas	4845845.10	1.9	4391152.66	110.35	29.5	120.4	

Sample Report

Sample Name SN5815-009

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:01:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.672	ppb	40.5	218.90	100	
11	B	6	No Gas	218.659	ppb	4.0	36076.85	1000	
23	Na	45	He	-17.995	ppb	N/A	16818.51	200000	
24	Mg	45	He	-2.692	ppb	N/A	833.42	200000	
27	Al	45	He	66.409	ppb	8.6	296.68	200000	
28	Si	45	H2	1334.796	ppb	9.9	11614.37	10000	
39	K	45	He	47.992	ppb	131.8	10587.53	200000	
40	Ca	45	H2	51.464	ppb	6.5	4767.65	200000	
51	V	89	He	3.009	ppb	3.2	732.27	1000	
52	Cr	89	He	1.175	ppb	9.5	298.62	2000	
55	Mn	89	He	2.026	ppb	8.9	210.63	2000	
56	Fe	89	H2	588.638	ppb	4.9	191706.55	100000	
59	Co	89	He	0.288	ppb	15.8	120.01	1000	
60	Ni	89	He	-0.047	ppb	N/A	231.12	1000	
63	Cu	89	He	1.889	ppb	12.1	611.15	2000	
66	Zn	89	He	6.074	ppb	14.8	284.46	2000	
75	As	89	He	0.351	ppb	41.5	14.00	1000	
78	Se	89	H2	0.782	ppb	19.3	13.00	1000	
88	Sr	89	He	0.889	ppb	15.3	135.56	2000	
95	Mo	89	He	1.559	ppb	1.9	261.12	1000	
107	Ag	89	He	0.445	ppb	10.1	252.23	100	
111	Cd	89	He	0.242	ppb	40.6	17.78	1000	
118	Sn	159	He	1508.787	ppb	4.1	254909.96	1000	
121	Sb	159	No Gas	0.407	ppb	13.1	660.76	1000	
137	Ba	159	No Gas	2.779	ppb	6.6	1678.66	2000	
182	W	159	No Gas	0.053	ppb	93.9	96.77	1000	
205	Tl	209	No Gas	0.343	ppb	27.9	1208.08	1000	
208	Pb	209	No Gas	2.047	ppb	3.3	7392.45	2000	
232	Th	209	No Gas	0.201	ppb	6.0	861.00	1000	
238	U	209	No Gas	0.017	ppb	44.0	56.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1585113.77	2.2	1745272.14	90.82	29.5	120.4	
Sc	45	No Gas	3794667.27	2.1	3932582.94	96.49	29.5	120.4	
Sc	45	H2	420960.95	2.7	485269.91	86.75	29.5	120.4	
Sc	45	He	83135.43	2.7	96164.21	86.45	29.5	120.4	
Ge	72	No Gas	879864.62	1.9	877152.82	100.31	29.5	120.4	
Ge	72	H2	155565.39	1.9	182501.5	85.24	29.5	120.4	
Ge	72	He	65221.62	2.7	74687.17	87.33	29.5	120.4	
Y	89	H2	2790582.20	3.2	3060772.3	91.17	29.5	120.4	
Y	89	He	569235.12	2.4	649886.7	87.59	29.5	120.4	
Tb	159	No Gas	9304054.10	1.7	8413567.03	110.58	29.5	120.4	
Tb	159	He	3205637.59	2.3	3319571.76	96.57	29.5	120.4	
Bi	209	No Gas	4887951.58	1.7	4391152.66	111.31	29.5	120.4	

Sample Report

Sample Name SN5815-016

File Name 085SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:04:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.276	ppb	12.7	117.78	100	
11	B	6	No Gas	19.093	ppb	1.5	4652.02	1000	
23	Na	45	He	94127.120	ppb	0.8	1921065.41	200000	
24	Mg	45	He	25864.005	ppb	0.6	291301.68	200000	
27	Al	45	He	9.664	ppb	36.7	57.78	200000	
28	Si	45	H2	2.353	ppb	67.0	503.90	10000	
39	K	45	He	16642.575	ppb	0.6	184534.91	200000	
40	Ca	45	H2	44883.598	ppb	2.0	3505678.91	200000	
51	V	89	He	1.878	ppb	11.8	567.81	1000	
52	Cr	89	He	0.311	ppb	10.7	131.31	2000	
55	Mn	89	He	0.497	ppb	28.0	69.99	2000	
56	Fe	89	H2	3.861	ppb	8.4	3527.70	100000	
59	Co	89	He	0.114	ppb	9.3	62.23	1000	
60	Ni	89	He	-1.161	ppb	N/A	133.34	1000	
63	Cu	89	He	0.433	ppb	23.4	241.12	2000	
66	Zn	89	He	2.851	ppb	21.1	181.12	2000	
75	As	89	He	0.168	ppb	51.2	9.00	1000	
78	Se	89	H2	0.254	ppb	69.4	4.67	1000	
88	Sr	89	He	4.895	ppb	2.2	743.38	2000	
95	Mo	89	He	0.789	ppb	23.8	138.90	1000	
107	Ag	89	He	0.256	ppb	19.9	151.12	100	
111	Cd	89	He	0.110	ppb	69.0	8.52	1000	
118	Sn	159	He	2.129	ppb	11.4	418.91	1000	
121	Sb	159	No Gas	0.063	ppb	40.9	133.49	1000	
137	Ba	159	No Gas	0.569	ppb	17.5	350.40	2000	
182	W	159	No Gas	0.013	ppb	278.2	50.06	1000	
205	Tl	209	No Gas	-0.041	ppb	N/A	236.93	1000	
208	Pb	209	No Gas	0.248	ppb	5.3	1097.92	2000	
232	Th	209	No Gas	0.040	ppb	74.4	276.98	1000	
238	U	209	No Gas	0.007	ppb	51.1	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1530415.60	2.1	1745272.14	87.69	29.5	120.4	
Sc	45	No Gas	3706719.61	2.2	3932582.94	94.26	29.5	120.4	
Sc	45	H2	422385.26	1.4	485269.91	87.04	29.5	120.4	
Sc	45	He	86504.31	0.5	96164.21	89.95	29.5	120.4	
Ge	72	No Gas	851632.64	2.4	877152.82	97.09	29.5	120.4	
Ge	72	H2	157138.75	2.7	182501.5	86.1	29.5	120.4	
Ge	72	He	67314.00	1.1	74687.17	90.13	29.5	120.4	
Y	89	H2	2800579.23	1.7	3060772.3	91.5	29.5	120.4	
Y	89	He	588751.71	0.8	649886.7	90.59	29.5	120.4	
Tb	159	No Gas	9039268.34	2.3	8413567.03	107.44	29.5	120.4	
Tb	159	He	3290384.64	1.0	3319571.76	99.12	29.5	120.4	
Bi	209	No Gas	4691663.32	3.0	4391152.66	106.84	29.5	120.4	

Sample Report

Sample Name SN5815-036

File Name 086SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:06:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.292	ppb	42.8	124.45	100	
11	B	6	No Gas	37.507	ppb	6.0	7650.07	1000	
23	Na	45	He	-231.059	ppb	N/A	13033.81	200000	
24	Mg	45	He	-4.914	ppb	N/A	831.20	200000	
27	Al	45	He	10.088	ppb	4.4	58.89	200000	
28	Si	45	H2	48.386	ppb	23.7	904.37	10000	
39	K	45	He	44.984	ppb	76.1	10855.94	200000	
40	Ca	45	H2	42.542	ppb	6.9	4160.77	200000	
51	V	89	He	2.435	ppb	12.9	657.82	1000	
52	Cr	89	He	0.288	ppb	41.8	125.98	2000	
55	Mn	89	He	0.776	ppb	24.5	96.65	2000	
56	Fe	89	H2	5.408	ppb	11.1	4078.48	100000	
59	Co	89	He	0.025	ppb	406.5	31.11	1000	
60	Ni	89	He	-0.013	ppb	N/A	241.12	1000	
63	Cu	89	He	3.383	ppb	7.1	1028.97	2000	
66	Zn	89	He	4.841	ppb	8.0	250.01	2000	
75	As	89	He	0.180	ppb	10.2	9.33	1000	
78	Se	89	H2	0.138	ppb	37.3	2.83	1000	
88	Sr	89	He	0.056	ppb	163.8	14.44	2000	
95	Mo	89	He	0.127	ppb	50.4	25.55	1000	
107	Ag	89	He	0.467	ppb	2.2	272.23	100	
111	Cd	89	He	0.060	ppb	13.5	4.81	1000	
118	Sn	159	He	1.746	ppb	3.2	351.13	1000	
121	Sb	159	No Gas	0.105	ppb	11.7	196.89	1000	
137	Ba	159	No Gas	0.398	ppb	31.8	256.95	2000	
182	W	159	No Gas	0.040	ppb	143.5	80.09	1000	
205	Tl	209	No Gas	-0.054	ppb	N/A	210.24	1000	
208	Pb	209	No Gas	0.257	ppb	15.4	1147.99	2000	
232	Th	209	No Gas	0.044	ppb	24.4	297.00	1000	
238	U	209	No Gas	62.223	ppb	10.0	203089.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1576005.27	4.2	1745272.14	90.3	29.5	120.4	
Sc	45	No Gas	3760084.49	5.3	3932582.94	95.61	29.5	120.4	
Sc	45	H2	429902.46	2.4	485269.91	88.59	29.5	120.4	
Sc	45	He	85401.22	0.5	96164.21	88.81	29.5	120.4	
Ge	72	No Gas	860507.49	3.6	877152.82	98.1	29.5	120.4	
Ge	72	H2	158750.45	3.8	182501.5	86.99	29.5	120.4	
Ge	72	He	67225.89	1.7	74687.17	90.01	29.5	120.4	
Y	89	H2	2836825.03	2.8	3060772.3	92.68	29.5	120.4	
Y	89	He	585850.45	1.2	649886.7	90.15	29.5	120.4	
Tb	159	No Gas	9126228.06	5.3	8413567.03	108.47	29.5	120.4	
Tb	159	He	3278918.22	1.5	3319571.76	98.78	29.5	120.4	
Bi	209	No Gas	4795732.75	5.1	4391152.66	109.21	29.5	120.4	

Sample Report

Sample Name SN6059-001

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:09:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.184	ppb	19.7	90.00	100	
11	B	6	No Gas	1093.770	ppb	6.3	156415.68	1000	
23	Na	45	He	499111.677	ppb	1.9	9933489.49	200000	
24	Mg	45	He	59710.599	ppb	2.1	659620.59	200000	
27	Al	45	He	20.113	ppb	3.8	102.23	200000	
28	Si	45	H2	8663.352	ppb	5.7	71269.92	10000	
39	K	45	He	943.378	ppb	3.8	20035.01	200000	
40	Ca	45	H2	326560.255	ppb	3.6	24884666.58	200000	
51	V	89	He	2.684	ppb	15.4	687.82	1000	
52	Cr	89	He	1.558	ppb	38.0	379.27	2000	
55	Mn	89	He	1274.930	ppb	1.1	120888.19	2000	
56	Fe	89	H2	8692.501	ppb	3.1	2740591.28	100000	
59	Co	89	He	0.450	ppb	100.4	177.80	1000	
60	Ni	89	He	0.864	ppb	120.6	318.90	1000	
63	Cu	89	He	1.321	ppb	25.0	470.03	2000	
66	Zn	89	He	6.706	ppb	35.5	310.02	2000	
75	As	89	He	0.557	ppb	34.6	20.33	1000	
78	Se	89	H2	0.454	ppb	25.4	7.67	1000	
88	Sr	89	He	3563.063	ppb	1.0	525129.14	2000	
95	Mo	89	He	0.831	ppb	71.7	143.34	1000	
107	Ag	89	He	0.375	ppb	107.5	216.68	100	
111	Cd	89	He	0.241	ppb	165.7	18.15	1000	
118	Sn	159	He	1.628	ppb	55.9	328.91	1000	
121	Sb	159	No Gas	0.134	ppb	39.5	220.25	1000	
137	Ba	159	No Gas	80.599	ppb	7.3	43874.42	2000	
182	W	159	No Gas	0.021	ppb	49.7	56.73	1000	
205	Tl	209	No Gas	-0.070	ppb	N/A	153.51	1000	
208	Pb	209	No Gas	0.303	ppb	8.6	1181.35	2000	
232	Th	209	No Gas	0.034	ppb	52.0	240.27	1000	
238	U	209	No Gas	1.984	ppb	5.3	5861.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1434963.25	6.5	1745272.14	82.22	29.5	120.4	
Sc	45	No Gas	3478744.84	8.6	3932582.94	88.46	29.5	120.4	
Sc	45	H2	412376.24	2.8	485269.91	84.98	29.5	120.4	
Sc	45	He	85015.11	1.8	96164.21	88.41	29.5	120.4	
Ge	72	No Gas	799482.85	7.7	877152.82	91.15	29.5	120.4	
Ge	72	H2	153480.33	2.2	182501.5	84.1	29.5	120.4	
Ge	72	He	66091.28	1.5	74687.17	88.49	29.5	120.4	
Y	89	H2	2730261.49	2.5	3060772.3	89.2	29.5	120.4	
Y	89	He	576036.94	1.1	649886.7	88.64	29.5	120.4	
Tb	159	No Gas	8523130.91	8.7	8413567.03	101.3	29.5	120.4	
Tb	159	He	3250592.42	1.5	3319571.76	97.92	29.5	120.4	
Bi	209	No Gas	4338334.85	8.0	4391152.66	98.8	29.5	120.4	

Sample Report

Sample Name SN6059-001L

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:12:05 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.577	ppb	48.0	83.34	100	
11	B	6	No Gas	1125.122	ppb	3.3	37398.06	1000	
23	Na	45	He	511041.084	ppb	1.0	2115236.39	200000	
24	Mg	45	He	61523.057	ppb	0.3	141107.25	200000	
27	Al	45	He	28.861	ppb	75.6	41.11	200000	
28	Si	45	H2	9077.543	ppb	2.2	15929.95	10000	
39	K	45	He	887.401	ppb	6.4	12564.89	200000	
40	Ca	45	H2	335736.862	ppb	1.5	5323007.70	200000	
51	V	89	He	4.151	ppb	16.5	396.68	1000	
52	Cr	89	He	1.176	ppb	17.1	117.31	2000	
55	Mn	89	He	1297.720	ppb	1.3	25482.28	2000	
56	Fe	89	H2	9173.275	ppb	1.1	602789.86	100000	
59	Co	89	He	0.091	ppb	118.3	28.89	1000	
60	Ni	89	He	-6.006	ppb	N/A	131.12	1000	
63	Cu	89	He	1.235	ppb	41.3	193.34	2000	
66	Zn	89	He	6.166	ppb	42.7	125.56	2000	
75	As	89	He	0.769	ppb	75.2	8.67	1000	
78	Se	89	H2	0.585	ppb	70.9	2.50	1000	
88	Sr	89	He	3676.531	ppb	0.4	112141.68	2000	
95	Mo	89	He	0.718	ppb	21.3	28.89	1000	
107	Ag	89	He	0.372	ppb	32.5	46.67	100	
111	Cd	89	He	0.027	ppb	158.4	0.74	1000	
118	Sn	159	He	1.102	ppb	11.6	87.78	1000	
121	Sb	159	No Gas	0.078	ppb	73.0	63.41	1000	
137	Ba	159	No Gas	75.682	ppb	8.3	8932.97	2000	
182	W	159	No Gas	-0.014	ppb	N/A	33.37	1000	
205	Tl	209	No Gas	-0.582	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	0.683	ppb	17.2	744.17	2000	
232	Th	209	No Gas	0.034	ppb	214.0	170.19	1000	
238	U	209	No Gas	1.841	ppb	2.4	1208.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1598658.60	1.8	1745272.14	91.6	29.5	120.4	
Sc	45	No Gas	3873219.88	2.8	3932582.94	98.49	29.5	120.4	
Sc	45	H2	428734.64	1.8	485269.91	88.35	29.5	120.4	
Sc	45	He	87781.04	0.2	96164.21	91.28	29.5	120.4	
Ge	72	No Gas	886250.17	2.7	877152.82	101.04	29.5	120.4	
Ge	72	H2	163204.28	1.4	182501.5	89.43	29.5	120.4	
Ge	72	He	68968.44	0.9	74687.17	92.34	29.5	120.4	
Y	89	H2	2835520.60	1.5	3060772.3	92.64	29.5	120.4	
Y	89	He	596016.13	0.7	649886.7	91.71	29.5	120.4	
Tb	159	No Gas	9197124.10	2.8	8413567.03	109.31	29.5	120.4	
Tb	159	He	3292886.58	0.7	3319571.76	99.2	29.5	120.4	
Bi	209	No Gas	4805642.09	2.3	4391152.66	109.44	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	089_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:14:48 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.518	ppb	7.3	29679.01	25	98.07	89.8	110.2	
11	B	6	No Gas	27.163	ppb	7.1	22932.12	25	108.65	89.8	110.2	
23	Na	45	He	5139.613	ppb	2.0	531141.18	5000	102.79	89.8	110.2	
24	Mg	45	He	5032.954	ppb	2.5	280091.44	5000	100.66	89.8	110.2	
27	Al	45	He	484.788	ppb	1.1	10625.42	500	96.96	89.8	110.2	
28	Si	45	H2	454.275	ppb	3.3	19555.19	500	90.85	89.8	110.2	
39	K	45	He	4859.215	ppb	1.8	261448.71	5000	97.18	89.8	110.2	
40	Ca	45	H2	4877.714	ppb	1.8	1909445.33	5000	97.55	89.8	110.2	
51	V	89	He	24.674	ppb	1.9	20769.27	25	98.7	89.8	110.2	
52	Cr	89	He	25.045	ppb	1.6	25496.96	25	100.18	89.8	110.2	
55	Mn	89	He	24.925	ppb	0.8	11990.91	25	99.7	89.8	110.2	
56	Fe	89	H2	4788.419	ppb	2.9	7788076.87	5000	95.77	89.8	110.2	
59	Co	89	He	25.491	ppb	2.7	44602.47	25	101.96	89.8	110.2	
60	Ni	89	He	25.189	ppb	3.1	12083.42	25	100.76	89.8	110.2	
63	Cu	89	He	25.394	ppb	2.7	33960.96	25	101.58	89.8	110.2	
66	Zn	89	He	25.524	ppb	3.6	4537.57	25	102.1	89.8	110.2	
75	As	89	He	24.912	ppb	1.5	3735.58	25	99.65	89.8	110.2	
78	Se	89	H2	24.142	ppb	3.5	1935.05	25	96.57	89.8	110.2	
88	Sr	89	He	24.211	ppb	0.7	18081.29	25	96.84	89.8	110.2	
95	Mo	89	He	25.166	ppb	1.9	21297.20	25	100.66	89.8	110.2	
107	Ag	89	He	25.608	ppb	2.1	73450.15	25	102.43	89.8	110.2	
111	Cd	89	He	25.687	ppb	3.1	9523.06	25	102.75	89.8	110.2	
118	Sn	159	He	24.000	ppb	3.4	20585.31	25	96	89.8	110.2	
121	Sb	159	No Gas	23.640	ppb	8.7	173851.86	25	94.56	89.8	110.2	
137	Ba	159	No Gas	23.765	ppb	8.1	68478.06	25	95.06	89.8	110.2	
182	W	159	No Gas	23.738	ppb	8.4	131259.27	25	94.95	89.8	110.2	
205	Tl	209	No Gas	24.306	ppb	6.8	293826.33	25	97.22	89.8	110.2	
208	Pb	209	No Gas	24.311	ppb	8.3	406829.56	25	97.24	89.8	110.2	
232	Th	209	No Gas	24.156	ppb	9.3	411526.49	25	96.62	89.8	110.2	
238	U	209	No Gas	24.351	ppb	8.9	391063.57	25	97.4	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1575891.78	4.6	1745272.14	90.29	29.5	120.4	
Sc	45	No Gas	3781172.58	6.6	3932582.94	96.15	29.5	120.4	
Sc	45	H2	423301.90	1.5	485269.91	87.23	29.5	120.4	
Sc	45	He	85499.59	1.5	96164.21	88.91	29.5	120.4	
Ge	72	No Gas	852193.60	5.3	877152.82	97.15	29.5	120.4	
Ge	72	H2	157951.58	2.2	182501.5	86.55	29.5	120.4	
Ge	72	He	66675.82	0.6	74687.17	89.27	29.5	120.4	
Y	89	H2	2818052.87	2.4	3060772.3	92.07	29.5	120.4	
Y	89	He	583571.04	1.1	649886.7	89.8	29.5	120.4	
Tb	159	No Gas	9017212.02	6.3	8413567.03	107.17	29.5	120.4	
Tb	159	He	3246364.85	0.9	3319571.76	97.79	29.5	120.4	
Bi	209	No Gas	4720424.53	6.1	4391152.66	107.5	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	090_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:17:23 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.080	ppb	31.2	154.45	0.2	
11	B	6	No Gas	2.084	ppb	11.4	3513.89	4	Failed DoD
23	Na	45	He	-65.692	ppb	N/A	11330.42	200	
24	Mg	45	He	-4.472	ppb	N/A	651.18	20	
27	Al	45	He	-0.130	ppb	N/A	12.22	20	
28	Si	45	H2	-1.447	ppb	N/A	437.16	100	
39	K	45	He	3.192	ppb	89.0	10785.95	200	
40	Ca	45	H2	3.307	ppb	5.5	2126.90	20	
51	V	89	He	-0.114	ppb	N/A	158.90	1	
52	Cr	89	He	-0.008	ppb	N/A	60.66	1	
55	Mn	89	He	0.005	ppb	234.4	24.66	0.4	
56	Fe	89	H2	1.926	ppb	12.8	5480.55	20	
59	Co	89	He	0.002	ppb	268.1	26.67	0.2	
60	Ni	89	He	-0.231	ppb	N/A	135.56	0.4	Failed DoD
63	Cu	89	He	-0.009	ppb	N/A	113.34	0.6	
66	Zn	89	He	-0.127	ppb	N/A	58.89	2	
75	As	89	He	0.011	ppb	91.1	5.67	1	
78	Se	89	H2	0.046	ppb	76.0	4.33	1	
88	Sr	89	He	0.015	ppb	115.3	17.78	1	
95	Mo	89	He	0.076	ppb	18.5	70.00	1	
107	Ag	89	He	0.017	ppb	33.7	52.22	0.2	
111	Cd	89	He	0.005	ppb	156.1	2.22	0.2	
118	Sn	159	He	0.050	ppb	55.1	91.12	1	
121	Sb	159	No Gas	0.020	ppb	32.2	186.88	0.2	
137	Ba	159	No Gas	0.012	ppb	82.6	56.73	0.4	
182	W	159	No Gas	0.070	ppb	9.1	423.81	1	
205	Tl	209	No Gas	0.005	ppb	132.2	407.13	0.2	
208	Pb	209	No Gas	0.030	ppb	24.9	784.23	0.2	
232	Th	209	No Gas	0.063	ppb	19.0	1228.11	1	
238	U	209	No Gas	0.024	ppb	23.4	383.77	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1609722.22	1.6	1745272.14	92.23	29.5	120.4	
Sc	45	No Gas	3827320.60	3.0	3932582.94	97.32	29.5	120.4	
Sc	45	H2	436016.16	1.2	485269.91	89.85	29.5	120.4	
Sc	45	He	87256.98	1.2	96164.21	90.74	29.5	120.4	
Ge	72	No Gas	867345.14	2.1	877152.82	98.88	29.5	120.4	
Ge	72	H2	163674.68	2.3	182501.5	89.68	29.5	120.4	
Ge	72	He	68376.52	0.8	74687.17	91.55	29.5	120.4	
Y	89	H2	2848134.83	1.7	3060772.3	93.05	29.5	120.4	
Y	89	He	595373.38	0.5	649886.7	91.61	29.5	120.4	
Tb	159	No Gas	9018457.78	2.9	8413567.03	107.19	29.5	120.4	
Tb	159	He	3243022.38	0.7	3319571.76	97.69	29.5	120.4	
Bi	209	No Gas	4749663.14	2.9	4391152.66	108.16	29.5	120.4	

Sample Report

Sample Name SN6059-001A

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:20:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.705	ppb	7.0	2631.45	100	
11	B	6	No Gas	1307.890	ppb	3.6	187397.59	1000	
23	Na	45	He	496061.375	ppb	0.8	9976321.07	200000	
24	Mg	45	He	59096.334	ppb	1.4	659687.72	200000	
27	Al	45	He	964.651	ppb	2.7	4256.34	200000	
28	Si	45	H2	13590.474	ppb	0.9	111107.44	10000	
39	K	45	He	10836.054	ppb	1.0	122941.85	200000	
40	Ca	45	H2	327849.927	ppb	0.5	24875682.68	200000	
51	V	89	He	54.638	ppb	0.9	9242.24	1000	
52	Cr	89	He	53.324	ppb	0.8	10785.48	2000	
55	Mn	89	He	1280.146	ppb	0.3	121715.92	2000	
56	Fe	89	H2	9712.793	ppb	0.5	3044180.25	100000	
59	Co	89	He	10.798	ppb	2.9	3760.78	1000	
60	Ni	89	He	23.111	ppb	3.4	2390.30	1000	
63	Cu	89	He	32.640	ppb	2.5	8733.02	2000	
66	Zn	89	He	115.627	ppb	3.2	4077.42	2000	
75	As	89	He	54.258	ppb	5.1	1612.94	1000	
78	Se	89	H2	51.348	ppb	0.3	792.99	1000	
88	Sr	89	He	3573.639	ppb	1.0	528151.79	2000	
95	Mo	89	He	54.867	ppb	2.3	9194.51	1000	
107	Ag	89	He	10.997	ppb	2.7	6247.20	100	
111	Cd	89	He	11.235	ppb	3.6	824.85	1000	
118	Sn	159	He	51.778	ppb	1.3	8911.03	1000	
121	Sb	159	No Gas	11.420	ppb	9.3	15656.57	1000	
137	Ba	159	No Gas	103.202	ppb	5.7	55383.68	2000	
182	W	159	No Gas	56.958	ppb	7.5	58644.13	1000	
205	Tl	209	No Gas	11.405	ppb	6.0	25390.29	1000	
208	Pb	209	No Gas	11.611	ppb	3.8	35659.52	2000	
232	Th	209	No Gas	12.807	ppb	5.2	39904.69	1000	
238	U	209	No Gas	14.290	ppb	6.2	41833.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1437378.24	3.2	1745272.14	82.36	29.5	120.4	
Sc	45	No Gas	3454651.09	5.9	3932582.94	87.85	29.5	120.4	
Sc	45	H2	410356.67	1.7	485269.91	84.56	29.5	120.4	
Sc	45	He	85891.66	1.4	96164.21	89.32	29.5	120.4	
Ge	72	No Gas	796763.53	3.8	877152.82	90.84	29.5	120.4	
Ge	72	H2	152490.75	0.5	182501.5	83.56	29.5	120.4	
Ge	72	He	66317.44	0.8	74687.17	88.79	29.5	120.4	
Y	89	H2	2712971.21	0.6	3060772.3	88.64	29.5	120.4	
Y	89	He	577593.15	0.5	649886.7	88.88	29.5	120.4	
Tb	159	No Gas	8385339.87	5.5	8413567.03	99.66	29.5	120.4	
Tb	159	He	3246350.02	0.9	3319571.76	97.79	29.5	120.4	
Bi	209	No Gas	4294654.92	4.5	4391152.66	97.8	29.5	120.4	

Sample Report

Sample Name SN6059-001S

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:22:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.425	ppb	5.5	12062.10	100	
11	B	6	No Gas	1606.714	ppb	4.0	243176.72	1000	
23	Na	45	He	504561.013	ppb	1.1	10350309.94	200000	
24	Mg	45	He	64490.556	ppb	1.7	734250.96	200000	
27	Al	45	He	1920.016	ppb	3.9	8628.46	200000	
28	Si	45	H2	9619.838	ppb	2.3	83100.18	10000	
39	K	45	He	10990.629	ppb	1.2	127041.50	200000	
40	Ca	45	H2	322718.827	ppb	3.1	25825849.06	200000	
51	V	89	He	526.267	ppb	2.0	88582.80	1000	
52	Cr	89	He	212.348	ppb	1.5	43588.13	2000	
55	Mn	89	He	1799.377	ppb	0.9	174423.87	2000	
56	Fe	89	H2	9542.037	ppb	2.6	3133380.14	100000	
59	Co	89	He	526.910	ppb	0.9	186037.00	1000	
60	Ni	89	He	522.887	ppb	1.9	49867.45	1000	
63	Cu	89	He	260.913	ppb	1.8	70302.83	2000	
66	Zn	89	He	527.062	ppb	2.9	18663.12	2000	
75	As	89	He	107.814	ppb	1.2	3263.75	1000	
78	Se	89	H2	100.542	ppb	5.6	1625.86	1000	
88	Sr	89	He	4108.439	ppb	1.4	619069.60	2000	
95	Mo	89	He	109.179	ppb	2.0	18649.98	1000	
107	Ag	89	He	53.378	ppb	2.5	30906.00	100	
111	Cd	89	He	263.715	ppb	0.5	19735.21	1000	
118	Sn	159	He	500.663	ppb	1.2	86826.71	1000	
121	Sb	159	No Gas	103.400	ppb	4.1	151380.56	1000	
137	Ba	159	No Gas	2061.685	ppb	4.9	1181871.48	2000	
182	W	159	No Gas	108.555	ppb	5.3	119467.42	1000	
205	Tl	209	No Gas	107.861	ppb	3.8	249671.22	1000	
208	Pb	209	No Gas	107.591	ppb	4.3	344941.63	2000	
232	Th	209	No Gas	111.002	ppb	5.3	362369.39	1000	
238	U	209	No Gas	112.310	ppb	3.6	345604.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1520455.08	2.1	1745272.14	87.12	29.5	120.4	
Sc	45	No Gas	3703496.88	1.7	3932582.94	94.17	29.5	120.4	
Sc	45	H2	433008.10	2.7	485269.91	89.23	29.5	120.4	
Sc	45	He	87608.32	0.4	96164.21	91.1	29.5	120.4	
Ge	72	No Gas	842599.95	1.4	877152.82	96.06	29.5	120.4	
Ge	72	H2	159996.43	2.7	182501.5	87.67	29.5	120.4	
Ge	72	He	68023.80	0.9	74687.17	91.08	29.5	120.4	
Y	89	H2	2843779.18	3.1	3060772.3	92.91	29.5	120.4	
Y	89	He	588901.65	0.2	649886.7	90.62	29.5	120.4	
Tb	159	No Gas	8945668.48	1.4	8413567.03	106.32	29.5	120.4	
Tb	159	He	3287293.21	0.4	3319571.76	99.03	29.5	120.4	
Bi	209	No Gas	4507868.02	1.5	4391152.66	102.66	29.5	120.4	

Sample Report

Sample Name SN6059-001P

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:25:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.770	ppb	7.4	12479.12	100	
11	B	6	No Gas	1572.499	ppb	5.2	244704.96	1000	
23	Na	45	He	496218.894	ppb	1.5	10200930.88	200000	
24	Mg	45	He	63687.092	ppb	1.4	726637.09	200000	
27	Al	45	He	1925.962	ppb	3.4	8671.83	200000	
28	Si	45	H2	9742.829	ppb	4.4	83603.37	10000	
39	K	45	He	10888.040	ppb	0.8	126228.01	200000	
40	Ca	45	H2	324855.262	ppb	2.8	25832785.73	200000	
51	V	89	He	520.700	ppb	2.1	88121.01	1000	
52	Cr	89	He	207.841	ppb	2.2	42894.17	2000	
55	Mn	89	He	1774.438	ppb	2.1	172933.93	2000	
56	Fe	89	H2	9611.301	ppb	3.7	3141875.80	100000	
59	Co	89	He	524.624	ppb	1.8	186234.04	1000	
60	Ni	89	He	526.961	ppb	2.2	50526.28	1000	
63	Cu	89	He	259.618	ppb	2.6	70327.10	2000	
66	Zn	89	He	529.487	ppb	2.6	18848.87	2000	
75	As	89	He	110.225	ppb	0.5	3355.44	1000	
78	Se	89	H2	104.701	ppb	5.1	1685.69	1000	
88	Sr	89	He	4024.946	ppb	2.2	609772.05	2000	
95	Mo	89	He	108.565	ppb	1.8	18645.50	1000	
107	Ag	89	He	52.441	ppb	3.3	30525.21	100	
111	Cd	89	He	261.968	ppb	2.3	19709.24	1000	
118	Sn	159	He	496.665	ppb	1.7	86307.97	1000	
121	Sb	159	No Gas	100.628	ppb	6.7	150094.91	1000	
137	Ba	159	No Gas	2018.984	ppb	6.0	1179464.89	2000	
182	W	159	No Gas	104.811	ppb	5.0	117581.40	1000	
205	Tl	209	No Gas	106.187	ppb	6.1	250492.80	1000	
208	Pb	209	No Gas	105.768	ppb	6.1	345573.20	2000	
232	Th	209	No Gas	109.016	ppb	7.0	362665.32	1000	
238	U	209	No Gas	110.684	ppb	7.2	346993.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1563867.34	3.1	1745272.14	89.61	29.5	120.4	
Sc	45	No Gas	3827959.65	3.6	3932582.94	97.34	29.5	120.4	
Sc	45	H2	430172.24	1.6	485269.91	88.65	29.5	120.4	
Sc	45	He	87802.28	1.3	96164.21	91.3	29.5	120.4	
Ge	72	No Gas	871462.33	3.4	877152.82	99.35	29.5	120.4	
Ge	72	H2	159020.71	2.0	182501.5	87.13	29.5	120.4	
Ge	72	He	68254.53	1.5	74687.17	91.39	29.5	120.4	
Y	89	H2	2831112.42	2.1	3060772.3	92.5	29.5	120.4	
Y	89	He	592209.44	1.8	649886.7	91.13	29.5	120.4	
Tb	159	No Gas	9126139.52	3.8	8413567.03	108.47	29.5	120.4	
Tb	159	He	3294258.43	1.1	3319571.76	99.24	29.5	120.4	
Bi	209	No Gas	4599016.20	3.6	4391152.66	104.73	29.5	120.4	

Sample Report

Sample Name SN6059-002

File Name 094SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:28:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.269	ppb	19.5	118.90	100	
11	B	6	No Gas	1041.746	ppb	5.0	163075.73	1000	
23	Na	45	He	490437.759	ppb	0.1	10130085.67	200000	
24	Mg	45	He	58964.543	ppb	0.3	676019.46	200000	
27	Al	45	He	37.457	ppb	3.6	184.45	200000	
28	Si	45	H2	8536.678	ppb	0.8	73218.39	10000	
39	K	45	He	954.984	ppb	1.4	20915.87	200000	
40	Ca	45	H2	324049.967	ppb	2.0	25730869.06	200000	
51	V	89	He	2.448	ppb	16.7	666.71	1000	
52	Cr	89	He	1.412	ppb	6.9	358.61	2000	
55	Mn	89	He	1272.339	ppb	0.9	123898.83	2000	
56	Fe	89	H2	8826.873	ppb	2.0	2882334.16	100000	
59	Co	89	He	0.357	ppb	2.7	148.90	1000	
60	Ni	89	He	0.195	ppb	176.8	263.34	1000	
63	Cu	89	He	1.563	ppb	7.2	547.81	2000	
66	Zn	89	He	5.590	ppb	10.2	278.90	2000	
75	As	89	He	0.616	ppb	47.7	22.67	1000	
78	Se	89	H2	0.540	ppb	48.0	9.33	1000	
88	Sr	89	He	3531.934	ppb	0.9	534598.58	2000	
95	Mo	89	He	0.922	ppb	5.8	162.23	1000	
107	Ag	89	He	0.123	ppb	35.0	74.45	100	
111	Cd	89	He	0.079	ppb	28.8	6.30	1000	
118	Sn	159	He	1.725	ppb	16.9	347.79	1000	
121	Sb	159	No Gas	0.237	ppb	5.5	397.12	1000	
137	Ba	159	No Gas	79.049	ppb	6.3	46633.54	2000	
182	W	159	No Gas	0.285	ppb	11.0	360.41	1000	
205	Tl	209	No Gas	-0.040	ppb	N/A	236.94	1000	
208	Pb	209	No Gas	0.158	ppb	16.7	787.56	2000	
232	Th	209	No Gas	0.813	ppb	10.4	2883.54	1000	
238	U	209	No Gas	1.926	ppb	8.5	6095.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1566934.63	2.5	1745272.14	89.78	29.5	120.4	
Sc	45	No Gas	3898062.07	2.9	3932582.94	99.12	29.5	120.4	
Sc	45	H2	429453.37	1.1	485269.91	88.5	29.5	120.4	
Sc	45	He	88208.18	0.5	96164.21	91.73	29.5	120.4	
Ge	72	No Gas	885593.97	3.4	877152.82	100.96	29.5	120.4	
Ge	72	H2	158166.72	1.7	182501.5	86.67	29.5	120.4	
Ge	72	He	68062.07	0.9	74687.17	91.13	29.5	120.4	
Y	89	H2	2826727.75	1.4	3060772.3	92.35	29.5	120.4	
Y	89	He	591547.80	0.4	649886.7	91.02	29.5	120.4	
Tb	159	No Gas	9209107.64	3.1	8413567.03	109.46	29.5	120.4	
Tb	159	He	3281885.23	0.4	3319571.76	98.86	29.5	120.4	
Bi	209	No Gas	4645110.94	3.6	4391152.66	105.78	29.5	120.4	

Sample Report

Sample Name SN6059-003

File Name 095SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:30:39 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.116	ppb	50.4	84.45	100	
11	B	6	No Gas	498.623	ppb	6.0	81045.07	1000	
23	Na	45	He	130436.347	ppb	1.0	2743536.90	200000	
24	Mg	45	He	19228.581	ppb	0.7	224004.75	200000	
27	Al	45	He	31.605	ppb	19.5	160.01	200000	
28	Si	45	H2	8627.042	ppb	3.7	76814.32	10000	
39	K	45	He	613.263	ppb	5.2	17502.99	200000	
40	Ca	45	H2	73971.051	ppb	3.8	6099426.16	200000	
51	V	89	He	2.656	ppb	6.8	716.72	1000	
52	Cr	89	He	0.317	ppb	23.4	135.98	2000	
55	Mn	89	He	682.236	ppb	1.0	67850.79	2000	
56	Fe	89	H2	3013.171	ppb	3.1	1019052.21	100000	
59	Co	89	He	0.066	ppb	28.4	46.67	1000	
60	Ni	89	He	-0.912	ppb	N/A	161.12	1000	
63	Cu	89	He	0.668	ppb	7.4	312.24	2000	
66	Zn	89	He	12.336	ppb	11.2	528.92	2000	
75	As	89	He	4.113	ppb	13.5	131.68	1000	
78	Se	89	H2	0.261	ppb	38.5	5.00	1000	
88	Sr	89	He	664.958	ppb	1.5	102782.73	2000	
95	Mo	89	He	2.938	ppb	2.5	518.92	1000	
107	Ag	89	He	0.137	ppb	12.5	84.45	100	
111	Cd	89	He	-0.004	ppb	N/A	0.00	1000	
118	Sn	159	He	1.150	ppb	23.7	252.24	1000	
121	Sb	159	No Gas	0.054	ppb	96.3	120.14	1000	
137	Ba	159	No Gas	14.953	ppb	9.3	8889.57	2000	
182	W	159	No Gas	0.085	ppb	27.1	133.48	1000	
205	Tl	209	No Gas	-0.102	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	0.059	ppb	20.3	477.20	2000	
232	Th	209	No Gas	0.102	ppb	4.2	497.23	1000	
238	U	209	No Gas	0.192	ppb	10.8	624.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1608629.68	3.7	1745272.14	92.17	29.5	120.4	
Sc	45	No Gas	3936178.91	3.8	3932582.94	100.09	29.5	120.4	
Sc	45	H2	446133.61	2.8	485269.91	91.94	29.5	120.4	
Sc	45	He	89383.37	0.8	96164.21	92.95	29.5	120.4	
Ge	72	No Gas	897755.80	3.4	877152.82	102.35	29.5	120.4	
Ge	72	H2	166244.92	2.5	182501.5	91.09	29.5	120.4	
Ge	72	He	69943.18	0.5	74687.17	93.65	29.5	120.4	
Y	89	H2	2923910.11	2.1	3060772.3	95.53	29.5	120.4	
Y	89	He	604103.07	0.8	649886.7	92.96	29.5	120.4	
Tb	159	No Gas	9270174.72	3.7	8413567.03	110.18	29.5	120.4	
Tb	159	He	3333823.80	0.3	3319571.76	100.43	29.5	120.4	
Bi	209	No Gas	4780800.01	3.5	4391152.66	108.87	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	lcs test
File Name	096LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:33:17 PM
Sample Type	LCSW
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.482	ppb	4.7	60157.92	50	90.96	79.5	120.4	
B	11	6	No Gas	500.547	ppb	3.6	427576.22	500	100.11	79.5	120.4	
Na	23	45	He	8254.688	ppb	2.2	831368.66	7500	110.06	79.5	120.4	
Mg	24	45	He	5355.167	ppb	2.1	294096.87	5000	107.1	79.5	120.4	
Al	27	45	He	1931.838	ppb	2.1	41741.74	2000	96.59	79.5	120.4	
Si	28	45	H2	972.317	ppb	0.9	40147.63	1000	97.23	0	200	
K	39	45	He	10362.009	ppb	1.5	538654.75	10000	103.62	79.5	120.4	
Ca	40	45	H2	2658.140	ppb	1.2	1011710.22	2500	106.33	79.5	120.4	
V	51	89	He	519.092	ppb	1.6	428111.30	500	103.82	79.5	120.4	
Cr	52	89	He	212.877	ppb	1.6	214319.43	200	106.44	79.5	120.4	
Mn	55	89	He	522.301	ppb	1.7	248621.93	500	104.46	79.5	120.4	
Fe	56	89	H2	1032.399	ppb	0.9	1649118.25	1000	103.24	79.5	120.4	
Co	59	89	He	532.264	ppb	1.7	922788.37	500	106.45	79.5	120.4	
Ni	60	89	He	539.846	ppb	1.5	251840.21	500	107.97	79.5	120.4	
Cu	63	89	He	263.447	ppb	1.4	348113.88	250	105.38	79.5	120.4	
Zn	66	89	He	520.999	ppb	0.9	90294.28	500	104.2	79.5	120.4	
As	75	89	He	104.703	ppb	0.8	15551.37	100	104.7	79.5	120.4	
Se	78	89	H2	103.223	ppb	0.8	8113.82	100	103.22	79.5	120.4	
Sr	88	89	He	512.291	ppb	1.0	379107.02	500	102.46	79.5	120.4	
Mo	95	89	He	109.628	ppb	1.9	91947.06	100	109.63	79.5	120.4	
Ag	107	89	He	55.558	ppb	1.4	157966.28	50	111.12	79.5	120.4	
Cd	111	89	He	268.405	ppb	1.6	98638.11	250	107.36	79.5	120.4	
Sn	118	159	He	483.119	ppb	1.5	418157.87	500	96.62	79.5	120.4	
Sb	121	159	No Gas	95.818	ppb	5.0	752338.13	100	95.82	79.5	120.4	
Ba	137	159	No Gas	1900.449	ppb	4.8	5844649.65	2000	95.02	79.5	120.4	
W	182	159	No Gas	101.000	ppb	4.9	596187.87	100	101	79.5	120.4	
Tl	205	209	No Gas	100.682	ppb	4.4	1266402.41	100	100.68	79.5	120.4	
[Pb]	206	209	No Gas	103.136	ppb	5.1	450847.13	100	103.14	79.5	120.4	
[Pb]	207	209	No Gas	103.215	ppb	4.2	395841.34	100	103.22	79.5	120.4	
Pb	208	209	No Gas	103.313	ppb	4.4	1800696.55	100	103.31	79.5	120.4	
Th	232	209	No Gas	103.101	ppb	6.2	1830014.04	100	103.1	79.5	120.4	
U	238	209	No Gas	103.113	ppb	5.7	1725541.84	100	103.11	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1720708.79	2.3	1745272.14	98.59	29.5	120.4	
Sc	45	No Gas	3871771.69	3.3	3932582.94	98.45	29.5	120.4	
Sc	45	H2	411388.16	0.8	485269.91	84.78	29.5	120.4	
Sc	45	He	84391.78	1.9	96164.21	87.76	29.5	120.4	
Ge	72	No Gas	924453.44	3.2	877152.82	105.39	29.5	120.4	
Ge	72	H2	152733.10	1.7	182501.5	83.69	29.5	120.4	
Ge	72	He	66674.34	1.1	74687.17	89.27	29.5	120.4	
Y	89	H2	2763597.67	0.4	3060772.3	90.29	29.5	120.4	
Y	89	He	578485.42	1.5	649886.7	89.01	29.5	120.4	
Tb	159	No Gas	9602597.29	3.0	8413567.03	114.13	29.5	120.4	
Tb	159	He	3283167.80	1.4	3319571.76	98.9	29.5	120.4	
Bi	209	No Gas	4907040.46	3.3	4391152.66	111.75	29.5	120.4	

Sample Report

Sample Name SN6090-001

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:35:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.710	ppb	12.2	227.79	100	
11	B	6	No Gas	259.242	ppb	3.4	42459.81	1000	
23	Na	45	He	39252.014	ppb	2.2	826392.20	200000	
24	Mg	45	He	18249.800	ppb	3.0	209553.39	200000	
27	Al	45	He	50.924	ppb	23.5	245.57	200000	
28	Si	45	H2	5671.101	ppb	1.8	48445.77	10000	
39	K	45	He	12963.133	ppb	3.2	148724.58	200000	
40	Ca	45	H2	110736.258	ppb	1.9	8728838.69	200000	
51	V	89	He	1.818	ppb	11.2	566.70	1000	
52	Cr	89	He	1.206	ppb	18.1	319.95	2000	
55	Mn	89	He	162.379	ppb	2.2	16010.16	2000	
56	Fe	89	H2	504.318	ppb	2.2	167109.42	100000	
59	Co	89	He	0.879	ppb	12.2	337.81	1000	
60	Ni	89	He	7.008	ppb	2.7	923.40	1000	
63	Cu	89	He	18.581	ppb	2.2	5204.48	2000	
66	Zn	89	He	134.157	ppb	0.7	4887.69	2000	
75	As	89	He	2.107	ppb	7.9	68.68	1000	
78	Se	89	H2	0.646	ppb	18.3	11.00	1000	
88	Sr	89	He	488.838	ppb	1.8	74834.95	2000	
95	Mo	89	He	2.422	ppb	6.1	424.47	1000	
107	Ag	89	He	0.235	ppb	12.0	141.12	100	
111	Cd	89	He	1.165	ppb	9.8	88.89	1000	
118	Sn	159	He	2.111	ppb	5.6	422.25	1000	
121	Sb	159	No Gas	0.630	ppb	18.5	1034.53	1000	
137	Ba	159	No Gas	333.471	ppb	3.8	205329.23	2000	
182	W	159	No Gas	0.673	ppb	10.7	834.29	1000	
205	Tl	209	No Gas	0.217	ppb	31.1	904.37	1000	
208	Pb	209	No Gas	1.526	ppb	7.8	5643.49	2000	
232	Th	209	No Gas	1.769	ppb	21.3	6485.65	1000	
238	U	209	No Gas	2.282	ppb	4.4	7694.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1585888.34	2.0	1745272.14	90.87	29.5	120.4	
Sc	45	No Gas	3943664.15	1.8	3932582.94	100.28	29.5	120.4	
Sc	45	H2	426416.96	2.8	485269.91	87.87	29.5	120.4	
Sc	45	He	88111.09	1.9	96164.21	91.63	29.5	120.4	
Ge	72	No Gas	898415.12	2.3	877152.82	102.42	29.5	120.4	
Ge	72	H2	158962.14	2.8	182501.5	87.1	29.5	120.4	
Ge	72	He	68532.63	0.5	74687.17	91.76	29.5	120.4	
Y	89	H2	2831818.20	2.6	3060772.3	92.52	29.5	120.4	
Y	89	He	598305.42	0.8	649886.7	92.06	29.5	120.4	
Tb	159	No Gas	9607355.76	1.6	8413567.03	114.19	29.5	120.4	
Tb	159	He	3340947.73	1.1	3319571.76	100.64	29.5	120.4	
Bi	209	No Gas	4939904.94	1.5	4391152.66	112.5	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG24IMW1
File Name	098_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:38:33 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.049	ppb	21.2	116.67	0.1	
B	11	6	No Gas	3.499	ppb	3.0	4685.37	2	200.8 PB Fails DoD
Na	23	45	He	-36.574	ppb	N/A	14740.64	100	
Mg	24	45	He	-3.184	ppb	N/A	746.74	10	
Al	27	45	He	8.103	ppb	12.1	202.23	10	
Si	28	45	H2	-0.073	ppb	N/A	500.57	50	
K	39	45	He	4.296	ppb	191.6	11177.71	100	
Ca	40	45	H2	11.452	ppb	4.2	5461.25	10	200.8 PB Fails DoD
V	51	89	He	0.071	ppb	42.2	322.24	0.5	
Cr	52	89	He	0.012	ppb	225.5	82.65	0.5	
Mn	55	89	He	0.257	ppb	12.0	151.31	0.2	200.8 PB Fails DoD
Fe	56	89	H2	0.808	ppb	8.6	3711.31	10	
Co	59	89	He	0.056	ppb	51.9	124.45	0.1	
Ni	60	89	He	-0.237	ppb	N/A	135.56	0.2	200.8 PB Fails DoD
Cu	63	89	He	0.113	ppb	4.0	285.57	0.3	
Zn	66	89	He	0.600	ppb	16.4	192.23	1	
As	75	89	He	0.008	ppb	45.2	5.33	0.5	
Se	78	89	H2	0.009	ppb	207.1	1.33	0.5	
Sr	88	89	He	0.045	ppb	19.0	41.11	0.5	
Mo	95	89	He	0.019	ppb	63.3	21.11	0.5	
Ag	107	89	He	0.013	ppb	50.5	41.11	0.1	
Cd	111	89	He	0.017	ppb	51.1	7.04	0.1	
Sn	118	159	He	0.104	ppb	1.2	142.23	0.5	
Sb	121	159	No Gas	0.011	ppb	30.5	126.81	0.1	
Ba	137	159	No Gas	0.213	ppb	17.5	657.42	0.2	200.8 PB Fails DoD
W	182	159	No Gas	0.017	ppb	26.6	136.82	0.5	
Tl	205	209	No Gas	-0.014	ppb	N/A	176.87	0.1	
[Pb]	206	209	No Gas	0.031	ppb	30.0	186.88	0.1	
[Pb]	207	209	No Gas	0.027	ppb	14.7	170.19	0.1	
Pb	208	209	No Gas	0.027	ppb	13.0	754.19	0.1	
Th	232	209	No Gas	0.027	ppb	25.8	624.05	0.5	
U	238	209	No Gas	0.008	ppb	16.4	136.82	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1626204.49	1.4	1745272.14	93.18	29.5	120.4	
Sc	45	No Gas	3918546.59	2.1	3932582.94	99.64	29.5	120.4	
Sc	45	H2	440204.13	1.3	485269.91	90.71	29.5	120.4	
Sc	45	He	89944.76	0.8	96164.21	93.53	29.5	120.4	
Ge	72	No Gas	890619.16	2.6	877152.82	101.54	29.5	120.4	
Ge	72	H2	164705.74	0.6	182501.5	90.25	29.5	120.4	
Ge	72	He	69624.56	1.3	74687.17	93.22	29.5	120.4	
Y	89	H2	2898057.95	1.7	3060772.3	94.68	29.5	120.4	
Y	89	He	607781.30	0.8	649886.7	93.52	29.5	120.4	
Tb	159	No Gas	9274178.47	3.0	8413567.03	110.23	29.5	120.4	
Tb	159	He	3346602.07	0.8	3319571.76	100.81	29.5	120.4	
Bi	209	No Gas	4891794.85	3.3	4391152.66	111.4	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW1
File Name	099_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:41:17 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.395	ppb	5.8	13254.29	50	20.56	79.5	120.4	
B	11	6	No Gas	529.186	ppb	4.4	89362.32	500	21.17	79.5	120.4	
Na	23	45	He	7636.777	ppb	1.3	178048.33	7500	20.36	79.5	120.4	
Mg	24	45	He	5445.039	ppb	2.6	64104.52	5000	21.78	79.5	120.4	
Al	27	45	He	2001.369	ppb	2.5	9175.49	2000	20.01	79.5	120.4	
Si	28	45	H2	1021.091	ppb	9.8	9624.01	1000	20.42	79.5	120.4	
K	39	45	He	10450.099	ppb	0.7	123798.62	10000	20.9	79.5	120.4	
Ca	40	45	H2	2574.057	ppb	5.2	214996.62	2500	20.59	79.5	120.4	
V	51	89	He	519.555	ppb	0.2	90350.65	500	20.78	79.5	120.4	
Cr	52	89	He	212.097	ppb	0.4	44976.29	200	21.21	79.5	120.4	
Mn	55	89	He	531.917	ppb	1.3	53279.58	500	21.28	79.5	120.4	
Fe	56	89	H2	1034.627	ppb	6.1	354222.89	1000	20.69	79.5	120.4	
Co	59	89	He	538.780	ppb	1.0	196510.47	500	21.55	79.5	120.4	
Ni	60	89	He	545.333	ppb	1.5	53714.68	500	21.81	79.5	120.4	
Cu	63	89	He	265.017	ppb	1.4	73763.82	250	21.2	79.5	120.4	
Zn	66	89	He	556.145	ppb	0.6	20339.86	500	22.25	79.5	120.4	
As	75	89	He	107.262	ppb	0.2	3354.45	100	21.45	79.5	120.4	
Se	78	89	H2	102.645	ppb	4.8	1721.03	100	20.53	79.5	120.4	
Sr	88	89	He	522.102	ppb	1.4	81273.45	500	20.88	79.5	120.4	
Mo	95	89	He	106.981	ppb	0.8	18880.28	100	21.4	79.5	120.4	
Ag	107	89	He	54.402	ppb	1.6	32538.76	50	21.76	79.5	120.4	
Cd	111	89	He	270.881	ppb	0.5	20941.46	250	21.67	79.5	120.4	
Sn	118	159	He	508.933	ppb	1.4	89257.10	500	20.36	79.5	120.4	
Sb	121	159	No Gas	101.641	ppb	6.5	151761.42	100	20.33	79.5	120.4	
Ba	137	159	No Gas	1986.304	ppb	5.6	1161550.13	2000	19.86	79.5	120.4	
W	182	159	No Gas	101.534	ppb	4.2	114025.46	100	20.31	79.5	120.4	
Tl	205	209	No Gas	105.576	ppb	4.8	258717.06	100	21.12	79.5	120.4	
Pb	208	209	No Gas	104.515	ppb	6.4	354625.93	100	20.9	79.5	120.4	
Th	232	209	No Gas	99.985	ppb	6.6	345474.49	100	20	79.5	120.4	
U	238	209	No Gas	102.738	ppb	6.6	334548.37	100	20.55	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1672071.78	2.3	1745272.14	95.81	29.5	120.4	
Sc	45	No Gas	3903825.54	2.8	3932582.94	99.27	29.5	120.4	
Sc	45	H2	450581.04	3.9	485269.91	92.85	29.5	120.4	
Sc	45	He	89397.74	0.6	96164.21	92.96	29.5	120.4	
Ge	72	No Gas	883558.32	2.7	877152.82	100.73	29.5	120.4	
Ge	72	H2	169786.48	3.7	182501.5	93.03	29.5	120.4	
Ge	72	He	70056.27	0.3	74687.17	93.8	29.5	120.4	
Y	89	H2	2950344.67	4.2	3060772.3	96.39	29.5	120.4	
Y	89	He	608388.53	1.0	649886.7	93.61	29.5	120.4	
Tb	159	No Gas	9131502.71	3.0	8413567.03	108.53	29.5	120.4	
Tb	159	He	3324529.39	0.7	3319571.76	100.15	29.5	120.4	
Bi	209	No Gas	4775101.23	3.1	4391152.66	108.74	29.5	120.4	

Sample Report

Sample Name SN6091-001

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:43:54 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.053	ppb	22.9	120.00	100	
11	B	6	No Gas	10.342	ppb	3.5	9950.43	1000	
23	Na	45	He	11512.292	ppb	0.7	1181108.45	200000	
24	Mg	45	He	3108.468	ppb	1.2	175312.83	200000	
27	Al	45	He	3.291	ppb	33.3	87.78	200000	
28	Si	45	H2	6960.579	ppb	0.6	290007.98	10000	
39	K	45	He	1393.289	ppb	1.4	83320.54	200000	
40	Ca	45	H2	14058.373	ppb	0.7	5451156.93	200000	
51	V	89	He	0.453	ppb	11.5	630.04	1000	
52	Cr	89	He	0.215	ppb	25.5	286.62	2000	
55	Mn	89	He	3.375	ppb	3.3	1649.80	2000	
56	Fe	89	H2	126.456	ppb	0.4	202964.59	100000	
59	Co	89	He	0.052	ppb	40.9	113.34	1000	
60	Ni	89	He	-0.170	ppb	N/A	162.23	1000	
63	Cu	89	He	41.672	ppb	0.6	55911.38	2000	
66	Zn	89	He	2.886	ppb	3.8	586.70	2000	
75	As	89	He	0.544	ppb	15.0	85.68	1000	
78	Se	89	H2	0.152	ppb	20.0	12.50	1000	
88	Sr	89	He	44.162	ppb	0.7	33126.20	2000	
95	Mo	89	He	1.278	ppb	3.9	1090.09	1000	
107	Ag	89	He	0.012	ppb	29.1	37.78	100	
111	Cd	89	He	0.024	ppb	51.5	9.26	1000	
118	Sn	159	He	0.835	ppb	8.4	770.05	1000	
121	Sb	159	No Gas	0.052	ppb	11.4	420.47	1000	
137	Ba	159	No Gas	1.891	ppb	3.0	5427.18	2000	
182	W	159	No Gas	0.167	ppb	7.4	951.10	1000	
205	Tl	209	No Gas	0.004	ppb	197.5	387.11	1000	
208	Pb	209	No Gas	0.257	ppb	6.8	4582.16	2000	
232	Th	209	No Gas	0.452	ppb	7.3	7867.97	1000	
238	U	209	No Gas	0.269	ppb	4.6	4338.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1588835.24	2.7	1745272.14	91.04	29.5	120.4	
Sc	45	No Gas	3787286.71	3.7	3932582.94	96.31	29.5	120.4	
Sc	45	H2	419349.11	0.2	485269.91	86.42	29.5	120.4	
Sc	45	He	86457.46	0.2	96164.21	89.91	29.5	120.4	
Ge	72	No Gas	859069.80	3.2	877152.82	97.94	29.5	120.4	
Ge	72	H2	156934.31	0.5	182501.5	85.99	29.5	120.4	
Ge	72	He	67482.88	0.1	74687.17	90.35	29.5	120.4	
Y	89	H2	2749983.77	0.8	3060772.3	89.85	29.5	120.4	
Y	89	He	586213.02	0.3	649886.7	90.2	29.5	120.4	
Tb	159	No Gas	8922050.56	2.9	8413567.03	106.04	29.5	120.4	
Tb	159	He	3272651.89	0.1	3319571.76	98.59	29.5	120.4	
Bi	209	No Gas	4717146.61	3.0	4391152.66	107.42	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	101_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:46:32 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.067	ppb	8.1	29193.52	25	96.27	89.8	110.2	
11	B	6	No Gas	26.832	ppb	5.8	22727.37	25	107.33	89.8	110.2	
23	Na	45	He	5092.005	ppb	1.2	530748.65	5000	101.84	89.8	110.2	
24	Mg	45	He	4992.144	ppb	1.6	280136.47	5000	99.84	89.8	110.2	
27	Al	45	He	484.774	ppb	2.1	10712.15	500	96.95	89.8	110.2	
28	Si	45	H2	455.011	ppb	3.2	19531.48	500	91	89.8	110.2	
39	K	45	He	4816.748	ppb	1.1	261394.26	5000	96.33	89.8	110.2	
40	Ca	45	H2	4851.142	ppb	1.1	1893398.96	5000	97.02	89.8	110.2	
51	V	89	He	24.356	ppb	0.8	20635.72	25	97.42	89.8	110.2	
52	Cr	89	He	24.747	ppb	0.7	25356.08	25	98.99	89.8	110.2	
55	Mn	89	He	24.636	ppb	0.7	11927.55	25	98.54	89.8	110.2	
56	Fe	89	H2	4771.883	ppb	0.8	7695489.07	5000	95.44	89.8	110.2	
59	Co	89	He	24.771	ppb	1.7	43623.56	25	99.08	89.8	110.2	
60	Ni	89	He	24.779	ppb	1.6	11968.86	25	99.12	89.8	110.2	
63	Cu	89	He	25.282	ppb	0.5	34031.20	25	101.13	89.8	110.2	
66	Zn	89	He	25.527	ppb	3.6	4567.58	25	102.11	89.8	110.2	
75	As	89	He	24.520	ppb	1.6	3700.57	25	98.08	89.8	110.2	
78	Se	89	H2	23.640	ppb	2.6	1878.38	25	94.56	89.8	110.2	
88	Sr	89	He	23.780	ppb	0.7	17872.15	25	95.12	89.8	110.2	
95	Mo	89	He	24.808	ppb	1.2	21129.19	25	99.23	89.8	110.2	
107	Ag	89	He	25.658	ppb	0.9	74071.11	25	102.63	89.8	110.2	
111	Cd	89	He	24.803	ppb	1.2	9255.10	25	99.21	89.8	110.2	
118	Sn	159	He	23.441	ppb	1.6	20240.23	25	93.76	89.8	110.2	
121	Sb	159	No Gas	23.247	ppb	6.7	170773.11	25	92.99	89.8	110.2	
137	Ba	159	No Gas	23.446	ppb	7.3	67466.14	25	93.78	89.8	110.2	
182	W	159	No Gas	23.305	ppb	7.5	128689.97	25	93.22	89.8	110.2	
205	Tl	209	No Gas	24.054	ppb	6.9	290734.82	25	96.22	89.8	110.2	
208	Pb	209	No Gas	23.922	ppb	6.6	400548.13	25	95.69	89.8	110.2	
232	Th	209	No Gas	23.719	ppb	8.3	404280.45	25	94.88	89.8	110.2	
238	U	209	No Gas	23.927	ppb	8.3	384370.18	25	95.71	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1578231.83	3.2	1745272.14	90.43	29.5	120.4	
Sc	45	No Gas	3745669.32	3.8	3932582.94	95.25	29.5	120.4	
Sc	45	H2	422022.09	1.2	485269.91	86.97	29.5	120.4	
Sc	45	He	86197.46	0.9	96164.21	89.64	29.5	120.4	
Ge	72	No Gas	851343.40	3.3	877152.82	97.06	29.5	120.4	
Ge	72	H2	158191.78	0.5	182501.5	86.68	29.5	120.4	
Ge	72	He	67517.27	0.2	74687.17	90.4	29.5	120.4	
Y	89	H2	2793240.22	0.8	3060772.3	91.26	29.5	120.4	
Y	89	He	587262.78	0.4	649886.7	90.36	29.5	120.4	
Tb	159	No Gas	8988269.66	3.6	8413567.03	106.83	29.5	120.4	
Tb	159	He	3267313.01	0.1	3319571.76	98.43	29.5	120.4	
Bi	209	No Gas	4715415.67	4.1	4391152.66	107.38	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	102_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 4:49:10 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.063	ppb	37.3	133.34	0.2	
11	B	6	No Gas	2.462	ppb	2.7	3820.64	4	Failed DoD
23	Na	45	He	-63.464	ppb	N/A	11550.73	200	
24	Mg	45	He	-5.377	ppb	N/A	600.06	20	
27	Al	45	He	-0.427	ppb	N/A	5.56	20	
28	Si	45	H2	-0.263	ppb	N/A	493.90	100	
39	K	45	He	3.752	ppb	97.9	10807.64	200	
40	Ca	45	H2	3.537	ppb	16.0	2241.37	20	
51	V	89	He	-0.093	ppb	N/A	174.45	1	
52	Cr	89	He	-0.019	ppb	N/A	48.66	1	
55	Mn	89	He	0.011	ppb	153.2	27.33	0.4	
56	Fe	89	H2	2.077	ppb	23.4	5784.30	20	
59	Co	89	He	0.018	ppb	77.5	53.34	0.2	
60	Ni	89	He	-0.273	ppb	N/A	114.45	0.4	Failed DoD
63	Cu	89	He	0.008	ppb	146.2	135.56	0.6	
66	Zn	89	He	-0.099	ppb	N/A	63.34	2	
75	As	89	He	0.027	ppb	48.3	8.00	1	
78	Se	89	H2	0.035	ppb	17.7	3.50	1	
88	Sr	89	He	0.030	ppb	73.4	28.89	1	
95	Mo	89	He	0.101	ppb	15.1	90.00	1	
107	Ag	89	He	0.009	ppb	23.6	30.00	0.2	
111	Cd	89	He	0.013	ppb	47.5	5.18	0.2	
118	Sn	159	He	0.142	ppb	28.1	170.01	1	
121	Sb	159	No Gas	0.036	ppb	5.0	300.34	0.2	
137	Ba	159	No Gas	0.071	ppb	13.7	223.58	0.4	
182	W	159	No Gas	0.073	ppb	25.4	440.50	1	
205	Tl	209	No Gas	0.009	ppb	62.0	440.50	0.2	
208	Pb	209	No Gas	0.028	ppb	9.4	727.50	0.2	
232	Th	209	No Gas	0.070	ppb	1.6	1331.56	1	
238	U	209	No Gas	0.029	ppb	12.2	467.20	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1613385.13	3.9	1745272.14	92.44	29.5	120.4	
Sc	45	No Gas	3799574.02	4.3	3932582.94	96.62	29.5	120.4	
Sc	45	H2	440766.24	2.2	485269.91	90.83	29.5	120.4	
Sc	45	He	87190.26	0.6	96164.21	90.67	29.5	120.4	
Ge	72	No Gas	858408.78	3.8	877152.82	97.86	29.5	120.4	
Ge	72	H2	164407.38	1.9	182501.5	90.09	29.5	120.4	
Ge	72	He	68091.70	1.2	74687.17	91.17	29.5	120.4	
Y	89	H2	2875110.04	0.8	3060772.3	93.93	29.5	120.4	
Y	89	He	589855.76	1.0	649886.7	90.76	29.5	120.4	
Tb	159	No Gas	8910781.47	4.5	8413567.03	105.91	29.5	120.4	
Tb	159	He	3231750.40	0.8	3319571.76	97.35	29.5	120.4	
Bi	209	No Gas	4683379.15	4.4	4391152.66	106.65	29.5	120.4	

Sample Report

Sample Name SN6091-002

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:51:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.112	ppb	27.2	184.46	100	
11	B	6	No Gas	7.440	ppb	9.1	7397.68	1000	
23	Na	45	He	26669.457	ppb	1.1	2654856.06	200000	
24	Mg	45	He	7662.171	ppb	1.0	421647.07	200000	
27	Al	45	He	14.864	ppb	4.3	336.68	200000	
28	Si	45	H2	8117.484	ppb	1.5	336880.80	10000	
39	K	45	He	1997.712	ppb	1.0	112453.76	200000	
40	Ca	45	H2	14408.689	ppb	1.6	5566242.49	200000	
51	V	89	He	0.140	ppb	39.0	363.35	1000	
52	Cr	89	He	0.172	ppb	6.9	239.29	2000	
55	Mn	89	He	707.586	ppb	0.8	336343.44	2000	
56	Fe	89	H2	1712.432	ppb	1.4	2722859.09	100000	
59	Co	89	He	0.208	ppb	1.6	382.26	1000	
60	Ni	89	He	0.310	ppb	34.1	383.35	1000	
63	Cu	89	He	2.692	ppb	5.3	3673.96	2000	
66	Zn	89	He	1636.003	ppb	0.7	282948.36	2000	
75	As	89	He	1.098	ppb	4.2	166.69	1000	
78	Se	89	H2	0.052	ppb	37.1	4.67	1000	
88	Sr	89	He	76.655	ppb	1.6	56648.53	2000	
95	Mo	89	He	1.256	ppb	2.2	1055.64	1000	
107	Ag	89	He	0.011	ppb	44.2	34.44	100	
111	Cd	89	He	0.024	ppb	62.6	9.26	1000	
118	Sn	159	He	0.201	ppb	10.9	220.01	1000	
121	Sb	159	No Gas	0.021	ppb	9.2	186.88	1000	
137	Ba	159	No Gas	12.576	ppb	7.9	34884.19	2000	
182	W	159	No Gas	0.058	ppb	5.6	343.72	1000	
205	Tl	209	No Gas	-0.016	ppb	N/A	133.48	1000	
208	Pb	209	No Gas	2.399	ppb	8.0	38946.95	2000	
232	Th	209	No Gas	0.104	ppb	5.0	1842.21	1000	
238	U	209	No Gas	0.210	ppb	9.9	3250.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1533898.02	3.5	1745272.14	87.89	29.5	120.4	
Sc	45	No Gas	3661727.30	3.5	3932582.94	93.11	29.5	120.4	
Sc	45	H2	417816.64	0.7	485269.91	86.1	29.5	120.4	
Sc	45	He	84617.63	0.6	96164.21	87.99	29.5	120.4	
Ge	72	No Gas	833160.33	3.1	877152.82	94.98	29.5	120.4	
Ge	72	H2	157530.86	1.1	182501.5	86.32	29.5	120.4	
Ge	72	He	66724.93	1.4	74687.17	89.34	29.5	120.4	
Y	89	H2	2752669.76	0.7	3060772.3	89.93	29.5	120.4	
Y	89	He	577608.56	0.8	649886.7	88.88	29.5	120.4	
Tb	159	No Gas	8662013.06	3.7	8413567.03	102.95	29.5	120.4	
Tb	159	He	3235875.96	0.7	3319571.76	97.48	29.5	120.4	
Bi	209	No Gas	4541319.34	3.1	4391152.66	103.42	29.5	120.4	

Sample Report

Sample Name SN6091-003

File Name 104SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:54:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	169.6	62.23	100	
11	B	6	No Gas	19.585	ppb	4.7	16802.54	1000	
23	Na	45	He	59148.658	ppb	1.0	5984451.58	200000	
24	Mg	45	He	635.894	ppb	0.4	36517.54	200000	
27	Al	45	He	11.100	ppb	15.2	260.01	200000	
28	Si	45	H2	7160.258	ppb	0.3	299051.23	10000	
39	K	45	He	617.538	ppb	2.7	42712.41	200000	
40	Ca	45	H2	3776.780	ppb	0.2	1468644.09	200000	
51	V	89	He	0.402	ppb	13.5	584.48	1000	
52	Cr	89	He	0.059	ppb	22.6	127.31	2000	
55	Mn	89	He	8.123	ppb	2.4	3918.51	2000	
56	Fe	89	H2	14.296	ppb	1.0	24959.15	100000	
59	Co	89	He	0.009	ppb	85.5	37.78	1000	
60	Ni	89	He	-0.249	ppb	N/A	124.45	1000	
63	Cu	89	He	0.368	ppb	10.1	613.37	2000	
66	Zn	89	He	11.868	ppb	5.6	2151.35	2000	
75	As	89	He	1.001	ppb	4.7	153.69	1000	
78	Se	89	H2	0.022	ppb	16.5	2.33	1000	
88	Sr	89	He	34.419	ppb	1.1	25679.16	2000	
95	Mo	89	He	2.491	ppb	1.6	2110.24	1000	
107	Ag	89	He	0.009	ppb	32.4	28.89	100	
111	Cd	89	He	0.006	ppb	124.2	2.59	1000	
118	Sn	159	He	0.196	ppb	9.2	217.79	1000	
121	Sb	159	No Gas	0.014	ppb	54.2	140.16	1000	
137	Ba	159	No Gas	0.571	ppb	9.0	1635.26	2000	
182	W	159	No Gas	1.257	ppb	6.6	6856.15	1000	
205	Tl	209	No Gas	-0.020	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	0.086	ppb	4.7	1668.59	2000	
232	Th	209	No Gas	0.059	ppb	24.3	1114.64	1000	
238	U	209	No Gas	0.346	ppb	11.1	5443.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1551845.05	2.2	1745272.14	88.92	29.5	120.4	
Sc	45	No Gas	3698163.09	2.9	3932582.94	94.04	29.5	120.4	
Sc	45	H2	420393.53	0.8	485269.91	86.63	29.5	120.4	
Sc	45	He	86317.56	1.1	96164.21	89.76	29.5	120.4	
Ge	72	No Gas	841520.38	2.9	877152.82	95.94	29.5	120.4	
Ge	72	H2	156874.19	0.6	182501.5	85.96	29.5	120.4	
Ge	72	He	67570.04	1.5	74687.17	90.47	29.5	120.4	
Y	89	H2	2752961.72	0.7	3060772.3	89.94	29.5	120.4	
Y	89	He	583060.57	0.8	649886.7	89.72	29.5	120.4	
Tb	159	No Gas	8830498.41	2.9	8413567.03	104.96	29.5	120.4	
Tb	159	He	3266520.16	0.7	3319571.76	98.4	29.5	120.4	
Bi	209	No Gas	4612893.20	3.1	4391152.66	105.05	29.5	120.4	

Sample Report

Sample Name SN6092-001

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:57:14 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	27.9	75.56	100	
11	B	6	No Gas	26.252	ppb	3.7	21503.16	1000	
23	Na	45	He	103758.999	ppb	1.7	10596754.50	200000	
24	Mg	45	He	61.047	ppb	3.2	4360.99	200000	
27	Al	45	He	7.837	ppb	12.5	190.01	200000	
28	Si	45	H2	6548.796	ppb	3.1	276751.66	10000	
39	K	45	He	458.040	ppb	3.2	34763.10	200000	
40	Ca	45	H2	417.434	ppb	3.0	164910.59	200000	
51	V	89	He	0.453	ppb	18.8	633.37	1000	
52	Cr	89	He	0.099	ppb	27.9	169.30	2000	
55	Mn	89	He	1.814	ppb	1.1	901.87	2000	
56	Fe	89	H2	45.175	ppb	2.1	74956.06	100000	
59	Co	89	He	0.011	ppb	82.2	42.22	1000	
60	Ni	89	He	-0.175	ppb	N/A	161.12	1000	
63	Cu	89	He	2.442	ppb	8.2	3410.54	2000	
66	Zn	89	He	9.053	ppb	2.6	1677.94	2000	
75	As	89	He	0.483	ppb	4.0	77.01	1000	
78	Se	89	H2	0.032	ppb	10.7	3.17	1000	
88	Sr	89	He	2.367	ppb	8.2	1790.18	2000	
95	Mo	89	He	0.088	ppb	23.8	78.89	1000	
107	Ag	89	He	0.007	ppb	1.1	23.33	100	
111	Cd	89	He	0.003	ppb	54.7	1.48	1000	
118	Sn	159	He	0.103	ppb	14.7	137.78	1000	
121	Sb	159	No Gas	0.463	ppb	3.6	3340.82	1000	
137	Ba	159	No Gas	0.063	ppb	28.6	196.89	2000	
182	W	159	No Gas	0.047	ppb	5.8	286.99	1000	
205	Tl	209	No Gas	-0.024	ppb	N/A	46.72	1000	
208	Pb	209	No Gas	0.056	ppb	9.1	1151.31	2000	
232	Th	209	No Gas	0.012	ppb	27.1	323.71	1000	
238	U	209	No Gas	0.002	ppb	20.5	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1521997.66	0.7	1745272.14	87.21	29.5	120.4	
Sc	45	No Gas	3685440.99	1.9	3932582.94	93.72	29.5	120.4	
Sc	45	H2	425377.42	0.9	485269.91	87.66	29.5	120.4	
Sc	45	He	87245.76	0.9	96164.21	90.73	29.5	120.4	
Ge	72	No Gas	833961.20	2.7	877152.82	95.08	29.5	120.4	
Ge	72	H2	159147.90	1.1	182501.5	87.2	29.5	120.4	
Ge	72	He	68300.25	0.9	74687.17	91.45	29.5	120.4	
Y	89	H2	2787867.22	0.9	3060772.3	91.08	29.5	120.4	
Y	89	He	589457.22	1.0	649886.7	90.7	29.5	120.4	
Tb	159	No Gas	8722135.77	2.3	8413567.03	103.67	29.5	120.4	
Tb	159	He	3264935.75	0.9	3319571.76	98.35	29.5	120.4	
Bi	209	No Gas	4486289.26	2.5	4391152.66	102.17	29.5	120.4	

Sample Report

Sample Name SN6092-001L

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 4:59:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	45.6	66.67	100	
11	B	6	No Gas	30.096	ppb	6.2	6681.77	1000	
23	Na	45	He	106066.225	ppb	3.2	2193120.99	200000	
24	Mg	45	He	35.003	ppb	7.4	1309.04	200000	
27	Al	45	He	8.199	ppb	51.6	52.22	200000	
28	Si	45	H2	6806.943	ppb	2.1	59295.63	10000	
39	K	45	He	492.086	ppb	11.1	15893.38	200000	
40	Ca	45	H2	437.081	ppb	2.5	35987.58	200000	
51	V	89	He	0.752	ppb	9.0	383.35	1000	
52	Cr	89	He	0.058	ppb	118.3	80.65	2000	
55	Mn	89	He	1.995	ppb	9.3	217.96	2000	
56	Fe	89	H2	44.963	ppb	2.3	17082.80	100000	
59	Co	89	He	0.000	ppb	N/A	22.22	1000	
60	Ni	89	He	-1.029	ppb	N/A	147.79	1000	
63	Cu	89	He	2.984	ppb	6.2	937.84	2000	
66	Zn	89	He	9.084	ppb	7.8	405.58	2000	
75	As	89	He	0.461	ppb	44.8	18.00	1000	
78	Se	89	H2	0.085	ppb	62.2	2.00	1000	
88	Sr	89	He	2.115	ppb	6.1	328.90	2000	
95	Mo	89	He	0.169	ppb	35.0	33.33	1000	
107	Ag	89	He	0.051	ppb	45.9	33.33	100	
111	Cd	89	He	0.005	ppb	316.0	0.74	1000	
118	Sn	159	He	0.151	ppb	73.3	75.56	1000	
121	Sb	159	No Gas	0.472	ppb	3.2	727.49	1000	
137	Ba	159	No Gas	0.139	ppb	66.0	100.11	2000	
182	W	159	No Gas	0.066	ppb	33.9	106.79	1000	
205	Tl	209	No Gas	-0.119	ppb	N/A	50.06	1000	
208	Pb	209	No Gas	0.052	ppb	49.4	443.84	2000	
232	Th	209	No Gas	0.023	ppb	27.7	220.25	1000	
238	U	209	No Gas	0.005	ppb	173.2	16.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1620395.48	3.2	1745272.14	92.84	29.5	120.4	
Sc	45	No Gas	3795325.27	3.5	3932582.94	96.51	29.5	120.4	
Sc	45	H2	435413.79	1.0	485269.91	89.73	29.5	120.4	
Sc	45	He	87776.26	2.5	96164.21	91.28	29.5	120.4	
Ge	72	No Gas	865963.98	3.4	877152.82	98.72	29.5	120.4	
Ge	72	H2	162581.55	1.0	182501.5	89.09	29.5	120.4	
Ge	72	He	69058.16	2.0	74687.17	92.46	29.5	120.4	
Y	89	H2	2844578.83	1.1	3060772.3	92.94	29.5	120.4	
Y	89	He	595932.92	1.7	649886.7	91.7	29.5	120.4	
Tb	159	No Gas	8911737.78	3.4	8413567.03	105.92	29.5	120.4	
Tb	159	He	3278318.39	1.8	3319571.76	98.76	29.5	120.4	
Bi	209	No Gas	4710075.64	3.5	4391152.66	107.26	29.5	120.4	

Sample Report

Sample Name SN6092-001A

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:02:33 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.161	ppb	3.5	2644.78	100	
11	B	6	No Gas	66.429	ppb	5.2	53024.69	1000	
23	Na	45	He	105921.541	ppb	2.0	10784518.20	200000	
24	Mg	45	He	270.376	ppb	4.4	16159.05	200000	
27	Al	45	He	211.489	ppb	1.5	4724.28	200000	
28	Si	45	H2	7646.629	ppb	1.0	320182.78	10000	
39	K	45	He	2515.825	ppb	1.7	142830.85	200000	
40	Ca	45	H2	639.441	ppb	1.3	249949.88	200000	
51	V	89	He	11.057	ppb	1.4	9582.48	1000	
52	Cr	89	He	10.655	ppb	0.9	11045.66	2000	
55	Mn	89	He	6.340	ppb	3.5	3109.79	2000	
56	Fe	89	H2	261.902	ppb	0.4	419503.57	100000	
59	Co	89	He	2.174	ppb	4.8	3883.04	1000	
60	Ni	89	He	4.388	ppb	2.9	2338.06	1000	
63	Cu	89	He	9.271	ppb	2.6	12658.35	2000	
66	Zn	89	He	30.994	ppb	2.7	5576.86	2000	
75	As	89	He	10.819	ppb	2.8	1647.95	1000	
78	Se	89	H2	10.126	ppb	3.8	795.82	1000	
88	Sr	89	He	12.873	ppb	3.8	9752.68	2000	
95	Mo	89	He	10.478	ppb	2.4	8999.93	1000	
107	Ag	89	He	2.172	ppb	2.5	6327.25	100	
111	Cd	89	He	2.198	ppb	5.8	827.81	1000	
118	Sn	159	He	10.157	ppb	2.1	8834.31	1000	
121	Sb	159	No Gas	2.589	ppb	4.2	18690.38	1000	
137	Ba	159	No Gas	4.090	ppb	7.6	11554.57	2000	
182	W	159	No Gas	10.186	ppb	6.5	55168.76	1000	
205	Tl	209	No Gas	2.094	ppb	7.3	24711.60	1000	
208	Pb	209	No Gas	2.208	ppb	6.9	35899.96	2000	
232	Th	209	No Gas	2.159	ppb	6.9	35647.09	1000	
238	U	209	No Gas	2.158	ppb	6.8	33458.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1560814.91	1.9	1745272.14	89.43	29.5	120.4	
Sc	45	No Gas	3754005.20	3.1	3932582.94	95.46	29.5	120.4	
Sc	45	H2	421516.56	1.8	485269.91	86.86	29.5	120.4	
Sc	45	He	86994.25	1.9	96164.21	90.46	29.5	120.4	
Ge	72	No Gas	848301.58	2.7	877152.82	96.71	29.5	120.4	
Ge	72	H2	158335.45	1.3	182501.5	86.76	29.5	120.4	
Ge	72	He	68232.24	2.1	74687.17	91.36	29.5	120.4	
Y	89	H2	2760206.83	1.4	3060772.3	90.18	29.5	120.4	
Y	89	He	592162.90	2.3	649886.7	91.12	29.5	120.4	
Tb	159	No Gas	8809556.95	3.1	8413567.03	104.71	29.5	120.4	
Tb	159	He	3281725.61	2.4	3319571.76	98.86	29.5	120.4	
Bi	209	No Gas	4547814.69	3.4	4391152.66	103.57	29.5	120.4	

Sample Report

Sample Name SN6092-001S

File Name 108SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:05:11 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.156	ppb	4.3	62083.78	100	
11	B	6	No Gas	501.209	ppb	4.5	426099.86	1000	
23	Na	45	He	114259.248	ppb	2.8	11663654.39	200000	
24	Mg	45	He	5322.392	ppb	2.7	302151.84	200000	
27	Al	45	He	1977.253	ppb	1.9	44166.77	200000	
28	Si	45	H2	7884.612	ppb	0.4	332865.72	10000	
39	K	45	He	10538.013	ppb	2.6	566057.58	200000	
40	Ca	45	H2	2975.706	ppb	0.6	1169924.14	200000	
51	V	89	He	512.910	ppb	2.0	434000.96	1000	
52	Cr	89	He	205.502	ppb	1.7	212273.97	2000	
55	Mn	89	He	514.345	ppb	1.7	251202.47	2000	
56	Fe	89	H2	1060.588	ppb	0.4	1712466.51	100000	
59	Co	89	He	516.279	ppb	1.9	918333.79	1000	
60	Ni	89	He	516.298	ppb	2.2	247113.77	1000	
63	Cu	89	He	257.356	ppb	1.6	348908.34	2000	
66	Zn	89	He	538.442	ppb	1.7	95734.71	2000	
75	As	89	He	106.233	ppb	2.2	16187.49	1000	
78	Se	89	H2	101.764	ppb	0.2	8086.14	1000	
88	Sr	89	He	511.418	ppb	1.7	388276.94	2000	
95	Mo	89	He	105.268	ppb	2.4	90581.47	1000	
107	Ag	89	He	51.542	ppb	2.1	150351.00	100	
111	Cd	89	He	261.642	ppb	1.6	98653.89	1000	
118	Sn	159	He	499.313	ppb	1.2	431417.77	1000	
121	Sb	159	No Gas	99.649	ppb	4.5	729893.56	1000	
137	Ba	159	No Gas	1931.666	ppb	4.7	5541418.78	2000	
182	W	159	No Gas	101.400	ppb	4.3	558346.45	1000	
205	Tl	209	No Gas	99.542	ppb	3.7	1167941.21	1000	
208	Pb	209	No Gas	102.606	ppb	4.4	1667964.00	2000	
232	Th	209	No Gas	104.850	ppb	4.7	1736258.91	1000	
238	U	209	No Gas	103.023	ppb	5.1	1608235.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1712439.62	1.7	1745272.14	98.12	29.5	120.4	
Sc	45	No Gas	3808260.24	2.3	3932582.94	96.84	29.5	120.4	
Sc	45	H2	424993.67	1.2	485269.91	87.58	29.5	120.4	
Sc	45	He	87254.33	2.8	96164.21	90.73	29.5	120.4	
Ge	72	No Gas	863850.14	2.0	877152.82	98.48	29.5	120.4	
Ge	72	H2	158170.56	0.9	182501.5	86.67	29.5	120.4	
Ge	72	He	68439.50	1.1	74687.17	91.63	29.5	120.4	
Y	89	H2	2793690.93	0.9	3060772.3	91.27	29.5	120.4	
Y	89	He	593538.84	1.7	649886.7	91.33	29.5	120.4	
Tb	159	No Gas	8955789.38	2.6	8413567.03	106.44	29.5	120.4	
Tb	159	He	3277331.03	1.6	3319571.76	98.73	29.5	120.4	
Bi	209	No Gas	4575493.40	2.5	4391152.66	104.2	29.5	120.4	

Sample Report

Sample Name SN6092-001P

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:07:53 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.609	ppb	4.8	62464.29	100	
11	B	6	No Gas	515.409	ppb	4.8	436612.78	1000	
23	Na	45	He	114297.652	ppb	2.5	11670751.80	200000	
24	Mg	45	He	5376.802	ppb	2.5	305308.17	200000	
27	Al	45	He	1986.196	ppb	2.8	44369.84	200000	
28	Si	45	H2	7997.636	ppb	0.5	342868.67	10000	
39	K	45	He	10667.178	ppb	2.8	572984.12	200000	
40	Ca	45	H2	3020.397	ppb	0.5	1205968.22	200000	
51	V	89	He	524.281	ppb	1.6	438032.94	1000	
52	Cr	89	He	210.710	ppb	1.6	214910.72	2000	
55	Mn	89	He	526.581	ppb	1.3	253937.16	2000	
56	Fe	89	H2	1080.010	ppb	0.4	1750871.37	100000	
59	Co	89	He	526.642	ppb	1.9	924943.46	1000	
60	Ni	89	He	530.827	ppb	1.6	250867.51	1000	
63	Cu	89	He	264.013	ppb	1.4	353404.66	2000	
66	Zn	89	He	553.206	ppb	1.2	97115.73	2000	
75	As	89	He	107.851	ppb	1.8	16226.22	1000	
78	Se	89	H2	104.147	ppb	0.3	8309.93	1000	
88	Sr	89	He	526.315	ppb	1.6	394544.55	2000	
95	Mo	89	He	108.151	ppb	1.4	91894.47	1000	
107	Ag	89	He	52.355	ppb	1.8	150798.11	100	
111	Cd	89	He	267.813	ppb	0.9	99706.57	1000	
118	Sn	159	He	510.704	ppb	1.7	434104.21	1000	
121	Sb	159	No Gas	101.844	ppb	5.8	731076.27	1000	
137	Ba	159	No Gas	1971.193	ppb	5.7	5542123.81	2000	
182	W	159	No Gas	104.556	ppb	4.9	564321.55	1000	
205	Tl	209	No Gas	101.646	ppb	5.7	1168274.26	1000	
208	Pb	209	No Gas	105.190	ppb	5.7	1675269.21	2000	
232	Th	209	No Gas	107.198	ppb	6.9	1738763.81	1000	
238	U	209	No Gas	105.012	ppb	6.6	1605860.41	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1707117.00	2.5	1745272.14	97.81	29.5	120.4	
Sc	45	No Gas	3759633.28	3.0	3932582.94	95.6	29.5	120.4	
Sc	45	H2	431619.24	2.7	485269.91	88.94	29.5	120.4	
Sc	45	He	87258.25	1.8	96164.21	90.74	29.5	120.4	
Ge	72	No Gas	845234.53	2.1	877152.82	96.36	29.5	120.4	
Ge	72	H2	160267.37	2.8	182501.5	87.82	29.5	120.4	
Ge	72	He	67268.51	0.5	74687.17	90.07	29.5	120.4	
Y	89	H2	2805161.97	2.6	3060772.3	91.65	29.5	120.4	
Y	89	He	585975.65	0.6	649886.7	90.17	29.5	120.4	
Tb	159	No Gas	8780062.30	2.7	8413567.03	104.36	29.5	120.4	
Tb	159	He	3224083.39	0.9	3319571.76	97.12	29.5	120.4	
Bi	209	No Gas	4484416.97	2.9	4391152.66	102.12	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG24IMW2
File Name	110_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:10:30 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.812	ppb	10.3	263.35	0.5	PB 6020 Fails DoD
B	11	6	No Gas	60.475	ppb	11.9	11785.19	10	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Na	23	45	He	285.476	ppb	28.4	24257.44	500	
Mg	24	45	He	-26.068	ppb	N/A	620.06	50	
Al	27	45	He	7.152	ppb	47.5	47.78	50	
Si	28	45	H2	34.002	ppb	55.2	800.92	250	
K	39	45	He	38.094	ppb	29.2	11212.72	500	
Ca	40	45	H2	38.930	ppb	3.9	3971.80	50	
V	51	89	He	3.283	ppb	19.8	818.94	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.373	ppb	30.2	146.64	2.5	
Mn	55	89	He	1.024	ppb	12.9	123.31	1	PB 6020 Fails DoD
Fe	56	89	H2	6.856	ppb	9.8	4609.23	50	
Co	59	89	He	0.587	ppb	13.8	233.35	0.5	PB 6020 Fails DoD
Ni	60	89	He	-0.625	ppb	N/A	187.79	1	
Cu	63	89	He	1.187	ppb	11.2	452.25	1.5	
Zn	66	89	He	1.491	ppb	111.5	135.56	5	
As	75	89	He	0.563	ppb	19.2	21.33	2.5	
Se	78	89	H2	1.280	ppb	17.6	21.50	2.5	
Sr	88	89	He	0.416	ppb	16.8	70.00	2.5	
Mo	95	89	He	1.302	ppb	9.9	231.12	2.5	
Ag	107	89	He	0.159	ppb	30.3	96.67	0.5	
Cd	111	89	He	0.336	ppb	11.4	25.93	0.5	
Sn	118	159	He	6.856	ppb	6.2	1250.11	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.499	ppb	5.2	780.90	0.5	
Ba	137	159	No Gas	6.791	ppb	5.8	3971.67	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
W	182	159	No Gas	1.536	ppb	13.9	1745.41	2.5	
Tl	205	209	No Gas	0.294	ppb	6.2	1054.56	0.5	
Pb	208	209	No Gas	0.456	ppb	12.9	1805.40	0.5	
Th	232	209	No Gas	1.373	ppb	5.5	4856.39	2.5	
U	238	209	No Gas	0.384	ppb	4.4	1244.79	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1655279.18	3.4	1745272.14	94.84	29.5	120.4	
Sc	45	No Gas	3803740.04	4.5	3932582.94	96.72	29.5	120.4	
Sc	45	H2	440478.52	1.1	485269.91	90.77	29.5	120.4	
Sc	45	He	88787.52	1.3	96164.21	92.33	29.5	120.4	
Ge	72	No Gas	867073.23	4.0	877152.82	98.85	29.5	120.4	
Ge	72	H2	161620.58	0.6	182501.5	88.56	29.5	120.4	
Ge	72	He	69115.71	2.3	74687.17	92.54	29.5	120.4	
Y	89	H2	2870271.24	1.0	3060772.3	93.78	29.5	120.4	
Y	89	He	600578.99	2.4	649886.7	92.41	29.5	120.4	
Tb	159	No Gas	9079779.31	4.6	8413567.03	107.92	29.5	120.4	
Tb	159	He	3319793.66	2.0	3319571.76	100.01	29.5	120.4	
Bi	209	No Gas	4744904.16	4.4	4391152.66	108.06	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW2
File Name	111LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:13:12 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.798	ppb	3.7	12669.32	50	19.52	79.5	120.4	
B	11	6	No Gas	528.793	ppb	3.3	89867.56	500	21.15	79.5	120.4	
Na	23	45	He	7870.299	ppb	5.3	178448.39	7500	20.99	79.5	120.4	
Mg	24	45	He	5474.522	ppb	4.2	62883.53	5000	21.9	79.5	120.4	
Al	27	45	He	2028.699	ppb	6.0	9070.97	2000	20.29	79.5	120.4	
Si	28	45	H2	1005.765	ppb	5.3	9300.03	1000	20.12	0	200	
K	39	45	He	10402.504	ppb	4.7	120275.71	10000	20.81	79.5	120.4	
Ca	40	45	H2	2582.025	ppb	4.7	211246.84	2500	20.66	79.5	120.4	
V	51	89	He	523.836	ppb	5.8	88251.92	500	20.95	79.5	120.4	
Cr	52	89	He	217.390	ppb	5.6	44661.95	200	21.74	79.5	120.4	
Mn	55	89	He	535.494	ppb	5.0	51979.54	500	21.42	79.5	120.4	
Fe	56	89	H2	1047.353	ppb	4.3	352330.90	1000	20.95	79.5	120.4	
Co	59	89	He	542.592	ppb	5.1	191772.71	500	21.7	79.5	120.4	
Ni	60	89	He	554.815	ppb	5.7	52944.35	500	22.19	79.5	120.4	
Cu	63	89	He	272.823	ppb	4.6	73595.31	250	21.83	79.5	120.4	
Zn	66	89	He	540.920	ppb	5.3	19172.72	500	21.64	79.5	120.4	
As	75	89	He	106.824	ppb	4.8	3237.40	100	21.36	79.5	120.4	
Se	78	89	H2	102.532	ppb	2.9	1689.53	100	20.51	79.5	120.4	
Sr	88	89	He	521.051	ppb	4.8	78605.82	500	20.84	79.5	120.4	
Mo	95	89	He	107.183	ppb	5.7	18326.18	100	21.44	79.5	120.4	
Ag	107	89	He	55.463	ppb	5.9	32139.90	50	22.19	79.5	120.4	
Cd	111	89	He	272.082	ppb	4.8	20383.95	250	21.77	79.5	120.4	
Sn	118	159	He	510.558	ppb	5.9	88130.58	500	20.42	79.5	120.4	
Sb	121	159	No Gas	97.643	ppb	4.2	148461.26	100	19.53	79.5	120.4	
Ba	137	159	No Gas	1939.145	ppb	2.6	1154686.62	2000	19.39	79.5	120.4	
W	182	159	No Gas	101.874	ppb	3.7	116461.05	100	20.38	79.5	120.4	
Tl	205	209	No Gas	103.023	ppb	2.8	256499.10	100	20.6	79.5	120.4	
[Pb]	206	209	No Gas	102.522	ppb	3.9	88654.99	100	20.5	79.5	120.4	
[Pb]	207	209	No Gas	103.491	ppb	3.2	78522.49	100	20.7	79.5	120.4	
Pb	208	209	No Gas	103.137	ppb	3.8	355627.89	100	20.63	79.5	120.4	
Th	232	209	No Gas	102.285	ppb	3.0	359210.72	100	20.46	79.5	120.4	
U	238	209	No Gas	101.798	ppb	2.8	336922.02	100	20.36	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1682325.18	2.2	1745272.14	96.39	29.5	120.4	
Sc	45	No Gas	3881913.94	2.8	3932582.94	98.71	29.5	120.4	
Sc	45	H2	441359.18	4.5	485269.91	90.95	29.5	120.4	
Sc	45	He	87313.94	3.9	96164.21	90.8	29.5	120.4	
Ge	72	No Gas	892224.51	2.6	877152.82	101.72	29.5	120.4	
Ge	72	H2	163663.67	3.4	182501.5	89.68	29.5	120.4	
Ge	72	He	68189.41	3.9	74687.17	91.3	29.5	120.4	
Y	89	H2	2897741.42	4.2	3060772.3	94.67	29.5	120.4	
Y	89	He	590301.33	3.9	649886.7	90.83	29.5	120.4	
Tb	159	No Gas	9291596.25	2.5	8413567.03	110.44	29.5	120.4	
Tb	159	He	3277267.69	4.2	3319571.76	98.73	29.5	120.4	
Bi	209	No Gas	4848280.50	2.1	4391152.66	110.41	29.5	120.4	

Sample Report

Sample Name SN6090-002

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:15:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.400	ppb	12.0	154.45	100	
11	B	6	No Gas	240.825	ppb	3.3	40128.72	1000	
23	Na	45	He	39230.427	ppb	0.3	829386.94	200000	
24	Mg	45	He	18166.653	ppb	1.1	209485.16	200000	
27	Al	45	He	18.478	ppb	24.2	98.89	200000	
28	Si	45	H2	5703.574	ppb	3.3	49547.51	10000	
39	K	45	He	12865.835	ppb	1.3	148311.94	200000	
40	Ca	45	H2	109784.631	ppb	2.1	8802368.20	200000	
51	V	89	He	2.225	ppb	7.3	636.70	1000	
52	Cr	89	He	1.273	ppb	12.0	334.61	2000	
55	Mn	89	He	177.263	ppb	1.8	17497.65	2000	
56	Fe	89	H2	570.875	ppb	2.3	191181.86	100000	
59	Co	89	He	0.568	ppb	5.0	226.68	1000	
60	Ni	89	He	5.831	ppb	5.8	811.17	1000	
63	Cu	89	He	18.173	ppb	1.1	5100.01	2000	
66	Zn	89	He	122.137	ppb	2.5	4461.99	2000	
75	As	89	He	1.616	ppb	12.8	53.68	1000	
78	Se	89	H2	0.462	ppb	16.9	8.17	1000	
88	Sr	89	He	486.337	ppb	1.9	74548.98	2000	
95	Mo	89	He	2.636	ppb	3.9	462.25	1000	
107	Ag	89	He	0.189	ppb	21.1	114.45	100	
111	Cd	89	He	0.993	ppb	8.7	75.92	1000	
118	Sn	159	He	1.985	ppb	16.1	398.91	1000	
121	Sb	159	No Gas	0.463	ppb	23.5	737.51	1000	
137	Ba	159	No Gas	339.407	ppb	5.7	200415.46	2000	
182	W	159	No Gas	0.454	ppb	18.8	550.63	1000	
205	Tl	209	No Gas	0.008	ppb	553.4	363.75	1000	
208	Pb	209	No Gas	1.252	ppb	4.4	4518.73	2000	
232	Th	209	No Gas	1.220	ppb	17.8	4369.03	1000	
238	U	209	No Gas	2.169	ppb	8.3	7046.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1608230.22	2.3	1745272.14	92.15	29.5	120.4	
Sc	45	No Gas	3851231.59	3.3	3932582.94	97.93	29.5	120.4	
Sc	45	H2	433698.33	2.0	485269.91	89.37	29.5	120.4	
Sc	45	He	88455.40	0.8	96164.21	91.98	29.5	120.4	
Ge	72	No Gas	885178.22	2.2	877152.82	100.91	29.5	120.4	
Ge	72	H2	161186.08	2.1	182501.5	88.32	29.5	120.4	
Ge	72	He	69113.13	1.2	74687.17	92.54	29.5	120.4	
Y	89	H2	2866128.97	1.3	3060772.3	93.64	29.5	120.4	
Y	89	He	599090.42	1.4	649886.7	92.18	29.5	120.4	
Tb	159	No Gas	9218890.49	2.9	8413567.03	109.57	29.5	120.4	
Tb	159	He	3331166.62	1.8	3319571.76	100.35	29.5	120.4	
Bi	209	No Gas	4767114.86	3.4	4391152.66	108.56	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	113_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:18:34 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.494	ppb	7.0	30209.95	25	97.98	89.8	110.2	
11	B	6	No Gas	28.071	ppb	7.1	24079.51	25	112.28	89.8	110.2	> +/- 10%
23	Na	45	He	5134.058	ppb	1.5	545609.27	5000	102.68	89.8	110.2	
24	Mg	45	He	5005.477	ppb	1.6	286465.90	5000	100.11	89.8	110.2	
27	Al	45	He	482.948	ppb	1.6	10883.40	500	96.59	89.8	110.2	
28	Si	45	H2	466.533	ppb	3.0	20574.33	500	93.31	89.8	110.2	
39	K	45	He	4842.415	ppb	1.4	267953.56	5000	96.85	89.8	110.2	
40	Ca	45	H2	4849.920	ppb	1.7	1946041.33	5000	97	89.8	110.2	
51	V	89	He	24.920	ppb	1.4	21440.29	25	99.68	89.8	110.2	
52	Cr	89	He	24.946	ppb	0.1	25962.31	25	99.78	89.8	110.2	
55	Mn	89	He	24.546	ppb	1.7	12071.00	25	98.18	89.8	110.2	
56	Fe	89	H2	4778.005	ppb	1.8	7867129.04	5000	95.56	89.8	110.2	
59	Co	89	He	24.734	ppb	0.7	44245.96	25	98.94	89.8	110.2	
60	Ni	89	He	25.107	ppb	1.3	12314.70	25	100.43	89.8	110.2	
63	Cu	89	He	25.170	ppb	0.8	34414.24	25	100.68	89.8	110.2	
66	Zn	89	He	25.602	ppb	2.9	4653.16	25	102.41	89.8	110.2	
75	As	89	He	24.787	ppb	2.1	3799.60	25	99.15	89.8	110.2	
78	Se	89	H2	24.220	ppb	1.7	1965.05	25	96.88	89.8	110.2	
88	Sr	89	He	23.892	ppb	0.4	18239.34	25	95.57	89.8	110.2	
95	Mo	89	He	24.834	ppb	2.0	21485.23	25	99.34	89.8	110.2	
107	Ag	89	He	25.693	ppb	0.7	75340.37	25	102.77	89.8	110.2	
111	Cd	89	He	25.461	ppb	1.7	9649.83	25	101.84	89.8	110.2	
118	Sn	159	He	23.401	ppb	1.6	20475.06	25	93.6	89.8	110.2	
121	Sb	159	No Gas	23.650	ppb	6.6	176593.38	25	94.6	89.8	110.2	
137	Ba	159	No Gas	23.785	ppb	7.6	69554.89	25	95.14	89.8	110.2	
182	W	159	No Gas	23.875	ppb	6.5	134028.62	25	95.5	89.8	110.2	
205	Tl	209	No Gas	24.519	ppb	6.6	299101.77	25	98.08	89.8	110.2	
208	Pb	209	No Gas	24.525	ppb	6.6	414417.20	25	98.1	89.8	110.2	
232	Th	209	No Gas	24.490	ppb	7.5	421337.26	25	97.96	89.8	110.2	
238	U	209	No Gas	24.583	ppb	8.4	398526.69	25	98.33	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1604093.98	2.8	1745272.14	91.91	29.5	120.4	
Sc	45	No Gas	3830278.84	3.9	3932582.94	97.4	29.5	120.4	
Sc	45	H2	433885.85	1.6	485269.91	89.41	29.5	120.4	
Sc	45	He	87916.51	1.5	96164.21	91.42	29.5	120.4	
Ge	72	No Gas	872617.20	3.2	877152.82	99.48	29.5	120.4	
Ge	72	H2	161517.83	1.7	182501.5	88.5	29.5	120.4	
Ge	72	He	68494.16	0.8	74687.17	91.71	29.5	120.4	
Y	89	H2	2852214.22	1.6	3060772.3	93.19	29.5	120.4	
Y	89	He	596508.72	0.3	649886.7	91.79	29.5	120.4	
Tb	159	No Gas	9136619.52	3.6	8413567.03	108.59	29.5	120.4	
Tb	159	He	3310833.63	0.7	3319571.76	99.74	29.5	120.4	
Bi	209	No Gas	4758108.05	3.7	4391152.66	108.36	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	114_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:21:12 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.091	ppb	17.5	171.12	0.2	
11	B	6	No Gas	2.660	ppb	5.8	4045.14	4	Failed DoD
23	Na	45	He	-45.773	ppb	N/A	13251.01	200	
24	Mg	45	He	-4.808	ppb	N/A	626.73	20	
27	Al	45	He	0.075	ppb	788.0	16.67	20	
28	Si	45	H2	-0.407	ppb	N/A	483.88	100	
39	K	45	He	10.570	ppb	88.5	11081.04	200	
40	Ca	45	H2	3.150	ppb	1.7	2070.22	20	
51	V	89	He	-0.045	ppb	N/A	214.45	1	
52	Cr	89	He	-0.003	ppb	N/A	64.66	1	
55	Mn	89	He	-0.001	ppb	N/A	21.33	0.4	
56	Fe	89	H2	1.897	ppb	7.6	5447.12	20	
59	Co	89	He	0.018	ppb	131.9	53.34	0.2	
60	Ni	89	He	-0.291	ppb	N/A	105.56	0.4	Failed DoD
63	Cu	89	He	-0.014	ppb	N/A	105.56	0.6	
66	Zn	89	He	-0.010	ppb	N/A	78.89	2	
75	As	89	He	0.012	ppb	183.3	5.67	1	
78	Se	89	H2	0.048	ppb	38.7	4.50	1	
88	Sr	89	He	0.019	ppb	26.4	20.00	1	
95	Mo	89	He	0.072	ppb	10.1	65.56	1	
107	Ag	89	He	0.016	ppb	24.9	50.00	0.2	
111	Cd	89	He	0.021	ppb	70.7	8.15	0.2	
118	Sn	159	He	0.097	ppb	33.3	130.00	1	
121	Sb	159	No Gas	0.031	ppb	20.7	266.97	0.2	
137	Ba	159	No Gas	0.091	ppb	10.7	283.65	0.4	
182	W	159	No Gas	0.087	ppb	18.8	513.92	1	
205	Tl	209	No Gas	-0.003	ppb	N/A	307.02	0.2	
208	Pb	209	No Gas	0.022	ppb	27.5	637.39	0.2	
232	Th	209	No Gas	0.058	ppb	13.3	1138.00	1	
238	U	209	No Gas	0.021	ppb	18.3	347.06	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1640191.02	1.7	1745272.14	93.98	29.5	120.4	
Sc	45	No Gas	3837647.25	2.5	3932582.94	97.59	29.5	120.4	
Sc	45	H2	437391.79	0.5	485269.91	90.13	29.5	120.4	
Sc	45	He	86558.21	1.8	96164.21	90.01	29.5	120.4	
Ge	72	No Gas	870563.29	2.1	877152.82	99.25	29.5	120.4	
Ge	72	H2	162717.68	0.9	182501.5	89.16	29.5	120.4	
Ge	72	He	67854.47	1.3	74687.17	90.85	29.5	120.4	
Y	89	H2	2853517.22	0.2	3060772.3	93.23	29.5	120.4	
Y	89	He	588119.23	1.8	649886.7	90.5	29.5	120.4	
Tb	159	No Gas	8977764.87	2.2	8413567.03	106.71	29.5	120.4	
Tb	159	He	3210597.18	1.7	3319571.76	96.72	29.5	120.4	
Bi	209	No Gas	4723185.21	2.4	4391152.66	107.56	29.5	120.4	

Sample Report

Sample Name SN6090-003

File Name 115SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:23:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.291	ppb	32.7	125.56	100	
11	B	6	No Gas	143.863	ppb	6.8	24419.05	1000	
23	Na	45	He	89375.063	ppb	2.6	1841525.04	200000	
24	Mg	45	He	58528.054	ppb	2.0	664038.15	200000	
27	Al	45	He	16.281	ppb	20.3	87.78	200000	
28	Si	45	H2	11678.423	ppb	2.8	99739.91	10000	
39	K	45	He	13111.891	ppb	1.9	148970.75	200000	
40	Ca	45	H2	225949.406	ppb	2.2	17899993.07	200000	
51	V	89	He	1.696	ppb	5.9	541.14	1000	
52	Cr	89	He	0.400	ppb	34.0	150.64	2000	
55	Mn	89	He	2864.740	ppb	1.5	279652.49	2000	
56	Fe	89	H2	12716.899	ppb	1.9	4109449.98	100000	
59	Co	89	He	7.531	ppb	3.4	2700.48	1000	
60	Ni	89	He	7.346	ppb	4.6	947.85	1000	
63	Cu	89	He	0.805	ppb	22.0	343.35	2000	
66	Zn	89	He	2.123	ppb	15.3	156.67	2000	
75	As	89	He	155.753	ppb	2.2	4746.33	1000	
78	Se	89	H2	0.171	ppb	43.2	3.33	1000	
88	Sr	89	He	1091.060	ppb	1.2	165580.07	2000	
95	Mo	89	He	1.170	ppb	13.8	205.56	1000	
107	Ag	89	He	0.065	ppb	9.3	41.11	100	
111	Cd	89	He	0.089	ppb	54.3	7.04	1000	
118	Sn	159	He	1.548	ppb	11.5	320.02	1000	
121	Sb	159	No Gas	0.105	ppb	24.0	193.55	1000	
137	Ba	159	No Gas	123.165	ppb	7.1	70977.80	2000	
182	W	159	No Gas	0.188	ppb	27.8	243.61	1000	
205	Tl	209	No Gas	-0.096	ppb	N/A	103.45	1000	
208	Pb	209	No Gas	0.123	ppb	16.5	670.76	2000	
232	Th	209	No Gas	0.400	ppb	12.2	1478.43	1000	
238	U	209	No Gas	92.870	ppb	8.4	292974.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1590254.48	3.4	1745272.14	91.12	29.5	120.4	
Sc	45	No Gas	3752399.64	3.7	3932582.94	95.42	29.5	120.4	
Sc	45	H2	428529.88	1.7	485269.91	88.31	29.5	120.4	
Sc	45	He	87307.43	1.6	96164.21	90.79	29.5	120.4	
Ge	72	No Gas	852502.79	2.7	877152.82	97.19	29.5	120.4	
Ge	72	H2	158446.61	2.4	182501.5	86.82	29.5	120.4	
Ge	72	He	68027.48	0.9	74687.17	91.08	29.5	120.4	
Y	89	H2	2798161.60	1.3	3060772.3	91.42	29.5	120.4	
Y	89	He	593134.82	1.2	649886.7	91.27	29.5	120.4	
Tb	159	No Gas	8999828.82	3.5	8413567.03	106.97	29.5	120.4	
Tb	159	He	3311662.24	0.7	3319571.76	99.76	29.5	120.4	
Bi	209	No Gas	4629467.28	3.7	4391152.66	105.43	29.5	120.4	

Sample Report

Sample Name SN6090-004

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:26:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.236	ppb	49.3	110.01	100	
11	B	6	No Gas	303.143	ppb	7.4	48371.96	1000	
23	Na	45	He	52605.225	ppb	8.1	1036891.44	200000	
24	Mg	45	He	26065.470	ppb	8.4	281402.26	200000	
27	Al	45	He	58.378	ppb	4.7	263.35	200000	
28	Si	45	H2	15218.018	ppb	5.2	128139.54	10000	
39	K	45	He	10446.735	ppb	8.8	114809.17	200000	
40	Ca	45	H2	181149.156	ppb	5.1	14164151.87	200000	
51	V	89	He	1.999	ppb	12.5	565.59	1000	
52	Cr	89	He	0.801	ppb	15.0	223.96	2000	
55	Mn	89	He	9093.742	ppb	7.7	846684.28	2000	
56	Fe	89	H2	35632.849	ppb	5.2	11473450.13	100000	
59	Co	89	He	0.308	ppb	12.3	126.68	1000	
60	Ni	89	He	5.449	ppb	17.3	730.05	1000	
63	Cu	89	He	0.712	ppb	18.0	303.35	2000	
66	Zn	89	He	1.872	ppb	16.6	141.12	2000	
75	As	89	He	206.842	ppb	7.7	6011.63	1000	
78	Se	89	H2	0.332	ppb	46.0	5.83	1000	
88	Sr	89	He	1011.603	ppb	7.8	146420.72	2000	
95	Mo	89	He	0.330	ppb	22.5	57.78	1000	
107	Ag	89	He	0.088	ppb	42.1	51.11	100	
111	Cd	89	He	0.102	ppb	92.3	7.40	1000	
118	Sn	159	He	1.459	ppb	17.6	293.35	1000	
121	Sb	159	No Gas	0.141	ppb	63.2	246.95	1000	
137	Ba	159	No Gas	86.428	ppb	5.5	50384.60	2000	
182	W	159	No Gas	0.207	ppb	48.9	266.97	1000	
205	Tl	209	No Gas	-0.084	ppb	N/A	133.49	1000	
208	Pb	209	No Gas	0.110	ppb	56.0	644.06	2000	
232	Th	209	No Gas	0.164	ppb	35.4	707.49	1000	
238	U	209	No Gas	0.417	ppb	31.5	1348.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1556411.66	3.2	1745272.14	89.18	29.5	120.4	
Sc	45	No Gas	3737284.29	3.2	3932582.94	95.03	29.5	120.4	
Sc	45	H2	423300.92	3.2	485269.91	87.23	29.5	120.4	
Sc	45	He	83204.04	6.1	96164.21	86.52	29.5	120.4	
Ge	72	No Gas	851344.96	3.0	877152.82	97.06	29.5	120.4	
Ge	72	H2	155054.95	2.8	182501.5	84.96	29.5	120.4	
Ge	72	He	65018.66	5.4	74687.17	87.05	29.5	120.4	
Y	89	H2	2791933.34	3.4	3060772.3	91.22	29.5	120.4	
Y	89	He	567397.76	5.9	649886.7	87.31	29.5	120.4	
Tb	159	No Gas	9098750.97	3.3	8413567.03	108.14	29.5	120.4	
Tb	159	He	3202612.49	5.7	3319571.76	96.48	29.5	120.4	
Bi	209	No Gas	4741580.84	2.8	4391152.66	107.98	29.5	120.4	

Sample Report

Sample Name SN6090-005

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:29:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.150	ppb	33.5	90.00	100	
11	B	6	No Gas	292.574	ppb	6.0	46806.48	1000	
23	Na	45	He	50417.496	ppb	1.1	1014340.53	200000	
24	Mg	45	He	25079.998	ppb	0.6	276252.05	200000	
27	Al	45	He	69.993	ppb	3.3	317.79	200000	
28	Si	45	H2	15005.176	ppb	1.6	125993.11	10000	
39	K	45	He	9909.298	ppb	0.9	111613.33	200000	
40	Ca	45	H2	180130.509	ppb	1.9	14045105.48	200000	
51	V	89	He	1.521	ppb	28.2	497.81	1000	
52	Cr	89	He	0.811	ppb	3.5	229.29	2000	
55	Mn	89	He	8759.390	ppb	0.1	831936.20	2000	
56	Fe	89	H2	35319.879	ppb	1.2	11415202.61	100000	
59	Co	89	He	0.220	ppb	26.7	97.79	1000	
60	Ni	89	He	5.044	ppb	2.2	707.82	1000	
63	Cu	89	He	0.653	ppb	12.3	294.46	2000	
66	Zn	89	He	1.508	ppb	28.4	131.12	2000	
75	As	89	He	198.477	ppb	2.8	5883.90	1000	
78	Se	89	H2	0.265	ppb	49.7	4.83	1000	
88	Sr	89	He	977.166	ppb	0.3	144284.90	2000	
95	Mo	89	He	0.142	ppb	21.2	27.78	1000	
107	Ag	89	He	0.065	ppb	17.8	40.00	100	
111	Cd	89	He	0.006	ppb	154.7	0.74	1000	
118	Sn	159	He	1.113	ppb	16.2	241.12	1000	
121	Sb	159	No Gas	0.069	ppb	18.9	143.50	1000	
137	Ba	159	No Gas	84.145	ppb	5.5	49426.68	2000	
182	W	159	No Gas	0.112	ppb	43.4	163.52	1000	
205	Tl	209	No Gas	-0.114	ppb	N/A	63.41	1000	
208	Pb	209	No Gas	0.087	ppb	11.7	570.64	2000	
232	Th	209	No Gas	0.088	ppb	27.7	450.51	1000	
238	U	209	No Gas	0.342	ppb	7.8	1117.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1558176.88	3.6	1745272.14	89.28	29.5	120.4	
Sc	45	No Gas	3743943.06	4.2	3932582.94	95.2	29.5	120.4	
Sc	45	H2	421688.45	1.2	485269.91	86.9	29.5	120.4	
Sc	45	He	84595.19	1.0	96164.21	87.97	29.5	120.4	
Ge	72	No Gas	855212.23	3.3	877152.82	97.5	29.5	120.4	
Ge	72	H2	155252.66	0.5	182501.5	85.07	29.5	120.4	
Ge	72	He	66186.73	0.7	74687.17	88.62	29.5	120.4	
Y	89	H2	2799090.01	0.8	3060772.3	91.45	29.5	120.4	
Y	89	He	577054.18	0.2	649886.7	88.79	29.5	120.4	
Tb	159	No Gas	9170313.41	3.6	8413567.03	108.99	29.5	120.4	
Tb	159	He	3269866.38	0.7	3319571.76	98.5	29.5	120.4	
Bi	209	No Gas	4787567.24	3.4	4391152.66	109.03	29.5	120.4	

Sample Report

Sample Name SN6090-006

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:31:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.078	ppb	78.0	71.11	100	
11	B	6	No Gas	5943.734	ppb	5.3	899984.06	1000	>LDR
23	Na	45	He	529530.710	ppb	1.7	10729606.52	200000	
24	Mg	45	He	55365.973	ppb	2.0	622796.20	200000	
27	Al	45	He	79.022	ppb	14.8	364.46	200000	
28	Si	45	H2	8180.380	ppb	3.0	70793.51	10000	
39	K	45	He	177681.995	ppb	1.5	1869241.56	200000	
40	Ca	45	H2	66292.554	ppb	2.8	5310467.21	200000	
51	V	89	He	8.015	ppb	4.0	1570.14	1000	
52	Cr	89	He	34.982	ppb	1.5	7113.19	2000	
55	Mn	89	He	756.241	ppb	1.7	72058.56	2000	
56	Fe	89	H2	10857.312	ppb	2.5	3559985.62	100000	
59	Co	89	He	9.495	ppb	4.1	3316.19	1000	
60	Ni	89	He	115.905	ppb	2.6	11049.16	1000	
63	Cu	89	He	3.287	ppb	14.4	990.07	2000	
66	Zn	89	He	36.892	ppb	7.4	1356.79	2000	
75	As	89	He	76.544	ppb	0.4	2278.78	1000	
78	Se	89	H2	0.467	ppb	13.1	8.17	1000	
88	Sr	89	He	646.974	ppb	1.6	95819.74	2000	
95	Mo	89	He	2.431	ppb	6.4	412.24	1000	
107	Ag	89	He	0.076	ppb	41.1	46.67	100	
111	Cd	89	He	0.066	ppb	25.4	5.18	1000	
118	Sn	159	He	8.986	ppb	2.0	1582.38	1000	
121	Sb	159	No Gas	1.930	ppb	6.0	2896.91	1000	
137	Ba	159	No Gas	136.768	ppb	4.6	79300.66	2000	
182	W	159	No Gas	2.956	ppb	14.4	3320.80	1000	
205	Tl	209	No Gas	-0.118	ppb	N/A	50.06	1000	
208	Pb	209	No Gas	1.378	ppb	10.2	4742.35	2000	
232	Th	209	No Gas	0.115	ppb	19.6	520.59	1000	
238	U	209	No Gas	0.577	ppb	16.7	1798.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1529543.91	2.2	1745272.14	87.64	29.5	120.4	
Sc	45	No Gas	3742346.17	1.7	3932582.94	95.16	29.5	120.4	
Sc	45	H2	433248.06	1.0	485269.91	89.28	29.5	120.4	
Sc	45	He	86565.17	2.3	96164.21	90.02	29.5	120.4	
Ge	72	No Gas	852797.04	1.9	877152.82	97.22	29.5	120.4	
Ge	72	H2	156827.66	1.0	182501.5	85.93	29.5	120.4	
Ge	72	He	66734.17	0.9	74687.17	89.35	29.5	120.4	
Y	89	H2	2839129.19	1.4	3060772.3	92.76	29.5	120.4	
Y	89	He	578899.55	1.9	649886.7	89.08	29.5	120.4	
Tb	159	No Gas	9046312.64	1.7	8413567.03	107.52	29.5	120.4	
Tb	159	He	3237555.92	1.7	3319571.76	97.53	29.5	120.4	
Bi	209	No Gas	4576483.82	2.0	4391152.66	104.22	29.5	120.4	

Sample Report

Sample Name SN6090-007

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:35:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.137	ppb	30.1	87.78	100	
11	B	6	No Gas	733.628	ppb	2.8	116413.74	1000	
23	Na	45	He	68984.319	ppb	1.0	1396204.91	200000	
24	Mg	45	He	46916.104	ppb	1.0	521509.04	200000	
27	Al	45	He	8.564	ppb	37.7	52.23	200000	
28	Si	45	H2	12150.674	ppb	4.4	103885.37	10000	
39	K	45	He	38904.776	ppb	0.9	412439.08	200000	
40	Ca	45	H2	165081.794	ppb	2.9	13095608.55	200000	
51	V	89	He	1.526	ppb	13.2	505.58	1000	
52	Cr	89	He	1.531	ppb	7.7	379.27	2000	
55	Mn	89	He	1500.989	ppb	0.9	144643.84	2000	
56	Fe	89	H2	48270.518	ppb	3.2	15809938.65	100000	
59	Co	89	He	12.545	ppb	2.7	4425.47	1000	
60	Ni	89	He	25.985	ppb	5.3	2693.68	1000	
63	Cu	89	He	0.659	ppb	11.2	300.01	2000	
66	Zn	89	He	3.006	ppb	7.8	185.57	2000	
75	As	89	He	115.078	ppb	1.1	3462.81	1000	
78	Se	89	H2	0.178	ppb	29.7	3.50	1000	
88	Sr	89	He	1083.659	ppb	0.9	162331.81	2000	
95	Mo	89	He	0.664	ppb	21.0	116.67	1000	
107	Ag	89	He	0.057	ppb	12.2	35.55	100	
111	Cd	89	He	0.030	ppb	56.5	2.59	1000	
118	Sn	159	He	1.090	ppb	7.2	238.90	1000	
121	Sb	159	No Gas	0.131	ppb	24.5	233.60	1000	
137	Ba	159	No Gas	231.758	ppb	3.6	134518.82	2000	
182	W	159	No Gas	0.141	ppb	12.1	193.55	1000	
205	Tl	209	No Gas	-0.115	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	0.008	ppb	49.3	293.67	2000	
232	Th	209	No Gas	0.051	ppb	16.3	313.69	1000	
238	U	209	No Gas	3.363	ppb	2.3	10663.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1580045.45	1.1	1745272.14	90.53	29.5	120.4	
Sc	45	No Gas	3749860.30	0.9	3932582.94	95.35	29.5	120.4	
Sc	45	H2	429101.70	1.3	485269.91	88.43	29.5	120.4	
Sc	45	He	85497.89	0.8	96164.21	88.91	29.5	120.4	
Ge	72	No Gas	851430.68	1.2	877152.82	97.07	29.5	120.4	
Ge	72	H2	157500.78	2.8	182501.5	86.3	29.5	120.4	
Ge	72	He	67185.21	0.3	74687.17	89.96	29.5	120.4	
Y	89	H2	2838011.51	2.0	3060772.3	92.72	29.5	120.4	
Y	89	He	585446.85	0.7	649886.7	90.08	29.5	120.4	
Tb	159	No Gas	9054394.10	1.0	8413567.03	107.62	29.5	120.4	
Tb	159	He	3295349.33	0.9	3319571.76	99.27	29.5	120.4	
Bi	209	No Gas	4643709.12	1.0	4391152.66	105.75	29.5	120.4	

Sample Report

Sample Name SN6090-008

File Name 120SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:38:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.050	ppb	199.0	66.67	100	
11	B	6	No Gas	158.552	ppb	1.6	26707.53	1000	
23	Na	45	He	46554.974	ppb	2.4	967190.93	200000	
24	Mg	45	He	37937.180	ppb	2.3	430418.73	200000	
27	Al	45	He	19.208	ppb	17.2	101.12	200000	
28	Si	45	H2	8960.166	ppb	5.3	74784.31	10000	
39	K	45	He	19697.535	ppb	2.2	218290.85	200000	
40	Ca	45	H2	181894.220	ppb	4.5	14062435.35	200000	
51	V	89	He	1.173	ppb	13.7	452.25	1000	
52	Cr	89	He	0.258	ppb	5.9	121.31	2000	
55	Mn	89	He	4290.956	ppb	1.2	418284.68	2000	
56	Fe	89	H2	3567.848	ppb	4.8	1148462.41	100000	
59	Co	89	He	18.506	ppb	0.5	6593.12	1000	
60	Ni	89	He	7.241	ppb	7.7	936.73	1000	
63	Cu	89	He	2.750	ppb	6.1	868.95	2000	
66	Zn	89	He	4.286	ppb	29.6	233.35	2000	
75	As	89	He	3.697	ppb	5.6	116.34	1000	
78	Se	89	H2	0.132	ppb	88.4	2.67	1000	
88	Sr	89	He	363.260	ppb	0.9	55055.51	2000	
95	Mo	89	He	0.150	ppb	58.1	30.00	1000	
107	Ag	89	He	0.060	ppb	11.9	37.78	100	
111	Cd	89	He	0.020	ppb	86.2	1.85	1000	
118	Sn	159	He	1.343	ppb	14.4	284.46	1000	
121	Sb	159	No Gas	0.087	ppb	15.6	173.53	1000	
137	Ba	159	No Gas	47.889	ppb	4.5	28586.03	2000	
182	W	159	No Gas	0.058	ppb	97.1	103.45	1000	
205	Tl	209	No Gas	-0.122	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.218	ppb	11.5	1021.16	2000	
232	Th	209	No Gas	0.040	ppb	31.4	283.65	1000	
238	U	209	No Gas	19.184	ppb	5.7	62747.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1587200.24	1.5	1745272.14	90.94	29.5	120.4	
Sc	45	No Gas	3838851.22	2.5	3932582.94	97.62	29.5	120.4	
Sc	45	H2	418497.84	3.3	485269.91	86.24	29.5	120.4	
Sc	45	He	87251.66	2.1	96164.21	90.73	29.5	120.4	
Ge	72	No Gas	875353.59	2.0	877152.82	99.79	29.5	120.4	
Ge	72	H2	156153.04	4.2	182501.5	85.56	29.5	120.4	
Ge	72	He	68247.89	1.5	74687.17	91.38	29.5	120.4	
Y	89	H2	2785460.86	2.9	3060772.3	91.01	29.5	120.4	
Y	89	He	592311.29	1.4	649886.7	91.14	29.5	120.4	
Tb	159	No Gas	9311291.53	2.7	8413567.03	110.67	29.5	120.4	
Tb	159	He	3307624.78	2.0	3319571.76	99.64	29.5	120.4	
Bi	209	No Gas	4794261.80	2.5	4391152.66	109.18	29.5	120.4	

Sample Report

Sample Name SN6090-009

File Name 121SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:40:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.137	ppb	43.4	86.67	100	
11	B	6	No Gas	126.559	ppb	9.7	21378.67	1000	
23	Na	45	He	85162.426	ppb	1.3	1746238.04	200000	
24	Mg	45	He	35709.570	ppb	1.4	403340.04	200000	
27	Al	45	He	74.591	ppb	5.7	346.69	200000	
28	Si	45	H2	10398.174	ppb	4.5	90798.27	10000	
39	K	45	He	23359.723	ppb	1.1	255715.00	200000	
40	Ca	45	H2	194278.824	ppb	3.6	15728645.46	200000	
51	V	89	He	1.398	ppb	13.3	490.03	1000	
52	Cr	89	He	0.394	ppb	4.0	149.30	2000	
55	Mn	89	He	6824.421	ppb	0.3	665082.69	2000	
56	Fe	89	H2	4583.473	ppb	3.4	1532401.17	100000	
59	Co	89	He	3.607	ppb	12.1	1302.38	1000	
60	Ni	89	He	4.664	ppb	7.4	690.04	1000	
63	Cu	89	He	1.348	ppb	11.0	490.03	2000	
66	Zn	89	He	6.835	ppb	8.4	323.35	2000	
75	As	89	He	6.823	ppb	3.0	211.36	1000	
78	Se	89	H2	0.154	ppb	11.6	3.17	1000	
88	Sr	89	He	410.929	ppb	0.3	62263.89	2000	
95	Mo	89	He	1.561	ppb	19.6	272.23	1000	
107	Ag	89	He	0.052	ppb	39.7	33.34	100	
111	Cd	89	He	0.015	ppb	147.9	1.48	1000	
118	Sn	159	He	1.101	ppb	12.5	242.23	1000	
121	Sb	159	No Gas	0.056	ppb	23.1	126.81	1000	
137	Ba	159	No Gas	42.079	ppb	9.5	25021.76	2000	
182	W	159	No Gas	0.050	ppb	151.2	93.44	1000	
205	Tl	209	No Gas	-0.129	ppb	N/A	26.70	1000	
208	Pb	209	No Gas	0.301	ppb	11.3	1298.14	2000	
232	Th	209	No Gas	0.192	ppb	22.6	807.60	1000	
238	U	209	No Gas	48.158	ppb	10.6	157005.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1569565.03	5.5	1745272.14	89.93	29.5	120.4	
Sc	45	No Gas	3833726.04	6.1	3932582.94	97.49	29.5	120.4	
Sc	45	H2	438089.02	2.7	485269.91	90.28	29.5	120.4	
Sc	45	He	86830.88	1.2	96164.21	90.29	29.5	120.4	
Ge	72	No Gas	873119.83	5.1	877152.82	99.54	29.5	120.4	
Ge	72	H2	161345.26	3.1	182501.5	88.41	29.5	120.4	
Ge	72	He	68075.83	0.5	74687.17	91.15	29.5	120.4	
Y	89	H2	2893297.34	2.4	3060772.3	94.53	29.5	120.4	
Y	89	He	592118.02	0.2	649886.7	91.11	29.5	120.4	
Tb	159	No Gas	9303155.83	6.3	8413567.03	110.57	29.5	120.4	
Tb	159	He	3312993.70	0.5	3319571.76	99.8	29.5	120.4	
Bi	209	No Gas	4795105.40	6.2	4391152.66	109.2	29.5	120.4	

Sample Report

Sample Name SN6090-010S

File Name 122SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:43:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.499	ppb	7.2	12860.55	100	
11	B	6	No Gas	525.399	ppb	6.5	87619.50	1000	
23	Na	45	He	7431.790	ppb	2.3	174701.16	200000	
24	Mg	45	He	5306.957	ppb	2.9	62838.48	200000	
27	Al	45	He	1956.747	ppb	2.6	9019.84	200000	
28	Si	45	H2	991.767	ppb	4.5	9330.14	10000	
39	K	45	He	10106.755	ppb	1.1	120742.51	200000	
40	Ca	45	H2	2639.044	ppb	5.3	219282.37	200000	
51	V	89	He	507.575	ppb	0.4	89006.81	1000	
52	Cr	89	He	210.167	ppb	1.2	44936.19	2000	
55	Mn	89	He	521.026	ppb	1.8	52622.51	2000	
56	Fe	89	H2	1046.596	ppb	5.0	359517.88	100000	
59	Co	89	He	529.931	ppb	1.8	194885.59	1000	
60	Ni	89	He	535.210	ppb	1.0	53161.78	1000	
63	Cu	89	He	263.331	ppb	1.6	73905.65	2000	
66	Zn	89	He	533.284	ppb	1.2	19668.89	2000	
75	As	89	He	105.395	ppb	2.5	3323.10	1000	
78	Se	89	H2	100.834	ppb	4.0	1696.36	1000	
88	Sr	89	He	505.406	ppb	1.7	79328.08	2000	
95	Mo	89	He	105.098	ppb	2.3	18698.97	1000	
107	Ag	89	He	54.803	ppb	2.4	33049.93	100	
111	Cd	89	He	265.645	ppb	2.2	20705.55	1000	
118	Sn	159	He	495.591	ppb	1.0	88549.10	1000	
121	Sb	159	No Gas	98.962	ppb	6.7	151597.32	1000	
137	Ba	159	No Gas	1947.479	ppb	7.0	1168120.12	2000	
182	W	159	No Gas	100.485	ppb	8.3	115676.63	1000	
205	Tl	209	No Gas	104.791	ppb	6.9	262777.33	1000	
208	Pb	209	No Gas	103.644	ppb	6.4	360034.95	2000	
232	Th	209	No Gas	101.668	ppb	8.0	359481.46	1000	
238	U	209	No Gas	101.698	ppb	6.8	339024.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1652509.08	3.6	1745272.14	94.68	29.5	120.4	
Sc	45	No Gas	3934668.96	4.5	3932582.94	100.05	29.5	120.4	
Sc	45	H2	448242.56	3.4	485269.91	92.37	29.5	120.4	
Sc	45	He	89893.34	1.3	96164.21	93.48	29.5	120.4	
Ge	72	No Gas	899254.42	4.4	877152.82	102.52	29.5	120.4	
Ge	72	H2	165969.14	2.5	182501.5	90.94	29.5	120.4	
Ge	72	He	70211.52	0.6	74687.17	94.01	29.5	120.4	
Y	89	H2	2958817.56	3.1	3060772.3	96.67	29.5	120.4	
Y	89	He	613448.82	0.9	649886.7	94.39	29.5	120.4	
Tb	159	No Gas	9373564.65	4.1	8413567.03	111.41	29.5	120.4	
Tb	159	He	3386838.53	0.5	3319571.76	102.03	29.5	120.4	
Bi	209	No Gas	4891585.63	4.5	4391152.66	111.4	29.5	120.4	

Sample Report

Sample Name SN6090-010P

File Name 123SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:46:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	53.953	ppb	7.7	13621.30	100	
11	B	6	No Gas	564.235	ppb	5.9	93196.18	1000	
23	Na	45	He	7870.419	ppb	3.9	183332.05	200000	
24	Mg	45	He	5680.106	ppb	2.7	66991.01	200000	
27	Al	45	He	2082.435	ppb	2.1	9570.20	200000	
28	Si	45	H2	1086.395	ppb	8.2	10028.09	10000	
39	K	45	He	10690.619	ppb	2.3	126697.02	200000	
40	Ca	45	H2	2929.723	ppb	5.4	240610.14	200000	
51	V	89	He	544.019	ppb	3.1	94137.52	1000	
52	Cr	89	He	226.931	ppb	3.0	47887.25	2000	
55	Mn	89	He	553.833	ppb	3.0	55211.89	2000	
56	Fe	89	H2	1143.866	ppb	1.5	386889.07	100000	
59	Co	89	He	567.508	ppb	3.2	206000.86	1000	
60	Ni	89	He	570.055	ppb	3.3	55874.50	1000	
63	Cu	89	He	283.094	ppb	3.3	78412.27	2000	
66	Zn	89	He	564.870	ppb	2.6	20560.21	2000	
75	As	89	He	111.258	ppb	4.0	3462.15	1000	
78	Se	89	H2	107.626	ppb	2.7	1783.03	1000	
88	Sr	89	He	545.970	ppb	3.9	84588.06	2000	
95	Mo	89	He	110.952	ppb	3.0	19486.69	1000	
107	Ag	89	He	56.650	ppb	3.5	33720.68	100	
111	Cd	89	He	283.084	ppb	2.5	21781.68	1000	
118	Sn	159	He	526.804	ppb	2.9	93727.05	1000	
121	Sb	159	No Gas	106.867	ppb	7.7	161885.94	1000	
137	Ba	159	No Gas	2112.273	ppb	7.2	1253150.68	2000	
182	W	159	No Gas	108.800	ppb	7.5	123915.02	1000	
205	Tl	209	No Gas	111.154	ppb	7.8	275117.01	1000	
208	Pb	209	No Gas	111.255	ppb	7.4	381452.43	2000	
232	Th	209	No Gas	111.764	ppb	8.4	390136.90	1000	
238	U	209	No Gas	110.979	ppb	8.1	365132.18	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1639168.33	3.9	1745272.14	93.92	29.5	120.4	
Sc	45	No Gas	3892846.46	4.6	3932582.94	98.99	29.5	120.4	
Sc	45	H2	442272.45	2.6	485269.91	91.14	29.5	120.4	
Sc	45	He	89635.07	2.0	96164.21	93.21	29.5	120.4	
Ge	72	No Gas	893231.37	3.8	877152.82	101.83	29.5	120.4	
Ge	72	H2	162992.78	2.3	182501.5	89.31	29.5	120.4	
Ge	72	He	69403.83	1.7	74687.17	92.93	29.5	120.4	
Y	89	H2	2912420.42	1.9	3060772.3	95.15	29.5	120.4	
Y	89	He	605707.31	2.0	649886.7	93.2	29.5	120.4	
Tb	159	No Gas	9271978.96	4.0	8413567.03	110.2	29.5	120.4	
Tb	159	He	3373717.28	2.0	3319571.76	101.63	29.5	120.4	
Bi	209	No Gas	4829132.87	4.2	4391152.66	109.97	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG24IMW3
File Name	124_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:48:48 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.274	ppb	34.3	117.78	0.5	
B	11	6	No Gas	23.987	ppb	5.1	5421.20	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	-273.790	ppb	N/A	12626.30	500	
Mg	24	45	He	-3.928	ppb	N/A	873.42	50	
Al	27	45	He	6.662	ppb	38.2	45.56	50	
Si	28	45	H2	17.108	ppb	23.8	647.40	250	
K	39	45	He	35.265	ppb	122.7	11147.71	500	
Ca	40	45	H2	30.500	ppb	3.1	3251.60	50	
V	51	89	He	1.547	ppb	23.1	524.47	2.5	
Cr	52	89	He	0.238	ppb	64.6	119.31	2.5	
Mn	55	89	He	1.347	ppb	22.8	155.97	1	PB 6020 Fails DoD
Fe	56	89	H2	19.774	ppb	3.3	8879.39	50	
Co	59	89	He	0.153	ppb	35.0	77.78	0.5	
Ni	60	89	He	-0.819	ppb	N/A	170.01	1	
Cu	63	89	He	0.589	ppb	12.6	290.01	1.5	
Zn	66	89	He	1.870	ppb	68.7	150.01	5	
As	75	89	He	0.193	ppb	16.4	10.00	2.5	
Se	78	89	H2	0.227	ppb	51.5	4.33	2.5	
Sr	88	89	He	0.133	ppb	49.0	26.67	2.5	
Mo	95	89	He	0.339	ppb	22.7	63.34	2.5	
Ag	107	89	He	0.044	ppb	45.2	28.89	0.5	
Cd	111	89	He	0.092	ppb	24.1	7.41	0.5	
Sn	118	159	He	1.968	ppb	17.9	395.58	2.5	
Sb	121	159	No Gas	0.185	ppb	24.7	303.68	0.5	
Ba	137	159	No Gas	1.361	ppb	35.4	797.57	1	PB 6020 Fails DoD
W	182	159	No Gas	0.262	ppb	30.1	317.03	2.5	
Tl	205	209	No Gas	0.003	ppb	1130.6	337.05	0.5	
Pb	208	209	No Gas	0.147	ppb	11.8	747.52	0.5	
Th	232	209	No Gas	1.101	ppb	6.7	3828.23	2.5	
U	238	209	No Gas	0.092	ppb	47.1	297.01	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1540012.33	5.9	1745272.14	88.24	29.5	120.4	
Sc	45	No Gas	3712152.52	8.3	3932582.94	94.39	29.5	120.4	
Sc	45	H2	435873.58	0.8	485269.91	89.82	29.5	120.4	
Sc	45	He	88526.10	0.7	96164.21	92.06	29.5	120.4	
Ge	72	No Gas	847885.12	6.9	877152.82	96.66	29.5	120.4	
Ge	72	H2	160763.48	1.4	182501.5	88.09	29.5	120.4	
Ge	72	He	69099.11	0.8	74687.17	92.52	29.5	120.4	
Y	89	H2	2867577.40	1.1	3060772.3	93.69	29.5	120.4	
Y	89	He	602924.54	0.2	649886.7	92.77	29.5	120.4	
Tb	159	No Gas	8825516.19	8.0	8413567.03	104.9	29.5	120.4	
Tb	159	He	3330639.85	0.5	3319571.76	100.33	29.5	120.4	
Bi	209	No Gas	4613211.49	8.0	4391152.66	105.06	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	125_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:51:30 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.790	ppb	6.2	30682.29	25	99.16	89.8	110.2	
11	B	6	No Gas	26.844	ppb	6.6	23188.12	25	107.38	89.8	110.2	
23	Na	45	He	5101.338	ppb	1.8	550513.84	5000	102.03	89.8	110.2	
24	Mg	45	He	4991.367	ppb	1.7	290032.92	5000	99.83	89.8	110.2	
27	Al	45	He	482.608	ppb	1.8	11043.51	500	96.52	89.8	110.2	
28	Si	45	H2	481.417	ppb	2.6	21460.07	500	96.28	89.8	110.2	
39	K	45	He	4821.632	ppb	1.5	270920.27	5000	96.43	89.8	110.2	
40	Ca	45	H2	4892.286	ppb	2.3	1985830.06	5000	97.85	89.8	110.2	
51	V	89	He	24.324	ppb	0.7	21202.17	25	97.3	89.8	110.2	
52	Cr	89	He	25.123	ppb	0.9	26480.57	25	100.49	89.8	110.2	
55	Mn	89	He	24.573	ppb	1.8	12239.09	25	98.29	89.8	110.2	
56	Fe	89	H2	4850.110	ppb	1.5	8034017.59	5000	97	89.8	110.2	
59	Co	89	He	25.484	ppb	2.3	46165.43	25	101.94	89.8	110.2	
60	Ni	89	He	25.186	ppb	2.5	12509.30	25	100.74	89.8	110.2	
63	Cu	89	He	25.337	ppb	2.3	35082.54	25	101.35	89.8	110.2	
66	Zn	89	He	24.940	ppb	1.0	4593.15	25	99.76	89.8	110.2	
75	As	89	He	24.585	ppb	2.3	3816.61	25	98.34	89.8	110.2	
78	Se	89	H2	24.496	ppb	0.7	1999.55	25	97.98	89.8	110.2	
88	Sr	89	He	23.598	ppb	0.7	18244.88	25	94.39	89.8	110.2	
95	Mo	89	He	25.036	ppb	1.6	21934.89	25	100.14	89.8	110.2	
107	Ag	89	He	25.477	ppb	2.3	75654.36	25	101.91	89.8	110.2	
111	Cd	89	He	24.934	ppb	2.5	9570.51	25	99.74	89.8	110.2	
118	Sn	159	He	23.666	ppb	0.5	20877.92	25	94.66	89.8	110.2	
121	Sb	159	No Gas	23.523	ppb	6.5	176619.74	25	94.09	89.8	110.2	
137	Ba	159	No Gas	24.223	ppb	6.1	71249.20	25	96.89	89.8	110.2	
182	W	159	No Gas	23.799	ppb	7.4	134302.42	25	95.2	89.8	110.2	
205	Tl	209	No Gas	24.372	ppb	6.7	298237.37	25	97.49	89.8	110.2	
208	Pb	209	No Gas	24.227	ppb	6.3	410681.86	25	96.91	89.8	110.2	
232	Th	209	No Gas	24.053	ppb	8.1	415019.57	25	96.21	89.8	110.2	
238	U	209	No Gas	24.244	ppb	8.0	394272.28	25	96.98	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1609524.32	2.8	1745272.14	92.22	29.5	120.4	
Sc	45	No Gas	3897918.69	3.6	3932582.94	99.12	29.5	120.4	
Sc	45	H2	438971.76	1.5	485269.91	90.46	29.5	120.4	
Sc	45	He	89259.64	1.5	96164.21	92.82	29.5	120.4	
Ge	72	No Gas	881793.06	4.1	877152.82	100.53	29.5	120.4	
Ge	72	H2	162811.73	2.3	182501.5	89.21	29.5	120.4	
Ge	72	He	69235.91	0.6	74687.17	92.7	29.5	120.4	
Y	89	H2	2869163.44	0.7	3060772.3	93.74	29.5	120.4	
Y	89	He	604165.55	0.9	649886.7	92.96	29.5	120.4	
Tb	159	No Gas	9188005.91	4.0	8413567.03	109.2	29.5	120.4	
Tb	159	He	3338288.94	1.0	3319571.76	100.56	29.5	120.4	
Bi	209	No Gas	4774619.03	4.6	4391152.66	108.73	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	126_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:54:08 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.067	ppb	28.3	143.34	0.2	
11	B	6	No Gas	2.163	ppb	4.5	3717.28	4	Failed DoD
23	Na	45	He	-79.708	ppb	N/A	10341.89	200	
24	Mg	45	He	-3.890	ppb	N/A	715.63	20	
27	Al	45	He	0.131	ppb	158.4	18.89	20	
28	Si	45	H2	-1.317	ppb	N/A	450.51	100	
39	K	45	He	6.115	ppb	97.3	11429.49	200	
40	Ca	45	H2	2.729	ppb	9.9	1924.64	20	
51	V	89	He	-0.154	ppb	N/A	130.01	1	
52	Cr	89	He	-0.021	ppb	N/A	47.99	1	
55	Mn	89	He	0.056	ppb	25.0	51.32	0.4	
56	Fe	89	H2	2.358	ppb	9.2	6258.39	20	
59	Co	89	He	0.009	ppb	103.6	40.00	0.2	
60	Ni	89	He	-0.212	ppb	N/A	150.01	0.4	Failed DoD
63	Cu	89	He	-0.009	ppb	N/A	118.89	0.6	
66	Zn	89	He	0.706	ppb	22.7	215.57	2	
75	As	89	He	0.001	ppb	1359.8	4.33	1	
78	Se	89	H2	0.041	ppb	14.5	4.00	1	
88	Sr	89	He	0.002	ppb	270.9	7.78	1	
95	Mo	89	He	0.053	ppb	29.3	52.22	1	
107	Ag	89	He	0.010	ppb	16.6	32.22	0.2	
111	Cd	89	He	0.008	ppb	34.5	3.33	0.2	
118	Sn	159	He	0.050	ppb	54.3	94.45	1	
121	Sb	159	No Gas	0.026	ppb	14.4	230.26	0.2	
137	Ba	159	No Gas	0.027	ppb	25.9	100.12	0.4	
182	W	159	No Gas	0.072	ppb	29.7	437.17	1	
205	Tl	209	No Gas	0.003	ppb	228.3	377.10	0.2	
208	Pb	209	No Gas	0.017	ppb	24.5	553.96	0.2	
232	Th	209	No Gas	0.072	ppb	12.8	1374.96	1	
238	U	209	No Gas	0.022	ppb	17.1	350.40	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1673963.63	1.9	1745272.14	95.91	29.5	120.4	
Sc	45	No Gas	3946798.20	3.0	3932582.94	100.36	29.5	120.4	
Sc	45	H2	443200.68	0.6	485269.91	91.33	29.5	120.4	
Sc	45	He	91190.41	2.4	96164.21	94.83	29.5	120.4	
Ge	72	No Gas	887834.78	2.2	877152.82	101.22	29.5	120.4	
Ge	72	H2	164117.30	0.5	182501.5	89.93	29.5	120.4	
Ge	72	He	71763.56	2.5	74687.17	96.09	29.5	120.4	
Y	89	H2	2876891.71	0.3	3060772.3	93.99	29.5	120.4	
Y	89	He	618414.05	2.6	649886.7	95.16	29.5	120.4	
Tb	159	No Gas	9075451.74	3.6	8413567.03	107.87	29.5	120.4	
Tb	159	He	3344781.58	2.1	3319571.76	100.76	29.5	120.4	
Bi	209	No Gas	4728289.06	3.1	4391152.66	107.68	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG24IMW3
File Name	127LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 5:56:51 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.814	ppb	7.9	12896.14	50	19.93	79.5	120.4	
B	11	6	No Gas	520.969	ppb	5.9	88358.64	500	20.84	79.5	120.4	
Na	23	45	He	7689.641	ppb	1.2	175919.77	7500	20.51	79.5	120.4	
Mg	24	45	He	5552.176	ppb	2.0	64169.02	5000	22.21	79.5	120.4	
Al	27	45	He	2053.663	ppb	4.7	9243.32	2000	20.54	79.5	120.4	
Si	28	45	H2	1065.416	ppb	7.4	9717.40	1000	21.31	0	200	
K	39	45	He	10575.967	ppb	1.8	122891.82	10000	21.15	79.5	120.4	
Ca	40	45	H2	2670.140	ppb	2.9	216282.55	2500	21.36	79.5	120.4	
V	51	89	He	530.362	ppb	2.7	90389.46	500	21.21	79.5	120.4	
Cr	52	89	He	216.026	ppb	3.0	44895.38	200	21.6	79.5	120.4	
Mn	55	89	He	539.795	ppb	2.2	52999.21	500	21.59	79.5	120.4	
Fe	56	89	H2	1094.452	ppb	3.1	363546.84	1000	21.89	79.5	120.4	
Co	59	89	He	550.199	ppb	2.4	196700.76	500	22.01	79.5	120.4	
Ni	60	89	He	554.183	ppb	2.5	53500.81	500	22.17	79.5	120.4	
Cu	63	89	He	274.609	ppb	3.2	74908.86	250	21.97	79.5	120.4	
Zn	66	89	He	561.112	ppb	3.5	20110.64	500	22.44	79.5	120.4	
As	75	89	He	108.329	ppb	3.2	3320.10	100	21.67	79.5	120.4	
Se	78	89	H2	104.358	ppb	2.7	1697.86	100	20.87	79.5	120.4	
Sr	88	89	He	530.184	ppb	3.0	80892.23	500	21.21	79.5	120.4	
Mo	95	89	He	109.229	ppb	1.3	18895.81	100	21.85	79.5	120.4	
Ag	107	89	He	55.737	ppb	2.6	32676.86	50	22.29	79.5	120.4	
Cd	111	89	He	276.310	ppb	2.9	20935.89	250	22.1	79.5	120.4	
Sn	118	159	He	516.233	ppb	2.9	89746.83	500	20.65	79.5	120.4	
Sb	121	159	No Gas	100.268	ppb	7.5	150884.12	100	20.05	79.5	120.4	
Ba	137	159	No Gas	1965.692	ppb	6.7	1158522.91	2000	19.66	79.5	120.4	
W	182	159	No Gas	102.184	ppb	7.5	115606.31	100	20.44	79.5	120.4	
Tl	205	209	No Gas	104.612	ppb	6.7	258539.00	100	20.92	79.5	120.4	
[Pb]	206	209	No Gas	103.789	ppb	6.5	89111.86	100	20.76	79.5	120.4	
[Pb]	207	209	No Gas	102.349	ppb	5.2	77111.73	100	20.47	79.5	120.4	
Pb	208	209	No Gas	103.630	ppb	6.1	354781.64	100	20.73	79.5	120.4	
Th	232	209	No Gas	103.127	ppb	7.6	359409.26	100	20.62	79.5	120.4	
U	238	209	No Gas	102.422	ppb	7.3	336425.02	100	20.48	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1679603.85	3.1	1745272.14	96.24	29.5	120.4	
Sc	45	No Gas	3878876.42	3.4	3932582.94	98.63	29.5	120.4	
Sc	45	H2	436723.06	3.1	485269.91	90	29.5	120.4	
Sc	45	He	87788.97	1.0	96164.21	91.29	29.5	120.4	
Ge	72	No Gas	883770.28	3.9	877152.82	100.75	29.5	120.4	
Ge	72	H2	163327.64	3.6	182501.5	89.49	29.5	120.4	
Ge	72	He	68277.68	2.0	74687.17	91.42	29.5	120.4	
Y	89	H2	2860686.18	3.0	3060772.3	93.46	29.5	120.4	
Y	89	He	596477.53	1.9	649886.7	91.78	29.5	120.4	
Tb	159	No Gas	9206665.97	3.3	8413567.03	109.43	29.5	120.4	
Tb	159	He	3296510.40	1.8	3319571.76	99.31	29.5	120.4	
Bi	209	No Gas	4819195.54	3.8	4391152.66	109.75	29.5	120.4	

Sample Report

Sample Name SN6124-001

File Name 128SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 5:59:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.220	ppb	23.6	110.00	100	
11	B	6	No Gas	22.067	ppb	1.3	5377.86	1000	
23	Na	45	He	17692.614	ppb	0.9	379997.01	200000	
24	Mg	45	He	5818.218	ppb	2.3	66992.52	200000	
27	Al	45	He	7.302	ppb	58.9	47.78	200000	
28	Si	45	H2	4903.120	ppb	5.1	43296.91	10000	
39	K	45	He	1531.054	ppb	5.9	26839.66	200000	
40	Ca	45	H2	28981.410	ppb	4.2	2358634.34	200000	
51	V	89	He	1.062	ppb	28.2	433.36	1000	
52	Cr	89	He	0.427	ppb	17.3	155.97	2000	
55	Mn	89	He	213.133	ppb	1.2	20780.17	2000	
56	Fe	89	H2	36.631	ppb	5.7	14540.44	100000	
59	Co	89	He	0.375	ppb	23.9	155.57	1000	
60	Ni	89	He	5.351	ppb	12.2	755.61	1000	
63	Cu	89	He	4.602	ppb	5.9	1369.01	2000	
66	Zn	89	He	5.052	ppb	1.2	260.01	2000	
75	As	89	He	1.492	ppb	19.0	49.34	1000	
78	Se	89	H2	0.354	ppb	59.1	6.50	1000	
88	Sr	89	He	151.174	ppb	1.3	22896.35	2000	
95	Mo	89	He	0.339	ppb	11.3	62.22	1000	
107	Ag	89	He	0.041	ppb	23.6	26.66	100	
111	Cd	89	He	0.040	ppb	38.2	3.33	1000	
118	Sn	159	He	2.110	ppb	5.8	416.69	1000	
121	Sb	159	No Gas	0.194	ppb	38.4	330.38	1000	
137	Ba	159	No Gas	11.940	ppb	8.6	7003.00	2000	
182	W	159	No Gas	0.388	ppb	11.8	473.87	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	340.39	1000	
208	Pb	209	No Gas	0.543	ppb	5.1	2119.10	2000	
232	Th	209	No Gas	1.038	ppb	13.4	3744.79	1000	
238	U	209	No Gas	0.193	ppb	10.7	630.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1613058.40	2.7	1745272.14	92.42	29.5	120.4	
Sc	45	No Gas	3819774.98	3.5	3932582.94	97.13	29.5	120.4	
Sc	45	H2	440252.84	2.1	485269.91	90.72	29.5	120.4	
Sc	45	He	87517.49	0.9	96164.21	91.01	29.5	120.4	
Ge	72	No Gas	879959.02	2.8	877152.82	100.32	29.5	120.4	
Ge	72	H2	165259.36	2.1	182501.5	90.55	29.5	120.4	
Ge	72	He	68381.12	1.3	74687.17	91.56	29.5	120.4	
Y	89	H2	2885020.08	2.2	3060772.3	94.26	29.5	120.4	
Y	89	He	591822.87	1.1	649886.7	91.07	29.5	120.4	
Tb	159	No Gas	9135823.41	3.2	8413567.03	108.58	29.5	120.4	
Tb	159	He	3299197.14	0.7	3319571.76	99.39	29.5	120.4	
Bi	209	No Gas	4775235.59	3.4	4391152.66	108.75	29.5	120.4	

Sample Report

Sample Name	SN6124-003
File Name	129SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:02:14 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.109	ppb	74.3	81.11	100	
11	B	6	No Gas	10.134	ppb	15.4	3403.85	1000	
23	Na	45	He	58297.904	ppb	2.1	1196647.92	200000	
24	Mg	45	He	7930.680	ppb	1.6	89950.07	200000	
27	Al	45	He	17.868	ppb	30.2	94.45	200000	
28	Si	45	H2	6262.217	ppb	3.5	54618.18	10000	
39	K	45	He	1881.687	ppb	5.4	30194.84	200000	
40	Ca	45	H2	35519.243	ppb	3.3	2861865.83	200000	
51	V	89	He	1.295	ppb	10.9	470.03	1000	
52	Cr	89	He	0.428	ppb	36.7	155.31	2000	
55	Mn	89	He	3.833	ppb	11.0	393.27	2000	
56	Fe	89	H2	5.924	ppb	1.8	4285.44	100000	
59	Co	89	He	0.076	ppb	16.4	48.89	1000	
60	Ni	89	He	6.985	ppb	3.8	906.73	1000	
63	Cu	89	He	9.872	ppb	0.4	2780.37	2000	
66	Zn	89	He	7.935	ppb	22.2	360.02	2000	
75	As	89	He	1.688	ppb	14.6	55.01	1000	
78	Se	89	H2	0.115	ppb	53.9	2.50	1000	
88	Sr	89	He	221.163	ppb	2.0	33333.48	2000	
95	Mo	89	He	0.387	ppb	45.3	70.00	1000	
107	Ag	89	He	0.041	ppb	15.1	26.67	100	
111	Cd	89	He	0.025	ppb	58.3	2.22	1000	
118	Sn	159	He	1.288	ppb	1.8	272.23	1000	
121	Sb	159	No Gas	0.056	ppb	21.8	123.47	1000	
137	Ba	159	No Gas	5.444	ppb	15.8	3183.96	2000	
182	W	159	No Gas	0.085	ppb	31.9	130.15	1000	
205	Tl	209	No Gas	-0.104	ppb	N/A	86.77	1000	
208	Pb	209	No Gas	1.023	ppb	7.8	3721.05	2000	
232	Th	209	No Gas	0.168	ppb	17.8	717.49	1000	
238	U	209	No Gas	0.275	ppb	11.5	887.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1583185.56	3.6	1745272.14	90.71	29.5	120.4	
Sc	45	No Gas	3794623.32	4.0	3932582.94	96.49	29.5	120.4	
Sc	45	H2	435722.54	1.0	485269.91	89.79	29.5	120.4	
Sc	45	He	86529.18	2.2	96164.21	89.98	29.5	120.4	
Ge	72	No Gas	873205.56	3.9	877152.82	99.55	29.5	120.4	
Ge	72	H2	163382.73	1.5	182501.5	89.52	29.5	120.4	
Ge	72	He	67908.50	1.1	74687.17	90.92	29.5	120.4	
Y	89	H2	2860369.12	1.1	3060772.3	93.45	29.5	120.4	
Y	89	He	588976.80	1.1	649886.7	90.63	29.5	120.4	
Tb	159	No Gas	9087546.39	3.9	8413567.03	108.01	29.5	120.4	
Tb	159	He	3281058.98	1.4	3319571.76	98.84	29.5	120.4	
Bi	209	No Gas	4732817.29	4.0	4391152.66	107.78	29.5	120.4	

Sample Report

Sample Name SN6124-005

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:04:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.118	ppb	92.9	83.34	100	
11	B	6	No Gas	8.624	ppb	14.7	3153.79	1000	
23	Na	45	He	51980.529	ppb	1.1	1094986.00	200000	
24	Mg	45	He	6823.985	ppb	0.2	79414.67	200000	
27	Al	45	He	11.789	ppb	53.6	68.89	200000	
28	Si	45	H2	5480.165	ppb	0.9	47474.41	10000	
39	K	45	He	1635.179	ppb	1.4	28300.13	200000	
40	Ca	45	H2	31869.841	ppb	0.6	2547153.69	200000	
51	V	89	He	0.794	ppb	22.9	394.46	1000	
52	Cr	89	He	0.220	ppb	22.4	115.31	2000	
55	Mn	89	He	1.033	ppb	4.7	124.65	2000	
56	Fe	89	H2	4.725	ppb	8.9	3868.17	100000	
59	Co	89	He	0.030	ppb	109.9	33.33	1000	
60	Ni	89	He	-0.847	ppb	N/A	166.67	1000	
63	Cu	89	He	0.882	ppb	6.6	370.02	2000	
66	Zn	89	He	8.294	ppb	10.2	381.13	2000	
75	As	89	He	0.280	ppb	22.4	12.67	1000	
78	Se	89	H2	0.023	ppb	265.0	1.00	1000	
88	Sr	89	He	191.792	ppb	0.5	29531.41	2000	
95	Mo	89	He	0.104	ppb	11.1	22.22	1000	
107	Ag	89	He	0.051	ppb	34.9	33.33	100	
111	Cd	89	He	0.034	ppb	130.1	2.96	1000	
118	Sn	159	He	1.225	ppb	5.3	266.68	1000	
121	Sb	159	No Gas	0.070	ppb	52.6	143.49	1000	
137	Ba	159	No Gas	4.352	ppb	8.8	2549.75	2000	
182	W	159	No Gas	0.049	ppb	69.0	90.10	1000	
205	Tl	209	No Gas	-0.123	ppb	N/A	40.04	1000	
208	Pb	209	No Gas	0.364	ppb	7.6	1491.71	2000	
232	Th	209	No Gas	0.071	ppb	38.5	387.11	1000	
238	U	209	No Gas	0.013	ppb	93.7	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1574999.35	2.3	1745272.14	90.24	29.5	120.4	
Sc	45	No Gas	3778619.87	1.9	3932582.94	96.08	29.5	120.4	
Sc	45	H2	432123.20	0.9	485269.91	89.05	29.5	120.4	
Sc	45	He	88622.63	1.3	96164.21	92.16	29.5	120.4	
Ge	72	No Gas	868388.28	1.2	877152.82	99	29.5	120.4	
Ge	72	H2	160971.79	1.7	182501.5	88.2	29.5	120.4	
Ge	72	He	69593.87	1.8	74687.17	93.18	29.5	120.4	
Y	89	H2	2844873.76	0.2	3060772.3	92.95	29.5	120.4	
Y	89	He	601677.91	1.7	649886.7	92.58	29.5	120.4	
Tb	159	No Gas	9056481.95	1.8	8413567.03	107.64	29.5	120.4	
Tb	159	He	3347317.56	1.7	3319571.76	100.84	29.5	120.4	
Bi	209	No Gas	4722220.75	2.4	4391152.66	107.54	29.5	120.4	

Sample Report

Sample Name SN6124-005L

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:07:35 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.131	ppb	61.1	62.22	100	
11	B	6	No Gas	30.773	ppb	14.9	2841.49	1000	
23	Na	45	He	53092.388	ppb	1.5	240201.41	200000	
24	Mg	45	He	6976.951	ppb	1.9	17111.46	200000	
27	Al	45	He	34.096	ppb	38.5	46.67	200000	
28	Si	45	H2	5670.972	ppb	3.4	10639.13	10000	
39	K	45	He	1780.185	ppb	12.4	14717.71	200000	
40	Ca	45	H2	32198.882	ppb	1.1	536624.91	200000	
51	V	89	He	0.555	ppb	190.9	278.90	1000	
52	Cr	89	He	-0.214	ppb	N/A	60.66	2000	
55	Mn	89	He	1.549	ppb	19.5	53.32	2000	
56	Fe	89	H2	1.290	ppb	95.4	2462.96	100000	
59	Co	89	He	0.115	ppb	44.6	31.12	1000	
60	Ni	89	He	-7.364	ppb	N/A	106.67	1000	
63	Cu	89	He	1.021	ppb	48.7	184.45	2000	
66	Zn	89	He	5.743	ppb	48.1	124.45	2000	
75	As	89	He	0.157	ppb	182.1	5.00	1000	
78	Se	89	H2	-0.042	ppb	N/A	0.50	1000	
88	Sr	89	He	192.023	ppb	4.5	5952.61	2000	
95	Mo	89	He	0.260	ppb	95.6	13.33	1000	
107	Ag	89	He	0.142	ppb	59.5	20.00	100	
111	Cd	89	He	0.074	ppb	112.8	1.48	1000	
118	Sn	159	He	1.426	ppb	42.3	100.01	1000	
121	Sb	159	No Gas	0.151	ppb	24.9	83.43	1000	
137	Ba	159	No Gas	4.253	ppb	17.9	510.58	2000	
182	W	159	No Gas	0.140	ppb	81.4	66.74	1000	
205	Tl	209	No Gas	-0.552	ppb	N/A	70.08	1000	
208	Pb	209	No Gas	0.248	ppb	40.0	440.49	2000	
232	Th	209	No Gas	0.074	ppb	151.7	193.55	1000	
238	U	209	No Gas	0.015	ppb	2.0	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1615300.26	1.9	1745272.14	92.55	29.5	120.4	
Sc	45	No Gas	3822115.26	2.0	3932582.94	97.19	29.5	120.4	
Sc	45	H2	450004.73	1.0	485269.91	92.73	29.5	120.4	
Sc	45	He	89348.35	1.1	96164.21	92.91	29.5	120.4	
Ge	72	No Gas	866434.70	2.4	877152.82	98.78	29.5	120.4	
Ge	72	H2	168068.89	1.6	182501.5	92.09	29.5	120.4	
Ge	72	He	69617.35	1.0	74687.17	93.21	29.5	120.4	
Y	89	H2	2917627.32	0.3	3060772.3	95.32	29.5	120.4	
Y	89	He	605328.02	1.2	649886.7	93.14	29.5	120.4	
Tb	159	No Gas	8975602.57	2.4	8413567.03	106.68	29.5	120.4	
Tb	159	He	3321862.21	1.0	3319571.76	100.07	29.5	120.4	
Bi	209	No Gas	4732815.56	2.0	4391152.66	107.78	29.5	120.4	

Sample Report

Sample Name SN6124-005A

File Name 132SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:10:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.972	ppb	6.5	2735.92	100	
11	B	6	No Gas	225.897	ppb	7.2	37340.15	1000	
23	Na	45	He	67230.260	ppb	1.9	1386880.68	200000	
24	Mg	45	He	8615.996	ppb	2.3	98315.81	200000	
27	Al	45	He	1073.361	ppb	4.1	4800.98	200000	
28	Si	45	H2	10856.632	ppb	3.5	95441.39	10000	
39	K	45	He	12589.929	ppb	2.8	143149.79	200000	
40	Ca	45	H2	34269.542	ppb	2.7	2794025.72	200000	
51	V	89	He	57.057	ppb	3.2	9960.53	1000	
52	Cr	89	He	56.466	ppb	3.0	11792.79	2000	
55	Mn	89	He	24.325	ppb	1.3	2411.77	2000	
56	Fe	89	H2	1104.826	ppb	3.0	371222.71	100000	
59	Co	89	He	12.036	ppb	6.1	4325.45	1000	
60	Ni	89	He	23.271	ppb	2.0	2484.75	1000	
63	Cu	89	He	35.408	ppb	5.0	9773.73	2000	
66	Zn	89	He	126.147	ppb	3.0	4587.59	2000	
75	As	89	He	54.964	ppb	2.9	1687.62	1000	
78	Se	89	H2	50.552	ppb	2.1	832.32	1000	
88	Sr	89	He	260.117	ppb	2.5	39716.06	2000	
95	Mo	89	He	56.157	ppb	1.1	9724.90	1000	
107	Ag	89	He	11.491	ppb	1.6	6744.14	100	
111	Cd	89	He	11.532	ppb	2.5	874.85	1000	
118	Sn	159	He	54.586	ppb	1.0	9609.29	1000	
121	Sb	159	No Gas	11.272	ppb	9.2	16662.49	1000	
137	Ba	159	No Gas	26.488	ppb	4.4	15335.87	2000	
182	W	159	No Gas	54.129	ppb	5.7	60085.87	1000	
205	Tl	209	No Gas	10.901	ppb	7.4	26804.72	1000	
208	Pb	209	No Gas	11.443	ppb	7.2	38779.97	2000	
232	Th	209	No Gas	11.608	ppb	8.1	39928.03	1000	
238	U	209	No Gas	11.263	ppb	10.4	36376.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1592177.24	3.4	1745272.14	91.23	29.5	120.4	
Sc	45	No Gas	3782603.20	2.9	3932582.94	96.19	29.5	120.4	
Sc	45	H2	440849.98	0.6	485269.91	90.85	29.5	120.4	
Sc	45	He	87130.58	2.0	96164.21	90.61	29.5	120.4	
Ge	72	No Gas	870368.21	2.8	877152.82	99.23	29.5	120.4	
Ge	72	H2	163829.74	0.3	182501.5	89.77	29.5	120.4	
Ge	72	He	68428.35	1.2	74687.17	91.62	29.5	120.4	
Y	89	H2	2892759.64	1.1	3060772.3	94.51	29.5	120.4	
Y	89	He	596831.13	1.9	649886.7	91.84	29.5	120.4	
Tb	159	No Gas	9025653.06	2.9	8413567.03	107.27	29.5	120.4	
Tb	159	He	3321436.06	1.0	3319571.76	100.06	29.5	120.4	
Bi	209	No Gas	4739434.58	2.9	4391152.66	107.93	29.5	120.4	

Sample Report

Sample Name SN6124-005S

File Name 133SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:12:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	56.211	ppb	1.8	13655.74	100	
11	B	6	No Gas	578.081	ppb	1.8	91810.85	1000	
23	Na	45	He	62566.762	ppb	0.4	1314141.14	200000	
24	Mg	45	He	12903.288	ppb	0.8	149321.37	200000	
27	Al	45	He	2168.511	ppb	2.3	9852.59	200000	
28	Si	45	H2	7159.337	ppb	4.8	60695.97	10000	
39	K	45	He	12399.576	ppb	1.0	143577.74	200000	
40	Ca	45	H2	37469.187	ppb	5.2	2937424.75	200000	
51	V	89	He	559.508	ppb	0.4	96234.55	1000	
52	Cr	89	He	229.158	ppb	1.1	48065.70	2000	
55	Mn	89	He	559.013	ppb	1.0	55393.82	2000	
56	Fe	89	H2	1188.863	ppb	5.9	384534.74	100000	
59	Co	89	He	572.558	ppb	1.0	206599.76	1000	
60	Ni	89	He	575.888	ppb	1.7	56101.08	1000	
63	Cu	89	He	286.085	ppb	0.2	78770.98	2000	
66	Zn	89	He	584.734	ppb	1.2	21151.11	2000	
75	As	89	He	113.338	ppb	1.0	3506.17	1000	
78	Se	89	H2	114.550	ppb	3.8	1816.37	1000	
88	Sr	89	He	760.961	ppb	1.3	117185.72	2000	
95	Mo	89	He	115.722	ppb	1.4	20201.08	1000	
107	Ag	89	He	56.827	ppb	1.1	33629.08	100	
111	Cd	89	He	282.829	ppb	0.9	21630.33	1000	
118	Sn	159	He	540.051	ppb	0.4	95352.85	1000	
121	Sb	159	No Gas	109.659	ppb	2.0	162083.50	1000	
137	Ba	159	No Gas	2151.419	ppb	1.7	1245328.99	2000	
182	W	159	No Gas	114.949	ppb	1.8	127731.17	1000	
205	Tl	209	No Gas	114.526	ppb	2.3	274224.77	1000	
208	Pb	209	No Gas	115.202	ppb	1.4	382116.21	2000	
232	Th	209	No Gas	116.504	ppb	1.7	393559.35	1000	
238	U	209	No Gas	115.602	ppb	1.3	368045.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1574568.23	0.9	1745272.14	90.22	29.5	120.4	
Sc	45	No Gas	3755647.78	1.7	3932582.94	95.5	29.5	120.4	
Sc	45	H2	424397.16	3.6	485269.91	87.46	29.5	120.4	
Sc	45	He	88608.18	0.7	96164.21	92.14	29.5	120.4	
Ge	72	No Gas	870640.04	1.4	877152.82	99.26	29.5	120.4	
Ge	72	H2	158644.30	3.1	182501.5	86.93	29.5	120.4	
Ge	72	He	69126.84	0.5	74687.17	92.56	29.5	120.4	
Y	89	H2	2789402.64	3.8	3060772.3	91.13	29.5	120.4	
Y	89	He	601865.18	0.9	649886.7	92.61	29.5	120.4	
Tb	159	No Gas	9029471.81	1.6	8413567.03	107.32	29.5	120.4	
Tb	159	He	3346956.69	1.2	3319571.76	100.82	29.5	120.4	
Bi	209	No Gas	4662678.14	1.7	4391152.66	106.18	29.5	120.4	

Sample Report

Sample Name SN6124-005P

File Name 134SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:15:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.553	ppb	5.8	12939.57	100	
11	B	6	No Gas	547.089	ppb	4.2	88145.97	1000	
23	Na	45	He	59953.955	ppb	1.1	1249194.81	200000	
24	Mg	45	He	12242.901	ppb	1.6	140505.90	200000	
27	Al	45	He	1980.741	ppb	1.7	8924.21	200000	
28	Si	45	H2	6666.160	ppb	4.4	59007.13	10000	
39	K	45	He	12035.160	ppb	1.0	138476.12	200000	
40	Ca	45	H2	33394.509	ppb	4.5	2732167.63	200000	
51	V	89	He	525.660	ppb	0.8	90024.87	1000	
52	Cr	89	He	214.028	ppb	0.2	44698.68	2000	
55	Mn	89	He	527.891	ppb	0.9	52078.03	2000	
56	Fe	89	H2	1055.476	ppb	5.1	356675.07	100000	
59	Co	89	He	533.635	ppb	1.5	191691.52	1000	
60	Ni	89	He	533.573	ppb	1.6	51767.72	1000	
63	Cu	89	He	269.633	ppb	0.8	73915.97	2000	
66	Zn	89	He	541.124	ppb	0.8	19494.23	2000	
75	As	89	He	107.337	ppb	1.2	3306.09	1000	
78	Se	89	H2	101.083	ppb	6.6	1672.03	1000	
88	Sr	89	He	710.762	ppb	1.1	108969.95	2000	
95	Mo	89	He	108.266	ppb	0.1	18816.83	1000	
107	Ag	89	He	54.501	ppb	0.6	32107.56	100	
111	Cd	89	He	270.116	ppb	0.6	20566.43	1000	
118	Sn	159	He	512.702	ppb	0.3	89587.41	1000	
121	Sb	159	No Gas	101.891	ppb	5.4	152580.57	1000	
137	Ba	159	No Gas	1976.642	ppb	6.1	1158964.46	2000	
182	W	159	No Gas	105.147	ppb	6.4	118354.34	1000	
205	Tl	209	No Gas	106.993	ppb	4.4	259818.94	1000	
208	Pb	209	No Gas	106.667	ppb	4.5	358768.53	2000	
232	Th	209	No Gas	107.388	ppb	6.1	367732.67	1000	
238	U	209	No Gas	105.917	ppb	6.4	341799.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1596198.85	1.6	1745272.14	91.46	29.5	120.4	
Sc	45	No Gas	3824085.31	2.5	3932582.94	97.24	29.5	120.4	
Sc	45	H2	442801.60	3.4	485269.91	91.25	29.5	120.4	
Sc	45	He	87845.01	0.1	96164.21	91.35	29.5	120.4	
Ge	72	No Gas	882504.84	2.9	877152.82	100.61	29.5	120.4	
Ge	72	H2	164828.33	2.9	182501.5	90.32	29.5	120.4	
Ge	72	He	69184.63	0.5	74687.17	92.63	29.5	120.4	
Y	89	H2	2911012.32	3.2	3060772.3	95.11	29.5	120.4	
Y	89	He	599174.87	0.6	649886.7	92.2	29.5	120.4	
Tb	159	No Gas	9154649.51	2.4	8413567.03	108.81	29.5	120.4	
Tb	159	He	3312131.41	0.7	3319571.76	99.78	29.5	120.4	
Bi	209	No Gas	4730932.64	2.5	4391152.66	107.74	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG27IMW1
File Name	135_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:18:14 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.183	ppb	49.9	97.78	0.5	
B	11	6	No Gas	14.866	ppb	11.6	4070.72	10	PB 6020 Fails DoD
Na	23	45	He	-300.000	ppb	N/A	12038.48	500	
Mg	24	45	He	-22.931	ppb	N/A	651.17	50	
Al	27	45	He	6.791	ppb	112.9	45.56	50	
Si	28	45	H2	7.347	ppb	49.5	560.64	250	
K	39	45	He	24.497	ppb	302.9	10990.94	500	
Ca	40	45	H2	36.087	ppb	5.3	3685.05	50	
V	51	89	He	1.838	ppb	18.7	570.04	2.5	
Cr	52	89	He	0.298	ppb	75.2	129.31	2.5	
Mn	55	89	He	0.482	ppb	21.5	69.99	1	
Fe	56	89	H2	3.419	ppb	6.3	3437.61	50	
Co	59	89	He	0.231	ppb	32.2	104.45	0.5	
Ni	60	89	He	-1.222	ppb	N/A	131.11	1	PB 6020 Fails DoD
Cu	63	89	He	0.427	ppb	16.7	244.46	1.5	
Zn	66	89	He	1.728	ppb	47.2	145.56	5	
As	75	89	He	0.296	ppb	29.0	13.00	2.5	
Se	78	89	H2	0.312	ppb	15.2	5.67	2.5	
Sr	88	89	He	0.181	ppb	51.5	34.45	2.5	
Mo	95	89	He	0.335	ppb	10.7	62.23	2.5	
Ag	107	89	He	0.044	ppb	24.9	28.89	0.5	
Cd	111	89	He	0.055	ppb	54.6	4.44	0.5	
Sn	118	159	He	1.713	ppb	15.6	348.91	2.5	
Sb	121	159	No Gas	0.101	ppb	27.7	183.54	0.5	
Ba	137	159	No Gas	0.896	ppb	39.1	527.27	1	
W	182	159	No Gas	0.262	ppb	28.4	320.36	2.5	
Tl	205	209	No Gas	-0.038	ppb	N/A	240.27	0.5	
Pb	208	209	No Gas	0.078	ppb	21.3	527.26	0.5	
Th	232	209	No Gas	0.926	ppb	16.5	3244.12	2.5	
U	238	209	No Gas	0.050	ppb	32.2	160.18	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1554675.17	3.0	1745272.14	89.08	29.5	120.4	
Sc	45	No Gas	3683468.34	3.6	3932582.94	93.67	29.5	120.4	
Sc	45	H2	433967.88	0.8	485269.91	89.43	29.5	120.4	
Sc	45	He	88456.11	6.7	96164.21	91.98	29.5	120.4	
Ge	72	No Gas	854595.22	3.0	877152.82	97.43	29.5	120.4	
Ge	72	H2	159030.70	0.6	182501.5	87.14	29.5	120.4	
Ge	72	He	69178.29	5.3	74687.17	92.62	29.5	120.4	
Y	89	H2	2843026.23	0.6	3060772.3	92.89	29.5	120.4	
Y	89	He	600381.84	6.5	649886.7	92.38	29.5	120.4	
Tb	159	No Gas	8835720.56	3.0	8413567.03	105.02	29.5	120.4	
Tb	159	He	3328627.52	6.3	3319571.76	100.27	29.5	120.4	
Bi	209	No Gas	4637824.22	3.1	4391152.66	105.62	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG27IMW1
File Name	136LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:20:49 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.123	ppb	3.7	12507.98	50	20.05	79.5	120.4	
B	11	6	No Gas	527.232	ppb	5.0	86114.06	500	21.09	79.5	120.4	
Na	23	45	He	7453.945	ppb	0.9	171241.14	7500	19.88	79.5	120.4	
Mg	24	45	He	5411.596	ppb	1.9	62624.20	5000	21.65	79.5	120.4	
Al	27	45	He	1977.437	ppb	1.5	8910.86	2000	19.77	79.5	120.4	
Si	28	45	H2	1033.929	ppb	1.0	9467.01	1000	20.68	0	200	
K	39	45	He	10362.282	ppb	1.6	120735.78	10000	20.72	79.5	120.4	
Ca	40	45	H2	2665.835	ppb	0.8	216271.22	2500	21.33	79.5	120.4	
V	51	89	He	514.304	ppb	1.8	88468.52	500	20.57	79.5	120.4	
Cr	52	89	He	209.348	ppb	1.1	43914.47	200	20.94	79.5	120.4	
Mn	55	89	He	523.242	ppb	2.1	51843.85	500	20.93	79.5	120.4	
Fe	56	89	H2	1074.237	ppb	1.5	356343.14	1000	21.48	79.5	120.4	
Co	59	89	He	531.429	ppb	2.0	191731.15	500	21.26	79.5	120.4	
Ni	60	89	He	540.958	ppb	2.6	52707.68	500	21.64	79.5	120.4	
Cu	63	89	He	268.152	ppb	1.5	73831.27	250	21.45	79.5	120.4	
Zn	66	89	He	541.138	ppb	0.9	19579.89	500	21.65	79.5	120.4	
As	75	89	He	107.240	ppb	1.2	3317.43	100	21.45	79.5	120.4	
Se	78	89	H2	102.512	ppb	1.3	1665.20	100	20.5	79.5	120.4	
Sr	88	89	He	515.040	ppb	2.1	79308.88	500	20.6	79.5	120.4	
Mo	95	89	He	104.632	ppb	1.2	18264.97	100	20.93	79.5	120.4	
Ag	107	89	He	53.540	ppb	1.3	31678.85	50	21.42	79.5	120.4	
Cd	111	89	He	268.745	ppb	1.4	20551.61	250	21.5	79.5	120.4	
Sn	118	159	He	502.170	ppb	2.2	88170.16	500	20.09	79.5	120.4	
Sb	121	159	No Gas	99.897	ppb	6.1	149761.07	100	19.98	79.5	120.4	
Ba	137	159	No Gas	1950.485	ppb	4.7	1145123.56	2000	19.5	79.5	120.4	
W	182	159	No Gas	102.356	ppb	5.6	115363.21	100	20.47	79.5	120.4	
Tl	205	209	No Gas	104.992	ppb	5.3	257645.41	100	21	79.5	120.4	
[Pb]	206	209	No Gas	105.206	ppb	3.9	89690.75	100	21.04	79.5	120.4	
[Pb]	207	209	No Gas	104.509	ppb	5.8	78149.40	100	20.9	79.5	120.4	
Pb	208	209	No Gas	105.120	ppb	4.9	357292.16	100	21.02	79.5	120.4	
Th	232	209	No Gas	102.822	ppb	6.0	355853.18	100	20.56	79.5	120.4	
U	238	209	No Gas	102.425	ppb	5.8	334077.98	100	20.48	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1617178.27	1.9	1745272.14	92.66	29.5	120.4	
Sc	45	No Gas	3830120.61	1.8	3932582.94	97.39	29.5	120.4	
Sc	45	H2	437135.13	0.9	485269.91	90.08	29.5	120.4	
Sc	45	He	87867.33	0.8	96164.21	91.37	29.5	120.4	
Ge	72	No Gas	881775.57	2.2	877152.82	100.53	29.5	120.4	
Ge	72	H2	162593.90	0.5	182501.5	89.09	29.5	120.4	
Ge	72	He	68980.76	1.7	74687.17	92.36	29.5	120.4	
Y	89	H2	2854644.67	0.6	3060772.3	93.27	29.5	120.4	
Y	89	He	601845.43	1.1	649886.7	92.61	29.5	120.4	
Tb	159	No Gas	9162351.60	1.8	8413567.03	108.9	29.5	120.4	
Tb	159	He	3328700.16	1.3	3319571.76	100.27	29.5	120.4	
Bi	209	No Gas	4779587.91	1.7	4391152.66	108.85	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	137_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:23:29 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.507	ppb	4.8	29893.90	25	98.03	89.8	110.2	
11	B	6	No Gas	26.910	ppb	4.4	22906.57	25	107.64	89.8	110.2	
23	Na	45	He	5137.335	ppb	0.4	542809.12	5000	102.75	89.8	110.2	
24	Mg	45	He	5044.268	ppb	0.9	287017.87	5000	100.89	89.8	110.2	
27	Al	45	He	486.241	ppb	1.3	10894.51	500	97.25	89.8	110.2	
28	Si	45	H2	478.660	ppb	2.0	21085.75	500	95.73	89.8	110.2	
39	K	45	He	4897.004	ppb	0.7	269293.16	5000	97.94	89.8	110.2	
40	Ca	45	H2	4931.727	ppb	2.0	1977936.78	5000	98.63	89.8	110.2	
51	V	89	He	24.764	ppb	1.8	21267.81	25	99.06	89.8	110.2	
52	Cr	89	He	25.151	ppb	0.7	26128.64	25	100.6	89.8	110.2	
55	Mn	89	He	24.996	ppb	2.1	12269.09	25	99.98	89.8	110.2	
56	Fe	89	H2	4875.741	ppb	1.7	7971286.95	5000	97.51	89.8	110.2	
59	Co	89	He	25.164	ppb	1.7	44930.15	25	100.66	89.8	110.2	
60	Ni	89	He	25.059	ppb	1.1	12269.09	25	100.24	89.8	110.2	
63	Cu	89	He	25.472	ppb	1.6	34761.86	25	101.89	89.8	110.2	
66	Zn	89	He	25.692	ppb	2.2	4660.95	25	102.77	89.8	110.2	
75	As	89	He	24.879	ppb	3.4	3806.28	25	99.52	89.8	110.2	
78	Se	89	H2	24.735	ppb	0.4	1992.89	25	98.94	89.8	110.2	
88	Sr	89	He	23.915	ppb	1.8	18222.66	25	95.66	89.8	110.2	
95	Mo	89	He	25.064	ppb	0.6	21644.40	25	100.26	89.8	110.2	
107	Ag	89	He	25.784	ppb	0.3	75471.98	25	103.14	89.8	110.2	
111	Cd	89	He	25.384	ppb	1.3	9603.11	25	101.54	89.8	110.2	
118	Sn	159	He	23.824	ppb	2.0	20754.40	25	95.3	89.8	110.2	
121	Sb	159	No Gas	23.426	ppb	6.6	173692.84	25	93.7	89.8	110.2	
137	Ba	159	No Gas	23.916	ppb	5.4	69478.23	25	95.66	89.8	110.2	
182	W	159	No Gas	23.698	ppb	6.8	132090.92	25	94.79	89.8	110.2	
205	Tl	209	No Gas	24.162	ppb	5.6	292955.85	25	96.65	89.8	110.2	
208	Pb	209	No Gas	24.207	ppb	5.0	406591.09	25	96.83	89.8	110.2	
232	Th	209	No Gas	24.304	ppb	7.2	415540.94	25	97.22	89.8	110.2	
238	U	209	No Gas	24.343	ppb	6.8	392310.55	25	97.37	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1585493.22	2.1	1745272.14	90.85	29.5	120.4	
Sc	45	No Gas	3824911.44	3.3	3932582.94	97.26	29.5	120.4	
Sc	45	H2	433705.65	1.7	485269.91	89.37	29.5	120.4	
Sc	45	He	87399.62	0.4	96164.21	90.89	29.5	120.4	
Ge	72	No Gas	873183.39	3.7	877152.82	99.55	29.5	120.4	
Ge	72	H2	162676.65	0.4	182501.5	89.14	29.5	120.4	
Ge	72	He	68098.46	0.9	74687.17	91.18	29.5	120.4	
Y	89	H2	2831984.83	1.4	3060772.3	92.53	29.5	120.4	
Y	89	He	595443.04	0.8	649886.7	91.62	29.5	120.4	
Tb	159	No Gas	9070295.07	3.1	8413567.03	107.81	29.5	120.4	
Tb	159	He	3296388.94	0.7	3319571.76	99.3	29.5	120.4	
Bi	209	No Gas	4726798.66	3.1	4391152.66	107.64	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	138_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:26:06 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.090	ppb	25.0	171.12	0.2	
11	B	6	No Gas	1.765	ppb	0.4	3347.17	4	
23	Na	45	He	-79.344	ppb	N/A	10222.15	200	
24	Mg	45	He	-4.457	ppb	N/A	671.19	20	
27	Al	45	He	0.098	ppb	731.1	17.78	20	
28	Si	45	H2	-1.005	ppb	N/A	473.87	100	
39	K	45	He	6.037	ppb	23.5	11247.75	200	
40	Ca	45	H2	2.607	ppb	3.4	1917.98	20	
51	V	89	He	-0.054	ppb	N/A	213.34	1	
52	Cr	89	He	-0.002	ppb	N/A	67.99	1	
55	Mn	89	He	0.118	ppb	139.8	81.32	0.4	
56	Fe	89	H2	1.701	ppb	5.5	5243.46	20	
59	Co	89	He	0.036	ppb	128.3	88.89	0.2	
60	Ni	89	He	-0.270	ppb	N/A	118.89	0.4	Failed DoD
63	Cu	89	He	0.006	ppb	328.8	136.67	0.6	
66	Zn	89	He	0.557	ppb	22.7	184.45	2	
75	As	89	He	0.030	ppb	82.2	8.67	1	
78	Se	89	H2	0.032	ppb	28.4	3.33	1	
88	Sr	89	He	0.049	ppb	133.6	44.45	1	
95	Mo	89	He	0.081	ppb	37.2	75.56	1	
107	Ag	89	He	0.014	ppb	90.8	45.55	0.2	
111	Cd	89	He	0.033	ppb	118.3	12.96	0.2	
118	Sn	159	He	0.100	ppb	40.2	136.67	1	
121	Sb	159	No Gas	0.023	ppb	30.2	206.90	0.2	
137	Ba	159	No Gas	0.050	ppb	16.5	166.86	0.4	
182	W	159	No Gas	0.084	ppb	3.9	497.23	1	
205	Tl	209	No Gas	0.000	ppb	685.8	340.39	0.2	
208	Pb	209	No Gas	0.019	ppb	15.7	590.67	0.2	
232	Th	209	No Gas	0.068	ppb	13.8	1311.54	1	
238	U	209	No Gas	0.019	ppb	33.6	313.69	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1653529.21	2.4	1745272.14	94.74	29.5	120.4	
Sc	45	No Gas	3869760.56	4.3	3932582.94	98.4	29.5	120.4	
Sc	45	H2	453360.45	1.0	485269.91	93.42	29.5	120.4	
Sc	45	He	89741.24	0.1	96164.21	93.32	29.5	120.4	
Ge	72	No Gas	873247.22	4.0	877152.82	99.55	29.5	120.4	
Ge	72	H2	167134.58	1.2	182501.5	91.58	29.5	120.4	
Ge	72	He	70108.75	0.6	74687.17	93.87	29.5	120.4	
Y	89	H2	2919792.89	1.0	3060772.3	95.39	29.5	120.4	
Y	89	He	607152.59	0.3	649886.7	93.42	29.5	120.4	
Tb	159	No Gas	8974522.30	4.2	8413567.03	106.67	29.5	120.4	
Tb	159	He	3295522.35	0.3	3319571.76	99.28	29.5	120.4	
Bi	209	No Gas	4711634.54	4.7	4391152.66	107.3	29.5	120.4	

Sample Report

Sample Name SN6146-001

File Name 139SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:28:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	189.7	65.56	100	
11	B	6	No Gas	25.023	ppb	4.2	5761.32	1000	
23	Na	45	He	1336.878	ppb	2.7	45629.83	200000	
24	Mg	45	He	1782.394	ppb	3.2	21243.90	200000	
27	Al	45	He	120.334	ppb	12.0	556.70	200000	
28	Si	45	H2	1369.200	ppb	6.3	12319.04	10000	
39	K	45	He	8899.492	ppb	1.6	105245.10	200000	
40	Ca	45	H2	8756.561	ppb	4.7	705588.22	200000	
51	V	89	He	2.700	ppb	7.4	721.16	1000	
52	Cr	89	He	0.564	ppb	17.4	187.30	2000	
55	Mn	89	He	31.683	ppb	5.9	3159.12	2000	
56	Fe	89	H2	199.403	ppb	5.5	68083.67	100000	
59	Co	89	He	0.633	ppb	13.6	251.13	1000	
60	Ni	89	He	-0.632	ppb	N/A	187.78	1000	
63	Cu	89	He	5.755	ppb	2.5	1709.06	2000	
66	Zn	89	He	64.630	ppb	3.6	2410.29	2000	
75	As	89	He	1.197	ppb	10.2	41.00	1000	
78	Se	89	H2	0.389	ppb	37.7	7.00	1000	
88	Sr	89	He	24.260	ppb	2.1	3740.65	2000	
95	Mo	89	He	0.684	ppb	22.2	123.34	1000	
107	Ag	89	He	0.107	ppb	22.4	66.67	100	
111	Cd	89	He	0.088	ppb	74.4	7.04	1000	
118	Sn	159	He	1.573	ppb	16.1	326.68	1000	
121	Sb	159	No Gas	0.325	ppb	25.5	503.91	1000	
137	Ba	159	No Gas	25.062	ppb	8.1	14133.18	2000	
182	W	159	No Gas	0.097	ppb	40.2	140.16	1000	
205	Tl	209	No Gas	-0.092	ppb	N/A	113.46	1000	
208	Pb	209	No Gas	0.295	ppb	18.3	1238.08	2000	
232	Th	209	No Gas	0.683	ppb	3.1	2436.29	1000	
238	U	209	No Gas	0.147	ppb	24.4	463.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1589547.21	3.5	1745272.14	91.08	29.5	120.4	
Sc	45	No Gas	3701087.23	3.1	3932582.94	94.11	29.5	120.4	
Sc	45	H2	435705.00	3.1	485269.91	89.79	29.5	120.4	
Sc	45	He	87907.99	1.4	96164.21	91.41	29.5	120.4	
Ge	72	No Gas	852179.28	3.1	877152.82	97.15	29.5	120.4	
Ge	72	H2	162812.39	3.2	182501.5	89.21	29.5	120.4	
Ge	72	He	68992.79	1.6	74687.17	92.38	29.5	120.4	
Y	89	H2	2859317.84	2.6	3060772.3	93.42	29.5	120.4	
Y	89	He	601633.63	0.8	649886.7	92.58	29.5	120.4	
Tb	159	No Gas	8794883.41	2.8	8413567.03	104.53	29.5	120.4	
Tb	159	He	3332665.96	1.0	3319571.76	100.39	29.5	120.4	
Bi	209	No Gas	4641864.31	3.1	4391152.66	105.71	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG27IMW2
File Name	140_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:31:27 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.069	ppb	20.1	71.11	0.5	
B	11	6	No Gas	4.634	ppb	4.0	2541.43	10	
Na	23	45	He	-366.558	ppb	N/A	10468.87	500	
Mg	24	45	He	-17.606	ppb	N/A	700.07	50	
Al	27	45	He	5.153	ppb	80.8	37.78	50	
Si	28	45	H2	-0.362	ppb	N/A	503.90	250	
K	39	45	He	58.847	ppb	34.5	11146.06	500	
Ca	40	45	H2	28.922	ppb	7.7	3169.35	50	
V	51	89	He	1.183	ppb	9.5	451.14	2.5	
Cr	52	89	He	0.147	ppb	41.5	97.98	2.5	
Mn	55	89	He	0.848	ppb	5.9	103.98	1	
Fe	56	89	H2	2.705	ppb	15.8	3233.97	50	
Co	59	89	He	-0.019	ppb	N/A	15.55	0.5	
Ni	60	89	He	-1.467	ppb	N/A	104.45	1	PB 6020 Fails DoD
Cu	63	89	He	0.379	ppb	22.4	226.68	1.5	
Zn	66	89	He	2.914	ppb	5.4	183.34	5	
As	75	89	He	0.289	ppb	23.4	12.67	2.5	
Se	78	89	H2	0.115	ppb	28.9	2.50	2.5	
Sr	88	89	He	0.055	ppb	121.1	14.44	2.5	
Mo	95	89	He	0.100	ppb	62.4	21.11	2.5	
Ag	107	89	He	0.041	ppb	65.4	26.66	0.5	
Cd	111	89	He	0.020	ppb	152.6	1.85	0.5	
Sn	118	159	He	0.960	ppb	14.5	214.46	2.5	
Sb	121	159	No Gas	0.016	ppb	139.1	63.40	0.5	
Ba	137	159	No Gas	0.071	ppb	93.2	63.40	1	
W	182	159	No Gas	0.055	ppb	27.7	96.78	2.5	
Tl	205	209	No Gas	-0.122	ppb	N/A	43.38	0.5	
Pb	208	209	No Gas	0.060	ppb	60.9	473.87	0.5	
Th	232	209	No Gas	0.108	ppb	17.4	517.27	2.5	
U	238	209	No Gas	0.005	ppb	34.1	16.68	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1579066.82	3.0	1745272.14	90.48	29.5	120.4	
Sc	45	No Gas	3759544.52	3.9	3932582.94	95.6	29.5	120.4	
Sc	45	H2	442301.15	1.8	485269.91	91.15	29.5	120.4	
Sc	45	He	86538.78	0.3	96164.21	89.99	29.5	120.4	
Ge	72	No Gas	863524.10	3.4	877152.82	98.45	29.5	120.4	
Ge	72	H2	162237.85	0.7	182501.5	88.9	29.5	120.4	
Ge	72	He	67433.49	1.1	74687.17	90.29	29.5	120.4	
Y	89	H2	2871593.42	1.7	3060772.3	93.82	29.5	120.4	
Y	89	He	588751.19	0.7	649886.7	90.59	29.5	120.4	
Tb	159	No Gas	8995660.91	3.9	8413567.03	106.92	29.5	120.4	
Tb	159	He	3268128.04	0.7	3319571.76	98.45	29.5	120.4	
Bi	209	No Gas	4739975.12	3.7	4391152.66	107.94	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG27IMW2
File Name	141LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:34:10 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.707	ppb	9.1	13097.49	50	21.08	79.5	120.4	
B	11	6	No Gas	542.664	ppb	6.5	88286.20	500	21.71	79.5	120.4	
Na	23	45	He	7704.422	ppb	0.6	176147.15	7500	20.55	79.5	120.4	
Mg	24	45	He	5579.071	ppb	2.6	64443.57	5000	22.32	79.5	120.4	
Al	27	45	He	1991.365	ppb	2.4	8960.88	2000	19.91	79.5	120.4	
Si	28	45	H2	1063.591	ppb	2.5	9647.44	1000	21.27	0	200	
K	39	45	He	10441.370	ppb	1.3	121410.99	10000	20.88	79.5	120.4	
Ca	40	45	H2	2711.334	ppb	2.0	218203.29	2500	21.69	79.5	120.4	
V	51	89	He	533.528	ppb	2.2	90637.82	500	21.34	79.5	120.4	
Cr	52	89	He	219.512	ppb	2.0	45475.67	200	21.95	79.5	120.4	
Mn	55	89	He	543.729	ppb	1.4	53215.91	500	21.75	79.5	120.4	
Fe	56	89	H2	1097.192	ppb	2.6	361604.72	1000	21.94	79.5	120.4	
Co	59	89	He	551.139	ppb	1.8	196409.38	500	22.05	79.5	120.4	
Ni	60	89	He	560.696	ppb	1.6	53955.80	500	22.43	79.5	120.4	
Cu	63	89	He	276.237	ppb	2.2	75119.86	250	22.1	79.5	120.4	
Zn	66	89	He	554.828	ppb	1.4	19826.89	500	22.19	79.5	120.4	
As	75	89	He	109.622	ppb	3.8	3349.11	100	21.92	79.5	120.4	
Se	78	89	H2	105.943	ppb	2.6	1710.03	100	21.19	79.5	120.4	
Sr	88	89	He	534.880	ppb	1.8	81353.97	500	21.4	79.5	120.4	
Mo	95	89	He	111.162	ppb	0.9	19167.33	100	22.23	79.5	120.4	
Ag	107	89	He	55.592	ppb	3.3	32486.19	50	22.24	79.5	120.4	
Cd	111	89	He	278.893	ppb	2.3	21065.74	250	22.31	79.5	120.4	
Sn	118	159	He	518.722	ppb	2.4	90391.07	500	20.75	79.5	120.4	
Sb	121	159	No Gas	103.983	ppb	7.1	153341.29	100	20.8	79.5	120.4	
Ba	137	159	No Gas	2040.380	ppb	7.3	1178289.33	2000	20.4	79.5	120.4	
W	182	159	No Gas	107.136	ppb	7.3	118774.16	100	21.43	79.5	120.4	
Tl	205	209	No Gas	109.282	ppb	6.8	264246.39	100	21.86	79.5	120.4	
[Pb]	206	209	No Gas	109.281	ppb	7.2	91791.59	100	21.86	79.5	120.4	
[Pb]	207	209	No Gas	107.754	ppb	8.1	79381.42	100	21.55	79.5	120.4	
Pb	208	209	No Gas	108.454	ppb	7.2	363192.88	100	21.69	79.5	120.4	
Th	232	209	No Gas	108.103	ppb	8.3	368588.02	100	21.62	79.5	120.4	
U	238	209	No Gas	108.509	ppb	7.9	348730.07	100	21.7	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1612773.55	2.9	1745272.14	92.41	29.5	120.4	
Sc	45	No Gas	3759706.95	3.6	3932582.94	95.6	29.5	120.4	
Sc	45	H2	433696.04	0.6	485269.91	89.37	29.5	120.4	
Sc	45	He	87746.43	0.8	96164.21	91.25	29.5	120.4	
Ge	72	No Gas	870107.99	3.1	877152.82	99.2	29.5	120.4	
Ge	72	H2	162907.17	1.0	182501.5	89.26	29.5	120.4	
Ge	72	He	68516.93	1.6	74687.17	91.74	29.5	120.4	
Y	89	H2	2837508.22	1.9	3060772.3	92.71	29.5	120.4	
Y	89	He	594476.01	1.2	649886.7	91.47	29.5	120.4	
Tb	159	No Gas	9021371.46	3.3	8413567.03	107.22	29.5	120.4	
Tb	159	He	3303572.31	1.0	3319571.76	99.52	29.5	120.4	
Bi	209	No Gas	4714279.17	3.4	4391152.66	107.36	29.5	120.4	

Sample Report

Sample Name SN6090-010R

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:36:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.166	ppb	8.2	94.45	100	
11	B	6	No Gas	12.328	ppb	13.0	3727.27	1000	
23	Na	45	He	-356.310	ppb	N/A	10689.24	200000	
24	Mg	45	He	-9.709	ppb	N/A	788.97	200000	
27	Al	45	He	25.181	ppb	27.2	126.67	200000	
28	Si	45	H2	37.466	ppb	49.6	814.26	10000	
39	K	45	He	59.314	ppb	15.7	11162.72	200000	
40	Ca	45	H2	55.513	ppb	8.1	5217.82	200000	
51	V	89	He	1.232	ppb	34.3	460.02	1000	
52	Cr	89	He	0.335	ppb	12.3	136.64	2000	
55	Mn	89	He	0.961	ppb	13.0	115.31	2000	
56	Fe	89	H2	12.252	ppb	6.5	6295.07	100000	
59	Co	89	He	0.119	ppb	31.7	64.45	1000	
60	Ni	89	He	-1.325	ppb	N/A	117.78	1000	
63	Cu	89	He	0.556	ppb	33.3	274.45	2000	
66	Zn	89	He	3.457	ppb	39.7	203.34	2000	
75	As	89	He	0.200	ppb	33.2	10.00	1000	
78	Se	89	H2	0.211	ppb	26.8	4.00	1000	
88	Sr	89	He	0.380	ppb	21.2	63.33	2000	
95	Mo	89	He	0.334	ppb	13.1	61.12	1000	
107	Ag	89	He	0.079	ppb	20.4	48.89	100	
111	Cd	89	He	0.069	ppb	84.5	5.56	1000	
118	Sn	159	He	1.498	ppb	18.8	306.68	1000	
121	Sb	159	No Gas	0.117	ppb	38.7	210.24	1000	
137	Ba	159	No Gas	1.452	ppb	31.3	860.99	2000	
182	W	159	No Gas	0.390	ppb	13.4	467.20	1000	
205	Tl	209	No Gas	-0.006	ppb	N/A	323.70	1000	
208	Pb	209	No Gas	0.079	ppb	3.4	537.28	2000	
232	Th	209	No Gas	1.121	ppb	4.7	3981.78	1000	
238	U	209	No Gas	0.091	ppb	30.1	293.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1572305.63	2.2	1745272.14	90.09	29.5	120.4	
Sc	45	No Gas	3752300.55	2.3	3932582.94	95.42	29.5	120.4	
Sc	45	H2	432226.48	2.4	485269.91	89.07	29.5	120.4	
Sc	45	He	86630.78	1.2	96164.21	90.09	29.5	120.4	
Ge	72	No Gas	864837.89	1.3	877152.82	98.6	29.5	120.4	
Ge	72	H2	160355.80	3.4	182501.5	87.87	29.5	120.4	
Ge	72	He	67475.91	1.3	74687.17	90.34	29.5	120.4	
Y	89	H2	2824263.90	2.6	3060772.3	92.27	29.5	120.4	
Y	89	He	590363.61	1.5	649886.7	90.84	29.5	120.4	
Tb	159	No Gas	8996853.34	2.1	8413567.03	106.93	29.5	120.4	
Tb	159	He	3261248.01	1.4	3319571.76	98.24	29.5	120.4	
Bi	209	No Gas	4726150.83	2.2	4391152.66	107.63	29.5	120.4	

Sample Report

Sample Name SN6090-010RL

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:39:30 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.012	ppb	N/A	55.56	100	
11	B	6	No Gas	27.374	ppb	9.5	2753.69	1000	
23	Na	45	He	-2387.709	ppb	N/A	8401.73	200000	
24	Mg	45	He	-115.848	ppb	N/A	651.18	200000	
27	Al	45	He	148.798	ppb	21.3	150.01	200000	
28	Si	45	H2	6.592	ppb	530.2	517.25	10000	
39	K	45	He	125.722	ppb	111.9	11027.68	200000	
40	Ca	45	H2	84.056	ppb	2.1	2174.69	200000	
51	V	89	He	-0.976	ppb	N/A	224.45	1000	
52	Cr	89	He	-0.122	ppb	N/A	63.99	2000	
55	Mn	89	He	0.627	ppb	57.8	34.66	2000	
56	Fe	89	H2	9.599	ppb	29.8	2963.63	100000	
59	Co	89	He	0.304	ppb	35.9	44.45	1000	
60	Ni	89	He	-8.657	ppb	N/A	81.11	1000	
63	Cu	89	He	0.310	ppb	140.7	144.45	2000	
66	Zn	89	He	13.861	ppb	37.6	182.23	2000	
75	As	89	He	0.000	ppb	N/A	4.00	1000	
78	Se	89	H2	0.319	ppb	147.1	1.67	1000	
88	Sr	89	He	0.522	ppb	43.6	22.22	2000	
95	Mo	89	He	0.326	ppb	117.4	15.55	1000	
107	Ag	89	He	0.078	ppb	111.6	12.22	100	
111	Cd	89	He	0.245	ppb	91.3	4.07	1000	
118	Sn	159	He	1.199	ppb	55.0	91.12	1000	
121	Sb	159	No Gas	0.141	ppb	51.4	80.09	1000	
137	Ba	159	No Gas	1.010	ppb	37.2	136.82	2000	
182	W	159	No Gas	0.352	ppb	36.7	113.46	1000	
205	Tl	209	No Gas	-0.546	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	-0.012	ppb	N/A	263.63	2000	
232	Th	209	No Gas	0.201	ppb	23.0	280.32	1000	
238	U	209	No Gas	0.073	ppb	34.2	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1626129.56	1.7	1745272.14	93.17	29.5	120.4	
Sc	45	No Gas	3812167.27	2.2	3932582.94	96.94	29.5	120.4	
Sc	45	H2	441161.51	0.9	485269.91	90.91	29.5	120.4	
Sc	45	He	88415.89	0.4	96164.21	91.94	29.5	120.4	
Ge	72	No Gas	870263.15	2.3	877152.82	99.21	29.5	120.4	
Ge	72	H2	163237.24	0.2	182501.5	89.44	29.5	120.4	
Ge	72	He	69186.88	0.9	74687.17	92.64	29.5	120.4	
Y	89	H2	2860903.85	0.2	3060772.3	93.47	29.5	120.4	
Y	89	He	601212.51	0.6	649886.7	92.51	29.5	120.4	
Tb	159	No Gas	8950140.14	2.0	8413567.03	106.38	29.5	120.4	
Tb	159	He	3296353.98	0.9	3319571.76	99.3	29.5	120.4	
Bi	209	No Gas	4712015.91	2.2	4391152.66	107.31	29.5	120.4	

Sample Report

Sample Name SN6090-010RA

File Name 144SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:42:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.694	ppb	4.9	2560.32	100	
11	B	6	No Gas	223.466	ppb	1.7	35453.12	1000	
23	Na	45	He	10474.972	ppb	2.1	231508.64	200000	
24	Mg	45	He	1018.481	ppb	1.2	12432.93	200000	
27	Al	45	He	975.264	ppb	5.3	4368.61	200000	
28	Si	45	H2	4930.364	ppb	2.4	42995.75	10000	
39	K	45	He	10175.534	ppb	2.2	117853.17	200000	
40	Ca	45	H2	1074.263	ppb	2.1	87099.84	200000	
51	V	89	He	52.355	ppb	2.8	9057.68	1000	
52	Cr	89	He	52.331	ppb	2.2	10812.82	2000	
55	Mn	89	He	21.810	ppb	1.0	2139.78	2000	
56	Fe	89	H2	1053.721	ppb	1.8	347205.78	100000	
59	Co	89	He	11.620	ppb	2.6	4131.99	1000	
60	Ni	89	He	19.811	ppb	2.1	2128.02	1000	
63	Cu	89	He	32.157	ppb	4.0	8789.76	2000	
66	Zn	89	He	108.105	ppb	0.8	3899.57	2000	
75	As	89	He	50.252	ppb	0.7	1526.25	1000	
78	Se	89	H2	49.101	ppb	2.8	792.49	1000	
88	Sr	89	He	50.330	ppb	3.6	7603.48	2000	
95	Mo	89	He	51.169	ppb	3.4	8758.67	1000	
107	Ag	89	He	11.223	ppb	3.3	6512.92	100	
111	Cd	89	He	11.188	ppb	2.4	839.30	1000	
118	Sn	159	He	51.391	ppb	3.1	8966.64	1000	
121	Sb	159	No Gas	10.957	ppb	8.4	15162.10	1000	
137	Ba	159	No Gas	21.390	ppb	5.9	11581.31	2000	
182	W	159	No Gas	52.907	ppb	5.5	54931.89	1000	
205	Tl	209	No Gas	11.103	ppb	4.4	25835.07	1000	
208	Pb	209	No Gas	11.267	ppb	3.6	36140.48	2000	
232	Th	209	No Gas	11.357	ppb	5.0	37002.76	1000	
238	U	209	No Gas	11.058	ppb	4.8	33830.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1525106.45	2.0	1745272.14	87.39	29.5	120.4	
Sc	45	No Gas	3536149.83	2.2	3932582.94	89.92	29.5	120.4	
Sc	45	H2	434531.16	0.5	485269.91	89.54	29.5	120.4	
Sc	45	He	87203.21	0.8	96164.21	90.68	29.5	120.4	
Ge	72	No Gas	806899.76	3.6	877152.82	91.99	29.5	120.4	
Ge	72	H2	160717.70	0.5	182501.5	88.06	29.5	120.4	
Ge	72	He	67943.66	0.9	74687.17	90.97	29.5	120.4	
Y	89	H2	2835448.84	0.5	3060772.3	92.64	29.5	120.4	
Y	89	He	590035.32	0.6	649886.7	90.79	29.5	120.4	
Tb	159	No Gas	8433901.96	2.5	8413567.03	100.24	29.5	120.4	
Tb	159	He	3291076.10	0.5	3319571.76	99.14	29.5	120.4	
Bi	209	No Gas	4481666.61	2.5	4391152.66	102.06	29.5	120.4	

Sample Report

Sample Name	SN6146-002
File Name	145SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:44:52 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.017	ppb	N/A	50.00	100	
11	B	6	No Gas	20.407	ppb	1.9	4961.00	1000	
23	Na	45	He	8281.880	ppb	0.9	185417.65	200000	
24	Mg	45	He	7433.565	ppb	1.0	84397.93	200000	
27	Al	45	He	16.435	ppb	11.0	87.78	200000	
28	Si	45	H2	5610.268	ppb	2.4	47635.11	10000	
39	K	45	He	5770.873	ppb	2.5	70902.69	200000	
40	Ca	45	H2	37888.787	ppb	0.8	2968870.41	200000	
51	V	89	He	1.795	ppb	6.9	555.59	1000	
52	Cr	89	He	0.467	ppb	11.8	163.97	2000	
55	Mn	89	He	6.535	ppb	8.8	656.56	2000	
56	Fe	89	H2	30.942	ppb	2.2	12272.37	100000	
59	Co	89	He	0.145	ppb	61.2	73.34	1000	
60	Ni	89	He	-1.096	ppb	N/A	140.01	1000	
63	Cu	89	He	3.369	ppb	4.5	1033.41	2000	
66	Zn	89	He	10.103	ppb	8.6	437.81	2000	
75	As	89	He	0.837	ppb	23.3	29.33	1000	
78	Se	89	H2	0.425	ppb	39.9	7.33	1000	
88	Sr	89	He	118.012	ppb	0.7	17838.80	2000	
95	Mo	89	He	0.943	ppb	4.4	165.56	1000	
107	Ag	89	He	0.029	ppb	34.4	20.00	100	
111	Cd	89	He	0.011	ppb	246.2	1.11	1000	
118	Sn	159	He	1.129	ppb	24.5	246.68	1000	
121	Sb	159	No Gas	0.245	ppb	22.3	403.79	1000	
137	Ba	159	No Gas	71.829	ppb	6.6	41655.03	2000	
182	W	159	No Gas	0.117	ppb	21.2	166.86	1000	
205	Tl	209	No Gas	-0.107	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.220	ppb	13.9	1017.84	2000	
232	Th	209	No Gas	0.135	ppb	13.8	607.37	1000	
238	U	209	No Gas	0.240	ppb	5.7	777.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1565511.03	2.7	1745272.14	89.7	29.5	120.4	
Sc	45	No Gas	3755167.77	3.1	3932582.94	95.49	29.5	120.4	
Sc	45	H2	423678.77	2.4	485269.91	87.31	29.5	120.4	
Sc	45	He	86545.54	0.9	96164.21	90	29.5	120.4	
Ge	72	No Gas	868639.13	3.9	877152.82	99.03	29.5	120.4	
Ge	72	H2	159830.24	2.1	182501.5	87.58	29.5	120.4	
Ge	72	He	68015.20	1.2	74687.17	91.07	29.5	120.4	
Y	89	H2	2798036.24	2.2	3060772.3	91.42	29.5	120.4	
Y	89	He	590578.02	1.4	649886.7	90.87	29.5	120.4	
Tb	159	No Gas	9052527.64	3.6	8413567.03	107.59	29.5	120.4	
Tb	159	He	3302310.09	1.5	3319571.76	99.48	29.5	120.4	
Bi	209	No Gas	4748567.26	3.4	4391152.66	108.14	29.5	120.4	

Sample Report

Sample Name SN6146-003

File Name 146SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:47:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.027	ppb	260.7	61.11	100	
11	B	6	No Gas	23.443	ppb	3.7	5494.58	1000	
23	Na	45	He	1811.054	ppb	3.1	54956.07	200000	
24	Mg	45	He	2511.463	ppb	1.4	29345.09	200000	
27	Al	45	He	42.209	ppb	20.1	203.34	200000	
28	Si	45	H2	2104.386	ppb	2.1	18362.43	10000	
39	K	45	He	5872.481	ppb	2.6	72536.76	200000	
40	Ca	45	H2	8945.803	ppb	0.3	708860.23	200000	
51	V	89	He	2.581	ppb	6.1	693.38	1000	
52	Cr	89	He	0.702	ppb	10.9	213.96	2000	
55	Mn	89	He	38.247	ppb	4.2	3767.83	2000	
56	Fe	89	H2	128.012	ppb	2.2	43844.01	100000	
59	Co	89	He	0.305	ppb	25.9	131.12	1000	
60	Ni	89	He	-0.876	ppb	N/A	162.23	1000	
63	Cu	89	He	26.153	ppb	3.5	7234.33	2000	
66	Zn	89	He	10.596	ppb	7.2	458.91	2000	
75	As	89	He	1.242	ppb	21.2	42.00	1000	
78	Se	89	H2	0.284	ppb	53.8	5.17	1000	
88	Sr	89	He	29.067	ppb	1.1	4433.09	2000	
95	Mo	89	He	0.618	ppb	30.6	111.12	1000	
107	Ag	89	He	0.033	ppb	28.2	22.22	100	
111	Cd	89	He	0.030	ppb	26.5	2.59	1000	
118	Sn	159	He	1.039	ppb	11.6	231.12	1000	
121	Sb	159	No Gas	4.943	ppb	4.6	7423.70	1000	
137	Ba	159	No Gas	33.232	ppb	6.2	19459.30	2000	
182	W	159	No Gas	0.126	ppb	38.9	176.86	1000	
205	Tl	209	No Gas	-0.116	ppb	N/A	56.73	1000	
208	Pb	209	No Gas	24.451	ppb	3.3	83730.82	2000	
232	Th	209	No Gas	0.092	ppb	13.3	467.20	1000	
238	U	209	No Gas	0.059	ppb	30.9	193.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1584011.76	1.4	1745272.14	90.76	29.5	120.4	
Sc	45	No Gas	3784547.02	1.9	3932582.94	96.24	29.5	120.4	
Sc	45	H2	428075.81	0.7	485269.91	88.21	29.5	120.4	
Sc	45	He	87259.21	1.9	96164.21	90.74	29.5	120.4	
Ge	72	No Gas	878099.52	2.5	877152.82	100.11	29.5	120.4	
Ge	72	H2	159279.51	0.8	182501.5	87.28	29.5	120.4	
Ge	72	He	68342.03	1.5	74687.17	91.5	29.5	120.4	
Y	89	H2	2812038.42	0.3	3060772.3	91.87	29.5	120.4	
Y	89	He	595257.62	1.6	649886.7	91.59	29.5	120.4	
Tb	159	No Gas	9127761.46	2.2	8413567.03	108.49	29.5	120.4	
Tb	159	He	3308736.79	1.1	3319571.76	99.67	29.5	120.4	
Bi	209	No Gas	4803333.43	2.4	4391152.66	109.39	29.5	120.4	

Sample Report

Sample Name SN6146-004

File Name 147SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:50:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	53.34	100	
11	B	6	No Gas	13.044	ppb	12.4	3805.07	1000	
23	Na	45	He	9770.086	ppb	5.7	209996.70	200000	
24	Mg	45	He	6763.431	ppb	5.5	74896.61	200000	
27	Al	45	He	9.181	ppb	11.8	54.45	200000	
28	Si	45	H2	8738.713	ppb	1.7	74832.37	10000	
39	K	45	He	3254.153	ppb	8.0	43417.72	200000	
40	Ca	45	H2	19101.249	ppb	0.9	1515341.26	200000	
51	V	89	He	2.464	ppb	2.6	655.60	1000	
52	Cr	89	He	0.607	ppb	4.6	189.30	2000	
55	Mn	89	He	11.087	ppb	6.8	1077.18	2000	
56	Fe	89	H2	17.747	ppb	6.6	8041.20	100000	
59	Co	89	He	0.085	ppb	39.0	51.12	1000	
60	Ni	89	He	-0.745	ppb	N/A	170.01	1000	
63	Cu	89	He	5.772	ppb	9.6	1646.83	2000	
66	Zn	89	He	6.203	ppb	13.1	295.57	2000	
75	As	89	He	0.575	ppb	21.0	21.00	1000	
78	Se	89	H2	0.368	ppb	15.9	6.50	1000	
88	Sr	89	He	71.357	ppb	5.6	10576.66	2000	
95	Mo	89	He	0.248	ppb	18.0	45.56	1000	
107	Ag	89	He	0.028	ppb	19.3	18.89	100	
111	Cd	89	He	0.006	ppb	152.6	0.74	1000	
118	Sn	159	He	0.648	ppb	15.2	158.90	1000	
121	Sb	159	No Gas	1.705	ppb	8.6	2546.42	1000	
137	Ba	159	No Gas	48.904	ppb	8.2	28184.61	2000	
182	W	159	No Gas	0.046	ppb	35.0	86.76	1000	
205	Tl	209	No Gas	-0.119	ppb	N/A	50.06	1000	
208	Pb	209	No Gas	0.809	ppb	6.7	2990.17	2000	
232	Th	209	No Gas	0.049	ppb	22.9	310.35	1000	
238	U	209	No Gas	0.046	ppb	18.0	150.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1560392.52	3.1	1745272.14	89.41	29.5	120.4	
Sc	45	No Gas	3741936.78	3.3	3932582.94	95.15	29.5	120.4	
Sc	45	H2	428821.94	0.9	485269.91	88.37	29.5	120.4	
Sc	45	He	84448.75	4.3	96164.21	87.82	29.5	120.4	
Ge	72	No Gas	868114.18	2.9	877152.82	98.97	29.5	120.4	
Ge	72	H2	160061.44	1.7	182501.5	87.7	29.5	120.4	
Ge	72	He	66354.01	4.3	74687.17	88.84	29.5	120.4	
Y	89	H2	2809373.57	1.0	3060772.3	91.79	29.5	120.4	
Y	89	He	579800.93	4.6	649886.7	89.22	29.5	120.4	
Tb	159	No Gas	8998537.30	3.3	8413567.03	106.95	29.5	120.4	
Tb	159	He	3238957.45	4.7	3319571.76	97.57	29.5	120.4	
Bi	209	No Gas	4731985.52	3.3	4391152.66	107.76	29.5	120.4	

Sample Report

Sample Name SN6146-004L

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 6:52:47 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.197	ppb	253.3	64.45	100	
11	B	6	No Gas	22.009	ppb	11.8	2535.87	1000	
23	Na	45	He	7807.295	ppb	1.2	50323.72	200000	
24	Mg	45	He	6691.453	ppb	3.5	16203.56	200000	
27	Al	45	He	27.546	ppb	62.6	40.00	200000	
28	Si	45	H2	9201.139	ppb	2.0	16604.77	10000	
39	K	45	He	3315.213	ppb	8.3	17766.37	200000	
40	Ca	45	H2	20272.462	ppb	1.5	331402.23	200000	
51	V	89	He	2.100	ppb	7.0	327.79	1000	
52	Cr	89	He	0.256	ppb	143.9	79.32	2000	
55	Mn	89	He	11.727	ppb	7.6	252.62	2000	
56	Fe	89	H2	14.597	ppb	27.5	3284.04	100000	
59	Co	89	He	0.029	ppb	387.4	24.45	1000	
60	Ni	89	He	-6.942	ppb	N/A	113.34	1000	
63	Cu	89	He	4.672	ppb	21.7	381.13	2000	
66	Zn	89	He	4.878	ppb	3.3	116.67	2000	
75	As	89	He	0.275	ppb	34.5	5.67	1000	
78	Se	89	H2	0.525	ppb	121.8	2.33	1000	
88	Sr	89	He	73.887	ppb	2.2	2264.72	2000	
95	Mo	89	He	0.394	ppb	50.4	17.78	1000	
107	Ag	89	He	0.182	ppb	23.0	24.44	100	
111	Cd	89	He	0.051	ppb	144.4	1.11	1000	
118	Sn	159	He	0.694	ppb	107.8	73.34	1000	
121	Sb	159	No Gas	1.708	ppb	4.3	543.96	1000	
137	Ba	159	No Gas	50.520	ppb	13.5	5841.15	2000	
182	W	159	No Gas	0.005	ppb	1139.4	36.71	1000	
205	Tl	209	No Gas	-0.593	ppb	N/A	50.06	1000	
208	Pb	209	No Gas	0.668	ppb	25.2	727.49	2000	
232	Th	209	No Gas	0.016	ppb	581.0	156.84	1000	
238	U	209	No Gas	0.047	ppb	68.9	30.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1599197.76	3.4	1745272.14	91.63	29.5	120.4	
Sc	45	No Gas	3817810.07	4.4	3932582.94	97.08	29.5	120.4	
Sc	45	H2	440998.81	0.5	485269.91	90.88	29.5	120.4	
Sc	45	He	88037.05	0.8	96164.21	91.55	29.5	120.4	
Ge	72	No Gas	871031.34	3.9	877152.82	99.3	29.5	120.4	
Ge	72	H2	163966.01	0.8	182501.5	89.84	29.5	120.4	
Ge	72	He	69276.52	0.9	74687.17	92.76	29.5	120.4	
Y	89	H2	2852094.83	0.3	3060772.3	93.18	29.5	120.4	
Y	89	He	597385.18	1.0	649886.7	91.92	29.5	120.4	
Tb	159	No Gas	9016702.16	4.0	8413567.03	107.17	29.5	120.4	
Tb	159	He	3289312.83	1.4	3319571.76	99.09	29.5	120.4	
Bi	209	No Gas	4745645.84	4.1	4391152.66	108.07	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	149_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:55:30 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.170	ppb	5.7	29037.65	25	96.68	89.8	110.2	
11	B	6	No Gas	24.865	ppb	7.2	20978.12	25	99.46	89.8	110.2	
23	Na	45	He	5007.119	ppb	1.5	530697.28	5000	100.14	89.8	110.2	
24	Mg	45	He	4951.364	ppb	0.8	282400.03	5000	99.03	89.8	110.2	
27	Al	45	He	489.244	ppb	2.5	10985.70	500	97.85	89.8	110.2	
28	Si	45	H2	485.224	ppb	1.2	21072.64	500	97.04	89.8	110.2	
39	K	45	He	4802.750	ppb	1.3	264913.86	5000	96.06	89.8	110.2	
40	Ca	45	H2	4911.198	ppb	1.0	1942557.49	5000	98.22	89.8	110.2	
51	V	89	He	24.458	ppb	2.2	20876.12	25	97.83	89.8	110.2	
52	Cr	89	He	24.716	ppb	0.7	25513.60	25	98.86	89.8	110.2	
55	Mn	89	He	24.794	ppb	0.7	12094.32	25	99.18	89.8	110.2	
56	Fe	89	H2	4836.700	ppb	1.3	7808146.62	5000	96.73	89.8	110.2	
59	Co	89	He	24.753	ppb	1.9	43918.05	25	99.01	89.8	110.2	
60	Ni	89	He	24.799	ppb	0.2	12067.82	25	99.2	89.8	110.2	
63	Cu	89	He	24.972	ppb	0.3	33866.24	25	99.89	89.8	110.2	
66	Zn	89	He	25.086	ppb	1.9	4524.24	25	100.34	89.8	110.2	
75	As	89	He	24.385	ppb	1.0	3707.57	25	97.54	89.8	110.2	
78	Se	89	H2	24.358	ppb	2.7	1937.55	25	97.43	89.8	110.2	
88	Sr	89	He	24.128	ppb	0.8	18269.38	25	96.51	89.8	110.2	
95	Mo	89	He	24.530	ppb	1.2	21047.94	25	98.12	89.8	110.2	
107	Ag	89	He	25.526	ppb	1.5	74242.45	25	102.1	89.8	110.2	
111	Cd	89	He	25.185	ppb	1.1	9467.85	25	100.74	89.8	110.2	
118	Sn	159	He	23.424	ppb	1.6	20317.04	25	93.7	89.8	110.2	
121	Sb	159	No Gas	23.489	ppb	5.1	168909.22	25	93.96	89.8	110.2	
137	Ba	159	No Gas	23.612	ppb	5.4	66506.73	25	94.45	89.8	110.2	
182	W	159	No Gas	23.840	ppb	6.5	128855.35	25	95.36	89.8	110.2	
205	Tl	209	No Gas	24.326	ppb	5.1	288669.35	25	97.3	89.8	110.2	
208	Pb	209	No Gas	24.161	ppb	5.3	397062.05	25	96.64	89.8	110.2	
232	Th	209	No Gas	23.819	ppb	6.9	398620.28	25	95.28	89.8	110.2	
238	U	209	No Gas	24.336	ppb	6.2	383852.31	25	97.34	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1561374.09	1.5	1745272.14	89.46	29.5	120.4	
Sc	45	No Gas	3704197.95	2.2	3932582.94	94.19	29.5	120.4	
Sc	45	H2	427641.76	0.6	485269.91	88.12	29.5	120.4	
Sc	45	He	87605.03	1.3	96164.21	91.1	29.5	120.4	
Ge	72	No Gas	847773.51	2.3	877152.82	96.65	29.5	120.4	
Ge	72	H2	160292.96	0.9	182501.5	87.83	29.5	120.4	
Ge	72	He	67953.81	0.4	74687.17	90.98	29.5	120.4	
Y	89	H2	2796109.11	0.6	3060772.3	91.35	29.5	120.4	
Y	89	He	591659.34	0.5	649886.7	91.04	29.5	120.4	
Tb	159	No Gas	8791115.70	2.3	8413567.03	104.49	29.5	120.4	
Tb	159	He	3282140.30	1.1	3319571.76	98.87	29.5	120.4	
Bi	209	No Gas	4623901.81	2.5	4391152.66	105.3	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	150_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 6:58:07 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.051	ppb	5.7	117.79	0.2	
11	B	6	No Gas	0.887	ppb	32.8	2535.86	4	
23	Na	45	He	-98.725	ppb	N/A	8201.46	200	
24	Mg	45	He	-4.960	ppb	N/A	642.29	20	
27	Al	45	He	0.098	ppb	180.3	17.78	20	
28	Si	45	H2	-0.669	ppb	N/A	473.88	100	
39	K	45	He	7.475	ppb	54.3	11341.12	200	
40	Ca	45	H2	1.314	ppb	7.8	1334.56	20	
51	V	89	He	-0.135	ppb	N/A	143.34	1	
52	Cr	89	He	-0.012	ppb	N/A	56.66	1	
55	Mn	89	He	-0.001	ppb	N/A	22.00	0.4	
56	Fe	89	H2	1.657	ppb	20.5	5016.54	20	
59	Co	89	He	0.001	ppb	1027.8	24.45	0.2	
60	Ni	89	He	-0.329	ppb	N/A	90.00	0.4	Failed DoD
63	Cu	89	He	-0.032	ppb	N/A	84.45	0.6	
66	Zn	89	He	0.423	ppb	51.3	160.01	2	
75	As	89	He	0.013	ppb	90.6	6.00	1	
78	Se	89	H2	0.032	ppb	97.1	3.17	1	
88	Sr	89	He	0.001	ppb	719.0	6.67	1	
95	Mo	89	He	0.076	ppb	20.6	71.12	1	
107	Ag	89	He	0.004	ppb	60.1	15.56	0.2	
111	Cd	89	He	0.001	ppb	313.7	0.74	0.2	
118	Sn	159	He	0.036	ppb	6.2	81.12	1	
121	Sb	159	No Gas	0.026	ppb	11.3	226.92	0.2	
137	Ba	159	No Gas	0.018	ppb	71.3	70.08	0.4	
182	W	159	No Gas	0.059	ppb	15.0	350.40	1	
205	Tl	209	No Gas	-0.001	ppb	N/A	320.37	0.2	
208	Pb	209	No Gas	0.011	ppb	60.8	443.84	0.2	
232	Th	209	No Gas	0.057	ppb	12.5	1081.26	1	
238	U	209	No Gas	0.023	ppb	42.4	367.08	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1597225.91	3.5	1745272.14	91.52	29.5	120.4	
Sc	45	No Gas	3736377.68	2.9	3932582.94	95.01	29.5	120.4	
Sc	45	H2	439876.44	2.3	485269.91	90.65	29.5	120.4	
Sc	45	He	89881.03	2.0	96164.21	93.47	29.5	120.4	
Ge	72	No Gas	849130.64	2.5	877152.82	96.81	29.5	120.4	
Ge	72	H2	164305.05	1.4	182501.5	90.03	29.5	120.4	
Ge	72	He	69683.84	2.0	74687.17	93.3	29.5	120.4	
Y	89	H2	2835459.19	2.4	3060772.3	92.64	29.5	120.4	
Y	89	He	605109.68	2.6	649886.7	93.11	29.5	120.4	
Tb	159	No Gas	8715463.20	2.7	8413567.03	103.59	29.5	120.4	
Tb	159	He	3296811.31	2.4	3319571.76	99.31	29.5	120.4	
Bi	209	No Gas	4588930.49	3.4	4391152.66	104.5	29.5	120.4	

Sample Report

Sample Name SN6146-004A

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:00:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.855	ppb	5.8	2631.44	100	
11	B	6	No Gas	222.685	ppb	7.7	35792.91	1000	
23	Na	45	He	20837.430	ppb	5.6	426020.73	200000	
24	Mg	45	He	7843.646	ppb	6.2	86280.44	200000	
27	Al	45	He	987.813	ppb	9.2	4254.11	200000	
28	Si	45	H2	14011.395	ppb	1.8	117548.52	10000	
39	K	45	He	13623.935	ppb	6.9	148333.78	200000	
40	Ca	45	H2	20880.500	ppb	1.0	1626836.47	200000	
51	V	89	He	54.879	ppb	5.4	9206.68	1000	
52	Cr	89	He	53.628	ppb	5.2	10758.82	2000	
55	Mn	89	He	32.373	ppb	7.4	3073.78	2000	
56	Fe	89	H2	1067.999	ppb	1.2	341973.23	100000	
59	Co	89	He	11.148	ppb	2.0	3854.15	1000	
60	Ni	89	He	22.468	ppb	2.3	2314.73	1000	
63	Cu	89	He	38.081	ppb	6.8	10082.87	2000	
66	Zn	89	He	115.671	ppb	6.5	4045.17	2000	
75	As	89	He	52.135	ppb	3.6	1538.26	1000	
78	Se	89	H2	50.075	ppb	0.8	785.49	1000	
88	Sr	89	He	125.874	ppb	7.1	18448.55	2000	
95	Mo	89	He	53.438	ppb	4.0	8885.41	1000	
107	Ag	89	He	11.342	ppb	2.7	6396.17	100	
111	Cd	89	He	11.409	ppb	5.5	831.15	1000	
118	Sn	159	He	51.120	ppb	6.7	8729.82	1000	
121	Sb	159	No Gas	12.089	ppb	10.0	17160.32	1000	
137	Ba	159	No Gas	71.774	ppb	5.3	39857.22	2000	
182	W	159	No Gas	50.906	ppb	5.3	54263.99	1000	
205	Tl	209	No Gas	10.875	ppb	5.8	25798.68	1000	
208	Pb	209	No Gas	11.610	ppb	6.5	37944.79	2000	
232	Th	209	No Gas	11.769	ppb	5.7	39057.45	1000	
238	U	209	No Gas	10.825	ppb	6.0	33753.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1546414.37	2.2	1745272.14	88.61	29.5	120.4	
Sc	45	No Gas	3608122.08	2.4	3932582.94	91.75	29.5	120.4	
Sc	45	H2	421167.97	0.5	485269.91	86.79	29.5	120.4	
Sc	45	He	84049.18	4.7	96164.21	87.4	29.5	120.4	
Ge	72	No Gas	832041.18	1.8	877152.82	94.86	29.5	120.4	
Ge	72	H2	157949.87	0.5	182501.5	86.55	29.5	120.4	
Ge	72	He	65836.53	3.6	74687.17	88.15	29.5	120.4	
Y	89	H2	2755539.17	0.2	3060772.3	90.03	29.5	120.4	
Y	89	He	573717.13	4.1	649886.7	88.28	29.5	120.4	
Tb	159	No Gas	8662592.79	1.7	8413567.03	102.96	29.5	120.4	
Tb	159	He	3225951.17	4.1	3319571.76	97.18	29.5	120.4	
Bi	209	No Gas	4568922.98	1.9	4391152.66	104.05	29.5	120.4	

Sample Report

Sample Name SN6146-004S

File Name 152SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:03:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.197	ppb	0.2	12273.36	100	
11	B	6	No Gas	528.665	ppb	2.4	82955.86	1000	
23	Na	45	He	16599.722	ppb	3.0	350883.24	200000	
24	Mg	45	He	11553.176	ppb	4.2	129611.30	200000	
27	Al	45	He	1860.442	ppb	1.8	8197.07	200000	
28	Si	45	H2	9425.679	ppb	3.5	80226.93	10000	
39	K	45	He	12915.986	ppb	3.5	144476.01	200000	
40	Ca	45	H2	20988.228	ppb	2.8	1655773.36	200000	
51	V	89	He	489.849	ppb	1.3	82030.09	1000	
52	Cr	89	He	202.598	ppb	1.9	41366.59	2000	
55	Mn	89	He	513.434	ppb	2.2	49515.31	2000	
56	Fe	89	H2	1026.455	ppb	3.5	334322.02	100000	
59	Co	89	He	506.583	ppb	1.8	177904.45	1000	
60	Ni	89	He	512.805	ppb	1.6	48650.76	1000	
63	Cu	89	He	257.574	ppb	2.5	69027.43	2000	
66	Zn	89	He	525.331	ppb	3.8	18498.42	2000	
75	As	89	He	101.315	ppb	1.3	3051.68	1000	
78	Se	89	H2	100.087	ppb	2.1	1596.19	1000	
88	Sr	89	He	565.127	ppb	1.6	84702.75	2000	
95	Mo	89	He	102.865	ppb	2.4	17476.14	1000	
107	Ag	89	He	52.789	ppb	2.2	30399.23	100	
111	Cd	89	He	261.000	ppb	1.5	19426.99	1000	
118	Sn	159	He	483.831	ppb	1.1	84064.24	1000	
121	Sb	159	No Gas	101.015	ppb	1.8	146838.37	1000	
137	Ba	159	No Gas	1984.696	ppb	0.9	1129777.88	2000	
182	W	159	No Gas	103.914	ppb	0.9	113564.78	1000	
205	Tl	209	No Gas	105.177	ppb	0.6	251122.30	1000	
208	Pb	209	No Gas	105.421	ppb	0.3	348627.78	2000	
232	Th	209	No Gas	105.369	ppb	0.5	354857.50	1000	
238	U	209	No Gas	105.310	ppb	1.3	334228.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1553003.43	1.0	1745272.14	88.98	29.5	120.4	
Sc	45	No Gas	3641172.61	1.0	3932582.94	92.59	29.5	120.4	
Sc	45	H2	426572.02	1.6	485269.91	87.9	29.5	120.4	
Sc	45	He	85904.47	2.9	96164.21	89.33	29.5	120.4	
Ge	72	No Gas	846505.57	0.6	877152.82	96.51	29.5	120.4	
Ge	72	H2	159474.30	2.2	182501.5	87.38	29.5	120.4	
Ge	72	He	67485.60	1.5	74687.17	90.36	29.5	120.4	
Y	89	H2	2803510.03	2.2	3060772.3	91.59	29.5	120.4	
Y	89	He	585835.29	1.7	649886.7	90.14	29.5	120.4	
Tb	159	No Gas	8879445.84	0.7	8413567.03	105.54	29.5	120.4	
Tb	159	He	3293448.84	1.2	3319571.76	99.21	29.5	120.4	
Bi	209	No Gas	4648111.70	0.8	4391152.66	105.85	29.5	120.4	

Sample Report

Sample Name SN6146-004P

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:06:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.338	ppb	4.8	12692.66	100	
11	B	6	No Gas	551.629	ppb	4.4	87506.85	1000	
23	Na	45	He	17585.176	ppb	1.1	374375.29	200000	
24	Mg	45	He	12193.868	ppb	1.0	138155.13	200000	
27	Al	45	He	1975.608	ppb	0.3	8787.47	200000	
28	Si	45	H2	10332.987	ppb	2.9	87528.47	10000	
39	K	45	He	13520.950	ppb	1.4	152276.45	200000	
40	Ca	45	H2	22834.674	ppb	1.7	1793736.59	200000	
51	V	89	He	527.087	ppb	1.1	88890.08	1000	
52	Cr	89	He	215.259	ppb	1.4	44268.14	2000	
55	Mn	89	He	542.767	ppb	1.5	52727.61	2000	
56	Fe	89	H2	1109.034	ppb	2.1	359514.75	100000	
59	Co	89	He	536.411	ppb	0.9	189755.32	1000	
60	Ni	89	He	545.383	ppb	1.1	52102.10	1000	
63	Cu	89	He	272.556	ppb	1.3	73574.02	2000	
66	Zn	89	He	552.432	ppb	1.4	19597.70	2000	
75	As	89	He	109.126	ppb	1.4	3309.76	1000	
78	Se	89	H2	106.408	ppb	1.8	1689.53	1000	
88	Sr	89	He	598.206	ppb	1.7	90312.69	2000	
95	Mo	89	He	110.117	ppb	1.3	18845.78	1000	
107	Ag	89	He	55.667	ppb	1.4	32293.80	100	
111	Cd	89	He	272.233	ppb	0.7	20412.91	1000	
118	Sn	159	He	513.582	ppb	0.6	89150.57	1000	
121	Sb	159	No Gas	102.972	ppb	3.8	151999.70	1000	
137	Ba	159	No Gas	2043.804	ppb	4.7	1181301.54	2000	
182	W	159	No Gas	104.665	ppb	4.1	116151.15	1000	
205	Tl	209	No Gas	107.413	ppb	3.5	260171.42	1000	
208	Pb	209	No Gas	106.474	ppb	3.9	357179.51	2000	
232	Th	209	No Gas	107.030	ppb	5.2	365575.99	1000	
238	U	209	No Gas	106.980	ppb	4.7	344394.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1571612.94	1.1	1745272.14	90.05	29.5	120.4	
Sc	45	No Gas	3703613.62	1.2	3932582.94	94.18	29.5	120.4	
Sc	45	H2	424690.09	1.1	485269.91	87.52	29.5	120.4	
Sc	45	He	86722.77	0.5	96164.21	90.18	29.5	120.4	
Ge	72	No Gas	859841.90	2.0	877152.82	98.03	29.5	120.4	
Ge	72	H2	158973.28	0.6	182501.5	87.11	29.5	120.4	
Ge	72	He	67652.29	0.3	74687.17	90.58	29.5	120.4	
Y	89	H2	2790708.06	1.2	3060772.3	91.18	29.5	120.4	
Y	89	He	590051.86	0.8	649886.7	90.79	29.5	120.4	
Tb	159	No Gas	9019705.28	1.6	8413567.03	107.2	29.5	120.4	
Tb	159	He	3290412.31	0.6	3319571.76	99.12	29.5	120.4	
Bi	209	No Gas	4717185.45	2.0	4391152.66	107.42	29.5	120.4	

Sample Report

Sample Name SN6146-005

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:08:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	65.5	80.00	100	
11	B	6	No Gas	33.993	ppb	2.0	7116.43	1000	
23	Na	45	He	1611.602	ppb	2.3	51629.70	200000	
24	Mg	45	He	1841.698	ppb	2.9	22076.30	200000	
27	Al	45	He	69.687	ppb	1.8	331.13	200000	
28	Si	45	H2	1886.189	ppb	3.5	16798.49	10000	
39	K	45	He	7125.479	ppb	0.6	87001.76	200000	
40	Ca	45	H2	6053.745	ppb	5.0	488148.33	200000	
51	V	89	He	2.425	ppb	13.4	680.04	1000	
52	Cr	89	He	0.329	ppb	6.9	139.31	2000	
55	Mn	89	He	44.458	ppb	1.7	4462.57	2000	
56	Fe	89	H2	130.296	ppb	10.0	45598.19	100000	
59	Co	89	He	0.360	ppb	59.4	153.35	1000	
60	Ni	89	He	-0.705	ppb	N/A	182.23	1000	
63	Cu	89	He	43.974	ppb	0.8	12316.93	2000	
66	Zn	89	He	13.253	ppb	6.7	564.48	2000	
75	As	89	He	0.972	ppb	4.9	34.33	1000	
78	Se	89	H2	0.487	ppb	65.4	8.50	1000	
88	Sr	89	He	23.442	ppb	1.8	3646.18	2000	
95	Mo	89	He	0.955	ppb	12.3	172.23	1000	
107	Ag	89	He	0.066	ppb	17.6	42.22	100	
111	Cd	89	He	0.087	ppb	24.9	7.04	1000	
118	Sn	159	He	2.308	ppb	6.3	460.03	1000	
121	Sb	159	No Gas	7.936	ppb	8.5	11895.13	1000	
137	Ba	159	No Gas	36.850	ppb	7.7	21581.63	2000	
182	W	159	No Gas	0.429	ppb	13.0	517.25	1000	
205	Tl	209	No Gas	0.026	ppb	190.3	410.47	1000	
208	Pb	209	No Gas	76.434	ppb	5.4	261609.85	2000	
232	Th	209	No Gas	1.106	ppb	7.9	4008.49	1000	
238	U	209	No Gas	0.142	ppb	22.7	467.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1577425.96	3.1	1745272.14	90.38	29.5	120.4	
Sc	45	No Gas	3773553.29	2.6	3932582.94	95.96	29.5	120.4	
Sc	45	H2	436034.43	4.5	485269.91	89.85	29.5	120.4	
Sc	45	He	88512.03	0.6	96164.21	92.04	29.5	120.4	
Ge	72	No Gas	874938.87	2.7	877152.82	99.75	29.5	120.4	
Ge	72	H2	163799.66	3.7	182501.5	89.75	29.5	120.4	
Ge	72	He	69101.25	0.9	74687.17	92.52	29.5	120.4	
Y	89	H2	2882597.99	3.7	3060772.3	94.18	29.5	120.4	
Y	89	He	606838.98	0.5	649886.7	93.38	29.5	120.4	
Tb	159	No Gas	9137208.54	2.5	8413567.03	108.6	29.5	120.4	
Tb	159	He	3364386.34	0.9	3319571.76	101.35	29.5	120.4	
Bi	209	No Gas	4813915.31	2.7	4391152.66	109.63	29.5	120.4	

Sample Report

Sample Name SN6146-006

File Name 155SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:11:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.012	ppb	154.8	56.67	100	
11	B	6	No Gas	14.814	ppb	5.6	4080.71	1000	
23	Na	45	He	5411.105	ppb	4.2	128305.96	200000	
24	Mg	45	He	2916.390	ppb	1.7	33924.76	200000	
27	Al	45	He	19.756	ppb	21.1	103.34	200000	
28	Si	45	H2	8720.121	ppb	3.6	76408.15	10000	
39	K	45	He	2366.934	ppb	0.8	35569.79	200000	
40	Ca	45	H2	8076.573	ppb	3.5	656091.68	200000	
51	V	89	He	2.672	ppb	13.0	711.16	1000	
52	Cr	89	He	0.423	ppb	7.7	156.64	2000	
55	Mn	89	He	8.695	ppb	6.0	877.21	2000	
56	Fe	89	H2	31.215	ppb	8.5	12659.78	100000	
59	Co	89	He	0.068	ppb	74.3	46.67	1000	
60	Ni	89	He	-1.229	ppb	N/A	128.90	1000	
63	Cu	89	He	5.666	ppb	3.6	1673.49	2000	
66	Zn	89	He	6.589	ppb	15.5	317.80	2000	
75	As	89	He	0.575	ppb	24.4	21.67	1000	
78	Se	89	H2	0.624	ppb	40.2	10.83	1000	
88	Sr	89	He	37.191	ppb	2.6	5692.48	2000	
95	Mo	89	He	0.175	ppb	33.7	34.45	1000	
107	Ag	89	He	0.048	ppb	56.9	31.11	100	
111	Cd	89	He	0.025	ppb	102.8	2.22	1000	
118	Sn	159	He	1.190	ppb	15.3	258.90	1000	
121	Sb	159	No Gas	1.344	ppb	3.1	2029.11	1000	
137	Ba	159	No Gas	43.113	ppb	3.7	24998.04	2000	
182	W	159	No Gas	0.037	ppb	63.0	76.75	1000	
205	Tl	209	No Gas	-0.091	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	2.569	ppb	1.8	8927.90	2000	
232	Th	209	No Gas	0.152	ppb	16.1	664.10	1000	
238	U	209	No Gas	0.034	ppb	24.1	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1560218.60	2.2	1745272.14	89.4	29.5	120.4	
Sc	45	No Gas	3750339.45	2.9	3932582.94	95.37	29.5	120.4	
Sc	45	H2	438907.95	1.3	485269.91	90.45	29.5	120.4	
Sc	45	He	87233.41	1.8	96164.21	90.71	29.5	120.4	
Ge	72	No Gas	870813.93	3.0	877152.82	99.28	29.5	120.4	
Ge	72	H2	163408.10	2.0	182501.5	89.54	29.5	120.4	
Ge	72	He	68700.40	1.0	74687.17	91.98	29.5	120.4	
Y	89	H2	2866416.47	1.5	3060772.3	93.65	29.5	120.4	
Y	89	He	597693.86	1.3	649886.7	91.97	29.5	120.4	
Tb	159	No Gas	9042756.74	3.3	8413567.03	107.48	29.5	120.4	
Tb	159	He	3328700.33	1.1	3319571.76	100.27	29.5	120.4	
Bi	209	No Gas	4738588.26	3.0	4391152.66	107.91	29.5	120.4	

Sample Report

Sample Name SN6146-007

File Name 156SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:13:58 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.084	ppb	102.1	73.34	100	
11	B	6	No Gas	14.149	ppb	4.8	3935.12	1000	
23	Na	45	He	5425.535	ppb	1.9	129221.75	200000	
24	Mg	45	He	2946.580	ppb	0.9	34421.32	200000	
27	Al	45	He	33.007	ppb	17.0	163.34	200000	
28	Si	45	H2	8833.356	ppb	1.6	77232.91	10000	
39	K	45	He	2365.182	ppb	2.6	35710.18	200000	
40	Ca	45	H2	8169.085	ppb	1.4	662185.81	200000	
51	V	89	He	2.906	ppb	7.0	756.72	1000	
52	Cr	89	He	0.277	ppb	24.7	127.31	2000	
55	Mn	89	He	9.353	ppb	3.7	949.20	2000	
56	Fe	89	H2	29.177	ppb	5.7	11985.18	100000	
59	Co	89	He	0.141	ppb	69.5	73.34	1000	
60	Ni	89	He	-1.295	ppb	N/A	123.34	1000	
63	Cu	89	He	3.565	ppb	9.5	1107.86	2000	
66	Zn	89	He	4.553	ppb	19.6	246.68	2000	
75	As	89	He	0.571	ppb	11.6	21.67	1000	
78	Se	89	H2	0.452	ppb	11.5	8.00	1000	
88	Sr	89	He	38.788	ppb	0.9	5981.52	2000	
95	Mo	89	He	0.231	ppb	23.2	44.44	1000	
107	Ag	89	He	0.038	ppb	48.1	25.55	100	
111	Cd	89	He	0.015	ppb	55.7	1.48	1000	
118	Sn	159	He	0.922	ppb	13.9	212.23	1000	
121	Sb	159	No Gas	1.399	ppb	2.2	2109.20	1000	
137	Ba	159	No Gas	41.120	ppb	3.4	23847.77	2000	
182	W	159	No Gas	0.061	ppb	106.6	103.45	1000	
205	Tl	209	No Gas	-0.106	ppb	N/A	80.09	1000	
208	Pb	209	No Gas	2.387	ppb	4.7	8333.75	2000	
232	Th	209	No Gas	0.102	ppb	5.6	493.90	1000	
238	U	209	No Gas	0.025	ppb	44.1	80.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1543372.89	2.8	1745272.14	88.43	29.5	120.4	
Sc	45	No Gas	3726075.11	2.1	3932582.94	94.75	29.5	120.4	
Sc	45	H2	437890.23	1.6	485269.91	90.24	29.5	120.4	
Sc	45	He	87628.26	1.0	96164.21	91.12	29.5	120.4	
Ge	72	No Gas	869470.60	1.9	877152.82	99.12	29.5	120.4	
Ge	72	H2	162538.26	1.1	182501.5	89.06	29.5	120.4	
Ge	72	He	68848.45	1.1	74687.17	92.18	29.5	120.4	
Y	89	H2	2867455.50	2.2	3060772.3	93.68	29.5	120.4	
Y	89	He	602040.42	0.8	649886.7	92.64	29.5	120.4	
Tb	159	No Gas	9039668.13	1.7	8413567.03	107.44	29.5	120.4	
Tb	159	He	3334423.49	0.9	3319571.76	100.45	29.5	120.4	
Bi	209	No Gas	4751961.59	1.7	4391152.66	108.22	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG27IMS1
File Name	157_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 7:16:41 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.030	ppb	267.1	61.11	0.5	
B	11	6	No Gas	3.455	ppb	32.4	2349.17	10	
Na	23	45	He	-423.123	ppb	N/A	9320.02	500	
Mg	24	45	He	-15.792	ppb	N/A	717.85	50	
Al	27	45	He	7.866	ppb	38.9	50.00	50	
Si	28	45	H2	-1.632	ppb	N/A	490.55	250	
K	39	45	He	85.887	ppb	42.5	11414.49	500	
Ca	40	45	H2	35.108	ppb	4.3	3658.38	50	
V	51	89	He	1.905	ppb	18.3	573.37	2.5	
Cr	52	89	He	0.758	ppb	8.9	223.29	2.5	
Mn	55	89	He	1.009	ppb	25.4	119.98	1	PB 6020 Fails DoD
Fe	56	89	H2	9.298	ppb	10.0	5440.46	50	
Co	59	89	He	0.095	ppb	63.5	55.56	0.5	
Ni	60	89	He	-0.976	ppb	N/A	151.12	1	
Cu	63	89	He	0.418	ppb	32.2	236.68	1.5	
Zn	66	89	He	2.081	ppb	44.8	154.45	5	
As	75	89	He	0.226	ppb	110.6	10.67	2.5	
Se	78	89	H2	0.074	ppb	89.1	1.83	2.5	
Sr	88	89	He	0.055	ppb	87.3	14.44	2.5	
Mo	95	89	He	0.132	ppb	50.3	26.67	2.5	
Ag	107	89	He	0.026	ppb	35.1	17.78	0.5	
Cd	111	89	He	0.010	ppb	144.7	1.11	0.5	
Sn	118	159	He	52.998	ppb	2.8	9172.39	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.033	ppb	48.2	90.10	0.5	
Ba	137	159	No Gas	0.168	ppb	13.9	120.13	1	
W	182	159	No Gas	0.036	ppb	115.3	76.75	2.5	
Tl	205	209	No Gas	-0.111	ppb	N/A	70.08	0.5	
Pb	208	209	No Gas	0.088	ppb	17.5	577.32	0.5	
Th	232	209	No Gas	0.038	ppb	38.1	276.98	2.5	
U	238	209	No Gas	0.009	ppb	33.0	30.03	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1574331.02	3.3	1745272.14	90.21	29.5	120.4	
Sc	45	No Gas	3808164.59	4.0	3932582.94	96.84	29.5	120.4	
Sc	45	H2	440287.63	1.9	485269.91	90.73	29.5	120.4	
Sc	45	He	86477.47	2.5	96164.21	89.93	29.5	120.4	
Ge	72	No Gas	876782.32	3.5	877152.82	99.96	29.5	120.4	
Ge	72	H2	162946.60	2.9	182501.5	89.29	29.5	120.4	
Ge	72	He	67118.65	3.3	74687.17	89.87	29.5	120.4	
Y	89	H2	2884397.31	2.1	3060772.3	94.24	29.5	120.4	
Y	89	He	588713.73	3.0	649886.7	90.59	29.5	120.4	
Tb	159	No Gas	9156687.64	4.1	8413567.03	108.83	29.5	120.4	
Tb	159	He	3266459.99	2.8	3319571.76	98.4	29.5	120.4	
Bi	209	No Gas	4805983.47	3.7	4391152.66	109.45	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG27IMS1
File Name	158LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 7:19:20 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.728	ppb	3.6	12526.95	50	20.29	79.5	120.4	
B	11	6	No Gas	514.480	ppb	3.4	83211.65	500	20.58	79.5	120.4	
Na	23	45	He	7278.797	ppb	2.2	167176.16	7500	19.41	79.5	120.4	
Mg	24	45	He	5397.403	ppb	2.1	62291.57	5000	21.59	79.5	120.4	
Al	27	45	He	1938.621	ppb	3.0	8712.98	2000	19.39	79.5	120.4	
Si	28	45	H2	983.760	ppb	2.1	8946.07	1000	19.68	79.5	120.4	
K	39	45	He	10212.321	ppb	1.6	118819.54	10000	20.42	79.5	120.4	
Ca	40	45	H2	2648.768	ppb	1.2	212837.61	2500	21.19	79.5	120.4	
V	51	89	He	510.667	ppb	1.7	86766.08	500	20.43	79.5	120.4	
Cr	52	89	He	213.892	ppb	2.1	44311.62	200	21.39	79.5	120.4	
Mn	55	89	He	525.244	ppb	1.3	51406.43	500	21.01	79.5	120.4	
Fe	56	89	H2	1069.318	ppb	1.0	353859.35	1000	21.39	79.5	120.4	
Co	59	89	He	535.683	ppb	1.6	190897.30	500	21.43	79.5	120.4	
Ni	60	89	He	536.698	ppb	1.2	51657.08	500	21.47	79.5	120.4	
Cu	63	89	He	265.571	ppb	1.6	72223.45	250	21.25	79.5	120.4	
Zn	66	89	He	528.171	ppb	1.9	18876.65	500	21.13	79.5	120.4	
As	75	89	He	107.800	ppb	1.4	3294.09	100	21.56	79.5	120.4	
Se	78	89	H2	102.552	ppb	1.2	1661.86	100	20.51	79.5	120.4	
Sr	88	89	He	517.298	ppb	0.6	78685.37	500	20.69	79.5	120.4	
Mo	95	89	He	107.315	ppb	1.0	18505.37	100	21.46	79.5	120.4	
Ag	107	89	He	53.619	ppb	2.4	31333.61	50	21.45	79.5	120.4	
Cd	111	89	He	270.908	ppb	2.4	20461.08	250	21.67	79.5	120.4	
Sn	118	159	He	553.369	ppb	1.3	96731.48	500	22.13	79.5	120.4	
Sb	121	159	No Gas	96.914	ppb	4.0	146187.31	100	19.38	79.5	120.4	
Ba	137	159	No Gas	1952.456	ppb	4.7	1153136.26	2000	19.52	79.5	120.4	
W	182	159	No Gas	102.576	ppb	5.7	116294.77	100	20.52	79.5	120.4	
Tl	205	209	No Gas	103.661	ppb	3.9	256416.53	100	20.73	79.5	120.4	
[Pb]	206	209	No Gas	103.888	ppb	3.5	89277.07	100	20.78	79.5	120.4	
[Pb]	207	209	No Gas	104.056	ppb	4.6	78428.36	100	20.81	79.5	120.4	
Pb	208	209	No Gas	103.904	ppb	4.1	355965.91	100	20.78	79.5	120.4	
Th	232	209	No Gas	102.786	ppb	5.8	358533.99	100	20.56	79.5	120.4	
U	238	209	No Gas	103.407	ppb	4.6	339992.43	100	20.68	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1599990.90	1.5	1745272.14	91.68	29.5	120.4	
Sc	45	No Gas	3814452.00	2.1	3932582.94	97	29.5	120.4	
Sc	45	H2	432952.36	0.5	485269.91	89.22	29.5	120.4	
Sc	45	He	87628.82	0.9	96164.21	91.12	29.5	120.4	
Ge	72	No Gas	883848.92	2.5	877152.82	100.76	29.5	120.4	
Ge	72	H2	163598.28	0.3	182501.5	89.64	29.5	120.4	
Ge	72	He	68262.63	1.5	74687.17	91.4	29.5	120.4	
Y	89	H2	2847796.70	0.4	3060772.3	93.04	29.5	120.4	
Y	89	He	594458.94	1.2	649886.7	91.47	29.5	120.4	
Tb	159	No Gas	9218520.63	2.2	8413567.03	109.57	29.5	120.4	
Tb	159	He	3313943.53	1.3	3319571.76	99.83	29.5	120.4	
Bi	209	No Gas	4818160.96	2.3	4391152.66	109.72	29.5	120.4	

Sample Report

Sample Name SN6056-018

File Name 159SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:22:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.740	ppb	5.2	234.45	100	
11	B	6	No Gas	19.581	ppb	1.6	4884.34	1000	
23	Na	45	He	-346.353	ppb	N/A	10872.79	200000	
24	Mg	45	He	1614.420	ppb	3.1	19022.75	200000	
27	Al	45	He	11154.854	ppb	1.8	49423.97	200000	
28	Si	45	H2	3009.903	ppb	1.4	26430.53	10000	
39	K	45	He	768.195	ppb	4.6	18558.78	200000	
40	Ca	45	H2	14855.621	ppb	1.9	1193647.45	200000	
51	V	89	He	23.519	ppb	2.1	4234.12	1000	
52	Cr	89	He	18.202	ppb	1.5	3829.17	2000	
55	Mn	89	He	232.944	ppb	1.8	22780.16	2000	
56	Fe	89	H2	7056.568	ppb	1.9	2333933.28	100000	
59	Co	89	He	3.361	ppb	14.0	1217.92	1000	
60	Ni	89	He	48.785	ppb	3.6	4912.15	1000	
63	Cu	89	He	57.603	ppb	1.9	15743.84	2000	
66	Zn	89	He	162.729	ppb	3.9	5864.77	2000	
75	As	89	He	7.303	ppb	11.3	226.36	1000	
78	Se	89	H2	4.200	ppb	5.6	69.00	1000	
88	Sr	89	He	48.001	ppb	4.0	7295.54	2000	
95	Mo	89	He	7.982	ppb	6.5	1377.90	1000	
107	Ag	89	He	0.792	ppb	9.5	465.59	100	
111	Cd	89	He	3.041	ppb	11.2	229.63	1000	
118	Sn	159	He	57.896	ppb	1.9	10155.34	1000	
121	Sb	159	No Gas	2.585	ppb	3.5	3941.67	1000	
137	Ba	159	No Gas	144.685	ppb	5.9	85474.64	2000	
182	W	159	No Gas	0.910	ppb	4.9	1067.90	1000	
205	Tl	209	No Gas	0.352	ppb	2.3	1238.12	1000	
208	Pb	209	No Gas	234.220	ppb	5.4	817023.98	2000	
232	Th	209	No Gas	3.751	ppb	2.0	13485.69	1000	
238	U	209	No Gas	1.645	ppb	7.9	5507.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1581649.51	2.2	1745272.14	90.62	29.5	120.4	
Sc	45	No Gas	3801935.84	3.3	3932582.94	96.68	29.5	120.4	
Sc	45	H2	434334.66	1.4	485269.91	89.5	29.5	120.4	
Sc	45	He	86518.55	1.2	96164.21	89.97	29.5	120.4	
Ge	72	No Gas	882670.52	2.9	877152.82	100.63	29.5	120.4	
Ge	72	H2	160455.50	1.1	182501.5	87.92	29.5	120.4	
Ge	72	He	67419.68	1.1	74687.17	90.27	29.5	120.4	
Y	89	H2	2862593.14	1.1	3060772.3	93.53	29.5	120.4	
Y	89	He	593678.36	1.1	649886.7	91.35	29.5	120.4	
Tb	159	No Gas	9223895.28	3.1	8413567.03	109.63	29.5	120.4	
Tb	159	He	3309891.09	1.3	3319571.76	99.71	29.5	120.4	
Bi	209	No Gas	4910607.52	3.3	4391152.66	111.83	29.5	120.4	

Sample Report

Sample Name SN6056-018L

File Name 160SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:24:39 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.697	ppb	14.7	88.89	100	
11	B	6	No Gas	32.143	ppb	13.3	2841.49	1000	
23	Na	45	He	-2523.515	ppb	N/A	7877.58	200000	
24	Mg	45	He	1510.718	ppb	1.9	4405.57	200000	
27	Al	45	He	11075.000	ppb	2.7	10089.44	200000	
28	Si	45	H2	3137.706	ppb	6.7	6052.01	10000	
39	K	45	He	772.792	ppb	19.6	12469.92	200000	
40	Ca	45	H2	15369.403	ppb	3.4	253845.09	200000	
51	V	89	He	21.301	ppb	4.7	995.63	1000	
52	Cr	89	He	17.621	ppb	9.1	812.55	2000	
55	Mn	89	He	234.894	ppb	2.1	4705.94	2000	
56	Fe	89	H2	7460.490	ppb	3.6	502411.91	100000	
59	Co	89	He	3.235	ppb	14.1	257.80	1000	
60	Ni	89	He	44.932	ppb	4.8	1127.87	1000	
63	Cu	89	He	55.718	ppb	4.8	3210.49	2000	
66	Zn	89	He	175.103	ppb	6.8	1353.45	2000	
75	As	89	He	8.411	ppb	5.6	56.34	1000	
78	Se	89	H2	4.696	ppb	6.0	16.17	1000	
88	Sr	89	He	47.031	ppb	2.6	1464.57	2000	
95	Mo	89	He	8.289	ppb	5.5	295.57	1000	
107	Ag	89	He	0.933	ppb	15.1	114.45	100	
111	Cd	89	He	2.581	ppb	22.5	40.00	1000	
118	Sn	159	He	59.039	ppb	4.4	2131.36	1000	
121	Sb	159	No Gas	2.801	ppb	4.9	864.32	1000	
137	Ba	159	No Gas	152.422	ppb	5.1	17604.58	2000	
182	W	159	No Gas	0.927	ppb	36.7	240.27	1000	
205	Tl	209	No Gas	-0.226	ppb	N/A	230.26	1000	
208	Pb	209	No Gas	245.292	ppb	3.2	166817.58	2000	
232	Th	209	No Gas	2.505	ppb	16.8	1875.58	1000	
238	U	209	No Gas	1.666	ppb	6.0	1087.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1590493.13	1.2	1745272.14	91.13	29.5	120.4	
Sc	45	No Gas	3759600.09	2.0	3932582.94	95.6	29.5	120.4	
Sc	45	H2	445537.95	3.6	485269.91	91.81	29.5	120.4	
Sc	45	He	88847.02	1.2	96164.21	92.39	29.5	120.4	
Ge	72	No Gas	864643.12	1.7	877152.82	98.57	29.5	120.4	
Ge	72	H2	166538.90	4.5	182501.5	91.25	29.5	120.4	
Ge	72	He	69096.23	0.8	74687.17	92.51	29.5	120.4	
Y	89	H2	2904780.10	2.6	3060772.3	94.9	29.5	120.4	
Y	89	He	605820.03	1.3	649886.7	93.22	29.5	120.4	
Tb	159	No Gas	9002368.13	1.9	8413567.03	107	29.5	120.4	
Tb	159	He	3343020.82	0.9	3319571.76	100.71	29.5	120.4	
Bi	209	No Gas	4777257.76	2.1	4391152.66	108.79	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	161_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 7:27:21 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	26.393	ppb	2.4	29897.19	25	105.57	89.8	110.2	
11	B	6	No Gas	26.438	ppb	3.5	20923.47	25	105.75	89.8	110.2	
23	Na	45	He	5001.601	ppb	2.9	531100.22	5000	100.03	89.8	110.2	
24	Mg	45	He	4914.641	ppb	1.8	280836.63	5000	98.29	89.8	110.2	
27	Al	45	He	478.029	ppb	1.4	10756.62	500	95.61	89.8	110.2	
28	Si	45	H2	469.801	ppb	5.4	20684.74	500	93.96	89.8	110.2	
39	K	45	He	4816.531	ppb	1.8	266154.23	5000	96.33	89.8	110.2	
40	Ca	45	H2	4854.785	ppb	1.9	1945435.04	5000	97.1	89.8	110.2	
51	V	89	He	24.017	ppb	1.0	20780.34	25	96.07	89.8	110.2	
52	Cr	89	He	24.454	ppb	0.5	25583.75	25	97.82	89.8	110.2	
55	Mn	89	He	24.609	ppb	1.7	12165.01	25	98.44	89.8	110.2	
56	Fe	89	H2	4773.757	ppb	2.0	7820756.68	5000	95.48	89.8	110.2	
59	Co	89	He	24.328	ppb	1.3	43746.43	25	97.31	89.8	110.2	
60	Ni	89	He	24.432	ppb	2.7	12051.12	25	97.73	89.8	110.2	
63	Cu	89	He	24.606	ppb	1.7	33820.65	25	98.42	89.8	110.2	
66	Zn	89	He	25.591	ppb	3.3	4675.39	25	102.36	89.8	110.2	
75	As	89	He	24.176	ppb	0.8	3725.25	25	96.7	89.8	110.2	
78	Se	89	H2	23.942	ppb	2.3	1932.88	25	95.77	89.8	110.2	
88	Sr	89	He	23.523	ppb	1.3	18052.48	25	94.09	89.8	110.2	
95	Mo	89	He	24.440	ppb	1.0	21252.66	25	97.76	89.8	110.2	
107	Ag	89	He	25.167	ppb	1.0	74179.29	25	100.67	89.8	110.2	
111	Cd	89	He	24.851	ppb	1.3	9467.83	25	99.4	89.8	110.2	
118	Sn	159	He	23.251	ppb	3.5	20463.90	25	93	89.8	110.2	
121	Sb	159	No Gas	25.475	ppb	3.3	175375.93	25	101.9	89.8	110.2	
137	Ba	159	No Gas	25.888	ppb	2.7	69807.70	25	103.55	89.8	110.2	
182	W	159	No Gas	25.713	ppb	3.5	133065.24	25	102.85	89.8	110.2	
205	Tl	209	No Gas	26.299	ppb	3.3	297600.33	25	105.2	89.8	110.2	
208	Pb	209	No Gas	26.188	ppb	3.2	410522.05	25	104.75	89.8	110.2	
232	Th	209	No Gas	26.445	ppb	3.6	422220.52	25	105.78	89.8	110.2	
238	U	209	No Gas	26.660	ppb	3.2	401192.71	25	106.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1472297.22	3.6	1745272.14	84.36	29.5	120.4	
Sc	45	No Gas	3523154.10	2.8	3932582.94	89.59	29.5	120.4	
Sc	45	H2	433344.08	1.5	485269.91	89.3	29.5	120.4	
Sc	45	He	87780.05	1.5	96164.21	91.28	29.5	120.4	
Ge	72	No Gas	811411.99	5.0	877152.82	92.51	29.5	120.4	
Ge	72	H2	161599.50	2.2	182501.5	88.55	29.5	120.4	
Ge	72	He	68587.66	1.7	74687.17	91.83	29.5	120.4	
Y	89	H2	2838033.14	1.5	3060772.3	92.72	29.5	120.4	
Y	89	He	599629.24	0.9	649886.7	92.27	29.5	120.4	
Tb	159	No Gas	8414332.24	3.0	8413567.03	100.01	29.5	120.4	
Tb	159	He	3330970.30	0.9	3319571.76	100.34	29.5	120.4	
Bi	209	No Gas	4409725.87	2.9	4391152.66	100.42	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	162_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 7:29:58 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.048	ppb	43.1	114.45	0.2	
11	B	6	No Gas	0.960	ppb	19.2	2592.55	4	
23	Na	45	He	-104.211	ppb	N/A	7613.81	200	Failed DoD
24	Mg	45	He	-6.354	ppb	N/A	560.05	20	
27	Al	45	He	0.638	ppb	115.4	30.00	20	
28	Si	45	H2	0.363	ppb	666.1	523.93	100	
39	K	45	He	5.537	ppb	158.3	11211.08	200	
40	Ca	45	H2	4.547	ppb	80.5	2655.13	20	
51	V	89	He	-0.098	ppb	N/A	175.56	1	
52	Cr	89	He	-0.010	ppb	N/A	58.66	1	
55	Mn	89	He	0.004	ppb	541.7	24.66	0.4	
56	Fe	89	H2	4.020	ppb	79.9	8950.35	20	
59	Co	89	He	0.013	ppb	27.4	46.67	0.2	
60	Ni	89	He	-0.323	ppb	N/A	93.34	0.4	Failed DoD
63	Cu	89	He	-0.018	ppb	N/A	103.34	0.6	
66	Zn	89	He	0.583	ppb	28.5	188.90	2	
75	As	89	He	0.004	ppb	105.3	4.67	1	
78	Se	89	H2	0.035	ppb	17.6	3.50	1	
88	Sr	89	He	0.006	ppb	173.7	11.11	1	
95	Mo	89	He	0.074	ppb	22.0	68.89	1	
107	Ag	89	He	0.009	ppb	23.1	31.11	0.2	
111	Cd	89	He	0.006	ppb	103.5	2.59	0.2	
118	Sn	159	He	0.030	ppb	61.9	75.56	1	
121	Sb	159	No Gas	0.025	ppb	13.9	220.25	0.2	
137	Ba	159	No Gas	0.033	ppb	37.8	113.46	0.4	
182	W	159	No Gas	0.064	ppb	6.2	380.43	1	
205	Tl	209	No Gas	0.006	ppb	120.9	400.45	0.2	
208	Pb	209	No Gas	0.022	ppb	46.1	627.38	0.2	
232	Th	209	No Gas	0.057	ppb	14.0	1101.29	1	
238	U	209	No Gas	0.027	ppb	6.9	427.15	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1593228.30	2.7	1745272.14	91.29	29.5	120.4	
Sc	45	No Gas	3756219.16	4.5	3932582.94	95.52	29.5	120.4	
Sc	45	H2	443871.97	1.9	485269.91	91.47	29.5	120.4	
Sc	45	He	89725.12	3.0	96164.21	93.3	29.5	120.4	
Ge	72	No Gas	854760.89	3.7	877152.82	97.45	29.5	120.4	
Ge	72	H2	166226.16	2.3	182501.5	91.08	29.5	120.4	
Ge	72	He	69717.12	1.4	74687.17	93.35	29.5	120.4	
Y	89	H2	2867832.00	1.2	3060772.3	93.7	29.5	120.4	
Y	89	He	607813.18	1.9	649886.7	93.53	29.5	120.4	
Tb	159	No Gas	8767983.69	4.4	8413567.03	104.21	29.5	120.4	
Tb	159	He	3308596.37	2.1	3319571.76	99.67	29.5	120.4	
Bi	209	No Gas	4606676.10	4.3	4391152.66	104.91	29.5	120.4	

Sample Report

Sample Name SN6056-018A

File Name 163SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:32:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.680	ppb	10.1	2849.27	100	
11	B	6	No Gas	227.152	ppb	5.4	36807.64	1000	
23	Na	45	He	10977.086	ppb	1.3	236752.77	200000	
24	Mg	45	He	2816.614	ppb	2.4	32106.65	200000	
27	Al	45	He	12946.071	ppb	2.8	56609.40	200000	
28	Si	45	H2	8257.958	ppb	3.6	70264.33	10000	
39	K	45	He	11220.543	ppb	1.7	126205.08	200000	
40	Ca	45	H2	17224.391	ppb	3.2	1357355.19	200000	
51	V	89	He	77.739	ppb	1.0	13250.02	1000	
52	Cr	89	He	72.770	ppb	1.1	14923.24	2000	
55	Mn	89	He	267.960	ppb	1.7	25890.96	2000	
56	Fe	89	H2	8650.742	ppb	3.6	2820365.61	100000	
59	Co	89	He	14.815	ppb	3.1	5232.45	1000	
60	Ni	89	He	77.657	ppb	2.2	7583.43	1000	
63	Cu	89	He	94.656	ppb	1.0	25485.05	2000	
66	Zn	89	He	286.483	ppb	4.7	10139.59	2000	
75	As	89	He	59.964	ppb	3.0	1809.65	1000	
78	Se	89	H2	54.791	ppb	4.1	880.16	1000	
88	Sr	89	He	103.904	ppb	2.3	15600.50	2000	
95	Mo	89	He	61.426	ppb	2.4	10453.23	1000	
107	Ag	89	He	12.170	ppb	2.5	7020.96	100	
111	Cd	89	He	14.365	ppb	5.8	1070.80	1000	
118	Sn	159	He	111.487	ppb	2.1	19421.24	1000	
121	Sb	159	No Gas	13.101	ppb	5.5	18894.32	1000	
137	Ba	159	No Gas	181.543	ppb	7.1	102318.83	2000	
182	W	159	No Gas	54.523	ppb	5.1	59029.61	1000	
205	Tl	209	No Gas	11.240	ppb	6.5	27266.25	1000	
208	Pb	209	No Gas	270.205	ppb	6.4	897450.74	2000	
232	Th	209	No Gas	15.062	ppb	8.3	51071.33	1000	
238	U	209	No Gas	12.764	ppb	7.3	40697.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1560651.56	3.3	1745272.14	89.42	29.5	120.4	
Sc	45	No Gas	3660267.02	3.0	3932582.94	93.08	29.5	120.4	
Sc	45	H2	426151.22	2.3	485269.91	87.82	29.5	120.4	
Sc	45	He	85406.02	1.7	96164.21	88.81	29.5	120.4	
Ge	72	No Gas	842988.34	3.2	877152.82	96.11	29.5	120.4	
Ge	72	H2	157701.10	2.4	182501.5	86.41	29.5	120.4	
Ge	72	He	66472.70	0.8	74687.17	89	29.5	120.4	
Y	89	H2	2823801.85	2.8	3060772.3	92.26	29.5	120.4	
Y	89	He	586640.87	1.0	649886.7	90.27	29.5	120.4	
Tb	159	No Gas	8803856.05	3.5	8413567.03	104.64	29.5	120.4	
Tb	159	He	3295833.35	1.0	3319571.76	99.28	29.5	120.4	
Bi	209	No Gas	4677185.36	3.4	4391152.66	106.51	29.5	120.4	

Sample Report

Sample Name SN6056-018S

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:35:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.069	ppb	5.4	11151.33	100	
11	B	6	No Gas	488.905	ppb	4.8	77578.32	1000	
23	Na	45	He	6729.809	ppb	2.4	151418.31	200000	
24	Mg	45	He	6824.247	ppb	3.0	76239.23	200000	
27	Al	45	He	18355.222	ppb	1.9	79981.46	200000	
28	Si	45	H2	3551.814	ppb	6.2	30634.55	10000	
39	K	45	He	10662.750	ppb	2.3	120007.89	200000	
40	Ca	45	H2	19421.201	ppb	3.1	1537754.82	200000	
51	V	89	He	484.683	ppb	1.4	81587.57	1000	
52	Cr	89	He	203.287	ppb	2.4	41721.58	2000	
55	Mn	89	He	722.300	ppb	2.0	70013.52	2000	
56	Fe	89	H2	8245.851	ppb	3.2	2702903.72	100000	
59	Co	89	He	481.598	ppb	1.7	170004.85	1000	
60	Ni	89	He	506.828	ppb	1.8	48333.26	1000	
63	Cu	89	He	297.996	ppb	1.8	80260.70	2000	
66	Zn	89	He	628.225	ppb	2.4	22226.12	2000	
75	As	89	He	100.725	ppb	1.0	3049.01	1000	
78	Se	89	H2	96.413	ppb	4.1	1556.35	1000	
88	Sr	89	He	515.621	ppb	1.0	77685.95	2000	
95	Mo	89	He	103.901	ppb	2.5	17744.25	1000	
107	Ag	89	He	49.364	ppb	1.6	28576.43	100	
111	Cd	89	He	244.743	ppb	2.4	18310.99	1000	
118	Sn	159	He	500.182	ppb	0.9	87537.20	1000	
121	Sb	159	No Gas	76.823	ppb	5.7	114286.92	1000	
137	Ba	159	No Gas	1930.208	ppb	4.8	1124519.61	2000	
182	W	159	No Gas	90.456	ppb	5.1	101175.59	1000	
205	Tl	209	No Gas	94.029	ppb	6.1	232643.85	1000	
208	Pb	209	No Gas	252.341	ppb	5.5	864307.66	2000	
232	Th	209	No Gas	88.128	ppb	6.4	307501.20	1000	
238	U	209	No Gas	94.835	ppb	7.3	311767.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1568322.60	1.8	1745272.14	89.86	29.5	120.4	
Sc	45	No Gas	3714455.71	2.9	3932582.94	94.45	29.5	120.4	
Sc	45	H2	428196.08	2.2	485269.91	88.24	29.5	120.4	
Sc	45	He	85099.49	1.5	96164.21	88.49	29.5	120.4	
Ge	72	No Gas	859266.05	2.5	877152.82	97.96	29.5	120.4	
Ge	72	H2	156385.96	2.2	182501.5	85.69	29.5	120.4	
Ge	72	He	66676.13	1.2	74687.17	89.27	29.5	120.4	
Y	89	H2	2838471.03	2.4	3060772.3	92.74	29.5	120.4	
Y	89	He	588816.00	0.7	649886.7	90.6	29.5	120.4	
Tb	159	No Gas	9094859.94	2.6	8413567.03	108.1	29.5	120.4	
Tb	159	He	3317460.19	0.9	3319571.76	99.94	29.5	120.4	
Bi	209	No Gas	4821703.72	3.1	4391152.66	109.8	29.5	120.4	

Sample Report

Sample Name SN6056-018P

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:37:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.012	ppb	8.1	12369.04	100	
11	B	6	No Gas	524.000	ppb	5.7	83235.91	1000	
23	Na	45	He	7178.993	ppb	1.6	161839.05	200000	
24	Mg	45	He	7143.658	ppb	0.3	80529.09	200000	
27	Al	45	He	15094.562	ppb	1.6	66380.13	200000	
28	Si	45	H2	3366.597	ppb	3.1	29480.57	10000	
39	K	45	He	10857.259	ppb	1.6	123139.84	200000	
40	Ca	45	H2	19077.521	ppb	3.3	1531654.51	200000	
51	V	89	He	519.921	ppb	1.1	88637.31	1000	
52	Cr	89	He	222.328	ppb	1.0	46217.30	2000	
55	Mn	89	He	752.237	ppb	0.7	73866.13	2000	
56	Fe	89	H2	8406.875	ppb	3.8	2803276.62	100000	
59	Co	89	He	519.721	ppb	2.2	185828.61	1000	
60	Ni	89	He	556.204	ppb	1.7	53706.11	1000	
63	Cu	89	He	316.226	ppb	1.4	86268.12	2000	
66	Zn	89	He	671.436	ppb	2.6	24054.76	2000	
75	As	89	He	107.766	ppb	1.8	3303.76	1000	
78	Se	89	H2	102.602	ppb	4.2	1684.86	1000	
88	Sr	89	He	553.892	ppb	1.5	84531.78	2000	
95	Mo	89	He	110.173	ppb	2.7	19061.63	1000	
107	Ag	89	He	51.144	ppb	1.2	29991.61	100	
111	Cd	89	He	263.141	ppb	2.0	19942.91	1000	
118	Sn	159	He	546.060	ppb	1.2	96512.35	1000	
121	Sb	159	No Gas	88.220	ppb	7.0	131638.73	1000	
137	Ba	159	No Gas	2082.713	ppb	7.2	1216807.08	2000	
182	W	159	No Gas	98.007	ppb	6.5	109959.80	1000	
205	Tl	209	No Gas	100.176	ppb	7.3	248712.53	1000	
208	Pb	209	No Gas	354.012	ppb	7.4	1216510.28	2000	
232	Th	209	No Gas	99.664	ppb	8.1	348915.99	1000	
238	U	209	No Gas	104.240	ppb	7.8	343934.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1573483.69	3.3	1745272.14	90.16	29.5	120.4	
Sc	45	No Gas	3716835.20	4.8	3932582.94	94.51	29.5	120.4	
Sc	45	H2	434161.27	2.2	485269.91	89.47	29.5	120.4	
Sc	45	He	85885.11	1.7	96164.21	89.31	29.5	120.4	
Ge	72	No Gas	864672.77	4.7	877152.82	98.58	29.5	120.4	
Ge	72	H2	162457.92	1.8	182501.5	89.02	29.5	120.4	
Ge	72	He	67548.91	1.0	74687.17	90.44	29.5	120.4	
Y	89	H2	2887299.13	2.0	3060772.3	94.33	29.5	120.4	
Y	89	He	596479.34	1.2	649886.7	91.78	29.5	120.4	
Tb	159	No Gas	9132225.98	4.4	8413567.03	108.54	29.5	120.4	
Tb	159	He	3350564.88	1.2	3319571.76	100.93	29.5	120.4	
Bi	209	No Gas	4843792.68	4.7	4391152.66	110.31	29.5	120.4	

Sample Report

Sample Name SN6056-019

File Name 166SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:40:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.237	ppb	16.0	347.80	100	
11	B	6	No Gas	34.937	ppb	2.9	7138.68	1000	
23	Na	45	He	-320.439	ppb	N/A	11437.28	200000	
24	Mg	45	He	3330.336	ppb	1.7	38422.76	200000	
27	Al	45	He	27017.648	ppb	1.9	120087.92	200000	
28	Si	45	H2	2627.231	ppb	4.3	23184.81	10000	
39	K	45	He	1985.720	ppb	1.9	31396.92	200000	
40	Ca	45	H2	16529.694	ppb	0.9	1331664.27	200000	
51	V	89	He	46.357	ppb	4.0	8164.88	1000	
52	Cr	89	He	30.872	ppb	2.9	6500.33	2000	
55	Mn	89	He	318.637	ppb	2.2	31417.10	2000	
56	Fe	89	H2	7652.020	ppb	1.2	2538565.87	100000	
59	Co	89	He	3.121	ppb	8.7	1142.36	1000	
60	Ni	89	He	17.704	ppb	12.6	1955.76	1000	
63	Cu	89	He	51.064	ppb	2.4	14088.71	2000	
66	Zn	89	He	553.355	ppb	2.4	19914.83	2000	
75	As	89	He	11.328	ppb	7.0	352.04	1000	
78	Se	89	H2	4.621	ppb	6.6	76.17	1000	
88	Sr	89	He	54.275	ppb	3.8	8318.35	2000	
95	Mo	89	He	9.596	ppb	1.8	1670.17	1000	
107	Ag	89	He	1.079	ppb	8.5	637.82	100	
111	Cd	89	He	4.474	ppb	5.3	340.75	1000	
118	Sn	159	He	57.714	ppb	1.5	10159.75	1000	
121	Sb	159	No Gas	1.014	ppb	8.6	1565.18	1000	
137	Ba	159	No Gas	306.587	ppb	4.0	180771.16	2000	
182	W	159	No Gas	0.613	ppb	6.2	730.84	1000	
205	Tl	209	No Gas	2.434	ppb	5.6	6485.58	1000	
208	Pb	209	No Gas	97.525	ppb	4.1	340897.65	2000	
232	Th	209	No Gas	9.447	ppb	5.4	33789.31	1000	
238	U	209	No Gas	2.639	ppb	1.9	8859.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1550052.88	1.3	1745272.14	88.81	29.5	120.4	
Sc	45	No Gas	3751851.12	1.5	3932582.94	95.4	29.5	120.4	
Sc	45	H2	435471.95	1.7	485269.91	89.74	29.5	120.4	
Sc	45	He	86811.73	1.1	96164.21	90.27	29.5	120.4	
Ge	72	No Gas	869131.71	1.5	877152.82	99.09	29.5	120.4	
Ge	72	H2	159422.97	1.9	182501.5	87.35	29.5	120.4	
Ge	72	He	67291.71	1.9	74687.17	90.1	29.5	120.4	
Y	89	H2	2871484.28	1.7	3060772.3	93.82	29.5	120.4	
Y	89	He	598769.28	1.5	649886.7	92.13	29.5	120.4	
Tb	159	No Gas	9200146.18	1.8	8413567.03	109.35	29.5	120.4	
Tb	159	He	3322535.23	1.2	3319571.76	100.09	29.5	120.4	
Bi	209	No Gas	4915000.35	1.8	4391152.66	111.93	29.5	120.4	

Sample Report

Sample Name SN6056-020

File Name 167SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:43:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.465	ppb	16.7	162.23	100	
11	B	6	No Gas	17.872	ppb	5.4	4474.16	1000	
23	Na	45	He	-351.475	ppb	N/A	10448.70	200000	
24	Mg	45	He	2670.683	ppb	2.7	29964.31	200000	
27	Al	45	He	16588.680	ppb	3.6	71285.91	200000	
28	Si	45	H2	3007.710	ppb	4.3	26143.29	10000	
39	K	45	He	1729.931	ppb	4.1	27762.80	200000	
40	Ca	45	H2	11595.180	ppb	3.5	922393.49	200000	
51	V	89	He	30.700	ppb	2.5	5312.30	1000	
52	Cr	89	He	20.102	ppb	4.3	4113.86	2000	
55	Mn	89	He	205.756	ppb	3.0	19618.05	2000	
56	Fe	89	H2	8459.457	ppb	4.7	2780449.94	100000	
59	Co	89	He	4.552	ppb	13.4	1597.99	1000	
60	Ni	89	He	22.357	ppb	10.4	2321.39	1000	
63	Cu	89	He	37.109	ppb	3.6	9930.55	2000	
66	Zn	89	He	191.213	ppb	2.0	6706.28	2000	
75	As	89	He	6.954	ppb	8.8	210.69	1000	
78	Se	89	H2	2.919	ppb	20.3	47.67	1000	
88	Sr	89	He	31.325	ppb	4.1	4643.19	2000	
95	Mo	89	He	4.121	ppb	4.3	695.60	1000	
107	Ag	89	He	0.561	ppb	6.3	322.24	100	
111	Cd	89	He	2.402	ppb	9.0	177.04	1000	
118	Sn	159	He	56.392	ppb	4.6	9732.77	1000	
121	Sb	159	No Gas	0.589	ppb	16.9	921.06	1000	
137	Ba	159	No Gas	144.681	ppb	6.3	84763.23	2000	
182	W	159	No Gas	0.414	ppb	18.4	503.91	1000	
205	Tl	209	No Gas	0.814	ppb	9.2	2386.24	1000	
208	Pb	209	No Gas	114.559	ppb	6.2	397326.38	2000	
232	Th	209	No Gas	4.158	ppb	8.2	14825.28	1000	
238	U	209	No Gas	1.359	ppb	5.4	4525.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1533681.22	2.6	1745272.14	87.88	29.5	120.4	
Sc	45	No Gas	3709693.76	3.1	3932582.94	94.33	29.5	120.4	
Sc	45	H2	430224.28	3.7	485269.91	88.66	29.5	120.4	
Sc	45	He	83970.68	3.0	96164.21	87.32	29.5	120.4	
Ge	72	No Gas	861775.87	2.7	877152.82	98.25	29.5	120.4	
Ge	72	H2	159221.62	3.8	182501.5	87.24	29.5	120.4	
Ge	72	He	65775.80	2.8	74687.17	88.07	29.5	120.4	
Y	89	H2	2848542.79	4.2	3060772.3	93.07	29.5	120.4	
Y	89	He	579022.10	3.1	649886.7	89.1	29.5	120.4	
Tb	159	No Gas	9146845.90	2.8	8413567.03	108.72	29.5	120.4	
Tb	159	He	3259736.93	3.1	3319571.76	98.2	29.5	120.4	
Bi	209	No Gas	4880825.60	2.9	4391152.66	111.15	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 168SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:45:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.024	ppb	574.2	57.78	100	
11	B	6	No Gas	6.173	ppb	8.5	2682.56	1000	
23	Na	45	He	-450.582	ppb	N/A	8708.99	200000	
24	Mg	45	He	-23.727	ppb	N/A	626.73	200000	
27	Al	45	He	14.847	ppb	43.0	80.00	200000	
28	Si	45	H2	17.414	ppb	42.0	647.40	10000	
39	K	45	He	37.925	ppb	70.0	10850.97	200000	
40	Ca	45	H2	40.365	ppb	5.9	4030.72	200000	
51	V	89	He	1.442	ppb	7.1	496.69	1000	
52	Cr	89	He	0.272	ppb	30.6	123.98	2000	
55	Mn	89	He	0.330	ppb	6.8	53.99	2000	
56	Fe	89	H2	12.408	ppb	3.1	6465.34	100000	
59	Co	89	He	0.031	ppb	2.1	33.34	1000	
60	Ni	89	He	-1.483	ppb	N/A	103.34	1000	
63	Cu	89	He	0.289	ppb	24.6	203.34	2000	
66	Zn	89	He	16.044	ppb	4.5	648.93	2000	
75	As	89	He	0.243	ppb	27.9	11.33	1000	
78	Se	89	H2	0.074	ppb	86.9	1.83	1000	
88	Sr	89	He	0.100	ppb	92.2	21.11	2000	
95	Mo	89	He	0.086	ppb	46.7	18.89	1000	
107	Ag	89	He	0.020	ppb	34.3	14.45	100	
111	Cd	89	He	0.045	ppb	83.6	3.70	1000	
118	Sn	159	He	0.966	ppb	7.0	218.90	1000	
121	Sb	159	No Gas	0.020	ppb	52.7	70.08	1000	
137	Ba	159	No Gas	0.754	ppb	14.9	463.86	2000	
182	W	159	No Gas	0.048	ppb	43.8	90.10	1000	
205	Tl	209	No Gas	-0.115	ppb	N/A	60.06	1000	
208	Pb	209	No Gas	0.120	ppb	12.5	687.45	2000	
232	Th	209	No Gas	0.128	ppb	9.0	590.68	1000	
238	U	209	No Gas	0.013	ppb	55.7	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1523222.61	3.3	1745272.14	87.28	29.5	120.4	
Sc	45	No Gas	3703036.68	2.6	3932582.94	94.16	29.5	120.4	
Sc	45	H2	434098.28	0.6	485269.91	89.46	29.5	120.4	
Sc	45	He	85942.51	1.1	96164.21	89.37	29.5	120.4	
Ge	72	No Gas	862322.97	3.6	877152.82	98.31	29.5	120.4	
Ge	72	H2	160857.29	1.2	182501.5	88.14	29.5	120.4	
Ge	72	He	67182.36	0.2	74687.17	89.95	29.5	120.4	
Y	89	H2	2877636.34	0.3	3060772.3	94.02	29.5	120.4	
Y	89	He	591364.90	0.7	649886.7	91	29.5	120.4	
Tb	159	No Gas	9119237.64	3.2	8413567.03	108.39	29.5	120.4	
Tb	159	He	3317457.28	0.6	3319571.76	99.94	29.5	120.4	
Bi	209	No Gas	4797539.19	2.9	4391152.66	109.25	29.5	120.4	

Sample Report

Sample Name SN5311-003

File Name 169SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:48:34 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.037	ppb	76.3	61.12	100	
11	B	6	No Gas	95.896	ppb	5.1	16137.25	1000	
23	Na	45	He	84512.284	ppb	1.8	1733454.00	200000	
24	Mg	45	He	15569.620	ppb	2.8	176389.44	200000	
27	Al	45	He	31.370	ppb	8.5	154.45	200000	
28	Si	45	H2	1609.437	ppb	2.4	14176.21	10000	
39	K	45	He	4878.069	ppb	3.0	61768.04	200000	
40	Ca	45	H2	45631.264	ppb	4.1	3615880.19	200000	
51	V	89	He	2.728	ppb	16.3	716.71	1000	
52	Cr	89	He	0.758	ppb	12.4	225.29	2000	
55	Mn	89	He	28.018	ppb	3.9	2761.11	2000	
56	Fe	89	H2	24.934	ppb	4.0	10452.15	100000	
59	Co	89	He	0.231	ppb	26.7	104.45	1000	
60	Ni	89	He	1.005	ppb	7.8	342.24	1000	
63	Cu	89	He	3.250	ppb	2.5	1007.85	2000	
66	Zn	89	He	10.368	ppb	9.6	450.03	2000	
75	As	89	He	1.074	ppb	21.6	36.67	1000	
78	Se	89	H2	0.464	ppb	52.6	8.17	1000	
88	Sr	89	He	178.040	ppb	1.8	27074.09	2000	
95	Mo	89	He	1.562	ppb	8.8	273.35	1000	
107	Ag	89	He	0.043	ppb	35.9	27.78	100	
111	Cd	89	He	0.035	ppb	87.3	2.96	1000	
118	Sn	159	He	0.796	ppb	10.4	188.90	1000	
121	Sb	159	No Gas	0.400	ppb	24.1	630.72	1000	
137	Ba	159	No Gas	57.107	ppb	5.0	33188.19	2000	
182	W	159	No Gas	0.141	ppb	19.6	193.55	1000	
205	Tl	209	No Gas	-0.107	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.200	ppb	15.0	934.39	2000	
232	Th	209	No Gas	0.056	ppb	6.1	330.37	1000	
238	U	209	No Gas	0.497	ppb	15.0	1581.89	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1518584.70	2.3	1745272.14	87.01	29.5	120.4	
Sc	45	No Gas	3704931.36	2.3	3932582.94	94.21	29.5	120.4	
Sc	45	H2	428827.59	3.1	485269.91	88.37	29.5	120.4	
Sc	45	He	86853.67	1.1	96164.21	90.32	29.5	120.4	
Ge	72	No Gas	863674.41	1.8	877152.82	98.46	29.5	120.4	
Ge	72	H2	161641.40	3.2	182501.5	88.57	29.5	120.4	
Ge	72	He	68425.71	1.5	74687.17	91.62	29.5	120.4	
Y	89	H2	2831871.28	2.5	3060772.3	92.52	29.5	120.4	
Y	89	He	594263.84	1.8	649886.7	91.44	29.5	120.4	
Tb	159	No Gas	9065034.31	2.0	8413567.03	107.74	29.5	120.4	
Tb	159	He	3314005.68	1.5	3319571.76	99.83	29.5	120.4	
Bi	209	No Gas	4674709.96	2.2	4391152.66	106.46	29.5	120.4	

Sample Report

Sample Name SN5311-003L

File Name 170SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:51:13 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.108	ppb	N/A	46.67	100	
11	B	6	No Gas	122.261	ppb	2.0	5303.39	1000	
23	Na	45	He	88292.433	ppb	0.5	380349.91	200000	
24	Mg	45	He	16005.465	ppb	1.7	37373.16	200000	
27	Al	45	He	36.243	ppb	51.4	47.78	200000	
28	Si	45	H2	1588.005	ppb	10.0	3320.72	10000	
39	K	45	He	5215.043	ppb	3.3	21740.04	200000	
40	Ca	45	H2	47242.932	ppb	2.1	779426.26	200000	
51	V	89	He	2.885	ppb	30.0	354.46	1000	
52	Cr	89	He	0.496	ppb	18.8	89.31	2000	
55	Mn	89	He	28.944	ppb	6.6	591.24	2000	
56	Fe	89	H2	27.425	ppb	7.9	4185.32	100000	
59	Co	89	He	0.401	ppb	13.9	51.12	1000	
60	Ni	89	He	-4.815	ppb	N/A	154.45	1000	
63	Cu	89	He	2.406	ppb	11.9	257.79	2000	
66	Zn	89	He	12.805	ppb	9.8	173.34	2000	
75	As	89	He	1.144	ppb	13.7	11.00	1000	
78	Se	89	H2	0.061	ppb	146.3	0.83	1000	
88	Sr	89	He	186.008	ppb	0.5	5691.41	2000	
95	Mo	89	He	1.774	ppb	12.5	65.56	1000	
107	Ag	89	He	0.116	ppb	64.5	16.67	100	
111	Cd	89	He	0.173	ppb	129.5	2.96	1000	
118	Sn	159	He	1.099	ppb	50.3	87.78	1000	
121	Sb	159	No Gas	0.545	ppb	24.1	190.22	1000	
137	Ba	159	No Gas	63.309	ppb	2.0	6979.67	2000	
182	W	159	No Gas	0.218	ppb	5.0	80.09	1000	
205	Tl	209	No Gas	-0.601	ppb	N/A	43.38	1000	
208	Pb	209	No Gas	0.340	ppb	53.1	473.87	2000	
232	Th	209	No Gas	0.080	ppb	99.0	186.88	1000	
238	U	209	No Gas	0.529	ppb	3.5	323.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1486209.16	3.1	1745272.14	85.16	29.5	120.4	
Sc	45	No Gas	3605240.19	2.4	3932582.94	91.68	29.5	120.4	
Sc	45	H2	445722.66	1.0	485269.91	91.85	29.5	120.4	
Sc	45	He	87754.62	0.7	96164.21	91.25	29.5	120.4	
Ge	72	No Gas	826379.33	4.3	877152.82	94.21	29.5	120.4	
Ge	72	H2	167573.34	2.9	182501.5	91.82	29.5	120.4	
Ge	72	He	68767.82	0.2	74687.17	92.07	29.5	120.4	
Y	89	H2	2890473.21	1.4	3060772.3	94.44	29.5	120.4	
Y	89	He	597267.52	0.3	649886.7	91.9	29.5	120.4	
Tb	159	No Gas	8573169.32	2.9	8413567.03	101.9	29.5	120.4	
Tb	159	He	3295599.33	0.2	3319571.76	99.28	29.5	120.4	
Bi	209	No Gas	4476237.54	2.6	4391152.66	101.94	29.5	120.4	

Sample Report

Sample Name SN5311-003A

File Name 171SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:53:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	11.392	ppb	6.0	2691.45	100	
11	B	6	No Gas	333.948	ppb	3.2	51513.61	1000	
23	Na	45	He	104863.162	ppb	1.4	2131209.86	200000	
24	Mg	45	He	18264.547	ppb	1.8	205298.69	200000	
27	Al	45	He	1053.172	ppb	2.9	4664.25	200000	
28	Si	45	H2	6929.575	ppb	2.5	59600.29	10000	
39	K	45	He	16076.733	ppb	1.4	178039.60	200000	
40	Ca	45	H2	52413.120	ppb	1.1	4167696.43	200000	
51	V	89	He	58.390	ppb	1.3	10112.88	1000	
52	Cr	89	He	56.366	ppb	2.1	11688.71	2000	
55	Mn	89	He	52.229	ppb	1.4	5114.02	2000	
56	Fe	89	H2	1134.304	ppb	1.2	371735.88	100000	
59	Co	89	He	11.914	ppb	7.1	4252.06	1000	
60	Ni	89	He	25.055	ppb	3.7	2637.02	1000	
63	Cu	89	He	36.751	ppb	2.4	10070.64	2000	
66	Zn	89	He	123.066	ppb	3.2	4445.31	2000	
75	As	89	He	55.899	ppb	2.1	1703.96	1000	
78	Se	89	H2	53.493	ppb	1.5	859.16	1000	
88	Sr	89	He	250.912	ppb	0.9	38037.96	2000	
95	Mo	89	He	57.841	ppb	1.7	9940.63	1000	
107	Ag	89	He	11.842	ppb	4.4	6898.67	100	
111	Cd	89	He	11.490	ppb	3.5	865.22	1000	
118	Sn	159	He	52.715	ppb	2.0	9245.69	1000	
121	Sb	159	No Gas	11.604	ppb	3.2	16909.57	1000	
137	Ba	159	No Gas	85.910	ppb	1.6	48950.53	2000	
182	W	159	No Gas	54.995	ppb	1.9	60149.96	1000	
205	Tl	209	No Gas	11.791	ppb	3.8	27991.97	1000	
208	Pb	209	No Gas	11.700	ppb	2.8	38311.77	2000	
232	Th	209	No Gas	11.901	ppb	4.7	39556.83	1000	
238	U	209	No Gas	12.322	ppb	2.9	38492.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1507835.42	1.1	1745272.14	86.4	29.5	120.4	
Sc	45	No Gas	3648441.13	1.4	3932582.94	92.77	29.5	120.4	
Sc	45	H2	429937.78	0.7	485269.91	88.6	29.5	120.4	
Sc	45	He	86223.90	0.3	96164.21	89.66	29.5	120.4	
Ge	72	No Gas	849405.00	2.0	877152.82	96.84	29.5	120.4	
Ge	72	H2	160752.70	0.9	182501.5	88.08	29.5	120.4	
Ge	72	He	68012.17	1.2	74687.17	91.06	29.5	120.4	
Y	89	H2	2821297.24	1.0	3060772.3	92.18	29.5	120.4	
Y	89	He	592414.36	0.8	649886.7	91.16	29.5	120.4	
Tb	159	No Gas	8885216.81	1.5	8413567.03	105.61	29.5	120.4	
Tb	159	He	3308736.41	0.6	3319571.76	99.67	29.5	120.4	
Bi	209	No Gas	4575675.20	1.9	4391152.66	104.2	29.5	120.4	

Sample Report

Sample Name SN5311-003S

File Name 172SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b

Acq Time 7/28/2020 7:56:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	57.047	ppb	4.3	13431.09	100	
11	B	6	No Gas	687.878	ppb	4.7	105539.46	1000	
23	Na	45	He	104942.254	ppb	0.8	2144171.15	200000	
24	Mg	45	He	23526.167	ppb	0.5	265596.95	200000	
27	Al	45	He	2164.809	ppb	2.7	9622.44	200000	
28	Si	45	H2	2998.660	ppb	3.9	25477.61	10000	
39	K	45	He	16672.359	ppb	0.7	185228.36	200000	
40	Ca	45	H2	56265.269	ppb	1.8	4373026.77	200000	
51	V	89	He	568.208	ppb	1.6	96729.01	1000	
52	Cr	89	He	229.755	ppb	2.2	47700.56	2000	
55	Mn	89	He	601.745	ppb	1.7	59019.82	2000	
56	Fe	89	H2	1185.581	ppb	1.3	384450.41	100000	
59	Co	89	He	577.059	ppb	1.4	206103.50	1000	
60	Ni	89	He	586.685	ppb	0.9	56571.80	1000	
63	Cu	89	He	288.957	ppb	1.4	78748.55	2000	
66	Zn	89	He	582.849	ppb	1.8	20871.79	2000	
75	As	89	He	117.281	ppb	1.8	3591.19	1000	
78	Se	89	H2	113.185	ppb	5.4	1798.54	1000	
88	Sr	89	He	761.484	ppb	1.3	116077.84	2000	
95	Mo	89	He	117.879	ppb	1.8	20370.25	1000	
107	Ag	89	He	59.254	ppb	2.9	34701.88	100	
111	Cd	89	He	289.090	ppb	2.3	21884.78	1000	
118	Sn	159	He	540.822	ppb	0.2	95067.30	1000	
121	Sb	159	No Gas	110.356	ppb	5.3	161917.98	1000	
137	Ba	159	No Gas	2228.163	ppb	5.5	1280130.52	2000	
182	W	159	No Gas	114.435	ppb	4.9	126235.65	1000	
205	Tl	209	No Gas	115.693	ppb	4.5	274538.53	1000	
208	Pb	209	No Gas	115.815	ppb	5.0	380644.31	2000	
232	Th	209	No Gas	116.471	ppb	5.1	389854.23	1000	
238	U	209	No Gas	117.243	ppb	5.6	369837.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1526597.38	1.6	1745272.14	87.47	29.5	120.4	
Sc	45	No Gas	3702214.95	2.1	3932582.94	94.14	29.5	120.4	
Sc	45	H2	420301.74	1.7	485269.91	86.61	29.5	120.4	
Sc	45	He	86682.99	0.5	96164.21	90.14	29.5	120.4	
Ge	72	No Gas	859989.95	2.7	877152.82	98.04	29.5	120.4	
Ge	72	H2	158133.41	1.8	182501.5	86.65	29.5	120.4	
Ge	72	He	67944.01	0.7	74687.17	90.97	29.5	120.4	
Y	89	H2	2792633.73	1.6	3060772.3	91.24	29.5	120.4	
Y	89	He	595772.67	1.1	649886.7	91.67	29.5	120.4	
Tb	159	No Gas	8968020.22	2.1	8413567.03	106.59	29.5	120.4	
Tb	159	He	3332100.12	0.7	3319571.76	100.38	29.5	120.4	
Bi	209	No Gas	4623520.96	2.6	4391152.66	105.29	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	173_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 7:59:14 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.875	ppb	5.3	29271.37	25	99.5	89.8	110.2	
11	B	6	No Gas	26.964	ppb	2.2	22145.33	25	107.86	89.8	110.2	
23	Na	45	He	5075.147	ppb	2.7	532791.44	5000	101.5	89.8	110.2	
24	Mg	45	He	4991.213	ppb	2.3	282083.34	5000	99.82	89.8	110.2	
27	Al	45	He	490.560	ppb	2.8	10917.88	500	98.11	89.8	110.2	
28	Si	45	H2	489.214	ppb	8.2	20901.98	500	97.84	89.8	110.2	
39	K	45	He	4870.729	ppb	1.9	266105.23	5000	97.41	89.8	110.2	
40	Ca	45	H2	5070.837	ppb	9.4	1972114.36	5000	101.42	89.8	110.2	
51	V	89	He	24.278	ppb	3.4	20984.00	25	97.11	89.8	110.2	
52	Cr	89	He	24.684	ppb	3.2	25802.14	25	98.74	89.8	110.2	
55	Mn	89	He	24.224	ppb	2.4	11967.61	25	96.9	89.8	110.2	
56	Fe	89	H2	4988.246	ppb	9.8	7941268.28	5000	99.76	89.8	110.2	
59	Co	89	He	24.665	ppb	3.3	44314.65	25	98.66	89.8	110.2	
60	Ni	89	He	24.831	ppb	2.8	12235.79	25	99.32	89.8	110.2	
63	Cu	89	He	24.799	ppb	2.0	34061.21	25	99.2	89.8	110.2	
66	Zn	89	He	24.916	ppb	6.2	4548.69	25	99.66	89.8	110.2	
75	As	89	He	24.508	ppb	2.4	3773.60	25	98.03	89.8	110.2	
78	Se	89	H2	24.779	ppb	9.8	1944.05	25	99.12	89.8	110.2	
88	Sr	89	He	23.705	ppb	4.1	18172.56	25	94.82	89.8	110.2	
95	Mo	89	He	24.775	ppb	3.1	21526.49	25	99.1	89.8	110.2	
107	Ag	89	He	25.564	ppb	2.0	75299.93	25	102.26	89.8	110.2	
111	Cd	89	He	25.177	ppb	4.7	9581.62	25	100.71	89.8	110.2	
118	Sn	159	He	23.397	ppb	3.8	20522.98	25	93.59	89.8	110.2	
121	Sb	159	No Gas	23.787	ppb	5.3	174077.30	25	95.15	89.8	110.2	
137	Ba	159	No Gas	24.249	ppb	5.7	69512.43	25	97	89.8	110.2	
182	W	159	No Gas	24.098	ppb	5.1	132588.85	25	96.39	89.8	110.2	
205	Tl	209	No Gas	24.614	ppb	5.3	296171.50	25	98.46	89.8	110.2	
208	Pb	209	No Gas	24.529	ppb	5.0	408877.65	25	98.12	89.8	110.2	
232	Th	209	No Gas	24.799	ppb	5.2	420971.20	25	99.2	89.8	110.2	
238	U	209	No Gas	24.677	ppb	6.2	394717.70	25	98.71	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1529535.17	1.9	1745272.14	87.64	29.5	120.4	
Sc	45	No Gas	3738047.86	2.8	3932582.94	95.05	29.5	120.4	
Sc	45	H2	422294.04	6.8	485269.91	87.02	29.5	120.4	
Sc	45	He	86830.24	1.9	96164.21	90.29	29.5	120.4	
Ge	72	No Gas	861429.29	2.6	877152.82	98.21	29.5	120.4	
Ge	72	H2	157808.01	8.0	182501.5	86.47	29.5	120.4	
Ge	72	He	68254.73	2.1	74687.17	91.39	29.5	120.4	
Y	89	H2	2770051.99	7.0	3060772.3	90.5	29.5	120.4	
Y	89	He	599363.58	2.1	649886.7	92.23	29.5	120.4	
Tb	159	No Gas	8948653.97	2.6	8413567.03	106.36	29.5	120.4	
Tb	159	He	3320965.58	2.2	3319571.76	100.04	29.5	120.4	
Bi	209	No Gas	4690731.76	3.0	4391152.66	106.82	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	174_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG28B.b
Acq Time	7/28/2020 8:01:49 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.065	ppb	26.5	134.45	0.2	
11	B	6	No Gas	1.165	ppb	12.7	2749.26	4	
23	Na	45	He	-95.563	ppb	N/A	8502.22	200	
24	Mg	45	He	-5.105	ppb	N/A	631.18	20	
27	Al	45	He	0.293	ppb	32.2	22.22	20	
28	Si	45	H2	-0.234	ppb	N/A	510.57	100	
39	K	45	He	3.312	ppb	180.3	11086.07	200	
40	Ca	45	H2	2.062	ppb	6.5	1699.06	20	
51	V	89	He	-0.079	ppb	N/A	192.23	1	
52	Cr	89	He	-0.007	ppb	N/A	61.99	1	
55	Mn	89	He	0.026	ppb	93.4	35.33	0.4	
56	Fe	89	H2	1.546	ppb	13.8	5043.22	20	
59	Co	89	He	0.014	ppb	148.7	48.89	0.2	
60	Ni	89	He	-0.300	ppb	N/A	104.45	0.4	Failed DoD
63	Cu	89	He	-0.008	ppb	N/A	117.78	0.6	
66	Zn	89	He	0.745	ppb	9.9	218.90	2	
75	As	89	He	0.013	ppb	186.7	6.00	1	
78	Se	89	H2	0.030	ppb	65.0	3.17	1	
88	Sr	89	He	0.047	ppb	139.6	42.22	1	
95	Mo	89	He	0.078	ppb	14.9	73.34	1	
107	Ag	89	He	0.012	ppb	68.8	40.00	0.2	
111	Cd	89	He	0.024	ppb	87.4	9.63	0.2	
118	Sn	159	He	0.081	ppb	33.1	121.12	1	
121	Sb	159	No Gas	0.036	ppb	10.9	300.34	0.2	
137	Ba	159	No Gas	0.045	ppb	10.5	150.17	0.4	
182	W	159	No Gas	0.084	ppb	14.2	493.90	1	
205	Tl	209	No Gas	0.008	ppb	71.1	437.17	0.2	
208	Pb	209	No Gas	0.015	ppb	14.8	527.26	0.2	
232	Th	209	No Gas	0.062	ppb	8.5	1198.08	1	
238	U	209	No Gas	0.026	ppb	15.5	420.48	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1591162.20	3.2	1745272.14	91.17	29.5	120.4	
Sc	45	No Gas	3785283.87	3.2	3932582.94	96.25	29.5	120.4	
Sc	45	H2	456107.07	3.4	485269.91	93.99	29.5	120.4	
Sc	45	He	89634.66	1.3	96164.21	93.21	29.5	120.4	
Ge	72	No Gas	864107.85	3.5	877152.82	98.51	29.5	120.4	
Ge	72	H2	169964.25	3.8	182501.5	93.13	29.5	120.4	
Ge	72	He	69920.53	1.0	74687.17	93.62	29.5	120.4	
Y	89	H2	2954488.97	2.2	3060772.3	96.53	29.5	120.4	
Y	89	He	607989.00	1.2	649886.7	93.55	29.5	120.4	
Tb	159	No Gas	8884631.47	4.0	8413567.03	105.6	29.5	120.4	
Tb	159	He	3333158.63	1.0	3319571.76	100.41	29.5	120.4	
Bi	209	No Gas	4692831.62	3.3	4391152.66	106.87	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

AP 7/31/20

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/28/2020

METHOD: ICP-MS
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNG2900A

REVIEWED 07/30/20 KATAHDIN ANALYTICAL

AP 7/30/20

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by AP (initials) on 7/29/20 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19511	07/22/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19505	07/22/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19506	07/22/20	07/29/20	Varies by Element
ICSAB	MW19513	07/22/20	07/29/20	Varies by Element
CCV	MW19512	07/22/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (17:45) fails high for Mn (0.531 ug/L) Fe (DoD) (25.183 ug/L) Ni (1.105 ug/L) Zn (2.721 ug/L)

Closing PQL (3:52) fails low for Ni and high for Na (310.82 ug/L) Ca (30.337 ug/L)

ICSA (17:18) fails high (DoD) for Be (0.131 ug/L) Th (0.160 ug/L)

CCBs fail low at concentrations no less than this for Ni (-0.982 ug/L)

CCBs fail high at concentrations no greater than these for Be (0.133 ug/L) Fe (17.608 ug/L) Ni (0.531 ug/L) Na (240.258 ug/L)

Ca (20.526 ug/L) Ba (0.329 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater

Dilutions: Some samples were diluted based on history or due to interfering element

concentrations. Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG29A	07/29/2020	17:04	AP
CalStd	1	LNG29A	07/29/2020	17:07	AP
ICV	1	LNG29A	07/29/2020	17:10	AP
ICB	1	LNG29A	07/29/2020	17:13	AP
ICSA	1	LNG29A	07/29/2020	17:18	AP
ICSAB	1	LNG29A	07/29/2020	17:21	AP
RINSE	1	LNG29A	07/29/2020	17:29	AP
RINSE	1	LNG29A	07/29/2020	17:31	AP
RINSE	1	LNG29A	07/29/2020	17:34	AP
RINSE	1	LNG29A	07/29/2020	17:42	AP
PQL	1	LNG29A	07/29/2020	17:45	AP
LRS1	1	LNG29A	07/29/2020	17:47	AP
LRS2	1	LNG29A	07/29/2020	17:50	AP
RINSE	1	LNG29A	07/29/2020	17:53	AP
RINSE	1	LNG29A	07/29/2020	17:56	AP
CCV	1	LNG29A	07/29/2020	17:58	AP
CCB	1	LNG29A	07/29/2020	18:01	AP
SN6194-001	1	LNG29A	07/29/2020	18:03	AP
SN6194-002	1	LNG29A	07/29/2020	18:06	AP
SN6194-003	1	LNG29A	07/29/2020	18:09	AP
SN6194-004	1	LNG29A	07/29/2020	18:11	AP
SN6194-005	1	LNG29A	07/29/2020	18:14	AP
PBSNG08IMS1	5	LNG29A	07/29/2020	18:17	AP
LCSONG08IMS1	5	LNG29A	07/29/2020	18:19	AP
SN5147-001	5	LNG29A	07/29/2020	18:22	AP
SN5147-003	5	LNG29A	07/29/2020	18:25	AP
SN5147-004	5	LNG29A	07/29/2020	18:27	AP
CCV	1	LNG29A	07/29/2020	18:30	AP
CCB	1	LNG29A	07/29/2020	18:33	AP
PBWNG23IMW1	1	LNG29A	07/29/2020	18:35	AP
LCSWNG23IMW1	5	LNG29A	07/29/2020	18:38	AP
SN5815-002	1	LNG29A	07/29/2020	18:41	AP
SN5815-002	10	LNG29A	07/29/2020	18:43	AP
SN5815-007	10	LNG29A	07/29/2020	18:46	AP
SN5815-014	10	LNG29A	07/29/2020	18:49	AP
SN6032-001	5	LNG29A	07/29/2020	18:51	AP
SN6071-001	1	LNG29A	07/29/2020	18:54	AP
PBWNG23IMW2	5	LNG29A	07/29/2020	18:57	AP
LCSWNG23IMW2	5	LNG29A	07/29/2020	18:59	AP
CCV	1	LNG29A	07/29/2020	19:02	AP
CCB	1	LNG29A	07/29/2020	19:05	AP
SN5815-004	5	LNG29A	07/29/2020	19:07	AP
SN5815-004	25	LNG29A	07/29/2020	19:10	AP
SN5815-016	5	LNG29A	07/29/2020	19:13	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5815-016	25	LNG29A	07/29/2020	19:15	AP
SN6059-001	5	LNG29A	07/29/2020	19:18	AP
SN6059-001L	25	LNG29A	07/29/2020	19:21	AP
SN6059-001A	5	LNG29A	07/29/2020	19:23	AP
SN6059-001S	5	LNG29A	07/29/2020	19:26	AP
SN6059-001P	5	LNG29A	07/29/2020	19:29	AP
SN6059-002	5	LNG29A	07/29/2020	19:31	AP
CCV	1	LNG29A	07/29/2020	19:34	AP
CCB	1	LNG29A	07/29/2020	19:37	AP
SN6059-003	5	LNG29A	07/29/2020	19:39	AP
SN6090-001	5	LNG29A	07/29/2020	19:42	AP
PBSNG28IMS1	5	LNG29A	07/29/2020	19:44	AP
LCSONG28IMS1	5	LNG29A	07/29/2020	19:47	AP
SN6056-001	5	LNG29A	07/29/2020	19:50	AP
SN6056-002	5	LNG29A	07/29/2020	19:52	AP
SN6056-003	5	LNG29A	07/29/2020	19:55	AP
PBWNG29IMW2	5	LNG29A	07/29/2020	19:57	AP
LCSWNG29IMW2	5	LNG29A	07/29/2020	20:00	AP
SN5124-002R	5	LNG29A	07/29/2020	20:03	AP
CCV	1	LNG29A	07/29/2020	20:05	AP
CCB	1	LNG29A	07/29/2020	20:08	AP
SN5124-002RL	25	LNG29A	07/29/2020	20:10	AP
SN5124-002RA	5	LNG29A	07/29/2020	20:13	AP
SN5124-002RS	5	LNG29A	07/29/2020	20:16	AP
SN5124-002RP	5	LNG29A	07/29/2020	20:18	AP
SN6056-004	5	LNG29A	07/29/2020	20:21	AP
SN6061-002	5	LNG29A	07/29/2020	20:24	AP
PBWNG29IMW1	5	LNG29A	07/29/2020	20:26	AP
LCSWNG29IMW1	5	LNG29A	07/29/2020	20:29	AP
SN5106-003R	5	LNG29A	07/29/2020	20:32	AP
SN5106-004R	5	LNG29A	07/29/2020	20:34	AP
CCV	1	LNG29A	07/29/2020	20:37	AP
CCB	1	LNG29A	07/29/2020	20:40	AP
SN5106-005R	5	LNG29A	07/29/2020	20:42	AP
SN5106-006R	5	LNG29A	07/29/2020	20:45	AP
SN5106-007R	5	LNG29A	07/29/2020	20:48	AP
SN5106-008R	5	LNG29A	07/29/2020	20:50	AP
SN5106-009R	5	LNG29A	07/29/2020	20:53	AP
SN5106-009RL	25	LNG29A	07/29/2020	20:56	AP
SN5106-009RA	5	LNG29A	07/29/2020	20:58	AP
SN5106-009RS	5	LNG29A	07/29/2020	21:01	AP
SN5106-009RP	5	LNG29A	07/29/2020	21:03	AP
SN5106-010R	5	LNG29A	07/29/2020	21:06	AP
CCV	1	LNG29A	07/29/2020	21:08	AP
CCB	1	LNG29A	07/29/2020	21:11	AP
SN5106-011R	5	LNG29A	07/29/2020	21:14	AP
SN5106-012R	5	LNG29A	07/29/2020	21:16	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5106-013R	5	LNG29A	07/29/2020	21:19	AP
SN5106-014R	5	LNG29A	07/29/2020	21:22	AP
SN5106-015R	5	LNG29A	07/29/2020	21:24	AP
SN5106-016R	5	LNG29A	07/29/2020	21:27	AP
SN5106-017R	5	LNG29A	07/29/2020	21:30	AP
SN5106-018R	5	LNG29A	07/29/2020	21:32	AP
SN5106-019R	5	LNG29A	07/29/2020	21:35	AP
SN5106-020R	5	LNG29A	07/29/2020	21:38	AP
CCV	1	LNG29A	07/29/2020	21:40	AP
CCB	1	LNG29A	07/29/2020	21:43	AP
SN5106-021R	5	LNG29A	07/29/2020	21:45	AP
SN5106-022R	5	LNG29A	07/29/2020	21:48	AP
PBSNG29IMS2	5	LNG29A	07/29/2020	21:51	AP
LCSONG29IMS2	5	LNG29A	07/29/2020	21:54	AP
SN5107-025R	5	LNG29A	07/29/2020	21:56	AP
SN5107-028R	5	LNG29A	07/29/2020	21:59	AP
SN5107-029R	5	LNG29A	07/29/2020	22:01	AP
SN5107-031R	5	LNG29A	07/29/2020	22:04	AP
SN5107-032R	5	LNG29A	07/29/2020	22:07	AP
SN5107-032RL	25	LNG29A	07/29/2020	22:09	AP
CCV	1	LNG29A	07/29/2020	22:12	AP
CCB	1	LNG29A	07/29/2020	22:14	AP
SN5107-032RA	5	LNG29A	07/29/2020	22:17	AP
SN5107-032RS	5	LNG29A	07/29/2020	22:19	AP
SN5107-032RP	5	LNG29A	07/29/2020	22:22	AP
PBSNG29IMS1	5	LNG29A	07/29/2020	22:24	AP
LCSONG29IMS1	5	LNG29A	07/29/2020	22:27	AP
SN5107-001R	5	LNG29A	07/29/2020	22:30	AP
SN5107-003R	5	LNG29A	07/29/2020	22:32	AP
SN5107-004R	5	LNG29A	07/29/2020	22:35	AP
SN5107-005R	5	LNG29A	07/29/2020	22:37	AP
SN5107-007R	5	LNG29A	07/29/2020	22:40	AP
CCV	1	LNG29A	07/29/2020	22:43	AP
CCB	1	LNG29A	07/29/2020	22:45	AP
SN5107-008R	5	LNG29A	07/29/2020	22:48	AP
SN5107-009R	5	LNG29A	07/29/2020	22:50	AP
SN5107-011R	5	LNG29A	07/29/2020	22:53	AP
SN5107-012R	5	LNG29A	07/29/2020	22:56	AP
SN5107-013R	5	LNG29A	07/29/2020	22:58	AP
SN5107-015R	5	LNG29A	07/29/2020	23:01	AP
SN5107-016R	5	LNG29A	07/29/2020	23:04	AP
SN5107-017R	5	LNG29A	07/29/2020	23:06	AP
SN5107-019R	5	LNG29A	07/29/2020	23:09	AP
SN5107-020R	5	LNG29A	07/29/2020	23:12	AP
CCV	1	LNG29A	07/29/2020	23:14	AP
CCB	1	LNG29A	07/29/2020	23:17	AP
SN5107-021R	5	LNG29A	07/29/2020	23:20	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5107-023R	5	LNG29A	07/29/2020	23:22	AP
SN5107-024R	5	LNG29A	07/29/2020	23:25	AP
SN5107-027R	5	LNG29A	07/29/2020	23:28	AP
SN5107-027RL	25	LNG29A	07/29/2020	23:30	AP
SN5107-027RA	5	LNG29A	07/29/2020	23:33	AP
SN5107-027RS	5	LNG29A	07/29/2020	23:36	AP
SN5107-027RP	5	LNG29A	07/29/2020	23:38	AP
SN6054-006	10	LNG29A	07/29/2020	23:41	AP
SN6054-006	20	LNG29A	07/29/2020	23:43	AP
CCV	1	LNG29A	07/29/2020	23:46	AP
CCB	1	LNG29A	07/29/2020	23:49	AP
SN6054-006	25	LNG29A	07/29/2020	23:51	AP
RINSE	1	LNG29A	07/29/2020	23:54	AP
SN6054-007	10	LNG29A	07/29/2020	23:56	AP
SN6054-007	20	LNG29A	07/29/2020	23:59	AP
SN6054-007	25	LNG29A	07/30/2020	00:01	AP
RINSE	1	LNG29A	07/30/2020	00:04	AP
RINSE	1	LNG29A	07/30/2020	00:06	AP
SN6054-008	10	LNG29A	07/30/2020	00:09	AP
SN6054-008	20	LNG29A	07/30/2020	00:11	AP
SN6054-008	25	LNG29A	07/30/2020	00:14	AP
CCV	1	LNG29A	07/30/2020	00:17	AP
CCB	1	LNG29A	07/30/2020	00:19	AP
RINSE	1	LNG29A	07/30/2020	00:22	AP
RINSE	1	LNG29A	07/30/2020	00:24	AP
SN6054-009	10	LNG29A	07/30/2020	00:27	AP
SN6054-009	20	LNG29A	07/30/2020	00:30	AP
SN6054-009	25	LNG29A	07/30/2020	00:32	AP
RINSE	1	LNG29A	07/30/2020	00:35	AP
RINSE	1	LNG29A	07/30/2020	00:38	AP
SN6054-010	10	LNG29A	07/30/2020	00:40	AP
SN6054-010	20	LNG29A	07/30/2020	00:43	AP
SN6054-010	25	LNG29A	07/30/2020	00:46	AP
CCV	1	LNG29A	07/30/2020	00:48	AP
CCB	1	LNG29A	07/30/2020	00:51	AP
RINSE	1	LNG29A	07/30/2020	00:53	AP
RINSE	1	LNG29A	07/30/2020	00:56	AP
SN6054-011	10	LNG29A	07/30/2020	00:58	AP
SN6054-011	20	LNG29A	07/30/2020	01:01	AP
SN6054-011	25	LNG29A	07/30/2020	01:04	AP
RINSE	1	LNG29A	07/30/2020	01:06	AP
RINSE	1	LNG29A	07/30/2020	01:09	AP
SN6054-012	10	LNG29A	07/30/2020	01:11	AP
SN6054-012L	50	LNG29A	07/30/2020	01:14	AP
SN6054-012A	10	LNG29A	07/30/2020	01:17	AP
CCV	1	LNG29A	07/30/2020	01:19	AP
CCB	1	LNG29A	07/30/2020	01:22	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
RINSE	1	LNG29A	07/30/2020	01:25	AP
RINSE	1	LNG29A	07/30/2020	01:27	AP
SN6054-012	20	LNG29A	07/30/2020	01:30	AP
SN6054-012	25	LNG29A	07/30/2020	01:33	AP
RINSE	1	LNG29A	07/30/2020	01:35	AP
RINSE	1	LNG29A	07/30/2020	01:38	AP
RINSE	1	LNG29A	07/30/2020	01:41	AP
SN6054-012S	10	LNG29A	07/30/2020	01:43	AP
SN6054-012S	20	LNG29A	07/30/2020	01:46	AP
SN6054-012S	25	LNG29A	07/30/2020	01:49	AP
CCV	1	LNG29A	07/30/2020	01:51	AP
CCB	1	LNG29A	07/30/2020	01:54	AP
RINSE	1	LNG29A	07/30/2020	01:57	AP
RINSE	1	LNG29A	07/30/2020	01:59	AP
SN6054-012P	10	LNG29A	07/30/2020	02:02	AP
SN6054-012P	20	LNG29A	07/30/2020	02:05	AP
SN6054-012P	25	LNG29A	07/30/2020	02:07	AP
RINSE	1	LNG29A	07/30/2020	02:10	AP
RINSE	1	LNG29A	07/30/2020	02:13	AP
SN6054-013	10	LNG29A	07/30/2020	02:15	AP
SN6054-013	20	LNG29A	07/30/2020	02:18	AP
SN6054-013	25	LNG29A	07/30/2020	02:20	AP
CCV	1	LNG29A	07/30/2020	02:23	AP
CCB	1	LNG29A	07/30/2020	02:26	AP
RINSE	1	LNG29A	07/30/2020	02:28	AP
RINSE	1	LNG29A	07/30/2020	02:31	AP
PBWNG21IMW2	5	LNG29A	07/30/2020	02:33	AP
LCSWNG21IMW2	5	LNG29A	07/30/2020	02:36	AP
SN5717-020	5	LNG29A	07/30/2020	02:39	AP
SN5830-002	5	LNG29A	07/30/2020	02:41	AP
SN5832-001	5	LNG29A	07/30/2020	02:44	AP
SN5832-002	5	LNG29A	07/30/2020	02:47	AP
SN5832-003	5	LNG29A	07/30/2020	02:49	AP
SN5832-004	5	LNG29A	07/30/2020	02:52	AP
CCV	1	LNG29A	07/30/2020	02:55	AP
CCB	1	LNG29A	07/30/2020	02:57	AP
SN5897-001	5	LNG29A	07/30/2020	03:00	AP
SN5897-002	5	LNG29A	07/30/2020	03:02	AP
SN5897-002L	25	LNG29A	07/30/2020	03:05	AP
SN5897-002A	5	LNG29A	07/30/2020	03:07	AP
SN5897-002S	5	LNG29A	07/30/2020	03:10	AP
SN5897-002P	5	LNG29A	07/30/2020	03:13	AP
SN5946-001	5	LNG29A	07/30/2020	03:15	AP
SN6056-012	50	LNG29A	07/30/2020	03:18	AP
SN6056-017	5	LNG29A	07/30/2020	03:20	AP
SN5717-020R	5	LNG29A	07/30/2020	03:23	AP
CCV	1	LNG29A	07/30/2020	03:25	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1	LNG29A	07/30/2020	03:28	AP
SN5830-002R	5	LNG29A	07/30/2020	03:31	AP
SN5832-001R	5	LNG29A	07/30/2020	03:33	AP
SN5832-002R	5	LNG29A	07/30/2020	03:36	AP
SN5832-003R	5	LNG29A	07/30/2020	03:38	AP
SN5832-004R	5	LNG29A	07/30/2020	03:41	AP
SN5897-001R	5	LNG29A	07/30/2020	03:44	AP
CCV	1	LNG29A	07/30/2020	03:46	AP
CCB	1	LNG29A	07/30/2020	03:49	AP
PQL	1	LNG29A	07/30/2020	03:52	AP
RINSE	1	LNG29A	07/30/2020	03:54	AP
RINSE	1	LNG29A	07/30/2020	03:57	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq. Date-Time	7/29/2020 3:42:21 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

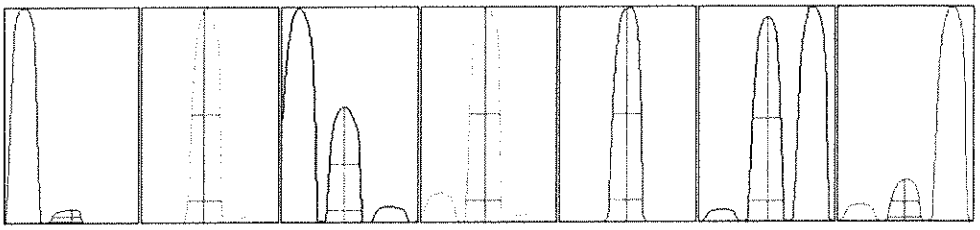
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2015	20145.17	0.684	5.000	
9	769	7691.10	1.080	5.000	
24	34704	347039.47	0.307	5.000	
59	7860	78598.82	0.239	5.000	
115	156546	1565464.46	0.550	5.000	
205	11239	112389.95	0.813	5.000	
208	25254	252539.93	0.379	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2032	2021	2019	2004	1997
9	769	773	779	756	768
24	34565	34643	34727	34737	34848
59	7838	7843	7879	7876	7863
115	155456	155982	156990	156635	157669
205	11166	11133	11237	11345	11314
208	25147	25205	25208	25352	25359

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	3283.90	7.05	6.90 - 7.10	
9	1252.23	8.90	8.90 - 9.10	
24	53717.09	23.90	23.90 - 24.10	
59	12317.14	58.95	58.90 - 59.10	
115	257056.00	115.00	114.90 - 115.10	
205	18672.58	205.05	204.90 - 205.10	
208	41576.43	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.63	0.730	0.900	
9	0.64	0.761	0.900	
24	0.68	0.778	0.900	
59	0.66	0.768	0.900	
115	0.63	0.730	0.900	
205	0.62	0.766	0.900	
208	0.63	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.3 V	Deflect	12.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-50 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	483	4830.99	2.309	5.000	
89	77695	776945.08	1.338	5.000	
205	8818	88181.72	0.555	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	464	491	486	487	488
89	76083	77344	78174	78064	78808
205	8761	8789	8850	8807	8884

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.3 V	Deflect	1.6 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm		

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1481	14810.97	0.992	5.000	
89	16061	160614.00	1.202	5.000	
205	4998	49983.60	1.818	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1466	1472	1487	1504	1477
89	15792	16043	15987	16292	16193
205	4863	4962	5007	5092	5067

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.3 V	Deflect	1.2 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:04:20 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	25.56	39.8
11	B	6	No Gas	1602.36	7.0
23	Na	45	He	9466.90	4.9
24	Mg	45	He	926.77	6.6
27	Al	45	He	34.45	22.4
28	Si	45	H2	483.88	11.4
39	K	45	He	11129.35	0.8
40	Ca	45	H2	1183.42	3.9
51	V	89	He	183.34	14.2
52	Cr	89	He	65.32	6.4
55	Mn	89	He	36.66	26.9
56	Fe	89	H2	6191.63	2.2
59	Co	89	He	33.34	60.0
60	Ni	89	He	651.15	9.0
63	Cu	89	He	95.56	14.1
66	Zn	89	He	103.34	14.1
75	As	89	He	4.33	13.3
78	Se	89	H2	0.33	173.2
95	Mo	89	He	8.89	57.3
107	Ag	89	He	6.67	50.0
118	Sn	159	He	57.78	13.3
121	Sb	159	No Gas	50.06	20.0
137	Ba	159	No Gas	30.04	88.2
182	W	159	No Gas	43.38	93.3
205	Tl	209	No Gas	16.68	124.9
208	Pb	209	No Gas	103.45	5.6
232	Th	209	No Gas	93.44	27.0
238	U	209	No Gas	10.01	100.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	1023754.81	0.7
Sc	45	No Gas	2927134.09	0.2
Sc	45	H2	374925.70	0.6
Sc	45	He	75429.93	1.1
Ge	72	No Gas	682196.39	0.0
Ge	72	H2	145757.50	1.0
Ge	72	He	59866.13	1.4
Y	89	H2	2441196.50	0.1
Y	89	He	531537.69	1.5
Tb	159	No Gas	7041897.33	0.5
Tb	159	He	2795586.52	1.1
Bi	209	No Gas	3760534.49	0.5

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:07:25 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	53535.32	1.3
11	B	6	No Gas	35945.49	1.3
23	Na	45	He	1012043.52	0.5
24	Mg	45	He	560325.75	0.7
27	Al	45	He	22440.44	0.7
28	Si	45	H2	44512.09	1.7
39	K	45	He	544223.28	0.4
40	Ca	45	H2	4251104.24	0.5
51	V	89	He	43737.60	1.0
52	Cr	89	He	53949.57	0.6
55	Mn	89	He	25970.48	0.2
56	Fe	89	H2	17251137.40	0.8
59	Co	89	He	93092.71	0.9
60	Ni	89	He	25962.53	0.4
63	Cu	89	He	71459.77	0.3
66	Zn	89	He	9681.44	2.6
75	As	89	He	8110.25	0.9
78	Se	89	H2	4324.31	1.4
88	Sr	89	He	41626.12	1.8
95	Mo	89	He	47039.32	0.8
107	Ag	89	He	161883.93	0.4
111	Cd	89	He	20787.51	0.6
118	Sn	159	He	46172.11	0.3
121	Sb	159	No Gas	375282.16	0.4
137	Ba	159	No Gas	148682.56	0.5
182	W	159	No Gas	295437.33	2.1
205	Tl	209	No Gas	642279.79	1.6
208	Pb	209	No Gas	892516.88	1.0
232	Th	209	No Gas	923103.83	1.9
238	U	209	No Gas	866625.83	1.1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	997437.42	0.7	1023754.81	97.43	29.5	120.4	
Sc	45	No Gas	2884331.00	0.8	2927134.09	98.54	29.5	120.4	
Sc	45	H2	355149.87	0.4	374925.7	94.73	29.5	120.4	
Sc	45	He	69222.82	0.6	75429.93	91.77	29.5	120.4	
Ge	72	No Gas	679571.81	0.7	682196.39	99.62	29.5	120.4	
Ge	72	H2	138527.31	1.1	145757.5	95.04	29.5	120.4	
Ge	72	He	55527.96	0.2	59866.13	92.75	29.5	120.4	
Y	89	H2	2360919.59	0.5	2441196.5	96.71	29.5	120.4	
Y	89	He	495731.75	0.1	531537.69	93.26	29.5	120.4	
Tb	159	No Gas	7179352.18	0.5	7041897.33	101.95	29.5	120.4	
Tb	159	He	2716924.09	0.1	2795586.52	97.19	29.5	120.4	
Bi	209	No Gas	3830695.43	0.4	3760534.49	101.87	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:10:21 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.471	ppb	3.7	22151.98	20	102.35	89.6	110.4	
11	B	6	No Gas	19.257	ppb	4.0	14950.46	20	96.29	89.6	110.4	
23	Na	45	He	4004.403	ppb	0.3	431749.77	4000	100.11	89.6	110.4	
24	Mg	45	He	3928.096	ppb	1.0	232049.00	4000	98.2	89.6	110.4	
27	Al	45	He	371.879	ppb	1.7	8798.56	400	92.97	89.6	110.4	
28	Si	45	H2	425.806	ppb	2.4	19825.94	400	106.45	89.6	110.4	
39	K	45	He	3914.251	ppb	0.9	230605.08	4000	97.86	89.6	110.4	
40	Ca	45	H2	3901.811	ppb	1.2	1712082.48	4000	97.55	89.6	110.4	
51	V	89	He	19.987	ppb	1.6	18277.95	20	99.94	89.6	110.4	
52	Cr	89	He	19.946	ppb	2.0	22402.95	20	99.73	89.6	110.4	
55	Mn	89	He	19.927	ppb	1.1	10778.17	20	99.64	89.6	110.4	
56	Fe	89	H2	3883.703	ppb	0.3	6914251.93	4000	97.09	89.6	110.4	
59	Co	89	He	20.076	ppb	1.9	38867.31	20	100.38	89.6	110.4	
60	Ni	89	He	20.194	ppb	1.6	11276.03	20	100.97	89.6	110.4	
63	Cu	89	He	20.216	ppb	1.6	30082.03	20	101.08	89.6	110.4	
66	Zn	89	He	20.021	ppb	2.7	4088.53	20	100.1	89.6	110.4	
75	As	89	He	19.988	ppb	1.0	3372.12	20	99.94	89.6	110.4	
78	Se	89	H2	19.838	ppb	0.6	1769.87	20	99.19	89.6	110.4	
88	Sr	89	He	19.459	ppb	1.2	16838.55	20	97.3	89.6	110.4	
95	Mo	89	He	38.801	ppb	1.4	37938.97	40	97	89.6	110.4	
107	Ag	89	He	20.068	ppb	1.1	67530.58	20	100.34	89.6	110.4	
111	Cd	89	He	20.233	ppb	1.1	8742.53	20	101.16	89.6	110.4	
118	Sn	159	He	19.532	ppb	2.6	18511.06	20	97.66	89.6	110.4	
121	Sb	159	No Gas	19.638	ppb	2.6	150654.55	20	98.19	89.6	110.4	
137	Ba	159	No Gas	19.914	ppb	3.1	60528.58	20	99.57	89.6	110.4	
182	W	159	No Gas	19.248	ppb	2.6	116251.38	20	96.24	89.6	110.4	
205	Tl	209	No Gas	20.634	ppb	3.7	272290.07	20	103.17	89.6	110.4	
208	Pb	209	No Gas	19.927	ppb	1.9	365510.31	20	99.64	89.6	110.4	
232	Th	209	No Gas	19.599	ppb	4.2	371740.47	20	98	89.6	110.4	
238	U	209	No Gas	19.695	ppb	3.7	350662.40	20	98.48	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1007624.46	1.4	1023754.81	98.42	29.5	120.4	
Sc	45	No Gas	2923356.72	0.8	2927134.09	99.87	29.5	120.4	
Sc	45	H2	366467.07	1.3	374925.7	97.74	29.5	120.4	
Sc	45	He	72808.98	0.5	75429.93	96.53	29.5	120.4	
Ge	72	No Gas	690253.25	1.2	682196.39	101.18	29.5	120.4	
Ge	72	H2	141144.80	0.4	145757.5	96.84	29.5	120.4	
Ge	72	He	57552.78	1.3	59866.13	96.14	29.5	120.4	
Y	89	H2	2435196.41	0.7	2441196.5	99.75	29.5	120.4	
Y	89	He	515238.63	1.1	531537.69	96.93	29.5	120.4	
Tb	159	No Gas	7337849.75	1.3	7041897.33	104.2	29.5	120.4	
Tb	159	He	2783635.58	1.4	2795586.52	99.57	29.5	120.4	
Bi	209	No Gas	3936147.10	1.4	3760534.49	104.67	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:13:05 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.086	ppb	16.0	121.12	0.2	
11	B	6	No Gas	0.416	ppb	6.3	1904.63	4	
23	Na	45	He	-2.300	ppb	N/A	8535.32	200	
24	Mg	45	He	-0.132	ppb	N/A	848.98	20	
27	Al	45	He	-0.339	ppb	N/A	24.45	20	
28	Si	45	H2	0.847	ppb	203.9	507.24	100	
39	K	45	He	7.576	ppb	113.8	10707.56	200	
40	Ca	45	H2	1.055	ppb	19.3	1607.93	20	
51	V	89	He	-0.028	ppb	N/A	146.67	1	
52	Cr	89	He	0.012	ppb	190.2	73.32	1	
55	Mn	89	He	0.033	ppb	103.8	50.66	0.4	
56	Fe	89	H2	2.225	ppb	7.1	9884.41	20	
59	Co	89	He	0.009	ppb	125.0	46.67	0.2	
60	Ni	89	He	-0.039	ppb	N/A	584.48	0.4	
63	Cu	89	He	0.005	ppb	307.2	95.56	0.6	
66	Zn	89	He	0.135	ppb	77.8	122.23	2	
75	As	89	He	-0.002	ppb	N/A	3.67	1	
78	Se	89	H2	0.033	ppb	66.5	3.17	1	
88	Sr	89	He	0.012	ppb	4.8	10.00	1	
95	Mo	89	He	0.189	ppb	20.2	186.68	1	
107	Ag	89	He	0.005	ppb	26.6	22.22	0.2	
111	Cd	89	He	0.007	ppb	40.4	2.96	0.2	
118	Sn	159	He	0.064	ppb	12.5	112.23	1	
121	Sb	159	No Gas	0.029	ppb	36.4	273.65	0.2	
137	Ba	159	No Gas	0.029	ppb	73.8	120.14	0.4	
182	W	159	No Gas	0.115	ppb	10.5	730.85	1	
205	Tl	209	No Gas	0.039	ppb	48.3	540.66	0.2	
208	Pb	209	No Gas	0.034	ppb	66.8	744.21	0.2	
232	Th	209	No Gas	0.078	ppb	26.8	1575.33	1	
238	U	209	No Gas	0.034	ppb	63.6	624.14	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1028869.20	3.6	1023754.81	100.5	29.5	120.4	
Sc	45	No Gas	2913949.63	4.5	2927134.09	99.55	29.5	120.4	
Sc	45	H2	363784.26	0.6	374925.7	97.03	29.5	120.4	
Sc	45	He	69904.89	5.4	75429.93	92.68	29.5	120.4	
Ge	72	No Gas	687834.40	4.4	682196.39	100.83	29.5	120.4	
Ge	72	H2	141431.10	1.0	145757.5	97.03	29.5	120.4	
Ge	72	He	55453.01	5.4	59866.13	92.63	29.5	120.4	
Y	89	H2	2375237.86	0.8	2441196.5	97.3	29.5	120.4	
Y	89	He	493762.18	4.7	531537.69	92.89	29.5	120.4	
Tb	159	No Gas	7251091.42	4.8	7041897.33	102.97	29.5	120.4	
Tb	159	He	2644722.88	5.1	2795586.52	94.6	29.5	120.4	
Bi	209	No Gas	3912623.84	4.8	3760534.49	104.04	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:18:29 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.131	ppb	14.7	146.67	0.2	-50	50	DoD
B	11	6	No Gas	1.213	ppb	13.7	2133.57	4	-50	100	
Na	23	45	He	97496.034	ppb	0.5	9169015.78	100000	80	120	
Mg	24	45	He	97242.514	ppb	0.3	5095751.28	100000	80	120	
Al	27	45	He	91972.151	ppb	0.3	1930119.09	100000	80	120	
Si	28	45	H2	4.979	ppb	33.3	607.36	100	-50	50	
K	39	45	He	94755.692	ppb	0.4	4748308.69	100000	80	120	
Ca	40	45	H2	101214.552	ppb	12.1	38519867.48	100000	80	120	
V	51	89	He	0.087	ppb	16.8	235.57	1	-50	100	
Cr	52	89	He	0.331	ppb	12.1	398.60	0.78	-100	100	
Mn	55	89	He	0.451	ppb	13.8	255.96	0.0826	100	100	
Fe	56	89	H2	98144.426	ppb	12.0	157146410.88	100000	80	120	
Co	59	89	He	0.285	ppb	20.5	535.60	0.2	-50	100	
Ni	60	89	He	0.242	ppb	9.4	696.71	0.114	100	100	
Cu	63	89	He	0.419	ppb	9.3	655.60	-0.043	100	100	
Zn	66	89	He	0.652	ppb	30.5	211.12	-0.7632	100	100	
As	75	89	He	0.057	ppb	35.5	12.67	1	-50	100	
Se	78	89	H2	0.150	ppb	9.9	12.50	1	-50	100	
Sr	88	89	He	0.837	ppb	12.2	664.49	0.0578	100	100	
Mo	95	89	He	2039.950	ppb	0.7	1830008.92	2000	80	120	
Ag	107	89	He	0.035	ppb	32.8	112.23	0.2	-50	50	
Cd	111	89	He	0.329	ppb	6.1	130.37	0.268	100	100	
Sn	118	159	He	0.378	ppb	12.6	404.47	-0.24	100	100	
Sb	121	159	No Gas	0.208	ppb	0.8	1585.21	0.089	100	100	
Ba	137	159	No Gas	0.178	ppb	3.6	550.62	-0.0794	100	100	
W	182	159	No Gas	0.271	ppb	5.4	1618.58	0.32	-100	100	
Tl	205	209	No Gas	0.040	ppb	12.1	503.91	0.2	-50	50	
Pb	208	209	No Gas	0.121	ppb	9.3	2145.82	0.03	100	100	
Th	232	209	No Gas	0.160	ppb	31.3	2883.59	0.2	-50	50	DoD
U	238	209	No Gas	0.027	ppb	32.5	460.53	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	888357.69	1.1	1023754.81	86.77	29.5	120.4	
Sc	45	No Gas	2620765.94	0.7	2927134.09	89.53	29.5	120.4	
Sc	45	H2	320448.92	9.4	374925.7	85.47	29.5	120.4	
Sc	45	He	64825.77	1.2	75429.93	85.94	29.5	120.4	
Ge	72	No Gas	629369.11	1.0	682196.39	92.26	29.5	120.4	
Ge	72	H2	124549.42	7.0	145757.5	85.45	29.5	120.4	
Ge	72	He	51965.88	0.8	59866.13	86.8	29.5	120.4	
Y	89	H2	2207708.33	8.9	2441196.5	90.44	29.5	120.4	
Y	89	He	472813.28	1.3	531537.69	88.95	29.5	120.4	
Tb	159	No Gas	7058623.64	0.3	7041897.33	100.24	29.5	120.4	
Tb	159	He	2714592.18	1.2	2795586.52	97.1	29.5	120.4	
Bi	209	No Gas	3625723.87	0.3	3760534.49	96.42	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:21:12 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.105	ppb	4.5	18722.75	20	79.5	120.4	
11	B	6	No Gas	20.253	ppb	5.1	13461.15	20	79.5	120.4	
23	Na	45	He	97572.814	ppb	2.2	9307610.41	100000	79.5	120.4	
24	Mg	45	He	97258.874	ppb	2.2	5169609.16	100000	79.5	120.4	
27	Al	45	He	91991.968	ppb	2.3	1958144.59	100000	79.5	120.4	
28	Si	45	H2	483.131	ppb	1.0	19909.39	500	79.5	120.4	
39	K	45	He	95022.342	ppb	1.8	4830016.38	100000	79.5	120.4	
40	Ca	45	H2	99655.022	ppb	0.4	38780808.03	100000	79.5	120.4	
51	V	89	He	20.382	ppb	1.7	17291.19	20	79.5	120.4	
52	Cr	89	He	19.758	ppb	2.5	20592.56	20	79.5	120.4	
55	Mn	89	He	20.189	ppb	3.0	10129.82	20	79.5	120.4	
56	Fe	89	H2	96185.521	ppb	0.6	158833296.04	100000	79.5	120.4	
59	Co	89	He	19.835	ppb	2.0	35636.47	20	79.5	120.4	
60	Ni	89	He	19.529	ppb	2.5	10136.21	20	79.5	120.4	
63	Cu	89	He	19.388	ppb	1.8	26774.08	20	79.5	120.4	
66	Zn	89	He	20.724	ppb	2.6	3926.25	20	79.5	120.4	
75	As	89	He	20.459	ppb	2.0	3203.06	20	79.5	120.4	
78	Se	89	H2	20.117	ppb	0.8	1666.19	20	79.5	120.4	
88	Sr	89	He	21.198	ppb	3.1	17016.59	20	79.5	120.4	
95	Mo	89	He	2063.443	ppb	2.6	1871487.30	2000	79.5	120.4	
107	Ag	89	He	19.610	ppb	1.8	61229.79	20	79.5	120.4	
111	Cd	89	He	20.172	ppb	3.4	8085.09	20	79.5	120.4	
118	Sn	159	He	19.391	ppb	2.4	18038.16	20	79.5	120.4	
121	Sb	159	No Gas	19.171	ppb	4.9	150093.99	20	79.5	120.4	
137	Ba	159	No Gas	19.280	ppb	5.7	59796.94	20	79.5	120.4	
182	W	159	No Gas	20.259	ppb	5.3	124853.32	20	79.5	120.4	
205	Tl	209	No Gas	20.202	ppb	5.5	260456.90	20	79.5	120.4	
208	Pb	209	No Gas	20.385	ppb	6.3	365193.11	20	79.5	120.4	
232	Th	209	No Gas	21.236	ppb	6.9	393414.45	20	79.5	120.4	
238	U	209	No Gas	21.184	ppb	7.1	368373.41	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	867669.10	3.2	1023754.81	84.75	29.5	120.4	
Sc	45	No Gas	2675571.52	3.4	2927134.09	91.41	29.5	120.4	
Sc	45	H2	325197.10	1.5	374925.7	86.74	29.5	120.4	
Sc	45	He	65771.35	2.1	75429.93	87.2	29.5	120.4	
Ge	72	No Gas	651256.06	3.0	682196.39	95.46	29.5	120.4	
Ge	72	H2	126648.41	1.3	145757.5	86.89	29.5	120.4	
Ge	72	He	52671.13	1.4	59866.13	87.98	29.5	120.4	
Y	89	H2	2260682.03	1.1	2441196.5	92.61	29.5	120.4	
Y	89	He	478183.41	2.4	531537.69	89.96	29.5	120.4	
Tb	159	No Gas	7494967.25	3.3	7041897.33	106.43	29.5	120.4	
Tb	159	He	2731911.80	1.6	2795586.52	97.72	29.5	120.4	
Bi	209	No Gas	3849092.11	3.4	3760534.49	102.35	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 5:29:16 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.054	ppb	11.3	81.11	100	
11	B	6	No Gas	0.123	ppb	52.8	1610.15	1000	
23	Na	45	He	32.628	ppb	18.2	12362.36	200000	
24	Mg	45	He	-1.604	ppb	N/A	786.75	200000	
27	Al	45	He	3.488	ppb	32.4	113.34	200000	
28	Si	45	H2	1.117	ppb	28.1	520.59	10000	
39	K	45	He	7.905	ppb	101.3	10992.69	200000	
40	Ca	45	H2	3.933	ppb	16.8	2864.84	200000	
51	V	89	He	0.134	ppb	10.9	302.24	1000	
52	Cr	89	He	0.002	ppb	685.7	66.66	2000	
55	Mn	89	He	0.016	ppb	132.7	44.66	2000	
56	Fe	89	H2	8.355	ppb	10.1	21173.06	100000	
59	Co	89	He	0.013	ppb	81.3	57.78	1000	
60	Ni	89	He	0.546	ppb	23.6	928.96	1000	
63	Cu	89	He	0.026	ppb	70.3	132.23	2000	
66	Zn	89	He	0.061	ppb	54.5	113.34	2000	
75	As	89	He	-0.005	ppb	N/A	3.33	1000	
78	Se	89	H2	0.011	ppb	153.8	1.33	1000	
88	Sr	89	He	0.013	ppb	17.2	11.11	2000	
95	Mo	89	He	0.254	ppb	7.0	260.01	1000	
107	Ag	89	He	0.006	ppb	47.8	27.78	100	
111	Cd	89	He	0.003	ppb	0.1	1.11	1000	
118	Sn	159	He	0.012	ppb	148.5	70.00	1000	
121	Sb	159	No Gas	0.002	ppb	114.0	73.42	1000	
137	Ba	159	No Gas	0.000	ppb	668.6	33.37	2000	
182	W	159	No Gas	0.004	ppb	51.0	73.42	1000	
205	Tl	209	No Gas	0.001	ppb	83.8	36.71	1000	
208	Pb	209	No Gas	0.008	ppb	25.8	260.30	2000	
232	Th	209	No Gas	0.001	ppb	196.8	130.15	1000	
238	U	209	No Gas	0.000	ppb	96.7	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	975969.20	2.3	1023754.81	95.33	29.5	120.4	
Sc	45	No Gas	2968667.39	3.1	2927134.09	101.42	29.5	120.4	
Sc	45	H2	364381.77	0.8	374925.7	97.19	29.5	120.4	
Sc	45	He	71564.25	1.2	75429.93	94.88	29.5	120.4	
Ge	72	No Gas	710522.81	2.4	682196.39	104.15	29.5	120.4	
Ge	72	H2	142155.12	0.7	145757.5	97.53	29.5	120.4	
Ge	72	He	58660.88	0.6	59866.13	97.99	29.5	120.4	
Y	89	H2	2451586.50	1.2	2441196.5	100.43	29.5	120.4	
Y	89	He	520521.07	0.1	531537.69	97.93	29.5	120.4	
Tb	159	No Gas	7600985.72	3.2	7041897.33	107.94	29.5	120.4	
Tb	159	He	2831999.82	0.6	2795586.52	101.3	29.5	120.4	
Bi	209	No Gas	4082780.55	3.1	3760534.49	108.57	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	016SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:31:56 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	23.1	58.89	100	
11	B	6	No Gas	0.086	ppb	69.9	1554.59	1000	
23	Na	45	He	25.451	ppb	11.0	11965.01	200000	
24	Mg	45	He	3.591	ppb	66.8	1120.12	200000	
27	Al	45	He	6.081	ppb	20.8	178.90	200000	
28	Si	45	H2	0.052	ppb	419.6	470.53	10000	
39	K	45	He	7.829	ppb	58.0	11316.10	200000	
40	Ca	45	H2	2.933	ppb	10.1	2421.41	200000	
51	V	89	He	0.076	ppb	32.3	251.12	1000	
52	Cr	89	He	-0.006	ppb	N/A	57.99	2000	
55	Mn	89	He	0.027	ppb	64.7	50.66	2000	
56	Fe	89	H2	6.222	ppb	5.2	17376.82	100000	
59	Co	89	He	0.002	ppb	452.2	37.78	1000	
60	Ni	89	He	0.616	ppb	4.8	974.51	1000	
63	Cu	89	He	0.015	ppb	131.3	116.67	2000	
66	Zn	89	He	-0.004	ppb	N/A	101.12	2000	
75	As	89	He	0.004	ppb	237.6	5.00	1000	
78	Se	89	H2	0.010	ppb	193.9	1.17	1000	
88	Sr	89	He	0.004	ppb	99.6	3.33	2000	
95	Mo	89	He	0.270	ppb	13.3	277.79	1000	
107	Ag	89	He	0.008	ppb	65.4	34.45	100	
111	Cd	89	He	0.003	ppb	100.4	1.11	1000	
118	Sn	159	He	0.010	ppb	36.9	68.89	1000	
121	Sb	159	No Gas	-0.002	ppb	N/A	33.37	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	16.68	2000	
182	W	159	No Gas	0.003	ppb	47.5	66.74	1000	
205	Tl	209	No Gas	0.003	ppb	51.5	56.73	1000	
208	Pb	209	No Gas	0.004	ppb	68.1	183.54	2000	
232	Th	209	No Gas	0.001	ppb	248.5	113.46	1000	
238	U	209	No Gas	0.000	ppb	N/A	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	957474.23	2.5	1023754.81	93.53	29.5	120.4	
Sc	45	No Gas	2879989.65	3.2	2927134.09	98.39	29.5	120.4	
Sc	45	H2	362885.39	2.3	374925.7	96.79	29.5	120.4	
Sc	45	He	73677.91	1.4	75429.93	97.68	29.5	120.4	
Ge	72	No Gas	692993.41	3.0	682196.39	101.58	29.5	120.4	
Ge	72	H2	143461.60	0.6	145757.5	98.42	29.5	120.4	
Ge	72	He	59117.95	1.2	59866.13	98.75	29.5	120.4	
Y	89	H2	2455382.04	2.8	2441196.5	100.58	29.5	120.4	
Y	89	He	524974.98	0.7	531537.69	98.77	29.5	120.4	
Tb	159	No Gas	7363672.25	3.3	7041897.33	104.57	29.5	120.4	
Tb	159	He	2842227.46	0.9	2795586.52	101.67	29.5	120.4	
Bi	209	No Gas	3956018.43	2.8	3760534.49	105.2	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	017SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:34:41 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.042	ppb	35.8	68.89	100	
11	B	6	No Gas	0.032	ppb	403.5	1547.92	1000	
23	Na	45	He	21.965	ppb	17.3	11460.64	200000	
24	Mg	45	He	7.893	ppb	11.6	1360.17	200000	
27	Al	45	He	10.801	ppb	22.5	287.79	200000	
28	Si	45	H2	2.217	ppb	88.9	560.64	10000	
39	K	45	He	11.493	ppb	36.2	11394.48	200000	
40	Ca	45	H2	15.735	ppb	6.9	7884.70	200000	
51	V	89	He	0.128	ppb	15.5	297.79	1000	
52	Cr	89	He	0.010	ppb	120.9	75.99	2000	
55	Mn	89	He	0.029	ppb	13.3	51.99	2000	
56	Fe	89	H2	19.758	ppb	7.5	40821.19	100000	
59	Co	89	He	0.000	ppb	2674.1	33.34	1000	
60	Ni	89	He	0.652	ppb	33.0	990.07	1000	
63	Cu	89	He	0.010	ppb	77.8	108.89	2000	
66	Zn	89	He	-0.079	ppb	N/A	85.56	2000	
75	As	89	He	-0.001	ppb	N/A	4.00	1000	
78	Se	89	H2	0.004	ppb	223.3	0.67	1000	
88	Sr	89	He	0.008	ppb	49.7	6.67	2000	
95	Mo	89	He	0.341	ppb	6.3	346.68	1000	
107	Ag	89	He	0.008	ppb	39.1	32.22	100	
111	Cd	89	He	0.007	ppb	94.3	2.96	1000	
118	Sn	159	He	0.009	ppb	82.4	66.67	1000	
121	Sb	159	No Gas	0.004	ppb	15.6	86.76	1000	
137	Ba	159	No Gas	-0.003	ppb	N/A	23.36	2000	
182	W	159	No Gas	0.005	ppb	100.3	76.75	1000	
205	Tl	209	No Gas	0.008	ppb	29.1	123.47	1000	
208	Pb	209	No Gas	0.007	ppb	60.6	233.60	2000	
232	Th	209	No Gas	0.005	ppb	79.1	200.23	1000	
238	U	209	No Gas	0.007	ppb	37.3	143.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	975620.31	1.4	1023754.81	95.3	29.5	120.4	
Sc	45	No Gas	2943419.49	1.0	2927134.09	100.56	29.5	120.4	
Sc	45	H2	358927.93	2.2	374925.7	95.73	29.5	120.4	
Sc	45	He	72852.52	0.9	75429.93	96.58	29.5	120.4	
Ge	72	No Gas	700597.32	1.6	682196.39	102.7	29.5	120.4	
Ge	72	H2	140424.49	2.7	145757.5	96.34	29.5	120.4	
Ge	72	He	58993.27	0.7	59866.13	98.54	29.5	120.4	
Y	89	H2	2408161.20	2.4	2441196.5	98.65	29.5	120.4	
Y	89	He	523038.18	0.5	531537.69	98.4	29.5	120.4	
Tb	159	No Gas	7460155.52	0.9	7041897.33	105.94	29.5	120.4	
Tb	159	He	2822450.20	0.4	2795586.52	100.96	29.5	120.4	
Bi	209	No Gas	4001497.45	1.3	3760534.49	106.41	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	020SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:42:40 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.051	ppb	17.6	76.67	100	
11	B	6	No Gas	0.154	ppb	37.5	1610.15	1000	
23	Na	45	He	-0.681	ppb	N/A	9096.30	200000	
24	Mg	45	He	-0.307	ppb	N/A	880.09	200000	
27	Al	45	He	-0.235	ppb	N/A	27.78	200000	
28	Si	45	H2	0.971	ppb	70.4	513.91	10000	
39	K	45	He	4.088	ppb	50.1	11011.01	200000	
40	Ca	45	H2	0.992	ppb	23.1	1583.48	200000	
51	V	89	He	0.109	ppb	9.8	281.13	1000	
52	Cr	89	He	0.001	ppb	136.8	65.99	2000	
55	Mn	89	He	0.042	ppb	73.2	59.32	2000	
56	Fe	89	H2	4.303	ppb	1.6	13905.74	100000	
59	Co	89	He	0.009	ppb	112.4	51.12	1000	
60	Ni	89	He	0.741	ppb	6.8	1040.08	1000	
63	Cu	89	He	-0.004	ppb	N/A	88.89	2000	
66	Zn	89	He	-0.020	ppb	N/A	97.78	2000	
75	As	89	He	0.000	ppb	6140.0	4.33	1000	
78	Se	89	H2	0.004	ppb	87.2	0.67	1000	
88	Sr	89	He	0.011	ppb	57.7	10.00	2000	
95	Mo	89	He	0.067	ppb	25.7	75.56	1000	
107	Ag	89	He	0.005	ppb	86.2	22.22	100	
111	Cd	89	He	0.004	ppb	34.8	1.85	1000	
118	Sn	159	He	-0.002	ppb	N/A	56.67	1000	
121	Sb	159	No Gas	0.003	ppb	154.2	76.75	1000	
137	Ba	159	No Gas	-0.001	ppb	N/A	30.03	2000	
182	W	159	No Gas	0.010	ppb	22.3	106.79	1000	
205	Tl	209	No Gas	0.002	ppb	74.4	46.72	1000	
208	Pb	209	No Gas	0.002	ppb	115.1	150.17	2000	
232	Th	209	No Gas	0.009	ppb	16.3	273.65	1000	
238	U	209	No Gas	0.000	ppb	N/A	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	963743.56	1.9	1023754.81	94.14	29.5	120.4	
Sc	45	No Gas	2967038.65	2.5	2927134.09	101.36	29.5	120.4	
Sc	45	H2	364589.70	1.6	374925.7	97.24	29.5	120.4	
Sc	45	He	73061.36	0.9	75429.93	96.86	29.5	120.4	
Ge	72	No Gas	705232.94	2.8	682196.39	103.38	29.5	120.4	
Ge	72	H2	143226.52	1.7	145757.5	98.26	29.5	120.4	
Ge	72	He	58946.37	0.6	59866.13	98.46	29.5	120.4	
Y	89	H2	2448530.89	0.2	2441196.5	100.3	29.5	120.4	
Y	89	He	524123.39	0.2	531537.69	98.61	29.5	120.4	
Tb	159	No Gas	7505441.76	3.2	7041897.33	106.58	29.5	120.4	
Tb	159	He	2825901.97	1.0	2795586.52	101.08	29.5	120.4	
Bi	209	No Gas	4024713.32	2.7	3760534.49	107.03	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	021LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:45:21 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.219	ppb	5.0	253.35	0.2	109.5	79.5	120.4
11	B	6	No Gas	3.968	ppb	4.5	4199.65	4	99.2	79.5	120.4
23	Na	45	He	208.664	ppb	2.8	31375.62	200	104.33	79.5	120.4
24	Mg	45	He	19.262	ppb	6.8	2042.51	20	96.31	79.5	120.4
27	Al	45	He	20.928	ppb	6.3	530.03	20	104.64	79.5	120.4
28	Si	45	H2	98.883	ppb	1.2	4979.74	100	98.88	79.5	120.4
39	K	45	He	207.998	ppb	3.3	22579.31	200	104	79.5	120.4
40	Ca	45	H2	22.867	ppb	0.9	11212.58	20	114.34	79.5	120.4
51	V	89	He	1.093	ppb	10.6	1191.21	1	109.3	79.5	120.4
52	Cr	89	He	0.997	ppb	2.6	1204.50	1	99.7	79.5	120.4
55	Mn	89	He	0.531	ppb	11.7	328.61	0.4	132.75	79.5	120.4
56	Fe	89	H2	25.183	ppb	2.1	51671.96	20	125.92	79.5	120.4
59	Co	89	He	0.235	ppb	9.6	497.82	0.2	117.5	79.5	120.4
60	Ni	89	He	1.105	ppb	17.1	1238.99	0.4	276.25	79.5	120.4
63	Cu	89	He	0.627	ppb	2.8	1044.52	0.6	104.5	79.5	120.4
66	Zn	89	He	2.721	ppb	5.7	655.60	2	136.05	79.5	120.4
75	As	89	He	1.016	ppb	5.3	179.02	1	101.6	79.5	120.4
78	Se	89	H2	0.953	ppb	7.2	86.50	1	95.3	79.5	120.4
88	Sr	89	He	1.053	ppb	8.0	930.06	1	105.3	79.5	120.4
95	Mo	89	He	1.025	ppb	7.3	1031.19	1	102.5	79.5	120.4
107	Ag	89	He	0.215	ppb	12.5	746.72	0.2	107.5	79.5	120.4
111	Cd	89	He	0.221	ppb	5.1	97.41	0.2	110.5	79.5	120.4
118	Sn	159	He	0.925	ppb	2.7	945.63	1	92.5	79.5	120.4
121	Sb	159	No Gas	0.236	ppb	5.5	1915.62	0.2	118	79.5	120.4
137	Ba	159	No Gas	0.379	ppb	11.4	1214.76	0.4	94.75	79.5	120.4
182	W	159	No Gas	0.965	ppb	8.8	6024.75	1	96.5	79.5	120.4
205	Tl	209	No Gas	0.221	ppb	8.3	3017.08	0.2	110.5	79.5	120.4
208	Pb	209	No Gas	0.207	ppb	9.7	4001.42	0.2	103.5	79.5	120.4
232	Th	209	No Gas	0.165	ppb	7.0	3310.85	0.2	82.5	79.5	120.4
238	U	209	No Gas	0.206	ppb	6.3	3771.49	0.2	103	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD □ Failed 6020/EPA

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	976923.09	2.3	1023754.81	95.43	29.5	120.4	
Sc	45	No Gas	3011013.77	3.4	2927134.09	102.87	29.5	120.4	
Sc	45	H2	367350.18	1.1	374925.7	97.98	29.5	120.4	
Sc	45	He	73309.29	0.6	75429.93	97.19	29.5	120.4	
Ge	72	No Gas	709689.45	3.2	682196.39	104.03	29.5	120.4	
Ge	72	H2	144934.64	0.9	145757.5	99.44	29.5	120.4	
Ge	72	He	59356.62	0.7	59866.13	99.15	29.5	120.4	
Y	89	H2	2468582.30	0.7	2441196.5	101.12	29.5	120.4	
Y	89	He	525885.91	0.3	531537.69	98.94	29.5	120.4	
Tb	159	No Gas	7544452.53	3.4	7041897.33	107.14	29.5	120.4	
Tb	159	He	2825101.83	0.2	2795586.52	101.06	29.5	120.4	
Bi	209	No Gas	4047363.47	3.0	3760534.49	107.63	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	022_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:47:56 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	100.483	ppb	4.7	104250.69	100	100.48	89.5	110.4	
11	B	6	No Gas	476.950	ppb	5.7	319320.84	500	95.39	89.5	110.4	
51	V	89	He	1000.611	ppb	0.2	870915.94	1000	100.06	89.5	110.4	
52	Cr	89	He	1987.894	ppb	0.2	2139775.97	2000	99.39	89.5	110.4	
55	Mn	89	He	1965.909	ppb	0.1	1018476.49	2000	98.3	89.5	110.4	
59	Co	89	He	1011.869	ppb	0.1	1880916.45	1000	101.19	89.5	110.4	
60	Ni	89	He	1031.175	ppb	0.2	522831.87	1000	103.12	89.5	110.4	
63	Cu	89	He	1972.776	ppb	0.1	2812383.95	2000	98.64	89.5	110.4	
66	Zn	89	He	2042.506	ppb	0.2	391136.30	2000	102.13	89.5	110.4	
75	As	89	He	1003.507	ppb	0.2	162486.67	1000	100.35	89.5	110.4	
78	Se	89	H2	987.687	ppb	0.3	85636.14	1000	98.77	89.5	110.4	
88	Sr	89	He	1973.680	ppb	0.2	1641020.13	2000	98.68	89.5	110.4	
95	Mo	89	He	1004.805	ppb	0.7	943910.53	1000	100.48	89.5	110.4	
107	Ag	89	He	108.378	ppb	0.4	350432.11	100	108.38	89.5	110.4	
111	Cd	89	He	1033.012	ppb	0.2	428914.97	1000	103.3	89.5	110.4	
118	Sn	159	He	972.130	ppb	0.2	910689.66	1000	97.21	89.5	110.4	
121	Sb	159	No Gas	928.921	ppb	5.3	7284631.04	1000	92.89	89.5	110.4	
137	Ba	159	No Gas	1863.446	ppb	5.4	5789224.75	2000	93.17	89.5	110.4	
182	W	159	No Gas	964.324	ppb	5.9	5952408.81	1000	96.43	89.5	110.4	
205	Tl	209	No Gas	961.757	ppb	5.4	13239667.85	1000	96.18	89.5	110.4	
208	Pb	209	No Gas	1868.349	ppb	6.2	35729689.84	2000	93.42	89.5	110.4	
232	Th	209	No Gas	938.139	ppb	6.4	18555159.09	1000	93.81	89.5	110.4	
238	U	209	No Gas	928.307	ppb	6.4	17238113.55	1000	92.83	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	967641.73	3.4	1023754.81	94.52	29.5	120.4	
Sc	45	No Gas	2904337.52	4.5	2927134.09	99.22	29.5	120.4	
Ge	72	No Gas	695519.45	4.3	682196.39	101.95	29.5	120.4	
Tb	159	No Gas	7512262.81	3.9	7041897.33	106.68	29.5	120.4	
Bi	209	No Gas	4111185.83	4.1	3760534.49	109.32	29.5	120.4	
Sc	45	H2	346591.08	0.6	374925.7	92.44	29.5	120.4	
Ge	72	H2	135965.65	1.3	145757.5	93.28	29.5	120.4	
Y	89	H2	2367062.29	0.4	2441196.5	96.96	29.5	120.4	
Sc	45	He	68401.47	0.7	75429.93	90.68	29.5	120.4	
Ge	72	He	55710.97	1.0	59866.13	93.06	29.5	120.4	
Y	89	He	495087.86	0.5	531537.69	93.14	29.5	120.4	
Tb	159	He	2759434.09	0.7	2795586.52	98.71	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 5:50:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.249	ppb	10.9	248.90	100	
11	B	6	No Gas	10.596	ppb	11.2	7570.03	1000	
23	Na	45	He	194722.290	ppb	2.3	19613372.27	200000	
24	Mg	45	He	194253.605	ppb	2.5	10905890.39	200000	
27	Al	45	He	188136.158	ppb	2.3	4230518.13	200000	
28	Si	45	H2	9620.326	ppb	0.5	403523.18	10000	
39	K	45	He	192072.711	ppb	2.0	10302879.71	200000	
40	Ca	45	H2	196519.972	ppb	0.2	79434342.71	200000	
51	V	89	He	0.159	ppb	9.3	308.90	1000	
52	Cr	89	He	1.520	ppb	0.1	1696.46	2000	
55	Mn	89	He	7.549	ppb	2.3	3941.85	2000	
56	Fe	89	H2	95610.348	ppb	0.3	160059759.12	100000	
59	Co	89	He	0.683	ppb	10.8	1300.16	1000	
60	Ni	89	He	2.596	ppb	3.1	1921.31	1000	
63	Cu	89	He	1.200	ppb	8.3	1799.07	2000	
66	Zn	89	He	1.901	ppb	4.4	460.02	2000	
75	As	89	He	0.369	ppb	9.2	63.68	1000	
78	Se	89	H2	0.767	ppb	2.9	64.67	1000	
88	Sr	89	He	1.278	ppb	3.5	1062.31	2000	
95	Mo	89	He	1.396	ppb	6.4	1319.00	1000	
107	Ag	89	He	0.112	ppb	5.1	366.68	100	
111	Cd	89	He	0.178	ppb	7.5	73.71	1000	
118	Sn	159	He	1.159	ppb	9.8	1128.98	1000	
121	Sb	159	No Gas	0.750	ppb	4.4	5590.70	1000	
137	Ba	159	No Gas	1.469	ppb	9.1	4332.20	2000	
182	W	159	No Gas	1.834	ppb	0.1	10709.74	1000	
205	Tl	209	No Gas	0.631	ppb	11.3	7520.68	1000	
208	Pb	209	No Gas	1.251	ppb	6.5	20766.63	2000	
232	Th	209	No Gas	1.752	ppb	25.1	30081.48	1000	
238	U	209	No Gas	0.773	ppb	11.0	12416.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	853040.07	0.7	1023754.81	83.32	29.5	120.4	
Sc	45	No Gas	2672219.26	0.1	2927134.09	91.29	29.5	120.4	
Sc	45	H2	337778.51	2.1	374925.7	90.09	29.5	120.4	
Sc	45	He	69477.84	2.0	75429.93	92.11	29.5	120.4	
Ge	72	No Gas	630926.45	0.9	682196.39	92.48	29.5	120.4	
Ge	72	H2	126283.72	1.0	145757.5	86.64	29.5	120.4	
Ge	72	He	54947.51	0.9	59866.13	91.78	29.5	120.4	
Y	89	H2	2291780.37	1.4	2441196.5	93.88	29.5	120.4	
Y	89	He	494831.11	1.3	531537.69	93.09	29.5	120.4	
Tb	159	No Gas	7068070.17	0.5	7041897.33	100.37	29.5	120.4	
Tb	159	He	2725219.30	1.5	2795586.52	97.48	29.5	120.4	
Bi	209	No Gas	3545462.81	1.1	3760534.49	94.28	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	024SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:53:20 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.127	ppb	51.8	162.23	100	
11	B	6	No Gas	2.433	ppb	1.3	3273.82	1000	
23	Na	45	He	141.500	ppb	8.0	24799.09	200000	
24	Mg	45	He	24.896	ppb	25.9	2427.05	200000	
27	Al	45	He	23.114	ppb	18.2	594.48	200000	
28	Si	45	H2	3.984	ppb	21.8	667.42	10000	
39	K	45	He	43.416	ppb	27.2	13577.04	200000	
40	Ca	45	H2	46.019	ppb	12.0	21775.23	200000	
51	V	89	He	0.143	ppb	32.8	316.68	1000	
52	Cr	89	He	0.099	ppb	51.9	179.97	2000	
55	Mn	89	He	0.160	ppb	52.1	125.31	2000	
56	Fe	89	H2	34.940	ppb	12.4	70965.09	100000	
59	Co	89	He	0.095	ppb	9.5	222.24	1000	
60	Ni	89	He	0.563	ppb	10.1	960.07	1000	
63	Cu	89	He	0.195	ppb	16.7	395.57	2000	
66	Zn	89	He	-0.022	ppb	N/A	98.89	2000	
75	As	89	He	0.071	ppb	54.3	16.67	1000	
78	Se	89	H2	0.138	ppb	19.0	13.17	1000	
88	Sr	89	He	0.070	ppb	76.1	62.22	2000	
95	Mo	89	He	0.278	ppb	9.1	290.01	1000	
107	Ag	89	He	0.013	ppb	46.2	51.11	100	
111	Cd	89	He	0.060	ppb	63.5	26.67	1000	
118	Sn	159	He	0.273	ppb	26.4	324.46	1000	
121	Sb	159	No Gas	0.262	ppb	124.5	2180.29	1000	
137	Ba	159	No Gas	0.483	ppb	134.5	1582.47	2000	
182	W	159	No Gas	0.439	ppb	74.0	2854.17	1000	
205	Tl	209	No Gas	0.267	ppb	122.3	3720.95	1000	
208	Pb	209	No Gas	0.550	ppb	118.8	10699.85	2000	
232	Th	209	No Gas	0.232	ppb	138.4	4702.08	1000	
238	U	209	No Gas	0.243	ppb	130.7	4544.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1009748.55	2.4	1023754.81	98.63	29.5	120.4	
Sc	45	No Gas	3083360.75	3.5	2927134.09	105.34	29.5	120.4	
Sc	45	H2	374273.28	1.5	374925.7	99.83	29.5	120.4	
Sc	45	He	75045.42	2.3	75429.93	99.49	29.5	120.4	
Ge	72	No Gas	728802.37	4.0	682196.39	106.83	29.5	120.4	
Ge	72	H2	146354.72	0.5	145757.5	100.41	29.5	120.4	
Ge	72	He	60009.58	1.9	59866.13	100.24	29.5	120.4	
Y	89	H2	2530656.09	0.8	2441196.5	103.66	29.5	120.4	
Y	89	He	532467.09	2.2	531537.69	100.17	29.5	120.4	
Tb	159	No Gas	7845488.15	3.5	7041897.33	111.41	29.5	120.4	
Tb	159	He	2867752.81	1.7	2795586.52	102.58	29.5	120.4	
Bi	209	No Gas	4181182.18	3.6	3760534.49	111.19	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:56:03 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.082	ppb	4.9	113.33	100	
11	B	6	No Gas	1.481	ppb	8.5	2592.55	1000	
23	Na	45	He	71.127	ppb	12.4	17079.36	200000	
24	Mg	45	He	11.564	ppb	81.8	1618.01	200000	
27	Al	45	He	10.919	ppb	92.7	298.90	200000	
28	Si	45	H2	0.233	ppb	676.4	490.56	10000	
39	K	45	He	17.203	ppb	66.4	12016.34	200000	
40	Ca	45	H2	7.647	ppb	36.1	4579.96	200000	
51	V	89	He	0.215	ppb	15.2	383.35	1000	
52	Cr	89	He	0.066	ppb	82.4	141.31	2000	
55	Mn	89	He	0.163	ppb	52.5	126.65	2000	
56	Fe	89	H2	9.371	ppb	19.7	23490.10	100000	
59	Co	89	He	0.063	ppb	67.7	157.79	1000	
60	Ni	89	He	0.714	ppb	27.5	1037.86	1000	
63	Cu	89	He	0.154	ppb	44.6	331.13	2000	
66	Zn	89	He	0.024	ppb	463.3	107.78	2000	
75	As	89	He	0.065	ppb	19.7	15.67	1000	
78	Se	89	H2	0.116	ppb	12.4	11.00	1000	
88	Sr	89	He	0.070	ppb	118.3	62.22	2000	
95	Mo	89	He	0.172	ppb	13.4	182.23	1000	
107	Ag	89	He	0.010	ppb	49.8	41.11	100	
111	Cd	89	He	0.050	ppb	89.2	22.23	1000	
118	Sn	159	He	0.165	ppb	15.2	220.01	1000	
121	Sb	159	No Gas	0.093	ppb	20.0	790.91	1000	
137	Ba	159	No Gas	0.150	ppb	9.9	507.25	2000	
182	W	159	No Gas	0.188	ppb	4.9	1228.10	1000	
205	Tl	209	No Gas	0.093	ppb	13.8	1284.84	1000	
208	Pb	209	No Gas	0.196	ppb	4.5	3847.88	2000	
232	Th	209	No Gas	0.083	ppb	9.5	1728.76	1000	
238	U	209	No Gas	0.074	ppb	1.8	1384.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1002696.71	1.3	1023754.81	97.94	29.5	120.4	
Sc	45	No Gas	3042176.00	2.6	2927134.09	103.93	29.5	120.4	
Sc	45	H2	371966.39	0.2	374925.7	99.21	29.5	120.4	
Sc	45	He	74701.98	0.9	75429.93	99.03	29.5	120.4	
Ge	72	No Gas	720017.61	2.8	682196.39	105.54	29.5	120.4	
Ge	72	H2	145971.67	0.9	145757.5	100.15	29.5	120.4	
Ge	72	He	60096.08	0.5	59866.13	100.38	29.5	120.4	
Y	89	H2	2503826.19	0.1	2441196.5	102.57	29.5	120.4	
Y	89	He	530288.30	0.8	531537.69	99.76	29.5	120.4	
Tb	159	No Gas	7623232.04	2.0	7041897.33	108.26	29.5	120.4	
Tb	159	He	2865547.81	0.6	2795586.52	102.5	29.5	120.4	
Bi	209	No Gas	4090093.80	2.1	3760534.49	108.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	026_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 5:58:38 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.778	ppb	5.1	25084.77	25	95.11	89.8	110.2	
11	B	6	No Gas	24.004	ppb	6.9	17786.96	25	96.02	89.8	110.2	
23	Na	45	He	5081.637	ppb	1.0	519618.26	5000	101.63	89.8	110.2	
24	Mg	45	He	4891.213	ppb	0.9	275063.15	5000	97.82	89.8	110.2	
27	Al	45	He	480.049	ppb	0.6	10811.09	500	96.01	89.8	110.2	
28	Si	45	H2	475.193	ppb	3.5	20908.40	500	95.04	89.8	110.2	
39	K	45	He	4874.358	ppb	0.8	271063.67	5000	97.49	89.8	110.2	
40	Ca	45	H2	4857.078	ppb	0.4	2018225.30	5000	97.14	89.8	110.2	
51	V	89	He	25.047	ppb	1.0	22046.83	25	100.19	89.8	110.2	
52	Cr	89	He	24.931	ppb	0.4	26994.80	25	99.72	89.8	110.2	
55	Mn	89	He	24.925	ppb	1.2	12993.61	25	99.7	89.8	110.2	
56	Fe	89	H2	4844.886	ppb	1.0	8382071.88	5000	96.9	89.8	110.2	
59	Co	89	He	25.085	ppb	1.9	46829.78	25	100.34	89.8	110.2	
60	Ni	89	He	25.615	ppb	3.2	13629.34	25	102.46	89.8	110.2	
63	Cu	89	He	25.112	ppb	0.7	36018.35	25	100.45	89.8	110.2	
66	Zn	89	He	25.062	ppb	3.2	4912.16	25	100.25	89.8	110.2	
75	As	89	He	24.789	ppb	2.7	4032.36	25	99.16	89.8	110.2	
78	Se	89	H2	24.556	ppb	0.2	2129.40	25	98.22	89.8	110.2	
88	Sr	89	He	24.208	ppb	1.0	20201.05	25	96.83	89.8	110.2	
95	Mo	89	He	25.175	ppb	1.5	23744.59	25	100.7	89.8	110.2	
107	Ag	89	He	25.016	ppb	0.6	81187.15	25	100.06	89.8	110.2	
111	Cd	89	He	24.846	ppb	0.6	10354.05	25	99.38	89.8	110.2	
118	Sn	159	He	23.904	ppb	0.9	22484.98	25	95.62	89.8	110.2	
121	Sb	159	No Gas	23.644	ppb	6.4	187806.77	25	94.58	89.8	110.2	
137	Ba	159	No Gas	23.785	ppb	7.0	74845.37	25	95.14	89.8	110.2	
182	W	159	No Gas	23.319	ppb	6.6	145813.97	25	93.28	89.8	110.2	
205	Tl	209	No Gas	23.950	ppb	6.4	325469.76	25	95.8	89.8	110.2	
208	Pb	209	No Gas	24.037	ppb	6.5	453945.40	25	96.15	89.8	110.2	
232	Th	209	No Gas	23.719	ppb	7.3	463187.01	25	94.88	89.8	110.2	
238	U	209	No Gas	23.974	ppb	7.2	439477.38	25	95.9	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	983314.87	3.5	1023754.81	96.05	29.5	120.4	
Sc	45	No Gas	2935918.39	4.7	2927134.09	100.3	29.5	120.4	
Sc	45	H2	347059.42	1.5	374925.7	92.57	29.5	120.4	
Sc	45	He	69363.99	0.5	75429.93	91.96	29.5	120.4	
Ge	72	No Gas	698327.38	4.1	682196.39	102.36	29.5	120.4	
Ge	72	H2	135719.32	0.9	145757.5	93.11	29.5	120.4	
Ge	72	He	56042.18	0.5	59866.13	93.61	29.5	120.4	
Y	89	H2	2367060.31	1.2	2441196.5	96.96	29.5	120.4	
Y	89	He	496899.30	0.0	531537.69	93.48	29.5	120.4	
Tb	159	No Gas	7609772.24	4.1	7041897.33	108.06	29.5	120.4	
Tb	159	He	2763732.88	0.4	2795586.52	98.86	29.5	120.4	
Bi	209	No Gas	4059595.99	4.3	3760534.49	107.95	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	027_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:01:21 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.069	ppb	5.8	96.67	0.2	
11	B	6	No Gas	0.882	ppb	7.2	2125.78	4	
23	Na	45	He	27.289	ppb	4.3	11921.44	200	
24	Mg	45	He	3.711	ppb	19.4	1104.57	20	
27	Al	45	He	3.771	ppb	22.4	121.11	20	
28	Si	45	H2	2.845	ppb	80.4	594.01	100	
39	K	45	He	5.559	ppb	60.0	10967.66	200	
40	Ca	45	H2	20.526	ppb	112.6	9964.35	20	Fail All Methods□ Failed DoD
51	V	89	He	0.136	ppb	32.9	300.02	1	
52	Cr	89	He	0.044	ppb	46.9	112.65	1	
55	Mn	89	He	0.078	ppb	15.7	77.32	0.4	
56	Fe	89	H2	17.608	ppb	83.3	37303.28	20	Failed DoD
59	Co	89	He	0.048	ppb	29.2	124.45	0.2	
60	Ni	89	He	0.531	ppb	13.5	910.07	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.072	ppb	14.9	200.01	0.6	
66	Zn	89	He	0.007	ppb	1955.0	101.12	2	
75	As	89	He	0.027	ppb	33.6	8.67	1	
78	Se	89	H2	0.156	ppb	55.7	14.17	1	
88	Sr	89	He	0.028	ppb	52.1	24.44	1	
95	Mo	89	He	0.122	ppb	11.0	127.79	1	
107	Ag	89	He	0.008	ppb	30.5	34.45	0.2	
111	Cd	89	He	0.021	ppb	0.9	8.89	0.2	
118	Sn	159	He	0.084	ppb	35.2	136.67	1	
121	Sb	159	No Gas	0.027	ppb	23.3	270.30	0.2	
137	Ba	159	No Gas	0.033	ppb	25.1	136.82	0.4	
182	W	159	No Gas	0.095	ppb	11.9	634.06	1	
205	Tl	209	No Gas	0.039	ppb	20.3	543.95	0.2	
208	Pb	209	No Gas	0.048	ppb	17.5	1021.15	0.2	
232	Th	209	No Gas	0.047	ppb	6.4	1011.17	1	
238	U	209	No Gas	0.024	ppb	15.8	443.84	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	978855.50	3.7	1023754.81	95.61	29.5	120.4	
Sc	45	No Gas	2955580.27	3.6	2927134.09	100.97	29.5	120.4	
Sc	45	H2	361895.36	1.2	374925.7	96.52	29.5	120.4	
Sc	45	He	72227.06	0.4	75429.93	95.75	29.5	120.4	
Ge	72	No Gas	704231.28	3.1	682196.39	103.23	29.5	120.4	
Ge	72	H2	140502.01	1.5	145757.5	96.39	29.5	120.4	
Ge	72	He	57970.81	0.6	59866.13	96.83	29.5	120.4	
Y	89	H2	2426109.15	0.6	2441196.5	99.38	29.5	120.4	
Y	89	He	514397.79	0.9	531537.69	96.78	29.5	120.4	
Tb	159	No Gas	7552849.40	3.5	7041897.33	107.26	29.5	120.4	
Tb	159	He	2787387.39	0.6	2795586.52	99.71	29.5	120.4	
Bi	209	No Gas	4058550.26	3.3	3760534.49	107.92	29.5	120.4	

Sample Report

Sample Name SN6194-001

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:03:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.062	ppb	34.9	91.12	100	
11	B	6	No Gas	1.923	ppb	6.1	2865.95	1000	
23	Na	45	He	6600.137	ppb	1.5	699640.92	200000	
24	Mg	45	He	1974.565	ppb	1.5	116089.69	200000	
27	Al	45	He	3.013	ppb	13.4	103.34	200000	
28	Si	45	H2	6842.781	ppb	0.6	306411.36	10000	
39	K	45	He	1327.506	ppb	0.7	84585.34	200000	
40	Ca	45	H2	8125.718	ppb	0.9	3505752.72	200000	
51	V	89	He	0.741	ppb	3.0	842.28	1000	
52	Cr	89	He	0.489	ppb	3.2	607.24	2000	
55	Mn	89	He	4.825	ppb	4.6	2617.78	2000	
56	Fe	89	H2	57.336	ppb	1.7	108167.61	100000	
59	Co	89	He	0.031	ppb	28.8	91.12	1000	
60	Ni	89	He	3.262	ppb	11.2	2332.51	1000	
63	Cu	89	He	656.987	ppb	2.6	967821.51	2000	
66	Zn	89	He	328.973	ppb	2.8	65176.08	2000	
75	As	89	He	0.289	ppb	31.5	52.34	1000	
78	Se	89	H2	0.168	ppb	32.8	15.33	1000	
88	Sr	89	He	50.339	ppb	2.9	43246.67	2000	
95	Mo	89	He	0.230	ppb	19.0	232.23	1000	
107	Ag	89	He	0.024	ppb	3.7	87.78	100	
111	Cd	89	He	0.033	ppb	17.6	14.07	1000	
118	Sn	159	He	0.139	ppb	18.3	191.12	1000	
121	Sb	159	No Gas	0.156	ppb	5.5	1294.84	1000	
137	Ba	159	No Gas	4.643	ppb	9.0	14607.82	2000	
182	W	159	No Gas	0.418	ppb	6.5	2656.60	1000	
205	Tl	209	No Gas	0.017	ppb	36.8	256.96	1000	
208	Pb	209	No Gas	2.859	ppb	8.3	54874.66	2000	
232	Th	209	No Gas	0.044	ppb	25.1	974.47	1000	
238	U	209	No Gas	0.065	ppb	4.0	1214.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	991777.80	2.4	1023754.81	96.88	29.5	120.4	
Sc	45	No Gas	2976636.01	3.5	2927134.09	101.69	29.5	120.4	
Sc	45	H2	360451.16	1.7	374925.7	96.14	29.5	120.4	
Sc	45	He	72193.78	1.3	75429.93	95.71	29.5	120.4	
Ge	72	No Gas	706772.63	3.6	682196.39	103.6	29.5	120.4	
Ge	72	H2	139035.46	0.5	145757.5	95.39	29.5	120.4	
Ge	72	He	57946.32	0.9	59866.13	96.79	29.5	120.4	
Y	89	H2	2435520.28	0.9	2441196.5	99.77	29.5	120.4	
Y	89	He	511743.13	2.0	531537.69	96.28	29.5	120.4	
Tb	159	No Gas	7595063.36	3.7	7041897.33	107.86	29.5	120.4	
Tb	159	He	2820081.94	1.8	2795586.52	100.88	29.5	120.4	
Bi	209	No Gas	4118835.98	3.6	3760534.49	109.53	29.5	120.4	

Sample Report

Sample Name SN6194-002

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:06:39 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.054	ppb	36.6	81.11	100	
11	B	6	No Gas	1.754	ppb	15.3	2723.69	1000	
23	Na	45	He	6556.837	ppb	0.6	696719.68	200000	
24	Mg	45	He	1903.502	ppb	0.7	112203.45	200000	
27	Al	45	He	1.911	ppb	10.1	77.78	200000	
28	Si	45	H2	6839.038	ppb	0.4	307640.78	10000	
39	K	45	He	1320.452	ppb	1.1	84383.87	200000	
40	Ca	45	H2	8741.081	ppb	0.5	3788376.58	200000	
51	V	89	He	1.008	ppb	12.0	1092.30	1000	
52	Cr	89	He	0.634	ppb	7.2	775.22	2000	
55	Mn	89	He	13.298	ppb	1.8	7221.88	2000	
56	Fe	89	H2	159.073	ppb	1.0	292392.20	100000	
59	Co	89	He	0.023	ppb	66.9	77.78	1000	
60	Ni	89	He	1.282	ppb	13.4	1310.11	1000	
63	Cu	89	He	272.756	ppb	0.3	405703.43	2000	
66	Zn	89	He	357.938	ppb	0.5	71586.33	2000	
75	As	89	He	0.688	ppb	7.7	120.34	1000	
78	Se	89	H2	0.179	ppb	5.5	16.50	1000	
88	Sr	89	He	53.230	ppb	1.6	46168.27	2000	
95	Mo	89	He	0.186	ppb	19.5	191.12	1000	
107	Ag	89	He	0.018	ppb	47.6	67.78	100	
111	Cd	89	He	0.039	ppb	61.3	16.67	1000	
118	Sn	159	He	0.125	ppb	14.4	180.01	1000	
121	Sb	159	No Gas	0.029	ppb	6.4	290.33	1000	
137	Ba	159	No Gas	5.362	ppb	6.4	17153.33	2000	
182	W	159	No Gas	0.401	ppb	10.2	2589.83	1000	
205	Tl	209	No Gas	0.010	ppb	22.0	153.51	1000	
208	Pb	209	No Gas	1.277	ppb	5.6	25034.51	2000	
232	Th	209	No Gas	0.014	ppb	21.4	390.44	1000	
238	U	209	No Gas	0.066	ppb	7.6	1268.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	982575.81	3.5	1023754.81	95.98	29.5	120.4	
Sc	45	No Gas	3000669.94	3.9	2927134.09	102.51	29.5	120.4	
Sc	45	H2	362075.07	1.1	374925.7	96.57	29.5	120.4	
Sc	45	He	72354.28	0.9	75429.93	95.92	29.5	120.4	
Ge	72	No Gas	715137.16	4.1	682196.39	104.83	29.5	120.4	
Ge	72	H2	141455.90	0.7	145757.5	97.05	29.5	120.4	
Ge	72	He	58837.72	0.2	59866.13	98.28	29.5	120.4	
Y	89	H2	2462714.97	0.2	2441196.5	100.88	29.5	120.4	
Y	89	He	516460.76	0.6	531537.69	97.16	29.5	120.4	
Tb	159	No Gas	7721931.14	4.0	7041897.33	109.66	29.5	120.4	
Tb	159	He	2846616.14	0.7	2795586.52	101.83	29.5	120.4	
Bi	209	No Gas	4194907.05	4.0	3760534.49	111.55	29.5	120.4	

Sample Report

Sample Name SN6194-003

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:09:14 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.045	ppb	7.1	71.12	100	
11	B	6	No Gas	1.713	ppb	9.5	2665.89	1000	
23	Na	45	He	6576.583	ppb	2.8	695424.91	200000	
24	Mg	45	He	1880.945	ppb	0.5	110360.83	200000	
27	Al	45	He	29.227	ppb	11.3	714.49	200000	
28	Si	45	H2	6932.424	ppb	0.9	311488.74	10000	
39	K	45	He	1349.751	ppb	1.2	85606.84	200000	
40	Ca	45	H2	9351.681	ppb	0.4	4048557.37	200000	
51	V	89	He	0.888	ppb	19.4	987.85	1000	
52	Cr	89	He	0.747	ppb	14.2	907.28	2000	
55	Mn	89	He	3.604	ppb	4.1	1992.46	2000	
56	Fe	89	H2	32.363	ppb	0.6	64368.13	100000	
59	Co	89	He	0.036	ppb	36.5	102.23	1000	
60	Ni	89	He	5.646	ppb	2.7	3633.94	1000	
63	Cu	89	He	249.008	ppb	0.2	372157.73	2000	
66	Zn	89	He	200.490	ppb	0.5	40332.41	2000	
75	As	89	He	0.209	ppb	22.5	39.67	1000	
78	Se	89	H2	0.128	ppb	23.7	11.83	1000	
88	Sr	89	He	57.401	ppb	1.1	50026.21	2000	
95	Mo	89	He	0.189	ppb	10.8	194.45	1000	
107	Ag	89	He	0.082	ppb	4.8	284.46	100	
111	Cd	89	He	0.029	ppb	13.3	12.59	1000	
118	Sn	159	He	0.094	ppb	19.2	150.01	1000	
121	Sb	159	No Gas	0.130	ppb	7.1	1094.59	1000	
137	Ba	159	No Gas	5.725	ppb	3.6	18185.98	2000	
182	W	159	No Gas	0.304	ppb	6.3	1962.35	1000	
205	Tl	209	No Gas	0.006	ppb	31.2	100.11	1000	
208	Pb	209	No Gas	2.968	ppb	4.1	57639.15	2000	
232	Th	209	No Gas	0.011	ppb	10.2	330.38	1000	
238	U	209	No Gas	0.051	ppb	13.7	964.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	971296.09	2.0	1023754.81	94.88	29.5	120.4	
Sc	45	No Gas	2999483.57	1.9	2927134.09	102.47	29.5	120.4	
Sc	45	H2	361674.29	0.4	374925.7	96.47	29.5	120.4	
Sc	45	He	72011.42	0.6	75429.93	95.47	29.5	120.4	
Ge	72	No Gas	715914.88	1.7	682196.39	104.94	29.5	120.4	
Ge	72	H2	141718.30	0.7	145757.5	97.23	29.5	120.4	
Ge	72	He	58948.24	0.5	59866.13	98.47	29.5	120.4	
Y	89	H2	2459146.01	0.3	2441196.5	100.74	29.5	120.4	
Y	89	He	518926.68	0.6	531537.69	97.63	29.5	120.4	
Tb	159	No Gas	7659920.23	1.8	7041897.33	108.78	29.5	120.4	
Tb	159	He	2850424.92	0.6	2795586.52	101.96	29.5	120.4	
Bi	209	No Gas	4161143.92	2.0	3760534.49	110.65	29.5	120.4	

Sample Report

Sample Name SN6194-004

File Name 031SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:11:56 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.050	ppb	31.5	76.67	100	
11	B	6	No Gas	1.710	ppb	10.8	2654.78	1000	
23	Na	45	He	6653.045	ppb	2.3	699225.44	200000	
24	Mg	45	He	1742.514	ppb	2.0	101690.74	200000	
27	Al	45	He	13.975	ppb	3.4	356.68	200000	
28	Si	45	H2	6848.428	ppb	1.1	304113.49	10000	
39	K	45	He	1369.058	ppb	2.0	86162.13	200000	
40	Ca	45	H2	11073.939	ppb	0.8	4737893.40	200000	
51	V	89	He	0.976	ppb	5.6	1067.86	1000	
52	Cr	89	He	0.758	ppb	7.1	917.87	2000	
55	Mn	89	He	2.632	ppb	1.7	1463.15	2000	
56	Fe	89	H2	36.375	ppb	2.2	71320.28	100000	
59	Co	89	He	0.022	ppb	53.9	75.56	1000	
60	Ni	89	He	1.368	ppb	14.0	1361.23	1000	
63	Cu	89	He	140.049	ppb	1.2	209138.96	2000	
66	Zn	89	He	120.634	ppb	0.6	24284.04	2000	
75	As	89	He	0.300	ppb	14.3	55.01	1000	
78	Se	89	H2	0.132	ppb	24.8	12.17	1000	
88	Sr	89	He	69.773	ppb	1.1	60744.70	2000	
95	Mo	89	He	0.165	ppb	5.4	171.12	1000	
107	Ag	89	He	0.012	ppb	30.9	47.78	100	
111	Cd	89	He	0.009	ppb	17.5	3.70	1000	
118	Sn	159	He	0.138	ppb	7.6	191.12	1000	
121	Sb	159	No Gas	0.029	ppb	8.6	286.99	1000	
137	Ba	159	No Gas	5.261	ppb	7.6	16806.05	2000	
182	W	159	No Gas	0.353	ppb	13.6	2279.45	1000	
205	Tl	209	No Gas	0.007	ppb	21.7	120.14	1000	
208	Pb	209	No Gas	0.754	ppb	7.9	14709.76	2000	
232	Th	209	No Gas	0.009	ppb	18.3	290.33	1000	
238	U	209	No Gas	0.059	ppb	18.1	1121.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	967379.07	3.7	1023754.81	94.49	29.5	120.4	
Sc	45	No Gas	3005290.63	4.6	2927134.09	102.67	29.5	120.4	
Sc	45	H2	357465.81	1.4	374925.7	95.34	29.5	120.4	
Sc	45	He	71592.75	1.6	75429.93	94.91	29.5	120.4	
Ge	72	No Gas	714135.11	3.7	682196.39	104.68	29.5	120.4	
Ge	72	H2	139788.45	1.2	145757.5	95.9	29.5	120.4	
Ge	72	He	58432.81	0.3	59866.13	97.61	29.5	120.4	
Y	89	H2	2450647.59	0.9	2441196.5	100.39	29.5	120.4	
Y	89	He	518406.09	0.3	531537.69	97.53	29.5	120.4	
Tb	159	No Gas	7714505.93	4.3	7041897.33	109.55	29.5	120.4	
Tb	159	He	2831124.71	0.9	2795586.52	101.27	29.5	120.4	
Bi	209	No Gas	4165835.01	4.5	3760534.49	110.78	29.5	120.4	

Sample Report

Sample Name SN6194-005

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:14:34 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	3.6	65.56	100	
11	B	6	No Gas	1.483	ppb	8.5	2486.97	1000	
23	Na	45	He	6333.043	ppb	1.3	677559.30	200000	
24	Mg	45	He	1785.577	ppb	0.8	105992.21	200000	
27	Al	45	He	2.506	ppb	24.6	92.22	200000	
28	Si	45	H2	6761.254	ppb	0.8	303464.28	10000	
39	K	45	He	1292.231	ppb	2.3	83328.24	200000	
40	Ca	45	H2	9147.433	ppb	0.8	3955678.38	200000	
51	V	89	He	0.968	ppb	7.4	1058.97	1000	
52	Cr	89	He	0.660	ppb	4.8	807.21	2000	
55	Mn	89	He	4.192	ppb	5.5	2307.11	2000	
56	Fe	89	H2	52.051	ppb	1.3	100056.07	100000	
59	Co	89	He	0.024	ppb	55.8	80.01	1000	
60	Ni	89	He	1.075	ppb	10.9	1204.54	1000	
63	Cu	89	He	78.906	ppb	1.0	117750.84	2000	
66	Zn	89	He	17.772	ppb	0.9	3659.50	2000	
75	As	89	He	0.272	ppb	20.9	50.34	1000	
78	Se	89	H2	0.105	ppb	21.7	9.83	1000	
88	Sr	89	He	55.604	ppb	0.6	48357.98	2000	
95	Mo	89	He	0.169	ppb	19.4	174.45	1000	
107	Ag	89	He	0.012	ppb	36.2	47.78	100	
111	Cd	89	He	0.011	ppb	27.0	4.82	1000	
118	Sn	159	He	0.057	ppb	29.0	114.45	1000	
121	Sb	159	No Gas	0.027	ppb	17.7	266.97	1000	
137	Ba	159	No Gas	5.164	ppb	5.5	16308.20	2000	
182	W	159	No Gas	0.320	ppb	1.0	2052.45	1000	
205	Tl	209	No Gas	0.003	ppb	81.9	56.73	1000	
208	Pb	209	No Gas	1.847	ppb	5.2	35598.96	2000	
232	Th	209	No Gas	0.009	ppb	40.2	290.33	1000	
238	U	209	No Gas	0.053	ppb	4.3	997.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	961081.85	2.6	1023754.81	93.88	29.5	120.4	
Sc	45	No Gas	2963024.69	2.4	2927134.09	101.23	29.5	120.4	
Sc	45	H2	361272.45	1.2	374925.7	96.36	29.5	120.4	
Sc	45	He	72822.91	1.3	75429.93	96.54	29.5	120.4	
Ge	72	No Gas	710279.14	2.6	682196.39	104.12	29.5	120.4	
Ge	72	H2	143172.84	1.7	145757.5	98.23	29.5	120.4	
Ge	72	He	58449.83	0.1	59866.13	97.63	29.5	120.4	
Y	89	H2	2467177.37	0.5	2441196.5	101.06	29.5	120.4	
Y	89	He	517867.62	0.5	531537.69	97.43	29.5	120.4	
Tb	159	No Gas	7617563.08	2.5	7041897.33	108.17	29.5	120.4	
Tb	159	He	2861687.21	0.5	2795586.52	102.36	29.5	120.4	
Bi	209	No Gas	4126717.61	2.6	3760534.49	109.74	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG08IMS1
File Name	033_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:17:17 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.258	ppb	16.0	76.67	0.5	
B	11	6	No Gas	5.396	ppb	7.4	2205.80	10	
Na	23	45	He	197.773	ppb	7.8	12906.79	500	
Mg	24	45	He	43.693	ppb	27.0	1366.84	50	
Al	27	45	He	71.949	ppb	17.1	361.13	50	PB 6020 Fails DoD
Si	28	45	H2	84.049	ppb	88.3	1194.75	250	
K	39	45	He	32.008	ppb	35.8	10765.89	500	
Ca	40	45	H2	440.212	ppb	113.4	38366.85	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
V	51	89	He	10.040	ppb	1.9	1975.77	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cr	52	89	He	0.910	ppb	22.9	264.62	2.5	
Mn	55	89	He	1.933	ppb	10.6	241.29	1	PB 6020 Fails DoD
Fe	56	89	H2	207.091	ppb	135.4	80066.67	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Co	59	89	He	0.137	ppb	41.8	84.45	0.5	
Ni	60	89	He	5.040	ppb	10.1	1151.20	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	1.783	ppb	12.9	615.59	1.5	PB 6020 Fails DoD
Zn	66	89	He	7.746	ppb	14.4	404.47	5	PB 6020 Fails DoD
As	75	89	He	0.436	ppb	25.1	18.67	2.5	
Se	78	89	H2	1.081	ppb	102.7	19.67	2.5	
Sr	88	89	He	0.337	ppb	56.7	57.78	2.5	
Mo	95	89	He	0.341	ppb	8.4	74.45	2.5	
Ag	107	89	He	0.044	ppb	28.5	35.56	0.5	
Cd	111	89	He	0.052	ppb	66.1	4.44	0.5	
Sn	118	159	He	45.320	ppb	1.6	8797.62	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.078	ppb	36.4	183.54	0.5	
Ba	137	159	No Gas	0.224	ppb	23.9	180.20	1	
W	182	159	No Gas	0.169	ppb	27.5	266.97	2.5	
Tl	205	209	No Gas	0.058	ppb	38.7	183.54	0.5	
Pb	208	209	No Gas	0.345	ppb	13.8	1468.36	0.5	
Th	232	209	No Gas	0.061	ppb	19.9	353.73	2.5	
U	238	209	No Gas	0.018	ppb	49.3	80.09	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	955708.12	4.0	1023754.81	93.35	29.5	120.4	
Sc	45	No Gas	2960146.06	3.6	2927134.09	101.13	29.5	120.4	
Sc	45	H2	354306.40	1.3	374925.7	94.5	29.5	120.4	
Sc	45	He	70597.70	0.4	75429.93	93.59	29.5	120.4	
Ge	72	No Gas	714881.97	3.0	682196.39	104.79	29.5	120.4	
Ge	72	H2	138958.48	0.6	145757.5	95.34	29.5	120.4	
Ge	72	He	56688.45	0.6	59866.13	94.69	29.5	120.4	
Y	89	H2	2437229.17	0.2	2441196.5	99.84	29.5	120.4	
Y	89	He	510037.97	0.8	531537.69	95.96	29.5	120.4	
Tb	159	No Gas	7876201.76	3.3	7041897.33	111.85	29.5	120.4	
Tb	159	He	2840226.49	0.4	2795586.52	101.6	29.5	120.4	
Bi	209	No Gas	4218190.75	3.9	3760534.49	112.17	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG08IMS1
File Name	034_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:19:54 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.786	ppb	3.6	9470.09	50	19.11	79.5	120.4	
B	11	6	No Gas	488.270	ppb	2.8	63466.59	500	19.53	79.5	120.4	
Na	23	45	He	7941.357	ppb	0.5	171833.97	7500	21.18	79.5	120.4	
Mg	24	45	He	4899.259	ppb	1.1	56928.63	5000	19.6	79.5	120.4	
Al	27	45	He	1818.997	ppb	1.2	8368.30	2000	18.19	79.5	120.4	
Si	28	45	H2	951.942	ppb	4.4	8829.22	1000	19.04	79.5	120.4	
K	39	45	He	10083.929	ppb	0.4	120568.95	10000	20.17	79.5	120.4	
Ca	40	45	H2	2569.148	ppb	1.2	219155.96	2500	20.55	79.5	120.4	
V	51	89	He	508.034	ppb	1.1	91438.44	500	20.32	79.5	120.4	
Cr	52	89	He	202.162	ppb	0.3	44983.56	200	20.22	79.5	120.4	
Mn	55	89	He	500.440	ppb	0.7	53554.45	500	20.02	79.5	120.4	
Fe	56	89	H2	1040.105	ppb	0.5	379360.38	1000	20.8	79.5	120.4	
Co	59	89	He	510.119	ppb	1.3	195775.93	500	20.4	79.5	120.4	
Ni	60	89	He	520.084	ppb	0.4	55000.05	500	20.8	79.5	120.4	
Cu	63	89	He	255.454	ppb	0.9	75267.17	250	20.44	79.5	120.4	
Zn	66	89	He	516.558	ppb	1.6	20514.51	500	20.66	79.5	120.4	
As	75	89	He	101.258	ppb	3.2	3388.46	100	20.25	79.5	120.4	
Se	78	89	H2	98.512	ppb	1.4	1772.70	100	19.7	79.5	120.4	
Sr	88	89	He	495.028	ppb	1.2	84965.32	500	19.8	79.5	120.4	
Mo	95	89	He	103.427	ppb	2.3	20065.33	100	20.68	79.5	120.4	
Ag	107	89	He	51.779	ppb	1.0	34568.16	50	20.71	79.5	120.4	
Cd	111	89	He	257.724	ppb	0.4	22090.65	250	20.62	79.5	120.4	
Sn	118	159	He	530.123	ppb	1.2	103406.11	500	21.2	79.5	120.4	
Sb	121	159	No Gas	97.135	ppb	0.9	161699.30	100	19.43	79.5	120.4	
Ba	137	159	No Gas	1890.905	ppb	1.4	1246690.68	2000	18.91	79.5	120.4	
W	182	159	No Gas	97.729	ppb	1.5	128084.48	100	19.55	79.5	120.4	
Tl	205	209	No Gas	101.929	ppb	1.0	289409.16	100	20.39	79.5	120.4	
Pb	208	209	No Gas	100.885	ppb	1.8	398116.69	100	20.18	79.5	120.4	
Th	232	209	No Gas	98.862	ppb	1.4	403505.56	100	19.77	79.5	120.4	
U	238	209	No Gas	99.717	ppb	1.8	382034.29	100	19.94	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	921276.63	0.7	1023754.81	89.99	29.5	120.4	
Sc	45	No Gas	2915300.74	0.8	2927134.09	99.6	29.5	120.4	
Sc	45	H2	354630.80	1.6	374925.7	94.59	29.5	120.4	
Sc	45	He	70782.06	0.7	75429.93	93.84	29.5	120.4	
Ge	72	No Gas	714738.98	0.4	682196.39	104.77	29.5	120.4	
Ge	72	H2	136862.62	1.7	145757.5	93.9	29.5	120.4	
Ge	72	He	56928.05	0.7	59866.13	95.09	29.5	120.4	
Y	89	H2	2455709.82	0.8	2441196.5	100.59	29.5	120.4	
Y	89	He	511019.45	0.3	531537.69	96.14	29.5	120.4	
Tb	159	No Gas	7959378.70	1.0	7041897.33	113.03	29.5	120.4	
Tb	159	He	2871469.16	0.5	2795586.52	102.71	29.5	120.4	
Bi	209	No Gas	4233100.92	0.8	3760534.49	112.57	29.5	120.4	

Sample Report

Sample Name SN5147-001

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:22:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.356	ppb	17.6	90.00	100	
11	B	6	No Gas	19.410	ppb	7.8	3771.72	1000	
23	Na	45	He	140.780	ppb	0.8	11777.83	200000	
24	Mg	45	He	140.788	ppb	3.6	2482.61	200000	
27	Al	45	He	1303.425	ppb	1.8	6008.16	200000	
28	Si	45	H2	866.030	ppb	28.7	7877.13	10000	
39	K	45	He	76.780	ppb	19.5	11287.78	200000	
40	Ca	45	H2	1994.323	ppb	0.4	166136.97	200000	
51	V	89	He	11.295	ppb	8.1	2202.50	1000	
52	Cr	89	He	3.038	ppb	4.9	737.22	2000	
55	Mn	89	He	17.032	ppb	1.1	1855.13	2000	
56	Fe	89	H2	605.704	ppb	0.3	221296.90	100000	
59	Co	89	He	0.461	ppb	3.0	208.90	1000	
60	Ni	89	He	4.770	ppb	7.9	1124.53	1000	
63	Cu	89	He	5.099	ppb	1.6	1591.26	2000	
66	Zn	89	He	11.646	ppb	13.8	558.92	2000	
75	As	89	He	0.763	ppb	15.5	29.67	1000	
78	Se	89	H2	0.524	ppb	16.3	9.67	1000	
88	Sr	89	He	9.949	ppb	6.2	1705.73	2000	
95	Mo	89	He	0.679	ppb	9.4	140.00	1000	
107	Ag	89	He	0.025	ppb	19.2	23.33	100	
111	Cd	89	He	0.130	ppb	26.3	11.11	1000	
118	Sn	159	He	45.327	ppb	1.0	8853.20	1000	
121	Sb	159	No Gas	0.226	ppb	15.7	440.50	1000	
137	Ba	159	No Gas	15.269	ppb	9.6	10225.29	2000	
182	W	159	No Gas	0.311	ppb	9.0	463.90	1000	
205	Tl	209	No Gas	0.107	ppb	13.9	333.71	1000	
208	Pb	209	No Gas	32.934	ppb	7.1	133789.68	2000	
232	Th	209	No Gas	2.069	ppb	4.1	8803.15	1000	
238	U	209	No Gas	0.344	ppb	1.5	1368.26	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	890219.83	3.8	1023754.81	86.96	29.5	120.4	
Sc	45	No Gas	2940488.51	4.1	2927134.09	100.46	29.5	120.4	
Sc	45	H2	345786.78	0.5	374925.7	92.23	29.5	120.4	
Sc	45	He	70818.47	0.9	75429.93	93.89	29.5	120.4	
Ge	72	No Gas	722182.73	3.4	682196.39	105.86	29.5	120.4	
Ge	72	H2	134620.93	0.2	145757.5	92.36	29.5	120.4	
Ge	72	He	56995.27	0.3	59866.13	95.2	29.5	120.4	
Y	89	H2	2431246.87	0.5	2441196.5	99.59	29.5	120.4	
Y	89	He	510579.24	0.8	531537.69	96.06	29.5	120.4	
Tb	159	No Gas	8076958.28	3.6	7041897.33	114.7	29.5	120.4	
Tb	159	He	2857536.63	0.5	2795586.52	102.22	29.5	120.4	
Bi	209	No Gas	4363506.68	4.1	3760534.49	116.03	29.5	120.4	

Sample Report

Sample Name SN5147-003

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:25:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.319	ppb	40.4	82.23	100	
11	B	6	No Gas	10.893	ppb	9.0	2715.92	1000	
23	Na	45	He	106.631	ppb	5.9	10972.99	200000	
24	Mg	45	He	147.073	ppb	4.2	2529.30	200000	
27	Al	45	He	1708.919	ppb	0.9	7793.53	200000	
28	Si	45	H2	957.879	ppb	7.8	8593.44	10000	
39	K	45	He	63.646	ppb	42.7	11037.64	200000	
40	Ca	45	H2	2587.857	ppb	1.1	213560.63	200000	
51	V	89	He	10.971	ppb	5.6	2144.70	1000	
52	Cr	89	He	5.730	ppb	7.9	1334.49	2000	
55	Mn	89	He	18.850	ppb	4.8	2049.12	2000	
56	Fe	89	H2	863.009	ppb	0.6	309408.99	100000	
59	Co	89	He	0.489	ppb	13.7	220.02	1000	
60	Ni	89	He	4.487	ppb	10.7	1095.64	1000	
63	Cu	89	He	6.322	ppb	1.0	1951.32	2000	
66	Zn	89	He	14.374	ppb	5.5	666.71	2000	
75	As	89	He	0.615	ppb	19.8	24.67	1000	
78	Se	89	H2	0.463	ppb	42.6	8.50	1000	
88	Sr	89	He	12.082	ppb	4.1	2072.46	2000	
95	Mo	89	He	0.667	ppb	4.8	137.78	1000	
107	Ag	89	He	0.040	ppb	20.9	33.34	100	
111	Cd	89	He	0.104	ppb	33.5	8.89	1000	
118	Sn	159	He	43.443	ppb	1.1	8587.47	1000	
121	Sb	159	No Gas	0.109	ppb	9.2	243.61	1000	
137	Ba	159	No Gas	16.992	ppb	9.8	11447.67	2000	
182	W	159	No Gas	0.171	ppb	27.9	276.98	1000	
205	Tl	209	No Gas	0.041	ppb	24.8	140.16	1000	
208	Pb	209	No Gas	22.482	ppb	7.1	92049.77	2000	
232	Th	209	No Gas	1.790	ppb	7.9	7681.08	1000	
238	U	209	No Gas	0.474	ppb	6.5	1895.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	886401.36	3.6	1023754.81	86.58	29.5	120.4	
Sc	45	No Gas	2934856.60	4.0	2927134.09	100.26	29.5	120.4	
Sc	45	H2	343059.11	0.8	374925.7	91.5	29.5	120.4	
Sc	45	He	70157.25	2.5	75429.93	93.01	29.5	120.4	
Ge	72	No Gas	722292.74	3.5	682196.39	105.88	29.5	120.4	
Ge	72	H2	134064.75	1.5	145757.5	91.98	29.5	120.4	
Ge	72	He	56888.40	1.5	59866.13	95.03	29.5	120.4	
Y	89	H2	2405731.51	0.6	2441196.5	98.55	29.5	120.4	
Y	89	He	510719.74	1.5	531537.69	96.08	29.5	120.4	
Tb	159	No Gas	8129149.88	3.8	7041897.33	115.44	29.5	120.4	
Tb	159	He	2891447.42	1.4	2795586.52	103.43	29.5	120.4	
Bi	209	No Gas	4395551.49	3.8	3760534.49	116.89	29.5	120.4	

Sample Report

Sample Name SN5147-004

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:27:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.276	ppb	29.7	74.45	100	
11	B	6	No Gas	10.085	ppb	9.4	2594.77	1000	
23	Na	45	He	95.762	ppb	9.7	10535.51	200000	
24	Mg	45	He	133.193	ppb	7.7	2324.79	200000	
27	Al	45	He	1243.170	ppb	2.6	5564.62	200000	
28	Si	45	H2	775.961	ppb	20.6	7010.06	10000	
39	K	45	He	61.839	ppb	67.8	10797.59	200000	
40	Ca	45	H2	1669.709	ppb	0.4	137525.04	200000	
51	V	89	He	10.006	ppb	7.4	1937.99	1000	
52	Cr	89	He	2.748	ppb	2.7	661.23	2000	
55	Mn	89	He	17.687	ppb	2.1	1891.79	2000	
56	Fe	89	H2	555.839	ppb	0.7	201047.04	100000	
59	Co	89	He	0.376	ppb	56.2	173.35	1000	
60	Ni	89	He	3.464	ppb	26.7	971.18	1000	
63	Cu	89	He	3.542	ppb	6.3	1113.42	2000	
66	Zn	89	He	9.716	ppb	2.6	474.47	2000	
75	As	89	He	0.708	ppb	23.1	27.33	1000	
78	Se	89	H2	0.398	ppb	10.3	7.33	1000	
88	Sr	89	He	7.977	ppb	5.9	1344.57	2000	
95	Mo	89	He	0.609	ppb	23.9	124.45	1000	
107	Ag	89	He	0.029	ppb	20.8	25.55	100	
111	Cd	89	He	0.066	ppb	53.6	5.55	1000	
118	Sn	159	He	42.149	ppb	1.0	8240.58	1000	
121	Sb	159	No Gas	0.159	ppb	47.7	323.70	1000	
137	Ba	159	No Gas	12.061	ppb	7.3	8101.53	2000	
182	W	159	No Gas	0.161	ppb	73.8	263.64	1000	
205	Tl	209	No Gas	0.098	ppb	119.4	303.70	1000	
208	Pb	209	No Gas	14.295	ppb	6.4	58170.79	2000	
232	Th	209	No Gas	1.081	ppb	21.0	4642.78	1000	
238	U	209	No Gas	0.342	ppb	32.3	1354.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	878814.77	4.6	1023754.81	85.84	29.5	120.4	
Sc	45	No Gas	2916502.15	4.3	2927134.09	99.64	29.5	120.4	
Sc	45	H2	341439.95	0.5	374925.7	91.07	29.5	120.4	
Sc	45	He	68739.74	0.5	75429.93	91.13	29.5	120.4	
Ge	72	No Gas	717099.47	3.7	682196.39	105.12	29.5	120.4	
Ge	72	H2	134990.57	0.6	145757.5	92.61	29.5	120.4	
Ge	72	He	56175.42	1.2	59866.13	93.84	29.5	120.4	
Y	89	H2	2400995.08	0.6	2441196.5	98.35	29.5	120.4	
Y	89	He	501742.53	0.6	531537.69	94.39	29.5	120.4	
Tb	159	No Gas	8087398.35	3.7	7041897.33	114.85	29.5	120.4	
Tb	159	He	2859003.08	0.6	2795586.52	102.27	29.5	120.4	
Bi	209	No Gas	4363850.21	3.6	3760534.49	116.04	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	038_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:30:25 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.347	ppb	6.5	24186.44	25	101.39	89.8	110.2	
11	B	6	No Gas	24.628	ppb	8.2	16474.34	25	98.51	89.8	110.2	
23	Na	45	He	5063.542	ppb	1.8	526348.00	5000	101.27	89.8	110.2	
24	Mg	45	He	4928.238	ppb	1.9	281718.62	5000	98.56	89.8	110.2	
27	Al	45	He	481.534	ppb	1.4	11024.60	500	96.31	89.8	110.2	
28	Si	45	H2	460.917	ppb	1.0	20587.64	500	92.18	89.8	110.2	
39	K	45	He	4950.667	ppb	1.7	279697.55	5000	99.01	89.8	110.2	
40	Ca	45	H2	4843.020	ppb	0.6	2041924.43	5000	96.86	89.8	110.2	
51	V	89	He	25.142	ppb	2.0	22544.26	25	100.57	89.8	110.2	
52	Cr	89	He	24.857	ppb	2.2	27416.88	25	99.43	89.8	110.2	
55	Mn	89	He	24.645	ppb	2.0	13088.36	25	98.58	89.8	110.2	
56	Fe	89	H2	4735.124	ppb	0.8	8501870.84	5000	94.7	89.8	110.2	
59	Co	89	He	25.275	ppb	1.1	48069.45	25	101.1	89.8	110.2	
60	Ni	89	He	25.098	ppb	1.8	13617.08	25	100.39	89.8	110.2	
63	Cu	89	He	25.432	ppb	0.2	37163.50	25	101.73	89.8	110.2	
66	Zn	89	He	24.957	ppb	3.1	4983.30	25	99.83	89.8	110.2	
75	As	89	He	24.684	ppb	2.5	4090.39	25	98.74	89.8	110.2	
78	Se	89	H2	23.852	ppb	1.6	2146.24	25	95.41	89.8	110.2	
88	Sr	89	He	24.558	ppb	2.0	20876.50	25	98.23	89.8	110.2	
95	Mo	89	He	24.733	ppb	1.5	23765.84	25	98.93	89.8	110.2	
107	Ag	89	He	25.305	ppb	1.9	83659.60	25	101.22	89.8	110.2	
111	Cd	89	He	25.384	ppb	2.1	10776.23	25	101.54	89.8	110.2	
118	Sn	159	He	23.934	ppb	1.7	23058.12	25	95.74	89.8	110.2	
121	Sb	159	No Gas	23.290	ppb	5.7	193770.02	25	93.16	89.8	110.2	
137	Ba	159	No Gas	23.668	ppb	6.0	78015.10	25	94.67	89.8	110.2	
182	W	159	No Gas	23.311	ppb	4.9	152718.17	25	93.24	89.8	110.2	
205	Tl	209	No Gas	23.946	ppb	6.1	342881.90	25	95.78	89.8	110.2	
208	Pb	209	No Gas	24.056	ppb	6.7	478620.59	25	96.22	89.8	110.2	
232	Th	209	No Gas	23.431	ppb	7.3	482095.31	25	93.72	89.8	110.2	
238	U	209	No Gas	23.934	ppb	7.7	462195.59	25	95.74	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	889564.45	2.9	1023754.81	86.89	29.5	120.4	
Sc	45	No Gas	2923140.46	4.5	2927134.09	99.86	29.5	120.4	
Sc	45	H2	352135.36	0.9	374925.7	93.92	29.5	120.4	
Sc	45	He	70519.25	1.3	75429.93	93.49	29.5	120.4	
Ge	72	No Gas	709289.19	4.3	682196.39	103.97	29.5	120.4	
Ge	72	H2	138154.71	0.9	145757.5	94.78	29.5	120.4	
Ge	72	He	57300.22	0.8	59866.13	95.71	29.5	120.4	
Y	89	H2	2456451.75	1.0	2441196.5	100.62	29.5	120.4	
Y	89	He	506248.80	0.9	531537.69	95.24	29.5	120.4	
Tb	159	No Gas	7968588.49	4.0	7041897.33	113.16	29.5	120.4	
Tb	159	He	2830893.57	0.5	2795586.52	101.26	29.5	120.4	
Bi	209	No Gas	4277271.03	4.3	3760534.49	113.74	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	039_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:33:07 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.071	ppb	27.7	94.45	0.2	
11	B	6	No Gas	0.770	ppb	12.4	1962.42	4	
23	Na	45	He	-10.194	ppb	N/A	7850.80	200	
24	Mg	45	He	1.661	ppb	13.1	966.77	20	
27	Al	45	He	0.092	ppb	643.1	34.45	20	
28	Si	45	H2	-0.157	ppb	N/A	447.17	100	
39	K	45	He	2.020	ppb	458.2	10570.81	200	
40	Ca	45	H2	2.808	ppb	4.4	2295.82	20	
51	V	89	He	0.342	ppb	4.8	484.47	1	
52	Cr	89	He	0.018	ppb	104.4	82.65	1	
55	Mn	89	He	0.045	ppb	8.6	59.32	0.4	
56	Fe	89	H2	4.829	ppb	10.2	14714.22	20	
59	Co	89	He	0.019	ppb	88.7	68.89	0.2	
60	Ni	89	He	0.332	ppb	12.2	801.16	0.4	Failed DoD
63	Cu	89	He	0.011	ppb	38.6	108.89	0.6	
66	Zn	89	He	-0.121	ppb	N/A	75.56	2	
75	As	89	He	-0.009	ppb	N/A	2.67	1	
78	Se	89	H2	0.028	ppb	11.1	2.83	1	
88	Sr	89	He	0.017	ppb	48.0	14.45	1	
95	Mo	89	He	0.104	ppb	9.2	110.00	1	
107	Ag	89	He	0.007	ppb	28.7	31.11	0.2	
111	Cd	89	He	0.011	ppb	47.6	4.82	0.2	
118	Sn	159	He	0.092	ppb	22.8	146.68	1	
121	Sb	159	No Gas	0.023	ppb	5.1	246.94	0.2	
137	Ba	159	No Gas	0.012	ppb	72.3	73.42	0.4	
182	W	159	No Gas	0.090	ppb	3.5	630.72	1	
205	Tl	209	No Gas	0.024	ppb	11.6	363.75	0.2	
208	Pb	209	No Gas	0.025	ppb	20.3	617.37	0.2	
232	Th	209	No Gas	0.129	ppb	2.7	2730.03	1	
238	U	209	No Gas	0.020	ppb	23.0	387.11	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937085.62	3.7	1023754.81	91.53	29.5	120.4	
Sc	45	No Gas	2972275.24	3.9	2927134.09	101.54	29.5	120.4	
Sc	45	H2	352284.02	0.6	374925.7	93.96	29.5	120.4	
Sc	45	He	70901.34	0.5	75429.93	94	29.5	120.4	
Ge	72	No Gas	711322.10	4.1	682196.39	104.27	29.5	120.4	
Ge	72	H2	137275.26	0.9	145757.5	94.18	29.5	120.4	
Ge	72	He	57703.78	0.8	59866.13	96.39	29.5	120.4	
Y	89	H2	2426988.83	0.4	2441196.5	99.42	29.5	120.4	
Y	89	He	511826.20	0.7	531537.69	96.29	29.5	120.4	
Tb	159	No Gas	7855061.06	4.6	7041897.33	111.55	29.5	120.4	
Tb	159	He	2832967.77	0.5	2795586.52	101.34	29.5	120.4	
Bi	209	No Gas	4208170.83	4.1	3760534.49	111.9	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW1
File Name	040_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:35:46 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.033	ppb	25.7	57.78	0.1	
B	11	6	No Gas	-0.277	ppb	N/A	1297.89	2	
Na	23	45	He	1.404	ppb	91.7	8892.57	100	
Mg	24	45	He	5.337	ppb	32.3	1157.91	10	
Al	27	45	He	4.940	ppb	6.0	143.34	10	
Si	28	45	H2	5.252	ppb	55.3	680.77	50	
K	39	45	He	2.767	ppb	192.7	10437.48	100	
Ca	40	45	H2	8.356	ppb	2.5	4614.26	10	
V	51	89	He	0.669	ppb	3.9	770.05	0.5	200.8 PB Fails DoD
Cr	52	89	He	0.198	ppb	7.4	279.95	0.5	
Mn	55	89	He	0.239	ppb	10.8	161.31	0.2	200.8 PB Fails DoD
Fe	56	89	H2	6.885	ppb	2.4	18212.21	10	
Co	59	89	He	0.023	ppb	34.9	75.56	0.1	
Ni	60	89	He	0.431	ppb	11.6	844.50	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Cu	63	89	He	0.072	ppb	5.2	196.67	0.3	
Zn	66	89	He	7.956	ppb	4.5	1656.82	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.009	ppb	74.2	5.67	0.5	
Se	78	89	H2	0.019	ppb	0.4	2.00	0.5	
Sr	88	89	He	0.010	ppb	57.5	8.89	0.5	
Mo	95	89	He	0.070	ppb	31.7	75.56	0.5	
Ag	107	89	He	0.007	ppb	97.4	30.00	0.1	
Cd	111	89	He	0.009	ppb	45.7	3.70	0.1	
Sn	118	159	He	0.181	ppb	11.2	231.12	0.5	
Sb	121	159	No Gas	0.009	ppb	21.6	130.14	0.1	
Ba	137	159	No Gas	0.020	ppb	48.0	100.11	0.2	
W	182	159	No Gas	0.032	ppb	34.1	250.28	0.5	
Tl	205	209	No Gas	0.005	ppb	47.8	86.76	0.1	
[Pb]	206	209	No Gas	0.036	ppb	33.2	203.56	0.1	
[Pb]	207	209	No Gas	0.023	ppb	26.6	133.48	0.1	
Pb	208	209	No Gas	0.034	ppb	16.9	784.22	0.1	
Th	232	209	No Gas	0.052	ppb	16.4	1171.39	0.5	
U	238	209	No Gas	0.003	ppb	31.1	66.74	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	946614.77	3.2	1023754.81	92.46	29.5	120.4	
Sc	45	No Gas	2967039.98	4.1	2927134.09	101.36	29.5	120.4	
Sc	45	H2	350739.39	0.6	374925.7	93.55	29.5	120.4	
Sc	45	He	69726.85	0.2	75429.93	92.44	29.5	120.4	
Ge	72	No Gas	706552.89	4.0	682196.39	103.57	29.5	120.4	
Ge	72	H2	136221.45	1.1	145757.5	93.46	29.5	120.4	
Ge	72	He	56847.01	0.5	59866.13	94.96	29.5	120.4	
Y	89	H2	2407280.47	0.3	2441196.5	98.61	29.5	120.4	
Y	89	He	506511.52	0.4	531537.69	95.29	29.5	120.4	
Tb	159	No Gas	7821018.08	4.0	7041897.33	111.06	29.5	120.4	
Tb	159	He	2817039.78	0.7	2795586.52	100.77	29.5	120.4	
Bi	209	No Gas	4221020.14	4.0	3760534.49	112.25	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW1
File Name	041_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:38:29 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.001	ppb	3.8	10527.52	50	20	79.5	120.4	
B	11	6	No Gas	501.492	ppb	5.0	69203.90	500	20.06	79.5	120.4	
Na	23	45	He	7656.176	ppb	1.3	167509.62	7500	20.42	79.5	120.4	
Mg	24	45	He	5379.619	ppb	1.8	62995.10	5000	21.52	79.5	120.4	
Al	27	45	He	1892.885	ppb	1.4	8787.46	2000	18.93	79.5	120.4	
Si	28	45	H2	1011.040	ppb	4.5	9323.40	1000	20.22	79.5	120.4	
K	39	45	He	10290.070	ppb	1.3	123959.13	10000	20.58	79.5	120.4	
Ca	40	45	H2	2619.059	ppb	0.9	222653.06	2500	20.95	79.5	120.4	
V	51	89	He	520.591	ppb	0.6	92768.29	500	20.82	79.5	120.4	
Cr	52	89	He	207.749	ppb	0.3	45767.25	200	20.78	79.5	120.4	
Mn	55	89	He	517.811	ppb	0.5	54863.36	500	20.71	79.5	120.4	
Fe	56	89	H2	1070.469	ppb	0.8	382012.37	1000	21.41	79.5	120.4	
Co	59	89	He	530.186	ppb	0.2	201463.38	500	21.21	79.5	120.4	
Ni	60	89	He	529.511	ppb	1.2	55430.39	500	21.18	79.5	120.4	
Cu	63	89	He	261.522	ppb	0.9	76290.52	250	20.92	79.5	120.4	
Zn	66	89	He	542.877	ppb	1.2	21341.41	500	21.72	79.5	120.4	
As	75	89	He	104.190	ppb	1.6	3452.15	100	20.84	79.5	120.4	
Se	78	89	H2	102.632	ppb	0.9	1807.70	100	20.53	79.5	120.4	
Sr	88	89	He	520.506	ppb	0.5	88455.41	500	20.82	79.5	120.4	
Mo	95	89	He	104.210	ppb	1.4	20017.41	100	20.84	79.5	120.4	
Ag	107	89	He	52.786	ppb	1.8	34891.21	50	21.11	79.5	120.4	
Cd	111	89	He	270.067	ppb	0.6	22919.43	250	21.61	79.5	120.4	
Sn	118	159	He	507.239	ppb	0.2	96675.17	500	20.29	79.5	120.4	
Sb	121	159	No Gas	100.925	ppb	7.1	164693.65	100	20.18	79.5	120.4	
Ba	137	159	No Gas	1943.441	ppb	6.9	1256072.60	2000	19.43	79.5	120.4	
W	182	159	No Gas	99.628	ppb	6.1	128033.73	100	19.93	79.5	120.4	
Tl	205	209	No Gas	104.585	ppb	7.2	293877.06	100	20.92	79.5	120.4	
Pb	208	209	No Gas	102.895	ppb	7.5	401789.78	100	20.58	79.5	120.4	
Th	232	209	No Gas	97.875	ppb	8.8	395123.60	100	19.58	79.5	120.4	
U	238	209	No Gas	100.806	ppb	7.9	382100.52	100	20.16	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	979647.10	3.6	1023754.81	95.69	29.5	120.4	
Sc	45	No Gas	2974785.41	5.0	2927134.09	101.63	29.5	120.4	
Sc	45	H2	353433.57	0.8	374925.7	94.27	29.5	120.4	
Sc	45	He	71435.24	0.7	75429.93	94.7	29.5	120.4	
Ge	72	No Gas	711347.60	4.1	682196.39	104.27	29.5	120.4	
Ge	72	H2	137740.92	0.3	145757.5	94.5	29.5	120.4	
Ge	72	He	57487.35	0.1	59866.13	96.03	29.5	120.4	
Y	89	H2	2403837.43	0.6	2441196.5	98.47	29.5	120.4	
Y	89	He	505958.67	0.2	531537.69	95.19	29.5	120.4	
Tb	159	No Gas	7821714.95	5.2	7041897.33	111.07	29.5	120.4	
Tb	159	He	2805494.99	0.3	2795586.52	100.35	29.5	120.4	
Bi	209	No Gas	4199516.40	5.0	3760534.49	111.67	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:41:07 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	222.879	ppb	7.1	226589.46	100	>LDR
11	B	6	No Gas	1745.524	ppb	6.7	1141734.31	1000	>LDR
23	Na	45	He	42.506	ppb	12.0	12706.33	200000	
24	Mg	45	He	7.747	ppb	6.0	1260.15	200000	
27	Al	45	He	1010.597	ppb	0.3	22250.13	200000	
28	Si	45	H2	105.987	ppb	14.4	4996.88	10000	
39	K	45	He	2.444	ppb	131.4	10149.05	200000	
40	Ca	45	H2	21.930	ppb	0.8	10174.01	200000	
51	V	89	He	360.152	ppb	1.0	312299.97	1000	
52	Cr	89	He	665.384	ppb	0.4	713357.30	2000	
55	Mn	89	He	1631.887	ppb	0.3	842015.99	2000	
56	Fe	89	H2	3031.439	ppb	0.3	5237957.62	100000	
59	Co	89	He	720.592	ppb	0.2	1334069.30	1000	
60	Ni	89	He	1570.181	ppb	0.4	792575.97	1000	>LDR
63	Cu	89	He	294.285	ppb	0.5	417906.57	2000	
66	Zn	89	He	1020.415	ppb	0.6	194662.82	2000	
75	As	89	He	204.309	ppb	0.6	32951.41	1000	
78	Se	89	H2	469.611	ppb	0.4	40644.61	1000	
88	Sr	89	He	100.078	ppb	0.6	82871.82	2000	
95	Mo	89	He	334.746	ppb	0.2	313198.66	1000	
107	Ag	89	He	172.164	ppb	2.0	554449.12	100	>LDR
111	Cd	89	He	716.539	ppb	0.3	296309.75	1000	
118	Sn	159	He	1.292	ppb	5.6	1282.33	1000	
121	Sb	159	No Gas	254.849	ppb	7.3	2066501.61	1000	
137	Ba	159	No Gas	1680.708	ppb	7.3	5398830.93	2000	
182	W	159	No Gas	0.138	ppb	20.5	931.08	1000	
205	Tl	209	No Gas	496.301	ppb	7.2	6963580.68	1000	
208	Pb	209	No Gas	887.773	ppb	7.2	17307556.06	2000	
232	Th	209	No Gas	0.252	ppb	8.2	5200.28	1000	
238	U	209	No Gas	0.030	ppb	49.5	577.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	949076.47	3.9	1023754.81	92.71	29.5	120.4	
Sc	45	No Gas	2905853.88	4.7	2927134.09	99.27	29.5	120.4	
Sc	45	H2	346058.89	0.2	374925.7	92.3	29.5	120.4	
Sc	45	He	67915.76	0.5	75429.93	90.04	29.5	120.4	
Ge	72	No Gas	700182.20	4.1	682196.39	102.64	29.5	120.4	
Ge	72	H2	133142.07	1.0	145757.5	91.34	29.5	120.4	
Ge	72	He	55222.66	0.8	59866.13	92.24	29.5	120.4	
Y	89	H2	2362848.62	0.3	2441196.5	96.79	29.5	120.4	
Y	89	He	493088.57	0.6	531537.69	92.77	29.5	120.4	
Tb	159	No Gas	7773187.11	4.4	7041897.33	110.38	29.5	120.4	
Tb	159	He	2792487.08	0.7	2795586.52	99.89	29.5	120.4	
Bi	209	No Gas	4193039.04	4.5	3760534.49	111.5	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 043SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:43:53 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	242.963	ppb	7.6	24959.98	100	
11	B	6	No Gas	1992.205	ppb	5.3	132952.91	1000	
23	Na	45	He	1417.586	ppb	3.9	23017.19	200000	
24	Mg	45	He	-14.504	ppb	N/A	773.41	200000	
27	Al	45	He	1552.727	ppb	1.1	3527.24	200000	
28	Si	45	H2	114.283	ppb	19.0	927.73	10000	
39	K	45	He	-52.506	ppb	N/A	9979.05	200000	
40	Ca	45	H2	41.831	ppb	4.2	2798.16	200000	
51	V	89	He	383.644	ppb	1.3	33583.10	1000	
52	Cr	89	He	701.259	ppb	0.7	75600.50	2000	
55	Mn	89	He	1724.214	ppb	0.4	89425.10	2000	
56	Fe	89	H2	3296.161	ppb	0.3	572861.28	100000	
59	Co	89	He	763.353	ppb	0.4	142033.34	1000	
60	Ni	89	He	1675.639	ppb	0.8	85530.85	1000	
63	Cu	89	He	310.845	ppb	1.3	44433.82	2000	
66	Zn	89	He	1122.198	ppb	1.5	21596.21	2000	
75	As	89	He	219.008	ppb	0.9	3552.84	1000	
78	Se	89	H2	496.364	ppb	0.8	4281.13	1000	
88	Sr	89	He	106.772	ppb	0.7	8884.28	2000	
95	Mo	89	He	350.659	ppb	0.9	32974.95	1000	
107	Ag	89	He	199.965	ppb	1.1	64710.38	100	
111	Cd	89	He	757.391	ppb	1.0	31472.07	1000	
118	Sn	159	He	1.560	ppb	23.1	204.46	1000	
121	Sb	159	No Gas	283.131	ppb	6.8	227261.61	1000	
137	Ba	159	No Gas	1808.901	ppb	6.5	575173.52	2000	
182	W	159	No Gas	0.191	ppb	55.0	166.86	1000	
205	Tl	209	No Gas	530.178	ppb	7.0	741172.98	1000	
208	Pb	209	No Gas	972.068	ppb	6.5	1888470.38	2000	
232	Th	209	No Gas	0.045	ppb	60.5	193.55	1000	
238	U	209	No Gas	0.005	ppb	288.3	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	958206.41	3.6	1023754.81	93.6	29.5	120.4	
Sc	45	No Gas	2896778.03	3.9	2927134.09	98.96	29.5	120.4	
Sc	45	H2	342815.16	1.0	374925.7	91.44	29.5	120.4	
Sc	45	He	69540.43	0.2	75429.93	92.19	29.5	120.4	
Ge	72	No Gas	691390.81	3.1	682196.39	101.35	29.5	120.4	
Ge	72	H2	135384.88	1.0	145757.5	92.88	29.5	120.4	
Ge	72	He	56299.98	0.4	59866.13	94.04	29.5	120.4	
Y	89	H2	2354576.86	0.8	2441196.5	96.45	29.5	120.4	
Y	89	He	495470.70	0.6	531537.69	93.21	29.5	120.4	
Tb	159	No Gas	7691543.08	4.2	7041897.33	109.23	29.5	120.4	
Tb	159	He	2775497.60	0.5	2795586.52	99.28	29.5	120.4	
Bi	209	No Gas	4177206.85	4.4	3760534.49	111.08	29.5	120.4	

Sample Report

Sample Name SN5815-007

File Name 044SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:46:28 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.750	ppb	7.5	306.68	100	
11	B	6	No Gas	296.799	ppb	5.2	21110.38	1000	
23	Na	45	He	274.968	ppb	9.5	11410.46	200000	
24	Mg	45	He	14.284	ppb	287.8	931.21	200000	
27	Al	45	He	75.281	ppb	15.6	200.01	200000	
28	Si	45	H2	1461.714	ppb	3.9	6745.77	10000	
39	K	45	He	-5.229	ppb	N/A	10150.75	200000	
40	Ca	45	H2	80.702	ppb	4.2	4449.75	200000	
51	V	89	He	3.250	ppb	12.3	453.36	1000	
52	Cr	89	He	1.490	ppb	12.5	221.30	2000	
55	Mn	89	He	4.452	ppb	5.9	264.62	2000	
56	Fe	89	H2	547.055	ppb	0.8	101179.00	100000	
59	Co	89	He	0.994	ppb	10.5	215.57	1000	
60	Ni	89	He	5.431	ppb	24.1	882.29	1000	
63	Cu	89	He	2.392	ppb	6.6	430.03	2000	
66	Zn	89	He	12.797	ppb	21.3	341.13	2000	
75	As	89	He	0.517	ppb	82.2	12.33	1000	
78	Se	89	H2	1.740	ppb	15.1	15.50	1000	
88	Sr	89	He	1.042	ppb	9.0	86.67	2000	
95	Mo	89	He	2.919	ppb	7.2	282.24	1000	
107	Ag	89	He	0.246	ppb	17.6	85.56	100	
111	Cd	89	He	0.582	ppb	32.1	24.07	1000	
118	Sn	159	He	1567.222	ppb	2.2	147396.76	1000	
121	Sb	159	No Gas	0.880	ppb	10.8	757.54	1000	
137	Ba	159	No Gas	4.280	ppb	14.8	1384.96	2000	
182	W	159	No Gas	0.054	ppb	170.9	80.09	1000	
205	Tl	209	No Gas	1.186	ppb	17.0	1661.98	1000	
208	Pb	209	No Gas	3.473	ppb	13.3	6795.08	2000	
232	Th	209	No Gas	0.119	ppb	13.1	340.39	1000	
238	U	209	No Gas	0.016	ppb	121.6	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	959275.51	3.2	1023754.81	93.7	29.5	120.4	
Sc	45	No Gas	2905689.49	3.3	2927134.09	99.27	29.5	120.4	
Sc	45	H2	347270.54	1.1	374925.7	92.62	29.5	120.4	
Sc	45	He	69025.69	2.0	75429.93	91.51	29.5	120.4	
Ge	72	No Gas	693745.12	3.3	682196.39	101.69	29.5	120.4	
Ge	72	H2	135112.64	0.6	145757.5	92.7	29.5	120.4	
Ge	72	He	55815.84	1.6	59866.13	93.23	29.5	120.4	
Y	89	H2	2381065.70	1.0	2441196.5	97.54	29.5	120.4	
Y	89	He	494882.92	1.3	531537.69	93.1	29.5	120.4	
Tb	159	No Gas	7656820.10	3.8	7041897.33	108.73	29.5	120.4	
Tb	159	He	2769976.56	1.4	2795586.52	99.08	29.5	120.4	
Bi	209	No Gas	4140842.05	3.7	3760534.49	110.11	29.5	120.4	

Sample Report

Sample Name SN5815-014

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:49:11 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.661	ppb	29.9	191.12	100	
11	B	6	No Gas	62.849	ppb	6.2	5555.70	1000	
23	Na	45	He	94811.597	ppb	0.8	962944.52	200000	
24	Mg	45	He	26067.976	ppb	0.7	147147.64	200000	
27	Al	45	He	10.122	ppb	22.9	54.45	200000	
28	Si	45	H2	-1.616	ppb	N/A	440.49	10000	
39	K	45	He	17275.828	ppb	1.4	102783.42	200000	
40	Ca	45	H2	44825.216	ppb	0.6	1861889.26	200000	
51	V	89	He	1.705	ppb	15.6	322.24	1000	
52	Cr	89	He	1.040	ppb	29.0	174.64	2000	
55	Mn	89	He	2.820	ppb	20.5	181.97	2000	
56	Fe	89	H2	32.382	ppb	6.1	11681.20	100000	
59	Co	89	He	0.839	ppb	57.7	188.91	1000	
60	Ni	89	He	2.652	ppb	24.1	748.94	1000	
63	Cu	89	He	0.625	ppb	30.3	180.01	2000	
66	Zn	89	He	13.020	ppb	12.0	348.91	2000	
75	As	89	He	0.240	ppb	67.2	8.00	1000	
78	Se	89	H2	0.955	ppb	24.6	8.67	1000	
88	Sr	89	He	5.358	ppb	5.6	450.02	2000	
95	Mo	89	He	1.517	ppb	16.6	152.23	1000	
107	Ag	89	He	0.188	ppb	15.7	67.78	100	
111	Cd	89	He	0.601	ppb	22.7	25.19	1000	
118	Sn	159	He	5.540	ppb	19.5	585.59	1000	
121	Sb	159	No Gas	0.272	ppb	19.7	270.31	1000	
137	Ba	159	No Gas	1.232	ppb	9.4	420.48	2000	
182	W	159	No Gas	0.101	ppb	43.9	110.12	1000	
205	Tl	209	No Gas	0.339	ppb	10.5	483.89	1000	
208	Pb	209	No Gas	0.928	ppb	2.0	1882.17	2000	
232	Th	209	No Gas	0.042	ppb	50.5	183.54	1000	
238	U	209	No Gas	0.010	ppb	54.8	30.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	941957.25	0.9	1023754.81	92.01	29.5	120.4	
Sc	45	No Gas	2887728.59	1.4	2927134.09	98.65	29.5	120.4	
Sc	45	H2	346900.20	0.4	374925.7	92.53	29.5	120.4	
Sc	45	He	69435.34	0.3	75429.93	92.05	29.5	120.4	
Ge	72	No Gas	688813.21	1.9	682196.39	100.97	29.5	120.4	
Ge	72	H2	136360.16	0.9	145757.5	93.55	29.5	120.4	
Ge	72	He	56439.01	0.7	59866.13	94.28	29.5	120.4	
Y	89	H2	2382798.29	1.0	2441196.5	97.61	29.5	120.4	
Y	89	He	500104.93	0.1	531537.69	94.09	29.5	120.4	
Tb	159	No Gas	7608504.40	1.6	7041897.33	108.05	29.5	120.4	
Tb	159	He	2802682.53	0.9	2795586.52	100.25	29.5	120.4	
Bi	209	No Gas	4092751.57	1.9	3760534.49	108.83	29.5	120.4	

Sample Report

Sample Name SN6032-001

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:51:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.209	ppb	22.0	217.79	100	
11	B	6	No Gas	63.040	ppb	3.0	7870.18	1000	
23	Na	45	He	22865201.359	ppb	3.3	457462429.65	200000	>LDR
24	Mg	45	He	2676.024	ppb	3.7	30699.21	200000	
27	Al	45	He	73.921	ppb	2.1	362.24	200000	
28	Si	45	H2	3709.110	ppb	1.3	31569.81	10000	
39	K	45	He	3779.545	ppb	2.3	50464.44	200000	
40	Ca	45	H2	13461.406	ppb	2.3	1090971.83	200000	
51	V	89	He	0.528	ppb	48.9	245.57	1000	
52	Cr	89	He	136.470	ppb	2.7	27614.47	2000	
55	Mn	89	He	22.960	ppb	3.4	2263.11	2000	
56	Fe	89	H2	1538.265	ppb	1.7	504647.18	100000	
59	Co	89	He	1.264	ppb	14.4	468.93	1000	
60	Ni	89	He	76.460	ppb	4.8	7831.34	1000	
63	Cu	89	He	43.560	ppb	2.4	11734.27	2000	
66	Zn	89	He	76.875	ppb	3.3	2851.50	2000	
75	As	89	He	1.063	ppb	15.6	36.00	1000	
78	Se	89	H2	2.742	ppb	14.9	45.00	1000	
88	Sr	89	He	129.122	ppb	4.3	20134.23	2000	
95	Mo	89	He	13.175	ppb	3.5	2329.17	1000	
107	Ag	89	He	0.117	ppb	21.6	76.67	100	
111	Cd	89	He	0.349	ppb	49.8	27.04	1000	
118	Sn	159	He	2.158	ppb	3.9	410.02	1000	
121	Sb	159	No Gas	41.126	ppb	1.1	56853.31	1000	
137	Ba	159	No Gas	7.288	ppb	6.8	4018.43	2000	
182	W	159	No Gas	0.558	ppb	6.2	647.41	1000	
205	Tl	209	No Gas	0.210	ppb	25.3	477.21	1000	
208	Pb	209	No Gas	1.386	ppb	8.4	4341.81	2000	
232	Th	209	No Gas	0.155	ppb	14.9	574.00	1000	
238	U	209	No Gas	0.401	ppb	20.3	1204.75	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	767201.95	1.3	1023754.81	74.94	29.5	120.4	
Sc	45	No Gas	2649021.38	1.9	2927134.09	90.5	29.5	120.4	
Sc	45	H2	338396.97	2.8	374925.7	90.26	29.5	120.4	
Sc	45	He	69074.03	4.1	75429.93	91.57	29.5	120.4	
Ge	72	No Gas	623447.96	1.6	682196.39	91.39	29.5	120.4	
Ge	72	H2	125924.47	2.0	145757.5	86.39	29.5	120.4	
Ge	72	He	52957.35	2.2	59866.13	88.46	29.5	120.4	
Y	89	H2	2220892.77	2.0	2441196.5	90.98	29.5	120.4	
Y	89	He	464641.39	3.0	531537.69	87.41	29.5	120.4	
Tb	159	No Gas	6605967.96	1.8	7041897.33	93.81	29.5	120.4	
Tb	159	He	2450294.65	3.1	2795586.52	87.65	29.5	120.4	
Bi	209	No Gas	3289113.94	0.9	3760534.49	87.46	29.5	120.4	

Sample Report

Sample Name SN6071-001

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 6:54:31 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	30.5	135.56	100	
11	B	6	No Gas	53.045	ppb	4.2	37468.37	1000	
23	Na	45	He	87955.400	ppb	2.4	9992854.07	200000	
24	Mg	45	He	5400.162	ppb	0.8	342727.70	200000	
27	Al	45	He	18.838	ppb	14.8	513.36	200000	
28	Si	45	H2	2622.295	ppb	4.2	127902.09	10000	
39	K	45	He	10546.889	ppb	1.4	648638.63	200000	
40	Ca	45	H2	19446.435	ppb	4.3	9114875.49	200000	
51	V	89	He	0.822	ppb	9.9	964.51	1000	
52	Cr	89	He	0.717	ppb	10.3	905.87	2000	
55	Mn	89	He	9.593	ppb	2.6	5445.42	2000	
56	Fe	89	H2	69.836	ppb	2.3	139864.90	100000	
59	Co	89	He	0.215	ppb	34.9	468.94	1000	
60	Ni	89	He	4.157	ppb	4.8	2951.53	1000	
63	Cu	89	He	14.438	ppb	1.3	22494.32	2000	
66	Zn	89	He	69.846	ppb	1.4	14654.91	2000	
75	As	89	He	0.437	ppb	5.0	81.34	1000	
78	Se	89	H2	0.257	ppb	19.5	25.00	1000	
88	Sr	89	He	88.346	ppb	0.5	79931.28	2000	
95	Mo	89	He	12.317	ppb	1.3	12600.65	1000	
107	Ag	89	He	0.039	ppb	54.6	145.56	100	
111	Cd	89	He	0.088	ppb	100.6	40.00	1000	
118	Sn	159	He	0.341	ppb	18.1	396.69	1000	
121	Sb	159	No Gas	0.449	ppb	8.6	3868.19	1000	
137	Ba	159	No Gas	7.062	ppb	4.8	23777.71	2000	
182	W	159	No Gas	0.097	ppb	5.2	700.81	1000	
205	Tl	209	No Gas	0.023	ppb	26.0	347.06	1000	
208	Pb	209	No Gas	0.311	ppb	4.0	6207.52	2000	
232	Th	209	No Gas	0.008	ppb	25.5	263.63	1000	
238	U	209	No Gas	0.007	ppb	43.9	136.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	982857.65	1.9	1023754.81	96.01	29.5	120.4	
Sc	45	No Gas	3235876.62	0.9	2927134.09	110.55	29.5	120.4	
Sc	45	H2	391986.76	3.2	374925.7	104.55	29.5	120.4	
Sc	45	He	78305.80	0.8	75429.93	103.81	29.5	120.4	
Ge	72	No Gas	752908.94	1.1	682196.39	110.37	29.5	120.4	
Ge	72	H2	148812.24	0.7	145757.5	102.1	29.5	120.4	
Ge	72	He	61795.30	0.2	59866.13	103.22	29.5	120.4	
Y	89	H2	2612819.24	3.1	2441196.5	107.03	29.5	120.4	
Y	89	He	538741.20	0.8	531537.69	101.36	29.5	120.4	
Tb	159	No Gas	8120861.82	0.8	7041897.33	115.32	29.5	120.4	
Tb	159	He	2908069.19	0.7	2795586.52	104.02	29.5	120.4	
Bi	209	No Gas	4205179.46	0.0	3760534.49	111.82	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW2
File Name	048_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:57:06 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.574	ppb	7.4	148.89	0.5	PB 6020 Fails DoD
B	11	6	No Gas	15.243	ppb	3.9	3677.25	10	PB 6020 Fails DoD
Na	23	45	He	9469.283	ppb	6.6	215381.58	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	8.652	ppb	26.2	1029.00	50	
Al	27	45	He	6.351	ppb	46.3	65.56	50	
Si	28	45	H2	17.379	ppb	45.5	660.76	250	
K	39	45	He	220.580	ppb	19.5	13633.69	500	
Ca	40	45	H2	50.495	ppb	9.1	5852.53	50	PB 6020 Fails DoD
V	51	89	He	2.821	ppb	11.4	707.82	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.420	ppb	37.5	161.31	2.5	
Mn	55	89	He	1.121	ppb	28.3	159.97	1	PB 6020 Fails DoD
Fe	56	89	H2	13.520	ppb	5.3	11747.98	50	
Co	59	89	He	0.192	ppb	36.8	108.90	0.5	
Ni	60	89	He	1.512	ppb	57.8	813.39	1	PB 6020 Fails DoD
Cu	63	89	He	5.643	ppb	8.6	1815.74	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	4.835	ppb	9.2	301.13	5	
As	75	89	He	0.324	ppb	35.4	15.67	2.5	
Se	78	89	H2	0.401	ppb	17.6	8.00	2.5	
Sr	88	89	He	0.227	ppb	41.0	40.00	2.5	
Mo	95	89	He	0.411	ppb	30.5	92.23	2.5	
Ag	107	89	He	0.167	ppb	4.4	122.23	0.5	
Cd	111	89	He	0.088	ppb	14.4	7.78	0.5	
Sn	118	159	He	1.495	ppb	0.7	352.24	2.5	
Sb	121	159	No Gas	0.131	ppb	12.9	290.33	0.5	
Ba	137	159	No Gas	0.726	ppb	18.0	540.62	1	
W	182	159	No Gas	0.035	ppb	97.8	100.11	2.5	
Tl	205	209	No Gas	0.046	ppb	24.9	160.18	0.5	
Pb	208	209	No Gas	1.105	ppb	9.3	4739.01	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.018	ppb	69.9	190.21	2.5	
U	238	209	No Gas	0.009	ppb	19.7	46.72	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1003328.17	3.4	1023754.81	98	29.5	120.4	
Sc	45	No Gas	3237636.43	3.0	2927134.09	110.61	29.5	120.4	
Sc	45	H2	384140.14	1.1	374925.7	102.46	29.5	120.4	
Sc	45	He	75148.12	3.8	75429.93	99.63	29.5	120.4	
Ge	72	No Gas	766622.30	3.3	682196.39	112.38	29.5	120.4	
Ge	72	H2	147125.10	0.5	145757.5	100.94	29.5	120.4	
Ge	72	He	60279.68	3.6	59866.13	100.69	29.5	120.4	
Y	89	H2	2604187.06	0.3	2441196.5	106.68	29.5	120.4	
Y	89	He	530550.86	4.1	531537.69	99.81	29.5	120.4	
Tb	159	No Gas	8419934.25	2.4	7041897.33	119.57	29.5	120.4	
Tb	159	He	2881932.88	3.5	2795586.52	103.09	29.5	120.4	
Bi	209	No Gas	4490186.07	2.6	3760534.49	119.4	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	049LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 6:59:49 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.310	ppb	7.1	11009.01	50	20.52	79.5	120.4	
B	11	6	No Gas	528.150	ppb	5.2	74233.26	500	21.13	79.5	120.4	
Na	23	45	He	14515.164	ppb	1.9	330995.17	7500	38.71	79.5	120.4	6020□ DoD
Mg	24	45	He	5346.924	ppb	0.2	66966.14	5000	21.39	79.5	120.4	
Al	27	45	He	1966.157	ppb	2.4	9758.13	2000	19.66	79.5	120.4	
Si	28	45	H2	1070.799	ppb	4.1	10522.24	1000	21.42	0	200	
K	39	45	He	10526.463	ppb	1.8	135326.50	10000	21.05	79.5	120.4	
Ca	40	45	H2	2685.145	ppb	2.2	243926.66	2500	21.48	79.5	120.4	
V	51	89	He	533.960	ppb	1.1	100688.78	500	21.36	79.5	120.4	
Cr	52	89	He	213.393	ppb	0.8	49747.94	200	21.34	79.5	120.4	
Mn	55	89	He	534.215	ppb	1.0	59897.91	500	21.37	79.5	120.4	
Fe	56	89	H2	1095.104	ppb	2.5	416799.26	1000	21.9	79.5	120.4	
Co	59	89	He	540.000	ppb	0.4	217150.97	500	21.6	79.5	120.4	
Ni	60	89	He	545.222	ppb	1.8	60379.73	500	21.81	79.5	120.4	
Cu	63	89	He	269.971	ppb	0.6	83341.94	250	21.6	79.5	120.4	
Zn	66	89	He	530.489	ppb	2.2	22071.53	500	21.22	79.5	120.4	
As	75	89	He	106.708	ppb	0.6	3741.58	100	21.34	79.5	120.4	
Se	78	89	H2	103.891	ppb	5.4	1951.55	100	20.78	79.5	120.4	
Sr	88	89	He	524.043	ppb	0.9	94244.60	500	20.96	79.5	120.4	
Mo	95	89	He	107.191	ppb	0.8	21790.19	100	21.44	79.5	120.4	
Ag	107	89	He	54.530	ppb	0.9	38143.28	50	21.81	79.5	120.4	
Cd	111	89	He	268.467	ppb	1.3	24110.77	250	21.48	79.5	120.4	
Sn	118	159	He	514.326	ppb	0.9	103465.67	500	20.57	79.5	120.4	
Sb	121	159	No Gas	101.708	ppb	5.7	179295.97	100	20.34	79.5	120.4	
Ba	137	159	No Gas	1991.377	ppb	5.5	1390343.64	2000	19.91	79.5	120.4	
W	182	159	No Gas	101.978	ppb	5.5	141541.84	100	20.4	79.5	120.4	
Tl	205	209	No Gas	105.126	ppb	5.3	317207.39	100	21.02	79.5	120.4	
[Pb]	206	209	No Gas	105.409	ppb	5.0	110751.26	100	21.08	79.5	120.4	
[Pb]	207	209	No Gas	105.836	ppb	5.5	96655.99	100	21.17	79.5	120.4	
Pb	208	209	No Gas	105.333	ppb	5.2	441716.23	100	21.07	79.5	120.4	
Th	232	209	No Gas	103.129	ppb	5.8	447267.16	100	20.63	79.5	120.4	
U	238	209	No Gas	102.609	ppb	6.4	417672.17	100	20.52	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	998651.43	2.6	1023754.81	97.55	29.5	120.4	
Sc	45	No Gas	3165247.95	3.4	2927134.09	108.13	29.5	120.4	
Sc	45	H2	377862.73	2.8	374925.7	100.78	29.5	120.4	
Sc	45	He	76390.57	0.9	75429.93	101.27	29.5	120.4	
Ge	72	No Gas	755051.01	3.0	682196.39	110.68	29.5	120.4	
Ge	72	H2	143544.89	2.2	145757.5	98.48	29.5	120.4	
Ge	72	He	60532.87	0.2	59866.13	101.11	29.5	120.4	
Y	89	H2	2565442.85	1.9	2441196.5	105.09	29.5	120.4	
Y	89	He	535448.14	0.4	531537.69	100.74	29.5	120.4	
Tb	159	No Gas	8438090.99	2.8	7041897.33	119.83	29.5	120.4	
Tb	159	He	2961321.17	0.7	2795586.52	105.93	29.5	120.4	
Bi	209	No Gas	4503461.58	3.0	3760534.49	119.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	050_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:02:27 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.344	ppb	4.0	25426.37	25	97.38	89.8	110.2	
11	B	6	No Gas	26.848	ppb	2.7	19521.56	25	107.39	89.8	110.2	
23	Na	45	He	5833.819	ppb	2.3	649613.44	5000	116.68	89.8	110.2	> +/- 10%
24	Mg	45	He	4985.039	ppb	1.9	305944.32	5000	99.7	89.8	110.2	
27	Al	45	He	491.492	ppb	2.1	12079.96	500	98.3	89.8	110.2	
28	Si	45	H2	459.996	ppb	2.9	21837.70	500	92	89.8	110.2	
39	K	45	He	4925.524	ppb	1.3	298847.85	5000	98.51	89.8	110.2	
40	Ca	45	H2	4865.270	ppb	0.6	2180305.90	5000	97.31	89.8	110.2	
51	V	89	He	24.733	ppb	2.5	23379.04	25	98.93	89.8	110.2	
52	Cr	89	He	25.010	ppb	1.1	29082.51	25	100.04	89.8	110.2	
55	Mn	89	He	25.166	ppb	2.5	14087.13	25	100.66	89.8	110.2	
56	Fe	89	H2	4860.593	ppb	0.8	9055465.87	5000	97.21	89.8	110.2	
59	Co	89	He	24.959	ppb	2.0	50034.24	25	99.84	89.8	110.2	
60	Ni	89	He	24.977	ppb	3.6	14284.39	25	99.91	89.8	110.2	
63	Cu	89	He	24.877	ppb	2.3	38314.37	25	99.51	89.8	110.2	
66	Zn	89	He	25.209	ppb	2.7	5304.52	25	100.84	89.8	110.2	
75	As	89	He	24.528	ppb	4.1	4283.46	25	98.11	89.8	110.2	
78	Se	89	H2	23.876	ppb	0.8	2229.41	25	95.5	89.8	110.2	
88	Sr	89	He	24.113	ppb	2.5	21606.52	25	96.45	89.8	110.2	
95	Mo	89	He	24.375	ppb	2.0	24687.46	25	97.5	89.8	110.2	
107	Ag	89	He	24.673	ppb	2.4	85980.90	25	98.69	89.8	110.2	
111	Cd	89	He	24.845	ppb	1.6	11118.35	25	99.38	89.8	110.2	
118	Sn	159	He	24.344	ppb	3.0	24323.76	25	97.38	89.8	110.2	
121	Sb	159	No Gas	23.154	ppb	4.9	199278.09	25	92.62	89.8	110.2	
137	Ba	159	No Gas	23.260	ppb	5.8	79320.62	25	93.04	89.8	110.2	
182	W	159	No Gas	22.940	ppb	4.5	155439.50	25	91.76	89.8	110.2	
205	Tl	209	No Gas	23.474	ppb	4.9	346945.70	25	93.9	89.8	110.2	
208	Pb	209	No Gas	23.874	ppb	4.7	490395.49	25	95.5	89.8	110.2	
232	Th	209	No Gas	23.142	ppb	5.8	491632.65	25	92.57	89.8	110.2	
238	U	209	No Gas	23.421	ppb	5.5	467058.32	25	93.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	972396.70	0.7	1023754.81	94.98	29.5	120.4	
Sc	45	No Gas	3079529.73	1.4	2927134.09	105.21	29.5	120.4	
Sc	45	H2	374297.12	0.9	374925.7	99.83	29.5	120.4	
Sc	45	He	75718.77	1.7	75429.93	100.38	29.5	120.4	
Ge	72	No Gas	741149.57	1.7	682196.39	108.64	29.5	120.4	
Ge	72	H2	146461.12	1.3	145757.5	100.48	29.5	120.4	
Ge	72	He	60725.55	1.2	59866.13	101.44	29.5	120.4	
Y	89	H2	2548887.94	0.9	2441196.5	104.41	29.5	120.4	
Y	89	He	533699.41	1.8	531537.69	100.41	29.5	120.4	
Tb	159	No Gas	8234518.63	1.4	7041897.33	116.94	29.5	120.4	
Tb	159	He	2936883.36	1.6	2795586.52	105.05	29.5	120.4	
Bi	209	No Gas	4409196.28	1.4	3760534.49	117.25	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	051_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:05:11 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.133	ppb	8.5	168.89	0.2	Failed DoD
11	B	6	No Gas	1.763	ppb	14.4	2795.93	4	
23	Na	45	He	560.236	ppb	2.0	71120.93	200	Fail All Methods□ Failed DoD
24	Mg	45	He	1.052	ppb	134.7	997.89	20	
27	Al	45	He	-0.318	ppb	N/A	26.67	20	
28	Si	45	H2	0.330	ppb	777.6	500.57	100	
39	K	45	He	10.455	ppb	12.5	11807.94	200	
40	Ca	45	H2	1.769	ppb	5.3	1986.89	20	
51	V	89	He	0.057	ppb	29.7	237.79	1	
52	Cr	89	He	0.026	ppb	40.7	95.31	1	
55	Mn	89	He	0.086	ppb	11.0	84.65	0.4	
56	Fe	89	H2	3.816	ppb	5.6	13541.66	20	
59	Co	89	He	0.021	ppb	35.1	75.56	0.2	
60	Ni	89	He	0.219	ppb	41.8	774.49	0.4	Failed DoD
63	Cu	89	He	0.048	ppb	16.9	170.01	0.6	
66	Zn	89	He	-0.120	ppb	N/A	78.89	2	
75	As	89	He	0.010	ppb	67.7	6.00	1	
78	Se	89	H2	0.059	ppb	28.7	5.83	1	
88	Sr	89	He	0.017	ppb	13.9	15.56	1	
95	Mo	89	He	0.107	ppb	9.3	117.78	1	
107	Ag	89	He	0.013	ppb	42.7	51.11	0.2	
111	Cd	89	He	0.014	ppb	55.9	6.30	0.2	
118	Sn	159	He	0.109	ppb	39.1	166.68	1	
121	Sb	159	No Gas	0.031	ppb	2.8	323.70	0.2	
137	Ba	159	No Gas	0.033	ppb	59.6	146.83	0.4	
182	W	159	No Gas	0.096	ppb	27.5	690.79	1	
205	Tl	209	No Gas	0.025	ppb	17.4	390.44	0.2	
208	Pb	209	No Gas	0.024	ppb	15.1	620.71	0.2	
232	Th	209	No Gas	0.134	ppb	8.9	2950.32	1	
238	U	209	No Gas	0.023	ppb	19.6	470.53	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1006406.48	2.1	1023754.81	98.31	29.5	120.4	
Sc	45	No Gas	3117117.48	2.9	2927134.09	106.49	29.5	120.4	
Sc	45	H2	376757.85	1.1	374925.7	100.49	29.5	120.4	
Sc	45	He	75869.72	2.0	75429.93	100.58	29.5	120.4	
Ge	72	No Gas	739087.24	3.5	682196.39	108.34	29.5	120.4	
Ge	72	H2	145298.68	0.9	145757.5	99.69	29.5	120.4	
Ge	72	He	60737.88	1.1	59866.13	101.46	29.5	120.4	
Y	89	H2	2542989.49	1.2	2441196.5	104.17	29.5	120.4	
Y	89	He	534548.54	2.1	531537.69	100.57	29.5	120.4	
Tb	159	No Gas	8186324.04	2.7	7041897.33	116.25	29.5	120.4	
Tb	159	He	2896579.36	2.5	2795586.52	103.61	29.5	120.4	
Bi	209	No Gas	4395472.82	3.0	3760534.49	116.88	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:07:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	223.279	ppb	4.5	48001.58	100	
11	B	6	No Gas	1717.719	ppb	4.3	238738.03	1000	
23	Na	45	He	4383.344	ppb	8.2	103035.32	200000	
24	Mg	45	He	7.224	ppb	116.9	993.45	200000	
27	Al	45	He	1002.067	ppb	5.5	4819.88	200000	
28	Si	45	H2	101.660	ppb	28.1	1404.97	10000	
39	K	45	He	28.247	ppb	67.3	11207.75	200000	
40	Ca	45	H2	48.122	ppb	1.3	5406.77	200000	
51	V	89	He	363.632	ppb	0.5	67485.56	1000	
52	Cr	89	He	670.274	ppb	1.0	153507.72	2000	
55	Mn	89	He	1653.022	ppb	0.6	182171.05	2000	
56	Fe	89	H2	3076.442	ppb	0.5	1137386.43	100000	
59	Co	89	He	728.316	ppb	1.2	287970.06	1000	
60	Ni	89	He	1576.647	ppb	0.7	170470.57	1000	
63	Cu	89	He	293.800	ppb	1.7	89169.79	2000	
66	Zn	89	He	1039.746	ppb	1.0	42438.72	2000	
75	As	89	He	202.656	ppb	2.0	6982.51	1000	
78	Se	89	H2	468.405	ppb	1.5	8635.78	1000	
88	Sr	89	He	97.415	ppb	1.0	17226.89	2000	
95	Mo	89	He	335.962	ppb	1.5	67129.50	1000	
107	Ag	89	He	731.860	ppb	0.3	503304.26	100	>LDR
111	Cd	89	He	710.907	ppb	0.5	62780.31	1000	
118	Sn	159	He	1.687	ppb	19.0	393.36	1000	
121	Sb	159	No Gas	267.806	ppb	5.9	461508.58	1000	
137	Ba	159	No Gas	1700.503	ppb	5.9	1160796.23	2000	
182	W	159	No Gas	0.142	ppb	26.1	243.61	1000	
205	Tl	209	No Gas	499.702	ppb	5.8	1493993.30	1000	
208	Pb	209	No Gas	910.134	ppb	5.9	3780836.75	2000	
232	Th	209	No Gas	0.500	ppb	5.8	2262.77	1000	
238	U	209	No Gas	0.009	ppb	47.0	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1001888.80	2.3	1023754.81	97.86	29.5	120.4	
Sc	45	No Gas	3094035.49	3.4	2927134.09	105.7	29.5	120.4	
Sc	45	H2	368449.30	0.3	374925.7	98.27	29.5	120.4	
Sc	45	He	73781.73	0.6	75429.93	97.81	29.5	120.4	
Ge	72	No Gas	742926.04	3.0	682196.39	108.9	29.5	120.4	
Ge	72	H2	142346.45	0.8	145757.5	97.66	29.5	120.4	
Ge	72	He	59372.24	1.4	59866.13	99.18	29.5	120.4	
Y	89	H2	2516545.62	0.1	2441196.5	103.09	29.5	120.4	
Y	89	He	526506.38	0.8	531537.69	99.05	29.5	120.4	
Tb	159	No Gas	8252917.59	3.5	7041897.33	117.2	29.5	120.4	
Tb	159	He	2905637.88	1.2	2795586.52	103.94	29.5	120.4	
Bi	209	No Gas	4463462.16	3.4	3760534.49	118.69	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 053SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:10:33 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	225.348	ppb	6.1	9671.30	100	
11	B	6	No Gas	1823.927	ppb	4.7	51744.60	1000	
23	Na	45	He	13306.706	ppb	7.1	66955.38	200000	
24	Mg	45	He	83.028	ppb	44.2	1117.92	200000	
27	Al	45	He	1064.991	ppb	7.9	1063.42	200000	
28	Si	45	H2	81.813	ppb	53.5	627.37	10000	
39	K	45	He	158.580	ppb	50.9	11381.12	200000	
40	Ca	45	H2	77.318	ppb	4.0	2536.98	200000	
51	V	89	He	364.943	ppb	1.3	13719.29	1000	
52	Cr	89	He	673.729	ppb	0.3	30978.14	2000	
55	Mn	89	He	1650.153	ppb	1.0	36478.31	2000	
56	Fe	89	H2	3194.860	ppb	0.6	241195.64	100000	
59	Co	89	He	735.435	ppb	1.0	58308.77	1000	
60	Ni	89	He	1584.790	ppb	2.1	34860.86	1000	
63	Cu	89	He	295.366	ppb	2.1	18043.32	2000	
66	Zn	89	He	1051.778	ppb	1.1	8686.34	2000	
75	As	89	He	207.276	ppb	1.3	1434.90	1000	
78	Se	89	H2	472.325	ppb	0.2	1741.20	1000	
88	Sr	89	He	98.703	ppb	0.7	3498.36	2000	
95	Mo	89	He	331.363	ppb	2.5	13278.01	1000	
107	Ag	89	He	728.481	ppb	0.5	100415.46	100	
111	Cd	89	He	714.365	ppb	0.5	12644.14	1000	
118	Sn	159	He	1.868	ppb	31.2	133.34	1000	
121	Sb	159	No Gas	267.518	ppb	7.0	91682.77	1000	
137	Ba	159	No Gas	1715.556	ppb	6.9	232814.79	2000	
182	W	159	No Gas	0.279	ppb	47.6	126.81	1000	
205	Tl	209	No Gas	505.391	ppb	6.6	299751.03	1000	
208	Pb	209	No Gas	931.970	ppb	5.6	768293.01	2000	
232	Th	209	No Gas	0.097	ppb	29.2	193.55	1000	
238	U	209	No Gas	0.002	ppb	841.2	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	998499.27	3.0	1023754.81	97.53	29.5	120.4	
Sc	45	No Gas	3095845.87	4.3	2927134.09	105.76	29.5	120.4	
Sc	45	H2	369910.60	0.5	374925.7	98.66	29.5	120.4	
Sc	45	He	74657.47	0.5	75429.93	98.98	29.5	120.4	
Ge	72	No Gas	735294.36	3.3	682196.39	107.78	29.5	120.4	
Ge	72	H2	144077.86	0.8	145757.5	98.85	29.5	120.4	
Ge	72	He	60381.77	0.1	59866.13	100.86	29.5	120.4	
Y	89	H2	2515549.42	0.2	2441196.5	103.05	29.5	120.4	
Y	89	He	527617.82	0.3	531537.69	99.26	29.5	120.4	
Tb	159	No Gas	8205082.72	3.7	7041897.33	116.52	29.5	120.4	
Tb	159	He	2894884.02	0.5	2795586.52	103.55	29.5	120.4	
Bi	209	No Gas	4428904.01	3.9	3760534.49	117.77	29.5	120.4	

Sample Report

Sample Name SN5815-016

File Name 054SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:13:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.608	ppb	22.4	153.34	100	
11	B	6	No Gas	17.738	ppb	4.5	3954.01	1000	
23	Na	45	He	93985.915	ppb	3.0	1967159.88	200000	
24	Mg	45	He	24893.969	ppb	3.5	290065.79	200000	
27	Al	45	He	2.489	ppb	56.5	44.45	200000	
28	Si	45	H2	5.860	ppb	118.7	510.59	10000	
39	K	45	He	16534.175	ppb	3.0	193951.42	200000	
40	Ca	45	H2	43835.470	ppb	1.2	3732044.04	200000	
51	V	89	He	3.582	ppb	2.3	827.84	1000	
52	Cr	89	He	0.489	ppb	31.9	172.64	2000	
55	Mn	89	He	0.939	ppb	22.3	136.64	2000	
56	Fe	89	H2	16.512	ppb	5.0	12088.68	100000	
59	Co	89	He	0.221	ppb	32.0	117.79	1000	
60	Ni	89	He	2.084	ppb	28.3	852.28	1000	
63	Cu	89	He	1.266	ppb	8.7	468.92	2000	
66	Zn	89	He	2.415	ppb	24.5	196.68	2000	
75	As	89	He	0.152	ppb	38.8	9.33	1000	
78	Se	89	H2	0.643	ppb	11.0	11.83	1000	
88	Sr	89	He	5.036	ppb	5.5	873.40	2000	
95	Mo	89	He	1.053	ppb	11.3	214.45	1000	
107	Ag	89	He	0.213	ppb	14.4	150.01	100	
111	Cd	89	He	0.176	ppb	45.1	15.18	1000	
118	Sn	159	He	0.820	ppb	32.2	222.24	1000	
121	Sb	159	No Gas	0.164	ppb	16.4	330.38	1000	
137	Ba	159	No Gas	0.628	ppb	29.4	450.51	2000	
182	W	159	No Gas	0.061	ppb	24.2	130.15	1000	
205	Tl	209	No Gas	0.201	ppb	8.4	590.68	1000	
208	Pb	209	No Gas	0.409	ppb	10.5	1735.34	2000	
232	Th	209	No Gas	0.073	ppb	13.8	403.79	1000	
238	U	209	No Gas	0.009	ppb	85.5	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	985728.41	0.5	1023754.81	96.29	29.5	120.4	
Sc	45	No Gas	2973593.46	0.4	2927134.09	101.59	29.5	120.4	
Sc	45	H2	355635.85	0.5	374925.7	94.86	29.5	120.4	
Sc	45	He	71899.40	2.2	75429.93	95.32	29.5	120.4	
Ge	72	No Gas	714026.57	0.6	682196.39	104.67	29.5	120.4	
Ge	72	H2	137381.82	0.5	145757.5	94.25	29.5	120.4	
Ge	72	He	58133.93	1.9	59866.13	97.11	29.5	120.4	
Y	89	H2	2442904.51	0.2	2441196.5	100.07	29.5	120.4	
Y	89	He	516341.48	2.5	531537.69	97.14	29.5	120.4	
Tb	159	No Gas	7996501.13	0.4	7041897.33	113.56	29.5	120.4	
Tb	159	He	2899247.01	2.3	2795586.52	103.71	29.5	120.4	
Bi	209	No Gas	4246177.33	0.8	3760534.49	112.91	29.5	120.4	

Sample Report

Sample Name SN5815-016

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:15:50 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.920	ppb	17.0	106.67	100	
11	B	6	No Gas	40.755	ppb	19.1	2669.23	1000	
23	Na	45	He	101760.678	ppb	1.9	448428.06	200000	
24	Mg	45	He	24222.615	ppb	1.4	59198.54	200000	
27	Al	45	He	-16.842	ppb	N/A	17.78	200000	
28	Si	45	H2	-0.203	ppb	N/A	470.53	10000	
39	K	45	He	15932.700	ppb	1.9	47572.21	200000	
40	Ca	45	H2	42614.735	ppb	0.6	745843.02	200000	
51	V	89	He	8.970	ppb	10.8	516.70	1000	
52	Cr	89	He	0.930	ppb	16.1	107.98	2000	
55	Mn	89	He	2.755	ppb	34.4	97.32	2000	
56	Fe	89	H2	58.143	ppb	9.1	10595.73	100000	
59	Co	89	He	0.645	ppb	46.7	84.45	1000	
60	Ni	89	He	3.700	ppb	45.8	728.93	1000	
63	Cu	89	He	2.120	ppb	9.2	224.46	2000	
66	Zn	89	He	3.574	ppb	80.2	132.23	2000	
75	As	89	He	0.440	ppb	71.8	7.33	1000	
78	Se	89	H2	0.771	ppb	41.3	3.17	1000	
88	Sr	89	He	5.313	ppb	14.9	188.90	2000	
95	Mo	89	He	1.440	ppb	17.1	66.67	1000	
107	Ag	89	He	0.394	ppb	39.8	61.11	100	
111	Cd	89	He	0.439	ppb	26.0	7.78	1000	
118	Sn	159	He	0.718	ppb	32.9	88.89	1000	
121	Sb	159	No Gas	0.149	ppb	61.0	110.12	1000	
137	Ba	159	No Gas	0.434	ppb	30.7	93.44	2000	
182	W	159	No Gas	-0.003	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	0.107	ppb	32.5	83.43	1000	
208	Pb	209	No Gas	0.369	ppb	25.7	423.81	2000	
232	Th	209	No Gas	0.027	ppb	113.2	133.48	1000	
238	U	209	No Gas	0.015	ppb	54.6	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	994110.21	3.3	1023754.81	97.1	29.5	120.4	
Sc	45	No Gas	3062479.25	4.2	2927134.09	104.62	29.5	120.4	
Sc	45	H2	365066.36	0.7	374925.7	97.37	29.5	120.4	
Sc	45	He	74432.39	1.3	75429.93	98.68	29.5	120.4	
Ge	72	No Gas	731296.87	4.1	682196.39	107.2	29.5	120.4	
Ge	72	H2	141318.08	0.8	145757.5	96.95	29.5	120.4	
Ge	72	He	59851.12	1.0	59866.13	99.97	29.5	120.4	
Y	89	H2	2502094.04	0.4	2441196.5	102.49	29.5	120.4	
Y	89	He	529406.18	1.7	531537.69	99.6	29.5	120.4	
Tb	159	No Gas	8190509.60	4.2	7041897.33	116.31	29.5	120.4	
Tb	159	He	2922748.08	1.5	2795586.52	104.55	29.5	120.4	
Bi	209	No Gas	4418418.52	4.2	3760534.49	117.49	29.5	120.4	

Sample Report

Sample Name SN6059-001

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:18:21 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.376	ppb	23.3	101.11	100	
11	B	6	No Gas	945.975	ppb	8.0	126654.16	1000	
23	Na	45	He	510142.515	ppb	2.6	9868921.60	200000	
24	Mg	45	He	60804.269	ppb	2.7	656160.05	200000	
27	Al	45	He	7.155	ppb	64.7	61.11	200000	
28	Si	45	H2	8759.752	ppb	0.9	73661.58	10000	
39	K	45	He	978.679	ppb	3.0	19909.91	200000	
40	Ca	45	H2	328912.930	ppb	0.2	26522672.66	200000	
51	V	89	He	2.689	ppb	13.7	623.37	1000	
52	Cr	89	He	1.358	ppb	10.2	345.28	2000	
55	Mn	89	He	1288.413	ppb	2.6	130418.66	2000	
56	Fe	89	H2	8694.151	ppb	0.1	2966381.51	100000	
59	Co	89	He	0.235	ppb	22.5	115.56	1000	
60	Ni	89	He	2.809	ppb	11.6	871.18	1000	
63	Cu	89	He	1.748	ppb	10.8	574.48	2000	
66	Zn	89	He	6.150	ppb	18.6	324.46	2000	
75	As	89	He	0.415	ppb	54.7	17.00	1000	
78	Se	89	H2	0.469	ppb	22.0	8.33	1000	
88	Sr	89	He	3609.020	ppb	2.8	586163.22	2000	
95	Mo	89	He	0.749	ppb	18.5	145.56	1000	
107	Ag	89	He	0.154	ppb	14.6	103.34	100	
111	Cd	89	He	0.087	ppb	41.5	7.04	1000	
118	Sn	159	He	0.836	ppb	14.1	213.34	1000	
121	Sb	159	No Gas	0.124	ppb	14.4	263.63	1000	
137	Ba	159	No Gas	72.171	ppb	7.4	47608.37	2000	
182	W	159	No Gas	0.047	ppb	34.1	110.12	1000	
205	Tl	209	No Gas	0.045	ppb	35.5	143.49	1000	
208	Pb	209	No Gas	0.195	ppb	2.8	871.00	2000	
232	Th	209	No Gas	0.076	ppb	24.6	407.13	1000	
238	U	209	No Gas	1.772	ppb	5.5	6689.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	961320.60	3.8	1023754.81	93.9	29.5	120.4	
Sc	45	No Gas	2884338.80	4.5	2927134.09	98.54	29.5	120.4	
Sc	45	H2	336909.08	1.6	374925.7	89.86	29.5	120.4	
Sc	45	He	66697.92	2.0	75429.93	88.42	29.5	120.4	
Ge	72	No Gas	694122.56	3.7	682196.39	101.75	29.5	120.4	
Ge	72	H2	130584.74	1.6	145757.5	89.59	29.5	120.4	
Ge	72	He	54154.16	2.3	59866.13	90.46	29.5	120.4	
Y	89	H2	2330896.81	0.7	2441196.5	95.48	29.5	120.4	
Y	89	He	483736.09	2.1	531537.69	91.01	29.5	120.4	
Tb	159	No Gas	7972980.99	3.7	7041897.33	113.22	29.5	120.4	
Tb	159	He	2756711.56	2.6	2795586.52	98.61	29.5	120.4	
Bi	209	No Gas	4170192.23	4.1	3760534.49	110.89	29.5	120.4	

Sample Report

Sample Name SN6059-001L

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:21:06 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.386	ppb	34.0	82.23	100	
11	B	6	No Gas	973.524	ppb	6.5	27669.37	1000	
23	Na	45	He	485202.528	ppb	1.3	2010659.94	200000	
24	Mg	45	He	56996.187	ppb	1.0	131997.80	200000	
27	Al	45	He	11.686	ppb	138.4	43.34	200000	
28	Si	45	H2	8104.284	ppb	2.6	14600.44	10000	
39	K	45	He	888.276	ppb	6.4	12451.52	200000	
40	Ca	45	H2	308531.027	ppb	1.6	5196519.75	200000	
51	V	89	He	7.160	ppb	11.9	431.13	1000	
52	Cr	89	He	1.358	ppb	28.8	122.65	2000	
55	Mn	89	He	1204.584	ppb	1.7	25671.28	2000	
56	Fe	89	H2	8456.132	ppb	1.9	603770.69	100000	
59	Co	89	He	0.949	ppb	22.3	104.45	1000	
60	Ni	89	He	7.630	ppb	15.5	782.27	1000	
63	Cu	89	He	2.762	ppb	3.5	253.34	2000	
66	Zn	89	He	10.625	ppb	27.8	182.23	2000	
75	As	89	He	0.430	ppb	70.1	7.00	1000	
78	Se	89	H2	0.708	ppb	61.7	2.83	1000	
88	Sr	89	He	3346.505	ppb	0.5	114311.19	2000	
95	Mo	89	He	0.931	ppb	27.7	44.45	1000	
107	Ag	89	He	0.403	ppb	64.4	60.00	100	
111	Cd	89	He	0.282	ppb	74.1	4.81	1000	
118	Sn	159	He	0.471	ppb	53.6	77.78	1000	
121	Sb	159	No Gas	0.217	ppb	43.5	130.15	1000	
137	Ba	159	No Gas	69.852	ppb	11.8	9390.47	2000	
182	W	159	No Gas	0.086	ppb	82.8	73.42	1000	
205	Tl	209	No Gas	0.176	ppb	25.2	123.47	1000	
208	Pb	209	No Gas	0.413	ppb	14.1	457.18	2000	
232	Th	209	No Gas	0.085	ppb	109.1	180.20	1000	
238	U	209	No Gas	1.572	ppb	3.3	1254.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	975143.19	3.4	1023754.81	95.25	29.5	120.4	
Sc	45	No Gas	2949402.56	4.8	2927134.09	100.76	29.5	120.4	
Sc	45	H2	351807.44	0.7	374925.7	93.83	29.5	120.4	
Sc	45	He	71162.26	1.2	75429.93	94.34	29.5	120.4	
Ge	72	No Gas	711610.26	4.4	682196.39	104.31	29.5	120.4	
Ge	72	H2	135262.28	1.4	145757.5	92.8	29.5	120.4	
Ge	72	He	57749.62	0.2	59866.13	96.46	29.5	120.4	
Y	89	H2	2419228.44	1.0	2441196.5	99.1	29.5	120.4	
Y	89	He	508499.76	0.6	531537.69	95.67	29.5	120.4	
Tb	159	No Gas	8111405.57	4.8	7041897.33	115.19	29.5	120.4	
Tb	159	He	2873090.55	0.7	2795586.52	102.77	29.5	120.4	
Bi	209	No Gas	4370065.95	4.6	3760534.49	116.21	29.5	120.4	

Sample Report

Sample Name SN6059-001A

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:23:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.306	ppb	2.8	2101.34	100	
11	B	6	No Gas	1151.797	ppb	5.7	150525.86	1000	
23	Na	45	He	494601.665	ppb	0.9	9566632.44	200000	
24	Mg	45	He	58557.877	ppb	0.7	631837.12	200000	
27	Al	45	He	948.411	ppb	6.4	4124.07	200000	
28	Si	45	H2	13250.274	ppb	0.8	109220.94	10000	
39	K	45	He	10842.006	ppb	0.8	121352.79	200000	
40	Ca	45	H2	320218.203	ppb	1.0	25363899.06	200000	
51	V	89	He	55.338	ppb	4.0	9564.69	1000	
52	Cr	89	He	51.816	ppb	0.9	10943.60	2000	
55	Mn	89	He	1236.749	ppb	0.3	125071.04	2000	
56	Fe	89	H2	9380.670	ppb	1.0	3175939.37	100000	
59	Co	89	He	10.935	ppb	5.1	3996.40	1000	
60	Ni	89	He	23.979	ppb	2.3	2962.63	1000	
63	Cu	89	He	31.739	ppb	1.3	8916.48	2000	
66	Zn	89	He	109.907	ppb	4.4	4200.77	2000	
75	As	89	He	49.881	ppb	2.2	1580.26	1000	
78	Se	89	H2	49.188	ppb	1.8	833.82	1000	
88	Sr	89	He	3487.976	ppb	0.2	565969.61	2000	
95	Mo	89	He	53.118	ppb	2.9	9747.14	1000	
107	Ag	89	He	10.691	ppb	2.7	6751.94	100	
111	Cd	89	He	10.947	ppb	1.7	887.08	1000	
118	Sn	159	He	49.164	ppb	1.8	9448.10	1000	
121	Sb	159	No Gas	10.508	ppb	4.3	17424.09	1000	
137	Ba	159	No Gas	91.008	ppb	6.6	59588.79	2000	
182	W	159	No Gas	51.019	ppb	6.7	66400.29	1000	
205	Tl	209	No Gas	10.552	ppb	7.0	29259.71	1000	
208	Pb	209	No Gas	10.587	ppb	5.9	40888.07	2000	
232	Th	209	No Gas	10.916	ppb	5.9	43581.07	1000	
238	U	209	No Gas	12.708	ppb	6.1	47533.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	939837.15	4.0	1023754.81	91.8	29.5	120.4	
Sc	45	No Gas	2822844.34	4.0	2927134.09	96.44	29.5	120.4	
Sc	45	H2	330968.58	1.4	374925.7	88.28	29.5	120.4	
Sc	45	He	66665.34	1.0	75429.93	88.38	29.5	120.4	
Ge	72	No Gas	683094.56	3.9	682196.39	100.13	29.5	120.4	
Ge	72	H2	127938.87	1.5	145757.5	87.78	29.5	120.4	
Ge	72	He	54428.12	0.4	59866.13	90.92	29.5	120.4	
Y	89	H2	2313436.53	1.1	2441196.5	94.77	29.5	120.4	
Y	89	He	483100.14	0.7	531537.69	90.89	29.5	120.4	
Tb	159	No Gas	7914440.58	3.9	7041897.33	112.39	29.5	120.4	
Tb	159	He	2813205.41	0.6	2795586.52	100.63	29.5	120.4	
Bi	209	No Gas	4138827.38	3.9	3760534.49	110.06	29.5	120.4	

Sample Report

Sample Name SN6059-001S

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:26:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	45.541	ppb	7.0	9278.83	100	
11	B	6	No Gas	1403.936	ppb	8.4	184741.52	1000	
23	Na	45	He	495588.674	ppb	0.2	9640916.20	200000	
24	Mg	45	He	63232.787	ppb	0.7	686122.22	200000	
27	Al	45	He	1854.813	ppb	2.9	8081.42	200000	
28	Si	45	H2	9514.975	ppb	0.4	78952.32	10000	
39	K	45	He	10817.170	ppb	0.4	121793.17	200000	
40	Ca	45	H2	324093.484	ppb	0.6	25802286.56	200000	
51	V	89	He	511.639	ppb	0.3	87262.10	1000	
52	Cr	89	He	202.997	ppb	0.6	42803.26	2000	
55	Mn	89	He	1731.696	ppb	0.5	175520.60	2000	
56	Fe	89	H2	9428.504	ppb	0.3	3214548.91	100000	
59	Co	89	He	507.604	ppb	0.6	184599.89	1000	
60	Ni	89	He	501.958	ppb	2.1	50316.81	1000	
63	Cu	89	He	247.577	ppb	0.7	69129.05	2000	
66	Zn	89	He	506.722	ppb	2.5	19069.14	2000	
75	As	89	He	104.693	ppb	1.6	3319.76	1000	
78	Se	89	H2	100.668	ppb	1.6	1718.20	1000	
88	Sr	89	He	3988.433	ppb	0.5	648688.03	2000	
95	Mo	89	He	106.285	ppb	0.6	19539.03	1000	
107	Ag	89	He	50.385	ppb	0.7	31874.86	100	
111	Cd	89	He	256.680	ppb	1.0	20847.60	1000	
118	Sn	159	He	492.162	ppb	0.4	93952.31	1000	
121	Sb	159	No Gas	93.466	ppb	9.6	157596.84	1000	
137	Ba	159	No Gas	1871.566	ppb	9.4	1249834.96	2000	
182	W	159	No Gas	98.573	ppb	8.8	130886.45	1000	
205	Tl	209	No Gas	98.814	ppb	9.1	279218.60	1000	
208	Pb	209	No Gas	98.864	ppb	8.9	388261.81	2000	
232	Th	209	No Gas	100.173	ppb	10.8	406685.16	1000	
238	U	209	No Gas	102.739	ppb	10.3	391562.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	948683.77	4.0	1023754.81	92.67	29.5	120.4	
Sc	45	No Gas	2857801.63	4.8	2927134.09	97.63	29.5	120.4	
Sc	45	H2	332633.19	0.2	374925.7	88.72	29.5	120.4	
Sc	45	He	67046.07	0.6	75429.93	88.89	29.5	120.4	
Ge	72	No Gas	691174.53	4.6	682196.39	101.32	29.5	120.4	
Ge	72	H2	128476.09	1.5	145757.5	88.14	29.5	120.4	
Ge	72	He	54608.48	0.8	59866.13	91.22	29.5	120.4	
Y	89	H2	2329550.17	0.7	2441196.5	95.43	29.5	120.4	
Y	89	He	484242.38	0.8	531537.69	91.1	29.5	120.4	
Tb	159	No Gas	8086391.06	4.7	7041897.33	114.83	29.5	120.4	
Tb	159	He	2809986.41	0.8	2795586.52	100.52	29.5	120.4	
Bi	209	No Gas	4223897.91	4.3	3760534.49	112.32	29.5	120.4	

Sample Report

Sample Name SN6059-001P

File Name 060SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:29:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.083	ppb	4.6	10064.96	100	
11	B	6	No Gas	1491.947	ppb	5.7	193605.52	1000	
23	Na	45	He	515676.435	ppb	3.9	9776463.62	200000	
24	Mg	45	He	65967.531	ppb	3.5	697643.79	200000	
27	Al	45	He	1956.612	ppb	6.0	8303.79	200000	
28	Si	45	H2	9588.319	ppb	1.0	78213.81	10000	
39	K	45	He	11396.444	ppb	4.6	124527.84	200000	
40	Ca	45	H2	328260.140	ppb	0.2	25691517.12	200000	
51	V	89	He	537.415	ppb	4.4	89606.99	1000	
52	Cr	89	He	213.114	ppb	4.4	43931.23	2000	
55	Mn	89	He	1804.436	ppb	3.9	178840.53	2000	
56	Fe	89	H2	9588.167	ppb	0.4	3233164.20	100000	
59	Co	89	He	529.104	ppb	4.3	188136.89	1000	
60	Ni	89	He	527.832	ppb	4.6	51705.10	1000	
63	Cu	89	He	263.863	ppb	3.9	72036.00	2000	
66	Zn	89	He	534.181	ppb	4.9	19649.97	2000	
75	As	89	He	109.387	ppb	5.8	3390.45	1000	
78	Se	89	H2	100.852	ppb	2.0	1702.86	1000	
88	Sr	89	He	4147.761	ppb	4.5	659569.78	2000	
95	Mo	89	He	113.377	ppb	4.2	20379.12	1000	
107	Ag	89	He	54.029	ppb	4.4	33417.55	100	
111	Cd	89	He	270.797	ppb	5.1	21501.19	1000	
118	Sn	159	He	513.630	ppb	4.2	96629.29	1000	
121	Sb	159	No Gas	99.644	ppb	6.8	169105.42	1000	
137	Ba	159	No Gas	1975.025	ppb	6.4	1327573.90	2000	
182	W	159	No Gas	104.355	ppb	7.3	139406.49	1000	
205	Tl	209	No Gas	105.064	ppb	6.8	298659.87	1000	
208	Pb	209	No Gas	103.718	ppb	7.2	409704.07	2000	
232	Th	209	No Gas	107.847	ppb	7.0	440638.27	1000	
238	U	209	No Gas	109.272	ppb	6.9	419086.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	935148.47	3.5	1023754.81	91.34	29.5	120.4	
Sc	45	No Gas	2832897.93	4.0	2927134.09	96.78	29.5	120.4	
Sc	45	H2	326998.61	0.7	374925.7	87.22	29.5	120.4	
Sc	45	He	65396.42	3.2	75429.93	86.7	29.5	120.4	
Ge	72	No Gas	690555.77	4.7	682196.39	101.23	29.5	120.4	
Ge	72	H2	128578.29	1.3	145757.5	88.21	29.5	120.4	
Ge	72	He	53488.77	3.9	59866.13	89.35	29.5	120.4	
Y	89	H2	2304118.70	0.9	2441196.5	94.38	29.5	120.4	
Y	89	He	473950.35	3.6	531537.69	89.17	29.5	120.4	
Tb	159	No Gas	8129183.91	4.0	7041897.33	115.44	29.5	120.4	
Tb	159	He	2772123.02	3.7	2795586.52	99.16	29.5	120.4	
Bi	209	No Gas	4246462.56	4.4	3760534.49	112.92	29.5	120.4	

Sample Report

Sample Name SN6059-002

File Name 061SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:31:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.427	ppb	19.5	105.56	100	
11	B	6	No Gas	982.068	ppb	3.2	123797.38	1000	
23	Na	45	He	471193.647	ppb	0.9	9239250.38	200000	
24	Mg	45	He	56525.844	ppb	1.0	618292.99	200000	
27	Al	45	He	2.843	ppb	91.3	43.33	200000	
28	Si	45	H2	8209.337	ppb	12.9	67916.17	10000	
39	K	45	He	828.886	ppb	3.0	18615.46	200000	
40	Ca	45	H2	313480.022	ppb	12.3	24868490.18	200000	
51	V	89	He	3.072	ppb	8.6	691.15	1000	
52	Cr	89	He	1.401	ppb	10.7	355.28	2000	
55	Mn	89	He	1211.168	ppb	1.4	122989.75	2000	
56	Fe	89	H2	8443.872	ppb	12.2	2867994.43	100000	
59	Co	89	He	0.270	ppb	43.8	128.90	1000	
60	Ni	89	He	1.574	ppb	63.4	751.16	1000	
63	Cu	89	He	1.426	ppb	11.4	485.58	2000	
66	Zn	89	He	4.952	ppb	7.4	280.01	2000	
75	As	89	He	0.296	ppb	37.1	13.33	1000	
78	Se	89	H2	0.466	ppb	10.5	8.33	1000	
88	Sr	89	He	3393.478	ppb	0.7	552916.82	2000	
95	Mo	89	He	0.729	ppb	2.8	142.23	1000	
107	Ag	89	He	0.071	ppb	40.4	51.11	100	
111	Cd	89	He	0.068	ppb	72.1	5.56	1000	
118	Sn	159	He	1.351	ppb	18.6	317.79	1000	
121	Sb	159	No Gas	0.183	ppb	11.9	367.08	1000	
137	Ba	159	No Gas	71.424	ppb	1.6	47845.57	2000	
182	W	159	No Gas	0.223	ppb	18.1	347.06	1000	
205	Tl	209	No Gas	0.090	ppb	19.3	273.64	1000	
208	Pb	209	No Gas	0.161	ppb	7.7	747.51	2000	
232	Th	209	No Gas	0.564	ppb	31.1	2399.61	1000	
238	U	209	No Gas	1.857	ppb	3.4	7096.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	904072.85	2.0	1023754.81	88.31	29.5	120.4	
Sc	45	No Gas	2829610.60	1.3	2927134.09	96.67	29.5	120.4	
Sc	45	H2	333920.62	9.0	374925.7	89.06	29.5	120.4	
Sc	45	He	67578.64	0.7	75429.93	89.59	29.5	120.4	
Ge	72	No Gas	686638.68	1.2	682196.39	100.65	29.5	120.4	
Ge	72	H2	129750.30	6.8	145757.5	89.02	29.5	120.4	
Ge	72	He	54778.35	0.6	59866.13	91.5	29.5	120.4	
Y	89	H2	2337750.90	9.2	2441196.5	95.76	29.5	120.4	
Y	89	He	485108.98	0.4	531537.69	91.27	29.5	120.4	
Tb	159	No Gas	8082212.31	0.9	7041897.33	114.77	29.5	120.4	
Tb	159	He	2827432.80	0.4	2795586.52	101.14	29.5	120.4	
Bi	209	No Gas	4215513.70	1.2	3760534.49	112.1	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	062_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:34:27 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.187	ppb	5.9	25016.73	25	96.75	89.8	110.2	
11	B	6	No Gas	28.300	ppb	5.5	20300.38	25	113.2	89.8	110.2	> +/- 10%
23	Na	45	He	5439.964	ppb	0.9	557806.21	5000	108.8	89.8	110.2	
24	Mg	45	He	4986.109	ppb	1.0	281473.79	5000	99.72	89.8	110.2	
27	Al	45	He	486.411	ppb	2.2	10996.82	500	97.28	89.8	110.2	
28	Si	45	H2	470.017	ppb	1.9	20855.18	500	94	89.8	110.2	
39	K	45	He	4922.014	ppb	0.8	274680.86	5000	98.44	89.8	110.2	
40	Ca	45	H2	4942.569	ppb	2.5	2070649.92	5000	98.85	89.8	110.2	
51	V	89	He	24.652	ppb	2.9	21838.68	25	98.61	89.8	110.2	
52	Cr	89	He	24.648	ppb	0.9	26858.51	25	98.59	89.8	110.2	
55	Mn	89	He	24.582	ppb	1.8	12896.24	25	98.33	89.8	110.2	
56	Fe	89	H2	4716.287	ppb	0.4	8419184.10	5000	94.33	89.8	110.2	
59	Co	89	He	24.773	ppb	2.7	46537.75	25	99.09	89.8	110.2	
60	Ni	89	He	24.819	ppb	4.5	13305.63	25	99.28	89.8	110.2	
63	Cu	89	He	24.973	ppb	2.0	36046.41	25	99.89	89.8	110.2	
66	Zn	89	He	25.474	ppb	0.4	5023.32	25	101.9	89.8	110.2	
75	As	89	He	24.045	ppb	1.3	3936.33	25	96.18	89.8	110.2	
78	Se	89	H2	23.560	ppb	2.0	2107.73	25	94.24	89.8	110.2	
88	Sr	89	He	24.615	ppb	1.6	20671.68	25	98.46	89.8	110.2	
95	Mo	89	He	24.764	ppb	2.6	23503.05	25	99.06	89.8	110.2	
107	Ag	89	He	25.235	ppb	1.4	82417.70	25	100.94	89.8	110.2	
111	Cd	89	He	25.761	ppb	1.8	10803.29	25	103.04	89.8	110.2	
118	Sn	159	He	23.522	ppb	1.3	22857.81	25	94.09	89.8	110.2	
121	Sb	159	No Gas	22.951	ppb	5.9	195943.45	25	91.8	89.8	110.2	
137	Ba	159	No Gas	23.762	ppb	6.4	80364.89	25	95.05	89.8	110.2	
182	W	159	No Gas	23.437	ppb	6.1	157521.37	25	93.75	89.8	110.2	
205	Tl	209	No Gas	23.826	ppb	7.0	353370.41	25	95.3	89.8	110.2	
208	Pb	209	No Gas	24.170	ppb	5.7	498367.58	25	96.68	89.8	110.2	
232	Th	209	No Gas	23.595	ppb	7.0	502997.42	25	94.38	89.8	110.2	
238	U	209	No Gas	24.098	ppb	6.8	482248.15	25	96.39	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	964296.05	3.5	1023754.81	94.19	29.5	120.4	
Sc	45	No Gas	2931296.38	4.3	2927134.09	100.14	29.5	120.4	
Sc	45	H2	349916.86	0.8	374925.7	93.33	29.5	120.4	
Sc	45	He	69635.60	0.7	75429.93	92.32	29.5	120.4	
Ge	72	No Gas	700108.94	4.1	682196.39	102.63	29.5	120.4	
Ge	72	H2	136446.04	1.8	145757.5	93.61	29.5	120.4	
Ge	72	He	56827.72	0.2	59866.13	94.92	29.5	120.4	
Y	89	H2	2442158.11	0.5	2441196.5	100.04	29.5	120.4	
Y	89	He	500103.59	1.2	531537.69	94.09	29.5	120.4	
Tb	159	No Gas	8178510.64	4.3	7041897.33	116.14	29.5	120.4	
Tb	159	He	2855411.90	0.7	2795586.52	102.14	29.5	120.4	
Bi	209	No Gas	4431702.69	4.5	3760534.49	117.85	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	063_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:37:07 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.095	ppb	34.0	123.34	0.2	
11	B	6	No Gas	2.860	ppb	6.9	3433.86	4	Failed DoD
23	Na	45	He	240.258	ppb	3.6	33640.40	200	Fail All Methods□ Failed DoD
24	Mg	45	He	-0.540	ppb	N/A	842.31	20	
27	Al	45	He	-0.684	ppb	N/A	16.67	20	
28	Si	45	H2	1.855	ppb	113.9	537.28	100	
39	K	45	He	-6.473	ppb	N/A	10124.05	200	
40	Ca	45	H2	3.699	ppb	7.5	2681.47	20	
51	V	89	He	0.034	ppb	73.1	205.57	1	
52	Cr	89	He	0.007	ppb	164.2	70.66	1	
55	Mn	89	He	0.071	ppb	30.9	72.66	0.4	
56	Fe	89	H2	3.232	ppb	5.6	11911.55	20	
59	Co	89	He	0.012	ppb	59.7	55.56	0.2	
60	Ni	89	He	-0.173	ppb	N/A	534.48	0.4	
63	Cu	89	He	0.038	ppb	17.2	146.67	0.6	
66	Zn	89	He	-0.164	ppb	N/A	66.67	2	
75	As	89	He	0.021	ppb	91.2	7.67	1	
78	Se	89	H2	0.041	ppb	24.0	4.00	1	
88	Sr	89	He	0.026	ppb	17.3	22.22	1	
95	Mo	89	He	0.129	ppb	17.8	133.34	1	
107	Ag	89	He	0.014	ppb	56.1	54.44	0.2	
111	Cd	89	He	0.003	ppb	86.6	1.48	0.2	
118	Sn	159	He	0.084	ppb	42.4	141.12	1	
121	Sb	159	No Gas	0.024	ppb	9.6	256.95	0.2	
137	Ba	159	No Gas	0.019	ppb	62.1	96.78	0.4	
182	W	159	No Gas	0.099	ppb	23.9	694.12	1	
205	Tl	209	No Gas	0.024	ppb	16.8	363.75	0.2	
208	Pb	209	No Gas	0.017	ppb	24.3	460.52	0.2	
232	Th	209	No Gas	0.064	ppb	6.7	1441.69	1	
238	U	209	No Gas	0.017	ppb	13.6	340.39	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	969918.69	3.8	1023754.81	94.74	29.5	120.4	
Sc	45	No Gas	2900424.75	1.9	2927134.09	99.09	29.5	120.4	
Sc	45	H2	353699.07	1.5	374925.7	94.34	29.5	120.4	
Sc	45	He	71018.79	0.9	75429.93	94.15	29.5	120.4	
Ge	72	No Gas	698370.93	1.6	682196.39	102.37	29.5	120.4	
Ge	72	H2	137388.33	0.5	145757.5	94.26	29.5	120.4	
Ge	72	He	57508.93	0.7	59866.13	96.06	29.5	120.4	
Y	89	H2	2432873.86	1.2	2441196.5	99.66	29.5	120.4	
Y	89	He	509144.26	0.4	531537.69	95.79	29.5	120.4	
Tb	159	No Gas	7965668.08	1.7	7041897.33	113.12	29.5	120.4	
Tb	159	He	2857138.53	0.7	2795586.52	102.2	29.5	120.4	
Bi	209	No Gas	4336633.20	2.4	3760534.49	115.32	29.5	120.4	

Sample Report

Sample Name SN6059-003

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:39:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.316	ppb	23.1	90.00	100	
11	B	6	No Gas	413.824	ppb	6.0	56657.36	1000	
23	Na	45	He	126208.410	ppb	0.2	2430947.89	200000	
24	Mg	45	He	18530.416	ppb	0.8	199153.54	200000	
27	Al	45	He	3.835	ppb	73.1	46.67	200000	
28	Si	45	H2	8295.886	ppb	2.5	67035.12	10000	
39	K	45	He	513.810	ppb	2.9	15019.46	200000	
40	Ca	45	H2	72564.199	ppb	1.3	5622183.25	200000	
51	V	89	He	2.357	ppb	2.6	563.37	1000	
52	Cr	89	He	0.334	ppb	26.2	128.65	2000	
55	Mn	89	He	643.064	ppb	0.3	64646.54	2000	
56	Fe	89	H2	2918.985	ppb	1.3	982258.73	100000	
59	Co	89	He	0.076	ppb	90.9	57.78	1000	
60	Ni	89	He	0.648	ppb	79.2	652.26	1000	
63	Cu	89	He	0.977	ppb	9.4	356.68	2000	
66	Zn	89	He	3.084	ppb	12.6	207.79	2000	
75	As	89	He	3.336	ppb	4.8	108.68	1000	
78	Se	89	H2	0.339	ppb	0.5	6.00	1000	
88	Sr	89	He	631.171	ppb	0.5	101781.06	2000	
95	Mo	89	He	2.865	ppb	10.9	530.03	1000	
107	Ag	89	He	0.079	ppb	7.5	55.56	100	
111	Cd	89	He	0.041	ppb	88.1	3.33	1000	
118	Sn	159	He	0.973	ppb	2.3	243.34	1000	
121	Sb	159	No Gas	0.036	ppb	22.9	116.80	1000	
137	Ba	159	No Gas	13.769	ppb	5.8	9086.54	2000	
182	W	159	No Gas	0.104	ppb	43.4	183.54	1000	
205	Tl	209	No Gas	0.019	ppb	51.5	73.41	1000	
208	Pb	209	No Gas	0.075	ppb	9.1	420.48	2000	
232	Th	209	No Gas	0.448	ppb	10.0	1969.04	1000	
238	U	209	No Gas	0.203	ppb	25.4	797.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	967392.83	3.1	1023754.81	94.49	29.5	120.4	
Sc	45	No Gas	2809420.28	3.0	2927134.09	95.98	29.5	120.4	
Sc	45	H2	323688.30	0.8	374925.7	86.33	29.5	120.4	
Sc	45	He	66214.56	0.2	75429.93	87.78	29.5	120.4	
Ge	72	No Gas	684491.31	2.5	682196.39	100.34	29.5	120.4	
Ge	72	H2	127231.02	1.4	145757.5	87.29	29.5	120.4	
Ge	72	He	54119.14	0.2	59866.13	90.4	29.5	120.4	
Y	89	H2	2289873.00	0.4	2441196.5	93.8	29.5	120.4	
Y	89	He	480113.27	0.4	531537.69	90.33	29.5	120.4	
Tb	159	No Gas	7945643.00	2.6	7041897.33	112.83	29.5	120.4	
Tb	159	He	2804998.22	0.4	2795586.52	100.34	29.5	120.4	
Bi	209	No Gas	4303058.33	3.0	3760534.49	114.43	29.5	120.4	

Sample Report

Sample Name SN6090-001

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:42:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.256	ppb	34.7	74.45	100	
11	B	6	No Gas	214.481	ppb	7.9	29097.75	1000	
23	Na	45	He	39352.771	ppb	1.6	771931.50	200000	
24	Mg	45	He	17894.868	ppb	1.5	194425.92	200000	
27	Al	45	He	13.741	ppb	25.9	90.00	200000	
28	Si	45	H2	5449.034	ppb	0.3	45064.28	10000	
39	K	45	He	12810.004	ppb	1.6	142156.88	200000	
40	Ca	45	H2	107991.216	ppb	0.8	8534831.26	200000	
51	V	89	He	2.299	ppb	7.8	562.25	1000	
52	Cr	89	He	1.157	ppb	15.5	305.29	2000	
55	Mn	89	He	157.857	ppb	1.4	16142.29	2000	
56	Fe	89	H2	500.376	ppb	2.2	177544.33	100000	
59	Co	89	He	0.444	ppb	14.5	193.35	1000	
60	Ni	89	He	5.612	ppb	13.4	1157.87	1000	
63	Cu	89	He	18.147	ppb	3.2	5183.37	2000	
66	Zn	89	He	124.323	ppb	1.3	4783.23	2000	
75	As	89	He	1.694	ppb	20.7	58.01	1000	
78	Se	89	H2	0.214	ppb	70.5	4.00	1000	
88	Sr	89	He	473.955	ppb	0.6	77624.91	2000	
95	Mo	89	He	2.148	ppb	10.8	405.58	1000	
107	Ag	89	He	0.165	ppb	26.2	111.12	100	
111	Cd	89	He	0.901	ppb	18.1	73.70	1000	
118	Sn	159	He	1.252	ppb	10.1	300.01	1000	
121	Sb	159	No Gas	0.318	ppb	4.4	594.01	1000	
137	Ba	159	No Gas	313.503	ppb	9.2	209622.11	2000	
182	W	159	No Gas	0.082	ppb	27.6	160.18	1000	
205	Tl	209	No Gas	0.017	ppb	34.9	70.08	1000	
208	Pb	209	No Gas	1.079	ppb	8.0	4455.36	2000	
232	Th	209	No Gas	0.058	ppb	28.9	347.07	1000	
238	U	209	No Gas	1.935	ppb	10.7	7554.20	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	935999.50	3.5	1023754.81	91.43	29.5	120.4	
Sc	45	No Gas	2814702.29	3.9	2927134.09	96.16	29.5	120.4	
Sc	45	H2	330185.18	1.1	374925.7	88.07	29.5	120.4	
Sc	45	He	66938.72	1.6	75429.93	88.74	29.5	120.4	
Ge	72	No Gas	689405.42	2.6	682196.39	101.06	29.5	120.4	
Ge	72	H2	129551.62	0.5	145757.5	88.88	29.5	120.4	
Ge	72	He	54765.65	0.5	59866.13	91.48	29.5	120.4	
Y	89	H2	2347401.41	0.5	2441196.5	96.16	29.5	120.4	
Y	89	He	487626.08	0.3	531537.69	91.74	29.5	120.4	
Tb	159	No Gas	8088246.06	3.5	7041897.33	114.86	29.5	120.4	
Tb	159	He	2837174.47	0.8	2795586.52	101.49	29.5	120.4	
Bi	209	No Gas	4318394.80	3.7	3760534.49	114.83	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG28IMS1
File Name	066_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:44:55 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.182	ppb	41.2	58.89	0.5	
B	11	6	No Gas	11.194	ppb	4.0	2871.49	10	PB 6020 Fails DoD
Na	23	45	He	1038.889	ppb	4.5	27607.19	500	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Mg	24	45	He	24.862	ppb	56.8	1053.46	50	
Al	27	45	He	12.858	ppb	24.5	83.34	50	
Si	28	45	H2	-0.482	ppb	N/A	437.17	250	
K	39	45	He	34.892	ppb	145.5	9892.34	500	
Ca	40	45	H2	68.641	ppb	5.7	6686.25	50	PB 6020 Fails DoD
V	51	89	He	3.005	ppb	14.6	656.71	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.865	ppb	13.2	233.96	2.5	
Mn	55	89	He	1.485	ppb	17.4	178.64	1	PB 6020 Fails DoD
Fe	56	89	H2	30.306	ppb	4.0	16815.45	50	
Co	59	89	He	0.073	ppb	117.8	55.56	0.5	
Ni	60	89	He	-0.366	ppb	N/A	541.14	1	
Cu	63	89	He	0.970	ppb	9.3	346.68	1.5	
Zn	66	89	He	4.678	ppb	6.8	261.12	5	
As	75	89	He	0.222	ppb	36.8	10.67	2.5	
Se	78	89	H2	0.085	ppb	17.9	1.83	2.5	
Sr	88	89	He	0.303	ppb	57.6	47.78	2.5	
Mo	95	89	He	0.126	ppb	47.9	30.00	2.5	
Ag	107	89	He	0.068	ppb	0.8	47.78	0.5	
Cd	111	89	He	0.043	ppb	35.5	3.33	0.5	
Sn	118	159	He	42.423	ppb	6.1	7955.96	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.030	ppb	163.3	106.79	0.5	
Ba	137	159	No Gas	0.430	ppb	28.1	320.36	1	
W	182	159	No Gas	0.053	ppb	37.9	120.13	2.5	
Tl	205	209	No Gas	0.021	ppb	56.7	80.09	0.5	
Pb	208	209	No Gas	0.231	ppb	5.4	1064.54	0.5	
Th	232	209	No Gas	0.037	ppb	35.5	263.63	2.5	
U	238	209	No Gas	0.011	ppb	36.9	53.40	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	923560.12	1.9	1023754.81	90.21	29.5	120.4	
Sc	45	No Gas	2782584.65	0.5	2927134.09	95.06	29.5	120.4	
Sc	45	H2	341722.79	3.1	374925.7	91.14	29.5	120.4	
Sc	45	He	64750.80	3.5	75429.93	85.84	29.5	120.4	
Ge	72	No Gas	686992.65	0.7	682196.39	100.7	29.5	120.4	
Ge	72	H2	131294.31	4.8	145757.5	90.08	29.5	120.4	
Ge	72	He	52751.45	2.8	59866.13	88.12	29.5	120.4	
Y	89	H2	2416026.20	3.2	2441196.5	98.97	29.5	120.4	
Y	89	He	469903.05	3.4	531537.69	88.4	29.5	120.4	
Tb	159	No Gas	8024182.59	0.6	7041897.33	113.95	29.5	120.4	
Tb	159	He	2745699.16	3.0	2795586.52	98.22	29.5	120.4	
Bi	209	No Gas	4379312.54	0.4	3760534.49	116.45	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG28IMS1
File Name	067LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:47:31 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.221	ppb	2.7	9581.26	50	19.29	79.5	120.4	
B	11	6	No Gas	480.293	ppb	4.7	62612.95	500	19.21	79.5	120.4	
Na	23	45	He	8329.102	ppb	1.9	168651.56	7500	22.21	79.5	120.4	
Mg	24	45	He	5108.564	ppb	1.0	55653.03	5000	20.43	79.5	120.4	
Al	27	45	He	1825.986	ppb	5.9	7876.88	2000	18.26	79.5	120.4	
Si	28	45	H2	932.801	ppb	1.6	8014.51	1000	18.66	79.5	120.4	
K	39	45	He	9785.820	ppb	1.2	110053.03	10000	19.57	79.5	120.4	
Ca	40	45	H2	2575.547	ppb	3.3	203136.24	2500	20.6	79.5	120.4	
V	51	89	He	489.354	ppb	0.8	83346.40	500	19.57	79.5	120.4	
Cr	52	89	He	202.075	ppb	1.0	42545.03	200	20.21	79.5	120.4	
Mn	55	89	He	494.894	ppb	0.8	50113.88	500	19.8	79.5	120.4	
Fe	56	89	H2	1047.727	ppb	4.0	359288.72	1000	20.95	79.5	120.4	
Co	59	89	He	511.190	ppb	1.0	185636.21	500	20.45	79.5	120.4	
Ni	60	89	He	509.741	ppb	0.6	51018.42	500	20.39	79.5	120.4	
Cu	63	89	He	254.370	ppb	0.9	70920.01	250	20.35	79.5	120.4	
Zn	66	89	He	506.435	ppb	1.3	19032.44	500	20.26	79.5	120.4	
As	75	89	He	99.492	ppb	2.3	3150.37	100	19.9	79.5	120.4	
Se	78	89	H2	98.197	ppb	3.6	1661.53	100	19.64	79.5	120.4	
Sr	88	89	He	491.592	ppb	1.0	79837.12	500	19.66	79.5	120.4	
Mo	95	89	He	102.938	ppb	0.4	18896.96	100	20.59	79.5	120.4	
Ag	107	89	He	51.942	ppb	1.1	32810.57	50	20.78	79.5	120.4	
Cd	111	89	He	258.757	ppb	1.3	20986.70	250	20.7	79.5	120.4	
Sn	118	159	He	512.637	ppb	1.0	98862.34	500	20.51	79.5	120.4	
Sb	121	159	No Gas	93.011	ppb	3.0	154630.20	100	18.6	79.5	120.4	
Ba	137	159	No Gas	1849.176	ppb	3.3	1217515.83	2000	18.49	79.5	120.4	
W	182	159	No Gas	97.500	ppb	3.0	127613.54	100	19.5	79.5	120.4	
Tl	205	209	No Gas	100.182	ppb	3.3	289601.49	100	20.04	79.5	120.4	
[Pb]	206	209	No Gas	100.895	ppb	5.9	101549.21	100	20.18	79.5	120.4	
[Pb]	207	209	No Gas	100.772	ppb	3.3	88175.76	100	20.15	79.5	120.4	
Pb	208	209	No Gas	100.028	ppb	4.5	401854.42	100	20.01	79.5	120.4	
Th	232	209	No Gas	98.987	ppb	2.8	411318.97	100	19.8	79.5	120.4	
U	238	209	No Gas	99.324	ppb	4.1	387400.04	100	19.86	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	923655.37	0.5	1023754.81	90.22	29.5	120.4	
Sc	45	No Gas	2742844.49	0.7	2927134.09	93.7	29.5	120.4	
Sc	45	H2	328077.58	3.1	374925.7	87.5	29.5	120.4	
Sc	45	He	66408.01	1.6	75429.93	88.04	29.5	120.4	
Ge	72	No Gas	678627.82	0.4	682196.39	99.48	29.5	120.4	
Ge	72	H2	128618.78	0.7	145757.5	88.24	29.5	120.4	
Ge	72	He	54182.05	0.4	59866.13	90.51	29.5	120.4	
Y	89	H2	2310795.58	2.8	2441196.5	94.66	29.5	120.4	
Y	89	He	483541.91	0.5	531537.69	90.97	29.5	120.4	
Tb	159	No Gas	7948881.20	0.7	7041897.33	112.88	29.5	120.4	
Tb	159	He	2838788.29	0.5	2795586.52	101.55	29.5	120.4	
Bi	209	No Gas	4310159.54	0.4	3760534.49	114.62	29.5	120.4	

Sample Report

Sample Name SN6056-001

File Name 068SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:50:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.775	ppb	9.6	934.51	100	
11	B	6	No Gas	63.700	ppb	5.3	9221.05	1000	
23	Na	45	He	1134.793	ppb	2.0	30078.07	200000	
24	Mg	45	He	27792.316	ppb	1.6	298139.72	200000	
27	Al	45	He	101755.790	ppb	1.5	436047.15	200000	
28	Si	45	H2	2581.544	ppb	2.4	21287.56	10000	
39	K	45	He	11367.065	ppb	2.3	125831.12	200000	
40	Ca	45	H2	25638.826	ppb	1.0	1999995.06	200000	
51	V	89	He	178.154	ppb	1.4	32573.93	1000	
52	Cr	89	He	131.145	ppb	1.2	29559.43	2000	
55	Mn	89	He	4133.105	ppb	0.5	447463.66	2000	
56	Fe	89	H2	163775.785	ppb	1.6	59661075.22	100000	
59	Co	89	He	64.827	ppb	0.9	25213.15	1000	
60	Ni	89	He	173.635	ppb	1.1	19009.03	1000	
63	Cu	89	He	165.881	ppb	0.3	49506.28	2000	
66	Zn	89	He	800.579	ppb	1.3	32128.85	2000	
75	As	89	He	62.612	ppb	2.2	2122.73	1000	
78	Se	89	H2	3.542	ppb	6.3	65.00	1000	
88	Sr	89	He	73.474	ppb	2.1	12765.36	2000	
95	Mo	89	He	15.665	ppb	1.8	3083.79	1000	
107	Ag	89	He	0.579	ppb	4.7	397.80	100	
111	Cd	89	He	2.826	ppb	5.4	245.19	1000	
118	Sn	159	He	48.336	ppb	1.1	9383.61	1000	
121	Sb	159	No Gas	1.325	ppb	13.1	2312.80	1000	
137	Ba	159	No Gas	544.872	ppb	7.6	366779.89	2000	
182	W	159	No Gas	0.808	ppb	11.0	1134.65	1000	
205	Tl	209	No Gas	2.566	ppb	10.1	7610.73	1000	
208	Pb	209	No Gas	273.904	ppb	7.4	1126409.66	2000	
232	Th	209	No Gas	25.110	ppb	3.5	106978.56	1000	
238	U	209	No Gas	7.012	ppb	5.3	28022.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	891817.50	3.2	1023754.81	87.11	29.5	120.4	
Sc	45	No Gas	2789666.68	2.4	2927134.09	95.3	29.5	120.4	
Sc	45	H2	325784.56	1.2	374925.7	86.89	29.5	120.4	
Sc	45	He	66188.91	1.3	75429.93	87.75	29.5	120.4	
Ge	72	No Gas	679500.19	2.5	682196.39	99.6	29.5	120.4	
Ge	72	H2	124554.40	2.5	145757.5	85.45	29.5	120.4	
Ge	72	He	53384.45	0.4	59866.13	89.17	29.5	120.4	
Y	89	H2	2493750.17	1.5	2441196.5	102.15	29.5	120.4	
Y	89	He	517270.63	0.5	531537.69	97.32	29.5	120.4	
Tb	159	No Gas	8136980.71	2.5	7041897.33	115.55	29.5	120.4	
Tb	159	He	2841268.22	0.9	2795586.52	101.63	29.5	120.4	
Bi	209	No Gas	4418303.93	2.7	3760534.49	117.49	29.5	120.4	

Sample Report

Sample Name SN6056-002

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:52:35 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.208	ppb	13.3	1008.96	100	
11	B	6	No Gas	60.283	ppb	9.0	8731.81	1000	
23	Na	45	He	1064.463	ppb	4.0	29118.84	200000	
24	Mg	45	He	29159.777	ppb	0.3	317030.78	200000	
27	Al	45	He	107242.182	ppb	0.5	465822.47	200000	
28	Si	45	H2	2221.919	ppb	3.9	18634.40	10000	
39	K	45	He	11027.057	ppb	0.8	124032.07	200000	
40	Ca	45	H2	30527.037	ppb	0.5	2413437.27	200000	
51	V	89	He	183.631	ppb	0.6	34282.62	1000	
52	Cr	89	He	131.758	ppb	0.5	30328.21	2000	
55	Mn	89	He	4827.121	ppb	0.3	533664.31	2000	
56	Fe	89	H2	173943.628	ppb	0.1	64133851.59	100000	
59	Co	89	He	68.699	ppb	1.6	27281.61	1000	
60	Ni	89	He	162.778	ppb	1.7	18237.97	1000	
63	Cu	89	He	193.877	ppb	0.5	59072.27	2000	
66	Zn	89	He	963.277	ppb	0.3	39456.75	2000	
75	As	89	He	62.651	ppb	1.7	2169.08	1000	
78	Se	89	H2	3.518	ppb	9.2	65.33	1000	
88	Sr	89	He	79.290	ppb	1.2	14067.67	2000	
95	Mo	89	He	15.652	ppb	4.9	3146.03	1000	
107	Ag	89	He	0.613	ppb	7.7	430.02	100	
111	Cd	89	He	3.575	ppb	8.4	316.68	1000	
118	Sn	159	He	46.474	ppb	1.6	9095.64	1000	
121	Sb	159	No Gas	1.238	ppb	15.4	2192.64	1000	
137	Ba	159	No Gas	516.967	ppb	11.1	353519.16	2000	
182	W	159	No Gas	0.452	ppb	11.7	667.43	1000	
205	Tl	209	No Gas	2.403	ppb	12.5	7240.18	1000	
208	Pb	209	No Gas	214.405	ppb	11.0	895605.85	2000	
232	Th	209	No Gas	22.605	ppb	10.3	97776.05	1000	
238	U	209	No Gas	6.974	ppb	11.7	28293.57	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	885185.90	3.0	1023754.81	86.46	29.5	120.4	
Sc	45	No Gas	2832838.26	4.2	2927134.09	96.78	29.5	120.4	
Sc	45	H2	330200.79	1.5	374925.7	88.07	29.5	120.4	
Sc	45	He	67082.87	0.3	75429.93	88.93	29.5	120.4	
Ge	72	No Gas	683291.05	4.0	682196.39	100.16	29.5	120.4	
Ge	72	H2	126489.54	0.4	145757.5	86.78	29.5	120.4	
Ge	72	He	54610.32	0.5	59866.13	91.22	29.5	120.4	
Y	89	H2	2523623.30	1.3	2441196.5	103.38	29.5	120.4	
Y	89	He	528242.94	0.6	531537.69	99.38	29.5	120.4	
Tb	159	No Gas	8280078.28	4.1	7041897.33	117.58	29.5	120.4	
Tb	159	He	2863961.28	0.5	2795586.52	102.45	29.5	120.4	
Bi	209	No Gas	4496350.78	4.5	3760534.49	119.57	29.5	120.4	

Sample Report

Sample Name SN6056-003

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 7:55:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.091	ppb	9.3	977.85	100	
11	B	6	No Gas	54.567	ppb	6.1	7949.08	1000	
23	Na	45	He	974.253	ppb	4.6	27286.19	200000	
24	Mg	45	He	27772.169	ppb	0.6	301148.28	200000	
27	Al	45	He	104046.070	ppb	0.9	450678.53	200000	
28	Si	45	H2	2322.720	ppb	3.9	19409.93	10000	
39	K	45	He	11072.794	ppb	0.6	124159.95	200000	
40	Ca	45	H2	28220.620	ppb	1.0	2225967.83	200000	
51	V	89	He	181.918	ppb	1.3	33766.90	1000	
52	Cr	89	He	129.168	ppb	1.8	29559.98	2000	
55	Mn	89	He	4109.712	ppb	0.8	451743.95	2000	
56	Fe	89	H2	166421.613	ppb	0.3	61132019.45	100000	
59	Co	89	He	65.559	ppb	2.4	25887.76	1000	
60	Ni	89	He	157.935	ppb	0.9	17616.02	1000	
63	Cu	89	He	156.426	ppb	1.9	47403.39	2000	
66	Zn	89	He	760.325	ppb	1.6	30984.03	2000	
75	As	89	He	61.714	ppb	0.3	2124.40	1000	
78	Se	89	H2	4.206	ppb	8.9	77.83	1000	
88	Sr	89	He	76.689	ppb	1.8	13527.06	2000	
95	Mo	89	He	15.298	ppb	4.2	3057.12	1000	
107	Ag	89	He	0.556	ppb	1.0	387.80	100	
111	Cd	89	He	2.997	ppb	4.8	264.08	1000	
118	Sn	159	He	46.776	ppb	2.7	9140.05	1000	
121	Sb	159	No Gas	1.034	ppb	5.5	1835.52	1000	
137	Ba	159	No Gas	504.998	ppb	6.0	343443.57	2000	
182	W	159	No Gas	0.421	ppb	24.3	617.38	1000	
205	Tl	209	No Gas	2.442	ppb	6.5	7303.69	1000	
208	Pb	209	No Gas	206.128	ppb	5.0	854527.00	2000	
232	Th	209	No Gas	22.612	ppb	5.4	97053.41	1000	
238	U	209	No Gas	6.885	ppb	7.4	27715.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	875478.86	3.2	1023754.81	85.52	29.5	120.4	
Sc	45	No Gas	2835528.37	3.4	2927134.09	96.87	29.5	120.4	
Sc	45	H2	329418.77	0.3	374925.7	87.86	29.5	120.4	
Sc	45	He	66898.88	0.8	75429.93	88.69	29.5	120.4	
Ge	72	No Gas	688126.26	3.2	682196.39	100.87	29.5	120.4	
Ge	72	H2	127712.53	1.4	145757.5	87.62	29.5	120.4	
Ge	72	He	54591.42	1.6	59866.13	91.19	29.5	120.4	
Y	89	H2	2514248.20	0.8	2441196.5	102.99	29.5	120.4	
Y	89	He	525234.40	1.2	531537.69	98.81	29.5	120.4	
Tb	159	No Gas	8222119.11	3.6	7041897.33	116.76	29.5	120.4	
Tb	159	He	2859772.80	1.0	2795586.52	102.3	29.5	120.4	
Bi	209	No Gas	4452567.62	3.1	3760534.49	118.4	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	071_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 7:57:58 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.163	ppb	31.5	51.11	0.5	
B	11	6	No Gas	4.614	ppb	10.8	1883.53	10	
Na	23	45	He	640.698	ppb	4.2	20089.65	500	PB 6020 Fails DoD
Mg	24	45	He	0.397	ppb	2732.7	797.86	50	
Al	27	45	He	10.984	ppb	71.1	75.56	50	
Si	28	45	H2	5.853	ppb	68.0	467.20	250	
K	39	45	He	-50.019	ppb	N/A	9027.18	500	
Ca	40	45	H2	30.805	ppb	1.8	3428.32	50	
V	51	89	He	1.019	ppb	6.0	335.57	2.5	
Cr	52	89	He	0.222	ppb	41.1	104.65	2.5	
Mn	55	89	He	1.226	ppb	33.5	155.31	1	PB 6020 Fails DoD
Fe	56	89	H2	58.980	ppb	6.5	26009.89	50	PB 6020 Fails DoD
Co	59	89	He	0.003	ppb	1678.0	31.11	0.5	
Ni	60	89	He	-2.273	ppb	N/A	363.35	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.540	ppb	10.3	234.46	1.5	
Zn	66	89	He	1.072	ppb	78.7	132.23	5	
As	75	89	He	0.164	ppb	34.3	9.00	2.5	
Se	78	89	H2	0.108	ppb	30.7	2.17	2.5	
Sr	88	89	He	0.055	ppb	57.4	8.89	2.5	
Mo	95	89	He	0.036	ppb	106.9	14.45	2.5	
Ag	107	89	He	0.033	ppb	32.2	26.67	0.5	
Cd	111	89	He	0.042	ppb	66.8	3.33	0.5	
Sn	118	159	He	0.601	ppb	11.6	173.34	2.5	
Sb	121	159	No Gas	0.021	ppb	179.2	93.44	0.5	
Ba	137	159	No Gas	0.259	ppb	31.7	210.24	1	
W	182	159	No Gas	0.032	ppb	101.1	93.44	2.5	
Tl	205	209	No Gas	0.009	ppb	79.0	46.72	0.5	
Pb	208	209	No Gas	0.199	ppb	14.2	941.06	0.5	
Th	232	209	No Gas	0.206	ppb	28.1	991.16	2.5	
U	238	209	No Gas	0.010	ppb	33.2	53.39	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	856102.10	2.2	1023754.81	83.62	29.5	120.4	
Sc	45	No Gas	2773883.84	2.5	2927134.09	94.76	29.5	120.4	
Sc	45	H2	325583.22	0.7	374925.7	86.84	29.5	120.4	
Sc	45	He	64553.34	0.8	75429.93	85.58	29.5	120.4	
Ge	72	No Gas	690560.75	3.3	682196.39	101.23	29.5	120.4	
Ge	72	H2	126816.77	0.5	145757.5	87.01	29.5	120.4	
Ge	72	He	53365.50	0.5	59866.13	89.14	29.5	120.4	
Y	89	H2	2332054.34	0.6	2441196.5	95.53	29.5	120.4	
Y	89	He	477400.32	0.3	531537.69	89.81	29.5	120.4	
Tb	159	No Gas	8136246.13	2.3	7041897.33	115.54	29.5	120.4	
Tb	159	He	2819569.16	0.0	2795586.52	100.86	29.5	120.4	
Bi	209	No Gas	4417056.33	2.8	3760534.49	117.46	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	072LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:00:35 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.703	ppb	4.0	9396.70	50	20.28	79.5	120.4	
B	11	6	No Gas	511.305	ppb	2.5	62099.54	500	20.45	79.5	120.4	
Na	23	45	He	8720.553	ppb	1.2	169770.44	7500	23.25	79.5	120.4	
Mg	24	45	He	5168.432	ppb	1.6	54234.34	5000	20.67	79.5	120.4	
Al	27	45	He	1914.566	ppb	1.8	7959.15	2000	19.15	79.5	120.4	
Si	28	45	H2	1012.310	ppb	6.5	8208.15	1000	20.25	0	200	
K	39	45	He	10207.709	ppb	2.6	110182.17	10000	20.42	79.5	120.4	
Ca	40	45	H2	2700.449	ppb	3.2	201960.50	2500	21.6	79.5	120.4	
V	51	89	He	498.806	ppb	2.1	83677.23	500	19.95	79.5	120.4	
Cr	52	89	He	202.792	ppb	2.6	42051.16	200	20.28	79.5	120.4	
Mn	55	89	He	501.674	ppb	2.0	50035.68	500	20.07	79.5	120.4	
Fe	56	89	H2	1130.648	ppb	2.6	377412.89	1000	22.61	79.5	120.4	
Co	59	89	He	519.502	ppb	2.2	185814.90	500	20.78	79.5	120.4	
Ni	60	89	He	511.686	ppb	2.5	50437.23	500	20.47	79.5	120.4	
Cu	63	89	He	258.477	ppb	3.2	70967.27	250	20.68	79.5	120.4	
Zn	66	89	He	520.485	ppb	1.6	19266.11	500	20.82	79.5	120.4	
As	75	89	He	103.192	ppb	2.2	3218.39	100	20.64	79.5	120.4	
Se	78	89	H2	100.767	ppb	2.8	1661.53	100	20.15	79.5	120.4	
Sr	88	89	He	505.913	ppb	3.6	80912.43	500	20.24	79.5	120.4	
Mo	95	89	He	107.091	ppb	2.5	19362.10	100	21.42	79.5	120.4	
Ag	107	89	He	53.937	ppb	2.2	33560.09	50	21.57	79.5	120.4	
Cd	111	89	He	272.257	ppb	2.0	21749.40	250	21.78	79.5	120.4	
Sn	118	159	He	484.990	ppb	1.6	93320.29	500	19.4	79.5	120.4	
Sb	121	159	No Gas	97.938	ppb	1.0	166132.51	100	19.59	79.5	120.4	
Ba	137	159	No Gas	1937.961	ppb	0.5	1301975.54	2000	19.38	79.5	120.4	
W	182	159	No Gas	102.866	ppb	1.7	137369.56	100	20.57	79.5	120.4	
Tl	205	209	No Gas	104.057	ppb	1.2	308003.64	100	20.81	79.5	120.4	
[Pb]	206	209	No Gas	105.318	ppb	0.6	108540.49	100	21.06	79.5	120.4	
[Pb]	207	209	No Gas	105.006	ppb	0.8	94067.34	100	21	79.5	120.4	
Pb	208	209	No Gas	104.370	ppb	0.4	429312.52	100	20.87	79.5	120.4	
Th	232	209	No Gas	103.836	ppb	0.2	441747.48	100	20.77	79.5	120.4	
U	238	209	No Gas	104.529	ppb	0.7	417421.69	100	20.91	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	861629.83	0.3	1023754.81	84.16	29.5	120.4	
Sc	45	No Gas	2716313.80	0.7	2927134.09	92.8	29.5	120.4	
Sc	45	H2	311086.60	1.9	374925.7	82.97	29.5	120.4	
Sc	45	He	63988.07	2.2	75429.93	84.83	29.5	120.4	
Ge	72	No Gas	674706.30	0.5	682196.39	98.9	29.5	120.4	
Ge	72	H2	124510.44	0.3	145757.5	85.42	29.5	120.4	
Ge	72	He	53182.01	1.4	59866.13	88.83	29.5	120.4	
Y	89	H2	2251205.24	2.1	2441196.5	92.22	29.5	120.4	
Y	89	He	476393.81	2.0	531537.69	89.63	29.5	120.4	
Tb	159	No Gas	8111120.99	1.0	7041897.33	115.18	29.5	120.4	
Tb	159	He	2832940.13	2.2	2795586.52	101.34	29.5	120.4	
Bi	209	No Gas	4412716.73	1.2	3760534.49	117.34	29.5	120.4	

Sample Report

Sample Name SN5124-002R

File Name 073SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:03:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.279	ppb	10.2	71.11	100	
11	B	6	No Gas	110.551	ppb	5.7	14037.26	1000	
23	Na	45	He	214260.066	ppb	1.5	3890056.01	200000	
24	Mg	45	He	16268.900	ppb	1.6	165136.77	200000	
27	Al	45	He	22.868	ppb	16.6	121.12	200000	
28	Si	45	H2	5594.096	ppb	0.6	43250.15	10000	
39	K	45	He	1497.805	ppb	5.5	23665.50	200000	
40	Ca	45	H2	51423.900	ppb	0.9	3800715.15	200000	
51	V	89	He	0.779	ppb	19.8	288.90	1000	
52	Cr	89	He	0.255	ppb	23.6	109.31	2000	
55	Mn	89	He	435.213	ppb	1.5	42570.72	2000	
56	Fe	89	H2	162.357	ppb	1.5	58798.11	100000	
59	Co	89	He	1.431	ppb	4.2	531.16	1000	
60	Ni	89	He	2.146	ppb	14.2	777.83	1000	
63	Cu	89	He	0.769	ppb	4.6	291.12	2000	
66	Zn	89	He	2.197	ppb	10.9	170.01	2000	
75	As	89	He	0.389	ppb	18.6	15.67	1000	
78	Se	89	H2	0.184	ppb	24.4	3.33	1000	
88	Sr	89	He	340.537	ppb	1.3	53421.08	2000	
95	Mo	89	He	0.319	ppb	21.6	64.45	1000	
107	Ag	89	He	0.067	ppb	37.1	46.67	100	
111	Cd	89	He	0.137	ppb	22.3	10.74	1000	
118	Sn	159	He	0.851	ppb	16.1	218.90	1000	
121	Sb	159	No Gas	0.123	ppb	24.0	266.96	1000	
137	Ba	159	No Gas	15.665	ppb	5.9	10522.44	2000	
182	W	159	No Gas	0.245	ppb	24.2	377.09	1000	
205	Tl	209	No Gas	0.118	ppb	14.2	367.08	1000	
208	Pb	209	No Gas	0.110	ppb	9.3	567.31	2000	
232	Th	209	No Gas	1.184	ppb	32.6	5120.25	1000	
238	U	209	No Gas	0.134	ppb	13.6	540.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	836084.82	3.5	1023754.81	81.67	29.5	120.4	
Sc	45	No Gas	2694549.56	3.1	2927134.09	92.05	29.5	120.4	
Sc	45	H2	308755.62	1.2	374925.7	82.35	29.5	120.4	
Sc	45	He	62510.28	1.4	75429.93	82.87	29.5	120.4	
Ge	72	No Gas	664625.03	3.0	682196.39	97.42	29.5	120.4	
Ge	72	H2	123217.78	0.8	145757.5	84.54	29.5	120.4	
Ge	72	He	52081.18	1.7	59866.13	87	29.5	120.4	
Y	89	H2	2239639.48	1.0	2441196.5	91.74	29.5	120.4	
Y	89	He	467098.52	1.2	531537.69	87.88	29.5	120.4	
Tb	159	No Gas	8090729.53	2.5	7041897.33	114.89	29.5	120.4	
Tb	159	He	2791571.83	1.1	2795586.52	99.86	29.5	120.4	
Bi	209	No Gas	4367870.11	3.2	3760534.49	116.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	074_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:05:41 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.751	ppb	8.1	22056.31	25	95	89.8	110.2	
11	B	6	No Gas	24.602	ppb	6.2	16023.81	25	98.41	89.8	110.2	
23	Na	45	He	5393.382	ppb	5.5	515046.67	5000	107.87	89.8	110.2	
24	Mg	45	He	5131.398	ppb	5.8	269673.30	5000	102.63	89.8	110.2	
27	Al	45	He	490.860	ppb	5.4	10332.96	500	98.17	89.8	110.2	
28	Si	45	H2	442.634	ppb	2.8	18826.73	500	88.53	89.8	110.2	> +/- 10%
39	K	45	He	5047.662	ppb	5.1	262085.93	5000	100.95	89.8	110.2	
40	Ca	45	H2	4816.617	ppb	1.7	1932155.46	5000	96.33	89.8	110.2	
51	V	89	He	24.737	ppb	5.0	20994.06	25	98.95	89.8	110.2	
52	Cr	89	He	24.868	ppb	3.1	25971.69	25	99.47	89.8	110.2	
55	Mn	89	He	24.868	ppb	4.9	12498.59	25	99.47	89.8	110.2	
56	Fe	89	H2	4665.092	ppb	0.9	8107020.69	5000	93.3	89.8	110.2	
59	Co	89	He	24.963	ppb	4.2	44936.73	25	99.85	89.8	110.2	
60	Ni	89	He	24.804	ppb	5.2	12744.05	25	99.22	89.8	110.2	
63	Cu	89	He	25.401	ppb	3.6	35135.01	25	101.6	89.8	110.2	
66	Zn	89	He	25.746	ppb	3.7	4864.36	25	102.98	89.8	110.2	
75	As	89	He	25.403	ppb	3.9	3984.68	25	101.61	89.8	110.2	
78	Se	89	H2	23.311	ppb	2.1	2030.06	25	93.24	89.8	110.2	
88	Sr	89	He	24.484	ppb	4.2	19701.39	25	97.94	89.8	110.2	
95	Mo	89	He	25.298	ppb	4.3	23006.64	25	101.19	89.8	110.2	
107	Ag	89	He	26.161	ppb	4.4	81865.58	25	104.64	89.8	110.2	
111	Cd	89	He	26.137	ppb	4.4	10502.32	25	104.55	89.8	110.2	
118	Sn	159	He	24.221	ppb	6.6	22927.95	25	96.88	89.8	110.2	
121	Sb	159	No Gas	22.187	ppb	7.8	188347.11	25	88.75	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.332	ppb	8.8	75099.00	25	89.33	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.720	ppb	6.5	151882.79	25	90.88	89.8	110.2	
205	Tl	209	No Gas	23.050	ppb	8.2	342082.32	25	92.2	89.8	110.2	
208	Pb	209	No Gas	23.341	ppb	7.0	481531.16	25	93.36	89.8	110.2	
232	Th	209	No Gas	22.646	ppb	8.2	483078.72	25	90.58	89.8	110.2	
238	U	209	No Gas	23.155	ppb	8.2	463660.27	25	92.62	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	865495.03	2.0	1023754.81	84.54	29.5	120.4	
Sc	45	No Gas	2786806.21	3.1	2927134.09	95.21	29.5	120.4	
Sc	45	H2	335086.72	1.4	374925.7	89.37	29.5	120.4	
Sc	45	He	64952.35	4.9	75429.93	86.11	29.5	120.4	
Ge	72	No Gas	682057.47	3.0	682196.39	99.98	29.5	120.4	
Ge	72	H2	130990.42	1.3	145757.5	89.87	29.5	120.4	
Ge	72	He	53900.83	4.0	59866.13	90.04	29.5	120.4	
Y	89	H2	2377553.46	1.4	2441196.5	97.39	29.5	120.4	
Y	89	He	479585.64	3.4	531537.69	90.23	29.5	120.4	
Tb	159	No Gas	8131791.47	3.2	7041897.33	115.48	29.5	120.4	
Tb	159	He	2785834.72	3.8	2795586.52	99.65	29.5	120.4	
Bi	209	No Gas	4433797.97	3.5	3760534.49	117.9	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	075_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:08:15 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.117	ppb	7.1	132.23	0.2	Failed DoD
11	B	6	No Gas	1.541	ppb	15.1	2301.38	4	
23	Na	45	He	127.157	ppb	2.7	21453.26	200	Failed DoD
24	Mg	45	He	1.029	ppb	123.2	908.99	20	
27	Al	45	He	-0.319	ppb	N/A	24.45	20	
28	Si	45	H2	1.746	ppb	174.7	487.22	100	
39	K	45	He	-2.739	ppb	N/A	10072.37	200	
40	Ca	45	H2	4.690	ppb	16.2	2858.18	20	
51	V	89	He	-0.008	ppb	N/A	166.67	1	
52	Cr	89	He	0.006	ppb	223.6	67.99	1	
55	Mn	89	He	0.100	ppb	22.5	87.32	0.4	
56	Fe	89	H2	5.819	ppb	15.5	15752.91	20	
59	Co	89	He	0.035	ppb	73.1	97.78	0.2	
60	Ni	89	He	-0.358	ppb	N/A	432.24	0.4	Failed DoD
63	Cu	89	He	0.027	ppb	92.9	128.89	0.6	
66	Zn	89	He	-0.097	ppb	N/A	78.89	2	
75	As	89	He	0.014	ppb	24.4	6.33	1	
78	Se	89	H2	0.055	ppb	16.2	5.00	1	
88	Sr	89	He	0.042	ppb	19.7	35.55	1	
95	Mo	89	He	0.107	ppb	9.0	110.00	1	
107	Ag	89	He	0.011	ppb	20.5	41.11	0.2	
111	Cd	89	He	0.021	ppb	22.0	8.89	0.2	
118	Sn	159	He	0.133	ppb	43.9	191.13	1	
121	Sb	159	No Gas	0.043	ppb	9.6	423.81	0.2	
137	Ba	159	No Gas	0.329	ppb	28.1	1141.34	0.4	Failed DoD
182	W	159	No Gas	0.117	ppb	4.6	834.29	1	
205	Tl	209	No Gas	0.054	ppb	4.8	830.96	0.2	
208	Pb	209	No Gas	0.044	ppb	3.3	1037.85	0.2	
232	Th	209	No Gas	0.133	ppb	13.2	2960.41	1	
238	U	209	No Gas	0.043	ppb	6.2	877.69	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	875687.17	1.0	1023754.81	85.54	29.5	120.4	
Sc	45	No Gas	2841567.67	1.7	2927134.09	97.08	29.5	120.4	
Sc	45	H2	327812.40	8.9	374925.7	87.43	29.5	120.4	
Sc	45	He	69250.13	0.6	75429.93	91.81	29.5	120.4	
Ge	72	No Gas	704666.35	0.2	682196.39	103.29	29.5	120.4	
Ge	72	H2	130819.51	5.9	145757.5	89.75	29.5	120.4	
Ge	72	He	57144.12	0.2	59866.13	95.45	29.5	120.4	
Y	89	H2	2332432.01	8.2	2441196.5	95.54	29.5	120.4	
Y	89	He	502942.86	0.5	531537.69	94.62	29.5	120.4	
Tb	159	No Gas	8127530.30	1.6	7041897.33	115.42	29.5	120.4	
Tb	159	He	2907726.21	0.3	2795586.52	104.01	29.5	120.4	
Bi	209	No Gas	4451347.49	1.1	3760534.49	118.37	29.5	120.4	

Sample Report

Sample Name SN5124-002RL

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:10:58 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.304	ppb	33.3	71.12	100	
11	B	6	No Gas	122.865	ppb	4.2	4348.58	1000	
23	Na	45	He	220542.388	ppb	2.6	867002.13	200000	
24	Mg	45	He	16712.205	ppb	3.3	37101.32	200000	
27	Al	45	He	15.908	ppb	53.0	44.45	200000	
28	Si	45	H2	5222.786	ppb	1.2	9320.10	10000	
39	K	45	He	1506.087	ppb	1.3	13031.78	200000	
40	Ca	45	H2	50045.682	ppb	1.1	821731.86	200000	
51	V	89	He	-0.575	ppb	N/A	148.90	1000	
52	Cr	89	He	0.256	ppb	130.5	71.32	2000	
55	Mn	89	He	443.998	ppb	2.6	9137.32	2000	
56	Fe	89	H2	185.616	ppb	4.2	19398.30	100000	
59	Co	89	He	1.490	ppb	34.2	140.01	1000	
60	Ni	89	He	-8.572	ppb	N/A	428.91	1000	
63	Cu	89	He	0.958	ppb	22.0	142.23	2000	
66	Zn	89	He	2.704	ppb	44.2	115.56	2000	
75	As	89	He	0.157	ppb	195.1	5.00	1000	
78	Se	89	H2	0.373	ppb	56.4	1.67	1000	
88	Sr	89	He	345.330	ppb	5.0	11359.54	2000	
95	Mo	89	He	1.280	ppb	29.4	55.56	1000	
107	Ag	89	He	0.186	ppb	36.1	30.00	100	
111	Cd	89	He	0.225	ppb	45.3	3.70	1000	
118	Sn	159	He	1.563	ppb	37.4	118.90	1000	
121	Sb	159	No Gas	0.203	ppb	36.7	126.81	1000	
137	Ba	159	No Gas	15.769	ppb	2.4	2155.91	2000	
182	W	159	No Gas	0.564	ppb	53.3	200.23	1000	
205	Tl	209	No Gas	0.084	ppb	19.9	70.08	1000	
208	Pb	209	No Gas	0.159	ppb	46.1	253.61	2000	
232	Th	209	No Gas	0.685	ppb	19.6	697.47	1000	
238	U	209	No Gas	0.097	ppb	20.9	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	877873.19	0.7	1023754.81	85.75	29.5	120.4	
Sc	45	No Gas	2836089.74	1.5	2927134.09	96.89	29.5	120.4	
Sc	45	H2	342593.94	1.2	374925.7	91.38	29.5	120.4	
Sc	45	He	67164.66	1.8	75429.93	89.04	29.5	120.4	
Ge	72	No Gas	705228.07	1.7	682196.39	103.38	29.5	120.4	
Ge	72	H2	134568.21	1.4	145757.5	92.32	29.5	120.4	
Ge	72	He	56214.02	1.8	59866.13	93.9	29.5	120.4	
Y	89	H2	2437007.08	0.8	2441196.5	99.83	29.5	120.4	
Y	89	He	490017.29	2.2	531537.69	92.19	29.5	120.4	
Tb	159	No Gas	8122519.88	1.4	7041897.33	115.35	29.5	120.4	
Tb	159	He	2838735.55	2.4	2795586.52	101.54	29.5	120.4	
Bi	209	No Gas	4448489.06	1.0	3760534.49	118.29	29.5	120.4	

Sample Report

Sample Name SN5124-002RA

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:13:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.102	ppb	7.6	946.73	100	
11	B	6	No Gas	205.994	ppb	3.5	25339.48	1000	
23	Na	45	He	226713.401	ppb	6.0	4109629.49	200000	
24	Mg	45	He	17352.450	ppb	6.6	175796.03	200000	
27	Al	45	He	453.394	ppb	7.2	1860.18	200000	
28	Si	45	H2	7626.443	ppb	1.2	60196.83	10000	
39	K	45	He	6491.987	ppb	5.9	71739.89	200000	
40	Ca	45	H2	52226.483	ppb	0.6	3950523.10	200000	
51	V	89	He	26.551	ppb	8.0	4476.44	1000	
52	Cr	89	He	25.193	ppb	8.2	5122.03	2000	
55	Mn	89	He	466.112	ppb	4.0	45172.99	2000	
56	Fe	89	H2	631.687	ppb	0.4	218046.41	100000	
59	Co	89	He	6.476	ppb	2.1	2280.36	1000	
60	Ni	89	He	13.151	ppb	10.3	1811.30	1000	
63	Cu	89	He	16.014	ppb	1.7	4353.08	2000	
66	Zn	89	He	53.656	ppb	7.3	2009.11	2000	
75	As	89	He	25.753	ppb	2.9	783.78	1000	
78	Se	89	H2	24.489	ppb	4.1	412.82	1000	
88	Sr	89	He	378.359	ppb	4.9	58796.37	2000	
95	Mo	89	He	26.814	ppb	6.3	4714.33	1000	
107	Ag	89	He	5.484	ppb	2.5	3321.64	100	
111	Cd	89	He	5.712	ppb	8.3	442.98	1000	
118	Sn	159	He	24.110	ppb	2.2	4594.28	1000	
121	Sb	159	No Gas	4.948	ppb	3.0	8558.93	1000	
137	Ba	159	No Gas	24.469	ppb	2.6	16685.78	2000	
182	W	159	No Gas	24.327	ppb	3.8	32942.05	1000	
205	Tl	209	No Gas	5.100	ppb	6.0	15129.23	1000	
208	Pb	209	No Gas	5.054	ppb	4.2	20930.17	2000	
232	Th	209	No Gas	5.371	ppb	4.0	22983.41	1000	
238	U	209	No Gas	5.059	ppb	5.7	20232.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	845899.46	2.4	1023754.81	82.63	29.5	120.4	
Sc	45	No Gas	2741665.50	2.7	2927134.09	93.66	29.5	120.4	
Sc	45	H2	315980.26	0.9	374925.7	84.28	29.5	120.4	
Sc	45	He	62519.72	4.4	75429.93	82.88	29.5	120.4	
Ge	72	No Gas	685025.33	2.6	682196.39	100.41	29.5	120.4	
Ge	72	H2	125355.00	1.2	145757.5	86	29.5	120.4	
Ge	72	He	52354.87	3.3	59866.13	87.45	29.5	120.4	
Y	89	H2	2299694.77	1.0	2441196.5	94.2	29.5	120.4	
Y	89	He	463155.01	3.2	531537.69	87.13	29.5	120.4	
Tb	159	No Gas	8218303.56	2.0	7041897.33	116.71	29.5	120.4	
Tb	159	He	2772726.97	3.3	2795586.52	99.18	29.5	120.4	
Bi	209	No Gas	4420905.59	2.4	3760534.49	117.56	29.5	120.4	

Sample Report

Sample Name SN5124-002RS

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:16:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	52.704	ppb	7.2	9193.22	100	
11	B	6	No Gas	650.060	ppb	3.4	73999.80	1000	
23	Na	45	He	225515.079	ppb	1.4	4212443.60	200000	
24	Mg	45	He	21748.870	ppb	1.4	226883.63	200000	
27	Al	45	He	1900.239	ppb	2.4	7944.70	200000	
28	Si	45	H2	6604.875	ppb	2.1	52458.31	10000	
39	K	45	He	11892.841	ppb	1.5	127499.08	200000	
40	Ca	45	H2	54943.331	ppb	1.9	4177811.64	200000	
51	V	89	He	507.052	ppb	1.0	85601.17	1000	
52	Cr	89	He	206.196	ppb	0.7	43033.27	2000	
55	Mn	89	He	949.550	ppb	1.0	95280.55	2000	
56	Fe	89	H2	1152.933	ppb	0.4	396520.52	100000	
59	Co	89	He	520.739	ppb	0.2	187458.59	1000	
60	Ni	89	He	515.622	ppb	0.7	51149.77	1000	
63	Cu	89	He	257.567	ppb	1.3	71180.70	2000	
66	Zn	89	He	520.297	ppb	0.9	19380.75	2000	
75	As	89	He	107.176	ppb	3.2	3364.45	1000	
78	Se	89	H2	102.215	ppb	0.3	1737.03	1000	
88	Sr	89	He	856.275	ppb	0.5	137853.67	2000	
95	Mo	89	He	110.924	ppb	1.6	20183.26	1000	
107	Ag	89	He	53.822	ppb	0.3	33702.62	100	
111	Cd	89	He	272.839	ppb	0.5	21935.25	1000	
118	Sn	159	He	497.575	ppb	0.6	96432.74	1000	
121	Sb	159	No Gas	103.842	ppb	6.1	172948.39	1000	
137	Ba	159	No Gas	2024.138	ppb	6.2	1335030.72	2000	
182	W	159	No Gas	108.116	ppb	6.9	141726.52	1000	
205	Tl	209	No Gas	108.931	ppb	6.1	312336.16	1000	
208	Pb	209	No Gas	108.676	ppb	5.3	433121.47	2000	
232	Th	209	No Gas	108.774	ppb	6.7	448227.20	1000	
238	U	209	No Gas	110.805	ppb	6.4	428661.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	811637.17	1.7	1023754.81	79.28	29.5	120.4	
Sc	45	No Gas	2613014.43	3.7	2927134.09	89.27	29.5	120.4	
Sc	45	H2	317668.84	1.0	374925.7	84.73	29.5	120.4	
Sc	45	He	64319.13	1.6	75429.93	85.27	29.5	120.4	
Ge	72	No Gas	658888.04	3.1	682196.39	96.58	29.5	120.4	
Ge	72	H2	124893.65	0.9	145757.5	85.69	29.5	120.4	
Ge	72	He	53813.60	1.1	59866.13	89.89	29.5	120.4	
Y	89	H2	2319318.61	0.4	2441196.5	95.01	29.5	120.4	
Y	89	He	479328.33	0.8	531537.69	90.18	29.5	120.4	
Tb	159	No Gas	7975424.05	3.9	7041897.33	113.26	29.5	120.4	
Tb	159	He	2852817.53	1.0	2795586.52	102.05	29.5	120.4	
Bi	209	No Gas	4280256.46	3.3	3760534.49	113.82	29.5	120.4	

Sample Report

Sample Name SN5124-002RP

File Name 079SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:18:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.231	ppb	9.2	8794.09	100	
11	B	6	No Gas	616.293	ppb	7.5	71894.95	1000	
23	Na	45	He	220335.256	ppb	0.3	4132646.15	200000	
24	Mg	45	He	21111.233	ppb	0.2	221154.24	200000	
27	Al	45	He	1871.661	ppb	4.0	7854.64	200000	
28	Si	45	H2	6524.345	ppb	0.8	52109.04	10000	
39	K	45	He	11560.838	ppb	0.3	124707.22	200000	
40	Ca	45	H2	53533.567	ppb	0.9	4092942.48	200000	
51	V	89	He	503.595	ppb	1.1	85147.19	1000	
52	Cr	89	He	201.230	ppb	0.7	42061.82	2000	
55	Mn	89	He	927.252	ppb	0.8	93185.20	2000	
56	Fe	89	H2	1133.132	ppb	0.7	389244.78	100000	
59	Co	89	He	510.013	ppb	0.4	183870.84	1000	
60	Ni	89	He	507.167	ppb	1.1	50396.07	1000	
63	Cu	89	He	255.643	ppb	0.9	70757.21	2000	
66	Zn	89	He	511.200	ppb	0.9	19072.53	2000	
75	As	89	He	103.855	ppb	1.5	3264.75	1000	
78	Se	89	H2	98.952	ppb	3.3	1679.03	1000	
88	Sr	89	He	841.062	ppb	1.4	135606.15	2000	
95	Mo	89	He	107.322	ppb	0.7	19559.05	1000	
107	Ag	89	He	52.655	ppb	0.8	33020.95	100	
111	Cd	89	He	267.959	ppb	1.0	21575.41	1000	
118	Sn	159	He	485.314	ppb	0.5	94051.51	1000	
121	Sb	159	No Gas	92.638	ppb	7.9	162124.76	1000	
137	Ba	159	No Gas	1821.055	ppb	8.7	1261872.34	2000	
182	W	159	No Gas	96.941	ppb	7.8	133570.40	1000	
205	Tl	209	No Gas	97.527	ppb	7.9	292752.83	1000	
208	Pb	209	No Gas	98.335	ppb	7.9	410225.06	2000	
232	Th	209	No Gas	98.408	ppb	9.2	424474.39	1000	
238	U	209	No Gas	99.397	ppb	9.0	402472.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	831908.41	3.1	1023754.81	81.26	29.5	120.4	
Sc	45	No Gas	2762024.53	4.4	2927134.09	94.36	29.5	120.4	
Sc	45	H2	319387.65	0.9	374925.7	85.19	29.5	120.4	
Sc	45	He	64572.32	0.2	75429.93	85.61	29.5	120.4	
Ge	72	No Gas	692571.68	3.6	682196.39	101.52	29.5	120.4	
Ge	72	H2	126329.84	0.4	145757.5	86.67	29.5	120.4	
Ge	72	He	54132.53	0.2	59866.13	90.42	29.5	120.4	
Y	89	H2	2315988.64	0.5	2441196.5	94.87	29.5	120.4	
Y	89	He	480039.26	0.2	531537.69	90.31	29.5	120.4	
Tb	159	No Gas	8385333.00	4.0	7041897.33	119.08	29.5	120.4	
Tb	159	He	2852570.76	0.1	2795586.52	102.04	29.5	120.4	
Bi	209	No Gas	4484193.62	3.8	3760534.49	119.24	29.5	120.4	

Sample Report

Sample Name SN6056-004

File Name 080SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:21:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.333	ppb	17.4	81.11	100	
11	B	6	No Gas	14.469	ppb	4.7	2993.74	1000	
23	Na	45	He	697.789	ppb	2.9	21707.18	200000	
24	Mg	45	He	12.834	ppb	64.3	951.21	200000	
27	Al	45	He	137.069	ppb	10.3	617.81	200000	
28	Si	45	H2	24.444	ppb	13.8	614.03	10000	
39	K	45	He	2.289	ppb	1367.8	9793.96	200000	
40	Ca	45	H2	96.077	ppb	2.5	8467.25	200000	
51	V	89	He	2.753	ppb	6.2	643.37	1000	
52	Cr	89	He	0.840	ppb	5.3	239.29	2000	
55	Mn	89	He	1.309	ppb	4.9	167.97	2000	
56	Fe	89	H2	38.108	ppb	2.9	19033.85	100000	
59	Co	89	He	0.291	ppb	36.4	137.79	1000	
60	Ni	89	He	-1.340	ppb	N/A	466.69	1000	
63	Cu	89	He	0.954	ppb	17.3	357.80	2000	
66	Zn	89	He	3.969	ppb	29.2	245.56	2000	
75	As	89	He	0.312	ppb	10.6	14.00	1000	
78	Se	89	H2	0.214	ppb	59.5	4.00	1000	
88	Sr	89	He	0.344	ppb	15.9	56.67	2000	
95	Mo	89	He	0.332	ppb	5.3	70.00	1000	
107	Ag	89	He	0.058	ppb	24.2	43.34	100	
111	Cd	89	He	0.081	ppb	60.1	6.67	1000	
118	Sn	159	He	1.579	ppb	25.5	370.02	1000	
121	Sb	159	No Gas	0.094	ppb	20.4	226.92	1000	
137	Ba	159	No Gas	1.304	ppb	12.1	954.43	2000	
182	W	159	No Gas	0.285	ppb	31.0	450.51	1000	
205	Tl	209	No Gas	0.114	ppb	7.1	373.76	1000	
208	Pb	209	No Gas	0.399	ppb	11.5	1848.80	2000	
232	Th	209	No Gas	0.805	ppb	20.4	3724.78	1000	
238	U	209	No Gas	0.065	ppb	18.8	286.99	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	840687.63	2.4	1023754.81	82.12	29.5	120.4	
Sc	45	No Gas	2801689.48	3.0	2927134.09	95.71	29.5	120.4	
Sc	45	H2	323814.58	0.9	374925.7	86.37	29.5	120.4	
Sc	45	He	66223.61	0.6	75429.93	87.79	29.5	120.4	
Ge	72	No Gas	702533.24	3.1	682196.39	102.98	29.5	120.4	
Ge	72	H2	127571.44	1.1	145757.5	87.52	29.5	120.4	
Ge	72	He	54926.83	0.5	59866.13	91.75	29.5	120.4	
Y	89	H2	2348819.62	0.5	2441196.5	96.22	29.5	120.4	
Y	89	He	490247.05	0.5	531537.69	92.23	29.5	120.4	
Tb	159	No Gas	8513710.64	2.2	7041897.33	120.9	29.5	120.4	6020/DoD
Tb	159	He	2894355.30	0.6	2795586.52	103.53	29.5	120.4	
Bi	209	No Gas	4637009.61	3.0	3760534.49	123.31	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6061-002

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:24:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.146	ppb	7.9	46.67	100	
11	B	6	No Gas	5.838	ppb	9.8	1964.64	1000	
23	Na	45	He	552.791	ppb	9.9	18733.01	200000	
24	Mg	45	He	14.967	ppb	18.9	964.55	200000	
27	Al	45	He	2.898	ppb	233.9	42.23	200000	
28	Si	45	H2	11.317	ppb	39.7	507.24	10000	
39	K	45	He	-15.915	ppb	N/A	9512.26	200000	
40	Ca	45	H2	37.197	ppb	5.6	3894.02	200000	
51	V	89	He	2.281	ppb	2.8	558.92	1000	
52	Cr	89	He	0.412	ppb	36.9	147.31	2000	
55	Mn	89	He	1.063	ppb	13.1	141.98	2000	
56	Fe	89	H2	5.785	ppb	16.8	7961.14	100000	
59	Co	89	He	0.098	ppb	18.1	66.67	1000	
60	Ni	89	He	-1.805	ppb	N/A	417.80	1000	
63	Cu	89	He	0.613	ppb	20.4	260.01	2000	
66	Zn	89	He	2.175	ppb	28.8	176.67	2000	
75	As	89	He	0.022	ppb	82.5	4.67	1000	
78	Se	89	H2	0.126	ppb	45.9	2.50	1000	
88	Sr	89	He	0.176	ppb	17.8	28.89	2000	
95	Mo	89	He	0.094	ppb	21.8	25.55	1000	
107	Ag	89	He	0.022	ppb	23.9	20.00	100	
111	Cd	89	He	0.023	ppb	91.7	1.85	1000	
118	Sn	159	He	1.611	ppb	2.4	373.35	1000	
121	Sb	159	No Gas	0.040	ppb	62.0	130.14	1000	
137	Ba	159	No Gas	0.223	ppb	36.8	193.55	2000	
182	W	159	No Gas	0.078	ppb	44.0	160.18	1000	
205	Tl	209	No Gas	0.013	ppb	30.2	60.07	1000	
208	Pb	209	No Gas	0.100	ppb	21.4	557.30	2000	
232	Th	209	No Gas	0.081	ppb	4.7	473.88	1000	
238	U	209	No Gas	0.007	ppb	98.1	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	829094.18	3.7	1023754.81	80.99	29.5	120.4	
Sc	45	No Gas	2801830.90	4.2	2927134.09	95.72	29.5	120.4	
Sc	45	H2	322864.41	0.5	374925.7	86.11	29.5	120.4	
Sc	45	He	65555.77	0.2	75429.93	86.91	29.5	120.4	
Ge	72	No Gas	702957.98	4.6	682196.39	103.04	29.5	120.4	
Ge	72	H2	127806.27	0.8	145757.5	87.68	29.5	120.4	
Ge	72	He	54694.30	0.3	59866.13	91.36	29.5	120.4	
Y	89	H2	2354363.11	0.5	2441196.5	96.44	29.5	120.4	
Y	89	He	487567.51	0.2	531537.69	91.73	29.5	120.4	
Tb	159	No Gas	8447300.22	4.1	7041897.33	119.96	29.5	120.4	
Tb	159	He	2869760.34	0.3	2795586.52	102.65	29.5	120.4	
Bi	209	No Gas	4608266.80	4.3	3760534.49	122.54	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBWNG29IMW1
File Name	082_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:26:55 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.239	ppb	11.9	63.34	0.5	
B	11	6	No Gas	2.890	ppb	11.2	1629.03	10	
Na	23	45	He	478.483	ppb	6.6	17526.96	500	
Mg	24	45	He	15.127	ppb	48.5	977.88	50	
Al	27	45	He	7.179	ppb	16.7	61.11	50	
Si	28	45	H2	8.403	ppb	24.1	507.24	250	
K	39	45	He	-60.540	ppb	N/A	9168.87	500	
Ca	40	45	H2	22.089	ppb	8.7	2850.39	50	
V	51	89	He	2.023	ppb	20.6	517.81	2.5	
Cr	52	89	He	0.274	ppb	13.1	118.65	2.5	
Mn	55	89	He	0.315	ppb	35.4	65.99	1	
Fe	56	89	H2	1.660	ppb	99.8	6802.59	50	
Co	59	89	He	0.043	ppb	110.2	46.67	0.5	
Ni	60	89	He	-2.126	ppb	N/A	387.80	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.436	ppb	48.7	211.12	1.5	
Zn	66	89	He	0.625	ppb	76.1	118.90	5	
As	75	89	He	0.239	ppb	61.2	11.67	2.5	
Se	78	89	H2	0.129	ppb	5.8	2.67	2.5	
Sr	88	89	He	0.115	ppb	10.5	18.89	2.5	
Mo	95	89	He	0.076	ppb	60.3	22.22	2.5	
Ag	107	89	He	0.032	ppb	42.6	26.67	0.5	
Cd	111	89	He	0.027	ppb	99.7	2.22	0.5	
Sn	118	159	He	0.558	ppb	9.1	168.90	2.5	
Sb	121	159	No Gas	0.036	ppb	59.7	123.47	0.5	
Ba	137	159	No Gas	0.994	ppb	1.5	730.84	1	
W	182	159	No Gas	0.033	ppb	126.4	96.78	2.5	
Tl	205	209	No Gas	0.004	ppb	163.5	33.37	0.5	
Pb	208	209	No Gas	0.037	ppb	25.0	283.65	0.5	
Th	232	209	No Gas	0.043	ppb	41.9	303.68	2.5	
U	238	209	No Gas	0.003	ppb	38.0	26.69	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	829941.56	2.8	1023754.81	81.07	29.5	120.4	
Sc	45	No Gas	2800337.95	3.0	2927134.09	95.67	29.5	120.4	
Sc	45	H2	338250.43	5.5	374925.7	90.22	29.5	120.4	
Sc	45	He	66333.90	0.4	75429.93	87.94	29.5	120.4	
Ge	72	No Gas	702426.91	3.0	682196.39	102.97	29.5	120.4	
Ge	72	H2	131408.32	4.3	145757.5	90.16	29.5	120.4	
Ge	72	He	54851.69	0.5	59866.13	91.62	29.5	120.4	
Y	89	H2	2455797.17	5.7	2441196.5	100.6	29.5	120.4	
Y	89	He	490185.07	0.6	531537.69	92.22	29.5	120.4	
Tb	159	No Gas	8441820.99	3.0	7041897.33	119.88	29.5	120.4	
Tb	159	He	2884390.48	0.9	2795586.52	103.18	29.5	120.4	
Bi	209	No Gas	4598783.99	3.5	3760534.49	122.29	29.5	120.4	6020/DoD

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW1
File Name	083LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:29:37 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.508	ppb	5.8	9074.28	50	19.8	79.5	120.4	
B	11	6	No Gas	500.530	ppb	7.3	60117.02	500	20.02	79.5	120.4	
Na	23	45	He	8393.901	ppb	2.3	169576.70	7500	22.38	79.5	120.4	
Mg	24	45	He	5200.311	ppb	2.4	56525.36	5000	20.8	79.5	120.4	
Al	27	45	He	1873.351	ppb	2.9	8068.10	2000	18.73	79.5	120.4	
Si	28	45	H2	966.269	ppb	1.3	8231.58	1000	19.33	0	200	
K	39	45	He	10229.680	ppb	1.2	114378.33	10000	20.46	79.5	120.4	
Ca	40	45	H2	2556.827	ppb	0.4	200407.72	2500	20.45	79.5	120.4	
V	51	89	He	509.369	ppb	1.1	88097.31	500	20.37	79.5	120.4	
Cr	52	89	He	205.359	ppb	0.1	43909.82	200	20.54	79.5	120.4	
Mn	55	89	He	508.830	ppb	0.7	52325.55	500	20.35	79.5	120.4	
Fe	56	89	H2	1018.146	ppb	0.8	358747.11	1000	20.36	79.5	120.4	
Co	59	89	He	524.820	ppb	0.7	193549.85	500	20.99	79.5	120.4	
Ni	60	89	He	525.021	ppb	0.6	53346.83	500	21	79.5	120.4	
Cu	63	89	He	263.112	ppb	1.0	74493.50	250	21.05	79.5	120.4	
Zn	66	89	He	520.183	ppb	1.8	19850.24	500	20.81	79.5	120.4	
As	75	89	He	104.794	ppb	1.5	3369.78	100	20.96	79.5	120.4	
Se	78	89	H2	98.945	ppb	0.4	1719.36	100	19.79	79.5	120.4	
Sr	88	89	He	504.626	ppb	0.9	83229.61	500	20.18	79.5	120.4	
Mo	95	89	He	107.771	ppb	1.2	20090.94	100	21.55	79.5	120.4	
Ag	107	89	He	54.590	ppb	0.6	35020.38	50	21.84	79.5	120.4	
Cd	111	89	He	271.495	ppb	0.6	22362.23	250	21.72	79.5	120.4	
Sn	118	159	He	484.527	ppb	0.9	95188.16	500	19.38	79.5	120.4	
Sb	121	159	No Gas	95.780	ppb	7.3	168281.39	100	19.16	79.5	120.4	
Ba	137	159	No Gas	1884.052	ppb	7.1	1310982.43	2000	18.84	79.5	120.4	
W	182	159	No Gas	97.874	ppb	6.6	135394.52	100	19.58	79.5	120.4	
Tl	205	209	No Gas	100.780	ppb	7.8	308061.43	100	20.16	79.5	120.4	
[Pb]	206	209	No Gas	100.520	ppb	7.2	107005.47	100	20.1	79.5	120.4	
[Pb]	207	209	No Gas	100.716	ppb	6.3	93216.10	100	20.14	79.5	120.4	
Pb	208	209	No Gas	100.306	ppb	6.8	426224.71	100	20.06	79.5	120.4	
Th	232	209	No Gas	96.894	ppb	7.8	425742.47	100	19.38	79.5	120.4	
U	238	209	No Gas	99.095	ppb	7.9	408694.98	100	19.82	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	852848.06	2.9	1023754.81	83.31	29.5	120.4	
Sc	45	No Gas	2799057.81	3.4	2927134.09	95.62	29.5	120.4	
Sc	45	H2	325822.99	1.0	374925.7	86.9	29.5	120.4	
Sc	45	He	66273.58	0.4	75429.93	87.86	29.5	120.4	
Ge	72	No Gas	705987.70	2.7	682196.39	103.49	29.5	120.4	
Ge	72	H2	128396.55	1.1	145757.5	88.09	29.5	120.4	
Ge	72	He	55381.49	0.5	59866.13	92.51	29.5	120.4	
Y	89	H2	2371614.58	1.0	2441196.5	97.15	29.5	120.4	
Y	89	He	491066.28	0.6	531537.69	92.39	29.5	120.4	
Tb	159	No Gas	8412471.40	2.9	7041897.33	119.46	29.5	120.4	
Tb	159	He	2891737.66	0.3	2795586.52	103.44	29.5	120.4	
Bi	209	No Gas	4564871.22	3.2	3760534.49	121.39	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-003R

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:32:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.202	ppb	53.1	56.67	100	
11	B	6	No Gas	25.519	ppb	8.3	4236.33	1000	
23	Na	45	He	5360.401	ppb	0.7	110206.40	200000	
24	Mg	45	He	917.837	ppb	0.6	10542.43	200000	
27	Al	45	He	331.364	ppb	1.3	1437.90	200000	
28	Si	45	H2	2789.423	ppb	3.7	22696.60	10000	
39	K	45	He	137.458	ppb	13.3	11074.36	200000	
40	Ca	45	H2	6051.372	ppb	0.4	467281.77	200000	
51	V	89	He	3.491	ppb	11.5	764.49	1000	
52	Cr	89	He	0.785	ppb	6.1	225.96	2000	
55	Mn	89	He	4.556	ppb	3.0	497.25	2000	
56	Fe	89	H2	323.081	ppb	1.2	117357.70	100000	
59	Co	89	He	0.214	ppb	27.3	108.90	1000	
60	Ni	89	He	-1.784	ppb	N/A	418.91	1000	
63	Cu	89	He	1.338	ppb	26.3	462.25	2000	
66	Zn	89	He	2.482	ppb	24.3	187.79	2000	
75	As	89	He	0.640	ppb	16.9	24.33	1000	
78	Se	89	H2	0.290	ppb	35.8	5.33	1000	
88	Sr	89	He	17.339	ppb	3.2	2832.62	2000	
95	Mo	89	He	0.347	ppb	26.4	72.23	1000	
107	Ag	89	He	0.045	ppb	24.2	34.45	100	
111	Cd	89	He	0.077	ppb	36.7	6.30	1000	
118	Sn	159	He	0.979	ppb	25.1	251.12	1000	
121	Sb	159	No Gas	0.151	ppb	38.9	327.04	1000	
137	Ba	159	No Gas	7.965	ppb	5.8	5627.50	2000	
182	W	159	No Gas	0.212	ppb	23.1	350.40	1000	
205	Tl	209	No Gas	0.076	ppb	35.4	260.29	1000	
208	Pb	209	No Gas	1.253	ppb	7.3	5540.07	2000	
232	Th	209	No Gas	0.690	ppb	25.5	3217.43	1000	
238	U	209	No Gas	0.091	ppb	25.0	397.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	834368.31	4.0	1023754.81	81.5	29.5	120.4	
Sc	45	No Gas	2823170.83	4.1	2927134.09	96.45	29.5	120.4	
Sc	45	H2	321936.30	0.4	374925.7	85.87	29.5	120.4	
Sc	45	He	65620.75	0.8	75429.93	87	29.5	120.4	
Ge	72	No Gas	706106.57	3.7	682196.39	103.5	29.5	120.4	
Ge	72	H2	128241.74	0.8	145757.5	87.98	29.5	120.4	
Ge	72	He	54834.50	0.8	59866.13	91.6	29.5	120.4	
Y	89	H2	2359567.95	0.8	2441196.5	96.66	29.5	120.4	
Y	89	He	486429.78	0.3	531537.69	91.51	29.5	120.4	
Tb	159	No Gas	8486109.81	3.6	7041897.33	120.51	29.5	120.4	6020/DoD
Tb	159	He	2881597.04	0.3	2795586.52	103.08	29.5	120.4	
Bi	209	No Gas	4640712.48	3.9	3760534.49	123.41	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-004R

File Name 085SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:34:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.109	ppb	19.6	40.00	100	
11	B	6	No Gas	20.602	ppb	12.8	3636.14	1000	
23	Na	45	He	5190.514	ppb	1.9	106125.50	200000	
24	Mg	45	He	920.022	ppb	2.7	10482.31	200000	
27	Al	45	He	308.395	ppb	2.8	1330.11	200000	
28	Si	45	H2	2707.832	ppb	2.6	22078.31	10000	
39	K	45	He	162.919	ppb	11.6	11242.75	200000	
40	Ca	45	H2	5886.508	ppb	0.8	455348.88	200000	
51	V	89	He	3.373	ppb	6.5	744.50	1000	
52	Cr	89	He	0.757	ppb	10.9	219.96	2000	
55	Mn	89	He	4.568	ppb	15.4	498.59	2000	
56	Fe	89	H2	285.553	ppb	0.8	103894.63	100000	
59	Co	89	He	0.385	ppb	31.4	171.12	1000	
60	Ni	89	He	-1.159	ppb	N/A	481.14	1000	
63	Cu	89	He	1.357	ppb	9.7	467.80	2000	
66	Zn	89	He	5.671	ppb	8.1	307.79	2000	
75	As	89	He	0.598	ppb	5.4	23.00	1000	
78	Se	89	H2	0.223	ppb	32.0	4.17	1000	
88	Sr	89	He	16.079	ppb	1.5	2627.01	2000	
95	Mo	89	He	0.245	ppb	46.1	53.34	1000	
107	Ag	89	He	0.034	ppb	23.3	27.78	100	
111	Cd	89	He	0.023	ppb	69.3	1.85	1000	
118	Sn	159	He	0.758	ppb	10.8	207.79	1000	
121	Sb	159	No Gas	0.130	ppb	48.9	293.66	1000	
137	Ba	159	No Gas	7.016	ppb	9.0	4943.15	2000	
182	W	159	No Gas	0.041	ppb	57.3	110.13	1000	
205	Tl	209	No Gas	0.009	ppb	28.1	50.06	1000	
208	Pb	209	No Gas	1.178	ppb	8.8	5196.22	2000	
232	Th	209	No Gas	0.131	ppb	12.3	697.47	1000	
238	U	209	No Gas	0.032	ppb	11.4	146.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	827144.73	4.1	1023754.81	80.8	29.5	120.4	
Sc	45	No Gas	2797419.07	3.7	2927134.09	95.57	29.5	120.4	
Sc	45	H2	322501.76	1.0	374925.7	86.02	29.5	120.4	
Sc	45	He	65109.32	1.5	75429.93	86.32	29.5	120.4	
Ge	72	No Gas	706551.96	3.6	682196.39	103.57	29.5	120.4	
Ge	72	H2	127830.19	2.5	145757.5	87.7	29.5	120.4	
Ge	72	He	54872.05	0.9	59866.13	91.66	29.5	120.4	
Y	89	H2	2347756.34	0.8	2441196.5	96.17	29.5	120.4	
Y	89	He	486437.49	0.2	531537.69	91.52	29.5	120.4	
Tb	159	No Gas	8464792.72	4.2	7041897.33	120.21	29.5	120.4	
Tb	159	He	2879904.51	0.5	2795586.52	103.02	29.5	120.4	
Bi	209	No Gas	4630302.90	4.5	3760534.49	123.13	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	086_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:37:37 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.446	ppb	1.7	23138.03	25	101.78	89.8	110.2	
11	B	6	No Gas	25.217	ppb	4.3	16041.67	25	100.87	89.8	110.2	
23	Na	45	He	5230.723	ppb	0.5	517787.82	5000	104.61	89.8	110.2	
24	Mg	45	He	4994.577	ppb	1.1	272014.36	5000	99.89	89.8	110.2	
27	Al	45	He	470.869	ppb	1.0	10271.81	500	94.17	89.8	110.2	
28	Si	45	H2	449.120	ppb	0.7	19234.44	500	89.82	89.8	110.2	
39	K	45	He	4891.054	ppb	1.3	263393.52	5000	97.82	89.8	110.2	
40	Ca	45	H2	4804.477	ppb	0.5	1941113.04	5000	96.09	89.8	110.2	
51	V	89	He	24.035	ppb	1.4	21143.16	25	96.14	89.8	110.2	
52	Cr	89	He	24.417	ppb	0.8	26413.11	25	97.67	89.8	110.2	
55	Mn	89	He	23.831	ppb	1.3	12412.57	25	95.32	89.8	110.2	
56	Fe	89	H2	4717.015	ppb	0.2	8275866.51	5000	94.34	89.8	110.2	
59	Co	89	He	24.556	ppb	0.7	45797.46	25	98.22	89.8	110.2	
60	Ni	89	He	24.138	ppb	1.7	12865.23	25	96.55	89.8	110.2	
63	Cu	89	He	25.005	ppb	0.2	35830.16	25	100.02	89.8	110.2	
66	Zn	89	He	24.694	ppb	2.2	4836.59	25	98.78	89.8	110.2	
75	As	89	He	24.149	ppb	2.2	3924.32	25	96.6	89.8	110.2	
78	Se	89	H2	24.040	ppb	1.6	2113.90	25	96.16	89.8	110.2	
88	Sr	89	He	23.809	ppb	0.9	19848.27	25	95.24	89.8	110.2	
95	Mo	89	He	24.557	ppb	0.4	23139.12	25	98.23	89.8	110.2	
107	Ag	89	He	25.459	ppb	0.5	82544.05	25	101.84	89.8	110.2	
111	Cd	89	He	25.460	ppb	1.4	10599.79	25	101.84	89.8	110.2	
118	Sn	159	He	23.113	ppb	1.0	22701.93	25	92.45	89.8	110.2	
121	Sb	159	No Gas	23.206	ppb	3.2	200553.28	25	92.82	89.8	110.2	
137	Ba	159	No Gas	23.297	ppb	3.4	79773.84	25	93.19	89.8	110.2	
182	W	159	No Gas	23.787	ppb	3.5	161831.35	25	95.15	89.8	110.2	
205	Tl	209	No Gas	23.901	ppb	4.2	360434.45	25	95.6	89.8	110.2	
208	Pb	209	No Gas	24.136	ppb	3.0	505895.45	25	96.54	89.8	110.2	
232	Th	209	No Gas	23.865	ppb	3.3	517365.60	25	95.46	89.8	110.2	
238	U	209	No Gas	24.153	ppb	3.4	491502.55	25	96.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	846760.24	1.6	1023754.81	82.71	29.5	120.4	
Sc	45	No Gas	2838530.28	1.1	2927134.09	96.97	29.5	120.4	
Sc	45	H2	337434.53	0.7	374925.7	90	29.5	120.4	
Sc	45	He	67182.40	0.9	75429.93	89.07	29.5	120.4	
Ge	72	No Gas	703735.14	1.5	682196.39	103.16	29.5	120.4	
Ge	72	H2	132751.80	0.3	145757.5	91.08	29.5	120.4	
Ge	72	He	56026.94	0.5	59866.13	93.59	29.5	120.4	
Y	89	H2	2400187.00	0.4	2441196.5	98.32	29.5	120.4	
Y	89	He	496412.02	0.4	531537.69	93.39	29.5	120.4	
Tb	159	No Gas	8268575.22	2.0	7041897.33	117.42	29.5	120.4	
Tb	159	He	2885719.78	0.2	2795586.52	103.22	29.5	120.4	
Bi	209	No Gas	4499068.70	1.9	3760534.49	119.64	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	087_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:40:17 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.064	ppb	41.7	83.34	0.2	
11	B	6	No Gas	0.891	ppb	13.8	1947.98	4	
23	Na	45	He	76.885	ppb	3.6	16447.58	200	
24	Mg	45	He	1.700	ppb	32.3	948.99	20	
27	Al	45	He	-0.470	ppb	N/A	21.11	20	
28	Si	45	H2	-0.216	ppb	N/A	430.49	100	
39	K	45	He	-6.260	ppb	N/A	9907.30	200	
40	Ca	45	H2	1.050	ppb	20.0	1505.70	20	
51	V	89	He	-0.022	ppb	N/A	154.45	1	
52	Cr	89	He	0.009	ppb	117.8	71.99	1	
55	Mn	89	He	0.010	ppb	75.1	39.99	0.4	
56	Fe	89	H2	1.770	ppb	25.4	9219.99	20	
59	Co	89	He	0.007	ppb	169.0	44.45	0.2	
60	Ni	89	He	-0.544	ppb	N/A	337.80	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.018	ppb	65.9	116.67	0.6	
66	Zn	89	He	-0.211	ppb	N/A	56.67	2	
75	As	89	He	0.011	ppb	189.4	6.00	1	
78	Se	89	H2	0.051	ppb	46.5	4.83	1	
88	Sr	89	He	0.008	ppb	51.2	6.67	1	
95	Mo	89	He	0.113	ppb	5.9	116.67	1	
107	Ag	89	He	0.007	ppb	40.8	30.00	0.2	
111	Cd	89	He	0.004	ppb	125.8	1.85	0.2	
118	Sn	159	He	0.080	ppb	26.5	138.90	1	
121	Sb	159	No Gas	0.018	ppb	17.1	213.57	0.2	
137	Ba	159	No Gas	0.012	ppb	78.6	76.75	0.4	
182	W	159	No Gas	0.097	ppb	25.6	710.81	1	
205	Tl	209	No Gas	0.023	ppb	4.0	373.75	0.2	
208	Pb	209	No Gas	0.014	ppb	34.1	423.81	0.2	
232	Th	209	No Gas	0.061	ppb	3.8	1438.36	1	
238	U	209	No Gas	0.016	ppb	3.3	333.71	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	894346.25	3.3	1023754.81	87.36	29.5	120.4	
Sc	45	No Gas	2918196.27	4.3	2927134.09	99.69	29.5	120.4	
Sc	45	H2	341052.23	0.6	374925.7	90.97	29.5	120.4	
Sc	45	He	69421.83	1.0	75429.93	92.03	29.5	120.4	
Ge	72	No Gas	712851.20	4.1	682196.39	104.49	29.5	120.4	
Ge	72	H2	133996.64	0.8	145757.5	91.93	29.5	120.4	
Ge	72	He	57240.46	1.3	59866.13	95.61	29.5	120.4	
Y	89	H2	2407368.40	0.7	2441196.5	98.61	29.5	120.4	
Y	89	He	504363.67	1.3	531537.69	94.89	29.5	120.4	
Tb	159	No Gas	8309408.97	4.5	7041897.33	118	29.5	120.4	
Tb	159	He	2895369.78	1.1	2795586.52	103.57	29.5	120.4	
Bi	209	No Gas	4516048.28	4.8	3760534.49	120.09	29.5	120.4	

Sample Report

Sample Name	SN5106-005R
File Name	088SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:42:59 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.135	ppb	20.0	46.67	100	
11	B	6	No Gas	16.027	ppb	8.2	3268.25	1000	
23	Na	45	He	3658.647	ppb	1.6	77564.92	200000	
24	Mg	45	He	1140.758	ppb	0.2	12862.27	200000	
27	Al	45	He	58.027	ppb	13.7	275.57	200000	
28	Si	45	H2	2428.956	ppb	1.3	19982.76	10000	
39	K	45	He	210.486	ppb	8.6	11772.88	200000	
40	Ca	45	H2	10040.293	ppb	0.9	781047.89	200000	
51	V	89	He	2.099	ppb	9.8	523.36	1000	
52	Cr	89	He	0.526	ppb	14.2	169.97	2000	
55	Mn	89	He	5.160	ppb	6.2	555.25	2000	
56	Fe	89	H2	88.867	ppb	1.5	36400.57	100000	
59	Co	89	He	0.357	ppb	33.7	160.01	1000	
60	Ni	89	He	-1.533	ppb	N/A	441.13	1000	
63	Cu	89	He	0.506	ppb	15.5	227.79	2000	
66	Zn	89	He	6.171	ppb	11.5	324.46	2000	
75	As	89	He	0.371	ppb	35.1	15.67	1000	
78	Se	89	H2	0.302	ppb	25.9	5.50	1000	
88	Sr	89	He	21.350	ppb	4.6	3466.12	2000	
95	Mo	89	He	0.277	ppb	27.6	58.89	1000	
107	Ag	89	He	0.041	ppb	19.5	32.22	100	
111	Cd	89	He	0.137	ppb	20.0	11.11	1000	
118	Sn	159	He	0.768	ppb	14.6	207.79	1000	
121	Sb	159	No Gas	0.086	ppb	25.3	206.90	1000	
137	Ba	159	No Gas	6.737	ppb	6.5	4666.03	2000	
182	W	159	No Gas	0.140	ppb	62.1	240.27	1000	
205	Tl	209	No Gas	0.048	ppb	7.9	166.85	1000	
208	Pb	209	No Gas	0.071	ppb	18.9	423.80	2000	
232	Th	209	No Gas	0.398	ppb	13.5	1852.23	1000	
238	U	209	No Gas	0.077	ppb	20.8	327.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	866755.42	3.8	1023754.81	84.66	29.5	120.4	
Sc	45	No Gas	2801423.51	4.9	2927134.09	95.71	29.5	120.4	
Sc	45	H2	324626.83	1.1	374925.7	86.58	29.5	120.4	
Sc	45	He	65391.62	0.2	75429.93	86.69	29.5	120.4	
Ge	72	No Gas	703181.22	4.5	682196.39	103.08	29.5	120.4	
Ge	72	H2	129002.59	1.9	145757.5	88.5	29.5	120.4	
Ge	72	He	54424.35	0.6	59866.13	90.91	29.5	120.4	
Y	89	H2	2345557.19	0.4	2441196.5	96.08	29.5	120.4	
Y	89	He	483352.61	0.4	531537.69	90.93	29.5	120.4	
Tb	159	No Gas	8313677.17	4.6	7041897.33	118.06	29.5	120.4	
Tb	159	He	2852571.90	0.3	2795586.52	102.04	29.5	120.4	
Bi	209	No Gas	4521567.24	4.5	3760534.49	120.24	29.5	120.4	

Sample Report

Sample Name	SN5106-006R
File Name	089SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 8:45:41 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.150	ppb	48.2	47.78	100	
11	B	6	No Gas	16.337	ppb	5.1	3177.13	1000	
23	Na	45	He	3656.635	ppb	1.4	76656.30	200000	
24	Mg	45	He	1141.002	ppb	2.0	12719.87	200000	
27	Al	45	He	69.121	ppb	7.2	318.91	200000	
28	Si	45	H2	2488.935	ppb	1.1	20287.05	10000	
39	K	45	He	234.179	ppb	6.2	11876.30	200000	
40	Ca	45	H2	9611.066	ppb	0.1	741247.63	200000	
51	V	89	He	2.385	ppb	13.1	571.15	1000	
52	Cr	89	He	0.562	ppb	15.2	177.30	2000	
55	Mn	89	He	5.241	ppb	7.6	562.58	2000	
56	Fe	89	H2	84.967	ppb	2.2	34945.75	100000	
59	Co	89	He	0.475	ppb	42.3	202.24	1000	
60	Ni	89	He	-1.493	ppb	N/A	444.47	1000	
63	Cu	89	He	0.738	ppb	12.5	292.24	2000	
66	Zn	89	He	4.786	ppb	25.1	272.24	2000	
75	As	89	He	0.446	ppb	25.1	18.00	1000	
78	Se	89	H2	0.205	ppb	43.2	3.83	1000	
88	Sr	89	He	20.695	ppb	1.3	3354.98	2000	
95	Mo	89	He	0.150	ppb	48.4	35.56	1000	
107	Ag	89	He	0.013	ppb	126.7	14.45	100	
111	Cd	89	He	0.133	ppb	31.8	10.74	1000	
118	Sn	159	He	0.648	ppb	15.1	185.56	1000	
121	Sb	159	No Gas	0.063	ppb	30.1	166.85	1000	
137	Ba	159	No Gas	6.817	ppb	7.7	4669.41	2000	
182	W	159	No Gas	0.049	ppb	25.7	116.80	1000	
205	Tl	209	No Gas	0.041	ppb	2.3	143.50	1000	
208	Pb	209	No Gas	0.083	ppb	19.5	470.53	2000	
232	Th	209	No Gas	0.087	ppb	14.2	487.23	1000	
238	U	209	No Gas	0.057	ppb	37.1	243.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	832543.49	2.0	1023754.81	81.32	29.5	120.4	
Sc	45	No Gas	2718240.07	1.7	2927134.09	92.86	29.5	120.4	
Sc	45	H2	321804.77	0.2	374925.7	85.83	29.5	120.4	
Sc	45	He	64655.03	0.7	75429.93	85.72	29.5	120.4	
Ge	72	No Gas	689984.82	1.9	682196.39	101.14	29.5	120.4	
Ge	72	H2	127143.18	0.6	145757.5	87.23	29.5	120.4	
Ge	72	He	54643.82	1.0	59866.13	91.28	29.5	120.4	
Y	89	H2	2337610.73	0.3	2441196.5	95.76	29.5	120.4	
Y	89	He	482670.17	0.5	531537.69	90.81	29.5	120.4	
Tb	159	No Gas	8213080.78	1.6	7041897.33	116.63	29.5	120.4	
Tb	159	He	2866230.37	0.7	2795586.52	102.53	29.5	120.4	
Bi	209	No Gas	4488538.12	2.0	3760534.49	119.36	29.5	120.4	

Sample Report

Sample Name SN5106-007R

File Name 090SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:48:18 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.102	ppb	47.5	38.89	100	
11	B	6	No Gas	21.013	ppb	13.3	3701.72	1000	
23	Na	45	He	7893.410	ppb	15.5	154751.38	200000	
24	Mg	45	He	1531.994	ppb	1.6	16626.53	200000	
27	Al	45	He	525.331	ppb	0.8	2204.72	200000	
28	Si	45	H2	1941.832	ppb	4.1	15876.49	10000	
39	K	45	He	843.887	ppb	2.6	17764.89	200000	
40	Ca	45	H2	22761.424	ppb	1.2	1749855.65	200000	
51	V	89	He	1.720	ppb	33.2	452.25	1000	
52	Cr	89	He	0.844	ppb	50.2	233.97	2000	
55	Mn	89	He	28.136	ppb	6.6	2833.81	2000	
56	Fe	89	H2	374.531	ppb	0.5	133144.98	100000	
59	Co	89	He	0.632	ppb	103.2	257.84	1000	
60	Ni	89	He	-1.514	ppb	N/A	436.70	1000	
63	Cu	89	He	0.948	ppb	59.3	346.69	2000	
66	Zn	89	He	2.585	ppb	42.4	187.79	2000	
75	As	89	He	0.419	ppb	64.3	17.00	1000	
78	Se	89	H2	0.127	ppb	59.3	2.50	1000	
88	Sr	89	He	36.783	ppb	7.1	5878.18	2000	
95	Mo	89	He	0.261	ppb	122.4	55.56	1000	
107	Ag	89	He	0.148	ppb	133.6	98.90	100	
111	Cd	89	He	0.339	ppb	144.5	27.41	1000	
118	Sn	159	He	0.871	ppb	42.6	226.68	1000	
121	Sb	159	No Gas	0.050	ppb	55.5	146.83	1000	
137	Ba	159	No Gas	85.020	ppb	8.8	58617.53	2000	
182	W	159	No Gas	0.118	ppb	18.1	213.57	1000	
205	Tl	209	No Gas	0.002	ppb	464.0	26.70	1000	
208	Pb	209	No Gas	0.043	ppb	53.6	303.68	2000	
232	Th	209	No Gas	0.074	ppb	13.6	433.83	1000	
238	U	209	No Gas	0.022	ppb	24.2	100.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	831008.13	3.5	1023754.81	81.17	29.5	120.4	
Sc	45	No Gas	2755864.13	3.3	2927134.09	94.15	29.5	120.4	
Sc	45	H2	321063.73	1.3	374925.7	85.63	29.5	120.4	
Sc	45	He	63956.71	2.5	75429.93	84.79	29.5	120.4	
Ge	72	No Gas	697367.22	2.8	682196.39	102.22	29.5	120.4	
Ge	72	H2	127874.85	0.9	145757.5	87.73	29.5	120.4	
Ge	72	He	53740.84	1.2	59866.13	89.77	29.5	120.4	
Y	89	H2	2325572.00	1.2	2441196.5	95.26	29.5	120.4	
Y	89	He	475421.16	1.7	531537.69	89.44	29.5	120.4	
Tb	159	No Gas	8332490.78	2.8	7041897.33	118.33	29.5	120.4	
Tb	159	He	2831639.89	1.7	2795586.52	101.29	29.5	120.4	
Bi	209	No Gas	4525674.79	3.6	3760534.49	120.35	29.5	120.4	

Sample Report

Sample Name SN5106-008R

File Name 091SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:50:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.130	ppb	76.9	43.34	100	
11	B	6	No Gas	20.066	ppb	16.3	3566.12	1000	
23	Na	45	He	6676.384	ppb	1.6	133539.51	200000	
24	Mg	45	He	1398.727	ppb	0.9	15447.03	200000	
27	Al	45	He	439.763	ppb	4.3	1874.64	200000	
28	Si	45	H2	1975.107	ppb	4.3	15936.47	10000	
39	K	45	He	901.343	ppb	2.7	18573.71	200000	
40	Ca	45	H2	22045.250	ppb	1.5	1672767.98	200000	
51	V	89	He	1.478	ppb	15.1	416.69	1000	
52	Cr	89	He	0.417	ppb	20.3	146.64	2000	
55	Mn	89	He	26.475	ppb	1.9	2705.11	2000	
56	Fe	89	H2	313.139	ppb	1.0	111237.00	100000	
59	Co	89	He	0.137	ppb	23.2	80.01	1000	
60	Ni	89	He	-2.187	ppb	N/A	375.58	1000	
63	Cu	89	He	0.543	ppb	28.1	237.79	2000	
66	Zn	89	He	1.988	ppb	23.2	167.79	2000	
75	As	89	He	0.277	ppb	43.0	12.67	1000	
78	Se	89	H2	0.090	ppb	69.0	1.83	1000	
88	Sr	89	He	33.835	ppb	3.1	5480.19	2000	
95	Mo	89	He	0.065	ppb	83.3	20.00	1000	
107	Ag	89	He	0.022	ppb	71.5	20.00	100	
111	Cd	89	He	0.009	ppb	173.2	0.74	1000	
118	Sn	159	He	0.435	ppb	11.3	144.45	1000	
121	Sb	159	No Gas	0.027	ppb	132.6	106.79	1000	
137	Ba	159	No Gas	82.204	ppb	9.8	57119.62	2000	
182	W	159	No Gas	0.104	ppb	59.9	193.55	1000	
205	Tl	209	No Gas	0.011	ppb	48.4	53.39	1000	
208	Pb	209	No Gas	0.040	ppb	30.5	293.66	2000	
232	Th	209	No Gas	0.044	ppb	18.8	307.01	1000	
238	U	209	No Gas	0.013	ppb	59.3	66.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	825298.54	3.6	1023754.81	80.61	29.5	120.4	
Sc	45	No Gas	2756125.40	4.2	2927134.09	94.16	29.5	120.4	
Sc	45	H2	316873.43	0.7	374925.7	84.52	29.5	120.4	
Sc	45	He	64797.77	0.6	75429.93	85.9	29.5	120.4	
Ge	72	No Gas	700311.38	3.6	682196.39	102.66	29.5	120.4	
Ge	72	H2	127240.58	0.7	145757.5	87.3	29.5	120.4	
Ge	72	He	54161.92	0.8	59866.13	90.47	29.5	120.4	
Y	89	H2	2303939.53	0.4	2441196.5	94.38	29.5	120.4	
Y	89	He	482237.22	0.2	531537.69	90.72	29.5	120.4	
Tb	159	No Gas	8405533.77	4.1	7041897.33	119.36	29.5	120.4	
Tb	159	He	2876842.87	0.5	2795586.52	102.91	29.5	120.4	
Bi	209	No Gas	4570134.40	4.3	3760534.49	121.53	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-009R

File Name 092SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:53:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.061	ppb	37.3	31.11	100	
11	B	6	No Gas	12.730	ppb	14.4	2709.24	1000	
23	Na	45	He	3552.825	ppb	1.9	73539.61	200000	
24	Mg	45	He	787.692	ppb	5.7	8883.42	200000	
27	Al	45	He	110.323	ppb	12.9	483.36	200000	
28	Si	45	H2	1635.349	ppb	2.3	13407.93	10000	
39	K	45	He	130.895	ppb	44.2	10674.16	200000	
40	Ca	45	H2	3458.789	ppb	1.3	266148.97	200000	
51	V	89	He	2.291	ppb	10.1	548.92	1000	
52	Cr	89	He	0.427	ppb	15.5	147.31	2000	
55	Mn	89	He	1.867	ppb	13.9	219.30	2000	
56	Fe	89	H2	105.402	ppb	2.7	42019.19	100000	
59	Co	89	He	0.066	ppb	178.9	53.34	1000	
60	Ni	89	He	-2.386	ppb	N/A	352.24	1000	
63	Cu	89	He	0.553	ppb	29.3	237.79	2000	
66	Zn	89	He	1.554	ppb	42.8	150.01	2000	
75	As	89	He	0.260	ppb	21.5	12.00	1000	
78	Se	89	H2	0.166	ppb	21.2	3.17	1000	
88	Sr	89	He	11.260	ppb	3.7	1805.74	2000	
95	Mo	89	He	0.085	ppb	37.7	23.34	1000	
107	Ag	89	He	0.030	ppb	11.3	24.44	100	
111	Cd	89	He	0.018	ppb	42.7	1.48	1000	
118	Sn	159	He	0.494	ppb	17.1	154.45	1000	
121	Sb	159	No Gas	0.025	ppb	13.8	103.45	1000	
137	Ba	159	No Gas	4.887	ppb	9.3	3404.26	2000	
182	W	159	No Gas	0.021	ppb	139.8	80.09	1000	
205	Tl	209	No Gas	0.009	ppb	78.9	46.72	1000	
208	Pb	209	No Gas	0.108	ppb	38.3	580.66	2000	
232	Th	209	No Gas	0.040	ppb	36.1	290.33	1000	
238	U	209	No Gas	0.050	ppb	34.2	216.91	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	816641.41	1.8	1023754.81	79.77	29.5	120.4	
Sc	45	No Gas	2740728.32	3.0	2927134.09	93.63	29.5	120.4	
Sc	45	H2	320297.96	0.4	374925.7	85.43	29.5	120.4	
Sc	45	He	63655.47	1.5	75429.93	84.39	29.5	120.4	
Ge	72	No Gas	693732.75	3.0	682196.39	101.69	29.5	120.4	
Ge	72	H2	128413.71	1.5	145757.5	88.1	29.5	120.4	
Ge	72	He	54002.20	0.8	59866.13	90.2	29.5	120.4	
Y	89	H2	2343117.64	1.0	2441196.5	95.98	29.5	120.4	
Y	89	He	477398.36	0.7	531537.69	89.81	29.5	120.4	
Tb	159	No Gas	8333249.74	2.6	7041897.33	118.34	29.5	120.4	
Tb	159	He	2848833.43	0.7	2795586.52	101.9	29.5	120.4	
Bi	209	No Gas	4563876.06	2.6	3760534.49	121.36	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-009RL

File Name 093SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:56:00 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.280	ppb	68.0	31.11	100	
11	B	6	No Gas	17.866	ppb	10.8	1730.16	1000	
23	Na	45	He	4497.227	ppb	5.3	25614.36	200000	
24	Mg	45	He	896.092	ppb	9.0	2736.02	200000	
27	Al	45	He	109.711	ppb	7.9	124.45	200000	
28	Si	45	H2	1686.752	ppb	14.0	3163.87	10000	
39	K	45	He	-4.770	ppb	N/A	9774.03	200000	
40	Ca	45	H2	3500.485	ppb	0.6	55964.49	200000	
51	V	89	He	2.580	ppb	26.8	256.68	1000	
52	Cr	89	He	0.220	ppb	26.0	69.32	2000	
55	Mn	89	He	2.046	ppb	22.2	75.32	2000	
56	Fe	89	H2	101.263	ppb	3.4	12990.40	100000	
59	Co	89	He	-0.297	ppb	N/A	8.89	1000	
60	Ni	89	He	-12.869	ppb	N/A	341.13	1000	
63	Cu	89	He	0.710	ppb	49.6	127.78	2000	
66	Zn	89	He	4.930	ppb	107.4	132.23	2000	
75	As	89	He	0.315	ppb	81.0	6.00	1000	
78	Se	89	H2	0.147	ppb	113.2	0.83	1000	
88	Sr	89	He	11.088	ppb	6.3	363.35	2000	
95	Mo	89	He	0.139	ppb	108.9	13.34	1000	
107	Ag	89	He	0.048	ppb	84.0	12.22	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.256	ppb	107.4	68.89	1000	
121	Sb	159	No Gas	0.013	ppb	452.1	63.40	1000	
137	Ba	159	No Gas	4.576	ppb	8.5	660.76	2000	
182	W	159	No Gas	-0.003	ppb	N/A	50.05	1000	
205	Tl	209	No Gas	0.022	ppb	190.8	33.37	1000	
208	Pb	209	No Gas	0.173	ppb	29.8	266.96	2000	
232	Th	209	No Gas	0.081	ppb	50.4	180.20	1000	
238	U	209	No Gas	0.060	ppb	76.4	60.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	840705.40	2.7	1023754.81	82.12	29.5	120.4	
Sc	45	No Gas	2799082.45	2.9	2927134.09	95.63	29.5	120.4	
Sc	45	H2	327831.48	1.2	374925.7	87.44	29.5	120.4	
Sc	45	He	66344.17	1.8	75429.93	87.95	29.5	120.4	
Ge	72	No Gas	701839.03	2.3	682196.39	102.88	29.5	120.4	
Ge	72	H2	130338.81	1.7	145757.5	89.42	29.5	120.4	
Ge	72	He	55691.31	0.9	59866.13	93.03	29.5	120.4	
Y	89	H2	2364128.13	0.6	2441196.5	96.84	29.5	120.4	
Y	89	He	487786.79	1.7	531537.69	91.77	29.5	120.4	
Tb	159	No Gas	8258372.03	2.5	7041897.33	117.27	29.5	120.4	
Tb	159	He	2846001.62	1.6	2795586.52	101.8	29.5	120.4	
Bi	209	No Gas	4478405.59	3.3	3760534.49	119.09	29.5	120.4	

Sample Report

Sample Name SN5106-009RA

File Name 094SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 8:58:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.505	ppb	1.2	1921.30	100	
11	B	6	No Gas	217.199	ppb	6.2	26537.28	1000	
23	Na	45	He	14178.192	ppb	1.2	272550.28	200000	
24	Mg	45	He	1786.884	ppb	2.0	19376.69	200000	
27	Al	45	He	983.552	ppb	3.0	4127.41	200000	
28	Si	45	H2	6145.996	ppb	0.3	48509.29	10000	
39	K	45	He	10238.300	ppb	0.9	111140.71	200000	
40	Ca	45	H2	4492.287	ppb	0.7	340160.68	200000	
51	V	89	He	53.535	ppb	5.1	9172.20	1000	
52	Cr	89	He	51.910	ppb	1.7	10862.23	2000	
55	Mn	89	He	22.604	ppb	1.6	2297.12	2000	
56	Fe	89	H2	1128.878	ppb	1.1	384014.20	100000	
59	Co	89	He	11.067	ppb	2.4	4007.54	1000	
60	Ni	89	He	19.042	ppb	5.6	2451.42	1000	
63	Cu	89	He	32.205	ppb	2.6	8963.15	2000	
66	Zn	89	He	110.339	ppb	0.8	4177.43	2000	
75	As	89	He	50.694	ppb	1.0	1590.94	1000	
78	Se	89	H2	48.384	ppb	2.3	813.16	1000	
88	Sr	89	He	61.592	ppb	0.9	9901.70	2000	
95	Mo	89	He	53.815	ppb	1.5	9782.72	1000	
107	Ag	89	He	11.642	ppb	1.5	7284.44	100	
111	Cd	89	He	11.437	ppb	2.2	918.19	1000	
118	Sn	159	He	49.001	ppb	0.9	9560.40	1000	
121	Sb	159	No Gas	10.154	ppb	6.1	17474.15	1000	
137	Ba	159	No Gas	24.964	ppb	3.5	16999.92	2000	
182	W	159	No Gas	50.779	ppb	4.8	68607.55	1000	
205	Tl	209	No Gas	10.405	ppb	5.4	31390.12	1000	
208	Pb	209	No Gas	10.402	ppb	4.8	43704.63	2000	
232	Th	209	No Gas	10.477	ppb	5.2	45516.38	1000	
238	U	209	No Gas	10.564	ppb	5.4	42988.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	842836.71	2.5	1023754.81	82.33	29.5	120.4	
Sc	45	No Gas	2735067.86	2.8	2927134.09	93.44	29.5	120.4	
Sc	45	H2	315460.87	0.4	374925.7	84.14	29.5	120.4	
Sc	45	He	64348.36	0.6	75429.93	85.31	29.5	120.4	
Ge	72	No Gas	687224.37	2.8	682196.39	100.74	29.5	120.4	
Ge	72	H2	123397.74	1.4	145757.5	84.66	29.5	120.4	
Ge	72	He	53741.13	0.6	59866.13	89.77	29.5	120.4	
Y	89	H2	2293378.77	0.5	2441196.5	93.94	29.5	120.4	
Y	89	He	478629.53	0.1	531537.69	90.05	29.5	120.4	
Tb	159	No Gas	8209178.14	2.5	7041897.33	116.58	29.5	120.4	
Tb	159	He	2855868.71	0.3	2795586.52	102.16	29.5	120.4	
Bi	209	No Gas	4498827.62	2.1	3760534.49	119.63	29.5	120.4	

Sample Report

Sample Name SN5106-009RS

File Name 095SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:01:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.859	ppb	6.5	8607.30	100	
11	B	6	No Gas	508.174	ppb	7.4	59880.36	1000	
23	Na	45	He	11698.170	ppb	0.3	224324.46	200000	
24	Mg	45	He	5909.760	ppb	3.0	61709.24	200000	
27	Al	45	He	1969.212	ppb	0.9	8161.50	200000	
28	Si	45	H2	2514.235	ppb	2.1	20567.58	10000	
39	K	45	He	10392.331	ppb	1.2	111683.51	200000	
40	Ca	45	H2	5932.898	ppb	0.5	459786.78	200000	
51	V	89	He	503.121	ppb	1.8	84691.20	1000	
52	Cr	89	He	201.976	ppb	2.7	42028.42	2000	
55	Mn	89	He	506.887	ppb	1.4	50731.97	2000	
56	Fe	89	H2	1077.695	ppb	0.5	376867.91	100000	
59	Co	89	He	520.484	ppb	2.6	186801.76	1000	
60	Ni	89	He	521.106	ppb	1.1	51540.11	1000	
63	Cu	89	He	258.790	ppb	2.5	71306.77	2000	
66	Zn	89	He	514.272	ppb	1.7	19101.48	2000	
75	As	89	He	106.399	ppb	1.5	3330.10	1000	
78	Se	89	H2	98.176	ppb	0.7	1694.70	1000	
88	Sr	89	He	520.824	ppb	1.9	83604.09	2000	
95	Mo	89	He	106.740	ppb	3.1	19364.28	1000	
107	Ag	89	He	54.952	ppb	1.3	34310.92	100	
111	Cd	89	He	272.742	ppb	1.3	21864.39	1000	
118	Sn	159	He	482.502	ppb	1.8	93600.74	1000	
121	Sb	159	No Gas	92.309	ppb	9.6	160716.68	1000	
137	Ba	159	No Gas	1808.740	ppb	9.2	1247209.60	2000	
182	W	159	No Gas	94.386	ppb	7.7	129416.68	1000	
205	Tl	209	No Gas	98.706	ppb	8.1	300805.34	1000	
208	Pb	209	No Gas	98.305	ppb	7.8	416376.63	2000	
232	Th	209	No Gas	93.917	ppb	9.8	411277.07	1000	
238	U	209	No Gas	96.046	ppb	9.5	394813.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	836932.20	2.7	1023754.81	81.75	29.5	120.4	
Sc	45	No Gas	2735300.12	3.3	2927134.09	93.45	29.5	120.4	
Sc	45	H2	323097.21	1.2	374925.7	86.18	29.5	120.4	
Sc	45	He	63788.07	1.1	75429.93	84.57	29.5	120.4	
Ge	72	No Gas	691749.19	3.4	682196.39	101.4	29.5	120.4	
Ge	72	H2	127196.70	1.6	145757.5	87.27	29.5	120.4	
Ge	72	He	53976.84	0.5	59866.13	90.16	29.5	120.4	
Y	89	H2	2355881.50	1.0	2441196.5	96.51	29.5	120.4	
Y	89	He	477990.37	1.4	531537.69	89.93	29.5	120.4	
Tb	159	No Gas	8340585.57	3.1	7041897.33	118.44	29.5	120.4	
Tb	159	He	2855642.35	0.7	2795586.52	102.15	29.5	120.4	
Bi	209	No Gas	4551455.72	3.3	3760534.49	121.03	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-009RP

File Name 096SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:03:42 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.420	ppb	13.0	8560.58	100	
11	B	6	No Gas	547.804	ppb	14.0	60837.94	1000	
23	Na	45	He	11620.419	ppb	0.9	223152.97	200000	
24	Mg	45	He	6006.318	ppb	2.4	62785.35	200000	
27	Al	45	He	2270.937	ppb	4.4	9417.88	200000	
28	Si	45	H2	2586.722	ppb	0.9	20975.39	10000	
39	K	45	He	10454.370	ppb	1.4	112430.34	200000	
40	Ca	45	H2	5953.032	ppb	0.5	457487.38	200000	
51	V	89	He	502.442	ppb	3.0	84635.42	1000	
52	Cr	89	He	203.694	ppb	3.0	42416.20	2000	
55	Mn	89	He	505.626	ppb	2.9	50638.51	2000	
56	Fe	89	H2	1084.664	ppb	0.6	378278.30	100000	
59	Co	89	He	521.993	ppb	1.7	187520.60	1000	
60	Ni	89	He	519.099	ppb	3.3	51371.67	1000	
63	Cu	89	He	264.514	ppb	2.3	72941.74	2000	
66	Zn	89	He	523.301	ppb	2.9	19448.57	2000	
75	As	89	He	105.067	ppb	2.2	3291.09	1000	
78	Se	89	H2	98.896	ppb	1.7	1702.53	1000	
88	Sr	89	He	514.214	ppb	2.7	82601.10	2000	
95	Mo	89	He	106.763	ppb	1.5	19388.91	1000	
107	Ag	89	He	54.957	ppb	2.2	34339.79	100	
111	Cd	89	He	273.335	ppb	3.0	21925.61	1000	
118	Sn	159	He	483.916	ppb	1.7	93471.90	1000	
121	Sb	159	No Gas	98.832	ppb	14.5	163729.80	1000	
137	Ba	159	No Gas	1938.391	ppb	14.3	1271899.97	2000	
182	W	159	No Gas	102.432	ppb	14.8	133555.01	1000	
205	Tl	209	No Gas	105.118	ppb	14.6	303672.32	1000	
208	Pb	209	No Gas	105.290	ppb	14.3	422811.42	2000	
232	Th	209	No Gas	102.177	ppb	13.5	424575.17	1000	
238	U	209	No Gas	103.267	ppb	14.6	402553.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	794935.51	8.2	1023754.81	77.65	29.5	120.4	
Sc	45	No Gas	2611886.04	9.1	2927134.09	89.23	29.5	120.4	
Sc	45	H2	320401.98	1.6	374925.7	85.46	29.5	120.4	
Sc	45	He	63864.91	0.9	75429.93	84.67	29.5	120.4	
Ge	72	No Gas	663518.78	9.1	682196.39	97.26	29.5	120.4	
Ge	72	H2	125870.58	1.4	145757.5	86.36	29.5	120.4	
Ge	72	He	53745.59	1.8	59866.13	89.78	29.5	120.4	
Y	89	H2	2349680.54	1.1	2441196.5	96.25	29.5	120.4	
Y	89	He	478449.61	2.3	531537.69	90.01	29.5	120.4	
Tb	159	No Gas	7986958.56	8.8	7041897.33	113.42	29.5	120.4	
Tb	159	He	2843709.12	1.6	2795586.52	101.72	29.5	120.4	
Bi	209	No Gas	4344281.76	9.0	3760534.49	115.52	29.5	120.4	

Sample Report

Sample Name SN5106-010R

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:06:15 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.255	ppb	30.5	65.56	100	
11	B	6	No Gas	23.531	ppb	8.0	3960.69	1000	
23	Na	45	He	3809.112	ppb	2.9	79282.76	200000	
24	Mg	45	He	792.652	ppb	0.8	9054.53	200000	
27	Al	45	He	225.419	ppb	7.5	971.18	200000	
28	Si	45	H2	1748.950	ppb	2.0	14433.43	10000	
39	K	45	He	216.567	ppb	15.6	11667.90	200000	
40	Ca	45	H2	3489.021	ppb	1.4	270766.19	200000	
51	V	89	He	3.011	ppb	20.3	675.60	1000	
52	Cr	89	He	0.611	ppb	12.4	187.30	2000	
55	Mn	89	He	4.103	ppb	8.4	446.59	2000	
56	Fe	89	H2	226.523	ppb	0.2	83788.35	100000	
59	Co	89	He	0.297	ppb	9.1	137.79	1000	
60	Ni	89	He	-2.204	ppb	N/A	373.35	1000	
63	Cu	89	He	1.013	ppb	7.1	367.80	2000	
66	Zn	89	He	5.484	ppb	4.6	297.79	2000	
75	As	89	He	0.437	ppb	26.2	17.67	1000	
78	Se	89	H2	0.388	ppb	46.7	7.00	1000	
88	Sr	89	He	12.894	ppb	2.2	2085.80	2000	
95	Mo	89	He	0.309	ppb	2.9	64.45	1000	
107	Ag	89	He	0.059	ppb	23.7	43.34	100	
111	Cd	89	He	0.114	ppb	60.1	9.26	1000	
118	Sn	159	He	1.227	ppb	14.8	298.90	1000	
121	Sb	159	No Gas	0.204	ppb	18.3	423.81	1000	
137	Ba	159	No Gas	11.160	ppb	2.8	7877.81	2000	
182	W	159	No Gas	0.337	ppb	15.7	523.93	1000	
205	Tl	209	No Gas	0.223	ppb	35.0	720.84	1000	
208	Pb	209	No Gas	0.568	ppb	3.2	2576.33	2000	
232	Th	209	No Gas	0.695	ppb	31.9	3244.11	1000	
238	U	209	No Gas	0.260	ppb	10.8	1104.63	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	824224.37	4.2	1023754.81	80.51	29.5	120.4	
Sc	45	No Gas	2772712.25	5.9	2927134.09	94.72	29.5	120.4	
Sc	45	H2	323034.17	0.1	374925.7	86.16	29.5	120.4	
Sc	45	He	64483.56	1.4	75429.93	85.49	29.5	120.4	
Ge	72	No Gas	704715.33	4.1	682196.39	103.3	29.5	120.4	
Ge	72	H2	127402.54	0.9	145757.5	87.41	29.5	120.4	
Ge	72	He	54317.45	0.7	59866.13	90.73	29.5	120.4	
Y	89	H2	2351745.88	0.4	2441196.5	96.34	29.5	120.4	
Y	89	He	481644.51	0.6	531537.69	90.61	29.5	120.4	
Tb	159	No Gas	8475127.44	5.6	7041897.33	120.35	29.5	120.4	
Tb	159	He	2875092.94	0.7	2795586.52	102.84	29.5	120.4	
Bi	209	No Gas	4619048.31	5.6	3760534.49	122.83	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	098_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:08:48 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.104	ppb	9.8	21771.42	25	96.42	89.8	110.2	
11	B	6	No Gas	24.741	ppb	8.1	15667.89	25	98.96	89.8	110.2	
23	Na	45	He	5122.729	ppb	0.6	502971.64	5000	102.45	89.8	110.2	
24	Mg	45	He	4904.689	ppb	0.4	264879.98	5000	98.09	89.8	110.2	
27	Al	45	He	465.426	ppb	1.7	10067.19	500	93.09	89.8	110.2	
28	Si	45	H2	448.978	ppb	3.1	18743.15	500	89.8	89.8	110.2	> +/- 10%
39	K	45	He	4819.782	ppb	0.5	257508.83	5000	96.4	89.8	110.2	
40	Ca	45	H2	4816.437	ppb	0.4	1896694.97	5000	96.33	89.8	110.2	
51	V	89	He	24.095	ppb	2.1	20985.18	25	96.38	89.8	110.2	
52	Cr	89	He	24.363	ppb	0.4	26092.54	25	97.45	89.8	110.2	
55	Mn	89	He	23.595	ppb	1.4	12168.37	25	94.38	89.8	110.2	
56	Fe	89	H2	4690.704	ppb	0.6	8074068.99	5000	93.81	89.8	110.2	
59	Co	89	He	24.539	ppb	0.1	45311.49	25	98.16	89.8	110.2	
60	Ni	89	He	23.840	ppb	1.6	12588.32	25	95.36	89.8	110.2	
63	Cu	89	He	24.841	ppb	1.8	35241.99	25	99.36	89.8	110.2	
66	Zn	89	He	24.548	ppb	0.4	4760.98	25	98.19	89.8	110.2	
75	As	89	He	24.193	ppb	0.3	3892.64	25	96.77	89.8	110.2	
78	Se	89	H2	23.952	ppb	0.4	2066.23	25	95.81	89.8	110.2	
88	Sr	89	He	23.698	ppb	2.1	19560.07	25	94.79	89.8	110.2	
95	Mo	89	He	24.805	ppb	1.1	23140.30	25	99.22	89.8	110.2	
107	Ag	89	He	25.385	ppb	0.5	81482.02	25	101.54	89.8	110.2	
111	Cd	89	He	25.461	ppb	1.1	10494.16	25	101.84	89.8	110.2	
118	Sn	159	He	22.927	ppb	1.5	22313.56	25	91.71	89.8	110.2	
121	Sb	159	No Gas	21.870	ppb	10.1	190030.53	25	87.48	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.329	ppb	9.0	76903.28	25	89.32	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.713	ppb	9.0	155421.24	25	90.85	89.8	110.2	
205	Tl	209	No Gas	22.779	ppb	8.7	345587.26	25	91.12	89.8	110.2	
208	Pb	209	No Gas	23.022	ppb	8.6	485401.18	25	92.09	89.8	110.2	
232	Th	209	No Gas	22.379	ppb	10.4	487804.87	25	89.52	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.853	ppb	9.9	467624.55	25	91.41	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	842417.54	2.7	1023754.81	82.29	29.5	120.4	
Sc	45	No Gas	2828091.30	4.3	2927134.09	96.62	29.5	120.4	
Sc	45	H2	328896.72	0.8	374925.7	87.72	29.5	120.4	
Sc	45	He	66611.70	0.2	75429.93	88.31	29.5	120.4	
Ge	72	No Gas	700584.40	4.0	682196.39	102.7	29.5	120.4	
Ge	72	H2	129198.61	1.0	145757.5	88.64	29.5	120.4	
Ge	72	He	55282.52	0.7	59866.13	92.34	29.5	120.4	
Y	89	H2	2354766.90	0.5	2441196.5	96.46	29.5	120.4	
Y	89	He	491469.78	0.6	531537.69	92.46	29.5	120.4	
Tb	159	No Gas	8335530.29	4.6	7041897.33	118.37	29.5	120.4	
Tb	159	He	2859308.74	0.1	2795586.52	102.28	29.5	120.4	
Bi	209	No Gas	4535180.80	4.4	3760534.49	120.6	29.5	120.4	6020/DoD

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	099_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:11:23 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.078	ppb	61.4	96.67	0.2	
11	B	6	No Gas	1.223	ppb	14.1	2120.23	4	
23	Na	45	He	40.542	ppb	10.4	12519.25	200	
24	Mg	45	He	2.886	ppb	51.6	993.44	20	
27	Al	45	He	-0.349	ppb	N/A	23.33	20	
28	Si	45	H2	-1.154	ppb	N/A	383.77	100	
39	K	45	He	-6.063	ppb	N/A	9708.99	200	
40	Ca	45	H2	1.810	ppb	11.1	1779.07	20	
51	V	89	He	-0.027	ppb	N/A	148.90	1	
52	Cr	89	He	-0.004	ppb	N/A	57.32	1	
55	Mn	89	He	0.010	ppb	104.3	39.99	0.4	
56	Fe	89	H2	2.130	ppb	1.6	9797.72	20	
59	Co	89	He	0.022	ppb	126.2	73.34	0.2	
60	Ni	89	He	-0.509	ppb	N/A	353.35	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.003	ppb	N/A	85.56	0.6	
66	Zn	89	He	-0.118	ppb	N/A	74.45	2	
75	As	89	He	-0.001	ppb	N/A	4.00	1	
78	Se	89	H2	0.038	ppb	23.4	3.67	1	
88	Sr	89	He	0.011	ppb	43.1	8.89	1	
95	Mo	89	He	0.095	ppb	17.1	98.89	1	
107	Ag	89	He	0.009	ppb	80.4	34.44	0.2	
111	Cd	89	He	0.008	ppb	89.5	3.33	0.2	
118	Sn	159	He	0.070	ppb	22.5	127.78	1	
121	Sb	159	No Gas	0.032	ppb	23.7	337.06	0.2	
137	Ba	159	No Gas	0.053	ppb	40.5	213.58	0.4	
182	W	159	No Gas	0.086	ppb	18.4	630.72	1	
205	Tl	209	No Gas	0.038	ppb	17.1	594.01	0.2	
208	Pb	209	No Gas	0.027	ppb	19.2	690.78	0.2	
232	Th	209	No Gas	0.138	ppb	5.0	3083.84	1	
238	U	209	No Gas	0.042	ppb	43.1	864.34	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	880881.97	3.6	1023754.81	86.04	29.5	120.4	
Sc	45	No Gas	2873021.80	4.0	2927134.09	98.15	29.5	120.4	
Sc	45	H2	334353.10	1.5	374925.7	89.18	29.5	120.4	
Sc	45	He	67950.42	1.2	75429.93	90.08	29.5	120.4	
Ge	72	No Gas	701704.48	3.2	682196.39	102.86	29.5	120.4	
Ge	72	H2	130177.50	1.9	145757.5	89.31	29.5	120.4	
Ge	72	He	56133.02	0.5	59866.13	93.76	29.5	120.4	
Y	89	H2	2394199.79	0.5	2441196.5	98.07	29.5	120.4	
Y	89	He	500908.25	1.4	531537.69	94.24	29.5	120.4	
Tb	159	No Gas	8245574.53	4.7	7041897.33	117.09	29.5	120.4	
Tb	159	He	2879353.81	1.1	2795586.52	103	29.5	120.4	
Bi	209	No Gas	4466492.32	4.3	3760534.49	118.77	29.5	120.4	

Sample Report

Sample Name SN5106-011R

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:14:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.110	ppb	24.4	41.11	100	
11	B	6	No Gas	13.944	ppb	3.2	2950.40	1000	
23	Na	45	He	3722.957	ppb	1.5	77752.41	200000	
24	Mg	45	He	576.177	ppb	4.0	6804.31	200000	
27	Al	45	He	161.121	ppb	13.9	702.27	200000	
28	Si	45	H2	2181.644	ppb	4.4	17834.36	10000	
39	K	45	He	22.919	ppb	135.5	9750.64	200000	
40	Ca	45	H2	1746.445	ppb	3.4	135547.94	200000	
51	V	89	He	2.180	ppb	10.3	532.25	1000	
52	Cr	89	He	0.530	ppb	18.1	169.30	2000	
55	Mn	89	He	2.171	ppb	4.8	250.63	2000	
56	Fe	89	H2	139.055	ppb	2.5	53571.63	100000	
59	Co	89	He	0.046	ppb	70.0	46.67	1000	
60	Ni	89	He	-2.638	ppb	N/A	328.91	1000	
63	Cu	89	He	0.646	ppb	19.2	264.46	2000	
66	Zn	89	He	1.297	ppb	24.0	141.12	2000	
75	As	89	He	0.301	ppb	48.1	13.33	1000	
78	Se	89	H2	0.165	ppb	35.1	3.17	1000	
88	Sr	89	He	6.829	ppb	2.1	1098.98	2000	
95	Mo	89	He	0.225	ppb	18.9	48.89	1000	
107	Ag	89	He	0.021	ppb	83.1	18.89	100	
111	Cd	89	He	0.046	ppb	17.3	3.70	1000	
118	Sn	159	He	0.720	ppb	17.4	197.79	1000	
121	Sb	159	No Gas	0.044	ppb	46.1	130.15	1000	
137	Ba	159	No Gas	2.930	ppb	5.9	1969.01	2000	
182	W	159	No Gas	0.145	ppb	17.0	240.27	1000	
205	Tl	209	No Gas	0.030	ppb	8.5	106.79	1000	
208	Pb	209	No Gas	0.403	ppb	11.4	1765.36	2000	
232	Th	209	No Gas	0.461	ppb	31.2	2049.14	1000	
238	U	209	No Gas	0.078	ppb	18.4	320.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	845959.59	0.7	1023754.81	82.63	29.5	120.4	
Sc	45	No Gas	2678840.26	1.9	2927134.09	91.52	29.5	120.4	
Sc	45	H2	322001.70	2.0	374925.7	85.88	29.5	120.4	
Sc	45	He	64540.50	0.8	75429.93	85.56	29.5	120.4	
Ge	72	No Gas	677311.86	1.4	682196.39	99.28	29.5	120.4	
Ge	72	H2	126922.24	3.0	145757.5	87.08	29.5	120.4	
Ge	72	He	53474.58	0.8	59866.13	89.32	29.5	120.4	
Y	89	H2	2344514.64	1.7	2441196.5	96.04	29.5	120.4	
Y	89	He	479118.36	0.2	531537.69	90.14	29.5	120.4	
Tb	159	No Gas	7978828.70	1.7	7041897.33	113.31	29.5	120.4	
Tb	159	He	2845349.19	0.7	2795586.52	101.78	29.5	120.4	
Bi	209	No Gas	4384313.01	1.7	3760534.49	116.59	29.5	120.4	

Sample Report

Sample Name SN5106-012R

File Name 101SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:16:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.146	ppb	34.3	46.67	100	
11	B	6	No Gas	12.673	ppb	6.1	2748.13	1000	
23	Na	45	He	3693.700	ppb	1.1	77042.22	200000	
24	Mg	45	He	572.736	ppb	5.4	6755.40	200000	
27	Al	45	He	168.430	ppb	14.9	731.16	200000	
28	Si	45	H2	2214.424	ppb	3.1	17817.55	10000	
39	K	45	He	35.750	ppb	97.4	9857.34	200000	
40	Ca	45	H2	1771.675	ppb	0.1	135353.57	200000	
51	V	89	He	2.018	ppb	9.3	507.80	1000	
52	Cr	89	He	0.615	ppb	39.9	187.97	2000	
55	Mn	89	He	2.237	ppb	5.4	258.62	2000	
56	Fe	89	H2	118.340	ppb	2.1	45811.81	100000	
59	Co	89	He	0.015	ppb	193.3	35.56	1000	
60	Ni	89	He	-3.096	ppb	N/A	285.57	1000	
63	Cu	89	He	0.521	ppb	6.0	231.12	2000	
66	Zn	89	He	1.902	ppb	30.4	164.45	2000	
75	As	89	He	0.235	ppb	28.6	11.33	1000	
78	Se	89	H2	0.109	ppb	41.5	2.17	1000	
88	Sr	89	He	6.476	ppb	7.4	1047.86	2000	
95	Mo	89	He	0.090	ppb	71.5	24.44	1000	
107	Ag	89	He	0.010	ppb	112.2	12.22	100	
111	Cd	89	He	0.046	ppb	46.1	3.70	1000	
118	Sn	159	He	0.494	ppb	2.8	155.56	1000	
121	Sb	159	No Gas	0.044	ppb	19.6	133.48	1000	
137	Ba	159	No Gas	2.579	ppb	4.9	1782.12	2000	
182	W	159	No Gas	0.069	ppb	44.9	143.49	1000	
205	Tl	209	No Gas	0.013	ppb	44.2	60.07	1000	
208	Pb	209	No Gas	0.390	ppb	9.7	1752.02	2000	
232	Th	209	No Gas	0.095	ppb	8.9	523.93	1000	
238	U	209	No Gas	0.071	ppb	20.6	300.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	829270.99	2.5	1023754.81	81	29.5	120.4	
Sc	45	No Gas	2713601.63	2.2	2927134.09	92.71	29.5	120.4	
Sc	45	H2	316854.16	0.3	374925.7	84.51	29.5	120.4	
Sc	45	He	64397.24	0.8	75429.93	85.37	29.5	120.4	
Ge	72	No Gas	679489.25	2.0	682196.39	99.6	29.5	120.4	
Ge	72	H2	125930.56	1.3	145757.5	86.4	29.5	120.4	
Ge	72	He	53556.99	0.3	59866.13	89.46	29.5	120.4	
Y	89	H2	2310917.06	0.8	2441196.5	94.66	29.5	120.4	
Y	89	He	481676.97	0.4	531537.69	90.62	29.5	120.4	
Tb	159	No Gas	8183643.49	2.1	7041897.33	116.21	29.5	120.4	
Tb	159	He	2870284.61	0.9	2795586.52	102.67	29.5	120.4	
Bi	209	No Gas	4487944.30	2.3	3760534.49	119.34	29.5	120.4	

Sample Report

Sample Name SN5106-013R

File Name 102SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:19:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.165	ppb	34.2	50.00	100	
11	B	6	No Gas	12.432	ppb	10.5	2725.90	1000	
23	Na	45	He	3480.401	ppb	3.5	72110.80	200000	
24	Mg	45	He	644.504	ppb	1.1	7406.90	200000	
27	Al	45	He	10.020	ppb	103.6	70.00	200000	
28	Si	45	H2	84.071	ppb	15.2	1064.56	10000	
39	K	45	He	229.078	ppb	17.6	11631.25	200000	
40	Ca	45	H2	1586.259	ppb	0.5	120716.50	200000	
51	V	89	He	2.093	ppb	13.5	515.58	1000	
52	Cr	89	He	0.324	ppb	30.3	125.98	2000	
55	Mn	89	He	2.032	ppb	11.4	235.96	2000	
56	Fe	89	H2	3.528	ppb	10.1	7012.88	100000	
59	Co	89	He	0.028	ppb	68.4	40.00	1000	
60	Ni	89	He	-3.151	ppb	N/A	277.79	1000	
63	Cu	89	He	0.346	ppb	22.4	181.12	2000	
66	Zn	89	He	1.405	ppb	35.2	144.45	2000	
75	As	89	He	0.271	ppb	60.8	12.33	1000	
78	Se	89	H2	0.140	ppb	32.4	2.67	1000	
88	Sr	89	He	6.696	ppb	8.7	1073.42	2000	
95	Mo	89	He	0.066	ppb	72.1	20.00	1000	
107	Ag	89	He	0.015	ppb	87.5	15.56	100	
111	Cd	89	He	0.018	ppb	42.6	1.48	1000	
118	Sn	159	He	0.433	ppb	34.5	142.23	1000	
121	Sb	159	No Gas	0.060	ppb	33.8	163.52	1000	
137	Ba	159	No Gas	8.916	ppb	3.4	6168.32	2000	
182	W	159	No Gas	0.043	ppb	62.9	110.12	1000	
205	Tl	209	No Gas	0.009	ppb	81.6	46.72	1000	
208	Pb	209	No Gas	0.097	ppb	17.4	533.94	2000	
232	Th	209	No Gas	0.040	ppb	27.0	290.33	1000	
238	U	209	No Gas	0.006	ppb	80.0	36.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	832146.07	4.2	1023754.81	81.28	29.5	120.4	
Sc	45	No Gas	2736262.81	3.7	2927134.09	93.48	29.5	120.4	
Sc	45	H2	315349.33	0.1	374925.7	84.11	29.5	120.4	
Sc	45	He	63585.79	1.6	75429.93	84.3	29.5	120.4	
Ge	72	No Gas	691628.23	3.9	682196.39	101.38	29.5	120.4	
Ge	72	H2	123897.24	1.1	145757.5	85	29.5	120.4	
Ge	72	He	53685.99	0.5	59866.13	89.68	29.5	120.4	
Y	89	H2	2298127.47	0.6	2441196.5	94.14	29.5	120.4	
Y	89	He	477319.31	0.8	531537.69	89.8	29.5	120.4	
Tb	159	No Gas	8311597.86	3.5	7041897.33	118.03	29.5	120.4	
Tb	159	He	2841806.21	0.8	2795586.52	101.65	29.5	120.4	
Bi	209	No Gas	4544574.67	3.4	3760534.49	120.85	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-014R

File Name 103SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:22:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.123	ppb	49.7	42.22	100	
11	B	6	No Gas	13.394	ppb	13.8	2812.59	1000	
23	Na	45	He	3745.424	ppb	5.5	75049.53	200000	
24	Mg	45	He	711.298	ppb	5.7	7884.93	200000	
27	Al	45	He	18.540	ppb	26.2	103.34	200000	
28	Si	45	H2	87.553	ppb	27.9	1114.61	10000	
39	K	45	He	291.139	ppb	16.5	11931.31	200000	
40	Ca	45	H2	1633.808	ppb	1.3	126915.07	200000	
51	V	89	He	2.495	ppb	15.3	564.48	1000	
52	Cr	89	He	0.280	ppb	49.1	112.65	2000	
55	Mn	89	He	2.741	ppb	15.3	296.62	2000	
56	Fe	89	H2	4.308	ppb	23.3	7386.87	100000	
59	Co	89	He	0.018	ppb	96.9	35.56	1000	
60	Ni	89	He	-2.419	ppb	N/A	337.79	1000	
63	Cu	89	He	0.450	ppb	32.5	202.23	2000	
66	Zn	89	He	3.010	ppb	34.8	196.68	2000	
75	As	89	He	0.242	ppb	45.1	11.00	1000	
78	Se	89	H2	0.128	ppb	22.3	2.50	1000	
88	Sr	89	He	7.634	ppb	5.4	1186.77	2000	
95	Mo	89	He	0.076	ppb	31.6	21.11	1000	
107	Ag	89	He	0.016	ppb	24.5	15.56	100	
111	Cd	89	He	0.023	ppb	121.5	1.85	1000	
118	Sn	159	He	1.265	ppb	12.0	294.46	1000	
121	Sb	159	No Gas	0.060	ppb	25.4	163.52	1000	
137	Ba	159	No Gas	7.521	ppb	4.6	5243.52	2000	
182	W	159	No Gas	0.035	ppb	23.2	100.11	1000	
205	Tl	209	No Gas	0.015	ppb	47.2	66.74	1000	
208	Pb	209	No Gas	0.106	ppb	4.1	573.98	2000	
232	Th	209	No Gas	0.022	ppb	45.0	210.24	1000	
238	U	209	No Gas	0.003	ppb	43.5	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	825342.74	2.7	1023754.81	80.62	29.5	120.4	
Sc	45	No Gas	2731148.63	3.3	2927134.09	93.3	29.5	120.4	
Sc	45	H2	321988.36	0.7	374925.7	85.88	29.5	120.4	
Sc	45	He	62039.48	4.1	75429.93	82.25	29.5	120.4	
Ge	72	No Gas	695462.92	3.7	682196.39	101.94	29.5	120.4	
Ge	72	H2	128095.54	1.1	145757.5	87.88	29.5	120.4	
Ge	72	He	52651.95	5.0	59866.13	87.95	29.5	120.4	
Y	89	H2	2333230.18	0.6	2441196.5	95.58	29.5	120.4	
Y	89	He	463729.82	5.3	531537.69	87.24	29.5	120.4	
Tb	159	No Gas	8370223.63	4.0	7041897.33	118.86	29.5	120.4	
Tb	159	He	2771072.23	4.7	2795586.52	99.12	29.5	120.4	
Bi	209	No Gas	4560639.80	3.7	3760534.49	121.28	29.5	120.4	6020/DoD

Sample Report

Sample Name	SN5106-015R
File Name	104SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:24:49 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.115	ppb	43.0	40.00	100	
11	B	6	No Gas	17.482	ppb	4.6	3201.58	1000	
23	Na	45	He	5622.836	ppb	1.4	112504.24	200000	
24	Mg	45	He	1236.772	ppb	2.7	13600.77	200000	
27	Al	45	He	223.820	ppb	2.5	957.85	200000	
28	Si	45	H2	2558.833	ppb	2.2	21028.88	10000	
39	K	45	He	79.941	ppb	29.2	10245.73	200000	
40	Ca	45	H2	3178.443	ppb	4.4	247882.01	200000	
51	V	89	He	2.564	ppb	10.8	596.70	1000	
52	Cr	89	He	0.608	ppb	11.3	185.30	2000	
55	Mn	89	He	4.740	ppb	4.3	507.92	2000	
56	Fe	89	H2	257.040	ppb	4.3	94884.49	100000	
59	Co	89	He	0.102	ppb	32.0	66.67	1000	
60	Ni	89	He	-2.920	ppb	N/A	301.13	1000	
63	Cu	89	He	0.747	ppb	29.4	292.24	2000	
66	Zn	89	He	3.370	ppb	9.7	217.79	2000	
75	As	89	He	0.535	ppb	12.5	20.67	1000	
78	Se	89	H2	0.068	ppb	45.1	1.50	1000	
88	Sr	89	He	10.868	ppb	5.3	1747.95	2000	
95	Mo	89	He	0.054	ppb	103.8	17.78	1000	
107	Ag	89	He	0.015	ppb	88.3	15.56	100	
111	Cd	89	He	0.041	ppb	1.0	3.33	1000	
118	Sn	159	He	0.581	ppb	38.1	171.12	1000	
121	Sb	159	No Gas	0.032	ppb	37.0	113.46	1000	
137	Ba	159	No Gas	4.629	ppb	2.3	3187.26	2000	
182	W	159	No Gas	-0.006	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	0.014	ppb	56.4	63.40	1000	
208	Pb	209	No Gas	0.477	ppb	11.6	2119.11	2000	
232	Th	209	No Gas	0.061	ppb	11.6	377.10	1000	
238	U	209	No Gas	0.079	ppb	32.1	333.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	805213.87	1.5	1023754.81	78.65	29.5	120.4	
Sc	45	No Gas	2700080.71	1.0	2927134.09	92.24	29.5	120.4	
Sc	45	H2	324786.50	2.9	374925.7	86.63	29.5	120.4	
Sc	45	He	64091.03	1.3	75429.93	84.97	29.5	120.4	
Ge	72	No Gas	682530.20	1.4	682196.39	100.05	29.5	120.4	
Ge	72	H2	127123.79	2.1	145757.5	87.22	29.5	120.4	
Ge	72	He	53644.71	1.0	59866.13	89.61	29.5	120.4	
Y	89	H2	2369046.72	3.2	2441196.5	97.04	29.5	120.4	
Y	89	He	478791.47	1.0	531537.69	90.08	29.5	120.4	
Tb	159	No Gas	8221013.00	0.6	7041897.33	116.74	29.5	120.4	
Tb	159	He	2842946.56	1.1	2795586.52	101.69	29.5	120.4	
Bi	209	No Gas	4491816.30	1.2	3760534.49	119.45	29.5	120.4	

Sample Report

Sample Name SN5106-016R

File Name 105SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:27:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.054	ppb	77.5	28.89	100	
11	B	6	No Gas	16.623	ppb	7.0	3055.99	1000	
23	Na	45	He	5268.033	ppb	1.5	105435.99	200000	
24	Mg	45	He	1146.118	ppb	2.6	12604.18	200000	
27	Al	45	He	196.348	ppb	7.2	840.06	200000	
28	Si	45	H2	2428.650	ppb	0.4	19434.98	10000	
39	K	45	He	80.781	ppb	25.3	10207.44	200000	
40	Ca	45	H2	2958.487	ppb	0.6	224576.16	200000	
51	V	89	He	2.589	ppb	16.1	602.26	1000	
52	Cr	89	He	0.486	ppb	11.0	160.64	2000	
55	Mn	89	He	4.329	ppb	10.5	467.92	2000	
56	Fe	89	H2	225.203	ppb	1.8	81972.43	100000	
59	Co	89	He	0.089	ppb	53.6	62.23	1000	
60	Ni	89	He	-3.018	ppb	N/A	292.24	1000	
63	Cu	89	He	0.957	ppb	1.7	351.13	2000	
66	Zn	89	He	2.756	ppb	2.7	195.56	2000	
75	As	89	He	0.555	ppb	17.0	21.33	1000	
78	Se	89	H2	0.148	ppb	59.7	2.83	1000	
88	Sr	89	He	9.868	ppb	5.3	1591.27	2000	
95	Mo	89	He	0.096	ppb	71.2	25.56	1000	
107	Ag	89	He	0.017	ppb	53.7	16.66	100	
111	Cd	89	He	0.032	ppb	65.1	2.59	1000	
118	Sn	159	He	0.431	ppb	29.2	143.34	1000	
121	Sb	159	No Gas	0.045	ppb	76.3	133.49	1000	
137	Ba	159	No Gas	4.259	ppb	7.9	2890.20	2000	
182	W	159	No Gas	0.022	ppb	54.6	80.09	1000	
205	Tl	209	No Gas	0.006	ppb	88.7	36.71	1000	
208	Pb	209	No Gas	0.453	ppb	5.9	2002.30	2000	
232	Th	209	No Gas	0.070	ppb	13.2	410.47	1000	
238	U	209	No Gas	0.064	ppb	20.9	270.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	792401.70	0.9	1023754.81	77.4	29.5	120.4	
Sc	45	No Gas	2643587.58	1.5	2927134.09	90.31	29.5	120.4	
Sc	45	H2	315775.71	1.3	374925.7	84.22	29.5	120.4	
Sc	45	He	63797.94	1.2	75429.93	84.58	29.5	120.4	
Ge	72	No Gas	675953.49	0.3	682196.39	99.08	29.5	120.4	
Ge	72	H2	124904.89	1.0	145757.5	85.69	29.5	120.4	
Ge	72	He	53504.70	0.6	59866.13	89.37	29.5	120.4	
Y	89	H2	2313527.38	1.2	2441196.5	94.77	29.5	120.4	
Y	89	He	480139.97	0.7	531537.69	90.33	29.5	120.4	
Tb	159	No Gas	8098868.42	1.5	7041897.33	115.01	29.5	120.4	
Tb	159	He	2865307.18	1.0	2795586.52	102.49	29.5	120.4	
Bi	209	No Gas	4453049.82	1.3	3760534.49	118.42	29.5	120.4	

Sample Report

Sample Name SN5106-017R

File Name 106SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:30:10 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.154	ppb	21.3	46.67	100	
11	B	6	No Gas	15.623	ppb	3.9	2997.09	1000	
23	Na	45	He	3272.869	ppb	4.1	68187.06	200000	
24	Mg	45	He	309.366	ppb	5.4	3954.16	200000	
27	Al	45	He	68.110	ppb	2.8	308.90	200000	
28	Si	45	H2	1216.474	ppb	4.8	9971.28	10000	
39	K	45	He	205.151	ppb	2.7	11377.84	200000	
40	Ca	45	H2	4629.150	ppb	0.8	352053.11	200000	
51	V	89	He	2.431	ppb	3.4	568.92	1000	
52	Cr	89	He	0.483	ppb	13.1	157.97	2000	
55	Mn	89	He	6.184	ppb	4.0	646.57	2000	
56	Fe	89	H2	32.356	ppb	4.5	16828.83	100000	
59	Co	89	He	0.010	ppb	327.9	33.34	1000	
60	Ni	89	He	-3.121	ppb	N/A	278.90	1000	
63	Cu	89	He	37.857	ppb	1.0	10428.69	2000	
66	Zn	89	He	13.085	ppb	9.5	572.25	2000	
75	As	89	He	0.262	ppb	60.7	12.00	1000	
78	Se	89	H2	0.119	ppb	51.1	2.33	1000	
88	Sr	89	He	6.785	ppb	3.3	1081.19	2000	
95	Mo	89	He	0.289	ppb	49.2	60.00	1000	
107	Ag	89	He	0.021	ppb	39.9	18.89	100	
111	Cd	89	He	0.033	ppb	89.4	2.59	1000	
118	Sn	159	He	0.676	ppb	22.8	190.01	1000	
121	Sb	159	No Gas	24.816	ppb	5.0	43250.95	1000	
137	Ba	159	No Gas	3.943	ppb	8.9	2753.36	2000	
182	W	159	No Gas	0.036	ppb	135.7	100.11	1000	
205	Tl	209	No Gas	0.011	ppb	42.1	53.39	1000	
208	Pb	209	No Gas	93.797	ppb	5.0	397178.84	2000	
232	Th	209	No Gas	0.043	ppb	3.0	300.34	1000	
238	U	209	No Gas	0.011	ppb	58.3	56.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	805649.71	1.8	1023754.81	78.7	29.5	120.4	
Sc	45	No Gas	2716303.01	3.0	2927134.09	92.8	29.5	120.4	
Sc	45	H2	316878.77	1.3	374925.7	84.52	29.5	120.4	
Sc	45	He	63489.92	1.2	75429.93	84.17	29.5	120.4	
Ge	72	No Gas	692217.71	2.7	682196.39	101.47	29.5	120.4	
Ge	72	H2	125746.73	1.9	145757.5	86.27	29.5	120.4	
Ge	72	He	53694.23	0.7	59866.13	89.69	29.5	120.4	
Y	89	H2	2317176.81	0.4	2441196.5	94.92	29.5	120.4	
Y	89	He	474459.10	0.6	531537.69	89.26	29.5	120.4	
Tb	159	No Gas	8331089.39	2.4	7041897.33	118.31	29.5	120.4	
Tb	159	He	2853012.63	0.7	2795586.52	102.05	29.5	120.4	
Bi	209	No Gas	4546381.38	2.6	3760534.49	120.9	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-018R

File Name 107SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:32:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.150	ppb	39.4	46.67	100	
11	B	6	No Gas	13.615	ppb	17.8	2789.26	1000	
23	Na	45	He	2877.696	ppb	0.9	60836.68	200000	
24	Mg	45	He	308.355	ppb	2.9	3938.61	200000	
27	Al	45	He	78.239	ppb	4.8	350.02	200000	
28	Si	45	H2	1000.925	ppb	0.7	8211.39	10000	
39	K	45	He	348.321	ppb	8.9	12761.74	200000	
40	Ca	45	H2	4190.762	ppb	1.5	316237.95	200000	
51	V	89	He	2.009	ppb	6.9	497.80	1000	
52	Cr	89	He	0.562	ppb	9.2	173.97	2000	
55	Mn	89	He	8.175	ppb	5.0	843.21	2000	
56	Fe	89	H2	39.453	ppb	0.6	19154.31	100000	
59	Co	89	He	0.072	ppb	59.3	55.56	1000	
60	Ni	89	He	-2.509	ppb	N/A	337.79	1000	
63	Cu	89	He	36.258	ppb	3.0	9978.34	2000	
66	Zn	89	He	13.561	ppb	3.6	588.92	2000	
75	As	89	He	0.391	ppb	40.9	16.00	1000	
78	Se	89	H2	0.149	ppb	30.3	2.83	1000	
88	Sr	89	He	6.507	ppb	9.0	1035.64	2000	
95	Mo	89	He	0.222	ppb	27.3	47.78	1000	
107	Ag	89	He	0.012	ppb	0.6	13.33	100	
111	Cd	89	He	0.037	ppb	78.0	2.96	1000	
118	Sn	159	He	0.427	ppb	15.3	141.12	1000	
121	Sb	159	No Gas	18.509	ppb	9.8	32218.10	1000	
137	Ba	159	No Gas	3.840	ppb	3.0	2683.30	2000	
182	W	159	No Gas	0.021	ppb	97.2	80.09	1000	
205	Tl	209	No Gas	0.009	ppb	46.8	46.72	1000	
208	Pb	209	No Gas	118.471	ppb	9.7	501365.03	2000	
232	Th	209	No Gas	0.048	ppb	23.5	323.70	1000	
238	U	209	No Gas	0.019	ppb	37.4	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	812262.46	4.0	1023754.81	79.34	29.5	120.4	
Sc	45	No Gas	2728124.23	4.4	2927134.09	93.2	29.5	120.4	
Sc	45	H2	314347.33	1.4	374925.7	83.84	29.5	120.4	
Sc	45	He	63389.51	0.7	75429.93	84.04	29.5	120.4	
Ge	72	No Gas	695745.29	3.7	682196.39	101.99	29.5	120.4	
Ge	72	H2	124863.74	0.6	145757.5	85.67	29.5	120.4	
Ge	72	He	53329.47	0.5	59866.13	89.08	29.5	120.4	
Y	89	H2	2307790.39	0.2	2441196.5	94.54	29.5	120.4	
Y	89	He	473811.20	0.3	531537.69	89.14	29.5	120.4	
Tb	159	No Gas	8331759.46	4.0	7041897.33	118.32	29.5	120.4	
Tb	159	He	2840338.67	0.7	2795586.52	101.6	29.5	120.4	
Bi	209	No Gas	4551627.46	3.9	3760534.49	121.04	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-019R

File Name 108SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:35:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.082	ppb	128.0	34.44	100	
11	B	6	No Gas	20.017	ppb	13.8	3480.54	1000	
23	Na	45	He	5136.093	ppb	0.8	102161.12	200000	
24	Mg	45	He	1211.854	ppb	1.5	13173.68	200000	
27	Al	45	He	147.564	ppb	7.0	633.37	200000	
28	Si	45	H2	2486.245	ppb	2.7	19565.23	10000	
39	K	45	He	240.604	ppb	6.8	11686.23	200000	
40	Ca	45	H2	13330.788	ppb	0.2	992220.32	200000	
51	V	89	He	2.502	ppb	1.7	580.03	1000	
52	Cr	89	He	0.552	ppb	12.3	171.97	2000	
55	Mn	89	He	2.461	ppb	9.4	276.62	2000	
56	Fe	89	H2	166.435	ppb	1.6	61606.85	100000	
59	Co	89	He	0.129	ppb	59.1	75.56	1000	
60	Ni	89	He	-2.590	ppb	N/A	330.02	1000	
63	Cu	89	He	1.161	ppb	15.2	402.24	2000	
66	Zn	89	He	2.129	ppb	17.3	170.01	2000	
75	As	89	He	1.220	ppb	9.4	41.67	1000	
78	Se	89	H2	0.120	ppb	51.1	2.33	1000	
88	Sr	89	He	22.805	ppb	3.7	3629.50	2000	
95	Mo	89	He	0.179	ppb	37.8	40.00	1000	
107	Ag	89	He	0.023	ppb	46.9	20.00	100	
111	Cd	89	He	0.014	ppb	99.7	1.11	1000	
118	Sn	159	He	0.409	ppb	35.8	137.78	1000	
121	Sb	159	No Gas	0.154	ppb	20.8	327.04	1000	
137	Ba	159	No Gas	8.158	ppb	11.1	5677.56	2000	
182	W	159	No Gas	0.004	ppb	626.3	56.73	1000	
205	Tl	209	No Gas	0.006	ppb	190.6	36.71	1000	
208	Pb	209	No Gas	0.649	ppb	4.5	2886.72	2000	
232	Th	209	No Gas	0.040	ppb	22.7	290.33	1000	
238	U	209	No Gas	0.035	ppb	31.1	156.84	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	806072.85	3.2	1023754.81	78.74	29.5	120.4	
Sc	45	No Gas	2727448.71	4.2	2927134.09	93.18	29.5	120.4	
Sc	45	H2	310685.27	0.8	374925.7	82.87	29.5	120.4	
Sc	45	He	63280.24	0.8	75429.93	83.89	29.5	120.4	
Ge	72	No Gas	690560.22	4.3	682196.39	101.23	29.5	120.4	
Ge	72	H2	124661.76	1.4	145757.5	85.53	29.5	120.4	
Ge	72	He	53045.35	0.4	59866.13	88.61	29.5	120.4	
Y	89	H2	2294253.00	1.0	2441196.5	93.98	29.5	120.4	
Y	89	He	473848.62	0.4	531537.69	89.15	29.5	120.4	
Tb	159	No Gas	8372976.26	4.0	7041897.33	118.9	29.5	120.4	
Tb	159	He	2844924.68	0.1	2795586.52	101.76	29.5	120.4	
Bi	209	No Gas	4571249.58	4.5	3760534.49	121.56	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5106-020R

File Name 109SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:38:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	102.6	31.11	100	
11	B	6	No Gas	20.247	ppb	6.0	3521.66	1000	
23	Na	45	He	4975.159	ppb	3.3	100138.01	200000	
24	Mg	45	He	1135.176	ppb	3.5	12506.33	200000	
27	Al	45	He	130.988	ppb	4.1	571.14	200000	
28	Si	45	H2	2198.389	ppb	6.4	18018.13	10000	
39	K	45	He	292.228	ppb	13.2	12306.51	200000	
40	Ca	45	H2	12039.192	ppb	7.5	930252.31	200000	
51	V	89	He	2.787	ppb	1.4	627.82	1000	
52	Cr	89	He	0.642	ppb	8.1	190.64	2000	
55	Mn	89	He	3.044	ppb	11.9	334.61	2000	
56	Fe	89	H2	134.102	ppb	8.4	52175.03	100000	
59	Co	89	He	0.054	ppb	131.9	48.89	1000	
60	Ni	89	He	-2.547	ppb	N/A	334.46	1000	
63	Cu	89	He	1.987	ppb	4.8	627.82	2000	
66	Zn	89	He	2.702	ppb	8.5	191.12	2000	
75	As	89	He	1.047	ppb	7.7	36.33	1000	
78	Se	89	H2	0.166	ppb	60.3	3.17	1000	
88	Sr	89	He	21.915	ppb	2.5	3489.46	2000	
95	Mo	89	He	0.172	ppb	12.5	38.89	1000	
107	Ag	89	He	0.017	ppb	53.9	16.66	100	
111	Cd	89	He	0.009	ppb	86.6	0.74	1000	
118	Sn	159	He	9.629	ppb	157.0	1926.33	1000	
121	Sb	159	No Gas	0.093	ppb	25.0	223.58	1000	
137	Ba	159	No Gas	8.386	ppb	7.9	5827.80	2000	
182	W	159	No Gas	-0.001	ppb	N/A	50.06	1000	
205	Tl	209	No Gas	0.009	ppb	178.0	46.72	1000	
208	Pb	209	No Gas	0.560	ppb	14.2	2496.23	2000	
232	Th	209	No Gas	0.040	ppb	13.0	290.33	1000	
238	U	209	No Gas	0.028	ppb	50.6	130.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	809006.62	3.4	1023754.81	79.02	29.5	120.4	
Sc	45	No Gas	2718789.76	3.8	2927134.09	92.88	29.5	120.4	
Sc	45	H2	323572.49	6.8	374925.7	86.3	29.5	120.4	
Sc	45	He	63897.40	2.0	75429.93	84.71	29.5	120.4	
Ge	72	No Gas	688217.91	3.4	682196.39	100.88	29.5	120.4	
Ge	72	H2	125564.84	3.9	145757.5	86.15	29.5	120.4	
Ge	72	He	53124.62	0.6	59866.13	88.74	29.5	120.4	
Y	89	H2	2365334.55	6.3	2441196.5	96.89	29.5	120.4	
Y	89	He	474091.30	0.5	531537.69	89.19	29.5	120.4	
Tb	159	No Gas	8353599.11	3.5	7041897.33	118.63	29.5	120.4	
Tb	159	He	2851970.48	0.2	2795586.52	102.02	29.5	120.4	
Bi	209	No Gas	4558140.85	3.6	3760534.49	121.21	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	110_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:40:32 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.979	ppb	7.9	21467.72	25	95.92	89.8	110.2	
11	B	6	No Gas	23.956	ppb	8.5	15071.65	25	95.82	89.8	110.2	
23	Na	45	He	5077.724	ppb	0.8	495866.16	5000	101.55	89.8	110.2	
24	Mg	45	He	4912.892	ppb	0.9	263850.36	5000	98.26	89.8	110.2	
27	Al	45	He	471.145	ppb	0.5	10133.91	500	94.23	89.8	110.2	
28	Si	45	H2	453.835	ppb	2.9	18602.68	500	90.77	89.8	110.2	
39	K	45	He	4814.633	ppb	0.1	255823.70	5000	96.29	89.8	110.2	
40	Ca	45	H2	4847.998	ppb	0.6	1875072.87	5000	96.96	89.8	110.2	
51	V	89	He	23.897	ppb	1.0	20622.36	25	95.59	89.8	110.2	
52	Cr	89	He	24.341	ppb	1.2	25829.50	25	97.36	89.8	110.2	
55	Mn	89	He	23.604	ppb	1.6	12060.28	25	94.42	89.8	110.2	
56	Fe	89	H2	4697.186	ppb	0.1	7979739.77	5000	93.94	89.8	110.2	
59	Co	89	He	24.829	ppb	1.4	45425.20	25	99.32	89.8	110.2	
60	Ni	89	He	23.903	ppb	0.4	12503.77	25	95.61	89.8	110.2	
63	Cu	89	He	24.559	ppb	1.1	34522.30	25	98.24	89.8	110.2	
66	Zn	89	He	25.129	ppb	2.5	4826.57	25	100.52	89.8	110.2	
75	As	89	He	23.921	ppb	2.9	3813.94	25	95.68	89.8	110.2	
78	Se	89	H2	23.620	ppb	1.4	2011.06	25	94.48	89.8	110.2	
88	Sr	89	He	23.810	ppb	1.6	19471.04	25	95.24	89.8	110.2	
95	Mo	89	He	24.443	ppb	1.6	22594.84	25	97.77	89.8	110.2	
107	Ag	89	He	25.357	ppb	0.9	80649.32	25	101.43	89.8	110.2	
111	Cd	89	He	25.497	ppb	1.6	10412.61	25	101.99	89.8	110.2	
118	Sn	159	He	22.912	ppb	1.0	22218.99	25	91.65	89.8	110.2	
121	Sb	159	No Gas	21.884	ppb	8.2	189442.13	25	87.54	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.155	ppb	8.4	75984.25	25	88.62	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.504	ppb	8.2	153362.77	25	90.02	89.8	110.2	
205	Tl	209	No Gas	22.833	ppb	9.5	344660.25	25	91.33	89.8	110.2	
208	Pb	209	No Gas	23.072	ppb	9.1	484062.25	25	92.29	89.8	110.2	
232	Th	209	No Gas	22.020	ppb	10.7	477588.85	25	88.08	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.951	ppb	10.2	467340.05	25	91.8	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	834843.63	3.1	1023754.81	81.55	29.5	120.4	
Sc	45	No Gas	2781342.99	4.5	2927134.09	95.02	29.5	120.4	
Sc	45	H2	323035.31	0.4	374925.7	86.16	29.5	120.4	
Sc	45	He	66244.52	0.6	75429.93	87.82	29.5	120.4	
Ge	72	No Gas	690712.31	3.6	682196.39	101.25	29.5	120.4	
Ge	72	H2	128139.66	1.3	145757.5	87.91	29.5	120.4	
Ge	72	He	54893.97	0.5	59866.13	91.69	29.5	120.4	
Y	89	H2	2324068.88	0.2	2441196.5	95.2	29.5	120.4	
Y	89	He	486972.07	0.5	531537.69	91.62	29.5	120.4	
Tb	159	No Gas	8297979.74	4.3	7041897.33	117.84	29.5	120.4	
Tb	159	He	2849009.23	0.2	2795586.52	101.91	29.5	120.4	
Bi	209	No Gas	4515441.22	5.0	3760534.49	120.07	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	111_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:43:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.074	ppb	22.2	91.12	0.2	
11	B	6	No Gas	0.472	ppb	22.1	1654.59	4	
23	Na	45	He	25.574	ppb	9.3	10802.89	200	
24	Mg	45	He	3.197	ppb	64.4	989.00	20	
27	Al	45	He	-0.841	ppb	N/A	12.22	20	
28	Si	45	H2	-0.848	ppb	N/A	387.10	100	
39	K	45	He	-0.832	ppb	N/A	9760.63	200	
40	Ca	45	H2	1.932	ppb	1.0	1786.85	20	
51	V	89	He	-0.030	ppb	N/A	143.34	1	
52	Cr	89	He	-0.011	ppb	N/A	47.99	1	
55	Mn	89	He	-0.019	ppb	N/A	24.00	0.4	
56	Fe	89	H2	1.579	ppb	16.0	8635.54	20	
59	Co	89	He	0.006	ppb	146.2	42.23	0.2	
60	Ni	89	He	-0.688	ppb	N/A	255.57	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.004	ppb	N/A	82.23	0.6	
66	Zn	89	He	-0.150	ppb	N/A	66.67	2	
75	As	89	He	-0.010	ppb	N/A	2.33	1	
78	Se	89	H2	0.025	ppb	39.8	2.50	1	
88	Sr	89	He	0.008	ppb	132.5	6.67	1	
95	Mo	89	He	0.098	ppb	30.6	98.89	1	
107	Ag	89	He	0.007	ppb	94.0	28.89	0.2	
111	Cd	89	He	0.017	ppb	32.5	7.04	0.2	
118	Sn	159	He	0.087	ppb	19.8	142.23	1	
121	Sb	159	No Gas	0.020	ppb	16.9	226.93	0.2	
137	Ba	159	No Gas	0.017	ppb	47.7	93.44	0.4	
182	W	159	No Gas	0.094	ppb	20.1	677.45	1	
205	Tl	209	No Gas	0.023	ppb	4.9	360.41	0.2	
208	Pb	209	No Gas	0.018	ppb	13.7	487.21	0.2	
232	Th	209	No Gas	0.118	ppb	2.1	2639.91	1	
238	U	209	No Gas	0.020	ppb	21.4	423.81	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	875500.58	3.2	1023754.81	85.52	29.5	120.4	
Sc	45	No Gas	2835951.32	4.8	2927134.09	96.88	29.5	120.4	
Sc	45	H2	326724.69	0.5	374925.7	87.14	29.5	120.4	
Sc	45	He	66445.65	0.8	75429.93	88.09	29.5	120.4	
Ge	72	No Gas	693220.54	3.7	682196.39	101.62	29.5	120.4	
Ge	72	H2	129729.24	0.6	145757.5	89	29.5	120.4	
Ge	72	He	55384.45	0.9	59866.13	92.51	29.5	120.4	
Y	89	H2	2340377.04	0.2	2441196.5	95.87	29.5	120.4	
Y	89	He	489481.90	0.5	531537.69	92.09	29.5	120.4	
Tb	159	No Gas	8170983.84	4.9	7041897.33	116.03	29.5	120.4	
Tb	159	He	2828540.13	0.5	2795586.52	101.18	29.5	120.4	
Bi	209	No Gas	4452969.64	4.9	3760534.49	118.41	29.5	120.4	

Sample Report

Sample Name SN5106-021R

File Name 112SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:45:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.183	ppb	26.0	54.45	100	
11	B	6	No Gas	17.998	ppb	11.7	3443.86	1000	
23	Na	45	He	5010.925	ppb	0.8	101076.76	200000	
24	Mg	45	He	905.183	ppb	3.8	10157.68	200000	
27	Al	45	He	356.342	ppb	4.0	1506.80	200000	
28	Si	45	H2	2756.922	ppb	0.8	21984.70	10000	
39	K	45	He	140.292	ppb	21.0	10835.93	200000	
40	Ca	45	H2	6026.395	ppb	0.2	455998.76	200000	
51	V	89	He	3.282	ppb	3.1	713.38	1000	
52	Cr	89	He	0.692	ppb	12.7	201.97	2000	
55	Mn	89	He	4.317	ppb	12.1	462.59	2000	
56	Fe	89	H2	334.529	ppb	0.5	118068.80	100000	
59	Co	89	He	0.165	ppb	63.3	88.90	1000	
60	Ni	89	He	-2.961	ppb	N/A	295.57	1000	
63	Cu	89	He	0.947	ppb	14.8	345.58	2000	
66	Zn	89	He	3.826	ppb	7.7	233.35	2000	
75	As	89	He	0.764	ppb	19.0	27.67	1000	
78	Se	89	H2	0.269	ppb	12.3	4.83	1000	
88	Sr	89	He	16.621	ppb	0.7	2658.13	2000	
95	Mo	89	He	0.264	ppb	4.5	55.56	1000	
107	Ag	89	He	0.033	ppb	58.0	26.67	100	
111	Cd	89	He	0.014	ppb	0.8	1.11	1000	
118	Sn	159	He	0.718	ppb	21.7	196.67	1000	
121	Sb	159	No Gas	0.090	ppb	36.8	210.24	1000	
137	Ba	159	No Gas	9.168	ppb	6.3	6215.05	2000	
182	W	159	No Gas	0.082	ppb	17.7	160.18	1000	
205	Tl	209	No Gas	0.023	ppb	23.2	90.10	1000	
208	Pb	209	No Gas	1.284	ppb	7.8	5489.96	2000	
232	Th	209	No Gas	0.498	ppb	11.1	2269.43	1000	
238	U	209	No Gas	0.039	ppb	3.5	170.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	852038.72	3.4	1023754.81	83.23	29.5	120.4	
Sc	45	No Gas	2724478.76	3.6	2927134.09	93.08	29.5	120.4	
Sc	45	H2	315464.43	0.5	374925.7	84.14	29.5	120.4	
Sc	45	He	64049.01	0.8	75429.93	84.91	29.5	120.4	
Ge	72	No Gas	679967.48	3.6	682196.39	99.67	29.5	120.4	
Ge	72	H2	123668.89	1.0	145757.5	84.85	29.5	120.4	
Ge	72	He	52965.54	0.4	59866.13	88.47	29.5	120.4	
Y	89	H2	2296731.05	0.5	2441196.5	94.08	29.5	120.4	
Y	89	He	476123.75	0.8	531537.69	89.57	29.5	120.4	
Tb	159	No Gas	8149728.42	3.1	7041897.33	115.73	29.5	120.4	
Tb	159	He	2832153.64	0.6	2795586.52	101.31	29.5	120.4	
Bi	209	No Gas	4488094.55	3.3	3760534.49	119.35	29.5	120.4	

Sample Report

Sample Name SN5106-022R

File Name 113SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:48:37 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.084	ppb	21.8	35.55	100	
11	B	6	No Gas	11.797	ppb	12.2	2638.11	1000	
23	Na	45	He	3680.538	ppb	0.7	74863.85	200000	
24	Mg	45	He	625.265	ppb	3.6	7117.81	200000	
27	Al	45	He	181.237	ppb	6.9	765.60	200000	
28	Si	45	H2	2343.549	ppb	2.3	18412.24	10000	
39	K	45	He	50.241	ppb	49.6	9750.67	200000	
40	Ca	45	H2	1855.312	ppb	1.8	138550.03	200000	
51	V	89	He	2.369	ppb	18.3	558.92	1000	
52	Cr	89	He	0.392	ppb	20.4	139.31	2000	
55	Mn	89	He	2.509	ppb	10.0	281.95	2000	
56	Fe	89	H2	151.802	ppb	1.6	56401.93	100000	
59	Co	89	He	0.047	ppb	103.9	46.67	1000	
60	Ni	89	He	-2.711	ppb	N/A	318.91	1000	
63	Cu	89	He	0.606	ppb	6.6	251.12	2000	
66	Zn	89	He	1.604	ppb	48.2	151.12	2000	
75	As	89	He	0.251	ppb	19.6	11.67	1000	
78	Se	89	H2	0.141	ppb	69.0	2.67	1000	
88	Sr	89	He	6.899	ppb	4.0	1100.09	2000	
95	Mo	89	He	0.086	ppb	74.7	23.33	1000	
107	Ag	89	He	0.035	ppb	18.0	27.78	100	
111	Cd	89	He	0.014	ppb	0.3	1.11	1000	
118	Sn	159	He	0.565	ppb	32.0	167.79	1000	
121	Sb	159	No Gas	0.039	ppb	58.8	126.81	1000	
137	Ba	159	No Gas	2.953	ppb	22.9	2052.47	2000	
182	W	159	No Gas	0.043	ppb	42.9	110.12	1000	
205	Tl	209	No Gas	0.013	ppb	49.3	60.07	1000	
208	Pb	209	No Gas	0.409	ppb	12.9	1858.80	2000	
232	Th	209	No Gas	0.116	ppb	12.1	624.06	1000	
238	U	209	No Gas	0.075	ppb	23.3	323.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	828192.46	6.3	1023754.81	80.9	29.5	120.4	
Sc	45	No Gas	2727729.79	9.8	2927134.09	93.19	29.5	120.4	
Sc	45	H2	309881.83	1.9	374925.7	82.65	29.5	120.4	
Sc	45	He	62780.52	0.8	75429.93	83.23	29.5	120.4	
Ge	72	No Gas	686817.83	7.0	682196.39	100.68	29.5	120.4	
Ge	72	H2	122749.75	2.0	145757.5	84.22	29.5	120.4	
Ge	72	He	52784.90	0.4	59866.13	88.17	29.5	120.4	
Y	89	H2	2282627.94	1.4	2441196.5	93.5	29.5	120.4	
Y	89	He	474765.14	0.3	531537.69	89.32	29.5	120.4	
Tb	159	No Gas	8355824.18	9.6	7041897.33	118.66	29.5	120.4	
Tb	159	He	2838189.30	0.6	2795586.52	101.52	29.5	120.4	
Bi	209	No Gas	4578443.91	8.0	3760534.49	121.75	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBSNG29IMS2
File Name	114_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:51:17 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.080	ppb	125.1	34.45	0.5	
B	11	6	No Gas	1.860	ppb	73.7	1474.57	10	
Na	23	45	He	169.026	ppb	6.2	10952.98	500	
Mg	24	45	He	21.422	ppb	15.8	989.00	50	
Al	27	45	He	4.981	ppb	34.7	48.89	50	
Si	28	45	H2	13.643	ppb	46.0	500.56	250	
K	39	45	He	16.164	ppb	293.5	9418.93	500	
Ca	40	45	H2	38.630	ppb	3.1	3812.87	50	
V	51	89	He	2.206	ppb	5.1	527.81	2.5	
Cr	52	89	He	0.726	ppb	10.7	206.63	2.5	
Mn	55	89	He	0.414	ppb	25.9	73.32	1	
Fe	56	89	H2	6.048	ppb	10.7	7740.74	50	
Co	59	89	He	-0.021	ppb	N/A	22.22	0.5	
Ni	60	89	He	-3.228	ppb	N/A	266.68	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.559	ppb	18.3	236.68	1.5	
Zn	66	89	He	0.602	ppb	110.0	113.34	5	
As	75	89	He	0.125	ppb	81.0	7.67	2.5	
Se	78	89	H2	0.082	ppb	42.4	1.67	2.5	
Sr	88	89	He	0.161	ppb	32.2	25.56	2.5	
Mo	95	89	He	0.074	ppb	64.1	21.11	2.5	
Ag	107	89	He	0.016	ppb	120.8	15.56	0.5	
Cd	111	89	He	0.009	ppb	173.2	0.74	0.5	
Sn	118	159	He	36.740	ppb	2.2	7111.03	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	-0.007	ppb	N/A	46.72	0.5	
Ba	137	159	No Gas	0.064	ppb	31.5	80.09	1	
W	182	159	No Gas	0.017	ppb	243.7	73.42	2.5	
Tl	205	209	No Gas	0.007	ppb	59.9	43.38	0.5	
Pb	208	209	No Gas	0.107	ppb	29.5	577.32	0.5	
Th	232	209	No Gas	0.053	ppb	14.9	347.06	2.5	
U	238	209	No Gas	0.004	ppb	45.0	26.69	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	810605.75	2.5	1023754.81	79.18	29.5	120.4	
Sc	45	No Gas	2709853.25	3.7	2927134.09	92.58	29.5	120.4	
Sc	45	H2	307452.61	0.6	374925.7	82	29.5	120.4	
Sc	45	He	62768.67	0.2	75429.93	83.21	29.5	120.4	
Ge	72	No Gas	683661.10	3.9	682196.39	100.21	29.5	120.4	
Ge	72	H2	122274.09	2.1	145757.5	83.89	29.5	120.4	
Ge	72	He	52831.63	0.6	59866.13	88.25	29.5	120.4	
Y	89	H2	2263281.01	0.6	2441196.5	92.71	29.5	120.4	
Y	89	He	471174.19	0.7	531537.69	88.64	29.5	120.4	
Tb	159	No Gas	8346891.47	3.9	7041897.33	118.53	29.5	120.4	
Tb	159	He	2827396.31	0.3	2795586.52	101.14	29.5	120.4	
Bi	209	No Gas	4564325.93	3.6	3760534.49	121.37	29.5	120.4	6020/DoD

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG29IMS2
File Name	115LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 9:54:01 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.793	ppb	7.1	8509.48	50	19.52	79.5	120.4	
B	11	6	No Gas	496.124	ppb	5.3	56754.49	500	19.84	79.5	120.4	
Na	23	45	He	7937.166	ppb	1.0	152145.78	7500	21.17	79.5	120.4	
Mg	24	45	He	4986.823	ppb	0.8	51316.83	5000	19.95	79.5	120.4	
Al	27	45	He	1770.999	ppb	3.2	7217.63	2000	17.71	79.5	120.4	
Si	28	45	H2	880.610	ppb	1.3	7203.09	1000	17.61	79.5	120.4	
K	39	45	He	9803.508	ppb	0.3	104103.98	10000	19.61	79.5	120.4	
Ca	40	45	H2	2459.058	ppb	0.6	184204.78	2500	19.67	79.5	120.4	
V	51	89	He	478.163	ppb	0.1	79396.30	500	19.13	79.5	120.4	
Cr	52	89	He	195.260	ppb	1.1	40077.16	200	19.53	79.5	120.4	
Mn	55	89	He	480.640	ppb	0.9	47446.00	500	19.23	79.5	120.4	
Fe	56	89	H2	965.136	ppb	0.4	328407.23	1000	19.3	79.5	120.4	
Co	59	89	He	498.788	ppb	0.2	176579.67	500	19.95	79.5	120.4	
Ni	60	89	He	497.862	ppb	1.0	48590.56	500	19.91	79.5	120.4	
Cu	63	89	He	253.073	ppb	0.5	68781.92	250	20.25	79.5	120.4	
Zn	66	89	He	494.752	ppb	2.5	18129.01	500	19.79	79.5	120.4	
As	75	89	He	100.212	ppb	1.6	3093.35	100	20.04	79.5	120.4	
Se	78	89	H2	96.319	ppb	1.7	1614.85	100	19.26	79.5	120.4	
Sr	88	89	He	484.940	ppb	0.7	76776.49	500	19.4	79.5	120.4	
Mo	95	89	He	104.039	ppb	1.2	18617.70	100	20.81	79.5	120.4	
Ag	107	89	He	53.269	ppb	0.5	32802.62	50	21.31	79.5	120.4	
Cd	111	89	He	264.253	ppb	0.8	20893.23	250	21.14	79.5	120.4	
Sn	118	159	He	499.531	ppb	0.6	96728.89	500	19.98	79.5	120.4	
Sb	121	159	No Gas	85.130	ppb	6.9	148796.03	100	17.03	79.5	120.4	
Ba	137	159	No Gas	1806.399	ppb	6.5	1250473.89	2000	18.06	79.5	120.4	
W	182	159	No Gas	95.187	ppb	7.0	130973.01	100	19.04	79.5	120.4	
Tl	205	209	No Gas	98.349	ppb	6.9	300284.16	100	19.67	79.5	120.4	
[Pb]	206	209	No Gas	97.843	ppb	6.7	104024.69	100	19.57	79.5	120.4	
[Pb]	207	209	No Gas	98.148	ppb	6.3	90722.28	100	19.63	79.5	120.4	
Pb	208	209	No Gas	97.775	ppb	6.5	414948.51	100	19.56	79.5	120.4	
Th	232	209	No Gas	95.924	ppb	7.6	420913.46	100	19.18	79.5	120.4	
U	238	209	No Gas	98.261	ppb	7.6	404718.19	100	19.65	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	812022.64	3.6	1023754.81	79.32	29.5	120.4	
Sc	45	No Gas	2688629.63	4.4	2927134.09	91.85	29.5	120.4	
Sc	45	H2	311319.39	0.7	374925.7	83.03	29.5	120.4	
Sc	45	He	62706.44	1.0	75429.93	83.13	29.5	120.4	
Ge	72	No Gas	684549.78	4.4	682196.39	100.34	29.5	120.4	
Ge	72	H2	121775.78	1.2	145757.5	83.55	29.5	120.4	
Ge	72	He	52977.41	0.5	59866.13	88.49	29.5	120.4	
Y	89	H2	2288064.31	0.3	2441196.5	93.73	29.5	120.4	
Y	89	He	471372.02	0.6	531537.69	88.68	29.5	120.4	
Tb	159	No Gas	8371305.02	3.7	7041897.33	118.88	29.5	120.4	
Tb	159	He	2850255.02	0.7	2795586.52	101.96	29.5	120.4	
Bi	209	No Gas	4560579.53	4.0	3760534.49	121.27	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-025R

File Name 116SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:56:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.338	ppb	24.7	77.78	100	
11	B	6	No Gas	15.338	ppb	12.3	2921.52	1000	
23	Na	45	He	174.011	ppb	9.4	11150.07	200000	
24	Mg	45	He	195.787	ppb	1.8	2784.90	200000	
27	Al	45	He	10337.220	ppb	1.1	42447.21	200000	
28	Si	45	H2	2815.088	ppb	10.9	22337.83	10000	
39	K	45	He	64.930	ppb	57.1	9985.68	200000	
40	Ca	45	H2	360.908	ppb	1.4	28120.86	200000	
51	V	89	He	9.892	ppb	6.7	1809.07	1000	
52	Cr	89	He	7.389	ppb	7.3	1578.48	2000	
55	Mn	89	He	6.107	ppb	8.8	637.24	2000	
56	Fe	89	H2	1094.962	ppb	0.4	375245.87	100000	
59	Co	89	He	0.391	ppb	37.7	168.90	1000	
60	Ni	89	He	-0.291	ppb	N/A	552.25	1000	
63	Cu	89	He	2.252	ppb	5.0	698.93	2000	
66	Zn	89	He	5.778	ppb	5.1	303.35	2000	
75	As	89	He	0.931	ppb	40.3	32.67	1000	
78	Se	89	H2	0.612	ppb	15.6	10.67	1000	
88	Sr	89	He	6.165	ppb	5.5	980.08	2000	
95	Mo	89	He	0.618	ppb	6.8	118.89	1000	
107	Ag	89	He	3.566	ppb	1.3	2210.26	100	
111	Cd	89	He	0.061	ppb	35.8	4.81	1000	
118	Sn	159	He	37.198	ppb	1.1	7296.68	1000	
121	Sb	159	No Gas	1.796	ppb	6.0	3223.96	1000	
137	Ba	159	No Gas	12.240	ppb	11.6	8579.12	2000	
182	W	159	No Gas	0.288	ppb	30.7	450.51	1000	
205	Tl	209	No Gas	0.122	ppb	9.7	400.46	1000	
208	Pb	209	No Gas	10.624	ppb	5.9	46137.83	2000	
232	Th	209	No Gas	2.790	ppb	1.8	12630.45	1000	
238	U	209	No Gas	0.458	ppb	15.1	1935.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	795068.83	4.0	1023754.81	77.66	29.5	120.4	
Sc	45	No Gas	2708886.66	3.7	2927134.09	92.54	29.5	120.4	
Sc	45	H2	314088.72	0.4	374925.7	83.77	29.5	120.4	
Sc	45	He	63378.27	0.5	75429.93	84.02	29.5	120.4	
Ge	72	No Gas	692670.92	3.4	682196.39	101.54	29.5	120.4	
Ge	72	H2	123394.97	0.2	145757.5	84.66	29.5	120.4	
Ge	72	He	53297.46	0.6	59866.13	89.03	29.5	120.4	
Y	89	H2	2309269.79	0.1	2441196.5	94.6	29.5	120.4	
Y	89	He	473279.19	0.7	531537.69	89.04	29.5	120.4	
Tb	159	No Gas	8438421.68	3.5	7041897.33	119.83	29.5	120.4	
Tb	159	He	2865728.12	0.6	2795586.52	102.51	29.5	120.4	
Bi	209	No Gas	4654409.09	3.8	3760534.49	123.77	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-028R

File Name 117SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 9:59:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.135	ppb	44.5	42.22	100	
11	B	6	No Gas	9.777	ppb	6.9	2276.92	1000	
23	Na	45	He	168.707	ppb	7.5	10896.24	200000	
24	Mg	45	He	88.779	ppb	6.7	1664.66	200000	
27	Al	45	He	854.491	ppb	1.9	3484.99	200000	
28	Si	45	H2	717.227	ppb	15.9	5802.14	10000	
39	K	45	He	22.719	ppb	62.1	9437.20	200000	
40	Ca	45	H2	308.914	ppb	8.4	23477.94	200000	
51	V	89	He	3.987	ppb	7.4	820.06	1000	
52	Cr	89	He	2.664	ppb	9.9	601.91	2000	
55	Mn	89	He	3.795	ppb	12.2	405.28	2000	
56	Fe	89	H2	297.926	ppb	9.0	103397.79	100000	
59	Co	89	He	0.074	ppb	77.7	55.56	1000	
60	Ni	89	He	-2.964	ppb	N/A	291.13	1000	
63	Cu	89	He	1.055	ppb	10.8	370.02	2000	
66	Zn	89	He	2.689	ppb	26.9	188.90	2000	
75	As	89	He	0.266	ppb	53.5	12.00	1000	
78	Se	89	H2	0.103	ppb	59.2	2.00	1000	
88	Sr	89	He	29.358	ppb	3.2	4629.84	2000	
95	Mo	89	He	0.473	ppb	19.9	92.23	1000	
107	Ag	89	He	0.039	ppb	27.2	30.00	100	
111	Cd	89	He	0.070	ppb	34.3	5.56	1000	
118	Sn	159	He	43.790	ppb	1.8	8520.77	1000	
121	Sb	159	No Gas	0.130	ppb	15.3	283.66	1000	
137	Ba	159	No Gas	9.674	ppb	1.1	6682.39	2000	
182	W	159	No Gas	0.051	ppb	82.5	120.14	1000	
205	Tl	209	No Gas	0.019	ppb	51.5	76.75	1000	
208	Pb	209	No Gas	4.906	ppb	3.7	20753.17	2000	
232	Th	209	No Gas	0.729	ppb	7.3	3280.78	1000	
238	U	209	No Gas	0.239	ppb	5.7	987.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	781394.07	2.2	1023754.81	76.33	29.5	120.4	
Sc	45	No Gas	2636639.59	1.7	2927134.09	90.08	29.5	120.4	
Sc	45	H2	305296.29	4.6	374925.7	81.43	29.5	120.4	
Sc	45	He	62472.06	0.5	75429.93	82.82	29.5	120.4	
Ge	72	No Gas	679182.07	2.2	682196.39	99.56	29.5	120.4	
Ge	72	H2	120843.30	4.2	145757.5	82.91	29.5	120.4	
Ge	72	He	52365.55	0.3	59866.13	87.47	29.5	120.4	
Y	89	H2	2251054.18	4.9	2441196.5	92.21	29.5	120.4	
Y	89	He	469574.12	0.6	531537.69	88.34	29.5	120.4	
Tb	159	No Gas	8296466.06	1.4	7041897.33	117.82	29.5	120.4	
Tb	159	He	2846152.39	0.1	2795586.52	101.81	29.5	120.4	
Bi	209	No Gas	4513892.28	1.9	3760534.49	120.03	29.5	120.4	

Sample Report

Sample Name SN5107-029R

File Name 118SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:01:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.083	ppb	46.8	33.33	100	
11	B	6	No Gas	5.790	ppb	15.4	1841.30	1000	
23	Na	45	He	160.998	ppb	6.8	10809.39	200000	
24	Mg	45	He	83.828	ppb	15.5	1622.43	200000	
27	Al	45	He	870.763	ppb	3.0	3568.36	200000	
28	Si	45	H2	742.295	ppb	1.6	6118.77	10000	
39	K	45	He	2.473	ppb	1431.2	9287.24	200000	
40	Ca	45	H2	223.421	ppb	2.7	17582.57	200000	
51	V	89	He	3.242	ppb	4.2	700.05	1000	
52	Cr	89	He	2.286	ppb	3.5	526.59	2000	
55	Mn	89	He	2.699	ppb	11.2	298.62	2000	
56	Fe	89	H2	291.900	ppb	2.1	103442.14	100000	
59	Co	89	He	0.086	ppb	97.5	60.00	1000	
60	Ni	89	He	-3.262	ppb	N/A	263.34	1000	
63	Cu	89	He	0.907	ppb	6.8	331.13	2000	
66	Zn	89	He	2.301	ppb	28.3	175.56	2000	
75	As	89	He	0.200	ppb	32.1	10.00	1000	
78	Se	89	H2	0.140	ppb	12.2	2.67	1000	
88	Sr	89	He	24.108	ppb	2.1	3818.45	2000	
95	Mo	89	He	0.267	ppb	28.8	55.56	1000	
107	Ag	89	He	0.010	ppb	121.8	12.22	100	
111	Cd	89	He	0.023	ppb	124.3	1.85	1000	
118	Sn	159	He	38.680	ppb	4.2	7522.38	1000	
121	Sb	159	No Gas	0.056	ppb	42.6	156.84	1000	
137	Ba	159	No Gas	8.685	ppb	4.7	6021.41	2000	
182	W	159	No Gas	0.063	ppb	55.8	136.82	1000	
205	Tl	209	No Gas	0.028	ppb	28.6	106.79	1000	
208	Pb	209	No Gas	4.373	ppb	4.6	18653.00	2000	
232	Th	209	No Gas	0.713	ppb	7.6	3237.40	1000	
238	U	209	No Gas	0.217	ppb	10.2	904.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	779200.80	0.5	1023754.81	76.11	29.5	120.4	
Sc	45	No Gas	2628913.17	0.6	2927134.09	89.81	29.5	120.4	
Sc	45	H2	310530.65	1.2	374925.7	82.82	29.5	120.4	
Sc	45	He	62781.26	0.3	75429.93	83.23	29.5	120.4	
Ge	72	No Gas	678048.69	1.6	682196.39	99.39	29.5	120.4	
Ge	72	H2	121783.11	1.3	145757.5	83.55	29.5	120.4	
Ge	72	He	52572.66	0.6	59866.13	87.82	29.5	120.4	
Y	89	H2	2289784.60	0.7	2441196.5	93.8	29.5	120.4	
Y	89	He	471560.64	1.0	531537.69	88.72	29.5	120.4	
Tb	159	No Gas	8323499.53	1.0	7041897.33	118.2	29.5	120.4	
Tb	159	He	2842292.60	0.7	2795586.52	101.67	29.5	120.4	
Bi	209	No Gas	4547441.76	0.7	3760534.49	120.93	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-031R

File Name 119SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:04:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.124	ppb	65.6	41.11	100	
11	B	6	No Gas	10.782	ppb	2.3	2441.41	1000	
23	Na	45	He	180.376	ppb	18.1	11210.24	200000	
24	Mg	45	He	220.984	ppb	10.8	3027.21	200000	
27	Al	45	He	10861.853	ppb	0.6	44386.60	200000	
28	Si	45	H2	2820.765	ppb	6.9	21955.91	10000	
39	K	45	He	67.419	ppb	20.6	9962.35	200000	
40	Ca	45	H2	369.145	ppb	1.4	28190.96	200000	
51	V	89	He	10.800	ppb	6.7	1956.87	1000	
52	Cr	89	He	7.730	ppb	6.5	1646.47	2000	
55	Mn	89	He	7.622	ppb	4.3	786.55	2000	
56	Fe	89	H2	1276.388	ppb	0.5	431893.33	100000	
59	Co	89	He	0.386	ppb	43.5	166.68	1000	
60	Ni	89	He	-0.319	ppb	N/A	548.92	1000	
63	Cu	89	He	2.149	ppb	4.1	670.04	2000	
66	Zn	89	He	6.885	ppb	10.1	343.35	2000	
75	As	89	He	0.900	ppb	21.1	31.67	1000	
78	Se	89	H2	0.699	ppb	34.4	12.00	1000	
88	Sr	89	He	5.850	ppb	6.2	928.95	2000	
95	Mo	89	He	0.564	ppb	39.4	108.90	1000	
107	Ag	89	He	0.480	ppb	6.2	302.24	100	
111	Cd	89	He	0.061	ppb	35.9	4.81	1000	
118	Sn	159	He	36.729	ppb	1.7	7182.19	1000	
121	Sb	159	No Gas	0.040	ppb	19.8	130.15	1000	
137	Ba	159	No Gas	10.857	ppb	10.4	7600.75	2000	
182	W	159	No Gas	0.106	ppb	49.2	196.89	1000	
205	Tl	209	No Gas	0.058	ppb	28.4	203.56	1000	
208	Pb	209	No Gas	10.648	ppb	7.4	46351.90	2000	
232	Th	209	No Gas	2.225	ppb	7.6	10108.80	1000	
238	U	209	No Gas	0.358	ppb	8.8	1521.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	799867.66	2.4	1023754.81	78.13	29.5	120.4	
Sc	45	No Gas	2698709.27	3.7	2927134.09	92.2	29.5	120.4	
Sc	45	H2	308082.22	0.2	374925.7	82.17	29.5	120.4	
Sc	45	He	63072.43	0.9	75429.93	83.62	29.5	120.4	
Ge	72	No Gas	689291.86	3.0	682196.39	101.04	29.5	120.4	
Ge	72	H2	122842.29	1.7	145757.5	84.28	29.5	120.4	
Ge	72	He	52719.04	0.4	59866.13	88.06	29.5	120.4	
Y	89	H2	2285131.67	0.4	2441196.5	93.61	29.5	120.4	
Y	89	He	472642.32	0.6	531537.69	88.92	29.5	120.4	
Tb	159	No Gas	8430217.86	3.5	7041897.33	119.72	29.5	120.4	
Tb	159	He	2856456.97	0.8	2795586.52	102.18	29.5	120.4	
Bi	209	No Gas	4665486.94	3.2	3760534.49	124.06	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-032R

File Name 120SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:07:17 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	44.670	ppb	9.9	7690.08	100	
11	B	6	No Gas	470.876	ppb	7.9	53221.04	1000	
23	Na	45	He	7425.482	ppb	1.6	145440.83	200000	
24	Mg	45	He	4881.840	ppb	0.6	51165.10	200000	
27	Al	45	He	18566.065	ppb	1.0	76770.46	200000	
28	Si	45	H2	2803.868	ppb	4.9	22185.05	10000	
39	K	45	He	9222.939	ppb	1.1	100268.72	200000	
40	Ca	45	H2	3113.670	ppb	1.6	234241.44	200000	
51	V	89	He	445.352	ppb	0.8	75095.83	1000	
52	Cr	89	He	189.217	ppb	0.3	39437.54	2000	
55	Mn	89	He	452.755	ppb	0.4	45382.92	2000	
56	Fe	89	H2	1945.247	ppb	0.3	661477.84	100000	
59	Co	89	He	460.529	ppb	1.0	165537.40	1000	
60	Ni	89	He	462.851	ppb	0.6	45907.18	1000	
63	Cu	89	He	229.944	ppb	0.5	63463.62	2000	
66	Zn	89	He	462.794	ppb	1.1	17223.37	2000	
75	As	89	He	90.362	ppb	1.4	2832.60	1000	
78	Se	89	H2	89.098	ppb	1.0	1506.18	1000	
88	Sr	89	He	459.690	ppb	1.4	73896.99	2000	
95	Mo	89	He	94.503	ppb	0.6	17172.40	1000	
107	Ag	89	He	50.408	ppb	0.3	31518.49	100	
111	Cd	89	He	241.967	ppb	1.4	19424.38	1000	
118	Sn	159	He	460.769	ppb	0.6	90419.34	1000	
121	Sb	159	No Gas	60.064	ppb	6.6	105757.75	1000	
137	Ba	159	No Gas	1671.639	ppb	7.8	1165041.23	2000	
182	W	159	No Gas	76.798	ppb	8.5	106398.09	1000	
205	Tl	209	No Gas	89.691	ppb	7.3	275705.06	1000	
208	Pb	209	No Gas	109.943	ppb	7.6	469652.45	2000	
232	Th	209	No Gas	89.728	ppb	9.2	396352.97	1000	
238	U	209	No Gas	89.728	ppb	8.7	372067.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	801515.67	2.9	1023754.81	78.29	29.5	120.4	
Sc	45	No Gas	2680638.09	2.7	2927134.09	91.58	29.5	120.4	
Sc	45	H2	313051.67	1.4	374925.7	83.5	29.5	120.4	
Sc	45	He	63842.51	0.5	75429.93	84.64	29.5	120.4	
Ge	72	No Gas	688269.16	2.6	682196.39	100.89	29.5	120.4	
Ge	72	H2	123944.95	2.2	145757.5	85.04	29.5	120.4	
Ge	72	He	53519.43	0.8	59866.13	89.4	29.5	120.4	
Y	89	H2	2307121.96	0.3	2441196.5	94.51	29.5	120.4	
Y	89	He	478616.42	0.5	531537.69	90.04	29.5	120.4	
Tb	159	No Gas	8425907.93	2.6	7041897.33	119.65	29.5	120.4	
Tb	159	He	2888431.21	0.3	2795586.52	103.32	29.5	120.4	
Bi	209	No Gas	4588733.52	2.6	3760534.49	122.02	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-032RL

File Name 121SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:09:49 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.394	ppb	5.3	1641.27	100	
11	B	6	No Gas	516.319	ppb	7.6	12863.94	1000	
23	Na	45	He	7596.622	ppb	1.7	37122.74	200000	
24	Mg	45	He	5186.877	ppb	1.6	11805.68	200000	
27	Al	45	He	19154.969	ppb	1.7	16298.66	200000	
28	Si	45	H2	2875.348	ppb	8.7	5063.92	10000	
39	K	45	He	9355.611	ppb	3.7	28612.30	200000	
40	Ca	45	H2	3150.247	ppb	0.6	50102.91	200000	
51	V	89	He	460.161	ppb	2.8	15915.06	1000	
52	Cr	89	He	191.342	ppb	3.1	8158.88	2000	
55	Mn	89	He	460.043	ppb	1.4	9406.76	2000	
56	Fe	89	H2	1956.904	ppb	1.0	141353.89	100000	
59	Co	89	He	467.127	ppb	1.2	34181.53	1000	
60	Ni	89	He	455.820	ppb	3.1	9674.77	1000	
63	Cu	89	He	237.835	ppb	2.2	13421.31	2000	
66	Zn	89	He	465.263	ppb	4.5	3597.27	2000	
75	As	89	He	93.080	ppb	1.7	596.75	1000	
78	Se	89	H2	85.100	ppb	0.4	295.49	1000	
88	Sr	89	He	467.630	ppb	2.1	15295.65	2000	
95	Mo	89	He	94.786	ppb	0.4	3510.59	1000	
107	Ag	89	He	50.399	ppb	3.8	6413.99	100	
111	Cd	89	He	247.005	ppb	2.0	4033.61	1000	
118	Sn	159	He	474.632	ppb	1.0	18578.90	1000	
121	Sb	159	No Gas	63.288	ppb	7.5	22323.63	1000	
137	Ba	159	No Gas	1694.999	ppb	9.3	236157.11	2000	
182	W	159	No Gas	77.128	ppb	7.1	21415.04	1000	
205	Tl	209	No Gas	89.009	ppb	8.8	54627.84	1000	
208	Pb	209	No Gas	110.364	ppb	8.1	94223.37	2000	
232	Th	209	No Gas	79.914	ppb	7.1	70600.62	1000	
238	U	209	No Gas	88.098	ppb	9.1	72937.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	814466.24	1.7	1023754.81	79.56	29.5	120.4	
Sc	45	No Gas	2772034.52	2.8	2927134.09	94.7	29.5	120.4	
Sc	45	H2	325448.21	0.6	374925.7	86.8	29.5	120.4	
Sc	45	He	65599.34	1.5	75429.93	86.97	29.5	120.4	
Ge	72	No Gas	698227.39	3.4	682196.39	102.35	29.5	120.4	
Ge	72	H2	126463.41	0.8	145757.5	86.76	29.5	120.4	
Ge	72	He	54491.69	0.9	59866.13	91.02	29.5	120.4	
Y	89	H2	2367284.47	0.1	2441196.5	96.97	29.5	120.4	
Y	89	He	486842.31	1.2	531537.69	91.59	29.5	120.4	
Tb	159	No Gas	8428079.88	3.5	7041897.33	119.68	29.5	120.4	
Tb	159	He	2873719.68	1.2	2795586.52	102.79	29.5	120.4	
Bi	209	No Gas	4582630.13	3.3	3760534.49	121.86	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	122_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:12:19 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.856	ppb	2.9	22868.74	25	99.42	89.8	110.2	
11	B	6	No Gas	24.861	ppb	2.4	16024.90	25	99.44	89.8	110.2	
23	Na	45	He	5125.393	ppb	1.2	490860.95	5000	102.51	89.8	110.2	
24	Mg	45	He	4943.178	ppb	0.8	260399.41	5000	98.86	89.8	110.2	
27	Al	45	He	466.465	ppb	1.6	9841.49	500	93.29	89.8	110.2	
28	Si	45	H2	439.280	ppb	1.1	18101.76	500	87.86	89.8	110.2	> +/- 10%
39	K	45	He	4854.816	ppb	0.9	252940.84	5000	97.1	89.8	110.2	
40	Ca	45	H2	4767.177	ppb	1.4	1852151.71	5000	95.34	89.8	110.2	
51	V	89	He	24.082	ppb	0.1	20492.21	25	96.33	89.8	110.2	
52	Cr	89	He	24.126	ppb	0.1	25247.86	25	96.5	89.8	110.2	
55	Mn	89	He	24.134	ppb	0.6	12160.36	25	96.54	89.8	110.2	
56	Fe	89	H2	4591.138	ppb	1.5	7894920.79	5000	91.82	89.8	110.2	
59	Co	89	He	24.362	ppb	0.4	43953.38	25	97.45	89.8	110.2	
60	Ni	89	He	24.108	ppb	1.4	12431.51	25	96.43	89.8	110.2	
63	Cu	89	He	24.565	ppb	0.8	34053.37	25	98.26	89.8	110.2	
66	Zn	89	He	23.935	ppb	2.3	4537.57	25	95.74	89.8	110.2	
75	As	89	He	24.198	ppb	1.8	3804.27	25	96.79	89.8	110.2	
78	Se	89	H2	22.801	ppb	1.3	1965.05	25	91.2	89.8	110.2	
88	Sr	89	He	23.750	ppb	1.5	19152.80	25	95	89.8	110.2	
95	Mo	89	He	24.551	ppb	0.5	22378.91	25	98.2	89.8	110.2	
107	Ag	89	He	25.472	ppb	0.7	79894.76	25	101.89	89.8	110.2	
111	Cd	89	He	25.359	ppb	0.9	10213.20	25	101.44	89.8	110.2	
118	Sn	159	He	22.683	ppb	1.4	21941.86	25	90.73	89.8	110.2	
121	Sb	159	No Gas	22.691	ppb	4.7	188947.34	25	90.76	89.8	110.2	
137	Ba	159	No Gas	22.933	ppb	4.3	75668.72	25	91.73	89.8	110.2	
182	W	159	No Gas	23.197	ppb	3.0	152115.22	25	92.79	89.8	110.2	
205	Tl	209	No Gas	23.584	ppb	4.2	343391.65	25	94.34	89.8	110.2	
208	Pb	209	No Gas	23.659	ppb	4.4	478716.14	25	94.64	89.8	110.2	
232	Th	209	No Gas	23.698	ppb	4.1	495969.81	25	94.79	89.8	110.2	
238	U	209	No Gas	23.999	ppb	4.2	471476.02	25	96	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	856849.86	1.6	1023754.81	83.7	29.5	120.4	
Sc	45	No Gas	2732143.79	3.0	2927134.09	93.34	29.5	120.4	
Sc	45	H2	324509.93	0.7	374925.7	86.55	29.5	120.4	
Sc	45	He	64980.44	1.3	75429.93	86.15	29.5	120.4	
Ge	72	No Gas	670978.45	2.7	682196.39	98.36	29.5	120.4	
Ge	72	H2	128926.31	0.7	145757.5	88.45	29.5	120.4	
Ge	72	He	54296.20	0.4	59866.13	90.7	29.5	120.4	
Y	89	H2	2352709.94	1.2	2441196.5	96.38	29.5	120.4	
Y	89	He	480216.57	0.6	531537.69	90.34	29.5	120.4	
Tb	159	No Gas	7970665.58	2.9	7041897.33	113.19	29.5	120.4	
Tb	159	He	2841903.22	0.0	2795586.52	101.66	29.5	120.4	
Bi	209	No Gas	4345410.36	3.1	3760534.49	115.55	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	123_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:14:55 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	18.3	83.33	0.2	
11	B	6	No Gas	0.798	ppb	26.9	1835.74	4	
23	Na	45	He	7.009	ppb	62.1	9159.83	200	
24	Mg	45	He	3.126	ppb	62.9	1000.11	20	
27	Al	45	He	-0.648	ppb	N/A	16.67	20	
28	Si	45	H2	1.021	ppb	135.0	467.19	100	
39	K	45	He	-7.860	ppb	N/A	9555.60	200	
40	Ca	45	H2	0.751	ppb	8.8	1336.78	20	
51	V	89	He	0.025	ppb	97.4	191.12	1	
52	Cr	89	He	0.003	ppb	210.4	63.32	1	
55	Mn	89	He	0.007	ppb	276.6	37.32	0.4	
56	Fe	89	H2	1.041	ppb	22.7	7734.16	20	
59	Co	89	He	0.003	ppb	453.7	35.56	0.2	
60	Ni	89	He	-0.558	ppb	N/A	322.24	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.012	ppb	N/A	71.12	0.6	
66	Zn	89	He	-0.181	ppb	N/A	61.11	2	
75	As	89	He	0.014	ppb	251.2	6.33	1	
78	Se	89	H2	0.027	ppb	32.7	2.67	1	
88	Sr	89	He	0.009	ppb	64.5	7.78	1	
95	Mo	89	He	0.096	ppb	18.2	97.78	1	
107	Ag	89	He	0.009	ppb	17.8	35.56	0.2	
111	Cd	89	He	0.013	ppb	53.8	5.19	0.2	
118	Sn	159	He	0.114	ppb	24.8	170.01	1	
121	Sb	159	No Gas	0.027	ppb	19.7	290.32	0.2	
137	Ba	159	No Gas	0.019	ppb	53.6	100.11	0.4	
182	W	159	No Gas	0.097	ppb	7.9	697.48	1	
205	Tl	209	No Gas	0.026	ppb	29.7	407.13	0.2	
208	Pb	209	No Gas	0.019	ppb	26.9	507.23	0.2	
232	Th	209	No Gas	0.074	ppb	26.7	1685.36	1	
238	U	209	No Gas	0.024	ppb	40.4	487.23	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	867360.44	1.5	1023754.81	84.72	29.5	120.4	
Sc	45	No Gas	2796644.93	1.9	2927134.09	95.54	29.5	120.4	
Sc	45	H2	329633.11	1.3	374925.7	87.92	29.5	120.4	
Sc	45	He	67528.74	1.0	75429.93	89.53	29.5	120.4	
Ge	72	No Gas	689856.04	2.5	682196.39	101.12	29.5	120.4	
Ge	72	H2	130538.78	1.4	145757.5	89.56	29.5	120.4	
Ge	72	He	55336.61	0.7	59866.13	92.43	29.5	120.4	
Y	89	H2	2345549.27	0.6	2441196.5	96.08	29.5	120.4	
Y	89	He	491655.47	1.1	531537.69	92.5	29.5	120.4	
Tb	159	No Gas	8109834.19	1.8	7041897.33	115.17	29.5	120.4	
Tb	159	He	2871166.94	0.9	2795586.52	102.7	29.5	120.4	
Bi	209	No Gas	4433780.19	2.1	3760534.49	117.9	29.5	120.4	

Sample Report

Sample Name SN5107-032RA

File Name 124SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:17:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.068	ppb	8.1	9520.09	100	
11	B	6	No Gas	636.639	ppb	9.2	77423.62	1000	
23	Na	45	He	18135.196	ppb	0.9	338749.89	200000	
24	Mg	45	He	5956.798	ppb	2.0	61369.98	200000	
27	Al	45	He	19593.559	ppb	1.9	79859.51	200000	
28	Si	45	H2	7715.005	ppb	1.5	59898.60	10000	
39	K	45	He	19234.632	ppb	2.2	196041.20	200000	
40	Ca	45	H2	4117.517	ppb	0.7	307311.09	200000	
51	V	89	He	495.138	ppb	1.0	82497.16	1000	
52	Cr	89	He	237.594	ppb	0.9	48925.83	2000	
55	Mn	89	He	470.095	ppb	0.7	46569.25	2000	
56	Fe	89	H2	2867.856	ppb	0.8	971114.01	100000	
59	Co	89	He	467.342	ppb	0.4	166036.50	1000	
60	Ni	89	He	480.124	ppb	1.6	47040.98	1000	
63	Cu	89	He	260.633	ppb	0.5	71085.72	2000	
66	Zn	89	He	573.374	ppb	1.0	21067.61	2000	
75	As	89	He	140.360	ppb	0.9	4346.82	1000	
78	Se	89	H2	133.379	ppb	2.3	2251.58	1000	
88	Sr	89	He	504.350	ppb	1.1	80127.87	2000	
95	Mo	89	He	146.657	ppb	0.5	26334.93	1000	
107	Ag	89	He	60.955	ppb	0.5	37667.60	100	
111	Cd	89	He	249.828	ppb	0.7	19822.36	1000	
118	Sn	159	He	499.963	ppb	0.1	96621.63	1000	
121	Sb	159	No Gas	68.216	ppb	8.5	117272.45	1000	
137	Ba	159	No Gas	1642.714	ppb	9.4	1118024.07	2000	
182	W	159	No Gas	122.055	ppb	8.1	165174.71	1000	
205	Tl	209	No Gas	96.036	ppb	9.9	289715.65	1000	
208	Pb	209	No Gas	114.625	ppb	10.1	480537.03	2000	
232	Th	209	No Gas	97.941	ppb	10.3	424657.45	1000	
238	U	209	No Gas	95.013	ppb	11.1	386600.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	868419.03	3.8	1023754.81	84.83	29.5	120.4	
Sc	45	No Gas	2737186.23	4.3	2927134.09	93.51	29.5	120.4	
Sc	45	H2	310863.74	1.7	374925.7	82.91	29.5	120.4	
Sc	45	He	62933.85	0.8	75429.93	83.43	29.5	120.4	
Ge	72	No Gas	685506.55	4.6	682196.39	100.49	29.5	120.4	
Ge	72	H2	123971.56	1.2	145757.5	85.05	29.5	120.4	
Ge	72	He	53019.81	0.6	59866.13	88.56	29.5	120.4	
Y	89	H2	2303981.01	0.4	2441196.5	94.38	29.5	120.4	
Y	89	He	473037.60	0.8	531537.69	88.99	29.5	120.4	
Tb	159	No Gas	8236453.00	3.8	7041897.33	116.96	29.5	120.4	
Tb	159	He	2844705.37	0.5	2795586.52	101.76	29.5	120.4	
Bi	209	No Gas	4510450.29	4.3	3760534.49	119.94	29.5	120.4	

Sample Report

Sample Name SN5107-032RS

File Name 125SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:19:57 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.488	ppb	20.8	105.56	100	
11	B	6	No Gas	24.738	ppb	4.7	4044.03	1000	
23	Na	45	He	228.431	ppb	5.9	11931.61	200000	
24	Mg	45	He	249.352	ppb	11.7	3273.95	200000	
27	Al	45	He	8841.112	ppb	2.7	35644.16	200000	
28	Si	45	H2	2380.738	ppb	1.8	18642.31	10000	
39	K	45	He	161.629	ppb	3.4	10734.28	200000	
40	Ca	45	H2	846.129	ppb	0.9	63524.20	200000	
51	V	89	He	10.533	ppb	2.5	1894.64	1000	
52	Cr	89	He	6.966	ppb	0.9	1475.81	2000	
55	Mn	89	He	7.883	ppb	8.6	804.55	2000	
56	Fe	89	H2	827.032	ppb	0.5	280972.37	100000	
59	Co	89	He	0.491	ppb	11.2	202.24	1000	
60	Ni	89	He	-0.511	ppb	N/A	525.59	1000	
63	Cu	89	He	3.083	ppb	3.2	915.62	2000	
66	Zn	89	He	9.085	ppb	7.9	420.02	2000	
75	As	89	He	1.031	ppb	20.6	35.33	1000	
78	Se	89	H2	1.200	ppb	10.0	20.33	1000	
88	Sr	89	He	10.139	ppb	4.1	1594.61	2000	
95	Mo	89	He	0.763	ppb	7.4	143.34	1000	
107	Ag	89	He	1.391	ppb	5.0	856.73	100	
111	Cd	89	He	0.085	ppb	33.2	6.67	1000	
118	Sn	159	He	42.051	ppb	4.6	8140.53	1000	
121	Sb	159	No Gas	1.029	ppb	2.2	1862.20	1000	
137	Ba	159	No Gas	16.881	ppb	6.5	11734.91	2000	
182	W	159	No Gas	0.473	ppb	15.5	707.49	1000	
205	Tl	209	No Gas	0.233	ppb	28.3	750.87	1000	
208	Pb	209	No Gas	13.957	ppb	16.9	60107.30	2000	
232	Th	209	No Gas	2.620	ppb	7.0	11792.14	1000	
238	U	209	No Gas	0.508	ppb	3.2	2142.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	813359.09	4.7	1023754.81	79.45	29.5	120.4	
Sc	45	No Gas	2723012.66	5.2	2927134.09	93.03	29.5	120.4	
Sc	45	H2	308874.56	0.1	374925.7	82.38	29.5	120.4	
Sc	45	He	62230.06	1.0	75429.93	82.5	29.5	120.4	
Ge	72	No Gas	690032.59	3.4	682196.39	101.15	29.5	120.4	
Ge	72	H2	122824.03	1.9	145757.5	84.27	29.5	120.4	
Ge	72	He	52332.08	1.4	59866.13	87.42	29.5	120.4	
Y	89	H2	2277769.10	0.6	2441196.5	93.31	29.5	120.4	
Y	89	He	468242.46	1.6	531537.69	88.09	29.5	120.4	
Tb	159	No Gas	8381739.81	4.2	7041897.33	119.03	29.5	120.4	
Tb	159	He	2832009.20	1.4	2795586.52	101.3	29.5	120.4	
Bi	209	No Gas	4633045.59	4.4	3760534.49	123.2	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-032RP

File Name 126SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:22:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	39.849	ppb	13.0	7015.27	100	
11	B	6	No Gas	421.075	ppb	15.3	48750.59	1000	
23	Na	45	He	7408.830	ppb	1.6	145329.15	200000	
24	Mg	45	He	4888.137	ppb	2.3	51294.53	200000	
27	Al	45	He	18114.671	ppb	2.3	75001.48	200000	
28	Si	45	H2	2717.957	ppb	1.5	21463.58	10000	
39	K	45	He	9198.967	ppb	1.5	100171.05	200000	
40	Ca	45	H2	3126.936	ppb	0.6	234725.61	200000	
51	V	89	He	446.734	ppb	1.9	75550.37	1000	
52	Cr	89	He	187.395	ppb	1.0	39178.16	2000	
55	Mn	89	He	456.618	ppb	1.7	45906.50	2000	
56	Fe	89	H2	1919.182	ppb	0.7	651231.60	100000	
59	Co	89	He	457.605	ppb	1.3	164985.70	1000	
60	Ni	89	He	458.989	ppb	1.8	45666.23	1000	
63	Cu	89	He	230.145	ppb	1.7	63708.38	2000	
66	Zn	89	He	469.606	ppb	2.3	17527.12	2000	
75	As	89	He	91.852	ppb	1.8	2887.95	1000	
78	Se	89	H2	90.554	ppb	1.7	1527.19	1000	
88	Sr	89	He	462.395	ppb	2.2	74551.24	2000	
95	Mo	89	He	95.472	ppb	0.6	17402.71	1000	
107	Ag	89	He	50.364	ppb	2.1	31584.19	100	
111	Cd	89	He	243.952	ppb	2.4	19640.99	1000	
118	Sn	159	He	462.123	ppb	2.2	90514.45	1000	
121	Sb	159	No Gas	54.967	ppb	17.0	96492.36	1000	
137	Ba	159	No Gas	1490.018	ppb	16.0	1035962.29	2000	
182	W	159	No Gas	69.791	ppb	17.1	96466.62	1000	
205	Tl	209	No Gas	79.684	ppb	16.5	244499.30	1000	
208	Pb	209	No Gas	96.409	ppb	17.6	410994.64	2000	
232	Th	209	No Gas	78.590	ppb	15.7	346735.71	1000	
238	U	209	No Gas	78.497	ppb	17.1	324929.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	819803.06	2.8	1023754.81	80.08	29.5	120.4	
Sc	45	No Gas	2720859.28	4.5	2927134.09	92.95	29.5	120.4	
Sc	45	H2	312345.52	1.5	374925.7	83.31	29.5	120.4	
Sc	45	He	63942.59	2.2	75429.93	84.77	29.5	120.4	
Ge	72	No Gas	687862.77	3.7	682196.39	100.83	29.5	120.4	
Ge	72	H2	125212.23	0.9	145757.5	85.9	29.5	120.4	
Ge	72	He	53411.16	1.5	59866.13	89.22	29.5	120.4	
Y	89	H2	2301866.79	0.9	2441196.5	94.29	29.5	120.4	
Y	89	He	480123.91	1.6	531537.69	90.33	29.5	120.4	
Tb	159	No Gas	8430089.25	4.1	7041897.33	119.71	29.5	120.4	
Tb	159	He	2883839.61	2.0	2795586.52	103.16	29.5	120.4	
Bi	209	No Gas	4596922.38	4.5	3760534.49	122.24	29.5	120.4	6020/DoD

Prep Blank (PB) Report

Sample Name	PBSNG29IMS1
File Name	127_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:24:54 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.177	ppb	31.6	50.00	0.5	
B	11	6	No Gas	11.749	ppb	1.4	2531.42	10	PB 6020 Fails DoD
Na	23	45	He	129.008	ppb	30.4	10215.07	500	
Mg	24	45	He	26.123	ppb	9.8	1035.67	50	
Al	27	45	He	17.304	ppb	16.5	98.89	50	
Si	28	45	H2	12.991	ppb	68.7	500.59	250	
K	39	45	He	13.057	ppb	184.9	9378.90	500	
Ca	40	45	H2	50.400	ppb	5.0	4724.29	50	PB 6020 Fails DoD
V	51	89	He	3.352	ppb	5.5	721.15	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.811	ppb	11.9	225.29	2.5	
Mn	55	89	He	0.869	ppb	11.7	118.65	1	
Fe	56	89	H2	7.565	ppb	11.5	8315.00	50	
Co	59	89	He	0.191	ppb	34.5	97.79	0.5	
Ni	60	89	He	-2.863	ppb	N/A	303.35	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.486	ppb	16.2	217.79	1.5	
Zn	66	89	He	1.494	ppb	54.6	146.67	5	
As	75	89	He	0.231	ppb	55.9	11.00	2.5	
Se	78	89	H2	0.191	ppb	41.3	3.50	2.5	
Sr	88	89	He	0.266	ppb	24.2	42.22	2.5	
Mo	95	89	He	0.315	ppb	36.0	64.45	2.5	
Ag	107	89	He	0.037	ppb	55.1	28.89	0.5	
Cd	111	89	He	0.061	ppb	13.4	4.81	0.5	
Sn	118	159	He	40.187	ppb	0.3	7860.35	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.855	ppb	12.1	1571.85	0.5	PB 6020 Fails DoD
Ba	137	159	No Gas	1.858	ppb	7.9	1344.90	1	PB 6020 Fails DoD
W	182	159	No Gas	0.219	ppb	31.1	357.07	2.5	
Tl	205	209	No Gas	0.142	ppb	22.4	467.20	0.5	
Pb	208	209	No Gas	0.207	ppb	8.4	1021.18	0.5	
Th	232	209	No Gas	1.231	ppb	18.0	5647.65	2.5	
U	238	209	No Gas	0.091	ppb	26.5	397.12	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	794922.47	3.3	1023754.81	77.65	29.5	120.4	
Sc	45	No Gas	2720182.46	4.9	2927134.09	92.93	29.5	120.4	
Sc	45	H2	310387.29	0.3	374925.7	82.79	29.5	120.4	
Sc	45	He	62704.10	0.2	75429.93	83.13	29.5	120.4	
Ge	72	No Gas	696054.21	4.0	682196.39	102.03	29.5	120.4	
Ge	72	H2	123041.23	0.5	145757.5	84.42	29.5	120.4	
Ge	72	He	52985.94	0.4	59866.13	88.51	29.5	120.4	
Y	89	H2	2283605.35	0.6	2441196.5	93.54	29.5	120.4	
Y	89	He	473519.52	0.1	531537.69	89.08	29.5	120.4	
Tb	159	No Gas	8483593.62	4.2	7041897.33	120.47	29.5	120.4	6020/DoD
Tb	159	He	2859224.16	0.3	2795586.52	102.28	29.5	120.4	
Bi	209	No Gas	4647648.47	4.1	3760534.49	123.59	29.5	120.4	6020/DoD

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG29IMS1
File Name	128LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:27:30 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	47.209	ppb	6.1	8071.42	50	18.88	79.5	120.4	
B	11	6	No Gas	493.111	ppb	7.7	55265.26	500	19.72	79.5	120.4	
Na	23	45	He	7901.870	ppb	2.6	151317.37	7500	21.07	79.5	120.4	
Mg	24	45	He	5020.339	ppb	1.7	51597.89	5000	20.08	79.5	120.4	
Al	27	45	He	1744.823	ppb	1.4	7104.21	2000	17.45	79.5	120.4	
Si	28	45	H2	843.107	ppb	3.3	6889.36	1000	16.86	79.5	120.4	
K	39	45	He	9797.652	ppb	1.5	103920.44	10000	19.6	79.5	120.4	
Ca	40	45	H2	2477.922	ppb	1.5	184940.75	2500	19.82	79.5	120.4	
V	51	89	He	477.469	ppb	1.7	79420.82	500	19.1	79.5	120.4	
Cr	52	89	He	193.268	ppb	1.6	39740.96	200	19.33	79.5	120.4	
Mn	55	89	He	479.641	ppb	0.7	47433.83	500	19.19	79.5	120.4	
Fe	56	89	H2	957.762	ppb	0.6	327679.32	1000	19.16	79.5	120.4	
Co	59	89	He	498.095	ppb	1.0	176649.00	500	19.92	79.5	120.4	
Ni	60	89	He	496.205	ppb	1.6	48514.87	500	19.85	79.5	120.4	
Cu	63	89	He	249.381	ppb	0.1	67905.50	250	19.95	79.5	120.4	
Zn	66	89	He	499.545	ppb	1.2	18335.96	500	19.98	79.5	120.4	
As	75	89	He	102.302	ppb	1.4	3164.05	100	20.46	79.5	120.4	
Se	78	89	H2	94.730	ppb	2.1	1596.52	100	18.95	79.5	120.4	
Sr	88	89	He	483.170	ppb	0.3	76639.41	500	19.33	79.5	120.4	
Mo	95	89	He	103.631	ppb	1.6	18578.80	100	20.73	79.5	120.4	
Ag	107	89	He	52.976	ppb	0.6	32683.39	50	21.19	79.5	120.4	
Cd	111	89	He	261.503	ppb	0.5	20714.42	250	20.92	79.5	120.4	
Sn	118	159	He	495.416	ppb	1.0	96762.19	500	19.82	79.5	120.4	
Sb	121	159	No Gas	82.051	ppb	8.2	145348.81	100	16.41	79.5	120.4	
Ba	137	159	No Gas	1772.702	ppb	8.7	1243376.53	2000	17.73	79.5	120.4	
W	182	159	No Gas	94.012	ppb	8.3	131088.82	100	18.8	79.5	120.4	
Tl	205	209	No Gas	95.650	ppb	9.2	296473.01	100	19.13	79.5	120.4	
[Pb]	206	209	No Gas	95.169	ppb	9.0	102722.96	100	19.03	79.5	120.4	
[Pb]	207	209	No Gas	96.660	ppb	8.0	90726.18	100	19.33	79.5	120.4	
Pb	208	209	No Gas	95.844	ppb	8.3	413002.11	100	19.17	79.5	120.4	
Th	232	209	No Gas	92.987	ppb	9.9	414223.86	100	18.6	79.5	120.4	
U	238	209	No Gas	95.299	ppb	9.6	398499.49	100	19.06	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	796021.28	4.1	1023754.81	77.76	29.5	120.4	
Sc	45	No Gas	2687737.43	4.1	2927134.09	91.82	29.5	120.4	
Sc	45	H2	310173.71	1.8	374925.7	82.73	29.5	120.4	
Sc	45	He	62639.49	1.4	75429.93	83.04	29.5	120.4	
Ge	72	No Gas	691236.41	4.1	682196.39	101.33	29.5	120.4	
Ge	72	H2	122431.03	0.6	145757.5	84	29.5	120.4	
Ge	72	He	52745.08	0.9	59866.13	88.11	29.5	120.4	
Y	89	H2	2300226.86	0.5	2441196.5	94.23	29.5	120.4	
Y	89	He	472245.01	0.9	531537.69	88.85	29.5	120.4	
Tb	159	No Gas	8486935.78	3.9	7041897.33	120.52	29.5	120.4	6020/DoD
Tb	159	He	2875190.86	1.1	2795586.52	102.85	29.5	120.4	
Bi	209	No Gas	4632976.72	4.2	3760534.49	123.2	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-001R

File Name 129SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:30:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.369	ppb	19.8	81.11	100	
11	B	6	No Gas	14.498	ppb	7.4	2764.81	1000	
23	Na	45	He	121.024	ppb	15.1	10098.08	200000	
24	Mg	45	He	85.301	ppb	9.1	1640.21	200000	
27	Al	45	He	1879.075	ppb	1.3	7679.00	200000	
28	Si	45	H2	918.533	ppb	19.6	7534.61	10000	
39	K	45	He	12.717	ppb	89.2	9402.23	200000	
40	Ca	45	H2	1245.941	ppb	1.7	94331.84	200000	
51	V	89	He	4.739	ppb	10.6	956.74	1000	
52	Cr	89	He	2.803	ppb	5.0	638.57	2000	
55	Mn	89	He	9.141	ppb	3.4	943.20	2000	
56	Fe	89	H2	681.798	ppb	1.3	237585.64	100000	
59	Co	89	He	0.333	ppb	28.0	148.90	1000	
60	Ni	89	He	-2.297	ppb	N/A	360.02	1000	
63	Cu	89	He	1.358	ppb	19.4	457.80	2000	
66	Zn	89	He	20.042	ppb	7.3	830.05	2000	
75	As	89	He	0.721	ppb	2.9	26.33	1000	
78	Se	89	H2	0.372	ppb	31.5	6.67	1000	
88	Sr	89	He	19.860	ppb	4.1	3174.93	2000	
95	Mo	89	He	0.325	ppb	19.7	66.67	1000	
107	Ag	89	He	0.033	ppb	16.2	26.67	100	
111	Cd	89	He	0.139	ppb	46.0	11.11	1000	
118	Sn	159	He	37.850	ppb	1.5	7454.54	1000	
121	Sb	159	No Gas	1.740	ppb	4.4	3140.52	1000	
137	Ba	159	No Gas	13.281	ppb	7.3	9340.41	2000	
182	W	159	No Gas	0.258	ppb	17.1	410.47	1000	
205	Tl	209	No Gas	0.100	ppb	19.3	333.72	1000	
208	Pb	209	No Gas	3.855	ppb	9.7	16819.95	2000	
232	Th	209	No Gas	1.272	ppb	10.5	5844.68	1000	
238	U	209	No Gas	0.441	ppb	8.6	1868.91	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	776534.75	3.7	1023754.81	75.85	29.5	120.4	
Sc	45	No Gas	2688613.26	3.8	2927134.09	91.85	29.5	120.4	
Sc	45	H2	313044.42	0.5	374925.7	83.5	29.5	120.4	
Sc	45	He	62883.97	0.5	75429.93	83.37	29.5	120.4	
Ge	72	No Gas	692517.03	2.9	682196.39	101.51	29.5	120.4	
Ge	72	H2	122427.29	1.6	145757.5	83.99	29.5	120.4	
Ge	72	He	53190.01	0.0	59866.13	88.85	29.5	120.4	
Y	89	H2	2326305.05	1.0	2441196.5	95.29	29.5	120.4	
Y	89	He	475925.36	0.3	531537.69	89.54	29.5	120.4	
Tb	159	No Gas	8470789.46	3.3	7041897.33	120.29	29.5	120.4	
Tb	159	He	2877762.49	0.3	2795586.52	102.94	29.5	120.4	
Bi	209	No Gas	4658263.05	4.1	3760534.49	123.87	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-003R

File Name 130SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:32:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.137	ppb	40.7	42.22	100	
11	B	6	No Gas	10.465	ppb	22.6	2325.82	1000	
23	Na	45	He	107.291	ppb	6.9	9967.91	200000	
24	Mg	45	He	87.477	ppb	4.0	1682.44	200000	
27	Al	45	He	1606.556	ppb	1.1	6649.55	200000	
28	Si	45	H2	647.950	ppb	5.9	5484.27	10000	
39	K	45	He	23.783	ppb	101.6	9623.93	200000	
40	Ca	45	H2	872.967	ppb	2.4	66998.84	200000	
51	V	89	He	3.859	ppb	9.6	813.39	1000	
52	Cr	89	He	2.434	ppb	5.8	564.58	2000	
55	Mn	89	He	6.741	ppb	3.8	707.23	2000	
56	Fe	89	H2	539.078	ppb	1.1	190133.07	100000	
59	Co	89	He	0.281	ppb	41.2	131.12	1000	
60	Ni	89	He	-2.257	ppb	N/A	365.58	1000	
63	Cu	89	He	1.201	ppb	3.6	416.69	2000	
66	Zn	89	He	19.858	ppb	5.2	826.72	2000	
75	As	89	He	0.568	ppb	16.8	21.67	1000	
78	Se	89	H2	0.224	ppb	51.6	4.17	1000	
88	Sr	89	He	12.047	ppb	4.7	1933.55	2000	
95	Mo	89	He	0.250	ppb	31.8	53.33	1000	
107	Ag	89	He	0.024	ppb	12.0	21.11	100	
111	Cd	89	He	0.102	ppb	54.9	8.15	1000	
118	Sn	159	He	38.398	ppb	1.6	7589.11	1000	
121	Sb	159	No Gas	0.203	ppb	42.3	420.48	1000	
137	Ba	159	No Gas	7.187	ppb	4.3	5106.72	2000	
182	W	159	No Gas	0.036	ppb	11.8	103.45	1000	
205	Tl	209	No Gas	0.019	ppb	46.7	80.09	1000	
208	Pb	209	No Gas	2.904	ppb	6.1	12659.98	2000	
232	Th	209	No Gas	0.465	ppb	10.8	2189.34	1000	
238	U	209	No Gas	0.170	ppb	4.3	724.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	774308.51	2.1	1023754.81	75.63	29.5	120.4	
Sc	45	No Gas	2702739.62	1.6	2927134.09	92.33	29.5	120.4	
Sc	45	H2	315960.33	1.3	374925.7	84.27	29.5	120.4	
Sc	45	He	63647.35	0.8	75429.93	84.38	29.5	120.4	
Ge	72	No Gas	693456.39	1.6	682196.39	101.65	29.5	120.4	
Ge	72	H2	125566.49	1.5	145757.5	86.15	29.5	120.4	
Ge	72	He	53640.41	1.5	59866.13	89.6	29.5	120.4	
Y	89	H2	2339144.43	1.1	2441196.5	95.82	29.5	120.4	
Y	89	He	477952.07	0.7	531537.69	89.92	29.5	120.4	
Tb	159	No Gas	8521211.40	1.9	7041897.33	121.01	29.5	120.4	6020/DoD
Tb	159	He	2888064.68	0.9	2795586.52	103.31	29.5	120.4	
Bi	209	No Gas	4634636.04	1.8	3760534.49	123.24	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-004R

File Name 131SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:35:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.174	ppb	50.6	48.89	100	
11	B	6	No Gas	6.434	ppb	24.9	1916.86	1000	
23	Na	45	He	108.582	ppb	33.9	9961.39	200000	
24	Mg	45	He	95.096	ppb	8.2	1755.79	200000	
27	Al	45	He	1694.102	ppb	2.2	6991.95	200000	
28	Si	45	H2	761.164	ppb	7.1	6318.78	10000	
39	K	45	He	21.883	ppb	82.4	9580.65	200000	
40	Ca	45	H2	909.781	ppb	0.4	69137.93	200000	
51	V	89	He	3.998	ppb	3.4	836.72	1000	
52	Cr	89	He	2.330	ppb	5.1	543.25	2000	
55	Mn	89	He	8.238	ppb	7.8	857.27	2000	
56	Fe	89	H2	555.594	ppb	0.6	195033.62	100000	
59	Co	89	He	0.220	ppb	34.9	108.90	1000	
60	Ni	89	He	-2.301	ppb	N/A	361.13	1000	
63	Cu	89	He	1.116	ppb	8.3	393.36	2000	
66	Zn	89	He	19.944	ppb	8.3	830.06	2000	
75	As	89	He	0.579	ppb	22.0	22.00	1000	
78	Se	89	H2	0.235	ppb	43.3	4.33	1000	
88	Sr	89	He	14.004	ppb	5.7	2248.04	2000	
95	Mo	89	He	0.158	ppb	34.2	36.67	1000	
107	Ag	89	He	0.005	ppb	133.8	8.89	100	
111	Cd	89	He	0.079	ppb	37.5	6.30	1000	
118	Sn	159	He	39.107	ppb	1.4	7688.03	1000	
121	Sb	159	No Gas	0.056	ppb	38.3	160.18	1000	
137	Ba	159	No Gas	7.708	ppb	12.6	5470.61	2000	
182	W	159	No Gas	0.048	ppb	22.8	120.14	1000	
205	Tl	209	No Gas	0.024	ppb	24.8	96.77	1000	
208	Pb	209	No Gas	3.222	ppb	11.4	14109.02	2000	
232	Th	209	No Gas	0.504	ppb	3.9	2382.92	1000	
238	U	209	No Gas	0.212	ppb	21.8	904.39	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	782975.06	4.0	1023754.81	76.48	29.5	120.4	
Sc	45	No Gas	2710155.53	5.2	2927134.09	92.59	29.5	120.4	
Sc	45	H2	312993.48	1.5	374925.7	83.48	29.5	120.4	
Sc	45	He	63485.38	1.2	75429.93	84.16	29.5	120.4	
Ge	72	No Gas	698547.38	3.9	682196.39	102.4	29.5	120.4	
Ge	72	H2	125665.26	1.4	145757.5	86.22	29.5	120.4	
Ge	72	He	53333.58	0.5	59866.13	89.09	29.5	120.4	
Y	89	H2	2330099.13	0.5	2441196.5	95.45	29.5	120.4	
Y	89	He	478055.58	0.7	531537.69	89.94	29.5	120.4	
Tb	159	No Gas	8539366.75	4.4	7041897.33	121.27	29.5	120.4	6020/DoD
Tb	159	He	2873172.87	0.1	2795586.52	102.78	29.5	120.4	
Bi	209	No Gas	4673161.90	4.7	3760534.49	124.27	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-005R

File Name 132SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:37:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.158	ppb	18.6	46.67	100	
11	B	6	No Gas	14.601	ppb	7.1	2822.59	1000	
23	Na	45	He	137.181	ppb	22.8	10545.63	200000	
24	Mg	45	He	193.459	ppb	1.8	2780.45	200000	
27	Al	45	He	3385.642	ppb	0.6	14019.54	200000	
28	Si	45	H2	1991.037	ppb	37.5	15989.94	10000	
39	K	45	He	50.229	ppb	31.5	9912.39	200000	
40	Ca	45	H2	1672.270	ppb	0.8	127170.82	200000	
51	V	89	He	7.854	ppb	3.1	1489.03	1000	
52	Cr	89	He	5.079	ppb	2.4	1117.85	2000	
55	Mn	89	He	4.988	ppb	8.2	533.25	2000	
56	Fe	89	H2	869.175	ppb	1.3	299941.79	100000	
59	Co	89	He	0.114	ppb	25.9	71.12	1000	
60	Ni	89	He	-2.159	ppb	N/A	376.69	1000	
63	Cu	89	He	2.947	ppb	7.9	900.06	2000	
66	Zn	89	He	34.269	ppb	5.6	1363.45	2000	
75	As	89	He	1.004	ppb	28.2	35.34	1000	
78	Se	89	H2	0.482	ppb	10.1	8.50	1000	
88	Sr	89	He	12.926	ppb	4.6	2082.46	2000	
95	Mo	89	He	0.805	ppb	8.3	154.45	1000	
107	Ag	89	He	0.031	ppb	59.1	25.56	100	
111	Cd	89	He	0.046	ppb	47.3	3.70	1000	
118	Sn	159	He	37.191	ppb	0.6	7338.91	1000	
121	Sb	159	No Gas	0.118	ppb	6.2	270.30	1000	
137	Ba	159	No Gas	13.189	ppb	8.3	9316.96	2000	
182	W	159	No Gas	0.074	ppb	42.7	156.84	1000	
205	Tl	209	No Gas	0.021	ppb	20.0	86.76	1000	
208	Pb	209	No Gas	17.759	ppb	9.5	78244.48	2000	
232	Th	209	No Gas	3.490	ppb	10.7	15988.38	1000	
238	U	209	No Gas	1.207	ppb	8.5	5173.60	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	789420.47	3.8	1023754.81	77.11	29.5	120.4	
Sc	45	No Gas	2728286.84	4.0	2927134.09	93.21	29.5	120.4	
Sc	45	H2	315272.60	1.0	374925.7	84.09	29.5	120.4	
Sc	45	He	63825.86	1.2	75429.93	84.62	29.5	120.4	
Ge	72	No Gas	696693.15	4.1	682196.39	102.13	29.5	120.4	
Ge	72	H2	123189.82	0.6	145757.5	84.52	29.5	120.4	
Ge	72	He	53413.56	1.4	59866.13	89.22	29.5	120.4	
Y	89	H2	2315877.57	0.6	2441196.5	94.87	29.5	120.4	
Y	89	He	479544.15	1.3	531537.69	90.22	29.5	120.4	
Tb	159	No Gas	8511103.00	4.0	7041897.33	120.86	29.5	120.4	6020/DoD
Tb	159	He	2882946.52	1.4	2795586.52	103.12	29.5	120.4	
Bi	209	No Gas	4731665.09	4.0	3760534.49	125.82	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5107-007R

File Name 133SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:40:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.138	ppb	43.2	42.23	100	
11	B	6	No Gas	16.403	ppb	14.1	2961.52	1000	
23	Na	45	He	119.582	ppb	16.8	10124.70	200000	
24	Mg	45	He	153.651	ppb	8.9	2347.04	200000	
27	Al	45	He	1616.629	ppb	3.1	6644.01	200000	
28	Si	45	H2	1306.167	ppb	4.3	10488.64	10000	
39	K	45	He	40.761	ppb	41.4	9722.29	200000	
40	Ca	45	H2	1450.086	ppb	3.3	108983.09	200000	
51	V	89	He	7.024	ppb	8.0	1343.45	1000	
52	Cr	89	He	3.753	ppb	8.7	837.88	2000	
55	Mn	89	He	6.139	ppb	11.6	646.57	2000	
56	Fe	89	H2	592.950	ppb	3.2	208691.14	100000	
59	Co	89	He	0.387	ppb	6.0	168.91	1000	
60	Ni	89	He	-2.160	ppb	N/A	374.46	1000	
63	Cu	89	He	2.629	ppb	4.8	808.94	2000	
66	Zn	89	He	4.198	ppb	13.4	247.79	2000	
75	As	89	He	0.687	ppb	62.3	25.33	1000	
78	Se	89	H2	0.157	ppb	50.8	3.00	1000	
88	Sr	89	He	8.592	ppb	6.0	1377.90	2000	
95	Mo	89	He	0.667	ppb	24.6	128.89	1000	
107	Ag	89	He	0.028	ppb	38.5	23.33	100	
111	Cd	89	He	0.069	ppb	20.4	5.56	1000	
118	Sn	159	He	37.809	ppb	1.6	7482.33	1000	
121	Sb	159	No Gas	0.092	ppb	26.1	226.92	1000	
137	Ba	159	No Gas	10.315	ppb	18.3	7310.18	2000	
182	W	159	No Gas	0.110	ppb	13.3	206.90	1000	
205	Tl	209	No Gas	0.014	ppb	141.4	63.40	1000	
208	Pb	209	No Gas	17.189	ppb	8.1	75482.95	2000	
232	Th	209	No Gas	1.638	ppb	13.7	7534.08	1000	
238	U	209	No Gas	0.266	ppb	17.1	1144.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	775727.22	4.4	1023754.81	75.77	29.5	120.4	
Sc	45	No Gas	2717606.11	4.6	2927134.09	92.84	29.5	120.4	
Sc	45	H2	311262.36	1.3	374925.7	83.02	29.5	120.4	
Sc	45	He	63198.73	1.0	75429.93	83.78	29.5	120.4	
Ge	72	No Gas	694728.35	3.5	682196.39	101.84	29.5	120.4	
Ge	72	H2	125664.24	1.4	145757.5	86.21	29.5	120.4	
Ge	72	He	53521.82	0.3	59866.13	89.4	29.5	120.4	
Y	89	H2	2341616.56	2.1	2441196.5	95.92	29.5	120.4	
Y	89	He	477502.73	0.4	531537.69	89.83	29.5	120.4	
Tb	159	No Gas	8554252.44	4.0	7041897.33	121.48	29.5	120.4	6020/DoD
Tb	159	He	2891368.78	0.8	2795586.52	103.43	29.5	120.4	
Bi	209	No Gas	4714621.59	4.1	3760534.49	125.37	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	134_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:43:05 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.261	ppb	6.1	21872.67	25	101.04	89.8	110.2	
11	B	6	No Gas	24.999	ppb	8.2	15152.89	25	100	89.8	110.2	
23	Na	45	He	5242.326	ppb	3.2	490597.77	5000	104.85	89.8	110.2	
24	Mg	45	He	5065.300	ppb	2.5	260831.28	5000	101.31	89.8	110.2	
27	Al	45	He	484.099	ppb	1.9	9984.90	500	96.82	89.8	110.2	
28	Si	45	H2	443.384	ppb	1.4	18328.86	500	88.68	89.8	110.2	> +/- 10%
39	K	45	He	4977.662	ppb	2.6	253290.80	5000	99.55	89.8	110.2	
40	Ca	45	H2	4790.302	ppb	0.3	1867419.28	5000	95.81	89.8	110.2	
51	V	89	He	24.569	ppb	4.9	20601.26	25	98.28	89.8	110.2	
52	Cr	89	He	24.690	ppb	3.4	25469.57	25	98.76	89.8	110.2	
55	Mn	89	He	24.241	ppb	3.9	12040.28	25	96.96	89.8	110.2	
56	Fe	89	H2	4634.084	ppb	0.5	7961648.03	5000	92.68	89.8	110.2	
59	Co	89	He	25.379	ppb	3.1	45141.81	25	101.52	89.8	110.2	
60	Ni	89	He	24.483	ppb	5.0	12432.60	25	97.93	89.8	110.2	
63	Cu	89	He	25.325	ppb	4.3	34599.26	25	101.3	89.8	110.2	
66	Zn	89	He	25.188	ppb	7.1	4699.85	25	100.75	89.8	110.2	
75	As	89	He	25.146	ppb	4.7	3895.97	25	100.58	89.8	110.2	
78	Se	89	H2	23.485	ppb	0.7	2022.23	25	93.94	89.8	110.2	
88	Sr	89	He	24.174	ppb	4.8	19212.96	25	96.7	89.8	110.2	
95	Mo	89	He	25.083	ppb	2.5	22542.55	25	100.33	89.8	110.2	
107	Ag	89	He	26.260	ppb	3.3	81195.83	25	105.04	89.8	110.2	
111	Cd	89	He	25.920	ppb	4.3	10289.91	25	103.68	89.8	110.2	
118	Sn	159	He	23.638	ppb	2.5	22490.51	25	94.55	89.8	110.2	
121	Sb	159	No Gas	22.607	ppb	5.6	197967.12	25	90.43	89.8	110.2	
137	Ba	159	No Gas	22.871	ppb	5.4	79361.37	25	91.48	89.8	110.2	
182	W	159	No Gas	23.266	ppb	5.9	160394.20	25	93.06	89.8	110.2	
205	Tl	209	No Gas	23.714	ppb	5.7	361151.83	25	94.86	89.8	110.2	
208	Pb	209	No Gas	23.684	ppb	5.7	501277.26	25	94.74	89.8	110.2	
232	Th	209	No Gas	23.173	ppb	7.4	507037.20	25	92.69	89.8	110.2	
238	U	209	No Gas	23.937	ppb	7.5	491628.95	25	95.75	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	807222.37	3.2	1023754.81	78.85	29.5	120.4	
Sc	45	No Gas	2766448.49	4.3	2927134.09	94.51	29.5	120.4	
Sc	45	H2	325584.54	0.9	374925.7	86.84	29.5	120.4	
Sc	45	He	63543.56	2.2	75429.93	84.24	29.5	120.4	
Ge	72	No Gas	696705.60	3.9	682196.39	102.13	29.5	120.4	
Ge	72	H2	128864.24	0.7	145757.5	88.41	29.5	120.4	
Ge	72	He	53592.95	3.8	59866.13	89.52	29.5	120.4	
Y	89	H2	2350383.01	0.7	2441196.5	96.28	29.5	120.4	
Y	89	He	473748.24	3.2	531537.69	89.13	29.5	120.4	
Tb	159	No Gas	8386856.68	3.8	7041897.33	119.1	29.5	120.4	
Tb	159	He	2796845.13	2.8	2795586.52	100.05	29.5	120.4	
Bi	209	No Gas	4548667.26	4.3	3760534.49	120.96	29.5	120.4	6020/DoD

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	135_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 10:45:47 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.077	ppb	30.6	92.22	0.2	
11	B	6	No Gas	0.637	ppb	8.9	1714.60	4	
23	Na	45	He	-0.911	ppb	N/A	8167.96	200	
24	Mg	45	He	2.957	ppb	34.2	964.54	20	
27	Al	45	He	-0.940	ppb	N/A	10.00	20	
28	Si	45	H2	-1.983	ppb	N/A	353.73	100	
39	K	45	He	-5.749	ppb	N/A	9405.58	200	
40	Ca	45	H2	0.642	ppb	34.7	1331.22	20	
51	V	89	He	0.004	ppb	241.3	168.90	1	
52	Cr	89	He	0.001	ppb	508.4	59.99	1	
55	Mn	89	He	-0.021	ppb	N/A	22.67	0.4	
56	Fe	89	H2	0.332	ppb	42.9	6755.77	20	
59	Co	89	He	0.004	ppb	118.9	37.78	0.2	
60	Ni	89	He	-0.815	ppb	N/A	187.79	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.004	ppb	N/A	80.00	0.6	
66	Zn	89	He	-0.121	ppb	N/A	71.11	2	
75	As	89	He	0.013	ppb	11.0	6.00	1	
78	Se	89	H2	0.032	ppb	39.2	3.17	1	
88	Sr	89	He	0.005	ppb	40.6	4.44	1	
95	Mo	89	He	0.111	ppb	23.4	108.89	1	
107	Ag	89	He	0.005	ppb	43.9	22.22	0.2	
111	Cd	89	He	0.009	ppb	21.4	3.70	0.2	
118	Sn	159	He	0.087	ppb	36.3	141.12	1	
121	Sb	159	No Gas	0.021	ppb	31.8	240.27	0.2	
137	Ba	159	No Gas	0.001	ppb	1801.5	36.71	0.4	
182	W	159	No Gas	0.084	ppb	8.9	617.37	1	
205	Tl	209	No Gas	0.024	ppb	30.2	383.77	0.2	
208	Pb	209	No Gas	0.015	ppb	10.2	430.48	0.2	
232	Th	209	No Gas	0.060	ppb	11.9	1411.66	1	
238	U	209	No Gas	0.013	ppb	34.9	280.32	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	855399.26	1.8	1023754.81	83.56	29.5	120.4	
Sc	45	No Gas	2815988.05	2.0	2927134.09	96.2	29.5	120.4	
Sc	45	H2	339455.50	2.4	374925.7	90.54	29.5	120.4	
Sc	45	He	65782.97	4.5	75429.93	87.21	29.5	120.4	
Ge	72	No Gas	694255.90	2.1	682196.39	101.77	29.5	120.4	
Ge	72	H2	131704.37	2.3	145757.5	90.36	29.5	120.4	
Ge	72	He	54903.63	2.3	59866.13	91.71	29.5	120.4	
Y	89	H2	2432203.99	1.8	2441196.5	99.63	29.5	120.4	
Y	89	He	480533.43	3.8	531537.69	90.4	29.5	120.4	
Tb	159	No Gas	8203629.25	1.1	7041897.33	116.5	29.5	120.4	
Tb	159	He	2804676.04	3.3	2795586.52	100.33	29.5	120.4	
Bi	209	No Gas	4462194.64	1.8	3760534.49	118.66	29.5	120.4	

Sample Report

Sample Name SN5107-008R

File Name 136SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:48:18 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.169	ppb	29.8	51.11	100	
11	B	6	No Gas	11.288	ppb	3.0	2609.22	1000	
23	Na	45	He	169.239	ppb	18.4	10979.75	200000	
24	Mg	45	He	162.006	ppb	9.2	2420.38	200000	
27	Al	45	He	2112.340	ppb	1.8	8632.91	200000	
28	Si	45	H2	1464.344	ppb	11.1	11754.79	10000	
39	K	45	He	64.105	ppb	28.6	9905.68	200000	
40	Ca	45	H2	1974.418	ppb	1.0	148721.44	200000	
51	V	89	He	8.914	ppb	8.0	1647.93	1000	
52	Cr	89	He	5.566	ppb	3.8	1204.50	2000	
55	Mn	89	He	8.783	ppb	1.1	903.20	2000	
56	Fe	89	H2	754.052	ppb	0.7	259578.72	100000	
59	Co	89	He	0.329	ppb	5.0	146.68	1000	
60	Ni	89	He	-2.505	ppb	N/A	337.79	1000	
63	Cu	89	He	3.179	ppb	4.9	952.29	2000	
66	Zn	89	He	4.588	ppb	10.8	260.01	2000	
75	As	89	He	1.209	ppb	23.2	41.34	1000	
78	Se	89	H2	0.387	ppb	36.8	6.83	1000	
88	Sr	89	He	13.347	ppb	4.1	2123.59	2000	
95	Mo	89	He	1.390	ppb	6.8	257.79	1000	
107	Ag	89	He	0.046	ppb	24.4	34.45	100	
111	Cd	89	He	0.056	ppb	49.7	4.44	1000	
118	Sn	159	He	39.314	ppb	3.2	7646.87	1000	
121	Sb	159	No Gas	0.101	ppb	20.2	233.60	1000	
137	Ba	159	No Gas	15.258	ppb	7.8	10469.16	2000	
182	W	159	No Gas	0.204	ppb	26.0	327.04	1000	
205	Tl	209	No Gas	0.034	ppb	21.4	126.81	1000	
208	Pb	209	No Gas	30.271	ppb	9.7	129898.46	2000	
232	Th	209	No Gas	6.223	ppb	8.7	27711.63	1000	
238	U	209	No Gas	0.758	ppb	16.0	3163.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	836175.75	3.5	1023754.81	81.68	29.5	120.4	
Sc	45	No Gas	2715095.03	4.6	2927134.09	92.76	29.5	120.4	
Sc	45	H2	312656.35	1.1	374925.7	83.39	29.5	120.4	
Sc	45	He	62919.65	1.0	75429.93	83.41	29.5	120.4	
Ge	72	No Gas	688055.42	3.7	682196.39	100.86	29.5	120.4	
Ge	72	H2	123062.48	0.5	145757.5	84.43	29.5	120.4	
Ge	72	He	52476.67	1.1	59866.13	87.66	29.5	120.4	
Y	89	H2	2303458.74	0.6	2441196.5	94.36	29.5	120.4	
Y	89	He	473618.59	0.8	531537.69	89.1	29.5	120.4	
Tb	159	No Gas	8271533.90	3.8	7041897.33	117.46	29.5	120.4	
Tb	159	He	2842879.19	0.6	2795586.52	101.69	29.5	120.4	
Bi	209	No Gas	4611092.44	3.8	3760534.49	122.62	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-009R

File Name 137SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:50:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.183	ppb	40.8	221.12	100	
11	B	6	No Gas	19.077	ppb	14.8	3348.29	1000	
23	Na	45	He	89.736	ppb	21.9	9587.22	200000	
24	Mg	45	He	173.345	ppb	1.2	2551.53	200000	
27	Al	45	He	5077.203	ppb	1.3	20834.74	200000	
28	Si	45	H2	980.875	ppb	5.2	7966.44	10000	
39	K	45	He	38.897	ppb	104.5	9717.33	200000	
40	Ca	45	H2	1522.019	ppb	0.9	114267.62	200000	
51	V	89	He	13.637	ppb	4.7	2524.76	1000	
52	Cr	89	He	15.532	ppb	3.1	3378.47	2000	
55	Mn	89	He	19.474	ppb	1.2	2036.45	2000	
56	Fe	89	H2	3814.968	ppb	0.3	1331464.30	100000	
59	Co	89	He	0.675	ppb	14.6	280.02	1000	
60	Ni	89	He	-2.126	ppb	N/A	388.91	1000	
63	Cu	89	He	2.362	ppb	2.0	756.72	2000	
66	Zn	89	He	46.350	ppb	4.1	1856.86	2000	
75	As	89	He	1.846	ppb	6.4	63.34	1000	
78	Se	89	H2	0.585	ppb	22.4	10.50	1000	
88	Sr	89	He	118.817	ppb	1.9	19610.22	2000	
95	Mo	89	He	0.904	ppb	16.6	176.68	1000	
107	Ag	89	He	0.049	ppb	22.5	37.78	100	
111	Cd	89	He	2.331	ppb	11.8	192.22	1000	
118	Sn	159	He	38.697	ppb	4.6	7569.07	1000	
121	Sb	159	No Gas	0.165	ppb	7.1	347.06	1000	
137	Ba	159	No Gas	54.467	ppb	9.4	37711.85	2000	
182	W	159	No Gas	0.102	ppb	53.7	190.22	1000	
205	Tl	209	No Gas	0.074	ppb	8.1	250.28	1000	
208	Pb	209	No Gas	29.559	ppb	7.6	127249.90	2000	
232	Th	209	No Gas	8.474	ppb	9.0	37792.76	1000	
238	U	209	No Gas	6.075	ppb	10.8	25360.92	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	799701.00	4.0	1023754.81	78.11	29.5	120.4	
Sc	45	No Gas	2694772.75	3.8	2927134.09	92.06	29.5	120.4	
Sc	45	H2	311005.30	1.5	374925.7	82.95	29.5	120.4	
Sc	45	He	63289.18	0.8	75429.93	83.9	29.5	120.4	
Ge	72	No Gas	686366.09	3.5	682196.39	100.61	29.5	120.4	
Ge	72	H2	123213.81	0.8	145757.5	84.53	29.5	120.4	
Ge	72	He	52740.96	0.8	59866.13	88.1	29.5	120.4	
Y	89	H2	2378248.53	1.1	2441196.5	97.42	29.5	120.4	
Y	89	He	491363.56	0.7	531537.69	92.44	29.5	120.4	
Tb	159	No Gas	8369422.38	3.4	7041897.33	118.85	29.5	120.4	
Tb	159	He	2858416.52	0.7	2795586.52	102.25	29.5	120.4	
Bi	209	No Gas	4623624.71	3.8	3760534.49	122.95	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-011R

File Name 138SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:53:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.369	ppb	2.3	253.34	100	
11	B	6	No Gas	9.712	ppb	12.8	2305.82	1000	
23	Na	45	He	84.125	ppb	9.9	9557.05	200000	
24	Mg	45	He	192.471	ppb	10.1	2767.14	200000	
27	Al	45	He	5604.660	ppb	2.2	23169.41	200000	
28	Si	45	H2	1443.000	ppb	19.0	11589.54	10000	
39	K	45	He	39.558	ppb	10.6	9798.95	200000	
40	Ca	45	H2	1843.870	ppb	0.5	138861.86	200000	
51	V	89	He	6.433	ppb	3.8	1290.11	1000	
52	Cr	89	He	8.090	ppb	4.4	1802.46	2000	
55	Mn	89	He	6.529	ppb	1.5	710.56	2000	
56	Fe	89	H2	4582.910	ppb	0.1	1609199.00	100000	
59	Co	89	He	0.718	ppb	18.0	297.80	1000	
60	Ni	89	He	-1.769	ppb	N/A	427.80	1000	
63	Cu	89	He	2.980	ppb	6.5	938.95	2000	
66	Zn	89	He	42.565	ppb	4.2	1725.72	2000	
75	As	89	He	2.090	ppb	18.3	71.68	1000	
78	Se	89	H2	0.617	ppb	31.9	11.17	1000	
88	Sr	89	He	81.478	ppb	2.0	13548.51	2000	
95	Mo	89	He	0.405	ppb	17.2	84.45	1000	
107	Ag	89	He	0.051	ppb	26.1	38.89	100	
111	Cd	89	He	1.824	ppb	6.9	151.48	1000	
118	Sn	159	He	39.158	ppb	2.0	7696.93	1000	
121	Sb	159	No Gas	0.077	ppb	41.4	193.56	1000	
137	Ba	159	No Gas	52.302	ppb	8.6	36433.80	2000	
182	W	159	No Gas	0.069	ppb	46.0	146.83	1000	
205	Tl	209	No Gas	0.052	ppb	45.4	183.54	1000	
208	Pb	209	No Gas	16.056	ppb	9.7	69591.13	2000	
232	Th	209	No Gas	2.760	ppb	6.2	12480.32	1000	
238	U	209	No Gas	3.259	ppb	7.3	13709.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	794276.89	2.8	1023754.81	77.58	29.5	120.4	
Sc	45	No Gas	2691648.48	3.6	2927134.09	91.96	29.5	120.4	
Sc	45	H2	312426.09	0.4	374925.7	83.33	29.5	120.4	
Sc	45	He	63768.73	1.1	75429.93	84.54	29.5	120.4	
Ge	72	No Gas	686487.47	3.2	682196.39	100.63	29.5	120.4	
Ge	72	H2	124011.73	1.3	145757.5	85.08	29.5	120.4	
Ge	72	He	52867.32	0.8	59866.13	88.31	29.5	120.4	
Y	89	H2	2394498.40	0.6	2441196.5	98.09	29.5	120.4	
Y	89	He	495069.10	0.4	531537.69	93.14	29.5	120.4	
Tb	159	No Gas	8418138.83	3.3	7041897.33	119.54	29.5	120.4	
Tb	159	He	2872881.24	0.4	2795586.52	102.76	29.5	120.4	
Bi	209	No Gas	4651212.40	3.0	3760534.49	123.68	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-012R

File Name 139SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:56:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.120	ppb	12.9	207.79	100	
11	B	6	No Gas	14.278	ppb	3.9	2775.05	1000	
23	Na	45	He	115.858	ppb	10.9	10081.43	200000	
24	Mg	45	He	188.499	ppb	1.9	2709.34	200000	
27	Al	45	He	5029.800	ppb	1.5	20661.27	200000	
28	Si	45	H2	1200.325	ppb	4.7	9656.07	10000	
39	K	45	He	-16.321	ppb	N/A	9188.87	200000	
40	Ca	45	H2	1938.281	ppb	1.4	145184.65	200000	
51	V	89	He	8.926	ppb	2.0	1710.17	1000	
52	Cr	89	He	9.628	ppb	2.0	2116.45	2000	
55	Mn	89	He	10.242	ppb	2.9	1086.52	2000	
56	Fe	89	H2	3947.449	ppb	0.1	1384413.33	100000	
59	Co	89	He	0.646	ppb	14.6	268.91	1000	
60	Ni	89	He	-1.825	ppb	N/A	418.91	1000	
63	Cu	89	He	3.554	ppb	2.8	1093.42	2000	
66	Zn	89	He	47.724	ppb	3.6	1907.98	2000	
75	As	89	He	1.753	ppb	13.9	60.34	1000	
78	Se	89	H2	0.467	ppb	19.0	8.50	1000	
88	Sr	89	He	103.719	ppb	1.4	17110.01	2000	
95	Mo	89	He	0.498	ppb	14.0	101.12	1000	
107	Ag	89	He	0.029	ppb	27.9	24.44	100	
111	Cd	89	He	2.095	ppb	8.4	172.60	1000	
118	Sn	159	He	61.256	ppb	0.6	12035.76	1000	
121	Sb	159	No Gas	0.128	ppb	1.1	286.99	1000	
137	Ba	159	No Gas	47.795	ppb	10.0	33579.99	2000	
182	W	159	No Gas	0.084	ppb	24.3	170.19	1000	
205	Tl	209	No Gas	0.038	ppb	19.4	140.16	1000	
208	Pb	209	No Gas	18.815	ppb	9.1	81470.42	2000	
232	Th	209	No Gas	3.380	ppb	8.3	15233.15	1000	
238	U	209	No Gas	2.996	ppb	9.7	12587.08	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	785096.25	3.1	1023754.81	76.69	29.5	120.4	
Sc	45	No Gas	2693685.07	3.8	2927134.09	92.02	29.5	120.4	
Sc	45	H2	310861.47	1.2	374925.7	82.91	29.5	120.4	
Sc	45	He	63361.58	1.2	75429.93	84	29.5	120.4	
Ge	72	No Gas	686881.44	3.3	682196.39	100.69	29.5	120.4	
Ge	72	H2	123119.68	1.3	145757.5	84.47	29.5	120.4	
Ge	72	He	52774.07	0.3	59866.13	88.15	29.5	120.4	
Y	89	H2	2390189.98	1.0	2441196.5	97.91	29.5	120.4	
Y	89	He	491126.38	0.4	531537.69	92.4	29.5	120.4	
Tb	159	No Gas	8491291.40	3.2	7041897.33	120.58	29.5	120.4	6020/DoD
Tb	159	He	2879707.39	0.6	2795586.52	103.01	29.5	120.4	
Bi	209	No Gas	4650146.86	3.9	3760534.49	123.66	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-013R

File Name 140SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 10:58:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.319	ppb	45.8	72.23	100	
11	B	6	No Gas	14.762	ppb	11.5	2783.70	1000	
23	Na	45	He	107.594	ppb	16.1	10124.84	200000	
24	Mg	45	He	94.169	ppb	11.3	1778.03	200000	
27	Al	45	He	13528.009	ppb	1.3	56625.08	200000	
28	Si	45	H2	2050.595	ppb	17.5	16452.72	10000	
39	K	45	He	8.804	ppb	185.4	9622.31	200000	
40	Ca	45	H2	223.421	ppb	2.3	17842.91	200000	
51	V	89	He	20.939	ppb	2.4	3711.74	1000	
52	Cr	89	He	13.375	ppb	8.2	2860.80	2000	
55	Mn	89	He	17.532	ppb	1.8	1800.47	2000	
56	Fe	89	H2	4503.741	ppb	1.3	1547368.04	100000	
59	Co	89	He	2.479	ppb	1.5	926.77	1000	
60	Ni	89	He	2.858	ppb	0.2	872.28	1000	
63	Cu	89	He	5.067	ppb	6.0	1492.36	2000	
66	Zn	89	He	24.217	ppb	6.6	995.63	2000	
75	As	89	He	1.156	ppb	9.4	40.34	1000	
78	Se	89	H2	1.128	ppb	19.1	19.67	1000	
88	Sr	89	He	6.705	ppb	9.5	1084.57	2000	
95	Mo	89	He	0.807	ppb	14.5	155.56	1000	
107	Ag	89	He	0.047	ppb	42.5	35.56	100	
111	Cd	89	He	0.147	ppb	46.3	11.85	1000	
118	Sn	159	He	38.884	ppb	2.0	7742.49	1000	
121	Sb	159	No Gas	0.135	ppb	33.5	300.34	1000	
137	Ba	159	No Gas	26.539	ppb	3.7	18729.76	2000	
182	W	159	No Gas	38.506	ppb	3.1	53877.45	1000	
205	Tl	209	No Gas	0.034	ppb	23.0	130.15	1000	
208	Pb	209	No Gas	12.050	ppb	8.0	53092.08	2000	
232	Th	209	No Gas	4.716	ppb	8.1	21549.44	1000	
238	U	209	No Gas	0.935	ppb	11.2	4002.56	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	773845.52	3.2	1023754.81	75.59	29.5	120.4	
Sc	45	No Gas	2682350.77	2.9	2927134.09	91.64	29.5	120.4	
Sc	45	H2	315140.68	1.3	374925.7	84.05	29.5	120.4	
Sc	45	He	64614.96	0.2	75429.93	85.66	29.5	120.4	
Ge	72	No Gas	693457.06	2.2	682196.39	101.65	29.5	120.4	
Ge	72	H2	124897.35	1.3	145757.5	85.69	29.5	120.4	
Ge	72	He	53645.51	0.3	59866.13	89.61	29.5	120.4	
Y	89	H2	2342843.21	0.9	2441196.5	95.97	29.5	120.4	
Y	89	He	481697.20	0.2	531537.69	90.62	29.5	120.4	
Tb	159	No Gas	8498455.15	3.1	7041897.33	120.68	29.5	120.4	6020/DoD
Tb	159	He	2910040.58	0.3	2795586.52	104.09	29.5	120.4	
Bi	209	No Gas	4723208.72	3.1	3760534.49	125.6	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5107-015R

File Name 141SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:01:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.188	ppb	19.4	51.12	100	
11	B	6	No Gas	12.262	ppb	11.6	2552.54	1000	
23	Na	45	He	86.114	ppb	16.2	9580.53	200000	
24	Mg	45	He	81.830	ppb	9.1	1624.66	200000	
27	Al	45	He	7443.490	ppb	0.8	30710.42	200000	
28	Si	45	H2	2064.293	ppb	26.6	14962.74	10000	
39	K	45	He	17.753	ppb	146.6	9567.27	200000	
40	Ca	45	H2	274.369	ppb	12.7	19500.66	200000	
51	V	89	He	15.938	ppb	2.0	2840.40	1000	
52	Cr	89	He	8.834	ppb	1.4	1893.13	2000	
55	Mn	89	He	12.984	ppb	16.5	1330.01	2000	
56	Fe	89	H2	2663.866	ppb	13.5	825018.22	100000	
59	Co	89	He	0.678	ppb	19.0	273.36	1000	
60	Ni	89	He	-0.581	ppb	N/A	528.92	1000	
63	Cu	89	He	3.121	ppb	10.3	944.51	2000	
66	Zn	89	He	11.996	ppb	17.1	535.61	2000	
75	As	89	He	0.867	ppb	21.8	31.00	1000	
78	Se	89	H2	0.899	ppb	16.5	14.50	1000	
88	Sr	89	He	8.949	ppb	7.3	1435.70	2000	
95	Mo	89	He	0.766	ppb	4.6	146.67	1000	
107	Ag	89	He	0.038	ppb	55.2	30.00	100	
111	Cd	89	He	0.056	ppb	66.3	4.45	1000	
118	Sn	159	He	38.401	ppb	1.7	7585.74	1000	
121	Sb	159	No Gas	0.103	ppb	14.5	246.94	1000	
137	Ba	159	No Gas	15.737	ppb	5.5	11244.26	2000	
182	W	159	No Gas	11.044	ppb	9.5	15660.96	1000	
205	Tl	209	No Gas	0.008	ppb	60.9	46.72	1000	
208	Pb	209	No Gas	10.755	ppb	8.7	47691.59	2000	
232	Th	209	No Gas	2.861	ppb	7.4	13217.59	1000	
238	U	209	No Gas	0.553	ppb	2.4	2393.33	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	785513.96	4.8	1023754.81	76.73	29.5	120.4	
Sc	45	No Gas	2727313.70	4.5	2927134.09	93.17	29.5	120.4	
Sc	45	H2	286174.20	12.2	374925.7	76.33	29.5	120.4	
Sc	45	He	63664.36	0.9	75429.93	84.4	29.5	120.4	
Ge	72	No Gas	698168.52	3.3	682196.39	102.34	29.5	120.4	
Ge	72	H2	113792.69	10.2	145757.5	78.07	29.5	120.4	
Ge	72	He	53323.26	0.7	59866.13	89.07	29.5	120.4	
Y	89	H2	2129245.92	12.1	2441196.5	87.22	29.5	120.4	
Y	89	He	477571.59	0.4	531537.69	89.85	29.5	120.4	
Tb	159	No Gas	8610489.38	4.4	7041897.33	122.28	29.5	120.4	6020/DoD
Tb	159	He	2886473.85	0.4	2795586.52	103.25	29.5	120.4	
Bi	209	No Gas	4759264.72	5.0	3760534.49	126.56	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5107-016R

File Name 142SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:04:07 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.433	ppb	8.1	91.12	100	
11	B	6	No Gas	21.631	ppb	13.2	3508.33	1000	
23	Na	45	He	66.287	ppb	61.1	9276.56	200000	
24	Mg	45	He	82.802	ppb	12.1	1646.88	200000	
27	Al	45	He	16408.487	ppb	0.9	68149.52	200000	
28	Si	45	H2	1691.568	ppb	6.2	13700.95	10000	
39	K	45	He	23.339	ppb	85.3	9692.28	200000	
40	Ca	45	H2	215.363	ppb	2.3	17325.59	200000	
51	V	89	He	24.833	ppb	0.7	4373.07	1000	
52	Cr	89	He	13.390	ppb	2.5	2865.11	2000	
55	Mn	89	He	11.388	ppb	4.2	1181.84	2000	
56	Fe	89	H2	4893.442	ppb	0.3	1673889.99	100000	
59	Co	89	He	6.040	ppb	5.6	2215.88	1000	
60	Ni	89	He	8.286	ppb	3.2	1407.91	1000	
63	Cu	89	He	5.249	ppb	8.0	1543.48	2000	
66	Zn	89	He	48.439	ppb	2.8	1899.09	2000	
75	As	89	He	1.366	ppb	20.1	47.01	1000	
78	Se	89	H2	1.327	ppb	12.0	23.00	1000	
88	Sr	89	He	6.638	ppb	6.6	1074.55	2000	
95	Mo	89	He	0.886	ppb	23.7	170.01	1000	
107	Ag	89	He	0.042	ppb	38.9	32.22	100	
111	Cd	89	He	0.142	ppb	68.1	11.48	1000	
118	Sn	159	He	37.943	ppb	4.6	7537.95	1000	
121	Sb	159	No Gas	0.132	ppb	19.9	293.66	1000	
137	Ba	159	No Gas	26.614	ppb	1.6	18704.63	2000	
182	W	159	No Gas	42.474	ppb	5.8	59238.30	1000	
205	Tl	209	No Gas	0.014	ppb	72.9	63.40	1000	
208	Pb	209	No Gas	12.355	ppb	3.4	54379.96	2000	
232	Th	209	No Gas	4.338	ppb	4.7	19821.40	1000	
238	U	209	No Gas	0.949	ppb	10.1	4055.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	772130.46	1.7	1023754.81	75.42	29.5	120.4	
Sc	45	No Gas	2684983.35	1.1	2927134.09	91.73	29.5	120.4	
Sc	45	H2	316730.49	0.1	374925.7	84.48	29.5	120.4	
Sc	45	He	64117.95	0.6	75429.93	85	29.5	120.4	
Ge	72	No Gas	688065.81	1.5	682196.39	100.86	29.5	120.4	
Ge	72	H2	123722.79	0.8	145757.5	84.88	29.5	120.4	
Ge	72	He	53509.05	1.4	59866.13	89.38	29.5	120.4	
Y	89	H2	2333246.50	0.3	2441196.5	95.58	29.5	120.4	
Y	89	He	481928.64	0.3	531537.69	90.67	29.5	120.4	
Tb	159	No Gas	8468273.00	1.0	7041897.33	120.26	29.5	120.4	
Tb	159	He	2902140.31	0.8	2795586.52	103.81	29.5	120.4	
Bi	209	No Gas	4712887.51	1.6	3760534.49	125.32	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-017R

File Name 143SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:06:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.089	ppb	62.1	34.44	100	
11	B	6	No Gas	9.494	ppb	17.3	2241.36	1000	
23	Na	45	He	83.154	ppb	24.6	9400.16	200000	
24	Mg	45	He	99.467	ppb	11.7	1782.47	200000	
27	Al	45	He	1181.834	ppb	1.2	4836.56	200000	
28	Si	45	H2	664.640	ppb	5.7	5560.67	10000	
39	K	45	He	-1.899	ppb	N/A	9253.89	200000	
40	Ca	45	H2	497.853	ppb	2.0	38254.74	200000	
51	V	89	He	4.538	ppb	9.0	922.28	1000	
52	Cr	89	He	2.578	ppb	11.4	591.24	2000	
55	Mn	89	He	5.656	ppb	6.7	595.24	2000	
56	Fe	89	H2	382.331	ppb	0.3	135507.61	100000	
59	Co	89	He	0.097	ppb	106.9	64.45	1000	
60	Ni	89	He	-3.263	ppb	N/A	265.57	1000	
63	Cu	89	He	0.865	ppb	14.3	322.24	2000	
66	Zn	89	He	4.473	ppb	15.1	256.68	2000	
75	As	89	He	0.358	ppb	26.7	15.00	1000	
78	Se	89	H2	0.217	ppb	36.5	4.00	1000	
88	Sr	89	He	26.213	ppb	2.2	4185.23	2000	
95	Mo	89	He	0.128	ppb	49.9	31.11	1000	
107	Ag	89	He	0.055	ppb	69.0	40.00	100	
111	Cd	89	He	0.218	ppb	15.1	17.41	1000	
118	Sn	159	He	39.034	ppb	3.3	7729.17	1000	
121	Sb	159	No Gas	0.019	ppb	121.4	93.44	1000	
137	Ba	159	No Gas	11.801	ppb	5.8	8415.43	2000	
182	W	159	No Gas	0.141	ppb	23.4	253.62	1000	
205	Tl	209	No Gas	0.019	ppb	63.3	80.09	1000	
208	Pb	209	No Gas	4.448	ppb	4.7	19530.98	2000	
232	Th	209	No Gas	1.701	ppb	6.4	7787.77	1000	
238	U	209	No Gas	0.399	ppb	8.9	1702.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	781170.54	3.3	1023754.81	76.3	29.5	120.4	
Sc	45	No Gas	2709300.09	3.5	2927134.09	92.56	29.5	120.4	
Sc	45	H2	312774.19	0.2	374925.7	83.42	29.5	120.4	
Sc	45	He	62834.63	0.6	75429.93	83.3	29.5	120.4	
Ge	72	No Gas	698697.80	3.8	682196.39	102.42	29.5	120.4	
Ge	72	H2	124352.01	1.6	145757.5	85.31	29.5	120.4	
Ge	72	He	52947.28	0.5	59866.13	88.44	29.5	120.4	
Y	89	H2	2320737.87	0.5	2441196.5	95.07	29.5	120.4	
Y	89	He	475323.56	0.5	531537.69	89.42	29.5	120.4	
Tb	159	No Gas	8584449.59	3.6	7041897.33	121.91	29.5	120.4	6020/DoD
Tb	159	He	2893945.83	0.2	2795586.52	103.52	29.5	120.4	
Bi	209	No Gas	4685284.70	3.3	3760534.49	124.59	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-019R

File Name 144SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:09:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.029	ppb	269.2	24.44	100	
11	B	6	No Gas	9.009	ppb	12.1	2176.91	1000	
23	Na	45	He	74.231	ppb	45.0	9129.74	200000	
24	Mg	45	He	86.300	ppb	13.8	1629.10	200000	
27	Al	45	He	1008.941	ppb	7.0	4084.04	200000	
28	Si	45	H2	574.116	ppb	10.3	5160.10	10000	
39	K	45	He	31.408	ppb	67.2	9477.23	200000	
40	Ca	45	H2	316.557	ppb	13.0	26104.76	200000	
51	V	89	He	5.000	ppb	4.9	996.74	1000	
52	Cr	89	He	3.578	ppb	5.7	795.88	2000	
55	Mn	89	He	7.561	ppb	2.0	783.22	2000	
56	Fe	89	H2	346.185	ppb	13.3	129965.94	100000	
59	Co	89	He	0.160	ppb	43.3	86.67	1000	
60	Ni	89	He	-3.182	ppb	N/A	272.24	1000	
63	Cu	89	He	0.865	ppb	7.6	322.24	2000	
66	Zn	89	He	5.352	ppb	13.2	288.90	2000	
75	As	89	He	0.356	ppb	30.5	15.00	1000	
78	Se	89	H2	0.199	ppb	23.4	4.00	1000	
88	Sr	89	He	27.723	ppb	4.0	4414.22	2000	
95	Mo	89	He	0.394	ppb	9.7	78.89	1000	
107	Ag	89	He	0.034	ppb	43.0	26.67	100	
111	Cd	89	He	0.225	ppb	40.6	17.78	1000	
118	Sn	159	He	37.894	ppb	5.4	7425.66	1000	
121	Sb	159	No Gas	0.017	ppb	144.5	90.10	1000	
137	Ba	159	No Gas	12.578	ppb	2.1	9019.78	2000	
182	W	159	No Gas	0.054	ppb	63.1	130.15	1000	
205	Tl	209	No Gas	0.004	ppb	128.1	33.37	1000	
208	Pb	209	No Gas	4.890	ppb	9.8	21578.21	2000	
232	Th	209	No Gas	1.881	ppb	8.7	8652.59	1000	
238	U	209	No Gas	0.426	ppb	16.2	1825.51	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	776420.27	3.6	1023754.81	75.84	29.5	120.4	
Sc	45	No Gas	2705297.42	5.0	2927134.09	92.42	29.5	120.4	
Sc	45	H2	333919.50	11.3	374925.7	89.06	29.5	120.4	
Sc	45	He	62204.04	4.2	75429.93	82.47	29.5	120.4	
Ge	72	No Gas	699041.47	4.1	682196.39	102.47	29.5	120.4	
Ge	72	H2	130888.83	9.7	145757.5	89.8	29.5	120.4	
Ge	72	He	53068.87	2.8	59866.13	88.65	29.5	120.4	
Y	89	H2	2470336.13	11.2	2441196.5	101.19	29.5	120.4	
Y	89	He	474561.91	4.3	531537.69	89.28	29.5	120.4	
Tb	159	No Gas	8628018.34	4.3	7041897.33	122.52	29.5	120.4	6020/DoD
Tb	159	He	2866797.52	4.3	2795586.52	102.55	29.5	120.4	
Bi	209	No Gas	4721313.70	4.7	3760534.49	125.55	29.5	120.4	6020/DoD□ EPA

Sample Report

Sample Name SN5107-020R

File Name 145SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:12:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.079	ppb	102.8	32.22	100	
11	B	6	No Gas	4.597	ppb	23.2	1699.05	1000	
23	Na	45	He	76.235	ppb	31.5	9156.47	200000	
24	Mg	45	He	95.719	ppb	12.2	1722.45	200000	
27	Al	45	He	917.579	ppb	4.4	3713.96	200000	
28	Si	45	H2	569.703	ppb	2.0	4779.43	10000	
39	K	45	He	8.848	ppb	202.9	9235.54	200000	
40	Ca	45	H2	295.429	ppb	0.1	22885.88	200000	
51	V	89	He	4.037	ppb	13.7	832.28	1000	
52	Cr	89	He	2.493	ppb	11.1	569.24	2000	
55	Mn	89	He	7.036	ppb	6.0	727.22	2000	
56	Fe	89	H2	271.366	ppb	0.7	97371.56	100000	
59	Co	89	He	0.104	ppb	64.5	66.67	1000	
60	Ni	89	He	-2.493	ppb	N/A	337.80	1000	
63	Cu	89	He	0.812	ppb	14.3	305.57	2000	
66	Zn	89	He	4.251	ppb	10.3	246.68	2000	
75	As	89	He	0.372	ppb	10.5	15.33	1000	
78	Se	89	H2	0.169	ppb	20.2	3.17	1000	
88	Sr	89	He	27.343	ppb	2.3	4333.07	2000	
95	Mo	89	He	0.229	ppb	54.0	48.89	1000	
107	Ag	89	He	0.037	ppb	21.6	28.89	100	
111	Cd	89	He	0.201	ppb	41.7	15.93	1000	
118	Sn	159	He	41.251	ppb	1.0	8106.08	1000	
121	Sb	159	No Gas	0.022	ppb	57.9	100.11	1000	
137	Ba	159	No Gas	10.654	ppb	6.8	7597.32	2000	
182	W	159	No Gas	0.024	ppb	25.4	86.76	1000	
205	Tl	209	No Gas	0.011	ppb	35.3	56.73	1000	
208	Pb	209	No Gas	4.764	ppb	11.0	20990.28	2000	
232	Th	209	No Gas	0.808	ppb	5.0	3781.44	1000	
238	U	209	No Gas	0.277	ppb	19.0	1188.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	773971.59	3.7	1023754.81	75.6	29.5	120.4	
Sc	45	No Gas	2690442.20	3.5	2927134.09	91.91	29.5	120.4	
Sc	45	H2	309841.39	0.6	374925.7	82.64	29.5	120.4	
Sc	45	He	62022.26	0.9	75429.93	82.22	29.5	120.4	
Ge	72	No Gas	693538.69	3.6	682196.39	101.66	29.5	120.4	
Ge	72	H2	122182.61	0.3	145757.5	83.83	29.5	120.4	
Ge	72	He	52361.42	0.2	59866.13	87.46	29.5	120.4	
Y	89	H2	2308572.74	0.7	2441196.5	94.57	29.5	120.4	
Y	89	He	471781.11	0.5	531537.69	88.76	29.5	120.4	
Tb	159	No Gas	8580692.30	3.5	7041897.33	121.85	29.5	120.4	6020/DoD
Tb	159	He	2873143.08	0.9	2795586.52	102.77	29.5	120.4	
Bi	209	No Gas	4708931.53	3.3	3760534.49	125.22	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	146_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 11:14:47 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.643	ppb	8.4	21359.77	25	98.57	89.8	110.2	
11	B	6	No Gas	24.307	ppb	9.8	14785.82	25	97.23	89.8	110.2	
23	Na	45	He	5087.165	ppb	1.2	485141.40	5000	101.74	89.8	110.2	
24	Mg	45	He	4917.515	ppb	1.2	257913.72	5000	98.35	89.8	110.2	
27	Al	45	He	460.831	ppb	1.4	9681.40	500	92.17	89.8	110.2	
28	Si	45	H2	450.282	ppb	2.6	18054.78	500	90.06	89.8	110.2	
39	K	45	He	4764.918	ppb	0.6	247361.57	5000	95.3	89.8	110.2	
40	Ca	45	H2	4850.341	ppb	0.8	1834811.22	5000	97.01	89.8	110.2	
51	V	89	He	23.865	ppb	0.8	20222.89	25	95.46	89.8	110.2	
52	Cr	89	He	24.109	ppb	1.0	25122.31	25	96.44	89.8	110.2	
55	Mn	89	He	23.991	ppb	1.3	12037.61	25	95.96	89.8	110.2	
56	Fe	89	H2	4676.838	ppb	0.6	7867960.55	5000	93.54	89.8	110.2	
59	Co	89	He	24.440	ppb	1.8	43904.52	25	97.76	89.8	110.2	
60	Ni	89	He	23.292	ppb	2.7	11978.82	25	93.17	89.8	110.2	
63	Cu	89	He	24.730	ppb	0.3	34137.05	25	98.92	89.8	110.2	
66	Zn	89	He	25.073	ppb	3.6	4729.86	25	100.29	89.8	110.2	
75	As	89	He	24.255	ppb	1.0	3796.93	25	97.02	89.8	110.2	
78	Se	89	H2	23.299	ppb	2.2	1964.55	25	93.2	89.8	110.2	
88	Sr	89	He	23.656	ppb	2.0	18997.10	25	94.62	89.8	110.2	
95	Mo	89	He	24.646	ppb	2.1	22368.96	25	98.58	89.8	110.2	
107	Ag	89	He	25.523	ppb	0.9	79710.64	25	102.09	89.8	110.2	
111	Cd	89	He	25.580	ppb	1.2	10258.04	25	102.32	89.8	110.2	
118	Sn	159	He	22.695	ppb	0.6	22107.60	25	90.78	89.8	110.2	
121	Sb	159	No Gas	21.926	ppb	9.7	191477.68	25	87.7	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.004	ppb	9.2	76159.15	25	88.02	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.566	ppb	9.5	155156.61	25	90.26	89.8	110.2	
205	Tl	209	No Gas	22.885	ppb	9.6	350497.34	25	91.54	89.8	110.2	
208	Pb	209	No Gas	22.935	ppb	9.7	488126.97	25	91.74	89.8	110.2	
232	Th	209	No Gas	22.223	ppb	10.9	489055.68	25	88.89	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.915	ppb	10.1	473458.85	25	91.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	808338.58	3.0	1023754.81	78.96	29.5	120.4	
Sc	45	No Gas	2758061.61	5.0	2927134.09	94.22	29.5	120.4	
Sc	45	H2	315953.77	0.6	374925.7	84.27	29.5	120.4	
Sc	45	He	64695.13	0.8	75429.93	85.77	29.5	120.4	
Ge	72	No Gas	691701.95	4.3	682196.39	101.39	29.5	120.4	
Ge	72	H2	127019.17	0.8	145757.5	87.14	29.5	120.4	
Ge	72	He	54064.85	0.7	59866.13	90.31	29.5	120.4	
Y	89	H2	2301559.24	0.9	2441196.5	94.28	29.5	120.4	
Y	89	He	478191.13	0.8	531537.69	89.96	29.5	120.4	
Tb	159	No Gas	8378449.32	5.0	7041897.33	118.98	29.5	120.4	
Tb	159	He	2861951.21	0.7	2795586.52	102.37	29.5	120.4	
Bi	209	No Gas	4581717.28	5.1	3760534.49	121.84	29.5	120.4	6020/DoD

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	147_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 11:17:31 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.066	ppb	11.2	82.23	0.2	
11	B	6	No Gas	0.345	ppb	41.0	1543.47	4	
23	Na	45	He	-9.904	ppb	N/A	7383.42	200	
24	Mg	45	He	5.069	ppb	35.7	1089.01	20	
27	Al	45	He	-0.273	ppb	N/A	24.44	20	
28	Si	45	H2	-0.738	ppb	N/A	387.11	100	
39	K	45	He	-7.189	ppb	N/A	9435.56	200	
40	Ca	45	H2	0.770	ppb	25.7	1316.78	20	
51	V	89	He	0.048	ppb	19.3	208.90	1	
52	Cr	89	He	0.001	ppb	738.5	61.32	1	
55	Mn	89	He	-0.029	ppb	N/A	18.67	0.4	
56	Fe	89	H2	0.195	ppb	97.6	6244.98	20	
59	Co	89	He	-0.003	ppb	N/A	24.45	0.2	
60	Ni	89	He	-0.830	ppb	N/A	183.34	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.001	ppb	N/A	86.67	0.6	
66	Zn	89	He	-0.136	ppb	N/A	68.89	2	
75	As	89	He	0.000	ppb	9192.9	4.00	1	
78	Se	89	H2	0.024	ppb	29.1	2.33	1	
88	Sr	89	He	0.007	ppb	34.4	5.56	1	
95	Mo	89	He	0.073	ppb	7.1	75.56	1	
107	Ag	89	He	0.005	ppb	38.3	23.33	0.2	
111	Cd	89	He	0.013	ppb	12.8	5.19	0.2	
118	Sn	159	He	0.092	ppb	40.6	147.79	1	
121	Sb	159	No Gas	0.021	ppb	5.1	236.93	0.2	
137	Ba	159	No Gas	0.009	ppb	72.0	66.74	0.4	
182	W	159	No Gas	0.084	ppb	2.9	624.05	1	
205	Tl	209	No Gas	0.021	ppb	15.1	330.37	0.2	
208	Pb	209	No Gas	0.017	ppb	3.8	480.54	0.2	
232	Th	209	No Gas	0.103	ppb	3.7	2352.87	1	
238	U	209	No Gas	0.020	ppb	23.7	417.15	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	857461.75	4.4	1023754.81	83.76	29.5	120.4	
Sc	45	No Gas	2812821.81	4.5	2927134.09	96.09	29.5	120.4	
Sc	45	H2	322861.66	0.6	374925.7	86.11	29.5	120.4	
Sc	45	He	66438.77	0.7	75429.93	88.08	29.5	120.4	
Ge	72	No Gas	693254.18	3.5	682196.39	101.62	29.5	120.4	
Ge	72	H2	128318.20	0.1	145757.5	88.04	29.5	120.4	
Ge	72	He	54908.89	1.0	59866.13	91.72	29.5	120.4	
Y	89	H2	2331540.02	0.6	2441196.5	95.51	29.5	120.4	
Y	89	He	486180.86	0.4	531537.69	91.47	29.5	120.4	
Tb	159	No Gas	8249772.79	4.9	7041897.33	117.15	29.5	120.4	
Tb	159	He	2853472.60	0.4	2795586.52	102.07	29.5	120.4	
Bi	209	No Gas	4493088.66	4.9	3760534.49	119.48	29.5	120.4	

Sample Report

Sample Name SN5107-021R

File Name 148SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:20:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.213	ppb	39.7	56.67	100	
11	B	6	No Gas	6.640	ppb	8.9	1990.21	1000	
23	Na	45	He	98.091	ppb	18.7	9510.39	200000	
24	Mg	45	He	57.488	ppb	14.6	1333.50	200000	
27	Al	45	He	414.546	ppb	9.9	1685.73	200000	
28	Si	45	H2	539.935	ppb	43.5	4590.77	10000	
39	K	45	He	12.571	ppb	106.8	9235.58	200000	
40	Ca	45	H2	180.141	ppb	1.4	14432.29	200000	
51	V	89	He	3.864	ppb	13.3	801.17	1000	
52	Cr	89	He	2.470	ppb	6.0	563.25	2000	
55	Mn	89	He	5.314	ppb	24.5	556.11	2000	
56	Fe	89	H2	176.755	ppb	3.2	65060.06	100000	
59	Co	89	He	0.105	ppb	77.3	66.67	1000	
60	Ni	89	He	-2.589	ppb	N/A	327.79	1000	
63	Cu	89	He	0.775	ppb	22.6	294.46	2000	
66	Zn	89	He	2.378	ppb	32.5	177.78	2000	
75	As	89	He	0.287	ppb	7.6	12.67	1000	
78	Se	89	H2	0.239	ppb	31.5	4.33	1000	
88	Sr	89	He	13.858	ppb	1.7	2190.25	2000	
95	Mo	89	He	0.560	ppb	10.9	107.78	1000	
107	Ag	89	He	0.034	ppb	59.2	26.67	100	
111	Cd	89	He	0.019	ppb	42.9	1.48	1000	
118	Sn	159	He	39.092	ppb	1.8	7540.17	1000	
121	Sb	159	No Gas	0.107	ppb	46.2	226.93	1000	
137	Ba	159	No Gas	5.868	ppb	3.3	3808.15	2000	
182	W	159	No Gas	0.291	ppb	13.5	420.47	1000	
205	Tl	209	No Gas	0.105	ppb	27.1	320.36	1000	
208	Pb	209	No Gas	5.315	ppb	1.1	21397.64	2000	
232	Th	209	No Gas	1.388	ppb	5.9	5851.24	1000	
238	U	209	No Gas	0.277	ppb	8.8	1087.94	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	802510.87	0.9	1023754.81	78.39	29.5	120.4	
Sc	45	No Gas	2534507.07	2.7	2927134.09	86.59	29.5	120.4	
Sc	45	H2	311944.89	1.4	374925.7	83.2	29.5	120.4	
Sc	45	He	61780.99	0.6	75429.93	81.91	29.5	120.4	
Ge	72	No Gas	645833.04	2.2	682196.39	94.67	29.5	120.4	
Ge	72	H2	122812.22	1.3	145757.5	84.26	29.5	120.4	
Ge	72	He	52570.28	1.2	59866.13	87.81	29.5	120.4	
Y	89	H2	2294457.34	0.5	2441196.5	93.99	29.5	120.4	
Y	89	He	470487.78	1.1	531537.69	88.51	29.5	120.4	
Tb	159	No Gas	7772049.12	2.8	7041897.33	110.37	29.5	120.4	
Tb	159	He	2818991.17	0.6	2795586.52	100.84	29.5	120.4	
Bi	209	No Gas	4296000.85	2.1	3760534.49	114.24	29.5	120.4	

Sample Report

Sample Name SN5107-023R

File Name 149SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:22:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.140	ppb	66.2	43.33	100	
11	B	6	No Gas	7.382	ppb	13.3	2036.88	1000	
23	Na	45	He	61.753	ppb	30.1	9006.20	200000	
24	Mg	45	He	55.080	ppb	1.1	1331.26	200000	
27	Al	45	He	308.391	ppb	7.1	1282.33	200000	
28	Si	45	H2	291.323	ppb	52.0	2645.86	10000	
39	K	45	He	8.195	ppb	702.7	9343.90	200000	
40	Ca	45	H2	142.433	ppb	4.3	11672.96	200000	
51	V	89	He	3.684	ppb	6.5	774.50	1000	
52	Cr	89	He	1.635	ppb	2.4	393.94	2000	
55	Mn	89	He	2.571	ppb	6.2	286.62	2000	
56	Fe	89	H2	104.193	ppb	4.8	41182.76	100000	
59	Co	89	He	0.042	ppb	138.1	44.45	1000	
60	Ni	89	He	-3.245	ppb	N/A	265.57	1000	
63	Cu	89	He	0.688	ppb	2.9	272.24	2000	
66	Zn	89	He	1.870	ppb	30.5	160.01	2000	
75	As	89	He	0.340	ppb	24.2	14.33	1000	
78	Se	89	H2	0.119	ppb	53.3	2.33	1000	
88	Sr	89	He	10.654	ppb	1.0	1690.17	2000	
95	Mo	89	He	0.272	ppb	29.8	56.67	1000	
107	Ag	89	He	0.001	ppb	437.2	6.67	100	
111	Cd	89	He	0.009	ppb	173.2	0.74	1000	
118	Sn	159	He	39.866	ppb	0.8	7790.31	1000	
121	Sb	159	No Gas	0.026	ppb	50.0	103.45	1000	
137	Ba	159	No Gas	3.661	ppb	2.4	2526.39	2000	
182	W	159	No Gas	0.076	ppb	23.3	153.52	1000	
205	Tl	209	No Gas	0.007	ppb	132.0	40.04	1000	
208	Pb	209	No Gas	2.880	ppb	1.5	12239.40	2000	
232	Th	209	No Gas	0.469	ppb	9.4	2152.61	1000	
238	U	209	No Gas	0.135	ppb	18.8	563.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	788594.10	0.9	1023754.81	77.03	29.5	120.4	
Sc	45	No Gas	2629981.87	1.1	2927134.09	89.85	29.5	120.4	
Sc	45	H2	313674.67	3.5	374925.7	83.66	29.5	120.4	
Sc	45	He	62805.88	1.0	75429.93	83.26	29.5	120.4	
Ge	72	No Gas	676378.33	1.0	682196.39	99.15	29.5	120.4	
Ge	72	H2	123940.42	3.8	145757.5	85.03	29.5	120.4	
Ge	72	He	52758.06	0.4	59866.13	88.13	29.5	120.4	
Y	89	H2	2321690.04	3.9	2441196.5	95.1	29.5	120.4	
Y	89	He	472312.90	0.1	531537.69	88.86	29.5	120.4	
Tb	159	No Gas	8217038.77	1.1	7041897.33	116.69	29.5	120.4	
Tb	159	He	2856347.81	0.4	2795586.52	102.17	29.5	120.4	
Bi	209	No Gas	4513750.62	0.6	3760534.49	120.03	29.5	120.4	

Sample Report

Sample Name SN5107-024R

File Name 150SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:25:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.074	ppb	95.1	32.22	100	
11	B	6	No Gas	12.660	ppb	7.1	2608.13	1000	
23	Na	45	He	63.328	ppb	11.2	9116.33	200000	
24	Mg	45	He	62.306	ppb	13.3	1417.96	200000	
27	Al	45	He	625.799	ppb	5.2	2595.89	200000	
28	Si	45	H2	638.014	ppb	8.9	5288.01	10000	
39	K	45	He	1.779	ppb	1396.7	9368.89	200000	
40	Ca	45	H2	320.328	ppb	0.7	24647.71	200000	
51	V	89	He	3.633	ppb	7.9	768.94	1000	
52	Cr	89	He	1.522	ppb	0.5	371.94	2000	
55	Mn	89	He	2.883	ppb	9.1	318.61	2000	
56	Fe	89	H2	233.371	ppb	2.8	83520.75	100000	
59	Co	89	He	0.066	ppb	97.7	53.34	1000	
60	Ni	89	He	-3.095	ppb	N/A	281.12	1000	
63	Cu	89	He	0.925	ppb	9.2	337.80	2000	
66	Zn	89	He	2.975	ppb	12.3	201.12	2000	
75	As	89	He	0.316	ppb	15.7	13.67	1000	
78	Se	89	H2	0.171	ppb	86.3	3.17	1000	
88	Sr	89	He	16.575	ppb	1.2	2639.23	2000	
95	Mo	89	He	0.228	ppb	26.1	48.89	1000	
107	Ag	89	He	0.014	ppb	59.4	14.44	100	
111	Cd	89	He	0.014	ppb	100.1	1.11	1000	
118	Sn	159	He	39.248	ppb	1.3	7688.01	1000	
121	Sb	159	No Gas	0.037	ppb	38.7	126.81	1000	
137	Ba	159	No Gas	6.085	ppb	10.8	4302.39	2000	
182	W	159	No Gas	0.051	ppb	51.4	123.47	1000	
205	Tl	209	No Gas	0.015	ppb	10.8	66.74	1000	
208	Pb	209	No Gas	3.967	ppb	6.1	17280.53	2000	
232	Th	209	No Gas	0.503	ppb	16.3	2362.86	1000	
238	U	209	No Gas	0.252	ppb	16.2	1074.59	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	788044.15	3.5	1023754.81	76.98	29.5	120.4	
Sc	45	No Gas	2693395.72	4.1	2927134.09	92.01	29.5	120.4	
Sc	45	H2	308785.34	0.9	374925.7	82.36	29.5	120.4	
Sc	45	He	63375.97	1.1	75429.93	84.02	29.5	120.4	
Ge	72	No Gas	689677.61	3.5	682196.39	101.1	29.5	120.4	
Ge	72	H2	122414.50	0.6	145757.5	83.99	29.5	120.4	
Ge	72	He	53174.80	0.7	59866.13	88.82	29.5	120.4	
Y	89	H2	2279999.35	0.6	2441196.5	93.4	29.5	120.4	
Y	89	He	474068.31	0.2	531537.69	89.19	29.5	120.4	
Tb	159	No Gas	8485906.96	4.0	7041897.33	120.51	29.5	120.4	6020/DoD
Tb	159	He	2863029.54	0.7	2795586.52	102.41	29.5	120.4	
Bi	209	No Gas	4647383.05	4.2	3760534.49	123.58	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-027R

File Name 151SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:28:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.062	ppb	65.0	30.00	100	
11	B	6	No Gas	6.784	ppb	14.2	1957.97	1000	
23	Na	45	He	68.048	ppb	29.5	9062.92	200000	
24	Mg	45	He	95.197	ppb	11.3	1726.90	200000	
27	Al	45	He	776.223	ppb	5.5	3163.80	200000	
28	Si	45	H2	611.235	ppb	6.4	5143.36	10000	
39	K	45	He	36.402	ppb	116.0	9558.90	200000	
40	Ca	45	H2	191.923	ppb	1.0	15340.98	200000	
51	V	89	He	3.884	ppb	4.5	807.83	1000	
52	Cr	89	He	3.146	ppb	2.5	704.56	2000	
55	Mn	89	He	5.614	ppb	9.1	587.91	2000	
56	Fe	89	H2	304.802	ppb	2.4	108839.30	100000	
59	Co	89	He	0.029	ppb	170.9	40.00	1000	
60	Ni	89	He	-3.511	ppb	N/A	240.01	1000	
63	Cu	89	He	0.851	ppb	5.6	316.68	2000	
66	Zn	89	He	2.721	ppb	49.7	191.12	2000	
75	As	89	He	0.382	ppb	42.9	15.67	1000	
78	Se	89	H2	0.109	ppb	30.9	2.17	1000	
88	Sr	89	He	18.585	ppb	4.7	2950.43	2000	
95	Mo	89	He	0.433	ppb	34.0	85.56	1000	
107	Ag	89	He	0.030	ppb	76.0	24.44	100	
111	Cd	89	He	0.023	ppb	69.3	1.85	1000	
118	Sn	159	He	38.052	ppb	1.7	7430.10	1000	
121	Sb	159	No Gas	0.026	ppb	33.7	103.45	1000	
137	Ba	159	No Gas	8.505	ppb	1.2	5884.52	2000	
182	W	159	No Gas	0.028	ppb	93.5	90.10	1000	
205	Tl	209	No Gas	0.022	ppb	9.8	86.76	1000	
208	Pb	209	No Gas	5.527	ppb	2.5	23548.17	2000	
232	Th	209	No Gas	0.994	ppb	10.9	4465.86	1000	
238	U	209	No Gas	0.258	ppb	4.6	1074.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	783068.53	0.5	1023754.81	76.49	29.5	120.4	
Sc	45	No Gas	2646236.56	0.6	2927134.09	90.4	29.5	120.4	
Sc	45	H2	312500.55	0.6	374925.7	83.35	29.5	120.4	
Sc	45	He	62423.43	1.9	75429.93	82.76	29.5	120.4	
Ge	72	No Gas	680078.12	1.3	682196.39	99.69	29.5	120.4	
Ge	72	H2	123860.59	1.4	145757.5	84.98	29.5	120.4	
Ge	72	He	52959.15	0.7	59866.13	88.46	29.5	120.4	
Y	89	H2	2312757.29	0.5	2441196.5	94.74	29.5	120.4	
Y	89	He	472500.69	1.0	531537.69	88.89	29.5	120.4	
Tb	159	No Gas	8303946.89	0.3	7041897.33	117.92	29.5	120.4	
Tb	159	He	2853334.82	1.4	2795586.52	102.07	29.5	120.4	
Bi	209	No Gas	4547996.54	0.9	3760534.49	120.94	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-027RL

File Name 152SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:30:51 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.074	ppb	N/A	17.78	100	
11	B	6	No Gas	3.775	ppb	66.8	1373.44	1000	
23	Na	45	He	-180.865	ppb	N/A	7466.91	200000	
24	Mg	45	He	158.642	ppb	16.9	1131.23	200000	
27	Al	45	He	785.374	ppb	7.7	690.04	200000	
28	Si	45	H2	560.532	ppb	18.6	1311.54	10000	
39	K	45	He	-98.112	ppb	N/A	9383.92	200000	
40	Ca	45	H2	221.545	ppb	4.2	4427.53	200000	
51	V	89	He	6.349	ppb	5.3	381.13	1000	
52	Cr	89	He	2.659	ppb	5.2	170.64	2000	
55	Mn	89	He	5.295	ppb	5.9	139.98	2000	
56	Fe	89	H2	278.949	ppb	1.2	24899.62	100000	
59	Co	89	He	-0.081	ppb	N/A	24.45	1000	
60	Ni	89	He	-22.078	ppb	N/A	155.56	1000	
63	Cu	89	He	0.379	ppb	16.2	107.78	2000	
66	Zn	89	He	3.423	ppb	115.0	118.90	2000	
75	As	89	He	0.491	ppb	118.2	7.00	1000	
78	Se	89	H2	0.103	ppb	219.1	0.67	1000	
88	Sr	89	He	18.129	ppb	5.2	586.70	2000	
95	Mo	89	He	0.723	ppb	53.1	34.44	1000	
107	Ag	89	He	0.023	ppb	69.4	8.89	100	
111	Cd	89	He	0.069	ppb	173.2	1.11	1000	
118	Sn	159	He	40.073	ppb	5.1	1615.71	1000	
121	Sb	159	No Gas	-0.001	ppb	N/A	60.07	1000	
137	Ba	159	No Gas	7.457	ppb	12.3	1071.24	2000	
182	W	159	No Gas	-0.031	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	0.047	ppb	49.9	50.05	1000	
208	Pb	209	No Gas	5.918	ppb	10.4	5176.24	2000	
232	Th	209	No Gas	0.658	ppb	31.0	694.14	1000	
238	U	209	No Gas	0.278	ppb	32.2	243.61	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	823632.01	3.7	1023754.81	80.45	29.5	120.4	
Sc	45	No Gas	2777494.71	4.5	2927134.09	94.89	29.5	120.4	
Sc	45	H2	321832.79	1.5	374925.7	85.84	29.5	120.4	
Sc	45	He	64927.20	0.3	75429.93	86.08	29.5	120.4	
Ge	72	No Gas	694812.74	4.2	682196.39	101.85	29.5	120.4	
Ge	72	H2	127832.48	0.8	145757.5	87.7	29.5	120.4	
Ge	72	He	54373.09	0.2	59866.13	90.82	29.5	120.4	
Y	89	H2	2330082.79	0.6	2441196.5	95.45	29.5	120.4	
Y	89	He	481881.87	1.0	531537.69	90.66	29.5	120.4	
Tb	159	No Gas	8414813.21	4.8	7041897.33	119.5	29.5	120.4	
Tb	159	He	2860768.71	0.3	2795586.52	102.33	29.5	120.4	
Bi	209	No Gas	4593992.32	4.9	3760534.49	122.16	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-027RA

File Name 153SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:33:32 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.242	ppb	10.9	1824.63	100	
11	B	6	No Gas	205.299	ppb	7.7	24539.30	1000	
23	Na	45	He	10686.781	ppb	1.7	202698.17	200000	
24	Mg	45	He	1107.487	ppb	0.8	12030.29	200000	
27	Al	45	He	1669.100	ppb	0.9	6824.08	200000	
28	Si	45	H2	5096.102	ppb	1.9	40221.66	10000	
39	K	45	He	10017.388	ppb	1.4	106463.44	200000	
40	Ca	45	H2	1186.522	ppb	0.6	90430.93	200000	
51	V	89	He	54.859	ppb	2.4	9297.84	1000	
52	Cr	89	He	52.384	ppb	1.0	10847.54	2000	
55	Mn	89	He	25.735	ppb	1.5	2583.77	2000	
56	Fe	89	H2	1287.028	ppb	1.0	440409.01	100000	
59	Co	89	He	10.783	ppb	3.4	3865.26	1000	
60	Ni	89	He	17.251	ppb	3.4	2252.49	1000	
63	Cu	89	He	32.160	ppb	2.8	8857.57	2000	
66	Zn	89	He	106.692	ppb	1.2	4000.72	2000	
75	As	89	He	49.978	ppb	2.2	1552.26	1000	
78	Se	89	H2	46.541	ppb	2.5	788.32	1000	
88	Sr	89	He	66.961	ppb	1.3	10653.39	2000	
95	Mo	89	He	52.175	ppb	0.7	9386.86	1000	
107	Ag	89	He	11.343	ppb	0.3	7024.29	100	
111	Cd	89	He	10.964	ppb	1.4	871.15	1000	
118	Sn	159	He	85.420	ppb	0.8	16628.52	1000	
121	Sb	159	No Gas	9.709	ppb	6.7	16989.57	1000	
137	Ba	159	No Gas	25.900	ppb	8.9	17922.15	2000	
182	W	159	No Gas	47.905	ppb	6.9	65813.83	1000	
205	Tl	209	No Gas	10.133	ppb	7.2	31202.98	1000	
208	Pb	209	No Gas	15.246	ppb	8.3	65295.62	2000	
232	Th	209	No Gas	10.833	ppb	8.2	48009.17	1000	
238	U	209	No Gas	9.999	ppb	10.5	41495.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	822757.83	3.5	1023754.81	80.37	29.5	120.4	
Sc	45	No Gas	2711933.97	3.8	2927134.09	92.65	29.5	120.4	
Sc	45	H2	314949.77	1.0	374925.7	84	29.5	120.4	
Sc	45	He	62884.90	1.2	75429.93	83.37	29.5	120.4	
Ge	72	No Gas	688160.15	4.3	682196.39	100.87	29.5	120.4	
Ge	72	H2	124823.45	1.8	145757.5	85.64	29.5	120.4	
Ge	72	He	52860.66	0.4	59866.13	88.3	29.5	120.4	
Y	89	H2	2311173.23	0.2	2441196.5	94.67	29.5	120.4	
Y	89	He	473685.81	0.3	531537.69	89.12	29.5	120.4	
Tb	159	No Gas	8351620.22	3.0	7041897.33	118.6	29.5	120.4	
Tb	159	He	2857097.88	0.5	2795586.52	102.2	29.5	120.4	
Bi	209	No Gas	4596608.64	3.8	3760534.49	122.23	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-027RS

File Name 154SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:36:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	44.245	ppb	8.4	7707.88	100	
11	B	6	No Gas	458.692	ppb	9.9	52449.57	1000	
23	Na	45	He	7495.873	ppb	1.0	141844.13	200000	
24	Mg	45	He	4881.206	ppb	2.0	49452.33	200000	
27	Al	45	He	3109.175	ppb	1.4	12451.36	200000	
28	Si	45	H2	1431.607	ppb	2.4	11300.42	10000	
39	K	45	He	9367.272	ppb	0.6	98297.54	200000	
40	Ca	45	H2	2559.742	ppb	0.3	189063.71	200000	
51	V	89	He	447.961	ppb	0.5	74087.04	1000	
52	Cr	89	He	186.605	ppb	1.0	38147.58	2000	
55	Mn	89	He	452.472	ppb	0.4	44484.89	2000	
56	Fe	89	H2	1272.947	ppb	0.1	432546.74	100000	
59	Co	89	He	469.823	ppb	0.8	165643.27	1000	
60	Ni	89	He	466.938	ppb	0.6	45421.22	1000	
63	Cu	89	He	234.810	ppb	0.8	63563.01	2000	
66	Zn	89	He	477.923	ppb	1.4	17443.67	2000	
75	As	89	He	90.088	ppb	1.9	2769.92	1000	
78	Se	89	H2	89.837	ppb	0.8	1510.51	1000	
88	Sr	89	He	478.004	ppb	0.5	75370.19	2000	
95	Mo	89	He	96.425	ppb	0.1	17185.77	1000	
107	Ag	89	He	49.883	ppb	0.7	30593.09	100	
111	Cd	89	He	245.138	ppb	1.0	19301.99	1000	
118	Sn	159	He	459.493	ppb	1.0	89215.80	1000	
121	Sb	159	No Gas	74.277	ppb	8.7	131239.65	1000	
137	Ba	159	No Gas	1650.645	ppb	9.1	1154847.39	2000	
182	W	159	No Gas	81.550	ppb	8.7	113436.01	1000	
205	Tl	209	No Gas	88.941	ppb	9.0	274859.57	1000	
208	Pb	209	No Gas	93.827	ppb	9.5	402933.19	2000	
232	Th	209	No Gas	86.623	ppb	11.1	384592.66	1000	
238	U	209	No Gas	88.351	ppb	10.7	368217.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	811510.03	4.5	1023754.81	79.27	29.5	120.4	
Sc	45	No Gas	2689517.52	4.2	2927134.09	91.88	29.5	120.4	
Sc	45	H2	307027.66	0.4	374925.7	81.89	29.5	120.4	
Sc	45	He	61711.84	0.4	75429.93	81.81	29.5	120.4	
Ge	72	No Gas	691849.45	4.2	682196.39	101.41	29.5	120.4	
Ge	72	H2	122657.74	0.6	145757.5	84.15	29.5	120.4	
Ge	72	He	52356.17	0.5	59866.13	87.46	29.5	120.4	
Y	89	H2	2294719.46	0.4	2441196.5	94	29.5	120.4	
Y	89	He	469445.07	0.3	531537.69	88.32	29.5	120.4	
Tb	159	No Gas	8466759.67	3.9	7041897.33	120.23	29.5	120.4	
Tb	159	He	2857955.03	0.5	2795586.52	102.23	29.5	120.4	
Bi	209	No Gas	4618811.51	4.2	3760534.49	122.82	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5107-027RP

File Name 155SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:38:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	45.705	ppb	10.2	7877.97	100	
11	B	6	No Gas	481.774	ppb	5.7	54527.04	1000	
23	Na	45	He	7547.304	ppb	1.3	144804.56	200000	
24	Mg	45	He	4864.016	ppb	1.0	49987.61	200000	
27	Al	45	He	3099.074	ppb	2.4	12587.09	200000	
28	Si	45	H2	1498.318	ppb	5.7	11838.98	10000	
39	K	45	He	9394.661	ppb	0.6	99969.50	200000	
40	Ca	45	H2	2605.984	ppb	0.4	192965.29	200000	
51	V	89	He	454.687	ppb	1.2	75633.20	1000	
52	Cr	89	He	188.032	ppb	0.9	38662.82	2000	
55	Mn	89	He	459.971	ppb	0.5	45484.53	2000	
56	Fe	89	H2	1267.442	ppb	0.4	429711.40	100000	
59	Co	89	He	478.033	ppb	0.7	169521.49	1000	
60	Ni	89	He	474.186	ppb	0.8	46385.41	1000	
63	Cu	89	He	240.341	ppb	0.6	65438.07	2000	
66	Zn	89	He	482.253	ppb	0.9	17702.85	2000	
75	As	89	He	92.918	ppb	1.9	2873.62	1000	
78	Se	89	H2	89.160	ppb	1.6	1495.68	1000	
88	Sr	89	He	482.128	ppb	0.3	76463.00	2000	
95	Mo	89	He	97.981	ppb	1.3	17565.13	1000	
107	Ag	89	He	50.634	ppb	0.8	31233.41	100	
111	Cd	89	He	250.465	ppb	1.0	19836.84	1000	
118	Sn	159	He	474.248	ppb	0.4	91984.20	1000	
121	Sb	159	No Gas	78.444	ppb	9.6	138374.58	1000	
137	Ba	159	No Gas	1696.664	ppb	8.1	1185547.37	2000	
182	W	159	No Gas	86.690	ppb	7.2	120445.31	1000	
205	Tl	209	No Gas	91.255	ppb	8.4	281051.10	1000	
208	Pb	209	No Gas	95.404	ppb	8.8	408321.13	2000	
232	Th	209	No Gas	88.965	ppb	9.3	393747.80	1000	
238	U	209	No Gas	91.474	ppb	9.5	380007.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	802668.10	2.9	1023754.81	78.4	29.5	120.4	
Sc	45	No Gas	2685374.76	3.7	2927134.09	91.74	29.5	120.4	
Sc	45	H2	307828.06	0.3	374925.7	82.1	29.5	120.4	
Sc	45	He	62595.74	0.7	75429.93	82.99	29.5	120.4	
Ge	72	No Gas	690923.74	3.5	682196.39	101.28	29.5	120.4	
Ge	72	H2	124071.77	0.1	145757.5	85.12	29.5	120.4	
Ge	72	He	52572.88	0.4	59866.13	87.82	29.5	120.4	
Y	89	H2	2289424.78	0.2	2441196.5	93.78	29.5	120.4	
Y	89	He	472178.31	0.4	531537.69	88.83	29.5	120.4	
Tb	159	No Gas	8452384.53	3.6	7041897.33	120.03	29.5	120.4	
Tb	159	He	2854894.58	0.6	2795586.52	102.12	29.5	120.4	
Bi	209	No Gas	4602436.91	4.2	3760534.49	122.39	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6054-006

File Name 156SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:41:15 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.631	ppb	23.3	71.11	100	
11	B	6	No Gas	5035.668	ppb	6.4	266930.54	1000	
23	Na	45	He	1284218.791	ppb	0.8	11709798.56	200000	
24	Mg	45	He	32543.767	ppb	1.1	166120.95	200000	
27	Al	45	He	819.427	ppb	2.4	1696.83	200000	
28	Si	45	H2	11946.959	ppb	1.6	46256.16	10000	
39	K	45	He	301819.384	ppb	0.9	1472998.24	200000	
40	Ca	45	H2	93105.806	ppb	0.1	3448678.84	200000	
51	V	89	He	35.665	ppb	1.2	3101.57	1000	
52	Cr	89	He	83.108	ppb	2.3	8529.69	2000	
55	Mn	89	He	199.721	ppb	2.2	9831.65	2000	
56	Fe	89	H2	2712.260	ppb	0.9	453329.94	100000	
59	Co	89	He	30.449	ppb	2.6	5390.30	1000	
60	Ni	89	He	122.004	ppb	3.9	6428.37	1000	
63	Cu	89	He	7.533	ppb	5.5	1101.20	2000	
66	Zn	89	He	134.319	ppb	2.9	2526.98	2000	
75	As	89	He	84.395	ppb	0.8	1298.21	1000	
78	Se	89	H2	2.440	ppb	7.1	20.50	1000	
88	Sr	89	He	257.824	ppb	2.2	20302.25	2000	
95	Mo	89	He	4.333	ppb	6.1	393.35	1000	
107	Ag	89	He	0.064	ppb	10.8	25.56	100	
111	Cd	89	He	0.322	ppb	86.5	12.59	1000	
118	Sn	159	He	20.955	ppb	3.0	2065.79	1000	
121	Sb	159	No Gas	36.012	ppb	5.0	31103.71	1000	
137	Ba	159	No Gas	129.026	ppb	4.8	44102.24	2000	
182	W	159	No Gas	2.324	ppb	15.1	1625.26	1000	
205	Tl	209	No Gas	0.229	ppb	27.4	357.07	1000	
208	Pb	209	No Gas	8.277	ppb	6.6	16916.75	2000	
232	Th	209	No Gas	2.708	ppb	12.4	5817.95	1000	
238	U	209	No Gas	1.856	ppb	1.4	3674.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	766599.47	3.9	1023754.81	74.88	29.5	120.4	
Sc	45	No Gas	2664499.35	4.4	2927134.09	91.03	29.5	120.4	
Sc	45	H2	309445.11	1.2	374925.7	82.54	29.5	120.4	
Sc	45	He	62868.46	1.5	75429.93	83.35	29.5	120.4	
Ge	72	No Gas	672235.71	4.3	682196.39	98.54	29.5	120.4	
Ge	72	H2	121526.58	0.6	145757.5	83.38	29.5	120.4	
Ge	72	He	52588.53	1.1	59866.13	87.84	29.5	120.4	
Y	89	H2	2259377.32	1.3	2441196.5	92.55	29.5	120.4	
Y	89	He	468951.17	1.0	531537.69	88.23	29.5	120.4	
Tb	159	No Gas	8258289.67	4.2	7041897.33	117.27	29.5	120.4	
Tb	159	He	2822100.34	0.9	2795586.52	100.95	29.5	120.4	
Bi	209	No Gas	4362439.52	3.9	3760534.49	116.01	29.5	120.4	

Sample Report

Sample Name SN6054-006

File Name 157SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:43:50 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.509	ppb	48.3	41.11	100	
11	B	6	No Gas	5206.238	ppb	1.0	142641.68	1000	
23	Na	45	He	1298283.173	ppb	0.8	6116605.66	200000	
24	Mg	45	He	33128.366	ppb	1.0	87711.62	200000	
27	Al	45	He	887.137	ppb	8.1	962.29	200000	
28	Si	45	H2	12378.187	ppb	1.9	25119.80	10000	
39	K	45	He	311352.510	ppb	0.7	789249.36	200000	
40	Ca	45	H2	94039.260	ppb	1.2	1811624.99	200000	
51	V	89	He	36.185	ppb	2.5	1696.83	1000	
52	Cr	89	He	83.529	ppb	0.7	4430.57	2000	
55	Mn	89	He	199.204	ppb	0.4	5050.68	2000	
56	Fe	89	H2	2718.483	ppb	2.5	236968.40	100000	
59	Co	89	He	31.242	ppb	1.4	2853.82	1000	
60	Ni	89	He	113.901	ppb	2.0	3394.98	1000	
63	Cu	89	He	8.530	ppb	8.1	677.82	2000	
66	Zn	89	He	133.562	ppb	3.4	1336.78	2000	
75	As	89	He	84.578	ppb	1.1	669.76	1000	
78	Se	89	H2	2.665	ppb	40.3	11.67	1000	
88	Sr	89	He	265.964	ppb	2.7	10751.21	2000	
95	Mo	89	He	3.840	ppb	13.7	183.34	1000	
107	Ag	89	He	0.124	ppb	52.6	25.56	100	
111	Cd	89	He	0.330	ppb	16.8	6.67	1000	
118	Sn	159	He	19.049	ppb	6.8	985.63	1000	
121	Sb	159	No Gas	35.044	ppb	4.7	14437.20	1000	
137	Ba	159	No Gas	134.470	ppb	1.7	21915.73	2000	
182	W	159	No Gas	2.357	ppb	10.8	810.94	1000	
205	Tl	209	No Gas	0.105	ppb	34.9	93.44	1000	
208	Pb	209	No Gas	8.318	ppb	2.2	8277.01	2000	
232	Th	209	No Gas	1.152	ppb	7.3	1274.83	1000	
238	U	209	No Gas	1.795	ppb	3.1	1722.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	787905.38	3.6	1023754.81	76.96	29.5	120.4	
Sc	45	No Gas	2622463.00	4.6	2927134.09	89.59	29.5	120.4	
Sc	45	H2	321805.56	0.7	374925.7	85.83	29.5	120.4	
Sc	45	He	64922.35	0.8	75429.93	86.07	29.5	120.4	
Ge	72	No Gas	656554.41	4.5	682196.39	96.24	29.5	120.4	
Ge	72	H2	127455.99	1.2	145757.5	87.44	29.5	120.4	
Ge	72	He	54513.43	0.4	59866.13	91.06	29.5	120.4	
Y	89	H2	2327641.80	0.8	2441196.5	95.35	29.5	120.4	
Y	89	He	481434.60	0.4	531537.69	90.57	29.5	120.4	
Tb	159	No Gas	7862019.95	4.4	7041897.33	111.65	29.5	120.4	
Tb	159	He	2864548.50	0.6	2795586.52	102.47	29.5	120.4	
Bi	209	No Gas	4209976.60	4.2	3760534.49	111.95	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	158_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 11:46:23 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.682	ppb	7.7	22156.49	25	94.73	89.8	110.2	
11	B	6	No Gas	29.898	ppb	4.4	19330.16	25	119.59	89.8	110.2	> +/- 10%
23	Na	45	He	5135.038	ppb	1.1	498493.18	5000	102.7	89.8	110.2	
24	Mg	45	He	4922.094	ppb	2.0	262820.36	5000	98.44	89.8	110.2	
27	Al	45	He	464.493	ppb	1.9	9933.79	500	92.9	89.8	110.2	
28	Si	45	H2	457.126	ppb	2.5	18816.65	500	91.43	89.8	110.2	
39	K	45	He	4830.039	ppb	0.5	255148.02	5000	96.6	89.8	110.2	
40	Ca	45	H2	4821.743	ppb	0.4	1873050.36	5000	96.43	89.8	110.2	
51	V	89	He	23.853	ppb	0.9	20451.04	25	95.41	89.8	110.2	
52	Cr	89	He	24.242	ppb	1.2	25557.70	25	96.97	89.8	110.2	
55	Mn	89	He	23.576	ppb	1.0	11968.91	25	94.3	89.8	110.2	
56	Fe	89	H2	4685.994	ppb	0.4	7991740.36	5000	93.72	89.8	110.2	
59	Co	89	He	24.589	ppb	0.6	44695.97	25	98.36	89.8	110.2	
60	Ni	89	He	23.335	ppb	3.6	12142.38	25	93.34	89.8	110.2	
63	Cu	89	He	24.325	ppb	0.7	33973.21	25	97.3	89.8	110.2	
66	Zn	89	He	24.440	ppb	2.0	4666.51	25	97.76	89.8	110.2	
75	As	89	He	24.222	ppb	1.4	3836.29	25	96.89	89.8	110.2	
78	Se	89	H2	23.550	ppb	3.2	2013.06	25	94.2	89.8	110.2	
88	Sr	89	He	23.438	ppb	2.1	19042.69	25	93.75	89.8	110.2	
95	Mo	89	He	24.456	ppb	1.3	22457.91	25	97.82	89.8	110.2	
107	Ag	89	He	25.391	ppb	0.7	80231.53	25	101.56	89.8	110.2	
111	Cd	89	He	25.381	ppb	0.7	10298.45	25	101.52	89.8	110.2	
118	Sn	159	He	22.747	ppb	0.1	22078.76	25	90.99	89.8	110.2	
121	Sb	159	No Gas	21.754	ppb	9.1	188218.76	25	87.02	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.320	ppb	10.3	76498.21	25	89.28	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.546	ppb	9.5	153559.27	25	90.18	89.8	110.2	
205	Tl	209	No Gas	22.572	ppb	9.0	341016.05	25	90.29	89.8	110.2	
208	Pb	209	No Gas	22.789	ppb	8.6	478525.17	25	91.16	89.8	110.2	
232	Th	209	No Gas	21.995	ppb	9.8	477552.57	25	87.98	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.655	ppb	9.2	461801.46	25	90.62	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	872227.72	2.9	1023754.81	85.2	29.5	120.4	
Sc	45	No Gas	2827972.33	4.2	2927134.09	96.61	29.5	120.4	
Sc	45	H2	324438.04	0.4	374925.7	86.53	29.5	120.4	
Sc	45	He	65867.23	1.1	75429.93	87.32	29.5	120.4	
Ge	72	No Gas	693906.41	3.4	682196.39	101.72	29.5	120.4	
Ge	72	H2	128867.33	0.4	145757.5	88.41	29.5	120.4	
Ge	72	He	54818.89	0.5	59866.13	91.57	29.5	120.4	
Y	89	H2	2333109.28	0.6	2441196.5	95.57	29.5	120.4	
Y	89	He	483803.02	0.3	531537.69	91.02	29.5	120.4	
Tb	159	No Gas	8294063.97	3.9	7041897.33	117.78	29.5	120.4	
Tb	159	He	2851523.88	0.1	2795586.52	102	29.5	120.4	
Bi	209	No Gas	4515356.18	3.9	3760534.49	120.07	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	159_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/29/2020 11:49:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.080	ppb	28.1	100.00	0.2	
11	B	6	No Gas	2.932	ppb	3.1	3234.91	4	Failed DoD
23	Na	45	He	38.960	ppb	15.2	12088.55	200	
24	Mg	45	He	2.253	ppb	63.8	937.88	20	
27	Al	45	He	-0.583	ppb	N/A	17.78	20	
28	Si	45	H2	5.722	ppb	59.8	660.74	100	
39	K	45	He	2.620	ppb	191.6	9937.36	200	
40	Ca	45	H2	1.638	ppb	11.8	1693.49	20	
51	V	89	He	0.043	ppb	52.1	205.56	1	
52	Cr	89	He	-0.001	ppb	N/A	59.32	1	
55	Mn	89	He	-0.012	ppb	N/A	27.33	0.4	
56	Fe	89	H2	0.467	ppb	63.6	6799.25	20	
59	Co	89	He	0.009	ppb	111.1	46.67	0.2	
60	Ni	89	He	-0.839	ppb	N/A	180.01	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.017	ppb	7.2	112.23	0.6	
66	Zn	89	He	-0.150	ppb	N/A	66.67	2	
75	As	89	He	0.004	ppb	83.4	4.67	1	
78	Se	89	H2	0.031	ppb	32.3	3.00	1	
88	Sr	89	He	0.019	ppb	33.0	15.56	1	
95	Mo	89	He	0.109	ppb	16.4	108.89	1	
107	Ag	89	He	0.008	ppb	68.5	31.11	0.2	
111	Cd	89	He	0.006	ppb	65.6	2.59	0.2	
118	Sn	159	He	0.091	ppb	43.2	147.78	1	
121	Sb	159	No Gas	0.027	ppb	29.8	290.33	0.2	
137	Ba	159	No Gas	0.033	ppb	12.8	146.83	0.4	
182	W	159	No Gas	0.080	ppb	17.1	590.67	1	
205	Tl	209	No Gas	0.029	ppb	19.6	460.53	0.2	
208	Pb	209	No Gas	0.018	ppb	35.8	510.58	0.2	
232	Th	209	No Gas	0.068	ppb	5.2	1571.88	1	
238	U	209	No Gas	0.022	ppb	31.9	457.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	902273.74	3.2	1023754.81	88.13	29.5	120.4	
Sc	45	No Gas	2838004.80	4.2	2927134.09	96.96	29.5	120.4	
Sc	45	H2	331051.47	1.5	374925.7	88.3	29.5	120.4	
Sc	45	He	66434.56	0.3	75429.93	88.07	29.5	120.4	
Ge	72	No Gas	696418.38	4.7	682196.39	102.08	29.5	120.4	
Ge	72	H2	130113.74	1.0	145757.5	89.27	29.5	120.4	
Ge	72	He	55281.13	0.7	59866.13	92.34	29.5	120.4	
Y	89	H2	2363292.90	0.4	2441196.5	96.81	29.5	120.4	
Y	89	He	489104.82	0.3	531537.69	92.02	29.5	120.4	
Tb	159	No Gas	8211558.14	4.3	7041897.33	116.61	29.5	120.4	
Tb	159	He	2860882.70	0.4	2795586.52	102.34	29.5	120.4	
Bi	209	No Gas	4479994.99	4.3	3760534.49	119.13	29.5	120.4	

Sample Report

Sample Name SN6054-006

File Name 160SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:51:37 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.634	ppb	31.2	45.56	100	
11	B	6	No Gas	4689.503	ppb	9.5	114183.27	1000	
23	Na	45	He	1296538.024	ppb	1.1	4950722.89	200000	
24	Mg	45	He	32828.941	ppb	1.7	70587.68	200000	
27	Al	45	He	849.183	ppb	7.8	753.38	200000	
28	Si	45	H2	12161.800	ppb	3.0	19942.66	10000	
39	K	45	He	309950.308	ppb	0.8	638566.17	200000	
40	Ca	45	H2	95835.812	ppb	0.2	1485080.11	200000	
51	V	89	He	36.423	ppb	2.0	1392.35	1000	
52	Cr	89	He	84.672	ppb	1.6	3587.82	2000	
55	Mn	89	He	198.232	ppb	0.3	4009.19	2000	
56	Fe	89	H2	2772.670	ppb	1.0	193085.94	100000	
59	Co	89	He	32.840	ppb	4.1	2393.73	1000	
60	Ni	89	He	109.001	ppb	5.9	2724.81	1000	
63	Cu	89	He	7.395	ppb	8.5	494.47	2000	
66	Zn	89	He	127.912	ppb	2.8	1041.19	2000	
75	As	89	He	86.639	ppb	9.7	547.07	1000	
78	Se	89	H2	1.926	ppb	31.4	6.83	1000	
88	Sr	89	He	264.930	ppb	2.5	8528.52	2000	
95	Mo	89	He	4.821	ppb	11.5	183.34	1000	
107	Ag	89	He	0.103	ppb	116.7	18.89	100	
111	Cd	89	He	0.276	ppb	43.2	4.44	1000	
118	Sn	159	He	21.766	ppb	3.6	895.62	1000	
121	Sb	159	No Gas	33.468	ppb	7.1	11330.75	1000	
137	Ba	159	No Gas	122.822	ppb	7.7	16421.63	2000	
182	W	159	No Gas	2.247	ppb	19.5	644.07	1000	
205	Tl	209	No Gas	0.101	ppb	73.8	76.75	1000	
208	Pb	209	No Gas	7.692	ppb	10.9	6307.70	2000	
232	Th	209	No Gas	2.161	ppb	8.4	1908.95	1000	
238	U	209	No Gas	1.546	ppb	10.2	1221.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	874239.48	3.6	1023754.81	85.4	29.5	120.4	
Sc	45	No Gas	2793404.69	4.8	2927134.09	95.43	29.5	120.4	
Sc	45	H2	323512.33	0.6	374925.7	86.29	29.5	120.4	
Sc	45	He	65752.25	0.9	75429.93	87.17	29.5	120.4	
Ge	72	No Gas	689106.39	4.3	682196.39	101.01	29.5	120.4	
Ge	72	H2	127186.45	0.7	145757.5	87.26	29.5	120.4	
Ge	72	He	54323.20	0.2	59866.13	90.74	29.5	120.4	
Y	89	H2	2311209.22	0.6	2441196.5	94.68	29.5	120.4	
Y	89	He	479231.11	0.3	531537.69	90.16	29.5	120.4	
Tb	159	No Gas	8072964.88	4.6	7041897.33	114.64	29.5	120.4	
Tb	159	He	2832082.21	0.3	2795586.52	101.31	29.5	120.4	
Bi	209	No Gas	4331508.39	4.7	3760534.49	115.18	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 161SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:54:12 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.014	ppb	65.9	35.56	100	
11	B	6	No Gas	5.164	ppb	1.3	4609.78	1000	
23	Na	45	He	45.685	ppb	8.6	12646.14	200000	
24	Mg	45	He	1.358	ppb	137.5	882.31	200000	
27	Al	45	He	0.519	ppb	91.9	41.11	200000	
28	Si	45	H2	7.142	ppb	23.7	720.82	10000	
39	K	45	He	4.394	ppb	30.7	9962.33	200000	
40	Ca	45	H2	1.421	ppb	13.7	1609.05	200000	
51	V	89	He	0.117	ppb	13.8	264.46	1000	
52	Cr	89	He	0.010	ppb	58.4	69.32	2000	
55	Mn	89	He	0.027	ppb	52.9	46.66	2000	
56	Fe	89	H2	-1.210	ppb	N/A	3914.91	100000	
59	Co	89	He	-0.002	ppb	N/A	26.67	1000	
60	Ni	89	He	-0.819	ppb	N/A	186.68	1000	
63	Cu	89	He	0.014	ppb	83.0	106.67	2000	
66	Zn	89	He	-0.096	ppb	N/A	75.56	2000	
75	As	89	He	0.001	ppb	2292.4	4.00	1000	
78	Se	89	H2	0.010	ppb	123.6	1.17	1000	
88	Sr	89	He	0.003	ppb	86.6	2.22	2000	
95	Mo	89	He	0.014	ppb	12.8	21.11	1000	
107	Ag	89	He	0.002	ppb	109.2	12.22	100	
111	Cd	89	He	0.004	ppb	86.6	1.48	1000	
118	Sn	159	He	0.042	ppb	16.9	97.78	1000	
121	Sb	159	No Gas	0.003	ppb	112.0	80.09	1000	
137	Ba	159	No Gas	0.021	ppb	6.6	106.79	2000	
182	W	159	No Gas	0.010	ppb	62.3	116.80	1000	
205	Tl	209	No Gas	0.003	ppb	51.7	60.07	1000	
208	Pb	209	No Gas	0.004	ppb	73.7	193.55	2000	
232	Th	209	No Gas	0.008	ppb	36.5	276.98	1000	
238	U	209	No Gas	0.001	ppb	94.0	40.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	899435.25	1.6	1023754.81	87.86	29.5	120.4	
Sc	45	No Gas	2810937.85	1.7	2927134.09	96.03	29.5	120.4	
Sc	45	H2	331266.72	0.2	374925.7	88.36	29.5	120.4	
Sc	45	He	65992.46	2.4	75429.93	87.49	29.5	120.4	
Ge	72	No Gas	690058.24	2.1	682196.39	101.15	29.5	120.4	
Ge	72	H2	130817.87	2.0	145757.5	89.75	29.5	120.4	
Ge	72	He	54155.06	3.3	59866.13	90.46	29.5	120.4	
Y	89	H2	2368476.54	0.6	2441196.5	97.02	29.5	120.4	
Y	89	He	480892.24	2.9	531537.69	90.47	29.5	120.4	
Tb	159	No Gas	8106386.69	1.9	7041897.33	115.12	29.5	120.4	
Tb	159	He	2805476.00	2.7	2795586.52	100.35	29.5	120.4	
Bi	209	No Gas	4402879.24	2.2	3760534.49	117.08	29.5	120.4	

Sample Report

Sample Name SN6054-007

File Name 162SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:56:43 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.291	ppb	3.0	46.67	100	
11	B	6	No Gas	5012.332	ppb	6.0	288079.62	1000	
23	Na	45	He	1315696.988	ppb	0.3	12524364.55	200000	
24	Mg	45	He	33683.788	ppb	0.9	179478.82	200000	
27	Al	45	He	822.762	ppb	1.9	1777.95	200000	
28	Si	45	H2	12706.333	ppb	1.6	50589.34	10000	
39	K	45	He	312527.329	ppb	0.4	1592003.43	200000	
40	Ca	45	H2	101116.650	ppb	0.6	3853094.32	200000	
51	V	89	He	36.539	ppb	4.0	3233.82	1000	
52	Cr	89	He	83.860	ppb	1.3	8771.15	2000	
55	Mn	89	He	203.788	ppb	2.2	10222.51	2000	
56	Fe	89	H2	3264.163	ppb	0.5	553164.54	100000	
59	Co	89	He	31.428	ppb	3.1	5668.24	1000	
60	Ni	89	He	127.529	ppb	2.9	6819.69	1000	
63	Cu	89	He	7.645	ppb	4.4	1137.87	2000	
66	Zn	89	He	129.818	ppb	4.4	2491.43	2000	
75	As	89	He	88.773	ppb	3.1	1391.22	1000	
78	Se	89	H2	1.885	ppb	16.1	16.17	1000	
88	Sr	89	He	275.190	ppb	0.7	22086.24	2000	
95	Mo	89	He	4.337	ppb	6.4	401.13	1000	
107	Ag	89	He	0.059	ppb	37.9	24.45	100	
111	Cd	89	He	0.268	ppb	25.8	10.74	1000	
118	Sn	159	He	18.382	ppb	2.8	1830.20	1000	
121	Sb	159	No Gas	39.936	ppb	6.5	32966.97	1000	
137	Ba	159	No Gas	131.306	ppb	6.9	42900.14	2000	
182	W	159	No Gas	2.626	ppb	18.8	1752.10	1000	
205	Tl	209	No Gas	0.023	ppb	84.3	50.05	1000	
208	Pb	209	No Gas	6.775	ppb	4.8	13234.16	2000	
232	Th	209	No Gas	0.919	ppb	15.1	1945.67	1000	
238	U	209	No Gas	1.558	ppb	8.6	2940.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	830343.70	1.7	1023754.81	81.11	29.5	120.4	
Sc	45	No Gas	2686559.77	1.0	2927134.09	91.78	29.5	120.4	
Sc	45	H2	318347.46	0.7	374925.7	84.91	29.5	120.4	
Sc	45	He	65629.51	0.3	75429.93	87.01	29.5	120.4	
Ge	72	No Gas	666047.33	1.8	682196.39	97.63	29.5	120.4	
Ge	72	H2	124911.78	0.6	145757.5	85.7	29.5	120.4	
Ge	72	He	53966.03	0.3	59866.13	90.14	29.5	120.4	
Y	89	H2	2295647.96	0.1	2441196.5	94.04	29.5	120.4	
Y	89	He	477889.67	0.6	531537.69	89.91	29.5	120.4	
Tb	159	No Gas	7886373.42	0.9	7041897.33	111.99	29.5	120.4	
Tb	159	He	2838764.57	0.3	2795586.52	101.54	29.5	120.4	
Bi	209	No Gas	4157558.82	1.4	3760534.49	110.56	29.5	120.4	

Sample Report

Sample Name SN6054-007

File Name 163SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/29/2020 11:59:14 PM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.512	ppb	46.4	44.44	100	
11	B	6	No Gas	5229.637	ppb	6.0	153481.98	1000	
23	Na	45	He	1366740.259	ppb	1.5	6667796.36	200000	
24	Mg	45	He	34996.424	ppb	0.8	95919.69	200000	
27	Al	45	He	885.475	ppb	8.8	993.41	200000	
28	Si	45	H2	12879.087	ppb	2.0	26738.26	10000	
39	K	45	He	325505.680	ppb	1.6	854016.81	200000	
40	Ca	45	H2	102054.027	ppb	0.7	2012268.58	200000	
51	V	89	He	37.454	ppb	1.2	1781.29	1000	
52	Cr	89	He	84.457	ppb	1.9	4557.26	2000	
55	Mn	89	He	211.266	ppb	1.4	5448.08	2000	
56	Fe	89	H2	3311.494	ppb	1.1	291764.12	100000	
59	Co	89	He	31.346	ppb	7.4	2913.87	1000	
60	Ni	89	He	120.994	ppb	3.1	3631.71	1000	
63	Cu	89	He	8.061	ppb	0.9	656.70	2000	
66	Zn	89	He	129.092	ppb	5.7	1317.89	2000	
75	As	89	He	92.232	ppb	4.3	742.77	1000	
78	Se	89	H2	2.007	ppb	25.7	9.00	1000	
88	Sr	89	He	278.905	ppb	0.7	11471.83	2000	
95	Mo	89	He	5.445	ppb	15.1	261.12	1000	
107	Ag	89	He	0.024	ppb	1.5	10.00	100	
111	Cd	89	He	0.415	ppb	37.5	8.52	1000	
118	Sn	159	He	17.849	ppb	7.6	927.85	1000	
121	Sb	159	No Gas	41.125	ppb	4.9	17467.48	1000	
137	Ba	159	No Gas	134.319	ppb	7.6	22554.46	2000	
182	W	159	No Gas	2.454	ppb	7.5	867.67	1000	
205	Tl	209	No Gas	0.011	ppb	200.6	26.70	1000	
208	Pb	209	No Gas	7.000	ppb	7.9	7095.41	2000	
232	Th	209	No Gas	0.920	ppb	17.9	1054.57	1000	
238	U	209	No Gas	1.573	ppb	22.2	1531.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	844776.01	2.4	1023754.81	82.52	29.5	120.4	
Sc	45	No Gas	2773908.08	1.6	2927134.09	94.77	29.5	120.4	
Sc	45	H2	329375.81	0.8	374925.7	87.85	29.5	120.4	
Sc	45	He	67242.61	2.0	75429.93	89.15	29.5	120.4	
Ge	72	No Gas	688675.06	1.7	682196.39	100.95	29.5	120.4	
Ge	72	H2	130007.32	0.8	145757.5	89.19	29.5	120.4	
Ge	72	He	55447.65	0.5	59866.13	92.62	29.5	120.4	
Y	89	H2	2362956.28	0.7	2441196.5	96.8	29.5	120.4	
Y	89	He	489852.26	0.6	531537.69	92.16	29.5	120.4	
Tb	159	No Gas	8104221.69	1.8	7041897.33	115.09	29.5	120.4	
Tb	159	He	2867546.28	0.5	2795586.52	102.57	29.5	120.4	
Bi	209	No Gas	4282917.92	2.0	3760534.49	113.89	29.5	120.4	

Sample Report

Sample Name SN6054-007

File Name 164SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:01:47 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.313	ppb	63.1	33.33	100	
11	B	6	No Gas	5173.201	ppb	7.2	125520.07	1000	
23	Na	45	He	1368893.181	ppb	1.1	5390714.28	200000	
24	Mg	45	He	34575.398	ppb	1.5	76636.45	200000	
27	Al	45	He	906.244	ppb	4.0	826.72	200000	
28	Si	45	H2	12833.369	ppb	2.0	21623.57	10000	
39	K	45	He	329968.964	ppb	1.3	700492.52	200000	
40	Ca	45	H2	102336.230	ppb	0.7	1631469.44	200000	
51	V	89	He	38.871	ppb	4.9	1513.47	1000	
52	Cr	89	He	85.284	ppb	2.4	3707.82	2000	
55	Mn	89	He	213.005	ppb	1.4	4417.90	2000	
56	Fe	89	H2	3326.577	ppb	0.7	236298.08	100000	
59	Co	89	He	34.588	ppb	6.5	2584.88	1000	
60	Ni	89	He	119.798	ppb	4.9	3013.76	1000	
63	Cu	89	He	8.951	ppb	18.0	595.59	2000	
66	Zn	89	He	124.171	ppb	2.0	1040.08	2000	
75	As	89	He	94.517	ppb	2.3	612.08	1000	
78	Se	89	H2	2.070	ppb	54.9	7.50	1000	
88	Sr	89	He	280.545	ppb	2.5	9266.81	2000	
95	Mo	89	He	4.157	ppb	5.6	163.34	1000	
107	Ag	89	He	0.091	ppb	33.8	17.78	100	
111	Cd	89	He	0.495	ppb	28.9	8.15	1000	
118	Sn	159	He	18.331	ppb	6.7	774.50	1000	
121	Sb	159	No Gas	42.544	ppb	9.7	14617.51	1000	
137	Ba	159	No Gas	133.054	ppb	9.4	18075.94	2000	
182	W	159	No Gas	2.032	ppb	28.0	597.35	1000	
205	Tl	209	No Gas	0.018	ppb	252.1	30.03	1000	
208	Pb	209	No Gas	7.100	ppb	7.4	5860.41	2000	
232	Th	209	No Gas	0.684	ppb	11.5	680.78	1000	
238	U	209	No Gas	1.589	ppb	12.2	1258.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	871234.35	2.5	1023754.81	85.1	29.5	120.4	
Sc	45	No Gas	2831937.83	3.3	2927134.09	96.75	29.5	120.4	
Sc	45	H2	332835.42	0.3	374925.7	88.77	29.5	120.4	
Sc	45	He	67816.44	0.8	75429.93	89.91	29.5	120.4	
Ge	72	No Gas	698541.53	2.8	682196.39	102.4	29.5	120.4	
Ge	72	H2	132750.24	0.8	145757.5	91.08	29.5	120.4	
Ge	72	He	55957.88	0.6	59866.13	93.47	29.5	120.4	
Y	89	H2	2369386.33	0.5	2441196.5	97.06	29.5	120.4	
Y	89	He	491767.48	0.6	531537.69	92.52	29.5	120.4	
Tb	159	No Gas	8202980.15	3.6	7041897.33	116.49	29.5	120.4	
Tb	159	He	2873721.94	0.8	2795586.52	102.79	29.5	120.4	
Bi	209	No Gas	4345652.01	3.3	3760534.49	115.56	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 165SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:04:17 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	2111.6	23.33	100	
11	B	6	No Gas	7.127	ppb	2.9	5896.97	1000	
23	Na	45	He	93.222	ppb	3.8	17607.03	200000	
24	Mg	45	He	2.165	ppb	106.2	949.00	200000	
27	Al	45	He	0.013	ppb	5380.4	31.11	200000	
28	Si	45	H2	10.118	ppb	16.6	867.67	10000	
39	K	45	He	-0.359	ppb	N/A	9950.73	200000	
40	Ca	45	H2	1.565	ppb	26.7	1714.61	200000	
51	V	89	He	0.160	ppb	20.5	310.01	1000	
52	Cr	89	He	-0.003	ppb	N/A	57.32	2000	
55	Mn	89	He	0.037	ppb	39.9	53.32	2000	
56	Fe	89	H2	-1.316	ppb	N/A	3804.75	100000	
59	Co	89	He	0.000	ppb	N/A	31.11	1000	
60	Ni	89	He	-0.794	ppb	N/A	205.57	1000	
63	Cu	89	He	0.039	ppb	11.4	145.56	2000	
66	Zn	89	He	0.019	ppb	99.8	100.00	2000	
75	As	89	He	-0.013	ppb	N/A	2.00	1000	
78	Se	89	H2	0.008	ppb	129.5	1.00	1000	
88	Sr	89	He	0.007	ppb	34.6	5.56	2000	
95	Mo	89	He	0.005	ppb	113.2	13.34	1000	
107	Ag	89	He	0.000	ppb	717.9	6.67	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.028	ppb	86.9	86.67	1000	
121	Sb	159	No Gas	0.000	ppb	N/A	56.73	1000	
137	Ba	159	No Gas	0.006	ppb	106.7	56.73	2000	
182	W	159	No Gas	-0.001	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.002	ppb	68.3	43.38	1000	
208	Pb	209	No Gas	0.002	ppb	146.1	160.18	2000	
232	Th	209	No Gas	0.001	ppb	212.1	123.47	1000	
238	U	209	No Gas	0.001	ppb	127.5	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	909895.48	3.7	1023754.81	88.88	29.5	120.4	
Sc	45	No Gas	2890764.26	4.7	2927134.09	98.76	29.5	120.4	
Sc	45	H2	340925.05	0.1	374925.7	90.93	29.5	120.4	
Sc	45	He	67559.63	0.3	75429.93	89.57	29.5	120.4	
Ge	72	No Gas	711277.81	4.1	682196.39	104.26	29.5	120.4	
Ge	72	H2	133652.18	2.2	145757.5	91.69	29.5	120.4	
Ge	72	He	56299.94	0.6	59866.13	94.04	29.5	120.4	
Y	89	H2	2415376.10	0.7	2441196.5	98.94	29.5	120.4	
Y	89	He	495885.61	0.4	531537.69	93.29	29.5	120.4	
Tb	159	No Gas	8310123.28	4.9	7041897.33	118.01	29.5	120.4	
Tb	159	He	2885423.01	0.2	2795586.52	103.21	29.5	120.4	
Bi	209	No Gas	4487368.98	4.6	3760534.49	119.33	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 166SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:06:50 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	21.11	100	
11	B	6	No Gas	3.197	ppb	10.1	3461.64	1000	
23	Na	45	He	57.546	ppb	3.2	14336.38	200000	
24	Mg	45	He	3.698	ppb	79.7	1049.00	200000	
27	Al	45	He	-0.409	ppb	N/A	22.22	200000	
28	Si	45	H2	7.165	ppb	12.1	740.85	10000	
39	K	45	He	0.283	ppb	2389.2	10142.45	200000	
40	Ca	45	H2	0.682	ppb	20.7	1351.23	200000	
51	V	89	He	0.165	ppb	19.6	315.57	1000	
52	Cr	89	He	-0.005	ppb	N/A	55.32	2000	
55	Mn	89	He	-0.020	ppb	N/A	24.00	2000	
56	Fe	89	H2	-1.495	ppb	N/A	3484.32	100000	
59	Co	89	He	-0.010	ppb	N/A	13.33	1000	
60	Ni	89	He	-0.823	ppb	N/A	191.12	1000	
63	Cu	89	He	0.000	ppb	955.1	90.00	2000	
66	Zn	89	He	-0.184	ppb	N/A	61.11	2000	
75	As	89	He	-0.002	ppb	N/A	3.67	1000	
78	Se	89	H2	0.008	ppb	197.5	1.00	1000	
88	Sr	89	He	0.003	ppb	86.6	2.22	2000	
95	Mo	89	He	0.004	ppb	49.7	12.22	1000	
107	Ag	89	He	0.001	ppb	359.4	8.89	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.008	ppb	201.6	67.78	1000	
121	Sb	159	No Gas	0.001	ppb	221.9	66.74	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	33.37	2000	
182	W	159	No Gas	-0.006	ppb	N/A	13.35	1000	
205	Tl	209	No Gas	0.002	ppb	81.4	46.72	1000	
208	Pb	209	No Gas	0.000	ppb	N/A	120.13	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	83.43	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	919704.30	3.9	1023754.81	89.84	29.5	120.4	
Sc	45	No Gas	2881730.38	3.9	2927134.09	98.45	29.5	120.4	
Sc	45	H2	339985.63	1.6	374925.7	90.68	29.5	120.4	
Sc	45	He	68626.83	0.8	75429.93	90.98	29.5	120.4	
Ge	72	No Gas	702968.36	3.7	682196.39	103.04	29.5	120.4	
Ge	72	H2	131742.29	2.0	145757.5	90.38	29.5	120.4	
Ge	72	He	56399.25	0.8	59866.13	94.21	29.5	120.4	
Y	89	H2	2413542.75	0.7	2441196.5	98.87	29.5	120.4	
Y	89	He	496678.81	0.5	531537.69	93.44	29.5	120.4	
Tb	159	No Gas	8179306.20	3.9	7041897.33	116.15	29.5	120.4	
Tb	159	He	2876615.86	0.4	2795586.52	102.9	29.5	120.4	
Bi	209	No Gas	4445943.23	4.0	3760534.49	118.23	29.5	120.4	

Sample Report

Sample Name SN6054-008

File Name 167SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:09:20 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.130	ppb	52.6	33.33	100	
11	B	6	No Gas	5763.528	ppb	6.2	342100.32	1000	
23	Na	45	He	1766810.678	ppb	1.8	16857217.46	200000	
24	Mg	45	He	52427.863	ppb	2.5	279567.23	200000	
27	Al	45	He	1966.729	ppb	6.0	4216.33	200000	
28	Si	45	H2	12215.306	ppb	2.8	49909.30	10000	
39	K	45	He	485819.303	ppb	1.7	2475535.80	200000	
40	Ca	45	H2	124319.593	ppb	0.1	4858728.05	200000	
51	V	89	He	139.023	ppb	0.9	11922.09	1000	
52	Cr	89	He	132.598	ppb	1.4	13929.00	2000	
55	Mn	89	He	155.573	ppb	1.3	7866.77	2000	
56	Fe	89	H2	11370.717	ppb	0.2	1950305.26	100000	
59	Co	89	He	42.084	ppb	2.1	7631.53	1000	
60	Ni	89	He	186.423	ppb	2.0	9763.73	1000	
63	Cu	89	He	5.572	ppb	7.0	858.95	2000	
66	Zn	89	He	326.178	ppb	3.9	6159.35	2000	
75	As	89	He	77.106	ppb	4.9	1216.52	1000	
78	Se	89	H2	6.592	ppb	7.1	56.83	1000	
88	Sr	89	He	201.768	ppb	1.5	16302.43	2000	
95	Mo	89	He	10.842	ppb	0.9	997.85	1000	
107	Ag	89	He	0.183	ppb	17.8	63.34	100	
111	Cd	89	He	0.249	ppb	40.7	10.00	1000	
118	Sn	159	He	33.211	ppb	3.8	3257.20	1000	
121	Sb	159	No Gas	33.272	ppb	5.7	27997.04	1000	
137	Ba	159	No Gas	7.393	ppb	8.3	2493.01	2000	
182	W	159	No Gas	7.534	ppb	2.2	5033.30	1000	
205	Tl	209	No Gas	0.027	ppb	86.1	56.73	1000	
208	Pb	209	No Gas	1.990	ppb	5.0	4011.44	2000	
232	Th	209	No Gas	0.921	ppb	14.6	1965.70	1000	
238	U	209	No Gas	1.856	ppb	7.3	3537.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	858500.06	2.9	1023754.81	83.86	29.5	120.4	
Sc	45	No Gas	2788180.66	2.5	2927134.09	95.25	29.5	120.4	
Sc	45	H2	326527.16	1.0	374925.7	87.09	29.5	120.4	
Sc	45	He	65807.50	2.2	75429.93	87.24	29.5	120.4	
Ge	72	No Gas	680158.13	2.5	682196.39	99.7	29.5	120.4	
Ge	72	H2	127941.94	1.2	145757.5	87.78	29.5	120.4	
Ge	72	He	54579.12	1.4	59866.13	91.17	29.5	120.4	
Y	89	H2	2341026.68	0.5	2441196.5	95.9	29.5	120.4	
Y	89	He	481162.95	2.1	531537.69	90.52	29.5	120.4	
Tb	159	No Gas	8040634.81	2.4	7041897.33	114.18	29.5	120.4	
Tb	159	He	2838415.75	2.1	2795586.52	101.53	29.5	120.4	
Bi	209	No Gas	4205835.06	2.9	3760534.49	111.84	29.5	120.4	

Sample Report

Sample Name SN6054-008

File Name 168SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:11:50 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.107	ppb	174.8	26.67	100	
11	B	6	No Gas	5768.104	ppb	7.2	173595.50	1000	
23	Na	45	He	1742709.510	ppb	0.9	8670072.16	200000	
24	Mg	45	He	51672.832	ppb	0.2	144060.02	200000	
27	Al	45	He	1978.546	ppb	4.0	2226.92	200000	
28	Si	45	H2	12378.459	ppb	0.8	26286.54	10000	
39	K	45	He	480118.067	ppb	0.7	1280172.81	200000	
40	Ca	45	H2	124809.623	ppb	0.8	2515799.51	200000	
51	V	89	He	139.621	ppb	1.3	6288.29	1000	
52	Cr	89	He	131.965	ppb	1.4	7211.88	2000	
55	Mn	89	He	152.468	ppb	0.7	4010.52	2000	
56	Fe	89	H2	11453.244	ppb	0.1	1003892.82	100000	
59	Co	89	He	42.611	ppb	1.2	4018.66	1000	
60	Ni	89	He	177.203	ppb	4.0	5128.91	1000	
63	Cu	89	He	5.826	ppb	16.3	507.81	2000	
66	Zn	89	He	310.725	ppb	2.5	3091.57	2000	
75	As	89	He	77.002	ppb	3.4	631.75	1000	
78	Se	89	H2	5.995	ppb	10.9	26.50	1000	
88	Sr	89	He	200.385	ppb	2.0	8387.29	2000	
95	Mo	89	He	10.657	ppb	4.9	512.25	1000	
107	Ag	89	He	0.241	ppb	33.8	45.56	100	
111	Cd	89	He	0.266	ppb	19.7	5.56	1000	
118	Sn	159	He	31.744	ppb	2.6	1613.49	1000	
121	Sb	159	No Gas	32.441	ppb	7.8	14009.58	1000	
137	Ba	159	No Gas	7.383	ppb	13.6	1291.51	2000	
182	W	159	No Gas	6.928	ppb	16.0	2392.90	1000	
205	Tl	209	No Gas	0.001	ppb	2789.2	20.02	1000	
208	Pb	209	No Gas	1.894	ppb	5.1	2022.34	2000	
232	Th	209	No Gas	0.994	ppb	20.3	1137.99	1000	
238	U	209	No Gas	1.826	ppb	9.4	1792.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	867334.71	2.8	1023754.81	84.72	29.5	120.4	
Sc	45	No Gas	2867364.82	3.2	2927134.09	97.96	29.5	120.4	
Sc	45	H2	336742.38	1.6	374925.7	89.82	29.5	120.4	
Sc	45	He	68583.36	1.5	75429.93	90.92	29.5	120.4	
Ge	72	No Gas	701793.74	2.8	682196.39	102.87	29.5	120.4	
Ge	72	H2	132121.57	1.6	145757.5	90.64	29.5	120.4	
Ge	72	He	56257.59	0.9	59866.13	93.97	29.5	120.4	
Y	89	H2	2385503.44	1.0	2441196.5	97.72	29.5	120.4	
Y	89	He	498459.08	0.4	531537.69	93.78	29.5	120.4	
Tb	159	No Gas	8243604.39	3.7	7041897.33	117.07	29.5	120.4	
Tb	159	He	2883503.88	0.8	2795586.52	103.14	29.5	120.4	
Bi	209	No Gas	4318991.13	3.6	3760534.49	114.85	29.5	120.4	

Sample Report

Sample Name SN6054-008

File Name 169SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:14:26 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.302	ppb	45.9	34.44	100	
11	B	6	No Gas	5512.271	ppb	7.1	139397.64	1000	
23	Na	45	He	1695458.636	ppb	0.7	6796635.10	200000	
24	Mg	45	He	50199.105	ppb	0.5	112918.10	200000	
27	Al	45	He	1852.991	ppb	5.4	1687.94	200000	
28	Si	45	H2	12105.177	ppb	1.8	20641.08	10000	
39	K	45	He	465486.250	ppb	0.6	1002068.68	200000	
40	Ca	45	H2	123195.597	ppb	0.9	1984783.58	200000	
51	V	89	He	139.692	ppb	1.6	5071.09	1000	
52	Cr	89	He	129.339	ppb	2.9	5671.46	2000	
55	Mn	89	He	149.626	ppb	1.0	3158.46	2000	
56	Fe	89	H2	11321.229	ppb	0.5	792191.83	100000	
59	Co	89	He	39.735	ppb	5.4	3007.20	1000	
60	Ni	89	He	169.558	ppb	3.1	4072.97	1000	
63	Cu	89	He	5.845	ppb	21.7	425.58	2000	
66	Zn	89	He	312.479	ppb	4.8	2508.10	2000	
75	As	89	He	72.330	ppb	7.8	476.40	1000	
78	Se	89	H2	7.614	ppb	25.3	26.83	1000	
88	Sr	89	He	194.088	ppb	3.1	6502.89	2000	
95	Mo	89	He	10.118	ppb	9.1	391.13	1000	
107	Ag	89	He	0.336	ppb	9.0	50.00	100	
111	Cd	89	He	0.266	ppb	25.9	4.44	1000	
118	Sn	159	He	32.448	ppb	1.8	1334.56	1000	
121	Sb	159	No Gas	32.127	ppb	7.8	10843.18	1000	
137	Ba	159	No Gas	7.134	ppb	16.6	981.15	2000	
182	W	159	No Gas	6.745	ppb	7.5	1838.85	1000	
205	Tl	209	No Gas	0.083	ppb	28.7	66.74	1000	
208	Pb	209	No Gas	1.839	ppb	2.3	1575.14	2000	
232	Th	209	No Gas	0.830	ppb	14.9	784.24	1000	
238	U	209	No Gas	1.644	ppb	19.0	1271.49	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	908891.58	3.1	1023754.81	88.78	29.5	120.4	
Sc	45	No Gas	2858558.95	4.3	2927134.09	97.66	29.5	120.4	
Sc	45	H2	336413.27	0.8	374925.7	89.73	29.5	120.4	
Sc	45	He	69053.55	0.9	75429.93	91.55	29.5	120.4	
Ge	72	No Gas	691379.08	3.6	682196.39	101.35	29.5	120.4	
Ge	72	H2	132261.00	0.8	145757.5	90.74	29.5	120.4	
Ge	72	He	56388.46	1.1	59866.13	94.19	29.5	120.4	
Y	89	H2	2376737.54	0.3	2441196.5	97.36	29.5	120.4	
Y	89	He	498887.66	1.2	531537.69	93.86	29.5	120.4	
Tb	159	No Gas	8043771.27	3.6	7041897.33	114.23	29.5	120.4	
Tb	159	He	2892876.17	1.0	2795586.52	103.48	29.5	120.4	
Bi	209	No Gas	4252368.99	3.4	3760534.49	113.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	170_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:17:00 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.284	ppb	10.2	23287.17	25	93.14	89.8	110.2	
11	B	6	No Gas	30.329	ppb	7.3	20949.19	25	121.32	89.8	110.2	> +/- 10%
23	Na	45	He	5239.429	ppb	0.8	537307.18	5000	104.79	89.8	110.2	
24	Mg	45	He	4900.528	ppb	0.8	276531.23	5000	98.01	89.8	110.2	
27	Al	45	He	479.130	ppb	1.9	10826.69	500	95.83	89.8	110.2	
28	Si	45	H2	456.858	ppb	1.3	19882.77	500	91.37	89.8	110.2	
39	K	45	He	4820.876	ppb	0.7	269115.47	5000	96.42	89.8	110.2	
40	Ca	45	H2	4822.458	ppb	0.5	1980498.46	5000	96.45	89.8	110.2	
51	V	89	He	24.161	ppb	0.4	21646.19	25	96.64	89.8	110.2	
52	Cr	89	He	24.196	ppb	1.4	26659.57	25	96.78	89.8	110.2	
55	Mn	89	He	23.857	ppb	1.7	12656.08	25	95.43	89.8	110.2	
56	Fe	89	H2	4720.141	ppb	0.7	8384131.44	5000	94.4	89.8	110.2	
59	Co	89	He	24.187	ppb	1.4	45944.41	25	96.75	89.8	110.2	
60	Ni	89	He	23.361	ppb	1.0	12701.70	25	93.44	89.8	110.2	
63	Cu	89	He	24.427	ppb	1.1	35655.22	25	97.71	89.8	110.2	
66	Zn	89	He	24.738	ppb	2.8	4934.39	25	98.95	89.8	110.2	
75	As	89	He	24.257	ppb	3.5	4014.69	25	97.03	89.8	110.2	
78	Se	89	H2	23.732	ppb	2.5	2112.74	25	94.93	89.8	110.2	
88	Sr	89	He	23.501	ppb	1.0	19953.98	25	94	89.8	110.2	
95	Mo	89	He	24.041	ppb	0.5	23072.44	25	96.16	89.8	110.2	
107	Ag	89	He	25.039	ppb	1.1	82682.66	25	100.16	89.8	110.2	
111	Cd	89	He	24.628	ppb	0.6	10443.01	25	98.51	89.8	110.2	
118	Sn	159	He	22.905	ppb	0.5	22608.46	25	91.62	89.8	110.2	
121	Sb	159	No Gas	22.055	ppb	9.4	191491.08	25	88.22	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.421	ppb	8.7	77142.27	25	89.68	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.263	ppb	8.6	152194.45	25	89.05	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.916	ppb	8.4	345447.91	25	91.66	89.8	110.2	
208	Pb	209	No Gas	22.983	ppb	9.0	481414.23	25	91.93	89.8	110.2	
232	Th	209	No Gas	21.971	ppb	11.0	475759.04	25	87.88	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.609	ppb	10.1	459662.67	25	90.44	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	933779.41	4.2	1023754.81	91.21	29.5	120.4	
Sc	45	No Gas	2952162.66	4.2	2927134.09	100.86	29.5	120.4	
Sc	45	H2	343009.02	0.8	374925.7	91.49	29.5	120.4	
Sc	45	He	69601.90	0.9	75429.93	92.27	29.5	120.4	
Ge	72	No Gas	715700.36	4.4	682196.39	104.91	29.5	120.4	
Ge	72	H2	134035.32	1.5	145757.5	91.96	29.5	120.4	
Ge	72	He	57292.85	0.7	59866.13	95.7	29.5	120.4	
Y	89	H2	2430018.76	0.4	2441196.5	99.54	29.5	120.4	
Y	89	He	505616.14	0.8	531537.69	95.12	29.5	120.4	
Tb	159	No Gas	8323076.06	3.9	7041897.33	118.19	29.5	120.4	
Tb	159	He	2899926.76	0.3	2795586.52	103.73	29.5	120.4	
Bi	209	No Gas	4504621.44	3.8	3760534.49	119.79	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	171_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:19:32 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.050	ppb	52.1	73.34	0.2	
11	B	6	No Gas	4.509	ppb	3.1	4358.59	4	Fail All Methods□ Failed DoD
23	Na	45	He	92.251	ppb	4.4	18001.35	200	
24	Mg	45	He	1.887	ppb	29.2	960.11	20	
27	Al	45	He	-0.668	ppb	N/A	16.67	20	
28	Si	45	H2	7.697	ppb	36.5	800.91	100	
39	K	45	He	10.676	ppb	132.6	10804.25	200	
40	Ca	45	H2	1.562	ppb	20.5	1791.29	20	
51	V	89	He	0.035	ppb	94.8	203.34	1	
52	Cr	89	He	-0.014	ppb	N/A	46.66	1	
55	Mn	89	He	-0.015	ppb	N/A	26.66	0.4	
56	Fe	89	H2	0.310	ppb	27.1	6906.01	20	
59	Co	89	He	0.000	ppb	N/A	31.11	0.2	
60	Ni	89	He	-0.835	ppb	N/A	185.56	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.016	ppb	78.8	112.23	0.6	
66	Zn	89	He	-0.136	ppb	N/A	71.11	2	
75	As	89	He	-0.007	ppb	N/A	3.00	1	
78	Se	89	H2	0.038	ppb	59.7	3.83	1	
88	Sr	89	He	0.010	ppb	55.0	8.89	1	
95	Mo	89	He	0.105	ppb	12.3	108.89	1	
107	Ag	89	He	0.007	ppb	20.6	27.78	0.2	
111	Cd	89	He	0.007	ppb	60.2	2.96	0.2	
118	Sn	159	He	0.058	ppb	35.6	116.67	1	
121	Sb	159	No Gas	0.020	ppb	20.8	230.26	0.2	
137	Ba	159	No Gas	0.001	ppb	1225.9	36.71	0.4	
182	W	159	No Gas	0.077	ppb	14.4	563.98	1	
205	Tl	209	No Gas	0.021	ppb	48.6	333.71	0.2	
208	Pb	209	No Gas	0.015	ppb	19.9	437.16	0.2	
232	Th	209	No Gas	0.064	ppb	6.9	1468.40	1	
238	U	209	No Gas	0.017	ppb	2.3	360.41	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	932443.32	0.6	1023754.81	91.08	29.5	120.4	
Sc	45	No Gas	2903383.46	0.4	2927134.09	99.19	29.5	120.4	
Sc	45	H2	356462.94	1.0	374925.7	95.08	29.5	120.4	
Sc	45	He	69474.98	3.9	75429.93	92.11	29.5	120.4	
Ge	72	No Gas	708996.62	1.7	682196.39	103.93	29.5	120.4	
Ge	72	H2	136714.32	0.9	145757.5	93.8	29.5	120.4	
Ge	72	He	57087.42	2.9	59866.13	95.36	29.5	120.4	
Y	89	H2	2499691.51	1.0	2441196.5	102.4	29.5	120.4	
Y	89	He	501170.62	4.2	531537.69	94.29	29.5	120.4	
Tb	159	No Gas	8112774.53	0.4	7041897.33	115.21	29.5	120.4	
Tb	159	He	2876401.14	3.7	2795586.52	102.89	29.5	120.4	
Bi	209	No Gas	4403149.97	0.6	3760534.49	117.09	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	172SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:22:09 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.022	ppb	25.6	45.56	100	
11	B	6	No Gas	3.165	ppb	6.2	3542.79	1000	
23	Na	45	He	74.633	ppb	9.6	16664.70	200000	
24	Mg	45	He	0.635	ppb	130.9	913.43	200000	
27	Al	45	He	0.371	ppb	84.0	41.11	200000	
28	Si	45	H2	9.695	ppb	8.2	881.00	10000	
39	K	45	He	0.754	ppb	771.9	10565.90	200000	
40	Ca	45	H2	1.525	ppb	9.4	1760.17	200000	
51	V	89	He	0.052	ppb	41.8	224.45	1000	
52	Cr	89	He	-0.008	ppb	N/A	53.99	2000	
55	Mn	89	He	-0.028	ppb	N/A	20.67	2000	
56	Fe	89	H2	-0.767	ppb	N/A	4862.92	100000	
59	Co	89	He	-0.006	ppb	N/A	20.00	1000	
60	Ni	89	He	-0.851	ppb	N/A	183.34	1000	
63	Cu	89	He	0.003	ppb	131.1	97.78	2000	
66	Zn	89	He	-0.011	ppb	N/A	97.78	2000	
75	As	89	He	-0.001	ppb	N/A	4.00	1000	
78	Se	89	H2	0.015	ppb	94.8	1.67	1000	
88	Sr	89	He	0.010	ppb	22.1	8.89	2000	
95	Mo	89	He	0.026	ppb	40.0	34.45	1000	
107	Ag	89	He	0.002	ppb	146.7	13.33	100	
111	Cd	89	He	0.003	ppb	100.8	1.11	1000	
118	Sn	159	He	0.028	ppb	48.6	88.89	1000	
121	Sb	159	No Gas	0.003	ppb	221.5	83.43	1000	
137	Ba	159	No Gas	0.004	ppb	180.5	46.72	2000	
182	W	159	No Gas	0.013	ppb	29.6	140.16	1000	
205	Tl	209	No Gas	0.003	ppb	72.9	70.08	1000	
208	Pb	209	No Gas	0.004	ppb	40.4	206.90	2000	
232	Th	209	No Gas	0.019	ppb	8.3	510.58	1000	
238	U	209	No Gas	0.001	ppb	38.2	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	946105.41	3.2	1023754.81	92.42	29.5	120.4	
Sc	45	No Gas	2937607.32	2.4	2927134.09	100.36	29.5	120.4	
Sc	45	H2	353385.46	0.6	374925.7	94.25	29.5	120.4	
Sc	45	He	71341.78	1.3	75429.93	94.58	29.5	120.4	
Ge	72	No Gas	714676.03	3.5	682196.39	104.76	29.5	120.4	
Ge	72	H2	135142.53	0.2	145757.5	92.72	29.5	120.4	
Ge	72	He	57900.95	0.9	59866.13	96.72	29.5	120.4	
Y	89	H2	2460366.79	0.2	2441196.5	100.79	29.5	120.4	
Y	89	He	515324.64	1.6	531537.69	96.95	29.5	120.4	
Tb	159	No Gas	8172529.46	2.9	7041897.33	116.06	29.5	120.4	
Tb	159	He	2946337.18	1.3	2795586.52	105.39	29.5	120.4	
Bi	209	No Gas	4443028.81	3.1	3760534.49	118.15	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 173SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:24:47 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.016	ppb	103.8	40.00	100	
11	B	6	No Gas	2.539	ppb	13.1	3108.22	1000	
23	Na	45	He	58.289	ppb	1.3	14787.20	200000	
24	Mg	45	He	1.658	ppb	61.3	960.10	200000	
27	Al	45	He	0.393	ppb	113.1	41.11	200000	
28	Si	45	H2	7.380	ppb	21.4	777.55	10000	
39	K	45	He	-1.408	ppb	N/A	10314.14	200000	
40	Ca	45	H2	0.868	ppb	16.0	1479.02	200000	
51	V	89	He	0.069	ppb	16.7	237.79	1000	
52	Cr	89	He	-0.003	ppb	N/A	59.32	2000	
55	Mn	89	He	0.039	ppb	68.4	55.99	2000	
56	Fe	89	H2	-1.096	ppb	N/A	4292.11	100000	
59	Co	89	He	-0.005	ppb	N/A	22.22	1000	
60	Ni	89	He	-0.743	ppb	N/A	237.79	1000	
63	Cu	89	He	0.020	ppb	71.8	121.12	2000	
66	Zn	89	He	-0.091	ppb	N/A	81.11	2000	
75	As	89	He	0.005	ppb	120.9	5.00	1000	
78	Se	89	H2	0.004	ppb	87.7	0.67	1000	
88	Sr	89	He	0.010	ppb	57.6	8.89	2000	
95	Mo	89	He	0.007	ppb	97.7	15.55	1000	
107	Ag	89	He	0.002	ppb	83.3	13.34	100	
111	Cd	89	He	0.001	ppb	173.2	0.37	1000	
118	Sn	159	He	0.028	ppb	55.5	87.78	1000	
121	Sb	159	No Gas	0.003	ppb	147.9	83.42	1000	
137	Ba	159	No Gas	0.000	ppb	1975.0	36.71	2000	
182	W	159	No Gas	0.006	ppb	142.0	90.10	1000	
205	Tl	209	No Gas	0.001	ppb	50.7	40.04	1000	
208	Pb	209	No Gas	0.003	ppb	129.7	186.87	2000	
232	Th	209	No Gas	0.007	ppb	39.2	250.29	1000	
238	U	209	No Gas	0.001	ppb	80.3	26.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	938429.69	2.4	1023754.81	91.67	29.5	120.4	
Sc	45	No Gas	2936595.63	2.0	2927134.09	100.32	29.5	120.4	
Sc	45	H2	352520.04	0.5	374925.7	94.02	29.5	120.4	
Sc	45	He	70418.85	0.2	75429.93	93.36	29.5	120.4	
Ge	72	No Gas	713687.58	2.1	682196.39	104.62	29.5	120.4	
Ge	72	H2	135660.00	1.2	145757.5	93.07	29.5	120.4	
Ge	72	He	57727.58	0.4	59866.13	96.43	29.5	120.4	
Y	89	H2	2472673.99	0.5	2441196.5	101.29	29.5	120.4	
Y	89	He	510554.60	0.5	531537.69	96.05	29.5	120.4	
Tb	159	No Gas	8162948.77	1.8	7041897.33	115.92	29.5	120.4	
Tb	159	He	2912504.12	0.2	2795586.52	104.18	29.5	120.4	
Bi	209	No Gas	4413439.43	2.5	3760534.49	117.36	29.5	120.4	

Sample Report

Sample Name SN6054-009

File Name 174SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:27:18 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.250	ppb	43.1	43.34	100	
11	B	6	No Gas	11389.070	ppb	6.2	660683.85	1000	>LDR
23	Na	45	He	2572135.487	ppb	2.0	25786846.98	200000	>LDR
24	Mg	45	He	54672.158	ppb	1.7	306387.42	200000	
27	Al	45	He	1365.760	ppb	3.3	3088.22	200000	
28	Si	45	H2	18306.504	ppb	1.3	77347.95	10000	
39	K	45	He	724331.532	ppb	1.8	3873911.79	200000	
40	Ca	45	H2	62761.726	ppb	0.8	2544806.07	200000	
51	V	89	He	171.871	ppb	2.8	15169.79	1000	
52	Cr	89	He	432.535	ppb	2.0	46751.62	2000	
55	Mn	89	He	155.661	ppb	1.8	8121.54	2000	
56	Fe	89	H2	11421.442	ppb	1.0	1998570.98	100000	
59	Co	89	He	60.721	ppb	3.4	11349.88	1000	
60	Ni	89	He	301.417	ppb	0.8	15918.54	1000	
63	Cu	89	He	33.006	ppb	3.8	4808.78	2000	
66	Zn	89	He	327.195	ppb	3.0	6378.36	2000	
75	As	89	He	223.825	ppb	3.9	3638.21	1000	
78	Se	89	H2	3.012	ppb	8.5	26.67	1000	
88	Sr	89	He	259.294	ppb	0.9	21622.11	2000	
95	Mo	89	He	11.948	ppb	12.4	1133.42	1000	
107	Ag	89	He	0.169	ppb	10.2	61.11	100	
111	Cd	89	He	0.347	ppb	14.0	14.45	1000	
118	Sn	159	He	182.841	ppb	1.7	17793.40	1000	
121	Sb	159	No Gas	27.762	ppb	6.6	22985.26	1000	
137	Ba	159	No Gas	87.747	ppb	5.0	28756.50	2000	
182	W	159	No Gas	5.971	ppb	10.3	3931.67	1000	
205	Tl	209	No Gas	0.033	ppb	63.1	63.41	1000	
208	Pb	209	No Gas	11.101	ppb	8.0	21250.71	2000	
232	Th	209	No Gas	0.619	ppb	10.3	1321.55	1000	
238	U	209	No Gas	1.408	ppb	5.4	2616.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	840477.88	2.4	1023754.81	82.1	29.5	120.4	
Sc	45	No Gas	2823011.25	2.8	2927134.09	96.44	29.5	120.4	
Sc	45	H2	338711.25	1.2	374925.7	90.34	29.5	120.4	
Sc	45	He	69156.36	1.6	75429.93	91.68	29.5	120.4	
Ge	72	No Gas	685115.38	2.5	682196.39	100.43	29.5	120.4	
Ge	72	H2	129282.28	1.1	145757.5	88.7	29.5	120.4	
Ge	72	He	55256.21	1.4	59866.13	92.3	29.5	120.4	
Y	89	H2	2388543.70	1.3	2441196.5	97.84	29.5	120.4	
Y	89	He	496562.80	0.8	531537.69	93.42	29.5	120.4	
Tb	159	No Gas	7909160.72	2.7	7041897.33	112.32	29.5	120.4	
Tb	159	He	2857285.17	0.4	2795586.52	102.21	29.5	120.4	
Bi	209	No Gas	4091521.17	2.7	3760534.49	108.8	29.5	120.4	

Sample Report

Sample Name SN6054-009

File Name 175SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:30:02 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.419	ppb	82.6	42.22	100	
11	B	6	No Gas	11708.226	ppb	4.8	358829.01	1000	
23	Na	45	He	2616741.582	ppb	0.2	13499827.06	200000	
24	Mg	45	He	56149.183	ppb	0.2	162291.86	200000	
27	Al	45	He	1307.600	ppb	3.7	1537.92	200000	
28	Si	45	H2	19271.584	ppb	0.4	41907.98	10000	
39	K	45	He	736772.871	ppb	0.6	2032122.64	200000	
40	Ca	45	H2	64000.765	ppb	0.5	1329356.51	200000	
51	V	89	He	175.161	ppb	0.8	7985.86	1000	
52	Cr	89	He	441.788	ppb	1.3	24429.94	2000	
55	Mn	89	He	160.058	ppb	1.9	4284.56	2000	
56	Fe	89	H2	11703.152	ppb	0.8	1044082.81	100000	
59	Co	89	He	60.375	ppb	3.2	5783.87	1000	
60	Ni	89	He	298.635	ppb	2.5	8371.69	1000	
63	Cu	89	He	32.913	ppb	2.4	2495.86	2000	
66	Zn	89	He	340.319	ppb	5.8	3437.22	2000	
75	As	89	He	223.098	ppb	0.7	1855.33	1000	
78	Se	89	H2	2.808	ppb	22.8	12.83	1000	
88	Sr	89	He	259.338	ppb	1.9	11049.23	2000	
95	Mo	89	He	12.241	ppb	4.0	597.81	1000	
107	Ag	89	He	0.096	ppb	64.7	22.22	100	
111	Cd	89	He	0.417	ppb	44.3	8.89	1000	
118	Sn	159	He	182.828	ppb	0.4	9104.50	1000	
121	Sb	159	No Gas	29.247	ppb	1.5	12646.72	1000	
137	Ba	159	No Gas	88.363	ppb	1.7	15102.01	2000	
182	W	159	No Gas	5.805	ppb	2.9	2019.05	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	11.255	ppb	6.3	11274.56	2000	
232	Th	209	No Gas	0.431	ppb	17.9	547.29	1000	
238	U	209	No Gas	1.483	ppb	8.4	1438.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	886105.74	2.0	1023754.81	86.55	29.5	120.4	
Sc	45	No Gas	2940384.71	2.6	2927134.09	100.45	29.5	120.4	
Sc	45	H2	346853.11	0.6	374925.7	92.51	29.5	120.4	
Sc	45	He	71137.11	0.6	75429.93	94.31	29.5	120.4	
Ge	72	No Gas	715099.21	2.8	682196.39	104.82	29.5	120.4	
Ge	72	H2	134829.21	0.5	145757.5	92.5	29.5	120.4	
Ge	72	He	57653.28	0.7	59866.13	96.3	29.5	120.4	
Y	89	H2	2428480.53	1.1	2441196.5	99.48	29.5	120.4	
Y	89	He	507426.02	0.7	531537.69	95.46	29.5	120.4	
Tb	159	No Gas	8237033.07	2.6	7041897.33	116.97	29.5	120.4	
Tb	159	He	2914413.88	0.6	2795586.52	104.25	29.5	120.4	
Bi	209	No Gas	4259967.89	3.2	3760534.49	113.28	29.5	120.4	

Sample Report

Sample Name SN6054-009

File Name 176SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:32:43 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.233	ppb	60.8	31.11	100	
11	B	6	No Gas	12094.041	ppb	1.1	298539.31	1000	
23	Na	45	He	2667004.250	ppb	1.6	11124604.42	200000	
24	Mg	45	He	57258.830	ppb	2.3	133950.08	200000	
27	Al	45	He	1299.374	ppb	2.5	1242.32	200000	
28	Si	45	H2	19583.771	ppb	3.9	34787.49	10000	
39	K	45	He	751055.979	ppb	2.2	1676499.00	200000	
40	Ca	45	H2	65301.984	ppb	1.2	1105628.91	200000	
51	V	89	He	186.646	ppb	1.6	6903.04	1000	
52	Cr	89	He	445.904	ppb	1.4	19939.77	2000	
55	Mn	89	He	158.345	ppb	2.1	3432.48	2000	
56	Fe	89	H2	12066.941	ppb	0.9	879473.53	100000	
59	Co	89	He	65.474	ppb	5.0	5072.43	1000	
60	Ni	89	He	309.088	ppb	2.0	7112.06	1000	
63	Cu	89	He	34.317	ppb	4.3	2118.01	2000	
66	Zn	89	He	343.326	ppb	2.6	2821.51	2000	
75	As	89	He	224.110	ppb	2.7	1506.92	1000	
78	Se	89	H2	2.934	ppb	33.1	11.00	1000	
88	Sr	89	He	267.864	ppb	1.2	9223.41	2000	
95	Mo	89	He	12.548	ppb	1.4	496.70	1000	
107	Ag	89	He	0.210	ppb	37.1	34.45	100	
111	Cd	89	He	0.367	ppb	10.8	6.30	1000	
118	Sn	159	He	186.798	ppb	2.1	7536.83	1000	
121	Sb	159	No Gas	29.541	ppb	3.8	10111.77	1000	
137	Ba	159	No Gas	96.427	ppb	1.7	13030.81	2000	
182	W	159	No Gas	6.240	ppb	2.0	1722.05	1000	
205	Tl	209	No Gas	0.043	ppb	48.4	43.38	1000	
208	Pb	209	No Gas	11.323	ppb	3.8	9098.15	2000	
232	Th	209	No Gas	0.420	ppb	16.3	450.51	1000	
238	U	209	No Gas	1.728	ppb	9.4	1341.58	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	890927.01	1.6	1023754.81	87.03	29.5	120.4	
Sc	45	No Gas	2921875.45	1.9	2927134.09	99.82	29.5	120.4	
Sc	45	H2	353386.19	1.1	374925.7	94.25	29.5	120.4	
Sc	45	He	71898.72	1.9	75429.93	95.32	29.5	120.4	
Ge	72	No Gas	711785.96	0.9	682196.39	104.34	29.5	120.4	
Ge	72	H2	137778.27	0.8	145757.5	94.53	29.5	120.4	
Ge	72	He	58417.13	0.6	59866.13	97.58	29.5	120.4	
Y	89	H2	2476769.65	0.7	2441196.5	101.46	29.5	120.4	
Y	89	He	512610.38	0.7	531537.69	96.44	29.5	120.4	
Tb	159	No Gas	8137496.48	1.8	7041897.33	115.56	29.5	120.4	
Tb	159	He	2947551.83	0.8	2795586.52	105.44	29.5	120.4	
Bi	209	No Gas	4255380.23	1.1	3760534.49	113.16	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 177SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:35:24 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	23.33	100	
11	B	6	No Gas	12.445	ppb	7.3	9649.11	1000	
23	Na	45	He	203.517	ppb	7.6	30422.63	200000	
24	Mg	45	He	2.978	ppb	16.5	1064.56	200000	
27	Al	45	He	0.729	ppb	92.3	50.00	200000	
28	Si	45	H2	16.379	ppb	10.7	1168.03	10000	
39	K	45	He	18.421	ppb	14.0	11711.29	200000	
40	Ca	45	H2	1.476	ppb	10.3	1731.28	200000	
51	V	89	He	0.254	ppb	20.8	414.47	1000	
52	Cr	89	He	0.015	ppb	48.8	81.32	2000	
55	Mn	89	He	-0.027	ppb	N/A	21.33	2000	
56	Fe	89	H2	-1.140	ppb	N/A	4215.33	100000	
59	Co	89	He	-0.001	ppb	N/A	31.11	1000	
60	Ni	89	He	-0.761	ppb	N/A	234.45	1000	
63	Cu	89	He	0.033	ppb	22.1	143.34	2000	
66	Zn	89	He	-0.024	ppb	N/A	96.67	2000	
75	As	89	He	0.024	ppb	143.2	8.33	1000	
78	Se	89	H2	0.004	ppb	88.7	0.67	1000	
88	Sr	89	He	0.014	ppb	40.9	12.22	2000	
95	Mo	89	He	0.000	ppb	2494.0	8.89	1000	
107	Ag	89	He	0.003	ppb	23.4	15.56	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.032	ppb	40.1	93.34	1000	
121	Sb	159	No Gas	0.003	ppb	294.7	83.43	1000	
137	Ba	159	No Gas	-0.007	ppb	N/A	10.01	2000	
182	W	159	No Gas	0.006	ppb	29.9	93.44	1000	
205	Tl	209	No Gas	0.001	ppb	40.4	33.37	1000	
208	Pb	209	No Gas	0.002	ppb	162.9	163.51	2000	
232	Th	209	No Gas	-0.001	ppb	N/A	100.11	1000	
238	U	209	No Gas	0.000	ppb	215.9	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	951667.91	1.7	1023754.81	92.96	29.5	120.4	
Sc	45	No Gas	2997181.06	2.6	2927134.09	102.39	29.5	120.4	
Sc	45	H2	351690.85	0.6	374925.7	93.8	29.5	120.4	
Sc	45	He	72395.82	1.8	75429.93	95.98	29.5	120.4	
Ge	72	No Gas	727963.91	1.7	682196.39	106.71	29.5	120.4	
Ge	72	H2	137875.80	0.8	145757.5	94.59	29.5	120.4	
Ge	72	He	59128.59	0.5	59866.13	98.77	29.5	120.4	
Y	89	H2	2474602.59	0.7	2441196.5	101.37	29.5	120.4	
Y	89	He	523442.56	1.6	531537.69	98.48	29.5	120.4	
Tb	159	No Gas	8288634.04	2.2	7041897.33	117.7	29.5	120.4	
Tb	159	He	2967214.68	1.3	2795586.52	106.14	29.5	120.4	
Bi	209	No Gas	4482167.69	2.1	3760534.49	119.19	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 178SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:38:02 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	322.0	25.56	100	
11	B	6	No Gas	5.973	ppb	1.3	5446.77	1000	
23	Na	45	He	143.154	ppb	5.9	23341.48	200000	
24	Mg	45	He	3.565	ppb	50.8	1062.34	200000	
27	Al	45	He	0.542	ppb	103.1	44.45	200000	
28	Si	45	H2	12.510	ppb	23.5	1044.53	10000	
39	K	45	He	14.368	ppb	73.5	11116.02	200000	
40	Ca	45	H2	0.488	ppb	10.8	1373.45	200000	
51	V	89	He	0.237	ppb	2.7	383.35	1000	
52	Cr	89	He	0.012	ppb	33.6	75.32	2000	
55	Mn	89	He	0.032	ppb	96.0	51.32	2000	
56	Fe	89	H2	-1.626	ppb	N/A	3444.26	100000	
59	Co	89	He	-0.007	ppb	N/A	17.78	1000	
60	Ni	89	He	-0.778	ppb	N/A	216.68	1000	
63	Cu	89	He	0.057	ppb	59.0	173.34	2000	
66	Zn	89	He	-0.078	ppb	N/A	82.23	2000	
75	As	89	He	0.009	ppb	240.4	5.67	1000	
78	Se	89	H2	0.003	ppb	90.1	0.67	1000	
88	Sr	89	He	0.006	ppb	91.6	5.56	2000	
95	Mo	89	He	0.006	ppb	114.2	14.45	1000	
107	Ag	89	He	0.004	ppb	69.6	21.11	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.055	ppb	12.5	113.34	1000	
121	Sb	159	No Gas	0.002	ppb	259.5	73.41	1000	
137	Ba	159	No Gas	-0.004	ppb	N/A	20.02	2000	
182	W	159	No Gas	0.000	ppb	1429.2	53.39	1000	
205	Tl	209	No Gas	0.001	ppb	101.4	30.03	1000	
208	Pb	209	No Gas	0.002	ppb	90.7	163.52	2000	
232	Th	209	No Gas	0.001	ppb	28.1	140.16	1000	
238	U	209	No Gas	0.000	ppb	993.3	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	958381.40	1.6	1023754.81	93.61	29.5	120.4	
Sc	45	No Gas	2965923.24	0.9	2927134.09	101.33	29.5	120.4	
Sc	45	H2	367205.22	1.3	374925.7	97.94	29.5	120.4	
Sc	45	He	70142.54	3.2	75429.93	92.99	29.5	120.4	
Ge	72	No Gas	719608.04	1.6	682196.39	105.48	29.5	120.4	
Ge	72	H2	141085.25	1.4	145757.5	96.79	29.5	120.4	
Ge	72	He	57836.84	2.5	59866.13	96.61	29.5	120.4	
Y	89	H2	2554279.40	1.3	2441196.5	104.63	29.5	120.4	
Y	89	He	503283.76	3.6	531537.69	94.68	29.5	120.4	
Tb	159	No Gas	8260394.18	0.9	7041897.33	117.3	29.5	120.4	
Tb	159	He	2874867.25	2.9	2795586.52	102.84	29.5	120.4	
Bi	209	No Gas	4471253.91	1.5	3760534.49	118.9	29.5	120.4	

Sample Report

Sample Name SN6054-010

File Name 179SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:40:44 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.044	ppb	159.2	26.67	100	
11	B	6	No Gas	6487.026	ppb	3.0	403139.49	1000	
23	Na	45	He	1084539.671	ppb	1.8	10812641.22	200000	
24	Mg	45	He	21199.452	ppb	2.7	118591.94	200000	
27	Al	45	He	725.681	ppb	3.2	1645.71	200000	
28	Si	45	H2	7971.618	ppb	2.4	32666.83	10000	
39	K	45	He	330336.910	ppb	2.2	1761475.76	200000	
40	Ca	45	H2	51617.007	ppb	3.5	2014850.56	200000	
51	V	89	He	157.294	ppb	5.4	13848.35	1000	
52	Cr	89	He	271.222	ppb	4.3	29235.43	2000	
55	Mn	89	He	93.724	ppb	1.9	4887.98	2000	
56	Fe	89	H2	26206.685	ppb	3.4	4428560.91	100000	
59	Co	89	He	23.041	ppb	1.2	4314.34	1000	
60	Ni	89	He	137.090	ppb	4.2	7546.74	1000	
63	Cu	89	He	23.532	ppb	1.5	3442.78	2000	
66	Zn	89	He	335.382	ppb	3.1	6513.97	2000	
75	As	89	He	166.987	ppb	3.6	2706.89	1000	
78	Se	89	H2	3.610	ppb	10.5	30.83	1000	
88	Sr	89	He	89.902	ppb	5.3	7470.08	2000	
95	Mo	89	He	23.439	ppb	3.0	2209.15	1000	
107	Ag	89	He	0.066	ppb	43.1	27.78	100	
111	Cd	89	He	0.232	ppb	13.6	9.63	1000	
118	Sn	159	He	56.835	ppb	6.0	5639.15	1000	
121	Sb	159	No Gas	131.221	ppb	2.5	111658.59	1000	
137	Ba	159	No Gas	89.165	ppb	2.3	30077.41	2000	
182	W	159	No Gas	3.848	ppb	8.7	2626.54	1000	
205	Tl	209	No Gas	0.019	ppb	74.2	46.72	1000	
208	Pb	209	No Gas	4.062	ppb	1.4	8180.23	2000	
232	Th	209	No Gas	0.818	ppb	11.2	1785.46	1000	
238	U	209	No Gas	10.041	ppb	2.1	19366.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	898369.76	1.1	1023754.81	87.75	29.5	120.4	
Sc	45	No Gas	2847870.32	0.8	2927134.09	97.29	29.5	120.4	
Sc	45	H2	326215.00	2.5	374925.7	87.01	29.5	120.4	
Sc	45	He	68738.01	1.5	75429.93	91.13	29.5	120.4	
Ge	72	No Gas	697205.68	1.0	682196.39	102.2	29.5	120.4	
Ge	72	H2	128835.47	1.4	145757.5	88.39	29.5	120.4	
Ge	72	He	55962.86	0.7	59866.13	93.48	29.5	120.4	
Y	89	H2	2311769.03	2.6	2441196.5	94.7	29.5	120.4	
Y	89	He	495053.89	2.0	531537.69	93.14	29.5	120.4	
Tb	159	No Gas	8135990.64	0.3	7041897.33	115.54	29.5	120.4	
Tb	159	He	2893513.53	1.5	2795586.52	103.5	29.5	120.4	
Bi	209	No Gas	4260395.92	0.7	3760534.49	113.29	29.5	120.4	

Sample Report

Sample Name SN6054-010

File Name 180SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:43:19 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.035	ppb	202.0	24.45	100	
11	B	6	No Gas	6471.418	ppb	5.0	204257.12	1000	
23	Na	45	He	1104874.655	ppb	4.4	5458225.48	200000	
24	Mg	45	He	21724.447	ppb	3.9	60595.65	200000	
27	Al	45	He	677.512	ppb	18.4	776.72	200000	
28	Si	45	H2	7487.471	ppb	1.6	16588.00	10000	
39	K	45	He	336506.210	ppb	4.0	893513.71	200000	
40	Ca	45	H2	47706.179	ppb	0.8	992976.45	200000	
51	V	89	He	160.900	ppb	4.3	7144.28	1000	
52	Cr	89	He	274.401	ppb	3.4	14776.39	2000	
55	Mn	89	He	94.190	ppb	3.6	2466.44	2000	
56	Fe	89	H2	24277.089	ppb	0.5	2192908.35	100000	
59	Co	89	He	23.497	ppb	3.5	2207.01	1000	
60	Ni	89	He	134.197	ppb	8.5	3987.37	1000	
63	Cu	89	He	24.610	ppb	3.2	1836.86	2000	
66	Zn	89	He	324.982	ppb	3.1	3196.04	2000	
75	As	89	He	166.868	ppb	4.0	1349.88	1000	
78	Se	89	H2	3.427	ppb	16.7	15.83	1000	
88	Sr	89	He	88.891	ppb	2.5	3683.96	2000	
95	Mo	89	He	23.356	ppb	7.0	1102.31	1000	
107	Ag	89	He	0.147	ppb	33.9	30.00	100	
111	Cd	89	He	0.320	ppb	30.8	6.67	1000	
118	Sn	159	He	58.903	ppb	2.8	2907.09	1000	
121	Sb	159	No Gas	129.122	ppb	2.5	55878.47	1000	
137	Ba	159	No Gas	87.501	ppb	4.8	15018.55	2000	
182	W	159	No Gas	3.688	ppb	13.6	1304.87	1000	
205	Tl	209	No Gas	0.001	ppb	1679.3	20.02	1000	
208	Pb	209	No Gas	3.742	ppb	6.9	3941.32	2000	
232	Th	209	No Gas	0.804	ppb	11.3	957.78	1000	
238	U	209	No Gas	9.773	ppb	4.1	9707.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	909937.85	2.6	1023754.81	88.88	29.5	120.4	
Sc	45	No Gas	2907678.96	1.2	2927134.09	99.34	29.5	120.4	
Sc	45	H2	347494.33	1.1	374925.7	92.68	29.5	120.4	
Sc	45	He	68135.11	3.9	75429.93	90.33	29.5	120.4	
Ge	72	No Gas	711332.89	2.3	682196.39	104.27	29.5	120.4	
Ge	72	H2	136007.16	1.3	145757.5	93.31	29.5	120.4	
Ge	72	He	56289.43	3.7	59866.13	94.03	29.5	120.4	
Y	89	H2	2466279.01	1.0	2441196.5	101.03	29.5	120.4	
Y	89	He	493672.08	3.3	531537.69	92.88	29.5	120.4	
Tb	159	No Gas	8273251.13	1.6	7041897.33	117.49	29.5	120.4	
Tb	159	He	2849824.89	3.4	2795586.52	101.94	29.5	120.4	
Bi	209	No Gas	4386646.75	1.9	3760534.49	116.65	29.5	120.4	

Sample Report

Sample Name SN6054-010

File Name 181SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:46:01 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.018	ppb	905.3	23.33	100	
11	B	6	No Gas	6552.875	ppb	0.8	164992.06	1000	
23	Na	45	He	1075775.159	ppb	2.5	4396912.07	200000	
24	Mg	45	He	20832.736	ppb	3.0	48245.65	200000	
27	Al	45	He	671.162	ppb	10.0	643.37	200000	
28	Si	45	H2	7678.810	ppb	3.1	13618.35	10000	
39	K	45	He	332117.816	ppb	2.1	731436.21	200000	
40	Ca	45	H2	49065.077	ppb	3.4	812955.44	200000	
51	V	89	He	156.695	ppb	3.8	5751.39	1000	
52	Cr	89	He	267.519	ppb	4.5	11835.48	2000	
55	Mn	89	He	93.064	ppb	0.6	2007.12	2000	
56	Fe	89	H2	25391.134	ppb	3.7	1793038.64	100000	
59	Co	89	He	22.543	ppb	12.0	1744.68	1000	
60	Ni	89	He	126.087	ppb	4.1	3234.93	1000	
63	Cu	89	He	24.285	ppb	3.8	1506.81	2000	
66	Zn	89	He	349.096	ppb	0.3	2832.62	2000	
75	As	89	He	162.936	ppb	3.9	1082.83	1000	
78	Se	89	H2	4.192	ppb	13.8	15.17	1000	
88	Sr	89	He	86.937	ppb	6.6	2954.88	2000	
95	Mo	89	He	23.183	ppb	11.8	897.84	1000	
107	Ag	89	He	0.062	ppb	85.6	14.45	100	
111	Cd	89	He	0.152	ppb	64.5	2.59	1000	
118	Sn	159	He	56.772	ppb	5.1	2308.07	1000	
121	Sb	159	No Gas	131.904	ppb	3.6	44871.52	1000	
137	Ba	159	No Gas	89.544	ppb	2.2	12092.30	2000	
182	W	159	No Gas	4.057	ppb	10.9	1134.65	1000	
205	Tl	209	No Gas	0.002	ppb	1089.6	20.02	1000	
208	Pb	209	No Gas	5.450	ppb	5.2	4495.35	2000	
232	Th	209	No Gas	0.842	ppb	12.8	807.60	1000	
238	U	209	No Gas	9.536	ppb	3.3	7447.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	905083.98	0.9	1023754.81	88.41	29.5	120.4	
Sc	45	No Gas	2876954.04	2.3	2927134.09	98.29	29.5	120.4	
Sc	45	H2	345919.32	3.0	374925.7	92.26	29.5	120.4	
Sc	45	He	70377.87	2.2	75429.93	93.3	29.5	120.4	
Ge	72	No Gas	704519.75	1.7	682196.39	103.27	29.5	120.4	
Ge	72	H2	135451.81	1.7	145757.5	92.93	29.5	120.4	
Ge	72	He	57807.61	1.6	59866.13	96.56	29.5	120.4	
Y	89	H2	2410490.12	3.0	2441196.5	98.74	29.5	120.4	
Y	89	He	506376.55	2.3	531537.69	95.27	29.5	120.4	
Tb	159	No Gas	8128177.52	1.7	7041897.33	115.43	29.5	120.4	
Tb	159	He	2918281.66	2.9	2795586.52	104.39	29.5	120.4	
Bi	209	No Gas	4309778.48	1.6	3760534.49	114.61	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	182_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:48:38 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.467	ppb	4.7	23639.94	25	93.87	89.8	110.2	
11	B	6	No Gas	31.943	ppb	1.3	22119.88	25	127.77	89.8	110.2	> +/- 10%
23	Na	45	He	5299.225	ppb	0.8	547561.33	5000	105.98	89.8	110.2	
24	Mg	45	He	5011.327	ppb	1.1	284954.58	5000	100.23	89.8	110.2	
27	Al	45	He	478.936	ppb	0.6	10906.72	500	95.79	89.8	110.2	
28	Si	45	H2	474.563	ppb	4.6	21439.76	500	94.91	89.8	110.2	
39	K	45	He	4904.008	ppb	0.7	275703.37	5000	98.08	89.8	110.2	
40	Ca	45	H2	4757.719	ppb	1.6	2029969.53	5000	95.15	89.8	110.2	
51	V	89	He	24.628	ppb	1.7	21942.17	25	98.51	89.8	110.2	
52	Cr	89	He	24.761	ppb	0.7	27133.04	25	99.04	89.8	110.2	
55	Mn	89	He	24.531	ppb	1.2	12942.25	25	98.12	89.8	110.2	
56	Fe	89	H2	4657.564	ppb	0.9	8483297.69	5000	93.15	89.8	110.2	
59	Co	89	He	24.810	ppb	0.7	46874.42	25	99.24	89.8	110.2	
60	Ni	89	He	24.072	ppb	2.0	12999.80	25	96.29	89.8	110.2	
63	Cu	89	He	25.141	ppb	1.1	36492.01	25	100.56	89.8	110.2	
66	Zn	89	He	25.056	ppb	1.5	4969.95	25	100.22	89.8	110.2	
75	As	89	He	24.564	ppb	1.3	4043.70	25	98.26	89.8	110.2	
78	Se	89	H2	23.499	ppb	1.7	2145.24	25	94	89.8	110.2	
88	Sr	89	He	23.838	ppb	2.0	20131.96	25	95.35	89.8	110.2	
95	Mo	89	He	24.539	ppb	0.8	23421.87	25	98.16	89.8	110.2	
107	Ag	89	He	25.324	ppb	1.3	83170.36	25	101.3	89.8	110.2	
111	Cd	89	He	25.269	ppb	0.3	10656.88	25	101.08	89.8	110.2	
118	Sn	159	He	23.453	ppb	1.3	23078.14	25	93.81	89.8	110.2	
121	Sb	159	No Gas	22.288	ppb	2.0	193019.03	25	89.15	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.365	ppb	2.5	76750.40	25	89.46	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.015	ppb	1.5	150086.99	25	88.06	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.955	ppb	2.2	343183.72	25	91.82	89.8	110.2	
208	Pb	209	No Gas	23.226	ppb	2.6	482575.80	25	92.9	89.8	110.2	
232	Th	209	No Gas	22.209	ppb	2.9	477293.00	25	88.84	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.749	ppb	2.8	458916.04	25	91	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937660.92	0.8	1023754.81	91.59	29.5	120.4	
Sc	45	No Gas	2973471.96	1.9	2927134.09	101.58	29.5	120.4	
Sc	45	H2	356390.95	1.2	374925.7	95.06	29.5	120.4	
Sc	45	He	70139.14	0.3	75429.93	92.99	29.5	120.4	
Ge	72	No Gas	718845.44	0.9	682196.39	105.37	29.5	120.4	
Ge	72	H2	138098.95	1.0	145757.5	94.75	29.5	120.4	
Ge	72	He	57746.70	0.7	59866.13	96.46	29.5	120.4	
Y	89	H2	2491782.00	0.4	2441196.5	102.07	29.5	120.4	
Y	89	He	502867.30	0.5	531537.69	94.61	29.5	120.4	
Tb	159	No Gas	8280213.42	1.9	7041897.33	117.58	29.5	120.4	
Tb	159	He	2891166.62	0.8	2795586.52	103.42	29.5	120.4	
Bi	209	No Gas	4457554.79	0.9	3760534.49	118.54	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	183_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:51:13 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.083	ppb	23.2	110.01	0.2	
11	B	6	No Gas	5.245	ppb	1.1	5017.72	4	Fail All Methods□ Failed DoD
23	Na	45	He	89.372	ppb	2.8	17947.83	200	
24	Mg	45	He	1.449	ppb	167.3	944.54	20	
27	Al	45	He	-0.480	ppb	N/A	21.11	20	
28	Si	45	H2	8.140	ppb	15.3	830.95	100	
39	K	45	He	13.055	ppb	59.4	11084.31	200	
40	Ca	45	H2	0.631	ppb	26.5	1413.45	20	
51	V	89	He	0.040	ppb	180.3	206.67	1	
52	Cr	89	He	-0.003	ppb	N/A	58.66	1	
55	Mn	89	He	-0.039	ppb	N/A	14.00	0.4	
56	Fe	89	H2	0.286	ppb	187.2	6929.50	20	
59	Co	89	He	-0.009	ppb	N/A	15.55	0.2	
60	Ni	89	He	-0.727	ppb	N/A	243.35	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.017	ppb	87.1	115.56	0.6	
66	Zn	89	He	-0.118	ppb	N/A	74.45	2	
75	As	89	He	0.009	ppb	83.7	5.67	1	
78	Se	89	H2	0.025	ppb	32.7	2.67	1	
88	Sr	89	He	0.008	ppb	48.6	6.67	1	
95	Mo	89	He	0.116	ppb	14.9	118.89	1	
107	Ag	89	He	0.005	ppb	13.7	23.33	0.2	
111	Cd	89	He	0.007	ppb	40.6	2.96	0.2	
118	Sn	159	He	0.089	ppb	33.3	145.56	1	
121	Sb	159	No Gas	0.032	ppb	14.7	340.38	0.2	
137	Ba	159	No Gas	0.024	ppb	74.6	116.80	0.4	
182	W	159	No Gas	0.109	ppb	6.3	797.58	1	
205	Tl	209	No Gas	0.031	ppb	40.4	490.56	0.2	
208	Pb	209	No Gas	0.024	ppb	32.7	627.38	0.2	
232	Th	209	No Gas	0.120	ppb	11.8	2713.34	1	
238	U	209	No Gas	0.036	ppb	55.4	754.21	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	968464.11	1.0	1023754.81	94.6	29.5	120.4	
Sc	45	No Gas	3008337.97	0.4	2927134.09	102.77	29.5	120.4	
Sc	45	H2	361432.26	0.9	374925.7	96.4	29.5	120.4	
Sc	45	He	70379.91	3.4	75429.93	93.31	29.5	120.4	
Ge	72	No Gas	724276.91	1.5	682196.39	106.17	29.5	120.4	
Ge	72	H2	140997.00	1.3	145757.5	96.73	29.5	120.4	
Ge	72	He	57707.52	3.4	59866.13	96.39	29.5	120.4	
Y	89	H2	2524494.07	0.7	2441196.5	103.41	29.5	120.4	
Y	89	He	503903.97	5.3	531537.69	94.8	29.5	120.4	
Tb	159	No Gas	8285533.35	0.6	7041897.33	117.66	29.5	120.4	
Tb	159	He	2857556.73	4.7	2795586.52	102.22	29.5	120.4	
Bi	209	No Gas	4482523.98	1.0	3760534.49	119.2	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 184SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:53:44 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	108.2	42.22	100	
11	B	6	No Gas	4.478	ppb	2.5	4376.38	1000	
23	Na	45	He	82.556	ppb	17.3	17446.58	200000	
24	Mg	45	He	1.382	ppb	141.1	953.44	200000	
27	Al	45	He	0.452	ppb	93.8	43.33	200000	
28	Si	45	H2	8.733	ppb	30.0	837.61	10000	
39	K	45	He	8.942	ppb	97.7	11009.36	200000	
40	Ca	45	H2	0.488	ppb	32.2	1320.11	200000	
51	V	89	He	0.071	ppb	18.2	242.23	1000	
52	Cr	89	He	0.001	ppb	1076.2	64.66	2000	
55	Mn	89	He	-0.024	ppb	N/A	22.66	2000	
56	Fe	89	H2	-0.693	ppb	N/A	4986.43	100000	
59	Co	89	He	-0.005	ppb	N/A	22.22	1000	
60	Ni	89	He	-0.712	ppb	N/A	255.57	1000	
63	Cu	89	He	0.006	ppb	111.7	101.12	2000	
66	Zn	89	He	0.051	ppb	218.0	110.01	2000	
75	As	89	He	-0.001	ppb	N/A	4.00	1000	
78	Se	89	H2	0.011	ppb	75.8	1.33	1000	
88	Sr	89	He	0.014	ppb	54.9	12.22	2000	
95	Mo	89	He	0.021	ppb	25.2	28.89	1000	
107	Ag	89	He	0.005	ppb	15.4	22.22	100	
111	Cd	89	He	0.003	ppb	47.9	1.48	1000	
118	Sn	159	He	0.024	ppb	128.4	83.34	1000	
121	Sb	159	No Gas	0.006	ppb	43.0	106.78	1000	
137	Ba	159	No Gas	0.005	ppb	129.9	50.06	2000	
182	W	159	No Gas	0.017	ppb	51.0	160.18	1000	
205	Tl	209	No Gas	0.003	ppb	40.7	60.07	1000	
208	Pb	209	No Gas	0.005	ppb	43.0	230.25	2000	
232	Th	209	No Gas	0.021	ppb	11.4	543.96	1000	
238	U	209	No Gas	0.000	ppb	311.5	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	940709.18	0.9	1023754.81	91.89	29.5	120.4	
Sc	45	No Gas	2934558.26	1.2	2927134.09	100.25	29.5	120.4	
Sc	45	H2	353128.22	2.1	374925.7	94.19	29.5	120.4	
Sc	45	He	71365.01	5.1	75429.93	94.61	29.5	120.4	
Ge	72	No Gas	711202.00	1.2	682196.39	104.25	29.5	120.4	
Ge	72	H2	138875.34	1.6	145757.5	95.28	29.5	120.4	
Ge	72	He	58282.13	3.1	59866.13	97.35	29.5	120.4	
Y	89	H2	2456397.98	1.1	2441196.5	100.62	29.5	120.4	
Y	89	He	516095.75	4.1	531537.69	97.09	29.5	120.4	
Tb	159	No Gas	8065444.53	1.0	7041897.33	114.54	29.5	120.4	
Tb	159	He	2906479.40	4.7	2795586.52	103.97	29.5	120.4	
Bi	209	No Gas	4358394.86	1.3	3760534.49	115.9	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	185SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 12:56:22 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	143.1	32.22	100	
11	B	6	No Gas	3.328	ppb	2.1	3699.49	1000	
23	Na	45	He	72.583	ppb	15.4	16223.85	200000	
24	Mg	45	He	1.672	ppb	37.7	960.10	200000	
27	Al	45	He	0.472	ppb	222.9	43.33	200000	
28	Si	45	H2	3.434	ppb	4.8	617.37	10000	
39	K	45	He	6.759	ppb	85.6	10750.88	200000	
40	Ca	45	H2	0.434	ppb	10.1	1322.34	200000	
51	V	89	He	0.124	ppb	6.4	285.57	1000	
52	Cr	89	He	0.007	ppb	165.6	69.99	2000	
55	Mn	89	He	0.028	ppb	38.1	49.99	2000	
56	Fe	89	H2	-0.771	ppb	N/A	4946.34	100000	
59	Co	89	He	-0.002	ppb	N/A	28.89	1000	
60	Ni	89	He	-0.672	ppb	N/A	274.46	1000	
63	Cu	89	He	0.013	ppb	64.8	110.01	2000	
66	Zn	89	He	-0.089	ppb	N/A	81.11	2000	
75	As	89	He	-0.003	ppb	N/A	3.67	1000	
78	Se	89	H2	0.013	ppb	2.1	1.50	1000	
88	Sr	89	He	0.010	ppb	40.3	8.89	2000	
95	Mo	89	He	0.011	ppb	46.9	18.89	1000	
107	Ag	89	He	0.000	ppb	N/A	5.55	100	
111	Cd	89	He	0.002	ppb	86.6	0.74	1000	
118	Sn	159	He	0.028	ppb	59.1	87.78	1000	
121	Sb	159	No Gas	0.004	ppb	83.1	96.78	1000	
137	Ba	159	No Gas	-0.001	ppb	N/A	33.37	2000	
182	W	159	No Gas	0.010	ppb	34.1	116.80	1000	
205	Tl	209	No Gas	0.002	ppb	16.4	53.40	1000	
208	Pb	209	No Gas	0.003	ppb	90.3	180.20	2000	
232	Th	209	No Gas	0.009	ppb	29.8	293.67	1000	
238	U	209	No Gas	0.000	ppb	2.3	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	958437.91	0.9	1023754.81	93.62	29.5	120.4	
Sc	45	No Gas	2990745.20	1.9	2927134.09	102.17	29.5	120.4	
Sc	45	H2	359775.28	1.6	374925.7	95.96	29.5	120.4	
Sc	45	He	70408.52	2.7	75429.93	93.34	29.5	120.4	
Ge	72	No Gas	721299.52	0.4	682196.39	105.73	29.5	120.4	
Ge	72	H2	139458.37	2.4	145757.5	95.68	29.5	120.4	
Ge	72	He	58035.71	1.8	59866.13	96.94	29.5	120.4	
Y	89	H2	2505635.34	1.6	2441196.5	102.64	29.5	120.4	
Y	89	He	508304.50	3.0	531537.69	95.63	29.5	120.4	
Tb	159	No Gas	8235773.63	1.3	7041897.33	116.95	29.5	120.4	
Tb	159	He	2886223.32	2.2	2795586.52	103.24	29.5	120.4	
Bi	209	No Gas	4447794.25	0.9	3760534.49	118.28	29.5	120.4	

Sample Report

Sample Name SN6054-011

File Name 186SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 12:58:55 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.591	ppb	25.4	78.89	100	
11	B	6	No Gas	4822.209	ppb	5.6	298469.13	1000	
23	Na	45	He	1177315.722	ppb	1.0	11583752.72	200000	
24	Mg	45	He	55113.340	ppb	1.4	302968.07	200000	
27	Al	45	He	13121.019	ppb	2.6	28840.90	200000	
28	Si	45	H2	8059.486	ppb	2.5	34827.86	10000	
39	K	45	He	393990.675	ppb	0.7	2071689.57	200000	
40	Ca	45	H2	131874.846	ppb	1.3	5428711.45	200000	
51	V	89	He	108.987	ppb	0.7	9580.23	1000	
52	Cr	89	He	213.910	ppb	2.7	22903.01	2000	
55	Mn	89	He	325.053	ppb	3.7	16739.52	2000	
56	Fe	89	H2	14459.228	ppb	0.7	2564769.65	100000	
59	Co	89	He	24.808	ppb	4.8	4607.78	1000	
60	Ni	89	He	146.463	ppb	1.2	7962.57	1000	
63	Cu	89	He	14.038	ppb	2.0	2074.67	2000	
66	Zn	89	He	58.947	ppb	5.1	1215.65	2000	
75	As	89	He	65.272	ppb	1.2	1052.82	1000	
78	Se	89	H2	9.774	ppb	11.6	87.00	1000	
88	Sr	89	He	116.734	ppb	0.2	9631.49	2000	
95	Mo	89	He	6.041	ppb	13.8	571.15	1000	
107	Ag	89	He	0.105	ppb	8.9	40.00	100	
111	Cd	89	He	0.260	ppb	20.1	10.74	1000	
118	Sn	159	He	27.888	ppb	0.4	2782.61	1000	
121	Sb	159	No Gas	6.211	ppb	2.4	5273.62	1000	
137	Ba	159	No Gas	38.605	ppb	1.5	12877.25	2000	
182	W	159	No Gas	3.323	ppb	3.3	2246.03	1000	
205	Tl	209	No Gas	0.022	ppb	54.5	50.06	1000	
208	Pb	209	No Gas	3.265	ppb	2.8	6521.35	2000	
232	Th	209	No Gas	9.557	ppb	6.3	19510.47	1000	
238	U	209	No Gas	7.005	ppb	4.1	13362.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	893916.58	1.3	1023754.81	87.32	29.5	120.4	
Sc	45	No Gas	2858412.27	1.3	2927134.09	97.65	29.5	120.4	
Sc	45	H2	343966.50	1.2	374925.7	91.74	29.5	120.4	
Sc	45	He	67833.25	1.1	75429.93	89.93	29.5	120.4	
Ge	72	No Gas	696887.50	1.0	682196.39	102.15	29.5	120.4	
Ge	72	H2	133557.73	1.5	145757.5	91.63	29.5	120.4	
Ge	72	He	55978.32	1.0	59866.13	93.51	29.5	120.4	
Y	89	H2	2422669.04	1.2	2441196.5	99.24	29.5	120.4	
Y	89	He	491294.22	1.4	531537.69	92.43	29.5	120.4	
Tb	159	No Gas	8031835.37	1.7	7041897.33	114.06	29.5	120.4	
Tb	159	He	2876333.39	1.3	2795586.52	102.89	29.5	120.4	
Bi	209	No Gas	4211676.79	1.2	3760534.49	112	29.5	120.4	

Sample Report

Sample Name SN6054-011

File Name 187SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:01:35 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.706	ppb	50.8	56.67	100	
11	B	6	No Gas	4834.888	ppb	4.8	152065.87	1000	
23	Na	45	He	1179172.363	ppb	0.6	5892968.96	200000	
24	Mg	45	He	55003.442	ppb	0.1	153901.03	200000	
27	Al	45	He	13075.865	ppb	2.9	14603.44	200000	
28	Si	45	H2	8210.743	ppb	5.3	18221.82	10000	
39	K	45	He	394551.886	ppb	1.1	1058032.30	200000	
40	Ca	45	H2	130331.428	ppb	0.9	2722554.65	200000	
51	V	89	He	110.230	ppb	3.2	5015.50	1000	
52	Cr	89	He	210.636	ppb	3.4	11508.58	2000	
55	Mn	89	He	325.073	ppb	1.9	8538.39	2000	
56	Fe	89	H2	14369.502	ppb	0.9	1295149.02	100000	
59	Co	89	He	24.328	ppb	8.3	2315.92	1000	
60	Ni	89	He	136.068	ppb	5.5	4091.87	1000	
63	Cu	89	He	14.564	ppb	4.0	1138.98	2000	
66	Zn	89	He	56.529	ppb	8.8	643.37	2000	
75	As	89	He	61.517	ppb	2.0	507.07	1000	
78	Se	89	H2	9.515	ppb	14.0	43.17	1000	
88	Sr	89	He	117.819	ppb	2.3	4946.63	2000	
95	Mo	89	He	6.564	ppb	9.5	320.02	1000	
107	Ag	89	He	0.111	ppb	26.3	24.44	100	
111	Cd	89	He	0.354	ppb	60.4	7.41	1000	
118	Sn	159	He	30.509	ppb	0.6	1551.26	1000	
121	Sb	159	No Gas	6.203	ppb	11.3	2713.32	1000	
137	Ba	159	No Gas	38.062	ppb	6.5	6485.47	2000	
182	W	159	No Gas	3.327	ppb	4.5	1171.37	1000	
205	Tl	209	No Gas	-0.003	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	3.335	ppb	8.5	3467.42	2000	
232	Th	209	No Gas	9.093	ppb	6.0	9550.99	1000	
238	U	209	No Gas	6.882	ppb	4.1	6722.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	904161.24	1.2	1023754.81	88.32	29.5	120.4	
Sc	45	No Gas	2901497.83	1.0	2927134.09	99.12	29.5	120.4	
Sc	45	H2	348992.40	0.3	374925.7	93.08	29.5	120.4	
Sc	45	He	68855.97	0.5	75429.93	91.28	29.5	120.4	
Ge	72	No Gas	703280.89	0.1	682196.39	103.09	29.5	120.4	
Ge	72	H2	134490.59	1.4	145757.5	92.27	29.5	120.4	
Ge	72	He	56718.07	1.3	59866.13	94.74	29.5	120.4	
Y	89	H2	2456129.90	0.8	2441196.5	100.61	29.5	120.4	
Y	89	He	500080.28	1.4	531537.69	94.08	29.5	120.4	
Tb	159	No Gas	8185628.42	0.8	7041897.33	116.24	29.5	120.4	
Tb	159	He	2880492.70	0.8	2795586.52	103.04	29.5	120.4	
Bi	209	No Gas	4310273.14	0.2	3760534.49	114.62	29.5	120.4	

Sample Report

Sample Name SN6054-011

File Name 188SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:04:06 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.536	ppb	73.5	44.45	100	
11	B	6	No Gas	4855.098	ppb	6.3	125186.17	1000	
23	Na	45	He	1166035.978	ppb	1.5	4839978.61	200000	
24	Mg	45	He	54688.898	ppb	1.8	127219.21	200000	
27	Al	45	He	12874.588	ppb	2.0	11945.38	200000	
28	Si	45	H2	8141.739	ppb	3.7	14724.09	10000	
39	K	45	He	388794.767	ppb	1.5	867856.98	200000	
40	Ca	45	H2	131604.315	ppb	0.9	2226252.10	200000	
51	V	89	He	108.302	ppb	2.9	4081.84	1000	
52	Cr	89	He	213.667	ppb	2.5	9592.85	2000	
55	Mn	89	He	321.842	ppb	1.7	6943.81	2000	
56	Fe	89	H2	14473.849	ppb	0.6	1059475.74	100000	
59	Co	89	He	23.762	ppb	10.9	1862.48	1000	
60	Ni	89	He	140.337	ppb	4.4	3573.92	1000	
63	Cu	89	He	14.821	ppb	7.2	967.85	2000	
66	Zn	89	He	51.181	ppb	4.3	505.58	2000	
75	As	89	He	60.249	ppb	2.8	408.38	1000	
78	Se	89	H2	9.592	ppb	14.4	35.33	1000	
88	Sr	89	He	119.417	ppb	3.3	4114.09	2000	
95	Mo	89	He	5.747	ppb	11.9	232.24	1000	
107	Ag	89	He	0.118	ppb	44.1	22.22	100	
111	Cd	89	He	0.237	ppb	57.0	4.07	1000	
118	Sn	159	He	29.065	ppb	8.5	1226.76	1000	
121	Sb	159	No Gas	6.604	ppb	12.2	2369.53	1000	
137	Ba	159	No Gas	41.681	ppb	8.1	5811.11	2000	
182	W	159	No Gas	3.363	ppb	9.2	977.80	1000	
205	Tl	209	No Gas	0.006	ppb	617.9	23.36	1000	
208	Pb	209	No Gas	3.252	ppb	12.9	2809.95	2000	
232	Th	209	No Gas	8.819	ppb	9.6	7657.59	1000	
238	U	209	No Gas	6.802	ppb	10.2	5474.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	925100.54	2.7	1023754.81	90.36	29.5	120.4	
Sc	45	No Gas	2990592.47	3.0	2927134.09	102.17	29.5	120.4	
Sc	45	H2	353239.25	0.7	374925.7	94.22	29.5	120.4	
Sc	45	He	71465.29	1.1	75429.93	94.74	29.5	120.4	
Ge	72	No Gas	724950.41	3.2	682196.39	106.27	29.5	120.4	
Ge	72	H2	136831.69	0.6	145757.5	93.88	29.5	120.4	
Ge	72	He	58247.22	0.4	59866.13	97.3	29.5	120.4	
Y	89	H2	2490370.23	0.5	2441196.5	102.01	29.5	120.4	
Y	89	He	512858.09	0.1	531537.69	96.49	29.5	120.4	
Tb	159	No Gas	8376902.24	2.8	7041897.33	118.96	29.5	120.4	
Tb	159	He	2954070.34	0.4	2795586.52	105.67	29.5	120.4	
Bi	209	No Gas	4444772.11	2.9	3760534.49	118.2	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 189SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:06:44 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.009	ppb	N/A	14.45	100	
11	B	6	No Gas	6.587	ppb	0.8	5859.17	1000	
23	Na	45	He	105.301	ppb	7.0	19925.95	200000	
24	Mg	45	He	0.717	ppb	43.8	922.32	200000	
27	Al	45	He	0.555	ppb	143.8	45.56	200000	
28	Si	45	H2	10.733	ppb	15.0	924.39	10000	
39	K	45	He	5.591	ppb	9.1	10880.98	200000	
40	Ca	45	H2	1.941	ppb	11.4	1932.43	200000	
51	V	89	He	0.124	ppb	32.0	290.01	1000	
52	Cr	89	He	0.013	ppb	51.0	77.99	2000	
55	Mn	89	He	-0.020	ppb	N/A	24.66	2000	
56	Fe	89	H2	-1.087	ppb	N/A	4328.88	100000	
59	Co	89	He	-0.008	ppb	N/A	17.78	1000	
60	Ni	89	He	-0.796	ppb	N/A	212.23	1000	
63	Cu	89	He	0.027	ppb	52.1	133.34	2000	
66	Zn	89	He	0.000	ppb	54144.4	100.00	2000	
75	As	89	He	-0.009	ppb	N/A	2.67	1000	
78	Se	89	H2	0.009	ppb	92.1	1.17	1000	
88	Sr	89	He	0.006	ppb	34.5	5.56	2000	
95	Mo	89	He	0.009	ppb	55.9	17.78	1000	
107	Ag	89	He	0.000	ppb	518.3	7.78	100	
111	Cd	89	He	0.002	ppb	86.6	0.74	1000	
118	Sn	159	He	0.008	ppb	413.2	68.89	1000	
121	Sb	159	No Gas	-0.002	ppb	N/A	46.72	1000	
137	Ba	159	No Gas	-0.005	ppb	N/A	20.02	2000	
182	W	159	No Gas	0.006	ppb	50.7	90.10	1000	
205	Tl	209	No Gas	0.000	ppb	5388.6	20.02	1000	
208	Pb	209	No Gas	0.003	ppb	36.4	193.55	2000	
232	Th	209	No Gas	0.005	ppb	3.4	230.26	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	959441.07	3.3	1023754.81	93.72	29.5	120.4	
Sc	45	No Gas	2990842.90	3.2	2927134.09	102.18	29.5	120.4	
Sc	45	H2	352536.59	0.8	374925.7	94.03	29.5	120.4	
Sc	45	He	71646.44	0.3	75429.93	94.98	29.5	120.4	
Ge	72	No Gas	727979.66	3.5	682196.39	106.71	29.5	120.4	
Ge	72	H2	137403.92	0.5	145757.5	94.27	29.5	120.4	
Ge	72	He	58659.52	0.4	59866.13	97.98	29.5	120.4	
Y	89	H2	2484739.83	0.3	2441196.5	101.78	29.5	120.4	
Y	89	He	514982.81	0.4	531537.69	96.89	29.5	120.4	
Tb	159	No Gas	8321277.72	3.1	7041897.33	118.17	29.5	120.4	
Tb	159	He	2941192.66	0.7	2795586.52	105.21	29.5	120.4	
Bi	209	No Gas	4502322.27	3.7	3760534.49	119.73	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 190SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:09:17 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.004	ppb	200.3	28.89	100	
11	B	6	No Gas	3.444	ppb	1.9	3901.77	1000	
23	Na	45	He	75.842	ppb	2.6	16410.94	200000	
24	Mg	45	He	1.154	ppb	241.0	922.32	200000	
27	Al	45	He	0.067	ppb	9.4	33.33	200000	
28	Si	45	H2	6.662	ppb	9.5	754.19	10000	
39	K	45	He	9.269	ppb	46.4	10784.27	200000	
40	Ca	45	H2	0.617	ppb	24.4	1387.89	200000	
51	V	89	He	0.130	ppb	45.2	287.79	1000	
52	Cr	89	He	-0.007	ppb	N/A	53.99	2000	
55	Mn	89	He	0.023	ppb	66.2	46.66	2000	
56	Fe	89	H2	-1.470	ppb	N/A	3617.84	100000	
59	Co	89	He	-0.013	ppb	N/A	6.67	1000	
60	Ni	89	He	-0.824	ppb	N/A	192.23	1000	
63	Cu	89	He	0.010	ppb	51.5	105.56	2000	
66	Zn	89	He	-0.136	ppb	N/A	71.12	2000	
75	As	89	He	-0.007	ppb	N/A	3.00	1000	
78	Se	89	H2	-0.002	ppb	N/A	0.17	1000	
88	Sr	89	He	0.001	ppb	173.2	1.11	2000	
95	Mo	89	He	0.001	ppb	1495.7	8.89	1000	
107	Ag	89	He	0.002	ppb	84.4	14.45	100	
111	Cd	89	He	0.001	ppb	173.2	0.37	1000	
118	Sn	159	He	0.027	ppb	114.5	85.56	1000	
121	Sb	159	No Gas	-0.002	ppb	N/A	36.71	1000	
137	Ba	159	No Gas	-0.002	ppb	N/A	26.69	2000	
182	W	159	No Gas	0.000	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	13.35	1000	
208	Pb	209	No Gas	0.000	ppb	693.5	123.47	2000	
232	Th	209	No Gas	0.003	ppb	93.7	173.53	1000	
238	U	209	No Gas	0.000	ppb	118.8	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	990536.25	2.7	1023754.81	96.76	29.5	120.4	
Sc	45	No Gas	2934995.05	2.4	2927134.09	100.27	29.5	120.4	
Sc	45	H2	356326.44	0.5	374925.7	95.04	29.5	120.4	
Sc	45	He	69704.66	0.4	75429.93	92.41	29.5	120.4	
Ge	72	No Gas	707260.71	2.9	682196.39	103.67	29.5	120.4	
Ge	72	H2	137623.86	1.4	145757.5	94.42	29.5	120.4	
Ge	72	He	57108.90	0.4	59866.13	95.39	29.5	120.4	
Y	89	H2	2474313.31	0.8	2441196.5	101.36	29.5	120.4	
Y	89	He	501996.89	0.6	531537.69	94.44	29.5	120.4	
Tb	159	No Gas	8018371.82	2.5	7041897.33	113.87	29.5	120.4	
Tb	159	He	2866814.09	0.5	2795586.52	102.55	29.5	120.4	
Bi	209	No Gas	4357439.53	2.9	3760534.49	115.87	29.5	120.4	

Sample Report

Sample Name SN6054-012

File Name 191SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:11:56 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	23.33	100	
11	B	6	No Gas	979.939	ppb	6.7	64746.73	1000	
23	Na	45	He	225761.432	ppb	0.4	2267326.44	200000	
24	Mg	45	He	11930.637	ppb	1.3	67403.97	200000	
27	Al	45	He	601.561	ppb	9.1	1375.68	200000	
28	Si	45	H2	5588.495	ppb	2.5	24020.37	10000	
39	K	45	He	69063.525	ppb	1.0	377921.52	200000	
40	Ca	45	H2	53948.002	ppb	1.3	2197320.16	200000	
51	V	89	He	16.515	ppb	4.3	1619.04	1000	
52	Cr	89	He	21.388	ppb	2.8	2379.78	2000	
55	Mn	89	He	197.116	ppb	2.1	10316.57	2000	
56	Fe	89	H2	7556.072	ppb	1.0	1345775.82	100000	
59	Co	89	He	3.870	ppb	4.7	755.63	1000	
60	Ni	89	He	10.588	ppb	15.2	1151.20	1000	
63	Cu	89	He	7.201	ppb	3.6	1123.42	2000	
66	Zn	89	He	261.644	ppb	1.5	5141.14	2000	
75	As	89	He	27.440	ppb	5.1	451.39	1000	
78	Se	89	H2	0.450	ppb	56.3	4.33	1000	
88	Sr	89	He	115.343	ppb	4.5	9655.96	2000	
95	Mo	89	He	0.394	ppb	22.9	45.56	1000	
107	Ag	89	He	0.015	ppb	39.2	11.11	100	
111	Cd	89	He	0.097	ppb	31.5	4.07	1000	
118	Sn	159	He	3.536	ppb	1.2	412.24	1000	
121	Sb	159	No Gas	27.002	ppb	7.1	23336.22	1000	
137	Ba	159	No Gas	47.612	ppb	9.6	16284.88	2000	
182	W	159	No Gas	0.391	ppb	6.5	317.03	1000	
205	Tl	209	No Gas	0.005	ppb	227.9	26.69	1000	
208	Pb	209	No Gas	0.449	ppb	23.2	1051.19	2000	
232	Th	209	No Gas	0.185	ppb	19.4	507.25	1000	
238	U	209	No Gas	0.261	ppb	18.8	537.28	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	938014.87	3.5	1023754.81	91.62	29.5	120.4	
Sc	45	No Gas	2912145.74	4.3	2927134.09	99.49	29.5	120.4	
Sc	45	H2	340237.60	1.5	374925.7	90.75	29.5	120.4	
Sc	45	He	69022.33	0.4	75429.93	91.51	29.5	120.4	
Ge	72	No Gas	711793.60	4.1	682196.39	104.34	29.5	120.4	
Ge	72	H2	133512.98	1.7	145757.5	91.6	29.5	120.4	
Ge	72	He	56703.10	0.4	59866.13	94.72	29.5	120.4	
Y	89	H2	2427281.54	0.7	2441196.5	99.43	29.5	120.4	
Y	89	He	498542.70	0.5	531537.69	93.79	29.5	120.4	
Tb	159	No Gas	8260154.39	3.6	7041897.33	117.3	29.5	120.4	
Tb	159	He	2929812.73	0.5	2795586.52	104.8	29.5	120.4	
Bi	209	No Gas	4461808.74	4.1	3760534.49	118.65	29.5	120.4	

Sample Report

Sample Name SN6054-012L

File Name 192SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:14:27 AM

Sample Type Sample

Total Dilution 50.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.157	ppb	659.1	26.67	100	
11	B	6	No Gas	1010.370	ppb	5.6	14607.83	1000	
23	Na	45	He	208868.392	ppb	0.8	440167.93	200000	
24	Mg	45	He	10606.935	ppb	0.5	13086.82	200000	
27	Al	45	He	517.599	ppb	12.6	271.13	200000	
28	Si	45	H2	5372.098	ppb	8.9	5156.68	10000	
39	K	45	He	61266.498	ppb	1.8	77828.19	200000	
40	Ca	45	H2	46649.206	ppb	1.8	395184.63	200000	
51	V	89	He	15.253	ppb	3.2	452.25	1000	
52	Cr	89	He	18.285	ppb	7.0	471.26	2000	
55	Mn	89	He	178.077	ppb	3.1	1948.46	2000	
56	Fe	89	H2	6669.848	ppb	0.3	249000.44	100000	
59	Co	89	He	3.259	ppb	44.8	157.79	1000	
60	Ni	89	He	-19.730	ppb	N/A	422.24	1000	
63	Cu	89	He	7.060	ppb	11.8	301.13	2000	
66	Zn	89	He	224.482	ppb	8.8	991.19	2000	
75	As	89	He	22.882	ppb	7.0	81.01	1000	
78	Se	89	H2	0.631	ppb	129.6	1.50	1000	
88	Sr	89	He	101.634	ppb	4.0	1752.40	2000	
95	Mo	89	He	0.474	ppb	42.0	17.78	1000	
107	Ag	89	He	0.120	ppb	146.3	14.44	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	3.272	ppb	38.5	126.67	1000	
121	Sb	159	No Gas	23.563	ppb	6.8	4188.68	1000	
137	Ba	159	No Gas	42.754	ppb	6.1	3003.71	2000	
182	W	159	No Gas	0.133	ppb	58.1	70.08	1000	
205	Tl	209	No Gas	-0.033	ppb	N/A	10.01	1000	
208	Pb	209	No Gas	0.485	ppb	10.2	330.37	2000	
232	Th	209	No Gas	0.139	ppb	79.0	173.53	1000	
238	U	209	No Gas	0.206	ppb	44.6	96.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	942726.74	0.5	1023754.81	92.09	29.5	120.4	
Sc	45	No Gas	2976149.92	0.9	2927134.09	101.67	29.5	120.4	
Sc	45	H2	353017.16	1.6	374925.7	94.16	29.5	120.4	
Sc	45	He	71219.81	0.5	75429.93	94.42	29.5	120.4	
Ge	72	No Gas	726058.42	0.5	682196.39	106.43	29.5	120.4	
Ge	72	H2	138150.93	1.7	145757.5	94.78	29.5	120.4	
Ge	72	He	58201.39	0.2	59866.13	97.22	29.5	120.4	
Y	89	H2	2490691.07	0.9	2441196.5	102.03	29.5	120.4	
Y	89	He	513394.08	0.4	531537.69	96.59	29.5	120.4	
Tb	159	No Gas	8377904.46	1.1	7041897.33	118.97	29.5	120.4	
Tb	159	He	2952820.48	0.1	2795586.52	105.62	29.5	120.4	
Bi	209	No Gas	4547216.75	0.9	3760534.49	120.92	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6054-012A

File Name 193SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:17:07 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	21.207	ppb	5.7	2101.34	100	
11	B	6	No Gas	1342.654	ppb	4.2	85983.83	1000	
23	Na	45	He	234992.767	ppb	0.8	2324879.82	200000	
24	Mg	45	He	13313.862	ppb	1.8	74007.86	200000	
27	Al	45	He	2513.388	ppb	0.2	5564.60	200000	
28	Si	45	H2	16469.896	ppb	12.9	64651.44	10000	
39	K	45	He	85004.704	ppb	1.3	455961.50	200000	
40	Ca	45	H2	56938.302	ppb	12.6	2143906.25	200000	
51	V	89	He	122.010	ppb	0.4	10826.73	1000	
52	Cr	89	He	123.430	ppb	1.7	13393.93	2000	
55	Mn	89	He	224.515	ppb	1.4	11706.74	2000	
56	Fe	89	H2	9891.555	ppb	12.9	1623613.70	100000	
59	Co	89	He	26.223	ppb	2.7	4923.46	1000	
60	Ni	89	He	53.825	ppb	1.6	3344.97	1000	
63	Cu	89	He	71.676	ppb	1.6	10344.17	2000	
66	Zn	89	He	468.333	ppb	1.6	9095.50	2000	
75	As	89	He	127.809	ppb	2.8	2080.72	1000	
78	Se	89	H2	108.443	ppb	11.3	890.82	1000	
88	Sr	89	He	208.550	ppb	1.3	17401.57	2000	
95	Mo	89	He	107.649	ppb	2.9	10157.46	1000	
107	Ag	89	He	22.022	ppb	1.1	7152.12	100	
111	Cd	89	He	22.865	ppb	5.8	952.64	1000	
118	Sn	159	He	103.182	ppb	2.5	10306.50	1000	
121	Sb	159	No Gas	46.314	ppb	2.8	39823.14	1000	
137	Ba	159	No Gas	82.636	ppb	4.3	28147.76	2000	
182	W	159	No Gas	100.891	ppb	3.8	68245.19	1000	
205	Tl	209	No Gas	20.888	ppb	5.5	30764.89	1000	
208	Pb	209	No Gas	21.428	ppb	4.0	43942.16	2000	
232	Th	209	No Gas	21.144	ppb	4.7	44836.93	1000	
238	U	209	No Gas	21.255	ppb	4.3	42224.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	913313.99	0.2	1023754.81	89.21	29.5	120.4	
Sc	45	No Gas	2870486.51	1.3	2927134.09	98.06	29.5	120.4	
Sc	45	H2	317281.26	10.4	374925.7	84.63	29.5	120.4	
Sc	45	He	68007.53	1.2	75429.93	90.16	29.5	120.4	
Ge	72	No Gas	709077.68	0.5	682196.39	103.94	29.5	120.4	
Ge	72	H2	125341.57	6.6	145757.5	85.99	29.5	120.4	
Ge	72	He	56101.36	0.9	59866.13	93.71	29.5	120.4	
Y	89	H2	2259520.52	10.4	2441196.5	92.56	29.5	120.4	
Y	89	He	496868.99	0.5	531537.69	93.48	29.5	120.4	
Tb	159	No Gas	8211964.74	1.3	7041897.33	116.62	29.5	120.4	
Tb	159	He	2925102.35	0.1	2795586.52	104.63	29.5	120.4	
Bi	209	No Gas	4388384.53	0.7	3760534.49	116.7	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	194_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:19:42 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.313	ppb	4.7	22961.14	25	93.25	89.8	110.2	
11	B	6	No Gas	26.620	ppb	4.4	18264.30	25	106.48	89.8	110.2	
23	Na	45	He	5143.173	ppb	1.0	530900.89	5000	102.86	89.8	110.2	
24	Mg	45	He	4935.054	ppb	1.4	280203.58	5000	98.7	89.8	110.2	
27	Al	45	He	473.561	ppb	2.1	10768.85	500	94.71	89.8	110.2	
28	Si	45	H2	449.836	ppb	2.7	20133.12	500	89.97	89.8	110.2	
39	K	45	He	4837.842	ppb	1.1	271711.73	5000	96.76	89.8	110.2	
40	Ca	45	H2	4654.119	ppb	1.6	1965187.77	5000	93.08	89.8	110.2	
51	V	89	He	24.132	ppb	1.3	21544.93	25	96.53	89.8	110.2	
52	Cr	89	He	24.334	ppb	1.7	26716.95	25	97.34	89.8	110.2	
55	Mn	89	He	23.970	ppb	1.6	12672.07	25	95.88	89.8	110.2	
56	Fe	89	H2	4552.530	ppb	2.4	8270714.59	5000	91.05	89.8	110.2	
59	Co	89	He	24.406	ppb	2.1	46198.87	25	97.62	89.8	110.2	
60	Ni	89	He	23.403	ppb	1.4	12681.68	25	93.61	89.8	110.2	
63	Cu	89	He	24.689	ppb	1.1	35909.27	25	98.76	89.8	110.2	
66	Zn	89	He	24.831	ppb	1.7	4936.61	25	99.32	89.8	110.2	
75	As	89	He	24.307	ppb	1.2	4009.36	25	97.23	89.8	110.2	
78	Se	89	H2	22.709	ppb	3.2	2067.56	25	90.84	89.8	110.2	
88	Sr	89	He	23.708	ppb	2.3	20063.08	25	94.83	89.8	110.2	
95	Mo	89	He	24.564	ppb	2.5	23489.72	25	98.26	89.8	110.2	
107	Ag	89	He	25.028	ppb	1.4	82366.51	25	100.11	89.8	110.2	
111	Cd	89	He	24.685	ppb	1.0	10431.14	25	98.74	89.8	110.2	
118	Sn	159	He	23.218	ppb	1.8	23029.26	25	92.87	89.8	110.2	
121	Sb	159	No Gas	21.904	ppb	5.0	188568.12	25	87.62	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.222	ppb	3.2	75799.58	25	88.89	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.326	ppb	4.1	151316.37	25	89.3	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.890	ppb	4.9	342972.88	25	91.56	89.8	110.2	
208	Pb	209	No Gas	23.165	ppb	4.2	482383.64	25	92.66	89.8	110.2	
232	Th	209	No Gas	22.149	ppb	4.9	477046.96	25	88.6	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.884	ppb	4.8	462671.75	25	91.54	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	916804.97	0.5	1023754.81	89.55	29.5	120.4	
Sc	45	No Gas	2904872.06	0.6	2927134.09	99.24	29.5	120.4	
Sc	45	H2	352666.45	0.5	374925.7	94.06	29.5	120.4	
Sc	45	He	70036.40	0.6	75429.93	92.85	29.5	120.4	
Ge	72	No Gas	704334.37	1.2	682196.39	103.25	29.5	120.4	
Ge	72	H2	137050.34	0.8	145757.5	94.03	29.5	120.4	
Ge	72	He	57178.29	1.1	59866.13	95.51	29.5	120.4	
Y	89	H2	2485777.43	1.2	2441196.5	101.83	29.5	120.4	
Y	89	He	503880.48	1.0	531537.69	94.8	29.5	120.4	
Tb	159	No Gas	8232965.64	0.4	7041897.33	116.91	29.5	120.4	
Tb	159	He	2914574.71	1.4	2795586.52	104.26	29.5	120.4	
Bi	209	No Gas	4468850.83	0.8	3760534.49	118.84	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	195_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:22:26 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	27.4	86.67	0.2	
11	B	6	No Gas	2.295	ppb	9.9	2985.97	4	Failed DoD
23	Na	45	He	45.820	ppb	12.2	13775.10	200	
24	Mg	45	He	-2.067	ppb	N/A	762.31	20	
27	Al	45	He	-0.693	ppb	N/A	16.67	20	
28	Si	45	H2	5.450	ppb	36.7	654.07	100	
39	K	45	He	1.758	ppb	215.8	10687.57	200	
40	Ca	45	H2	2.355	ppb	6.9	1986.88	20	
51	V	89	He	-0.013	ppb	N/A	165.56	1	
52	Cr	89	He	-0.012	ppb	N/A	49.99	1	
55	Mn	89	He	-0.024	ppb	N/A	22.66	0.4	
56	Fe	89	H2	0.869	ppb	13.2	7373.49	20	
59	Co	89	He	-0.003	ppb	N/A	26.67	0.2	
60	Ni	89	He	-0.764	ppb	N/A	228.90	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.007	ppb	194.9	103.34	0.6	
66	Zn	89	He	-0.117	ppb	N/A	76.67	2	
75	As	89	He	0.015	ppb	62.0	6.67	1	
78	Se	89	H2	0.038	ppb	29.6	3.50	1	
88	Sr	89	He	0.009	ppb	24.7	7.78	1	
95	Mo	89	He	0.096	ppb	25.1	102.22	1	
107	Ag	89	He	0.006	ppb	26.3	25.56	0.2	
111	Cd	89	He	0.011	ppb	66.7	4.82	0.2	
118	Sn	159	He	0.090	ppb	34.0	151.12	1	
121	Sb	159	No Gas	0.025	ppb	18.1	273.64	0.2	
137	Ba	159	No Gas	0.013	ppb	31.0	80.09	0.4	
182	W	159	No Gas	0.096	ppb	22.7	694.13	1	
205	Tl	209	No Gas	0.022	ppb	5.1	350.40	0.2	
208	Pb	209	No Gas	0.015	ppb	4.8	433.82	0.2	
232	Th	209	No Gas	0.077	ppb	11.7	1752.09	1	
238	U	209	No Gas	0.021	ppb	21.6	423.81	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	949496.74	2.8	1023754.81	92.75	29.5	120.4	
Sc	45	No Gas	2924695.74	4.2	2927134.09	99.92	29.5	120.4	
Sc	45	H2	332596.39	4.3	374925.7	88.71	29.5	120.4	
Sc	45	He	71771.47	0.3	75429.93	95.15	29.5	120.4	
Ge	72	No Gas	705634.23	3.3	682196.39	103.44	29.5	120.4	
Ge	72	H2	132954.87	0.6	145757.5	91.22	29.5	120.4	
Ge	72	He	58356.05	0.4	59866.13	97.48	29.5	120.4	
Y	89	H2	2326855.45	4.8	2441196.5	95.32	29.5	120.4	
Y	89	He	514757.24	0.2	531537.69	96.84	29.5	120.4	
Tb	159	No Gas	8125222.24	4.4	7041897.33	115.38	29.5	120.4	
Tb	159	He	2944456.83	0.6	2795586.52	105.33	29.5	120.4	
Bi	209	No Gas	4403990.09	4.2	3760534.49	117.11	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 196SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:25:09 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	94.2	38.89	100	
11	B	6	No Gas	2.122	ppb	5.5	2852.59	1000	
23	Na	45	He	41.014	ppb	13.2	12686.35	200000	
24	Mg	45	He	0.439	ppb	265.7	866.77	200000	
27	Al	45	He	0.685	ppb	95.0	46.67	200000	
28	Si	45	H2	4.227	ppb	18.2	640.73	10000	
39	K	45	He	3.750	ppb	75.1	10309.10	200000	
40	Ca	45	H2	0.276	ppb	64.7	1232.32	200000	
51	V	89	He	0.045	ppb	84.0	210.01	1000	
52	Cr	89	He	-0.001	ppb	N/A	59.99	2000	
55	Mn	89	He	-0.017	ppb	N/A	25.33	2000	
56	Fe	89	H2	-0.951	ppb	N/A	4565.83	100000	
59	Co	89	He	-0.010	ppb	N/A	13.33	1000	
60	Ni	89	He	-0.762	ppb	N/A	221.12	1000	
63	Cu	89	He	0.011	ppb	109.5	105.56	2000	
66	Zn	89	He	-0.061	ppb	N/A	84.45	2000	
75	As	89	He	0.002	ppb	514.9	4.33	1000	
78	Se	89	H2	0.015	ppb	88.1	1.67	1000	
88	Sr	89	He	0.004	ppb	173.2	3.33	2000	
95	Mo	89	He	0.037	ppb	43.2	43.34	1000	
107	Ag	89	He	0.001	ppb	87.5	10.00	100	
111	Cd	89	He	0.004	ppb	42.4	1.48	1000	
118	Sn	159	He	0.031	ppb	50.7	88.89	1000	
121	Sb	159	No Gas	0.001	ppb	455.4	63.40	1000	
137	Ba	159	No Gas	-0.002	ppb	N/A	26.69	2000	
182	W	159	No Gas	0.019	ppb	5.6	173.53	1000	
205	Tl	209	No Gas	0.003	ppb	75.9	56.73	1000	
208	Pb	209	No Gas	0.004	ppb	15.1	196.89	2000	
232	Th	209	No Gas	0.026	ppb	3.3	644.08	1000	
238	U	209	No Gas	0.001	ppb	94.0	40.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	942163.75	2.4	1023754.81	92.03	29.5	120.4	
Sc	45	No Gas	2863633.72	2.3	2927134.09	97.83	29.5	120.4	
Sc	45	H2	353269.00	1.2	374925.7	94.22	29.5	120.4	
Sc	45	He	68539.26	2.9	75429.93	90.86	29.5	120.4	
Ge	72	No Gas	696735.57	0.8	682196.39	102.13	29.5	120.4	
Ge	72	H2	137914.83	1.0	145757.5	94.62	29.5	120.4	
Ge	72	He	56347.41	2.3	59866.13	94.12	29.5	120.4	
Y	89	H2	2479252.63	1.1	2441196.5	101.56	29.5	120.4	
Y	89	He	496059.92	2.4	531537.69	93.33	29.5	120.4	
Tb	159	No Gas	7987284.81	2.7	7041897.33	113.43	29.5	120.4	
Tb	159	He	2849141.17	2.4	2795586.52	101.92	29.5	120.4	
Bi	209	No Gas	4325399.00	2.2	3760534.49	115.02	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	197SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:27:48 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	121.0	33.34	100	
11	B	6	No Gas	1.779	ppb	4.2	2655.90	1000	
23	Na	45	He	34.539	ppb	8.5	12355.81	200000	
24	Mg	45	He	-0.507	ppb	N/A	835.64	200000	
27	Al	45	He	0.431	ppb	182.9	42.23	200000	
28	Si	45	H2	2.453	ppb	59.5	563.98	10000	
39	K	45	He	-3.321	ppb	N/A	10204.06	200000	
40	Ca	45	H2	-0.166	ppb	N/A	1046.75	200000	
51	V	89	He	0.052	ppb	70.4	221.12	1000	
52	Cr	89	He	-0.002	ppb	N/A	59.99	2000	
55	Mn	89	He	-0.017	ppb	N/A	26.00	2000	
56	Fe	89	H2	-1.326	ppb	N/A	3864.85	100000	
59	Co	89	He	-0.011	ppb	N/A	11.11	1000	
60	Ni	89	He	-0.756	ppb	N/A	228.90	1000	
63	Cu	89	He	-0.003	ppb	N/A	86.67	2000	
66	Zn	89	He	0.031	ppb	218.6	104.45	2000	
75	As	89	He	-0.001	ppb	N/A	4.00	1000	
78	Se	89	H2	0.002	ppb	306.2	0.50	1000	
88	Sr	89	He	0.005	ppb	86.6	4.45	2000	
95	Mo	89	He	0.020	ppb	33.9	27.78	1000	
107	Ag	89	He	0.002	ppb	61.8	14.44	100	
111	Cd	89	He	0.000	ppb	N/A	0.00	1000	
118	Sn	159	He	0.014	ppb	93.6	74.45	1000	
121	Sb	159	No Gas	0.000	ppb	N/A	56.73	1000	
137	Ba	159	No Gas	-0.004	ppb	N/A	20.02	2000	
182	W	159	No Gas	0.008	ppb	57.6	103.45	1000	
205	Tl	209	No Gas	0.000	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	0.002	ppb	126.4	166.85	2000	
232	Th	209	No Gas	0.008	ppb	10.5	286.99	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	951503.80	0.3	1023754.81	92.94	29.5	120.4	
Sc	45	No Gas	2940206.14	2.2	2927134.09	100.45	29.5	120.4	
Sc	45	H2	353921.72	0.8	374925.7	94.4	29.5	120.4	
Sc	45	He	70404.45	2.5	75429.93	93.34	29.5	120.4	
Ge	72	No Gas	709599.49	0.9	682196.39	104.02	29.5	120.4	
Ge	72	H2	137217.87	1.2	145757.5	94.14	29.5	120.4	
Ge	72	He	57255.73	1.5	59866.13	95.64	29.5	120.4	
Y	89	H2	2466259.27	0.9	2441196.5	101.03	29.5	120.4	
Y	89	He	506212.14	1.7	531537.69	95.24	29.5	120.4	
Tb	159	No Gas	8171872.66	2.1	7041897.33	116.05	29.5	120.4	
Tb	159	He	2913852.39	1.6	2795586.52	104.23	29.5	120.4	
Bi	209	No Gas	4429544.96	1.2	3760534.49	117.79	29.5	120.4	

Sample Report

Sample Name SN6054-012

File Name 198SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:30:27 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	238.8	25.56	100	
11	B	6	No Gas	964.790	ppb	1.4	32663.19	1000	
23	Na	45	He	222114.848	ppb	5.3	1094911.93	200000	
24	Mg	45	He	11790.502	ppb	7.1	32971.09	200000	
27	Al	45	He	572.524	ppb	8.9	655.59	200000	
28	Si	45	H2	5671.390	ppb	1.3	12549.46	10000	
39	K	45	He	67948.568	ppb	6.0	186822.73	200000	
40	Ca	45	H2	50211.092	ppb	0.5	1034902.17	200000	
51	V	89	He	15.460	ppb	11.1	831.17	1000	
52	Cr	89	He	20.607	ppb	8.7	1151.18	2000	
55	Mn	89	He	188.739	ppb	6.1	4845.97	2000	
56	Fe	89	H2	7147.536	ppb	1.9	640293.19	100000	
59	Co	89	He	4.405	ppb	13.5	433.37	1000	
60	Ni	89	He	6.180	ppb	11.1	752.27	1000	
63	Cu	89	He	6.370	ppb	5.4	535.58	2000	
66	Zn	89	He	255.921	ppb	4.7	2506.99	2000	
75	As	89	He	27.608	ppb	9.1	224.03	1000	
78	Se	89	H2	0.487	ppb	79.9	2.50	1000	
88	Sr	89	He	112.099	ppb	8.4	4586.47	2000	
95	Mo	89	He	0.544	ppb	33.4	33.33	1000	
107	Ag	89	He	0.024	ppb	227.2	10.00	100	
111	Cd	89	He	0.110	ppb	52.9	2.22	1000	
118	Sn	159	He	3.942	ppb	14.4	246.68	1000	
121	Sb	159	No Gas	28.232	ppb	5.4	11861.87	1000	
137	Ba	159	No Gas	46.646	ppb	2.9	7760.89	2000	
182	W	159	No Gas	0.487	ppb	19.3	210.24	1000	
205	Tl	209	No Gas	0.033	ppb	88.2	43.38	1000	
208	Pb	209	No Gas	0.476	ppb	1.5	600.68	2000	
232	Th	209	No Gas	0.273	ppb	29.8	393.78	1000	
238	U	209	No Gas	0.287	ppb	19.9	293.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937876.49	0.8	1023754.81	91.61	29.5	120.4	
Sc	45	No Gas	2860573.02	1.5	2927134.09	97.73	29.5	120.4	
Sc	45	H2	344117.23	0.7	374925.7	91.78	29.5	120.4	
Sc	45	He	67606.15	4.9	75429.93	89.63	29.5	120.4	
Ge	72	No Gas	699884.23	0.6	682196.39	102.59	29.5	120.4	
Ge	72	H2	136623.11	0.7	145757.5	93.73	29.5	120.4	
Ge	72	He	56011.99	2.8	59866.13	93.56	29.5	120.4	
Y	89	H2	2429478.17	0.7	2441196.5	99.52	29.5	120.4	
Y	89	He	487986.03	3.2	531537.69	91.81	29.5	120.4	
Tb	159	No Gas	8002155.23	1.9	7041897.33	113.64	29.5	120.4	
Tb	159	He	2822464.92	3.9	2795586.52	100.96	29.5	120.4	
Bi	209	No Gas	4341405.52	1.7	3760534.49	115.45	29.5	120.4	

Sample Report

Sample Name SN6054-012

File Name 199SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:33:11 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.411	ppb	31.6	40.00	100	
11	B	6	No Gas	906.456	ppb	5.9	24884.33	1000	
23	Na	45	He	204820.734	ppb	1.7	832057.90	200000	
24	Mg	45	He	10504.724	ppb	3.2	24398.11	200000	
27	Al	45	He	9266.287	ppb	4.0	8349.39	200000	
28	Si	45	H2	5170.226	ppb	4.6	9413.51	10000	
39	K	45	He	62309.192	ppb	2.0	143538.54	200000	
40	Ca	45	H2	47304.362	ppb	0.6	791990.84	200000	
51	V	89	He	14.231	ppb	13.2	675.60	1000	
52	Cr	89	He	19.496	ppb	3.8	913.87	2000	
55	Mn	89	He	172.395	ppb	3.7	3659.82	2000	
56	Fe	89	H2	6809.973	ppb	0.7	491857.22	100000	
59	Co	89	He	3.943	ppb	10.5	328.92	1000	
60	Ni	89	He	1.695	ppb	33.8	651.15	1000	
63	Cu	89	He	6.308	ppb	9.4	455.58	2000	
66	Zn	89	He	263.509	ppb	1.3	2145.80	2000	
75	As	89	He	25.092	ppb	3.0	169.02	1000	
78	Se	89	H2	0.654	ppb	45.1	2.67	1000	
88	Sr	89	He	100.860	ppb	4.0	3403.87	2000	
95	Mo	89	He	0.743	ppb	13.3	36.67	1000	
107	Ag	89	He	1.348	ppb	8.9	183.34	100	
111	Cd	89	He	0.791	ppb	14.1	13.33	1000	
118	Sn	159	He	3.654	ppb	10.2	204.46	1000	
121	Sb	159	No Gas	24.716	ppb	9.9	8452.13	1000	
137	Ba	159	No Gas	44.053	ppb	3.3	5967.94	2000	
182	W	159	No Gas	0.326	ppb	44.2	136.82	1000	
205	Tl	209	No Gas	-0.016	ppb	N/A	10.01	1000	
208	Pb	209	No Gas	0.489	ppb	12.1	523.92	2000	
232	Th	209	No Gas	0.260	ppb	6.5	330.38	1000	
238	U	209	No Gas	0.355	ppb	25.4	293.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937346.81	2.0	1023754.81	91.56	29.5	120.4	
Sc	45	No Gas	2899496.69	3.1	2927134.09	99.06	29.5	120.4	
Sc	45	H2	349283.77	1.0	374925.7	93.16	29.5	120.4	
Sc	45	He	69341.75	1.2	75429.93	91.93	29.5	120.4	
Ge	72	No Gas	708060.19	3.1	682196.39	103.79	29.5	120.4	
Ge	72	H2	135385.84	1.9	145757.5	92.88	29.5	120.4	
Ge	72	He	56800.21	0.7	59866.13	94.88	29.5	120.4	
Y	89	H2	2441036.55	1.1	2441196.5	99.99	29.5	120.4	
Y	89	He	502552.39	1.3	531537.69	94.55	29.5	120.4	
Tb	159	No Gas	8136172.73	3.2	7041897.33	115.54	29.5	120.4	
Tb	159	He	2907006.17	1.1	2795586.52	103.99	29.5	120.4	
Bi	209	No Gas	4409665.03	2.8	3760534.49	117.26	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 200SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:35:50 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	93.4	31.11	100	
11	B	6	No Gas	2.126	ppb	2.4	2872.60	1000	
23	Na	45	He	38.555	ppb	18.7	12138.67	200000	
24	Mg	45	He	-0.571	ppb	N/A	793.41	200000	
27	Al	45	He	1.018	ppb	65.4	52.23	200000	
28	Si	45	H2	4.293	ppb	54.1	644.07	10000	
39	K	45	He	8.476	ppb	131.1	10312.47	200000	
40	Ca	45	H2	0.545	ppb	22.5	1345.68	200000	
51	V	89	He	0.080	ppb	15.1	236.68	1000	
52	Cr	89	He	0.006	ppb	106.4	65.99	2000	
55	Mn	89	He	-0.018	ppb	N/A	23.99	2000	
56	Fe	89	H2	-1.218	ppb	N/A	4071.85	100000	
59	Co	89	He	-0.006	ppb	N/A	20.00	1000	
60	Ni	89	He	-0.703	ppb	N/A	247.79	1000	
63	Cu	89	He	-0.002	ppb	N/A	84.45	2000	
66	Zn	89	He	-0.027	ppb	N/A	88.89	2000	
75	As	89	He	0.000	ppb	132423.7	4.00	1000	
78	Se	89	H2	0.007	ppb	75.2	1.00	1000	
88	Sr	89	He	0.011	ppb	24.3	8.89	2000	
95	Mo	89	He	0.001	ppb	599.2	8.89	1000	
107	Ag	89	He	0.001	ppb	137.8	7.78	100	
111	Cd	89	He	0.001	ppb	173.2	0.37	1000	
118	Sn	159	He	0.007	ppb	308.9	65.56	1000	
121	Sb	159	No Gas	0.002	ppb	395.9	73.42	1000	
137	Ba	159	No Gas	0.005	ppb	33.0	53.40	2000	
182	W	159	No Gas	-0.002	ppb	N/A	36.71	1000	
205	Tl	209	No Gas	0.001	ppb	68.7	36.71	1000	
208	Pb	209	No Gas	0.001	ppb	204.0	146.83	2000	
232	Th	209	No Gas	0.003	ppb	76.9	183.54	1000	
238	U	209	No Gas	0.000	ppb	308.7	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	947824.80	0.2	1023754.81	92.58	29.5	120.4	
Sc	45	No Gas	2932073.14	0.6	2927134.09	100.17	29.5	120.4	
Sc	45	H2	353329.37	0.5	374925.7	94.24	29.5	120.4	
Sc	45	He	67046.44	5.3	75429.93	88.89	29.5	120.4	
Ge	72	No Gas	708976.67	1.2	682196.39	103.93	29.5	120.4	
Ge	72	H2	138928.33	1.2	145757.5	95.31	29.5	120.4	
Ge	72	He	55987.63	4.2	59866.13	93.52	29.5	120.4	
Y	89	H2	2472398.56	0.3	2441196.5	101.28	29.5	120.4	
Y	89	He	487744.48	5.7	531537.69	91.76	29.5	120.4	
Tb	159	No Gas	8204180.78	0.7	7041897.33	116.51	29.5	120.4	
Tb	159	He	2813985.55	5.7	2795586.52	100.66	29.5	120.4	
Bi	209	No Gas	4431314.07	1.2	3760534.49	117.84	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 201SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:38:32 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.000	ppb	N/A	23.33	100	
11	B	6	No Gas	1.582	ppb	6.0	2523.65	1000	
23	Na	45	He	22.561	ppb	10.9	11150.05	200000	
24	Mg	45	He	0.827	ppb	302.8	913.43	200000	
27	Al	45	He	0.588	ppb	89.2	45.56	200000	
28	Si	45	H2	6.000	ppb	42.5	714.15	10000	
39	K	45	He	-0.709	ppb	N/A	10362.47	200000	
40	Ca	45	H2	0.327	ppb	71.9	1245.66	200000	
51	V	89	He	0.089	ppb	35.3	255.57	1000	
52	Cr	89	He	-0.002	ppb	N/A	60.66	2000	
55	Mn	89	He	-0.028	ppb	N/A	20.00	2000	
56	Fe	89	H2	-1.379	ppb	N/A	3751.33	100000	
59	Co	89	He	-0.009	ppb	N/A	15.55	1000	
60	Ni	89	He	-0.723	ppb	N/A	247.79	1000	
63	Cu	89	He	0.003	ppb	356.6	96.67	2000	
66	Zn	89	He	-0.079	ppb	N/A	83.34	2000	
75	As	89	He	0.005	ppb	236.1	5.00	1000	
78	Se	89	H2	0.006	ppb	208.9	0.83	1000	
88	Sr	89	He	0.007	ppb	91.5	5.56	2000	
95	Mo	89	He	0.005	ppb	181.9	13.33	1000	
107	Ag	89	He	0.002	ppb	165.7	13.34	100	
111	Cd	89	He	0.001	ppb	173.2	0.37	1000	
118	Sn	159	He	0.007	ppb	357.2	67.78	1000	
121	Sb	159	No Gas	0.000	ppb	N/A	53.39	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	33.37	2000	
182	W	159	No Gas	0.003	ppb	202.6	66.74	1000	
205	Tl	209	No Gas	0.002	ppb	95.8	43.38	1000	
208	Pb	209	No Gas	0.000	ppb	N/A	110.12	2000	
232	Th	209	No Gas	0.002	ppb	33.2	153.51	1000	
238	U	209	No Gas	0.000	ppb	N/A	6.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	950169.50	0.5	1023754.81	92.81	29.5	120.4	
Sc	45	No Gas	2869721.91	0.6	2927134.09	98.04	29.5	120.4	
Sc	45	H2	351016.67	0.1	374925.7	93.62	29.5	120.4	
Sc	45	He	70488.37	0.8	75429.93	93.45	29.5	120.4	
Ge	72	No Gas	694920.27	1.0	682196.39	101.87	29.5	120.4	
Ge	72	H2	136102.47	0.4	145757.5	93.38	29.5	120.4	
Ge	72	He	57086.15	0.2	59866.13	95.36	29.5	120.4	
Y	89	H2	2452931.15	0.4	2441196.5	100.48	29.5	120.4	
Y	89	He	509562.90	0.4	531537.69	95.87	29.5	120.4	
Tb	159	No Gas	7992111.34	0.3	7041897.33	113.49	29.5	120.4	
Tb	159	He	2936215.93	0.4	2795586.52	105.03	29.5	120.4	
Bi	209	No Gas	4347438.43	0.3	3760534.49	115.61	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	202SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:41:10 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	93.7	31.11	100	
11	B	6	No Gas	1.279	ppb	13.8	2325.83	1000	
23	Na	45	He	18.362	ppb	29.1	10438.70	200000	
24	Mg	45	He	0.020	ppb	6890.7	844.53	200000	
27	Al	45	He	-0.107	ppb	N/A	28.89	200000	
28	Si	45	H2	3.416	ppb	19.5	597.34	10000	
39	K	45	He	2.260	ppb	639.0	10240.69	200000	
40	Ca	45	H2	0.380	ppb	25.2	1259.00	200000	
51	V	89	He	0.063	ppb	65.3	225.57	1000	
52	Cr	89	He	0.004	ppb	332.7	64.66	2000	
55	Mn	89	He	0.028	ppb	48.3	48.66	2000	
56	Fe	89	H2	-1.518	ppb	N/A	3504.35	100000	
59	Co	89	He	-0.010	ppb	N/A	13.33	1000	
60	Ni	89	He	-0.784	ppb	N/A	211.12	1000	
63	Cu	89	He	-0.011	ppb	N/A	74.45	2000	
66	Zn	89	He	-0.046	ppb	N/A	87.78	2000	
75	As	89	He	-0.003	ppb	N/A	3.67	1000	
78	Se	89	H2	0.000	ppb	N/A	0.33	1000	
88	Sr	89	He	0.005	ppb	41.5	4.44	2000	
95	Mo	89	He	0.004	ppb	135.9	12.22	1000	
107	Ag	89	He	0.001	ppb	187.3	8.89	100	
111	Cd	89	He	0.001	ppb	173.2	0.37	1000	
118	Sn	159	He	0.013	ppb	158.8	72.22	1000	
121	Sb	159	No Gas	0.002	ppb	216.5	76.75	1000	
137	Ba	159	No Gas	0.002	ppb	319.0	40.04	2000	
182	W	159	No Gas	0.000	ppb	N/A	46.72	1000	
205	Tl	209	No Gas	0.001	ppb	246.8	30.03	1000	
208	Pb	209	No Gas	0.001	ppb	97.8	150.17	2000	
232	Th	209	No Gas	0.001	ppb	32.0	126.81	1000	
238	U	209	No Gas	0.001	ppb	98.2	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	951320.13	2.6	1023754.81	92.92	29.5	120.4	
Sc	45	No Gas	2906797.14	2.4	2927134.09	99.31	29.5	120.4	
Sc	45	H2	348641.48	1.0	374925.7	92.99	29.5	120.4	
Sc	45	He	68732.84	4.8	75429.93	91.12	29.5	120.4	
Ge	72	No Gas	705288.22	2.3	682196.39	103.38	29.5	120.4	
Ge	72	H2	135988.59	1.0	145757.5	93.3	29.5	120.4	
Ge	72	He	56119.57	3.4	59866.13	93.74	29.5	120.4	
Y	89	H2	2454223.98	0.3	2441196.5	100.53	29.5	120.4	
Y	89	He	497195.00	4.2	531537.69	93.54	29.5	120.4	
Tb	159	No Gas	8093450.64	2.1	7041897.33	114.93	29.5	120.4	
Tb	159	He	2848983.19	4.3	2795586.52	101.91	29.5	120.4	
Bi	209	No Gas	4399208.01	2.4	3760534.49	116.98	29.5	120.4	

Sample Report

Sample Name SN6054-012S

File Name 203SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:43:52 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.556	ppb	4.4	5022.16	100	
11	B	6	No Gas	1427.912	ppb	3.3	92146.61	1000	
23	Na	45	He	213660.975	ppb	3.0	2101788.91	200000	
24	Mg	45	He	16157.717	ppb	2.6	89109.19	200000	
27	Al	45	He	2539.948	ppb	3.7	5587.97	200000	
28	Si	45	H2	5019.300	ppb	2.7	21342.96	10000	
39	K	45	He	72442.983	ppb	2.5	387754.95	200000	
40	Ca	45	H2	51346.146	ppb	0.8	2064153.62	200000	
51	V	89	He	520.800	ppb	2.4	45324.84	1000	
52	Cr	89	He	222.382	ppb	3.3	23907.11	2000	
55	Mn	89	He	674.507	ppb	2.9	34847.22	2000	
56	Fe	89	H2	7768.291	ppb	0.8	1355540.13	100000	
59	Co	89	He	512.289	ppb	2.9	94899.96	1000	
60	Ni	89	He	516.921	ppb	3.3	26683.84	1000	
63	Cu	89	He	264.030	ppb	2.8	37587.00	2000	
66	Zn	89	He	740.537	ppb	1.6	14223.29	2000	
75	As	89	He	127.292	ppb	5.4	2056.71	1000	
78	Se	89	H2	60.843	ppb	2.0	530.32	1000	
88	Sr	89	He	605.650	ppb	2.5	50173.52	2000	
95	Mo	89	He	104.911	ppb	3.5	9826.08	1000	
107	Ag	89	He	52.287	ppb	2.2	16850.99	100	
111	Cd	89	He	266.337	ppb	1.8	11019.03	1000	
118	Sn	159	He	482.708	ppb	2.9	47631.64	1000	
121	Sb	159	No Gas	127.301	ppb	2.3	105294.08	1000	
137	Ba	159	No Gas	2038.250	ppb	1.9	667570.89	2000	
182	W	159	No Gas	104.514	ppb	2.2	68067.80	1000	
205	Tl	209	No Gas	105.044	ppb	1.4	149564.53	1000	
208	Pb	209	No Gas	106.269	ppb	3.0	210299.44	2000	
232	Th	209	No Gas	101.713	ppb	5.1	208149.40	1000	
238	U	209	No Gas	106.377	ppb	3.0	204328.98	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	921583.84	1.6	1023754.81	90.02	29.5	120.4	
Sc	45	No Gas	2776794.07	1.0	2927134.09	94.86	29.5	120.4	
Sc	45	H2	335784.21	1.2	374925.7	89.56	29.5	120.4	
Sc	45	He	67628.45	2.8	75429.93	89.66	29.5	120.4	
Ge	72	No Gas	684279.09	1.0	682196.39	100.31	29.5	120.4	
Ge	72	H2	131160.90	0.9	145757.5	89.99	29.5	120.4	
Ge	72	He	55888.24	1.9	59866.13	93.36	29.5	120.4	
Y	89	H2	2378380.25	0.8	2441196.5	97.43	29.5	120.4	
Y	89	He	493446.17	2.3	531537.69	92.83	29.5	120.4	
Tb	159	No Gas	7909168.42	0.8	7041897.33	112.32	29.5	120.4	
Tb	159	He	2904538.25	2.7	2795586.52	103.9	29.5	120.4	
Bi	209	No Gas	4245616.51	1.3	3760534.49	112.9	29.5	120.4	

Sample Report

Sample Name SN6054-012S

File Name 204SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:46:30 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.176	ppb	8.1	2461.41	100	
11	B	6	No Gas	1394.348	ppb	5.8	45872.53	1000	
23	Na	45	He	215422.165	ppb	2.8	1063953.68	200000	
24	Mg	45	He	16078.775	ppb	4.5	44745.79	200000	
27	Al	45	He	2482.742	ppb	4.2	2747.05	200000	
28	Si	45	H2	5008.635	ppb	3.1	11026.45	10000	
39	K	45	He	72837.139	ppb	3.9	199874.27	200000	
40	Ca	45	H2	49912.533	ppb	0.2	1018879.35	200000	
51	V	89	He	530.829	ppb	4.4	23032.88	1000	
52	Cr	89	He	223.329	ppb	3.6	11959.56	2000	
55	Mn	89	He	676.398	ppb	0.9	17388.23	2000	
56	Fe	89	H2	7629.958	ppb	0.2	682072.85	100000	
59	Co	89	He	524.051	ppb	4.6	48248.03	1000	
60	Ni	89	He	513.491	ppb	3.0	13475.82	1000	
63	Cu	89	He	265.485	ppb	1.4	18831.07	2000	
66	Zn	89	He	747.043	ppb	4.3	7174.35	2000	
75	As	89	He	133.219	ppb	0.6	1072.49	1000	
78	Se	89	H2	56.279	ppb	2.6	250.32	1000	
88	Sr	89	He	612.586	ppb	2.4	25219.42	2000	
95	Mo	89	He	106.136	ppb	3.2	4944.42	1000	
107	Ag	89	He	52.289	ppb	3.2	8377.32	100	
111	Cd	89	He	267.811	ppb	4.2	5503.79	1000	
118	Sn	159	He	488.476	ppb	3.9	23923.05	1000	
121	Sb	159	No Gas	117.921	ppb	8.2	50407.21	1000	
137	Ba	159	No Gas	1891.282	ppb	7.3	320009.98	2000	
182	W	159	No Gas	98.321	ppb	7.9	33102.62	1000	
205	Tl	209	No Gas	99.040	ppb	6.4	73543.32	1000	
208	Pb	209	No Gas	97.735	ppb	7.9	100911.27	2000	
232	Th	209	No Gas	89.988	ppb	7.2	96102.93	1000	
238	U	209	No Gas	95.472	ppb	8.3	95613.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	924865.41	2.0	1023754.81	90.34	29.5	120.4	
Sc	45	No Gas	2883873.85	2.2	2927134.09	98.52	29.5	120.4	
Sc	45	H2	340809.28	0.4	374925.7	90.9	29.5	120.4	
Sc	45	He	67638.62	2.8	75429.93	89.67	29.5	120.4	
Ge	72	No Gas	703300.55	2.8	682196.39	103.09	29.5	120.4	
Ge	72	H2	134173.84	1.1	145757.5	92.05	29.5	120.4	
Ge	72	He	56029.49	2.3	59866.13	93.59	29.5	120.4	
Y	89	H2	2425637.22	0.6	2441196.5	99.36	29.5	120.4	
Y	89	He	490480.12	2.8	531537.69	92.28	29.5	120.4	
Tb	159	No Gas	8179548.14	2.3	7041897.33	116.16	29.5	120.4	
Tb	159	He	2880055.69	2.7	2795586.52	103.02	29.5	120.4	
Bi	209	No Gas	4432302.82	2.6	3760534.49	117.86	29.5	120.4	

Sample Report

Sample Name SN6054-012S

File Name 205SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:49:08 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	46.100	ppb	7.8	1887.97	100	
11	B	6	No Gas	1332.027	ppb	6.7	36095.95	1000	
23	Na	45	He	210174.417	ppb	3.2	830329.88	200000	
24	Mg	45	He	15703.065	ppb	3.0	35071.58	200000	
27	Al	45	He	2374.924	ppb	4.0	2104.67	200000	
28	Si	45	H2	4800.796	ppb	2.9	8508.65	10000	
39	K	45	He	70981.823	ppb	3.1	157685.88	200000	
40	Ca	45	H2	48825.423	ppb	0.4	792985.88	200000	
51	V	89	He	508.196	ppb	4.9	17638.22	1000	
52	Cr	89	He	220.681	ppb	6.4	9440.79	2000	
55	Mn	89	He	662.227	ppb	4.0	13588.09	2000	
56	Fe	89	H2	7479.091	ppb	0.5	529564.99	100000	
59	Co	89	He	502.083	ppb	4.6	36899.52	1000	
60	Ni	89	He	502.101	ppb	4.0	10646.61	1000	
63	Cu	89	He	256.706	ppb	5.0	14543.60	2000	
66	Zn	89	He	735.801	ppb	3.8	5661.38	2000	
75	As	89	He	126.411	ppb	7.7	812.11	1000	
78	Se	89	H2	55.113	ppb	8.4	193.82	1000	
88	Sr	89	He	591.844	ppb	2.2	19451.02	2000	
95	Mo	89	He	105.683	ppb	6.8	3928.49	1000	
107	Ag	89	He	51.730	ppb	5.4	6612.97	100	
111	Cd	89	He	262.385	ppb	4.2	4304.44	1000	
118	Sn	159	He	475.871	ppb	2.5	18523.32	1000	
121	Sb	159	No Gas	113.681	ppb	5.4	38695.32	1000	
137	Ba	159	No Gas	1847.991	ppb	8.4	248690.40	2000	
182	W	159	No Gas	93.694	ppb	9.2	25099.14	1000	
205	Tl	209	No Gas	96.398	ppb	7.1	57080.86	1000	
208	Pb	209	No Gas	95.197	ppb	7.8	78409.12	2000	
232	Th	209	No Gas	87.524	ppb	7.9	74554.36	1000	
238	U	209	No Gas	94.643	ppb	6.9	75605.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	943363.27	2.4	1023754.81	92.15	29.5	120.4	
Sc	45	No Gas	2883735.90	3.3	2927134.09	98.52	29.5	120.4	
Sc	45	H2	338838.97	0.5	374925.7	90.37	29.5	120.4	
Sc	45	He	67478.64	2.4	75429.93	89.46	29.5	120.4	
Ge	72	No Gas	706828.85	3.9	682196.39	103.61	29.5	120.4	
Ge	72	H2	132055.20	1.0	145757.5	90.6	29.5	120.4	
Ge	72	He	55693.67	3.0	59866.13	93.03	29.5	120.4	
Y	89	H2	2395614.02	0.8	2441196.5	98.13	29.5	120.4	
Y	89	He	489380.21	2.8	531537.69	92.07	29.5	120.4	
Tb	159	No Gas	8138002.38	3.4	7041897.33	115.57	29.5	120.4	
Tb	159	He	2858682.11	2.6	2795586.52	102.26	29.5	120.4	
Bi	209	No Gas	4419525.05	3.2	3760534.49	117.52	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	206_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:51:41 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.231	ppb	6.8	23507.58	25	92.92	89.8	110.2	
11	B	6	No Gas	25.009	ppb	5.1	17720.34	25	100.04	89.8	110.2	
23	Na	45	He	5163.475	ppb	0.6	522368.85	5000	103.27	89.8	110.2	
24	Mg	45	He	4946.658	ppb	0.8	275285.44	5000	98.93	89.8	110.2	
27	Al	45	He	484.519	ppb	1.9	10798.89	500	96.9	89.8	110.2	
28	Si	45	H2	446.927	ppb	2.3	19732.24	500	89.39	89.8	110.2	> +/- 10%
39	K	45	He	4844.263	ppb	0.8	266657.47	5000	96.89	89.8	110.2	
40	Ca	45	H2	4688.280	ppb	1.6	1952663.11	5000	93.77	89.8	110.2	
51	V	89	He	24.107	ppb	1.7	21218.79	25	96.43	89.8	110.2	
52	Cr	89	He	24.410	ppb	1.5	26421.74	25	97.64	89.8	110.2	
55	Mn	89	He	24.192	ppb	2.0	12608.02	25	96.77	89.8	110.2	
56	Fe	89	H2	4607.085	ppb	1.0	8199091.10	5000	92.14	89.8	110.2	
59	Co	89	He	24.720	ppb	3.9	46129.91	25	98.88	89.8	110.2	
60	Ni	89	He	23.414	ppb	4.0	12504.84	25	93.66	89.8	110.2	
63	Cu	89	He	24.597	ppb	1.0	35270.98	25	98.39	89.8	110.2	
66	Zn	89	He	23.601	ppb	2.0	4629.83	25	94.4	89.8	110.2	
75	As	89	He	24.095	ppb	1.0	3918.32	25	96.38	89.8	110.2	
78	Se	89	H2	22.794	ppb	1.9	2033.39	25	91.18	89.8	110.2	
88	Sr	89	He	23.431	ppb	2.3	19545.58	25	93.72	89.8	110.2	
95	Mo	89	He	24.032	ppb	0.8	22659.55	25	96.13	89.8	110.2	
107	Ag	89	He	25.079	ppb	0.7	81364.70	25	100.32	89.8	110.2	
111	Cd	89	He	25.075	ppb	1.4	10445.97	25	100.3	89.8	110.2	
118	Sn	159	He	22.774	ppb	1.2	22399.31	25	91.1	89.8	110.2	
121	Sb	159	No Gas	22.010	ppb	4.2	186080.68	25	88.04	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.587	ppb	4.2	75661.78	25	90.35	89.8	110.2	
182	W	159	No Gas	22.381	ppb	4.3	148963.75	25	89.52	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.952	ppb	5.9	337828.84	25	91.81	89.8	110.2	
208	Pb	209	No Gas	22.824	ppb	5.4	466908.84	25	91.3	89.8	110.2	
232	Th	209	No Gas	22.285	ppb	6.4	471472.11	25	89.14	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.740	ppb	6.1	451606.08	25	90.96	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	942472.77	1.2	1023754.81	92.06	29.5	120.4	
Sc	45	No Gas	2872526.59	0.7	2927134.09	98.13	29.5	120.4	
Sc	45	H2	347924.84	2.1	374925.7	92.8	29.5	120.4	
Sc	45	He	68643.82	0.4	75429.93	91	29.5	120.4	
Ge	72	No Gas	694524.51	1.2	682196.39	101.81	29.5	120.4	
Ge	72	H2	134803.15	1.8	145757.5	92.48	29.5	120.4	
Ge	72	He	56452.76	0.5	59866.13	94.3	29.5	120.4	
Y	89	H2	2434799.06	1.1	2441196.5	99.74	29.5	120.4	
Y	89	He	496758.20	0.8	531537.69	93.46	29.5	120.4	
Tb	159	No Gas	8086109.25	0.4	7041897.33	114.83	29.5	120.4	
Tb	159	He	2889724.61	1.0	2795586.52	103.37	29.5	120.4	
Bi	209	No Gas	4391285.56	1.3	3760534.49	116.77	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	207_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 1:54:25 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.047	ppb	12.1	71.11	0.2	
11	B	6	No Gas	1.558	ppb	10.2	2500.30	4	
23	Na	45	He	25.009	ppb	14.7	11146.68	200	
24	Mg	45	He	1.382	ppb	10.4	924.54	20	
27	Al	45	He	-0.319	ppb	N/A	24.45	20	
28	Si	45	H2	2.178	ppb	121.5	540.62	100	
39	K	45	He	4.296	ppb	151.3	10399.13	200	
40	Ca	45	H2	1.793	ppb	10.8	1837.97	20	
51	V	89	He	0.016	ppb	72.5	185.56	1	
52	Cr	89	He	0.001	ppb	1525.6	61.99	1	
55	Mn	89	He	0.029	ppb	17.3	49.32	0.4	
56	Fe	89	H2	0.403	ppb	24.0	6876.04	20	
59	Co	89	He	0.019	ppb	53.5	66.67	0.2	
60	Ni	89	He	-0.855	ppb	N/A	175.56	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.009	ppb	127.6	103.34	0.6	
66	Zn	89	He	-0.151	ppb	N/A	67.78	2	
75	As	89	He	0.020	ppb	11.2	7.33	1	
78	Se	89	H2	0.041	ppb	23.1	4.00	1	
88	Sr	89	He	0.033	ppb	59.7	27.78	1	
95	Mo	89	He	0.090	ppb	13.1	93.34	1	
107	Ag	89	He	0.015	ppb	23.8	54.45	0.2	
111	Cd	89	He	0.014	ppb	13.5	5.93	0.2	
118	Sn	159	He	0.148	ppb	12.5	202.23	1	
121	Sb	159	No Gas	0.020	ppb	32.4	220.25	0.2	
137	Ba	159	No Gas	0.023	ppb	23.8	110.12	0.4	
182	W	159	No Gas	0.071	ppb	8.1	513.92	1	
205	Tl	209	No Gas	0.016	ppb	25.8	250.28	0.2	
208	Pb	209	No Gas	0.014	ppb	27.5	407.13	0.2	
232	Th	209	No Gas	0.080	ppb	10.0	1765.43	1	
238	U	209	No Gas	0.017	ppb	22.1	337.05	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	947121.59	0.9	1023754.81	92.51	29.5	120.4	
Sc	45	No Gas	2855888.26	1.7	2927134.09	97.57	29.5	120.4	
Sc	45	H2	346595.87	0.4	374925.7	92.44	29.5	120.4	
Sc	45	He	68950.19	2.5	75429.93	91.41	29.5	120.4	
Ge	72	No Gas	696511.52	1.3	682196.39	102.1	29.5	120.4	
Ge	72	H2	136181.89	1.8	145757.5	93.43	29.5	120.4	
Ge	72	He	56271.86	1.9	59866.13	94	29.5	120.4	
Y	89	H2	2428879.44	0.7	2441196.5	99.5	29.5	120.4	
Y	89	He	498497.74	3.2	531537.69	93.78	29.5	120.4	
Tb	159	No Gas	7951176.06	1.8	7041897.33	112.91	29.5	120.4	
Tb	159	He	2853894.96	3.5	2795586.52	102.09	29.5	120.4	
Bi	209	No Gas	4318140.75	1.5	3760534.49	114.83	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 208SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:57:07 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.026	ppb	9.8	51.11	100	
11	B	6	No Gas	1.460	ppb	5.8	2468.07	1000	
23	Na	45	He	27.632	ppb	7.8	11290.38	200000	
24	Mg	45	He	0.521	ppb	482.1	866.76	200000	
27	Al	45	He	0.395	ppb	145.7	40.00	200000	
28	Si	45	H2	3.995	ppb	64.1	614.03	10000	
39	K	45	He	2.682	ppb	242.1	10204.05	200000	
40	Ca	45	H2	1.598	ppb	18.7	1745.73	200000	
51	V	89	He	0.076	ppb	24.6	234.45	1000	
52	Cr	89	He	0.012	ppb	17.5	73.32	2000	
55	Mn	89	He	-0.005	ppb	N/A	31.32	2000	
56	Fe	89	H2	-0.687	ppb	N/A	4919.69	100000	
59	Co	89	He	0.005	ppb	361.6	40.00	1000	
60	Ni	89	He	-0.853	ppb	N/A	173.34	1000	
63	Cu	89	He	-0.007	ppb	N/A	78.89	2000	
66	Zn	89	He	-0.081	ppb	N/A	80.00	2000	
75	As	89	He	0.006	ppb	103.8	5.00	1000	
78	Se	89	H2	0.017	ppb	96.8	1.83	1000	
88	Sr	89	He	0.019	ppb	25.9	15.55	2000	
95	Mo	89	He	0.046	ppb	10.0	51.12	1000	
107	Ag	89	He	0.006	ppb	17.2	26.67	100	
111	Cd	89	He	0.006	ppb	64.6	2.59	1000	
118	Sn	159	He	0.077	ppb	25.2	133.34	1000	
121	Sb	159	No Gas	0.007	ppb	30.2	116.79	1000	
137	Ba	159	No Gas	0.029	ppb	20.2	130.14	2000	
182	W	159	No Gas	0.022	ppb	25.0	196.89	1000	
205	Tl	209	No Gas	0.008	ppb	12.9	136.82	1000	
208	Pb	209	No Gas	0.007	ppb	39.5	253.62	2000	
232	Th	209	No Gas	0.027	ppb	19.5	680.79	1000	
238	U	209	No Gas	0.005	ppb	37.4	116.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	959686.70	2.5	1023754.81	93.74	29.5	120.4	
Sc	45	No Gas	2871518.48	2.9	2927134.09	98.1	29.5	120.4	
Sc	45	H2	344350.84	1.2	374925.7	91.85	29.5	120.4	
Sc	45	He	68211.95	1.6	75429.93	90.43	29.5	120.4	
Ge	72	No Gas	693556.68	3.0	682196.39	101.67	29.5	120.4	
Ge	72	H2	133683.51	0.5	145757.5	91.72	29.5	120.4	
Ge	72	He	56119.65	0.5	59866.13	93.74	29.5	120.4	
Y	89	H2	2418051.59	0.6	2441196.5	99.05	29.5	120.4	
Y	89	He	490189.37	1.1	531537.69	92.22	29.5	120.4	
Tb	159	No Gas	8016733.14	2.7	7041897.33	113.84	29.5	120.4	
Tb	159	He	2848263.57	0.5	2795586.52	101.88	29.5	120.4	
Bi	209	No Gas	4339547.62	2.6	3760534.49	115.4	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 209SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 1:59:50 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	122.0	43.33	100	
11	B	6	No Gas	1.327	ppb	19.5	2385.83	1000	
23	Na	45	He	18.005	ppb	12.5	10575.64	200000	
24	Mg	45	He	-1.057	ppb	N/A	797.86	200000	
27	Al	45	He	0.509	ppb	59.3	43.34	200000	
28	Si	45	H2	3.650	ppb	33.7	597.34	10000	
39	K	45	He	-4.114	ppb	N/A	10072.38	200000	
40	Ca	45	H2	2.302	ppb	16.5	2025.78	200000	
51	V	89	He	0.051	ppb	81.4	216.68	1000	
52	Cr	89	He	-0.010	ppb	N/A	50.66	2000	
55	Mn	89	He	0.031	ppb	15.7	50.66	2000	
56	Fe	89	H2	-0.621	ppb	N/A	4999.82	100000	
59	Co	89	He	0.002	ppb	614.1	35.56	1000	
60	Ni	89	He	-0.903	ppb	N/A	151.12	1000	
63	Cu	89	He	0.002	ppb	529.9	93.34	2000	
66	Zn	89	He	-0.025	ppb	N/A	92.23	2000	
75	As	89	He	0.002	ppb	582.8	4.33	1000	
78	Se	89	H2	0.019	ppb	51.4	2.00	1000	
88	Sr	89	He	0.020	ppb	53.0	16.67	2000	
95	Mo	89	He	0.013	ppb	39.8	21.11	1000	
107	Ag	89	He	0.005	ppb	33.6	21.11	100	
111	Cd	89	He	0.004	ppb	35.0	1.85	1000	
118	Sn	159	He	0.059	ppb	24.7	117.78	1000	
121	Sb	159	No Gas	0.009	ppb	74.5	130.15	1000	
137	Ba	159	No Gas	0.053	ppb	6.4	210.23	2000	
182	W	159	No Gas	0.011	ppb	72.6	120.13	1000	
205	Tl	209	No Gas	0.005	ppb	74.9	93.44	1000	
208	Pb	209	No Gas	0.010	ppb	37.1	323.70	2000	
232	Th	209	No Gas	0.016	ppb	12.4	447.18	1000	
238	U	209	No Gas	0.008	ppb	37.1	166.86	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	962974.43	2.0	1023754.81	94.06	29.5	120.4	
Sc	45	No Gas	2868598.29	1.8	2927134.09	98	29.5	120.4	
Sc	45	H2	342814.43	0.7	374925.7	91.44	29.5	120.4	
Sc	45	He	69758.01	0.4	75429.93	92.48	29.5	120.4	
Ge	72	No Gas	697645.73	2.4	682196.39	102.26	29.5	120.4	
Ge	72	H2	133750.77	0.8	145757.5	91.76	29.5	120.4	
Ge	72	He	56532.72	0.7	59866.13	94.43	29.5	120.4	
Y	89	H2	2400510.37	0.6	2441196.5	98.33	29.5	120.4	
Y	89	He	499863.07	0.5	531537.69	94.04	29.5	120.4	
Tb	159	No Gas	7987197.66	2.1	7041897.33	113.42	29.5	120.4	
Tb	159	He	2887890.51	0.4	2795586.52	103.3	29.5	120.4	
Bi	209	No Gas	4371757.02	2.5	3760534.49	116.25	29.5	120.4	

Sample Report

Sample Name SN6054-012P

File Name 210SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:02:28 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.898	ppb	7.1	5170.00	100	
11	B	6	No Gas	1423.822	ppb	6.0	93998.27	1000	
23	Na	45	He	219352.165	ppb	0.2	2101638.93	200000	
24	Mg	45	He	16687.237	ppb	0.8	89607.64	200000	
27	Al	45	He	2665.789	ppb	1.6	5712.46	200000	
28	Si	45	H2	5198.625	ppb	1.1	21697.24	10000	
39	K	45	He	74215.508	ppb	0.2	386670.82	200000	
40	Ca	45	H2	51658.321	ppb	0.2	2040227.52	200000	
51	V	89	He	531.581	ppb	0.1	44993.84	1000	
52	Cr	89	He	226.130	ppb	1.0	23645.38	2000	
55	Mn	89	He	688.723	ppb	0.7	34609.96	2000	
56	Fe	89	H2	7879.285	ppb	0.1	1338588.36	100000	
59	Co	89	He	527.646	ppb	1.7	95083.39	1000	
60	Ni	89	He	529.014	ppb	1.9	26552.65	1000	
63	Cu	89	He	271.783	ppb	1.6	37634.74	2000	
66	Zn	89	He	757.916	ppb	1.2	14155.43	2000	
75	As	89	He	134.501	ppb	0.8	2114.39	1000	
78	Se	89	H2	60.225	ppb	1.0	511.16	1000	
88	Sr	89	He	619.949	ppb	1.4	49953.72	2000	
95	Mo	89	He	108.631	ppb	2.4	9897.25	1000	
107	Ag	89	He	53.586	ppb	1.8	16797.61	100	
111	Cd	89	He	270.579	ppb	0.6	10887.43	1000	
118	Sn	159	He	499.041	ppb	1.3	47874.71	1000	
121	Sb	159	No Gas	124.400	ppb	5.2	104762.50	1000	
137	Ba	159	No Gas	2006.356	ppb	5.5	668948.48	2000	
182	W	159	No Gas	103.669	ppb	4.8	68741.57	1000	
205	Tl	209	No Gas	104.150	ppb	6.0	151279.53	1000	
208	Pb	209	No Gas	104.564	ppb	5.8	211133.72	2000	
232	Th	209	No Gas	100.552	ppb	6.4	209962.48	1000	
238	U	209	No Gas	104.520	ppb	6.4	204813.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	943537.53	3.0	1023754.81	92.16	29.5	120.4	
Sc	45	No Gas	2830820.33	3.2	2927134.09	96.71	29.5	120.4	
Sc	45	H2	329865.04	0.9	374925.7	87.98	29.5	120.4	
Sc	45	He	65839.40	0.8	75429.93	87.29	29.5	120.4	
Ge	72	No Gas	694835.51	3.3	682196.39	101.85	29.5	120.4	
Ge	72	H2	126371.33	1.8	145757.5	86.7	29.5	120.4	
Ge	72	He	53952.52	0.8	59866.13	90.12	29.5	120.4	
Y	89	H2	2315635.22	0.8	2441196.5	94.86	29.5	120.4	
Y	89	He	479778.69	0.6	531537.69	90.26	29.5	120.4	
Tb	159	No Gas	8060396.68	3.3	7041897.33	114.46	29.5	120.4	
Tb	159	He	2822466.31	0.2	2795586.52	100.96	29.5	120.4	
Bi	209	No Gas	4336885.12	3.5	3760534.49	115.33	29.5	120.4	

Sample Report

Sample Name SN6054-012P

File Name 211SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:05:12 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.014	ppb	1.5	2511.41	100	
11	B	6	No Gas	1403.032	ppb	3.7	46288.34	1000	
23	Na	45	He	210563.137	ppb	2.7	1042281.13	200000	
24	Mg	45	He	15881.766	ppb	2.2	44315.38	200000	
27	Al	45	He	2431.899	ppb	1.5	2698.13	200000	
28	Si	45	H2	4874.857	ppb	3.5	10652.57	10000	
39	K	45	He	71299.955	ppb	2.2	196319.20	200000	
40	Ca	45	H2	49594.587	ppb	1.7	1003624.11	200000	
51	V	89	He	510.049	ppb	3.9	22353.97	1000	
52	Cr	89	He	214.397	ppb	1.7	11597.32	2000	
55	Mn	89	He	659.354	ppb	3.3	17105.90	2000	
56	Fe	89	H2	7591.905	ppb	2.0	671679.75	100000	
59	Co	89	He	510.331	ppb	1.5	47454.26	1000	
60	Ni	89	He	500.915	ppb	3.4	13285.63	1000	
63	Cu	89	He	262.180	ppb	3.8	18767.59	2000	
66	Zn	89	He	724.165	ppb	4.5	7024.26	2000	
75	As	89	He	126.099	ppb	0.9	1024.82	1000	
78	Se	89	H2	56.654	ppb	2.4	249.49	1000	
88	Sr	89	He	595.096	ppb	3.1	24729.63	2000	
95	Mo	89	He	101.650	ppb	7.0	4778.79	1000	
107	Ag	89	He	51.618	ppb	3.6	8347.30	100	
111	Cd	89	He	258.361	ppb	2.1	5362.23	1000	
118	Sn	159	He	477.260	ppb	2.5	23547.81	1000	
121	Sb	159	No Gas	120.764	ppb	5.0	51133.81	1000	
137	Ba	159	No Gas	1938.682	ppb	3.2	324930.21	2000	
182	W	159	No Gas	100.182	ppb	2.9	33413.93	1000	
205	Tl	209	No Gas	100.255	ppb	4.5	73465.70	1000	
208	Pb	209	No Gas	100.920	ppb	2.6	102871.11	2000	
232	Th	209	No Gas	94.890	ppb	3.7	100023.71	1000	
238	U	209	No Gas	100.879	ppb	4.1	99733.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	927373.14	1.7	1023754.81	90.59	29.5	120.4	
Sc	45	No Gas	2819312.60	1.5	2927134.09	96.32	29.5	120.4	
Sc	45	H2	337879.65	0.9	374925.7	90.12	29.5	120.4	
Sc	45	He	67768.64	2.2	75429.93	89.84	29.5	120.4	
Ge	72	No Gas	688527.70	2.5	682196.39	100.93	29.5	120.4	
Ge	72	H2	132182.66	0.9	145757.5	90.69	29.5	120.4	
Ge	72	He	56142.45	0.8	59866.13	93.78	29.5	120.4	
Y	89	H2	2400876.65	1.2	2441196.5	98.35	29.5	120.4	
Y	89	He	495085.65	1.9	531537.69	93.14	29.5	120.4	
Tb	159	No Gas	8096208.14	1.6	7041897.33	114.97	29.5	120.4	
Tb	159	He	2900250.69	1.7	2795586.52	103.74	29.5	120.4	
Bi	209	No Gas	4371477.68	1.7	3760534.49	116.25	29.5	120.4	

Sample Report

Sample Name SN6054-012P

File Name 212SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:07:49 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.064	ppb	2.8	1980.21	100	
11	B	6	No Gas	1409.326	ppb	2.5	37577.49	1000	
23	Na	45	He	206229.373	ppb	0.5	831260.71	200000	
24	Mg	45	He	15302.153	ppb	1.9	34880.24	200000	
27	Al	45	He	2357.846	ppb	3.3	2132.46	200000	
28	Si	45	H2	5117.826	ppb	1.7	8775.81	10000	
39	K	45	He	69673.360	ppb	0.4	158065.55	200000	
40	Ca	45	H2	50038.472	ppb	4.3	788177.98	200000	
51	V	89	He	493.581	ppb	1.2	17516.96	1000	
52	Cr	89	He	210.768	ppb	0.6	9222.68	2000	
55	Mn	89	He	647.113	ppb	2.0	13572.07	2000	
56	Fe	89	H2	7799.211	ppb	5.5	535627.30	100000	
59	Co	89	He	496.151	ppb	2.0	37273.96	1000	
60	Ni	89	He	485.894	ppb	4.4	10549.88	1000	
63	Cu	89	He	255.520	ppb	0.3	14799.43	2000	
66	Zn	89	He	723.594	ppb	5.3	5691.36	2000	
75	As	89	He	117.466	ppb	3.1	772.11	1000	
78	Se	89	H2	58.109	ppb	7.0	198.16	1000	
88	Sr	89	He	569.511	ppb	1.0	19121.63	2000	
95	Mo	89	He	99.002	ppb	2.7	3763.99	1000	
107	Ag	89	He	49.306	ppb	2.1	6443.98	100	
111	Cd	89	He	251.703	ppb	1.9	4220.34	1000	
118	Sn	159	He	455.422	ppb	1.8	18120.50	1000	
121	Sb	159	No Gas	121.371	ppb	0.2	40322.12	1000	
137	Ba	159	No Gas	1977.055	ppb	1.6	259831.87	2000	
182	W	159	No Gas	100.009	ppb	1.2	26172.27	1000	
205	Tl	209	No Gas	100.245	ppb	1.5	57951.59	1000	
208	Pb	209	No Gas	102.485	ppb	2.1	82399.42	2000	
232	Th	209	No Gas	95.975	ppb	4.0	79801.34	1000	
238	U	209	No Gas	102.607	ppb	3.5	79990.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	929429.48	0.9	1023754.81	90.79	29.5	120.4	
Sc	45	No Gas	2788303.89	2.6	2927134.09	95.26	29.5	120.4	
Sc	45	H2	328990.34	3.8	374925.7	87.75	29.5	120.4	
Sc	45	He	68799.12	1.2	75429.93	91.21	29.5	120.4	
Ge	72	No Gas	685939.66	0.7	682196.39	100.55	29.5	120.4	
Ge	72	H2	129431.00	2.2	145757.5	88.8	29.5	120.4	
Ge	72	He	56327.12	0.5	59866.13	94.09	29.5	120.4	
Y	89	H2	2328098.90	4.1	2441196.5	95.37	29.5	120.4	
Y	89	He	499815.35	0.1	531537.69	94.03	29.5	120.4	
Tb	159	No Gas	7934453.42	2.3	7041897.33	112.67	29.5	120.4	
Tb	159	He	2920371.69	0.2	2795586.52	104.46	29.5	120.4	
Bi	209	No Gas	4309126.21	2.4	3760534.49	114.59	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	213SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:10:27 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.027	ppb	70.4	52.22	100	
11	B	6	No Gas	2.353	ppb	7.8	3047.10	1000	
23	Na	45	He	15.223	ppb	27.8	10151.57	200000	
24	Mg	45	He	-3.142	ppb	N/A	671.18	200000	
27	Al	45	He	0.985	ppb	16.5	53.34	200000	
28	Si	45	H2	1.500	ppb	78.3	510.57	10000	
39	K	45	He	1.252	ppb	205.0	10217.40	200000	
40	Ca	45	H2	0.521	ppb	26.1	1306.78	200000	
51	V	89	He	0.046	ppb	39.4	213.34	1000	
52	Cr	89	He	-0.010	ppb	N/A	50.66	2000	
55	Mn	89	He	-0.019	ppb	N/A	24.67	2000	
56	Fe	89	H2	-1.737	ppb	N/A	3087.12	100000	
59	Co	89	He	-0.003	ppb	N/A	26.67	1000	
60	Ni	89	He	-0.861	ppb	N/A	173.34	1000	
63	Cu	89	He	0.001	ppb	919.2	91.11	2000	
66	Zn	89	He	0.003	ppb	2464.1	97.78	2000	
75	As	89	He	0.000	ppb	N/A	4.00	1000	
78	Se	89	H2	0.019	ppb	104.3	2.00	1000	
88	Sr	89	He	0.009	ppb	89.4	7.78	2000	
95	Mo	89	He	0.026	ppb	34.5	33.33	1000	
107	Ag	89	He	0.002	ppb	46.2	13.33	100	
111	Cd	89	He	0.004	ppb	42.7	1.48	1000	
118	Sn	159	He	0.119	ppb	34.4	176.68	1000	
121	Sb	159	No Gas	0.004	ppb	55.6	93.44	1000	
137	Ba	159	No Gas	0.046	ppb	11.0	190.21	2000	
182	W	159	No Gas	0.017	ppb	46.2	163.52	1000	
205	Tl	209	No Gas	0.004	ppb	31.0	83.43	1000	
208	Pb	209	No Gas	0.005	ppb	59.0	233.60	2000	
232	Th	209	No Gas	0.048	ppb	10.6	1131.32	1000	
238	U	209	No Gas	0.004	ppb	24.4	90.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	956433.04	2.3	1023754.81	93.42	29.5	120.4	
Sc	45	No Gas	2884195.63	2.3	2927134.09	98.53	29.5	120.4	
Sc	45	H2	345656.79	1.1	374925.7	92.19	29.5	120.4	
Sc	45	He	68796.80	0.6	75429.93	91.21	29.5	120.4	
Ge	72	No Gas	700835.26	2.3	682196.39	102.73	29.5	120.4	
Ge	72	H2	134647.64	1.4	145757.5	92.38	29.5	120.4	
Ge	72	He	56677.43	0.6	59866.13	94.67	29.5	120.4	
Y	89	H2	2435205.28	0.7	2441196.5	99.75	29.5	120.4	
Y	89	He	500917.18	0.5	531537.69	94.24	29.5	120.4	
Tb	159	No Gas	8123789.39	1.7	7041897.33	115.36	29.5	120.4	
Tb	159	He	2897584.71	0.2	2795586.52	103.65	29.5	120.4	
Bi	209	No Gas	4420653.73	2.3	3760534.49	117.55	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 214SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:13:00 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	64.5	32.22	100	
11	B	6	No Gas	1.447	ppb	11.9	2464.75	1000	
23	Na	45	He	9.961	ppb	42.6	9573.87	200000	
24	Mg	45	He	-1.794	ppb	N/A	742.30	200000	
27	Al	45	He	0.498	ppb	95.5	42.22	200000	
28	Si	45	H2	1.892	ppb	13.9	533.94	10000	
39	K	45	He	-0.665	ppb	N/A	10062.41	200000	
40	Ca	45	H2	0.382	ppb	47.4	1265.66	200000	
51	V	89	He	0.111	ppb	10.2	268.90	1000	
52	Cr	89	He	-0.002	ppb	N/A	58.66	2000	
55	Mn	89	He	0.040	ppb	53.0	55.32	2000	
56	Fe	89	H2	-1.816	ppb	N/A	2970.32	100000	
59	Co	89	He	-0.005	ppb	N/A	22.23	1000	
60	Ni	89	He	-0.802	ppb	N/A	202.23	1000	
63	Cu	89	He	0.003	ppb	311.9	94.45	2000	
66	Zn	89	He	-0.058	ppb	N/A	85.56	2000	
75	As	89	He	-0.004	ppb	N/A	3.33	1000	
78	Se	89	H2	0.006	ppb	153.7	0.83	1000	
88	Sr	89	He	0.011	ppb	114.4	8.89	2000	
95	Mo	89	He	0.010	ppb	53.4	17.78	1000	
107	Ag	89	He	0.000	ppb	123.4	7.78	100	
111	Cd	89	He	0.005	ppb	86.6	2.22	1000	
118	Sn	159	He	0.069	ppb	5.6	126.67	1000	
121	Sb	159	No Gas	0.001	ppb	216.4	70.08	1000	
137	Ba	159	No Gas	0.010	ppb	109.2	66.74	2000	
182	W	159	No Gas	0.002	ppb	452.3	63.41	1000	
205	Tl	209	No Gas	0.003	ppb	82.5	56.73	1000	
208	Pb	209	No Gas	0.001	ppb	92.5	146.83	2000	
232	Th	209	No Gas	0.014	ppb	21.3	407.13	1000	
238	U	209	No Gas	0.000	ppb	369.3	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	961698.84	0.8	1023754.81	93.94	29.5	120.4	
Sc	45	No Gas	2898613.09	0.6	2927134.09	99.03	29.5	120.4	
Sc	45	H2	350142.01	0.8	374925.7	93.39	29.5	120.4	
Sc	45	He	68431.52	0.8	75429.93	90.72	29.5	120.4	
Ge	72	No Gas	699961.73	1.3	682196.39	102.6	29.5	120.4	
Ge	72	H2	135871.01	0.8	145757.5	93.22	29.5	120.4	
Ge	72	He	56857.77	0.5	59866.13	94.97	29.5	120.4	
Y	89	H2	2454361.70	0.4	2441196.5	100.54	29.5	120.4	
Y	89	He	498082.27	0.3	531537.69	93.71	29.5	120.4	
Tb	159	No Gas	8118360.44	0.5	7041897.33	115.29	29.5	120.4	
Tb	159	He	2878855.75	0.4	2795586.52	102.98	29.5	120.4	
Bi	209	No Gas	4422037.51	0.7	3760534.49	117.59	29.5	120.4	

Sample Report

Sample Name SN6054-013

File Name 215SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:15:39 AM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.034	ppb	200.8	26.67	100	
11	B	6	No Gas	37.988	ppb	9.3	3906.24	1000	
23	Na	45	He	404.357	ppb	11.3	12111.89	200000	
24	Mg	45	He	766.147	ppb	5.7	4883.41	200000	
27	Al	45	He	147.353	ppb	8.1	344.46	200000	
28	Si	45	H2	1000.200	ppb	4.1	4525.79	10000	
39	K	45	He	108.828	ppb	58.1	10260.76	200000	
40	Ca	45	H2	38886.612	ppb	0.5	1538883.38	200000	
51	V	89	He	4.004	ppb	22.3	504.47	1000	
52	Cr	89	He	1.656	ppb	25.8	231.96	2000	
55	Mn	89	He	22.462	ppb	10.9	1163.84	2000	
56	Fe	89	H2	2860.011	ppb	1.6	499411.74	100000	
59	Co	89	He	0.152	ppb	17.4	57.78	1000	
60	Ni	89	He	-7.797	ppb	N/A	207.78	1000	
63	Cu	89	He	0.832	ppb	27.7	202.23	2000	
66	Zn	89	He	28.104	ppb	7.5	616.70	2000	
75	As	89	He	814.676	ppb	5.6	12833.65	1000	
78	Se	89	H2	0.329	ppb	37.2	3.17	1000	
88	Sr	89	He	36.952	ppb	6.7	2990.43	2000	
95	Mo	89	He	0.177	ppb	57.9	24.44	1000	
107	Ag	89	He	0.027	ppb	81.3	14.45	100	
111	Cd	89	He	0.018	ppb	86.8	0.74	1000	
118	Sn	159	He	18.584	ppb	3.6	1853.53	1000	
121	Sb	159	No Gas	179.496	ppb	3.6	152273.56	1000	
137	Ba	159	No Gas	6.289	ppb	9.7	2145.90	2000	
182	W	159	No Gas	0.044	ppb	116.7	80.09	1000	
205	Tl	209	No Gas	0.011	ppb	150.6	36.71	1000	
208	Pb	209	No Gas	0.902	ppb	13.9	2002.32	2000	
232	Th	209	No Gas	0.241	ppb	2.7	630.73	1000	
238	U	209	No Gas	0.027	ppb	20.0	66.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	933791.38	0.6	1023754.81	91.21	29.5	120.4	
Sc	45	No Gas	2827963.20	1.8	2927134.09	96.61	29.5	120.4	
Sc	45	H2	330466.81	0.7	374925.7	88.14	29.5	120.4	
Sc	45	He	65834.42	3.1	75429.93	87.28	29.5	120.4	
Ge	72	No Gas	697424.09	0.9	682196.39	102.23	29.5	120.4	
Ge	72	H2	131298.48	0.4	145757.5	90.08	29.5	120.4	
Ge	72	He	55032.94	2.0	59866.13	91.93	29.5	120.4	
Y	89	H2	2362051.42	0.9	2441196.5	96.76	29.5	120.4	
Y	89	He	482220.93	3.8	531537.69	90.72	29.5	120.4	
Tb	159	No Gas	8108781.20	2.1	7041897.33	115.15	29.5	120.4	
Tb	159	He	2847080.03	3.6	2795586.52	101.84	29.5	120.4	
Bi	209	No Gas	4468585.93	1.2	3760534.49	118.83	29.5	120.4	

Sample Report

Sample Name SN6054-013

File Name 216SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:18:10 AM

Sample Type Sample

Total Dilution 20.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.049	ppb	528.4	25.56	100	
11	B	6	No Gas	42.403	ppb	3.9	2811.49	1000	
23	Na	45	He	407.537	ppb	22.3	10428.64	200000	
24	Mg	45	He	676.051	ppb	5.5	2664.91	200000	
27	Al	45	He	163.707	ppb	11.1	208.90	200000	
28	Si	45	H2	921.421	ppb	3.0	2442.91	10000	
39	K	45	He	24.294	ppb	386.0	9989.04	200000	
40	Ca	45	H2	33853.694	ppb	0.7	707382.44	200000	
51	V	89	He	3.199	ppb	28.4	310.02	1000	
52	Cr	89	He	1.319	ppb	2.3	131.98	2000	
55	Mn	89	He	19.096	ppb	12.5	529.25	2000	
56	Fe	89	H2	2457.731	ppb	0.7	228144.65	100000	
59	Co	89	He	-0.096	ppb	N/A	22.22	1000	
60	Ni	89	He	-16.131	ppb	N/A	198.90	1000	
63	Cu	89	He	0.571	ppb	63.3	130.01	2000	
66	Zn	89	He	19.872	ppb	19.5	286.68	2000	
75	As	89	He	730.623	ppb	1.3	5924.25	1000	
78	Se	89	H2	0.109	ppb	154.9	0.83	1000	
88	Sr	89	He	33.996	ppb	3.7	1414.57	2000	
95	Mo	89	He	0.037	ppb	191.0	10.00	1000	
107	Ag	89	He	0.010	ppb	321.6	7.78	100	
111	Cd	89	He	0.018	ppb	173.2	0.37	1000	
118	Sn	159	He	16.752	ppb	5.2	882.29	1000	
121	Sb	159	No Gas	165.423	ppb	5.8	71489.37	1000	
137	Ba	159	No Gas	21.545	ppb	4.6	3721.33	2000	
182	W	159	No Gas	0.007	ppb	913.4	53.39	1000	
205	Tl	209	No Gas	0.013	ppb	101.2	30.03	1000	
208	Pb	209	No Gas	0.964	ppb	4.5	1141.30	2000	
232	Th	209	No Gas	0.135	ppb	47.8	260.29	1000	
238	U	209	No Gas	0.011	ppb	101.6	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	929008.85	0.9	1023754.81	90.75	29.5	120.4	
Sc	45	No Gas	2876697.09	1.0	2927134.09	98.28	29.5	120.4	
Sc	45	H2	348698.49	1.4	374925.7	93	29.5	120.4	
Sc	45	He	67275.23	0.7	75429.93	89.19	29.5	120.4	
Ge	72	No Gas	704817.64	1.7	682196.39	103.32	29.5	120.4	
Ge	72	H2	134197.13	1.7	145757.5	92.07	29.5	120.4	
Ge	72	He	56552.89	0.2	59866.13	94.47	29.5	120.4	
Y	89	H2	2471898.01	1.0	2441196.5	101.26	29.5	120.4	
Y	89	He	495540.89	0.4	531537.69	93.23	29.5	120.4	
Tb	159	No Gas	8264200.85	0.9	7041897.33	117.36	29.5	120.4	
Tb	159	He	2893216.97	0.7	2795586.52	103.49	29.5	120.4	
Bi	209	No Gas	4528193.61	1.3	3760534.49	120.41	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6054-013

File Name 217SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:20:49 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.313	ppb	129.4	35.56	100	
11	B	6	No Gas	39.132	ppb	12.0	2436.96	1000	
23	Na	45	He	680.437	ppb	13.8	11200.08	200000	
24	Mg	45	He	596.085	ppb	10.1	2144.76	200000	
27	Al	45	He	119.045	ppb	16.7	135.56	200000	
28	Si	45	H2	892.832	ppb	9.2	1975.66	10000	
39	K	45	He	-109.987	ppb	N/A	9789.01	200000	
40	Ca	45	H2	34048.482	ppb	2.3	564295.98	200000	
51	V	89	He	4.075	ppb	4.2	313.35	1000	
52	Cr	89	He	1.118	ppb	10.2	109.31	2000	
55	Mn	89	He	18.664	ppb	8.3	421.93	2000	
56	Fe	89	H2	2473.269	ppb	1.5	184226.45	100000	
59	Co	89	He	-0.090	ppb	N/A	24.45	1000	
60	Ni	89	He	-20.669	ppb	N/A	188.90	1000	
63	Cu	89	He	0.827	ppb	21.6	136.67	2000	
66	Zn	89	He	22.319	ppb	9.3	267.79	2000	
75	As	89	He	723.243	ppb	0.7	4701.31	1000	
78	Se	89	H2	0.275	ppb	56.0	1.33	1000	
88	Sr	89	He	29.823	ppb	6.4	994.52	2000	
95	Mo	89	He	0.105	ppb	47.9	12.22	1000	
107	Ag	89	He	0.004	ppb	1421.6	6.67	100	
111	Cd	89	He	0.044	ppb	173.2	0.74	1000	
118	Sn	159	He	16.120	ppb	9.6	694.49	1000	
121	Sb	159	No Gas	163.873	ppb	6.7	55375.49	1000	
137	Ba	159	No Gas	6.429	ppb	3.0	894.36	2000	
182	W	159	No Gas	-0.024	ppb	N/A	43.38	1000	
205	Tl	209	No Gas	0.001	ppb	2770.6	20.02	1000	
208	Pb	209	No Gas	0.740	ppb	14.4	734.17	2000	
232	Th	209	No Gas	0.137	ppb	22.3	226.92	1000	
238	U	209	No Gas	0.040	ppb	50.6	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	922179.80	1.8	1023754.81	90.08	29.5	120.4	
Sc	45	No Gas	2850275.88	1.3	2927134.09	97.37	29.5	120.4	
Sc	45	H2	345658.10	1.7	374925.7	92.19	29.5	120.4	
Sc	45	He	67918.20	1.2	75429.93	90.04	29.5	120.4	
Ge	72	No Gas	704130.46	1.4	682196.39	103.22	29.5	120.4	
Ge	72	H2	134412.70	1.6	145757.5	92.22	29.5	120.4	
Ge	72	He	56229.70	0.6	59866.13	93.93	29.5	120.4	
Y	89	H2	2463273.27	1.3	2441196.5	100.9	29.5	120.4	
Y	89	He	496472.36	0.3	531537.69	93.4	29.5	120.4	
Tb	159	No Gas	8075409.53	1.1	7041897.33	114.68	29.5	120.4	
Tb	159	He	2900534.68	1.1	2795586.52	103.75	29.5	120.4	
Bi	209	No Gas	4430948.03	1.6	3760534.49	117.83	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	218_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:23:25 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	22.931	ppb	7.6	23143.57	25	91.72	89.8	110.2	
11	B	6	No Gas	23.346	ppb	7.8	16596.70	25	93.38	89.8	110.2	
23	Na	45	He	5148.167	ppb	4.2	517266.96	5000	102.96	89.8	110.2	
24	Mg	45	He	5005.481	ppb	4.7	276602.37	5000	100.11	89.8	110.2	
27	Al	45	He	480.212	ppb	3.3	10630.95	500	96.04	89.8	110.2	
28	Si	45	H2	457.270	ppb	1.1	20062.95	500	91.45	89.8	110.2	
39	K	45	He	4840.252	ppb	3.7	264649.86	5000	96.81	89.8	110.2	
40	Ca	45	H2	4728.598	ppb	0.6	1957961.18	5000	94.57	89.8	110.2	
51	V	89	He	24.344	ppb	6.7	21116.45	25	97.38	89.8	110.2	
52	Cr	89	He	24.469	ppb	5.0	26115.24	25	97.88	89.8	110.2	
55	Mn	89	He	24.311	ppb	6.6	12487.92	25	97.24	89.8	110.2	
56	Fe	89	H2	4611.305	ppb	0.6	8226148.67	5000	92.23	89.8	110.2	
59	Co	89	He	24.922	ppb	3.1	45884.34	25	99.69	89.8	110.2	
60	Ni	89	He	24.418	ppb	5.6	12832.95	25	97.67	89.8	110.2	
63	Cu	89	He	24.818	ppb	4.4	35093.83	25	99.27	89.8	110.2	
66	Zn	89	He	25.129	ppb	7.2	4852.13	25	100.52	89.8	110.2	
75	As	89	He	24.184	ppb	4.6	3878.31	25	96.74	89.8	110.2	
78	Se	89	H2	23.264	ppb	1.0	2079.90	25	93.06	89.8	110.2	
88	Sr	89	He	24.098	ppb	4.4	19824.89	25	96.39	89.8	110.2	
95	Mo	89	He	24.737	ppb	6.5	22987.77	25	98.95	89.8	110.2	
107	Ag	89	He	25.371	ppb	4.7	81167.88	25	101.48	89.8	110.2	
111	Cd	89	He	25.482	ppb	4.8	10467.46	25	101.93	89.8	110.2	
118	Sn	159	He	23.282	ppb	3.6	22589.56	25	93.13	89.8	110.2	
121	Sb	159	No Gas	22.033	ppb	7.3	187332.40	25	88.13	89.8	110.2	> +/- 10%
137	Ba	159	No Gas	22.034	ppb	8.8	74211.96	25	88.14	89.8	110.2	> +/- 10%
182	W	159	No Gas	22.342	ppb	7.4	149544.98	25	89.37	89.8	110.2	> +/- 10%
205	Tl	209	No Gas	22.836	ppb	7.0	337381.26	25	91.34	89.8	110.2	
208	Pb	209	No Gas	22.937	ppb	6.7	470966.82	25	91.75	89.8	110.2	
232	Th	209	No Gas	22.060	ppb	8.4	468362.14	25	88.24	89.8	110.2	> +/- 10%
238	U	209	No Gas	22.627	ppb	7.4	451019.99	25	90.51	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	940166.85	1.5	1023754.81	91.84	29.5	120.4	
Sc	45	No Gas	2890889.72	2.2	2927134.09	98.76	29.5	120.4	
Sc	45	H2	345825.10	0.3	374925.7	92.24	29.5	120.4	
Sc	45	He	68235.87	3.5	75429.93	90.46	29.5	120.4	
Ge	72	No Gas	702266.03	2.3	682196.39	102.94	29.5	120.4	
Ge	72	H2	133105.62	0.2	145757.5	91.32	29.5	120.4	
Ge	72	He	55922.77	3.0	59866.13	93.41	29.5	120.4	
Y	89	H2	2440424.95	0.0	2441196.5	99.97	29.5	120.4	
Y	89	He	490456.81	4.1	531537.69	92.27	29.5	120.4	
Tb	159	No Gas	8140758.01	2.5	7041897.33	115.6	29.5	120.4	
Tb	159	He	2853430.03	3.9	2795586.52	102.07	29.5	120.4	
Bi	209	No Gas	4410353.90	2.4	3760534.49	117.28	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	219_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:26:00 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.055	ppb	9.9	81.11	0.2	
11	B	6	No Gas	0.825	ppb	14.8	2064.66	4	
23	Na	45	He	0.126	ppb	539.7	8722.28	200	
24	Mg	45	He	-2.450	ppb	N/A	715.62	20	
27	Al	45	He	-0.619	ppb	N/A	17.78	20	
28	Si	45	H2	1.811	ppb	91.8	510.58	100	
39	K	45	He	-6.370	ppb	N/A	9899.05	200	
40	Ca	45	H2	0.673	ppb	31.4	1335.67	20	
51	V	89	He	-0.025	ppb	N/A	151.12	1	
52	Cr	89	He	-0.004	ppb	N/A	57.32	1	
55	Mn	89	He	-0.014	ppb	N/A	27.33	0.4	
56	Fe	89	H2	-0.014	ppb	N/A	5967.91	20	
59	Co	89	He	-0.004	ppb	N/A	24.45	0.2	
60	Ni	89	He	-0.829	ppb	N/A	190.01	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.024	ppb	N/A	55.56	0.6	
66	Zn	89	He	-0.240	ppb	N/A	51.11	2	
75	As	89	He	0.012	ppb	181.5	6.00	1	
78	Se	89	H2	0.029	ppb	22.4	2.83	1	
88	Sr	89	He	0.009	ppb	24.4	7.78	1	
95	Mo	89	He	0.095	ppb	18.7	98.89	1	
107	Ag	89	He	0.005	ppb	19.8	23.33	0.2	
111	Cd	89	He	0.004	ppb	34.8	1.85	0.2	
118	Sn	159	He	0.087	ppb	19.9	145.56	1	
121	Sb	159	No Gas	0.041	ppb	22.0	390.44	0.2	
137	Ba	159	No Gas	0.018	ppb	49.1	90.10	0.4	
182	W	159	No Gas	0.073	ppb	8.1	517.26	1	
205	Tl	209	No Gas	0.020	ppb	23.0	310.35	0.2	
208	Pb	209	No Gas	0.014	ppb	20.0	387.10	0.2	
232	Th	209	No Gas	0.058	ppb	10.2	1301.53	1	
238	U	209	No Gas	0.017	ppb	17.6	330.37	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	968429.70	2.6	1023754.81	94.6	29.5	120.4	
Sc	45	No Gas	2838276.43	2.4	2927134.09	96.96	29.5	120.4	
Sc	45	H2	337094.36	0.7	374925.7	89.91	29.5	120.4	
Sc	45	He	69399.69	0.5	75429.93	92.01	29.5	120.4	
Ge	72	No Gas	679676.03	3.2	682196.39	99.63	29.5	120.4	
Ge	72	H2	131469.76	1.3	145757.5	90.2	29.5	120.4	
Ge	72	He	56755.51	0.4	59866.13	94.8	29.5	120.4	
Y	89	H2	2361814.49	0.6	2441196.5	96.75	29.5	120.4	
Y	89	He	503046.30	0.3	531537.69	94.64	29.5	120.4	
Tb	159	No Gas	7783478.64	2.8	7041897.33	110.53	29.5	120.4	
Tb	159	He	2889930.62	0.5	2795586.52	103.37	29.5	120.4	
Bi	209	No Gas	4246984.54	3.3	3760534.49	112.94	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	220SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:28:35 AM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	83.5	30.00	100	
11	B	6	No Gas	0.748	ppb	18.1	1950.21	1000	
23	Na	45	He	2.591	ppb	140.5	8966.17	200000	
24	Mg	45	He	-2.888	ppb	N/A	691.18	200000	
27	Al	45	He	0.815	ppb	15.2	50.00	200000	
28	Si	45	H2	1.046	ppb	163.5	460.52	10000	
39	K	45	He	-4.948	ppb	N/A	9974.03	200000	
40	Ca	45	H2	2.183	ppb	33.1	1866.87	200000	
51	V	89	He	0.029	ppb	46.9	198.90	1000	
52	Cr	89	He	-0.011	ppb	N/A	49.32	2000	
55	Mn	89	He	-0.030	ppb	N/A	18.67	2000	
56	Fe	89	H2	-0.491	ppb	N/A	4936.38	100000	
59	Co	89	He	-0.008	ppb	N/A	15.56	1000	
60	Ni	89	He	-0.855	ppb	N/A	176.67	1000	
63	Cu	89	He	-0.009	ppb	N/A	77.78	2000	
66	Zn	89	He	-0.010	ppb	N/A	95.56	2000	
75	As	89	He	0.016	ppb	44.6	6.67	1000	
78	Se	89	H2	0.024	ppb	89.6	2.33	1000	
88	Sr	89	He	0.004	ppb	99.9	3.33	2000	
95	Mo	89	He	0.037	ppb	10.1	43.33	1000	
107	Ag	89	He	0.003	ppb	31.8	16.67	100	
111	Cd	89	He	0.003	ppb	0.5	1.11	1000	
118	Sn	159	He	0.028	ppb	122.5	87.78	1000	
121	Sb	159	No Gas	0.019	ppb	28.9	210.24	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	33.37	2000	
182	W	159	No Gas	0.017	ppb	28.5	160.18	1000	
205	Tl	209	No Gas	0.004	ppb	51.7	70.08	1000	
208	Pb	209	No Gas	0.005	ppb	70.4	223.59	2000	
232	Th	209	No Gas	0.023	ppb	34.2	594.01	1000	
238	U	209	No Gas	0.002	ppb	42.3	46.72	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937788.45	1.2	1023754.81	91.6	29.5	120.4	
Sc	45	No Gas	2828041.59	2.1	2927134.09	96.61	29.5	120.4	
Sc	45	H2	326115.34	8.4	374925.7	86.98	29.5	120.4	
Sc	45	He	69387.46	1.2	75429.93	91.99	29.5	120.4	
Ge	72	No Gas	683701.73	1.2	682196.39	100.22	29.5	120.4	
Ge	72	H2	128509.94	5.9	145757.5	88.17	29.5	120.4	
Ge	72	He	56891.24	0.5	59866.13	95.03	29.5	120.4	
Y	89	H2	2285472.74	8.9	2441196.5	93.62	29.5	120.4	
Y	89	He	502414.72	0.5	531537.69	94.52	29.5	120.4	
Tb	159	No Gas	7880178.22	2.2	7041897.33	111.9	29.5	120.4	
Tb	159	He	2917527.98	0.6	2795586.52	104.36	29.5	120.4	
Bi	209	No Gas	4319793.13	1.5	3760534.49	114.87	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 221SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:31:15 AM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	158.1	31.11	100	
11	B	6	No Gas	0.963	ppb	24.5	2046.88	1000	
23	Na	45	He	2.246	ppb	145.6	8872.67	200000	
24	Mg	45	He	-3.242	ppb	N/A	666.73	200000	
27	Al	45	He	0.183	ppb	168.1	35.56	200000	
28	Si	45	H2	2.365	ppb	19.4	550.62	10000	
39	K	45	He	-9.306	ppb	N/A	9673.98	200000	
40	Ca	45	H2	0.211	ppb	76.8	1184.54	200000	
51	V	89	He	0.016	ppb	189.4	185.56	1000	
52	Cr	89	He	-0.010	ppb	N/A	50.66	2000	
55	Mn	89	He	0.021	ppb	90.7	45.32	2000	
56	Fe	89	H2	-1.687	ppb	N/A	3207.24	100000	
59	Co	89	He	-0.008	ppb	N/A	15.56	1000	
60	Ni	89	He	-0.837	ppb	N/A	184.45	1000	
63	Cu	89	He	-0.011	ppb	N/A	74.45	2000	
66	Zn	89	He	-0.099	ppb	N/A	77.78	2000	
75	As	89	He	0.000	ppb	N/A	4.00	1000	
78	Se	89	H2	0.007	ppb	2.7	1.00	1000	
88	Sr	89	He	0.007	ppb	69.5	5.55	2000	
95	Mo	89	He	0.024	ppb	22.7	31.11	1000	
107	Ag	89	He	0.005	ppb	78.9	21.11	100	
111	Cd	89	He	0.003	ppb	99.8	1.11	1000	
118	Sn	159	He	0.048	ppb	18.9	106.67	1000	
121	Sb	159	No Gas	0.012	ppb	38.3	153.51	1000	
137	Ba	159	No Gas	0.000	ppb	N/A	33.37	2000	
182	W	159	No Gas	0.011	ppb	42.8	120.13	1000	
205	Tl	209	No Gas	0.001	ppb	174.1	30.03	1000	
208	Pb	209	No Gas	0.002	ppb	107.2	156.84	2000	
232	Th	209	No Gas	0.007	ppb	14.3	253.63	1000	
238	U	209	No Gas	0.001	ppb	186.6	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	920495.54	4.7	1023754.81	89.91	29.5	120.4	
Sc	45	No Gas	2783155.17	3.7	2927134.09	95.08	29.5	120.4	
Sc	45	H2	347649.62	1.9	374925.7	92.72	29.5	120.4	
Sc	45	He	68917.31	0.8	75429.93	91.37	29.5	120.4	
Ge	72	No Gas	675043.50	4.1	682196.39	98.95	29.5	120.4	
Ge	72	H2	134742.85	1.5	145757.5	92.44	29.5	120.4	
Ge	72	He	56486.22	0.1	59866.13	94.35	29.5	120.4	
Y	89	H2	2457843.77	1.8	2441196.5	100.68	29.5	120.4	
Y	89	He	498889.75	0.3	531537.69	93.86	29.5	120.4	
Tb	159	No Gas	7778091.69	3.6	7041897.33	110.45	29.5	120.4	
Tb	159	He	2888936.07	0.1	2795586.52	103.34	29.5	120.4	
Bi	209	No Gas	4235455.10	4.2	3760534.49	112.63	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	222_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:33:52 AM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.045	ppb	297.0	31.11	0.5	
B	11	6	No Gas	5.380	ppb	3.0	2098.00	10	
Na	23	45	He	86.979	ppb	16.4	9881.05	500	
Mg	24	45	He	-1.003	ppb	N/A	795.64	50	
Al	27	45	He	2.650	ppb	99.6	41.12	50	
Si	28	45	H2	19.671	ppb	11.3	573.99	250	
K	39	45	He	-43.321	ppb	N/A	9238.85	500	
Ca	40	45	H2	20.261	ppb	11.4	2584.78	50	
V	51	89	He	1.380	ppb	5.0	402.24	2.5	
Cr	52	89	He	0.204	ppb	21.6	102.65	2.5	
Mn	55	89	He	-0.020	ppb	N/A	31.33	1	
Fe	56	89	H2	-7.004	ppb	N/A	3551.09	50	
Co	59	89	He	-0.047	ppb	N/A	13.33	0.5	
Ni	60	89	He	-3.810	ppb	N/A	216.68	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.248	ppb	42.4	156.67	1.5	
Zn	66	89	He	14.054	ppb	7.4	621.15	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.075	ppb	49.1	6.33	2.5	
Se	78	89	H2	0.030	ppb	55.8	0.83	2.5	
Sr	88	89	He	0.068	ppb	17.0	11.11	2.5	
Mo	95	89	He	0.071	ppb	39.5	21.11	2.5	
Ag	107	89	He	0.029	ppb	73.4	24.45	0.5	
Cd	111	89	He	0.014	ppb	100.1	1.11	0.5	
Sn	118	159	He	0.967	ppb	17.8	248.90	2.5	
Sb	121	159	No Gas	0.116	ppb	32.8	256.96	0.5	
Ba	137	159	No Gas	0.022	ppb	118.6	50.05	1	
W	182	159	No Gas	0.047	ppb	42.8	113.46	2.5	
Tl	205	209	No Gas	0.015	ppb	61.8	66.74	0.5	
Pb	208	209	No Gas	0.022	ppb	59.3	213.57	0.5	
Th	232	209	No Gas	0.110	ppb	28.1	587.33	2.5	
U	238	209	No Gas	0.005	ppb	58.6	30.03	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	909666.88	3.0	1023754.81	88.86	29.5	120.4	
Sc	45	No Gas	2788552.60	2.6	2927134.09	95.27	29.5	120.4	
Sc	45	H2	322842.78	0.5	374925.7	86.11	29.5	120.4	
Sc	45	He	65575.86	1.3	75429.93	86.94	29.5	120.4	
Ge	72	No Gas	695717.80	2.5	682196.39	101.98	29.5	120.4	
Ge	72	H2	127055.16	1.1	145757.5	87.17	29.5	120.4	
Ge	72	He	54375.39	1.4	59866.13	90.83	29.5	120.4	
Y	89	H2	2346523.76	0.5	2441196.5	96.12	29.5	120.4	
Y	89	He	484824.65	0.3	531537.69	91.21	29.5	120.4	
Tb	159	No Gas	8197527.24	2.1	7041897.33	116.41	29.5	120.4	
Tb	159	He	2880678.74	0.9	2795586.52	103.04	29.5	120.4	
Bi	209	No Gas	4481117.68	2.7	3760534.49	119.16	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	223LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:36:32 AM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.891	ppb	2.5	9513.43	50	19.96	79.5	120.4	
B	11	6	No Gas	520.941	ppb	2.1	65071.46	500	20.84	79.5	120.4	
Na	23	45	He	11446.159	ppb	3.2	224361.86	7500	30.52	79.5	120.4	6020□ DoD
Mg	24	45	He	5375.644	ppb	3.0	57415.81	5000	21.5	79.5	120.4	
Al	27	45	He	2041.218	ppb	4.0	8638.46	2000	20.41	79.5	120.4	
Si	28	45	H2	1027.633	ppb	7.3	8528.69	1000	20.55	0	200	
K	39	45	He	10251.349	ppb	4.5	112638.54	10000	20.5	79.5	120.4	
Ca	40	45	H2	2662.726	ppb	5.9	203979.60	2500	21.3	79.5	120.4	
V	51	89	He	519.204	ppb	3.7	87742.06	500	20.77	79.5	120.4	
Cr	52	89	He	213.275	ppb	3.9	44554.40	200	21.33	79.5	120.4	
Mn	55	89	He	524.533	ppb	3.3	52708.19	500	20.98	79.5	120.4	
Fe	56	89	H2	1052.831	ppb	6.4	361447.30	1000	21.06	79.5	120.4	
Co	59	89	He	544.827	ppb	3.2	196349.42	500	21.79	79.5	120.4	
Ni	60	89	He	544.062	ppb	3.7	53998.25	500	21.76	79.5	120.4	
Cu	63	89	He	270.544	ppb	3.0	74851.90	250	21.64	79.5	120.4	
Zn	66	89	He	567.294	ppb	2.7	21148.85	500	22.69	79.5	120.4	
As	75	89	He	106.612	ppb	3.7	3350.11	100	21.32	79.5	120.4	
Se	78	89	H2	102.347	ppb	7.4	1733.20	100	20.47	79.5	120.4	
Sr	88	89	He	510.955	ppb	3.7	82346.46	500	20.44	79.5	120.4	
Mo	95	89	He	108.871	ppb	1.6	19839.38	100	21.77	79.5	120.4	
Ag	107	89	He	56.244	ppb	1.5	35271.11	50	22.5	79.5	120.4	
Cd	111	89	He	277.494	ppb	3.7	22333.67	250	22.2	79.5	120.4	
Sn	118	159	He	489.708	ppb	3.0	95639.18	500	19.59	79.5	120.4	
Sb	121	159	No Gas	98.840	ppb	2.0	170349.42	100	19.77	79.5	120.4	
Ba	137	159	No Gas	1972.069	ppb	2.9	1345905.06	2000	19.72	79.5	120.4	
W	182	159	No Gas	104.338	ppb	4.6	141518.48	100	20.87	79.5	120.4	
Tl	205	209	No Gas	105.918	ppb	2.0	318494.43	100	21.18	79.5	120.4	
[Pb]	206	209	No Gas	105.887	ppb	3.5	110849.19	100	21.18	79.5	120.4	
[Pb]	207	209	No Gas	106.241	ppb	1.6	96693.07	100	21.25	79.5	120.4	
Pb	208	209	No Gas	105.329	ppb	2.3	440159.83	100	21.07	79.5	120.4	
Th	232	209	No Gas	104.417	ppb	2.1	451318.02	100	20.88	79.5	120.4	
U	238	209	No Gas	104.172	ppb	2.4	422632.01	100	20.83	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	886497.01	0.4	1023754.81	86.59	29.5	120.4	
Sc	45	No Gas	2753983.68	2.0	2927134.09	94.08	29.5	120.4	
Sc	45	H2	319124.90	5.0	374925.7	85.12	29.5	120.4	
Sc	45	He	65191.55	3.1	75429.93	86.43	29.5	120.4	
Ge	72	No Gas	686376.83	1.4	682196.39	100.61	29.5	120.4	
Ge	72	H2	126602.19	3.3	145757.5	86.86	29.5	120.4	
Ge	72	He	54322.65	2.1	59866.13	90.74	29.5	120.4	
Y	89	H2	2316414.59	4.6	2441196.5	94.89	29.5	120.4	
Y	89	He	480136.19	2.7	531537.69	90.33	29.5	120.4	
Tb	159	No Gas	8241678.84	1.8	7041897.33	117.04	29.5	120.4	
Tb	159	He	2876116.24	2.4	2795586.52	102.88	29.5	120.4	
Bi	209	No Gas	4483666.64	1.5	3760534.49	119.23	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 224SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:39:13 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	68.0	33.34	100	
11	B	6	No Gas	11.726	ppb	9.9	2738.14	1000	
23	Na	45	He	252.928	ppb	9.7	13170.67	200000	
24	Mg	45	He	26.899	ppb	25.8	1102.36	200000	
27	Al	45	He	82.073	ppb	8.6	382.24	200000	
28	Si	45	H2	111.569	ppb	10.6	1328.21	10000	
39	K	45	He	68.629	ppb	24.5	10475.83	200000	
40	Ca	45	H2	80.856	ppb	2.1	7366.62	200000	
51	V	89	He	1.718	ppb	16.4	465.58	1000	
52	Cr	89	He	0.657	ppb	14.4	200.63	2000	
55	Mn	89	He	3.967	ppb	7.1	441.26	2000	
56	Fe	89	H2	100.479	ppb	2.4	40861.52	100000	
59	Co	89	He	0.073	ppb	61.1	57.78	1000	
60	Ni	89	He	-2.754	ppb	N/A	325.57	1000	
63	Cu	89	He	0.819	ppb	2.9	320.02	2000	
66	Zn	89	He	19.028	ppb	4.0	817.83	2000	
75	As	89	He	0.135	ppb	87.0	8.33	1000	
78	Se	89	H2	0.115	ppb	71.6	2.33	1000	
88	Sr	89	He	0.465	ppb	20.4	76.67	2000	
95	Mo	89	He	0.267	ppb	33.8	57.78	1000	
107	Ag	89	He	0.015	ppb	53.4	15.56	100	
111	Cd	89	He	0.090	ppb	22.7	7.41	1000	
118	Sn	159	He	1.294	ppb	21.8	317.80	1000	
121	Sb	159	No Gas	0.174	ppb	13.8	363.74	1000	
137	Ba	159	No Gas	1.394	ppb	11.2	1001.16	2000	
182	W	159	No Gas	0.214	ppb	11.9	347.06	1000	
205	Tl	209	No Gas	0.083	ppb	48.9	276.98	1000	
208	Pb	209	No Gas	3.554	ppb	5.6	15304.05	2000	
232	Th	209	No Gas	0.576	ppb	20.4	2666.66	1000	
238	U	209	No Gas	0.062	ppb	22.9	270.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	859989.05	2.3	1023754.81	84	29.5	120.4	
Sc	45	No Gas	2778608.82	2.4	2927134.09	94.93	29.5	120.4	
Sc	45	H2	327282.74	0.5	374925.7	87.29	29.5	120.4	
Sc	45	He	66242.33	0.1	75429.93	87.82	29.5	120.4	
Ge	72	No Gas	697473.60	2.4	682196.39	102.24	29.5	120.4	
Ge	72	H2	127237.13	0.6	145757.5	87.29	29.5	120.4	
Ge	72	He	54604.02	1.1	59866.13	91.21	29.5	120.4	
Y	89	H2	2373859.11	1.0	2441196.5	97.24	29.5	120.4	
Y	89	He	490984.62	0.7	531537.69	92.37	29.5	120.4	
Tb	159	No Gas	8373354.95	2.5	7041897.33	118.91	29.5	120.4	
Tb	159	He	2928614.05	0.4	2795586.52	104.76	29.5	120.4	
Bi	209	No Gas	4586235.03	2.6	3760534.49	121.96	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5830-002

File Name 225SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:41:55 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.088	ppb	100.5	36.67	100	
11	B	6	No Gas	368.531	ppb	6.5	43846.25	1000	
23	Na	45	He	112654.197	ppb	2.1	2063646.93	200000	
24	Mg	45	He	14110.758	ppb	2.6	144348.98	200000	
27	Al	45	He	26.408	ppb	26.0	136.67	200000	
28	Si	45	H2	10024.269	ppb	1.4	77938.31	10000	
39	K	45	He	262.143	ppb	10.6	11836.30	200000	
40	Ca	45	H2	128931.125	ppb	0.7	9621936.18	200000	
51	V	89	He	1.561	ppb	19.4	417.80	1000	
52	Cr	89	He	0.376	ppb	22.4	133.98	2000	
55	Mn	89	He	293.167	ppb	1.8	28727.94	2000	
56	Fe	89	H2	2.056	ppb	22.8	6492.10	100000	
59	Co	89	He	0.588	ppb	25.9	235.57	1000	
60	Ni	89	He	-0.772	ppb	N/A	500.03	1000	
63	Cu	89	He	0.773	ppb	11.1	292.24	2000	
66	Zn	89	He	14.637	ppb	6.3	620.04	2000	
75	As	89	He	0.137	ppb	3.1	8.00	1000	
78	Se	89	H2	0.111	ppb	67.9	2.17	1000	
88	Sr	89	He	1796.664	ppb	1.6	282257.99	2000	
95	Mo	89	He	0.757	ppb	7.0	142.23	1000	
107	Ag	89	He	0.014	ppb	22.9	14.44	100	
111	Cd	89	He	0.028	ppb	1.6	2.22	1000	
118	Sn	159	He	0.977	ppb	2.5	248.90	1000	
121	Sb	159	No Gas	0.091	ppb	36.4	216.91	1000	
137	Ba	159	No Gas	31.541	ppb	7.1	21631.61	2000	
182	W	159	No Gas	0.046	ppb	39.4	113.46	1000	
205	Tl	209	No Gas	0.003	ppb	102.8	30.03	1000	
208	Pb	209	No Gas	0.035	ppb	56.1	270.30	2000	
232	Th	209	No Gas	0.099	ppb	19.5	543.96	1000	
238	U	209	No Gas	3.495	ppb	10.2	14244.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	837841.16	2.6	1023754.81	81.84	29.5	120.4	
Sc	45	No Gas	2712375.09	1.9	2927134.09	92.66	29.5	120.4	
Sc	45	H2	311799.85	1.3	374925.7	83.16	29.5	120.4	
Sc	45	He	62959.95	1.5	75429.93	83.47	29.5	120.4	
Ge	72	No Gas	682956.55	2.1	682196.39	100.11	29.5	120.4	
Ge	72	H2	123603.24	0.7	145757.5	84.8	29.5	120.4	
Ge	72	He	52975.00	0.9	59866.13	88.49	29.5	120.4	
Y	89	H2	2288668.04	0.2	2441196.5	93.75	29.5	120.4	
Y	89	He	467803.62	1.6	531537.69	88.01	29.5	120.4	
Tb	159	No Gas	8271459.46	1.6	7041897.33	117.46	29.5	120.4	
Tb	159	He	2860768.08	0.9	2795586.52	102.33	29.5	120.4	
Bi	209	No Gas	4504454.03	2.0	3760534.49	119.78	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 226SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:44:29 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	150.1	26.67	100	
11	B	6	No Gas	2031.031	ppb	5.6	224818.76	1000	
23	Na	45	He	1233535.402	ppb	1.3	22811837.70	200000	>LDR
24	Mg	45	He	253603.561	ppb	1.3	2614987.48	200000	
27	Al	45	He	5.829	ppb	88.7	53.33	200000	
28	Si	45	H2	8412.718	ppb	2.4	65405.01	10000	
39	K	45	He	7924.515	ppb	2.4	87373.58	200000	
40	Ca	45	H2	488824.008	ppb	1.7	36438903.90	200000	
51	V	89	He	3.943	ppb	7.2	816.72	1000	
52	Cr	89	He	0.756	ppb	21.9	213.30	2000	
55	Mn	89	He	27.695	ppb	4.6	2767.77	2000	
56	Fe	89	H2	157.367	ppb	1.3	58316.20	100000	
59	Co	89	He	0.543	ppb	29.7	222.24	1000	
60	Ni	89	He	5.769	ppb	14.7	1135.65	1000	
63	Cu	89	He	1.629	ppb	6.1	527.81	2000	
66	Zn	89	He	18.555	ppb	9.6	768.94	2000	
75	As	89	He	0.405	ppb	26.2	16.33	1000	
78	Se	89	H2	1.137	ppb	24.7	19.33	1000	
88	Sr	89	He	7050.321	ppb	0.7	1117580.04	2000	
95	Mo	89	He	0.520	ppb	39.9	101.11	1000	
107	Ag	89	He	0.030	ppb	90.7	24.45	100	
111	Cd	89	He	0.155	ppb	39.9	12.22	1000	
118	Sn	159	He	1.348	ppb	11.7	322.24	1000	
121	Sb	159	No Gas	0.114	ppb	0.7	256.95	1000	
137	Ba	159	No Gas	14.156	ppb	5.1	9794.46	2000	
182	W	159	No Gas	0.055	ppb	4.6	126.81	1000	
205	Tl	209	No Gas	0.021	ppb	47.4	80.09	1000	
208	Pb	209	No Gas	1.668	ppb	7.8	6881.81	2000	
232	Th	209	No Gas	0.074	ppb	5.1	417.14	1000	
238	U	209	No Gas	7.595	ppb	5.1	29905.87	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	798692.04	1.5	1023754.81	78.02	29.5	120.4	
Sc	45	No Gas	2693723.08	2.0	2927134.09	92.03	29.5	120.4	
Sc	45	H2	311488.86	1.0	374925.7	83.08	29.5	120.4	
Sc	45	He	63775.57	1.2	75429.93	84.55	29.5	120.4	
Ge	72	No Gas	672688.38	2.1	682196.39	98.61	29.5	120.4	
Ge	72	H2	122679.12	0.9	145757.5	84.17	29.5	120.4	
Ge	72	He	53311.25	0.3	59866.13	89.05	29.5	120.4	
Y	89	H2	2284679.99	0.5	2441196.5	93.59	29.5	120.4	
Y	89	He	471945.55	0.5	531537.69	88.79	29.5	120.4	
Tb	159	No Gas	8328467.72	2.0	7041897.33	118.27	29.5	120.4	
Tb	159	He	2871308.85	0.4	2795586.52	102.71	29.5	120.4	
Bi	209	No Gas	4352127.86	1.9	3760534.49	115.73	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 227SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:47:13 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	49.6	27.78	100	
11	B	6	No Gas	2091.348	ppb	3.4	235449.40	1000	
23	Na	45	He	1168355.894	ppb	0.4	21827690.67	200000	>LDR
24	Mg	45	He	212755.473	ppb	0.2	2216359.39	200000	
27	Al	45	He	73.113	ppb	12.7	334.46	200000	
28	Si	45	H2	8096.978	ppb	1.4	63214.05	10000	
39	K	45	He	10565.296	ppb	1.8	114516.61	200000	
40	Ca	45	H2	544575.938	ppb	1.6	40751350.23	200000	
51	V	89	He	4.858	ppb	9.5	980.07	1000	
52	Cr	89	He	5.595	ppb	2.5	1220.50	2000	
55	Mn	89	He	218.634	ppb	0.9	21884.31	2000	
56	Fe	89	H2	6322.084	ppb	1.9	2130490.99	100000	
59	Co	89	He	2.402	ppb	6.0	891.21	1000	
60	Ni	89	He	7.097	ppb	8.7	1278.99	1000	
63	Cu	89	He	2.297	ppb	4.2	717.83	2000	
66	Zn	89	He	22.400	ppb	13.6	920.07	2000	
75	As	89	He	0.814	ppb	25.2	29.33	1000	
78	Se	89	H2	0.120	ppb	15.7	2.33	1000	
88	Sr	89	He	8823.758	ppb	0.2	1415379.74	2000	
95	Mo	89	He	0.716	ppb	14.1	137.78	1000	
107	Ag	89	He	0.017	ppb	53.9	16.67	100	
111	Cd	89	He	0.065	ppb	12.4	5.19	1000	
118	Sn	159	He	0.955	ppb	15.1	247.79	1000	
121	Sb	159	No Gas	0.104	ppb	7.5	243.61	1000	
137	Ba	159	No Gas	17.890	ppb	4.0	12509.87	2000	
182	W	159	No Gas	0.015	ppb	118.5	73.42	1000	
205	Tl	209	No Gas	0.026	ppb	61.7	96.78	1000	
208	Pb	209	No Gas	3.093	ppb	4.1	12776.76	2000	
232	Th	209	No Gas	0.058	ppb	19.6	353.74	1000	
238	U	209	No Gas	5.808	ppb	5.5	23083.77	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	812224.07	1.2	1023754.81	79.34	29.5	120.4	
Sc	45	No Gas	2724551.91	0.7	2927134.09	93.08	29.5	120.4	
Sc	45	H2	312712.68	1.7	374925.7	83.41	29.5	120.4	
Sc	45	He	64421.90	0.7	75429.93	85.41	29.5	120.4	
Ge	72	No Gas	679434.59	1.0	682196.39	99.6	29.5	120.4	
Ge	72	H2	122846.98	2.4	145757.5	84.28	29.5	120.4	
Ge	72	He	53746.65	0.5	59866.13	89.78	29.5	120.4	
Y	89	H2	2301032.98	2.0	2441196.5	94.26	29.5	120.4	
Y	89	He	477570.00	0.1	531537.69	89.85	29.5	120.4	
Tb	159	No Gas	8419738.35	0.7	7041897.33	119.57	29.5	120.4	
Tb	159	He	2897743.15	0.8	2795586.52	103.65	29.5	120.4	
Bi	209	No Gas	4391359.85	0.9	3760534.49	116.77	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 228SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:49:48 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.036	ppb	43.8	26.67	100	
11	B	6	No Gas	2142.831	ppb	4.0	242381.27	1000	
23	Na	45	He	1178357.055	ppb	0.6	22164118.55	200000	>LDR
24	Mg	45	He	216921.609	ppb	0.7	2275064.93	200000	
27	Al	45	He	45.330	ppb	3.8	220.01	200000	
28	Si	45	H2	8165.205	ppb	1.2	64503.37	10000	
39	K	45	He	10664.338	ppb	0.8	116288.46	200000	
40	Ca	45	H2	547018.231	ppb	0.8	41422643.83	200000	
51	V	89	He	4.645	ppb	6.5	942.29	1000	
52	Cr	89	He	3.053	ppb	6.0	691.23	2000	
55	Mn	89	He	238.559	ppb	1.2	23823.07	2000	
56	Fe	89	H2	6737.371	ppb	0.9	2297287.39	100000	
59	Co	89	He	2.867	ppb	5.3	1055.68	1000	
60	Ni	89	He	5.928	ppb	11.5	1162.32	1000	
63	Cu	89	He	1.866	ppb	7.9	597.81	2000	
66	Zn	89	He	21.913	ppb	8.3	900.07	2000	
75	As	89	He	0.849	ppb	24.7	30.33	1000	
78	Se	89	H2	0.206	ppb	35.6	3.83	1000	
88	Sr	89	He	8955.890	ppb	0.2	1433408.38	2000	
95	Mo	89	He	0.859	ppb	9.2	163.34	1000	
107	Ag	89	He	0.017	ppb	31.0	16.67	100	
111	Cd	89	He	0.065	ppb	81.3	5.18	1000	
118	Sn	159	He	0.949	ppb	15.9	247.79	1000	
121	Sb	159	No Gas	0.108	ppb	23.3	253.62	1000	
137	Ba	159	No Gas	17.333	ppb	6.2	12269.35	2000	
182	W	159	No Gas	0.015	ppb	64.7	73.42	1000	
205	Tl	209	No Gas	0.020	ppb	20.0	80.09	1000	
208	Pb	209	No Gas	1.603	ppb	3.5	6788.29	2000	
232	Th	209	No Gas	0.020	ppb	79.2	196.89	1000	
238	U	209	No Gas	5.712	ppb	8.3	23050.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	816462.43	2.4	1023754.81	79.75	29.5	120.4	
Sc	45	No Gas	2728421.76	2.8	2927134.09	93.21	29.5	120.4	
Sc	45	H2	316413.88	1.7	374925.7	84.39	29.5	120.4	
Sc	45	He	64860.46	0.8	75429.93	85.99	29.5	120.4	
Ge	72	No Gas	683187.41	2.8	682196.39	100.15	29.5	120.4	
Ge	72	H2	123527.99	1.3	145757.5	84.75	29.5	120.4	
Ge	72	He	53520.22	0.7	59866.13	89.4	29.5	120.4	
Y	89	H2	2328211.91	1.2	2441196.5	95.37	29.5	120.4	
Y	89	He	476517.08	0.1	531537.69	89.65	29.5	120.4	
Tb	159	No Gas	8527846.19	2.8	7041897.33	121.1	29.5	120.4	6020/DoD
Tb	159	He	2911921.80	0.7	2795586.52	104.16	29.5	120.4	
Bi	209	No Gas	4464050.92	3.0	3760534.49	118.71	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 229SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 2:52:33 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.022	ppb	133.3	25.56	100	
11	B	6	No Gas	681.224	ppb	4.3	82169.19	1000	
23	Na	45	He	362739.318	ppb	5.3	6605999.36	200000	
24	Mg	45	He	46518.615	ppb	5.8	472514.03	200000	
27	Al	45	He	21.737	ppb	17.6	116.67	200000	
28	Si	45	H2	6971.454	ppb	1.6	57311.42	10000	
39	K	45	He	3440.191	ppb	7.5	42555.40	200000	
40	Ca	45	H2	154423.578	ppb	0.5	12157396.34	200000	
51	V	89	He	5.359	ppb	0.9	1051.19	1000	
52	Cr	89	He	0.606	ppb	23.5	181.97	2000	
55	Mn	89	He	62.994	ppb	4.7	6244.93	2000	
56	Fe	89	H2	170.145	ppb	1.2	65528.29	100000	
59	Co	89	He	0.429	ppb	17.4	182.24	1000	
60	Ni	89	He	-2.687	ppb	N/A	317.79	1000	
63	Cu	89	He	1.445	ppb	12.5	476.69	2000	
66	Zn	89	He	45.258	ppb	6.6	1741.29	2000	
75	As	89	He	0.533	ppb	33.0	20.33	1000	
78	Se	89	H2	0.305	ppb	51.7	5.67	1000	
88	Sr	89	He	1769.427	ppb	4.9	279983.09	2000	
95	Mo	89	He	0.620	ppb	10.6	118.89	1000	
107	Ag	89	He	0.016	ppb	53.5	15.56	100	
111	Cd	89	He	0.056	ppb	22.0	4.44	1000	
118	Sn	159	He	0.823	ppb	22.4	217.79	1000	
121	Sb	159	No Gas	0.185	ppb	21.4	397.11	1000	
137	Ba	159	No Gas	47.702	ppb	0.6	34248.73	2000	
182	W	159	No Gas	0.016	ppb	49.4	76.75	1000	
205	Tl	209	No Gas	0.008	ppb	59.7	46.72	1000	
208	Pb	209	No Gas	0.144	ppb	8.1	750.86	2000	
232	Th	209	No Gas	0.018	ppb	75.5	196.89	1000	
238	U	209	No Gas	3.404	ppb	7.6	14327.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	860832.44	2.0	1023754.81	84.09	29.5	120.4	
Sc	45	No Gas	2765490.94	0.3	2927134.09	94.48	29.5	120.4	
Sc	45	H2	328921.81	0.6	374925.7	87.73	29.5	120.4	
Sc	45	He	62848.83	4.7	75429.93	83.32	29.5	120.4	
Ge	72	No Gas	699315.95	0.7	682196.39	102.51	29.5	120.4	
Ge	72	H2	129979.94	0.5	145757.5	89.18	29.5	120.4	
Ge	72	He	53621.26	2.8	59866.13	89.57	29.5	120.4	
Y	89	H2	2392327.40	0.6	2441196.5	98	29.5	120.4	
Y	89	He	471782.89	4.4	531537.69	88.76	29.5	120.4	
Tb	159	No Gas	8659373.41	0.5	7041897.33	122.97	29.5	120.4	6020/DoD
Tb	159	He	2856604.30	4.5	2795586.52	102.18	29.5	120.4	
Bi	209	No Gas	4648067.12	0.7	3760534.49	123.6	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	230_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:55:08 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Fail
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.844	ppb	11.3	23154.76	25	99.38	89.8	110.2	
11	B	6	No Gas	29.373	ppb	7.4	18964.14	25	117.49	89.8	110.2	> +/- 10%
23	Na	45	He	5405.859	ppb	4.1	508151.28	5000	108.12	89.8	110.2	
24	Mg	45	He	5080.682	ppb	3.7	262909.20	5000	101.61	89.8	110.2	
27	Al	45	He	488.758	ppb	3.5	10130.60	500	97.75	89.8	110.2	
28	Si	45	H2	439.196	ppb	2.2	18181.80	500	87.84	89.8	110.2	> +/- 10%
39	K	45	He	4868.746	ppb	4.0	249166.73	5000	97.37	89.8	110.2	
40	Ca	45	H2	4838.650	ppb	0.2	1888860.55	5000	96.77	89.8	110.2	
51	V	89	He	24.253	ppb	6.4	20009.30	25	97.01	89.8	110.2	
52	Cr	89	He	24.648	ppb	4.5	25023.64	25	98.59	89.8	110.2	
55	Mn	89	He	24.532	ppb	4.8	11990.97	25	98.13	89.8	110.2	
56	Fe	89	H2	4635.771	ppb	0.7	8007771.92	5000	92.72	89.8	110.2	
59	Co	89	He	25.242	ppb	6.5	44154.76	25	100.97	89.8	110.2	
60	Ni	89	He	24.139	ppb	5.2	12075.65	25	96.56	89.8	110.2	
63	Cu	89	He	25.327	ppb	5.1	34055.87	25	101.31	89.8	110.2	
66	Zn	89	He	25.651	ppb	6.0	4709.85	25	102.6	89.8	110.2	
75	As	89	He	24.804	ppb	5.8	3781.61	25	99.22	89.8	110.2	
78	Se	89	H2	22.852	ppb	1.4	1978.38	25	91.41	89.8	110.2	
88	Sr	89	He	24.673	ppb	4.4	19305.33	25	98.69	89.8	110.2	
95	Mo	89	He	25.099	ppb	4.5	22196.49	25	100.4	89.8	110.2	
107	Ag	89	He	26.398	ppb	5.1	80310.77	25	105.59	89.8	110.2	
111	Cd	89	He	26.027	ppb	4.8	10168.37	25	104.11	89.8	110.2	
118	Sn	159	He	22.859	ppb	6.2	21881.80	25	91.44	89.8	110.2	
121	Sb	159	No Gas	23.088	ppb	13.2	200394.45	25	92.35	89.8	110.2	
137	Ba	159	No Gas	23.377	ppb	13.3	80387.22	25	93.51	89.8	110.2	
182	W	159	No Gas	24.268	ppb	12.6	165883.26	25	97.07	89.8	110.2	
205	Tl	209	No Gas	24.415	ppb	11.1	374103.07	25	97.66	89.8	110.2	
208	Pb	209	No Gas	24.466	ppb	10.6	521151.46	25	97.86	89.8	110.2	
232	Th	209	No Gas	23.967	ppb	12.0	527614.62	25	95.87	89.8	110.2	
238	U	209	No Gas	24.567	ppb	12.4	507567.70	25	98.27	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	871472.00	5.7	1023754.81	85.13	29.5	120.4	
Sc	45	No Gas	2753579.73	9.6	2927134.09	94.07	29.5	120.4	
Sc	45	H2	326038.94	0.8	374925.7	86.96	29.5	120.4	
Sc	45	He	63896.44	4.0	75429.93	84.71	29.5	120.4	
Ge	72	No Gas	686744.71	6.7	682196.39	100.67	29.5	120.4	
Ge	72	H2	129170.09	1.2	145757.5	88.62	29.5	120.4	
Ge	72	He	53024.59	5.3	59866.13	88.57	29.5	120.4	
Y	89	H2	2363128.59	0.2	2441196.5	96.8	29.5	120.4	
Y	89	He	466597.89	5.0	531537.69	87.78	29.5	120.4	
Tb	159	No Gas	8371628.21	9.7	7041897.33	118.88	29.5	120.4	
Tb	159	He	2817829.79	4.8	2795586.52	100.8	29.5	120.4	
Bi	209	No Gas	4597464.86	8.3	3760534.49	122.26	29.5	120.4	6020/DoD

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	231_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 2:57:49 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.059	ppb	36.3	83.34	0.2	
11	B	6	No Gas	2.706	ppb	9.6	3218.25	4	Failed DoD
23	Na	45	He	108.160	ppb	4.6	18168.23	200	Failed DoD
24	Mg	45	He	-1.995	ppb	N/A	688.96	20	
27	Al	45	He	-0.771	ppb	N/A	13.33	20	
28	Si	45	H2	0.263	ppb	847.6	427.14	100	
39	K	45	He	-8.874	ppb	N/A	9055.48	200	
40	Ca	45	H2	4.342	ppb	6.0	2698.14	20	
51	V	89	He	0.116	ppb	25.9	261.12	1	
52	Cr	89	He	-0.011	ppb	N/A	46.66	1	
55	Mn	89	He	-0.011	ppb	N/A	27.33	0.4	
56	Fe	89	H2	0.182	ppb	111.4	6171.54	20	
59	Co	89	He	-0.008	ppb	N/A	15.55	0.2	
60	Ni	89	He	-0.909	ppb	N/A	141.12	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.023	ppb	75.9	116.67	0.6	
66	Zn	89	He	-0.165	ppb	N/A	62.23	2	
75	As	89	He	0.020	ppb	52.3	7.00	1	
78	Se	89	H2	0.024	ppb	71.3	2.33	1	
88	Sr	89	He	0.058	ppb	31.6	46.67	1	
95	Mo	89	He	0.072	ppb	37.8	73.34	1	
107	Ag	89	He	0.006	ppb	62.5	24.44	0.2	
111	Cd	89	He	0.003	ppb	100.4	1.11	0.2	
118	Sn	159	He	0.107	ppb	26.0	161.12	1	
121	Sb	159	No Gas	0.029	ppb	50.0	307.01	0.2	
137	Ba	159	No Gas	0.011	ppb	60.0	73.42	0.4	
182	W	159	No Gas	0.080	ppb	8.0	584.00	1	
205	Tl	209	No Gas	0.025	ppb	14.9	397.12	0.2	
208	Pb	209	No Gas	0.017	ppb	32.8	480.54	0.2	
232	Th	209	No Gas	0.170	ppb	11.4	3781.50	1	
238	U	209	No Gas	0.027	ppb	34.5	570.65	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	937493.91	2.0	1023754.81	91.57	29.5	120.4	
Sc	45	No Gas	2727819.31	2.5	2927134.09	93.19	29.5	120.4	
Sc	45	H2	322922.87	0.9	374925.7	86.13	29.5	120.4	
Sc	45	He	64389.62	2.7	75429.93	85.36	29.5	120.4	
Ge	72	No Gas	665658.44	2.4	682196.39	97.58	29.5	120.4	
Ge	72	H2	126476.45	1.9	145757.5	86.77	29.5	120.4	
Ge	72	He	53645.54	1.0	59866.13	89.61	29.5	120.4	
Y	89	H2	2311595.76	0.9	2441196.5	94.69	29.5	120.4	
Y	89	He	475509.43	1.9	531537.69	89.46	29.5	120.4	
Tb	159	No Gas	8104563.28	3.0	7041897.33	115.09	29.5	120.4	
Tb	159	He	2839948.47	2.1	2795586.52	101.59	29.5	120.4	
Bi	209	No Gas	4487954.05	2.6	3760534.49	119.34	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 232SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:00:25 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.040	ppb	138.0	31.11	100	
11	B	6	No Gas	11.070	ppb	0.5	2877.05	1000	
23	Na	45	He	524.767	ppb	0.8	17597.04	200000	
24	Mg	45	He	-5.764	ppb	N/A	720.07	200000	
27	Al	45	He	18.400	ppb	13.5	104.45	200000	
28	Si	45	H2	13.490	ppb	102.7	513.92	10000	
39	K	45	He	-33.030	ppb	N/A	9028.78	200000	
40	Ca	45	H2	40.176	ppb	2.7	4038.50	200000	
51	V	89	He	4.030	ppb	2.7	827.83	1000	
52	Cr	89	He	0.223	ppb	27.8	103.31	2000	
55	Mn	89	He	0.132	ppb	77.9	45.32	2000	
56	Fe	89	H2	-4.469	ppb	N/A	4302.08	100000	
59	Co	89	He	-0.052	ppb	N/A	11.11	1000	
60	Ni	89	He	-4.064	ppb	N/A	185.57	1000	
63	Cu	89	He	0.472	ppb	24.2	212.23	2000	
66	Zn	89	He	13.694	ppb	8.1	588.92	2000	
75	As	89	He	0.287	ppb	50.5	12.67	1000	
78	Se	89	H2	0.051	ppb	187.9	1.17	1000	
88	Sr	89	He	0.247	ppb	33.1	38.89	2000	
95	Mo	89	He	0.118	ppb	9.2	28.89	1000	
107	Ag	89	He	0.027	ppb	12.6	22.22	100	
111	Cd	89	He	0.019	ppb	114.3	1.48	1000	
118	Sn	159	He	0.795	ppb	31.1	213.34	1000	
121	Sb	159	No Gas	0.063	ppb	20.6	163.52	1000	
137	Ba	159	No Gas	0.149	ppb	52.1	133.48	2000	
182	W	159	No Gas	0.068	ppb	16.9	140.16	1000	
205	Tl	209	No Gas	0.010	ppb	88.6	50.06	1000	
208	Pb	209	No Gas	0.047	ppb	6.0	320.36	2000	
232	Th	209	No Gas	0.767	ppb	7.8	3411.04	1000	
238	U	209	No Gas	0.012	ppb	18.7	60.07	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	930709.42	2.7	1023754.81	90.91	29.5	120.4	
Sc	45	No Gas	2662049.25	2.6	2927134.09	90.94	29.5	120.4	
Sc	45	H2	316176.32	0.3	374925.7	84.33	29.5	120.4	
Sc	45	He	63383.67	0.8	75429.93	84.03	29.5	120.4	
Ge	72	No Gas	658685.68	3.4	682196.39	96.55	29.5	120.4	
Ge	72	H2	124503.56	1.3	145757.5	85.42	29.5	120.4	
Ge	72	He	52652.41	0.5	59866.13	87.95	29.5	120.4	
Y	89	H2	2284643.89	0.5	2441196.5	93.59	29.5	120.4	
Y	89	He	469991.05	0.7	531537.69	88.42	29.5	120.4	
Tb	159	No Gas	8063810.50	2.5	7041897.33	114.51	29.5	120.4	
Tb	159	He	2855600.89	0.8	2795586.52	102.15	29.5	120.4	
Bi	209	No Gas	4460534.75	2.6	3760534.49	118.61	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 233SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:02:55 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.033	ppb	88.6	28.89	100	
11	B	6	No Gas	8.412	ppb	8.6	2462.52	1000	
23	Na	45	He	425.258	ppb	5.6	15782.83	200000	
24	Mg	45	He	-10.296	ppb	N/A	673.40	200000	
27	Al	45	He	3.824	ppb	104.9	44.45	200000	
28	Si	45	H2	17.229	ppb	18.7	547.28	10000	
39	K	45	He	-38.842	ppb	N/A	8980.48	200000	
40	Ca	45	H2	41.655	ppb	4.3	4184.10	200000	
51	V	89	He	3.675	ppb	9.6	767.83	1000	
52	Cr	89	He	0.337	ppb	7.7	126.65	2000	
55	Mn	89	He	0.547	ppb	17.9	85.99	2000	
56	Fe	89	H2	-1.189	ppb	N/A	5480.55	100000	
59	Co	89	He	-0.039	ppb	N/A	15.56	1000	
60	Ni	89	He	-3.578	ppb	N/A	232.23	1000	
63	Cu	89	He	0.653	ppb	6.3	261.13	2000	
66	Zn	89	He	14.183	ppb	9.4	606.70	2000	
75	As	89	He	0.147	ppb	71.1	8.33	1000	
78	Se	89	H2	0.118	ppb	62.0	2.33	1000	
88	Sr	89	He	0.183	ppb	34.8	28.89	2000	
95	Mo	89	He	0.149	ppb	36.4	34.44	1000	
107	Ag	89	He	0.014	ppb	78.1	14.45	100	
111	Cd	89	He	0.009	ppb	86.7	0.74	1000	
118	Sn	159	He	0.828	ppb	10.9	220.01	1000	
121	Sb	159	No Gas	0.046	ppb	52.6	136.82	1000	
137	Ba	159	No Gas	0.453	ppb	35.4	340.39	2000	
182	W	159	No Gas	0.024	ppb	20.3	83.43	1000	
205	Tl	209	No Gas	0.006	ppb	127.5	36.71	1000	
208	Pb	209	No Gas	0.027	ppb	36.4	236.93	2000	
232	Th	209	No Gas	0.067	ppb	46.0	403.80	1000	
238	U	209	No Gas	0.003	ppb	52.4	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	904043.86	2.2	1023754.81	88.31	29.5	120.4	
Sc	45	No Gas	2671921.25	1.9	2927134.09	91.28	29.5	120.4	
Sc	45	H2	318704.17	0.8	374925.7	85	29.5	120.4	
Sc	45	He	63473.34	2.8	75429.93	84.15	29.5	120.4	
Ge	72	No Gas	667112.21	2.3	682196.39	97.79	29.5	120.4	
Ge	72	H2	124068.48	1.1	145757.5	85.12	29.5	120.4	
Ge	72	He	52720.27	2.7	59866.13	88.06	29.5	120.4	
Y	89	H2	2320486.08	1.0	2441196.5	95.06	29.5	120.4	
Y	89	He	469725.03	2.9	531537.69	88.37	29.5	120.4	
Tb	159	No Gas	8174369.04	1.5	7041897.33	116.08	29.5	120.4	
Tb	159	He	2856875.48	3.0	2795586.52	102.19	29.5	120.4	
Bi	209	No Gas	4508893.84	1.9	3760534.49	119.9	29.5	120.4	

Sample Report

Sample Name SN5897-002L

File Name 234SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:05:28 AM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.239	ppb	43.3	32.22	100	
11	B	6	No Gas	21.095	ppb	30.3	1963.54	1000	
23	Na	45	He	1473.588	ppb	5.4	13561.49	200000	
24	Mg	45	He	-23.510	ppb	N/A	742.29	200000	
27	Al	45	He	5.153	ppb	313.5	33.33	200000	
28	Si	45	H2	27.536	ppb	109.9	463.86	10000	
39	K	45	He	-264.491	ppb	N/A	8960.49	200000	
40	Ca	45	H2	539.395	ppb	24.4	9426.87	200000	
51	V	89	He	7.453	ppb	22.5	406.69	1000	
52	Cr	89	He	0.627	ppb	51.0	83.32	2000	
55	Mn	89	He	3.153	ppb	18.8	93.98	2000	
56	Fe	89	H2	-7.190	ppb	N/A	5433.80	100000	
59	Co	89	He	-0.072	ppb	N/A	24.45	1000	
60	Ni	89	He	-17.860	ppb	N/A	232.23	1000	
63	Cu	89	He	0.798	ppb	40.6	127.78	2000	
66	Zn	89	He	15.014	ppb	29.5	200.01	2000	
75	As	89	He	0.083	ppb	292.0	4.33	1000	
78	Se	89	H2	0.150	ppb	148.8	0.83	1000	
88	Sr	89	He	1.544	ppb	41.5	48.89	2000	
95	Mo	89	He	0.596	ppb	39.3	28.89	1000	
107	Ag	89	He	0.034	ppb	9.7	10.00	100	
111	Cd	89	He	0.023	ppb	173.2	0.37	1000	
118	Sn	159	He	0.752	ppb	45.3	86.67	1000	
121	Sb	159	No Gas	0.077	ppb	134.3	83.43	1000	
137	Ba	159	No Gas	5.377	ppb	13.7	750.86	2000	
182	W	159	No Gas	-0.036	ppb	N/A	40.04	1000	
205	Tl	209	No Gas	0.056	ppb	76.5	53.39	1000	
208	Pb	209	No Gas	0.186	ppb	2.9	276.98	2000	
232	Th	209	No Gas	0.062	ppb	81.0	163.52	1000	
238	U	209	No Gas	0.076	ppb	53.0	73.42	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	915018.18	0.8	1023754.81	89.38	29.5	120.4	
Sc	45	No Gas	2710296.95	0.4	2927134.09	92.59	29.5	120.4	
Sc	45	H2	325050.54	0.7	374925.7	86.7	29.5	120.4	
Sc	45	He	64308.35	3.6	75429.93	85.26	29.5	120.4	
Ge	72	No Gas	663858.02	1.6	682196.39	97.31	29.5	120.4	
Ge	72	H2	126747.52	1.3	145757.5	86.96	29.5	120.4	
Ge	72	He	52840.50	4.1	59866.13	88.26	29.5	120.4	
Y	89	H2	2334349.27	0.4	2441196.5	95.62	29.5	120.4	
Y	89	He	469560.50	3.9	531537.69	88.34	29.5	120.4	
Tb	159	No Gas	8050894.19	0.9	7041897.33	114.33	29.5	120.4	
Tb	159	He	2801857.81	3.4	2795586.52	100.22	29.5	120.4	
Bi	209	No Gas	4459362.48	1.4	3760534.49	118.58	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 235SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:07:59 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	9.903	ppb	5.6	1907.97	100	
11	B	6	No Gas	205.615	ppb	4.4	26556.28	1000	
23	Na	45	He	11142.580	ppb	0.7	215702.79	200000	
24	Mg	45	He	1048.989	ppb	1.2	11690.01	200000	
27	Al	45	He	949.868	ppb	0.8	3982.91	200000	
28	Si	45	H2	4634.731	ppb	3.6	36500.36	10000	
39	K	45	He	9845.794	ppb	2.3	107121.24	200000	
40	Ca	45	H2	1068.612	ppb	2.4	81283.05	200000	
51	V	89	He	52.691	ppb	2.0	8980.97	1000	
52	Cr	89	He	50.272	ppb	1.4	10462.66	2000	
55	Mn	89	He	21.157	ppb	5.9	2139.78	2000	
56	Fe	89	H2	1008.535	ppb	1.8	342680.31	100000	
59	Co	89	He	10.830	ppb	4.5	3900.83	1000	
60	Ni	89	He	17.534	ppb	8.3	2291.39	1000	
63	Cu	89	He	32.422	ppb	2.3	8973.22	2000	
66	Zn	89	He	122.106	ppb	1.3	4587.59	2000	
75	As	89	He	49.437	ppb	1.7	1542.93	1000	
78	Se	89	H2	48.727	ppb	4.9	816.32	1000	
88	Sr	89	He	49.462	ppb	1.6	7907.03	2000	
95	Mo	89	He	53.027	ppb	1.3	9585.92	1000	
107	Ag	89	He	11.145	ppb	2.7	6934.25	100	
111	Cd	89	He	11.143	ppb	2.6	889.67	1000	
118	Sn	159	He	47.543	ppb	2.6	9422.49	1000	
121	Sb	159	No Gas	10.125	ppb	5.0	16789.20	1000	
137	Ba	159	No Gas	20.459	ppb	6.7	13428.58	2000	
182	W	159	No Gas	50.699	ppb	5.2	66011.44	1000	
205	Tl	209	No Gas	10.579	ppb	2.8	31286.36	1000	
208	Pb	209	No Gas	10.543	ppb	1.1	43417.49	2000	
232	Th	209	No Gas	10.560	ppb	4.4	44963.79	1000	
238	U	209	No Gas	10.783	ppb	5.3	43018.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	887541.47	0.9	1023754.81	86.69	29.5	120.4	
Sc	45	No Gas	2630359.43	0.4	2927134.09	89.86	29.5	120.4	
Sc	45	H2	314022.90	1.7	374925.7	83.76	29.5	120.4	
Sc	45	He	64281.99	1.0	75429.93	85.22	29.5	120.4	
Ge	72	No Gas	658827.04	0.4	682196.39	96.57	29.5	120.4	
Ge	72	H2	123516.58	0.5	145757.5	84.74	29.5	120.4	
Ge	72	He	52927.95	0.3	59866.13	88.41	29.5	120.4	
Y	89	H2	2286809.98	1.1	2441196.5	93.68	29.5	120.4	
Y	89	He	475976.25	0.5	531537.69	89.55	29.5	120.4	
Tb	159	No Gas	7905554.81	0.2	7041897.33	112.26	29.5	120.4	
Tb	159	He	2900208.22	0.6	2795586.52	103.74	29.5	120.4	
Bi	209	No Gas	4406839.39	0.3	3760534.49	117.19	29.5	120.4	

Sample Report

Sample Name SN5897-002S

File Name 236SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:10:30 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.262	ppb	6.1	9173.22	100	
11	B	6	No Gas	484.521	ppb	5.2	60405.75	1000	
23	Na	45	He	7663.658	ppb	1.1	148879.45	200000	
24	Mg	45	He	5129.521	ppb	1.8	53370.91	200000	
27	Al	45	He	1859.544	ppb	1.1	7665.64	200000	
28	Si	45	H2	917.785	ppb	3.5	7583.76	10000	
39	K	45	He	9723.337	ppb	1.1	104516.94	200000	
40	Ca	45	H2	2505.343	ppb	0.5	189972.67	200000	
51	V	89	He	493.502	ppb	1.3	81765.14	1000	
52	Cr	89	He	200.753	ppb	1.8	41115.35	2000	
55	Mn	89	He	499.590	ppb	1.8	49208.35	2000	
56	Fe	89	H2	1015.714	ppb	0.9	345242.78	100000	
59	Co	89	He	511.857	ppb	1.2	180820.97	1000	
60	Ni	89	He	504.169	ppb	1.6	49092.26	1000	
63	Cu	89	He	256.430	ppb	1.1	69549.19	2000	
66	Zn	89	He	534.242	ppb	2.5	19524.31	2000	
75	As	89	He	99.758	ppb	2.0	3073.01	1000	
78	Se	89	H2	95.703	ppb	1.4	1604.19	1000	
88	Sr	89	He	488.350	ppb	1.2	77153.33	2000	
95	Mo	89	He	103.162	ppb	1.6	18421.85	1000	
107	Ag	89	He	54.506	ppb	1.2	33495.52	100	
111	Cd	89	He	265.814	ppb	1.4	20971.50	1000	
118	Sn	159	He	459.718	ppb	1.5	89260.37	1000	
121	Sb	159	No Gas	91.952	ppb	0.9	156736.56	1000	
137	Ba	159	No Gas	1839.515	ppb	2.7	1241978.16	2000	
182	W	159	No Gas	98.091	ppb	2.0	131641.91	1000	
205	Tl	209	No Gas	99.030	ppb	2.0	297521.61	1000	
208	Pb	209	No Gas	98.497	ppb	2.7	411284.21	2000	
232	Th	209	No Gas	98.255	ppb	2.2	424314.85	1000	
238	U	209	No Gas	99.221	ppb	2.2	402209.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	883483.90	1.1	1023754.81	86.3	29.5	120.4	
Sc	45	No Gas	2644380.33	1.0	2927134.09	90.34	29.5	120.4	
Sc	45	H2	315160.65	0.6	374925.7	84.06	29.5	120.4	
Sc	45	He	63435.03	1.4	75429.93	84.1	29.5	120.4	
Ge	72	No Gas	666151.05	0.3	682196.39	97.65	29.5	120.4	
Ge	72	H2	123424.48	0.9	145757.5	84.68	29.5	120.4	
Ge	72	He	52396.41	0.9	59866.13	87.52	29.5	120.4	
Y	89	H2	2287609.17	0.1	2441196.5	93.71	29.5	120.4	
Y	89	He	470427.68	1.4	531537.69	88.5	29.5	120.4	
Tb	159	No Gas	8149543.28	1.4	7041897.33	115.73	29.5	120.4	
Tb	159	He	2858371.35	1.7	2795586.52	102.25	29.5	120.4	
Bi	209	No Gas	4478777.53	0.8	3760534.49	119.1	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 237SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:13:01 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.426	ppb	8.0	8977.51	100	
11	B	6	No Gas	497.209	ppb	7.1	60454.94	1000	
23	Na	45	He	7638.359	ppb	1.3	149865.61	200000	
24	Mg	45	He	5130.066	ppb	0.8	53904.45	200000	
27	Al	45	He	1890.672	ppb	1.4	7870.19	200000	
28	Si	45	H2	982.943	ppb	6.8	7967.76	10000	
39	K	45	He	9716.916	ppb	0.4	105483.40	200000	
40	Ca	45	H2	2593.098	ppb	5.9	193601.94	200000	
51	V	89	He	497.464	ppb	0.5	84106.50	1000	
52	Cr	89	He	202.109	ppb	0.5	42241.73	2000	
55	Mn	89	He	502.627	ppb	0.4	50522.66	2000	
56	Fe	89	H2	1035.543	ppb	5.5	350908.23	100000	
59	Co	89	He	517.692	ppb	0.5	186620.81	1000	
60	Ni	89	He	508.546	ppb	0.9	50526.59	1000	
63	Cu	89	He	256.767	ppb	0.4	71061.28	2000	
66	Zn	89	He	530.534	ppb	0.8	19787.97	2000	
75	As	89	He	100.503	ppb	1.7	3159.38	1000	
78	Se	89	H2	96.677	ppb	5.2	1616.19	1000	
88	Sr	89	He	488.666	ppb	0.3	78782.45	2000	
95	Mo	89	He	104.054	ppb	0.9	18961.46	1000	
107	Ag	89	He	54.533	ppb	0.8	34194.94	100	
111	Cd	89	He	265.084	ppb	0.2	21342.06	1000	
118	Sn	159	He	460.618	ppb	1.6	91448.00	1000	
121	Sb	159	No Gas	90.271	ppb	6.3	159493.98	1000	
137	Ba	159	No Gas	1815.683	ppb	7.2	1270293.28	2000	
182	W	159	No Gas	97.376	ppb	8.1	135408.62	1000	
205	Tl	209	No Gas	99.824	ppb	6.5	308337.82	1000	
208	Pb	209	No Gas	97.968	ppb	7.5	420489.38	2000	
232	Th	209	No Gas	98.678	ppb	7.0	438102.72	1000	
238	U	209	No Gas	97.878	ppb	8.4	407809.95	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	863235.10	3.2	1023754.81	84.32	29.5	120.4	
Sc	45	No Gas	2695722.03	2.4	2927134.09	92.09	29.5	120.4	
Sc	45	H2	310961.53	4.9	374925.7	82.94	29.5	120.4	
Sc	45	He	64056.37	1.3	75429.93	84.92	29.5	120.4	
Ge	72	No Gas	683279.68	2.3	682196.39	100.16	29.5	120.4	
Ge	72	H2	124651.01	2.9	145757.5	85.52	29.5	120.4	
Ge	72	He	53531.90	1.1	59866.13	89.42	29.5	120.4	
Y	89	H2	2285100.05	4.5	2441196.5	93.61	29.5	120.4	
Y	89	He	479997.53	0.4	531537.69	90.3	29.5	120.4	
Tb	159	No Gas	8454191.68	1.9	7041897.33	120.06	29.5	120.4	
Tb	159	He	2922432.25	1.0	2795586.52	104.54	29.5	120.4	
Bi	209	No Gas	4609307.22	2.2	3760534.49	122.57	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5946-001

File Name 238SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:15:34 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.293	ppb	28.1	72.22	100	
11	B	6	No Gas	627.734	ppb	5.5	72259.03	1000	
23	Na	45	He	149809.733	ppb	2.0	2703362.38	200000	
24	Mg	45	He	47542.012	ppb	2.3	477735.13	200000	
27	Al	45	He	12.008	ppb	29.3	76.67	200000	
28	Si	45	H2	9162.088	ppb	1.9	70561.65	10000	
39	K	45	He	1153.314	ppb	3.0	20205.16	200000	
40	Ca	45	H2	189589.312	ppb	0.6	14006812.15	200000	
51	V	89	He	3.528	ppb	4.8	737.83	1000	
52	Cr	89	He	0.494	ppb	8.9	157.30	2000	
55	Mn	89	He	871.537	ppb	1.0	84937.16	2000	
56	Fe	89	H2	5087.296	ppb	0.5	1698748.41	100000	
59	Co	89	He	0.247	ppb	32.7	115.57	1000	
60	Ni	89	He	-3.114	ppb	N/A	274.46	1000	
63	Cu	89	He	0.504	ppb	1.5	218.90	2000	
66	Zn	89	He	14.804	ppb	5.9	623.37	2000	
75	As	89	He	1.058	ppb	6.0	36.00	1000	
78	Se	89	H2	0.261	ppb	67.6	4.67	1000	
88	Sr	89	He	1836.011	ppb	1.0	287066.74	2000	
95	Mo	89	He	1.365	ppb	12.1	248.90	1000	
107	Ag	89	He	0.036	ppb	32.5	27.78	100	
111	Cd	89	He	0.052	ppb	16.5	4.07	1000	
118	Sn	159	He	1.872	ppb	13.7	422.24	1000	
121	Sb	159	No Gas	0.136	ppb	22.2	293.66	1000	
137	Ba	159	No Gas	122.692	ppb	5.2	84208.84	2000	
182	W	159	No Gas	0.332	ppb	12.9	503.91	1000	
205	Tl	209	No Gas	0.208	ppb	3.5	640.74	1000	
208	Pb	209	No Gas	0.134	ppb	23.0	677.44	2000	
232	Th	209	No Gas	1.990	ppb	15.3	8666.14	1000	
238	U	209	No Gas	0.796	ppb	5.1	3220.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	820457.69	1.8	1023754.81	80.14	29.5	120.4	
Sc	45	No Gas	2635735.72	0.7	2927134.09	90.04	29.5	120.4	
Sc	45	H2	308669.81	0.3	374925.7	82.33	29.5	120.4	
Sc	45	He	62085.90	2.3	75429.93	82.31	29.5	120.4	
Ge	72	No Gas	666925.77	1.7	682196.39	97.76	29.5	120.4	
Ge	72	H2	122847.30	0.9	145757.5	84.28	29.5	120.4	
Ge	72	He	52563.72	0.7	59866.13	87.8	29.5	120.4	
Y	89	H2	2278006.55	0.3	2441196.5	93.32	29.5	120.4	
Y	89	He	465533.84	0.9	531537.69	87.58	29.5	120.4	
Tb	159	No Gas	8284514.74	0.6	7041897.33	117.65	29.5	120.4	
Tb	159	He	2856901.59	0.8	2795586.52	102.19	29.5	120.4	
Bi	209	No Gas	4456703.32	1.0	3760534.49	118.51	29.5	120.4	

Sample Report

Sample Name SN6056-012

File Name 239SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:18:05 AM

Sample Type Sample

Total Dilution 50.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.472	ppb	31.3	103.34	100	
11	B	6	No Gas	217.229	ppb	3.7	3893.98	1000	
23	Na	45	He	2462.648	ppb	10.1	12786.56	200000	
24	Mg	45	He	34036.552	ppb	2.1	36528.46	200000	
27	Al	45	He	62993.250	ppb	2.4	26516.39	200000	
28	Si	45	H2	4219.139	ppb	2.5	3891.52	10000	
39	K	45	He	10598.201	ppb	6.2	20200.21	200000	
40	Ca	45	H2	48067.364	ppb	0.5	381811.67	200000	
51	V	89	He	134.957	ppb	2.6	2475.87	1000	
52	Cr	89	He	90.642	ppb	3.2	1977.12	2000	
55	Mn	89	He	1074.323	ppb	1.7	10971.60	2000	
56	Fe	89	H2	110246.139	ppb	1.5	3880313.04	100000	
59	Co	89	He	52.033	ppb	1.8	1931.38	1000	
60	Ni	89	He	96.455	ppb	8.3	1556.81	1000	
63	Cu	89	He	566.039	ppb	0.7	15946.22	2000	
66	Zn	89	He	1034.579	ppb	2.4	3987.38	2000	
75	As	89	He	61.922	ppb	8.8	201.03	1000	
78	Se	89	H2	2.178	ppb	27.5	4.17	1000	
88	Sr	89	He	94.665	ppb	4.5	1546.81	2000	
95	Mo	89	He	12.797	ppb	20.0	244.46	1000	
107	Ag	89	He	1.006	ppb	15.2	70.00	100	
111	Cd	89	He	2.543	ppb	31.3	20.74	1000	
118	Sn	159	He	70.132	ppb	5.6	1441.24	1000	
121	Sb	159	No Gas	87.106	ppb	4.4	15202.15	1000	
137	Ba	159	No Gas	312.891	ppb	5.3	21584.82	2000	
182	W	159	No Gas	0.892	ppb	65.7	173.53	1000	
205	Tl	209	No Gas	2.016	ppb	8.4	647.40	1000	
208	Pb	209	No Gas	11076.724	ppb	4.0	4784988.81	2000	
232	Th	209	No Gas	18.190	ppb	7.0	8241.98	1000	
238	U	209	No Gas	6.494	ppb	3.6	2736.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	853820.06	0.8	1023754.81	83.4	29.5	120.4	
Sc	45	No Gas	2715714.78	0.3	2927134.09	92.78	29.5	120.4	
Sc	45	H2	330985.41	1.2	374925.7	88.28	29.5	120.4	
Sc	45	He	64952.06	1.4	75429.93	86.11	29.5	120.4	
Ge	72	No Gas	676060.16	0.8	682196.39	99.1	29.5	120.4	
Ge	72	H2	130054.07	1.9	145757.5	89.23	29.5	120.4	
Ge	72	He	54546.33	0.5	59866.13	91.11	29.5	120.4	
Y	89	H2	2405875.14	1.6	2441196.5	98.55	29.5	120.4	
Y	89	He	486506.60	0.4	531537.69	91.53	29.5	120.4	
Tb	159	No Gas	8314937.72	0.2	7041897.33	118.08	29.5	120.4	
Tb	159	He	2901381.35	0.6	2795586.52	103.78	29.5	120.4	
Bi	209	No Gas	4636087.59	0.5	3760534.49	123.28	29.5	120.4	6020/DoD

Sample Report

Sample Name SN6056-017

File Name 240SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:20:41 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.385	ppb	63.5	87.78	100	
11	B	6	No Gas	16.684	ppb	13.7	3226.02	1000	
23	Na	45	He	311.334	ppb	9.5	13421.17	200000	
24	Mg	45	He	1281.467	ppb	1.7	13647.39	200000	
27	Al	45	He	9080.565	ppb	0.8	36586.65	200000	
28	Si	45	H2	3269.473	ppb	2.2	25721.84	10000	
39	K	45	He	762.661	ppb	4.6	16490.51	200000	
40	Ca	45	H2	13267.222	ppb	1.1	992089.75	200000	
51	V	89	He	19.427	ppb	4.9	3366.08	1000	
52	Cr	89	He	11.686	ppb	1.6	2441.78	2000	
55	Mn	89	He	178.422	ppb	0.9	17552.40	2000	
56	Fe	89	H2	5692.048	ppb	2.4	1922982.52	100000	
59	Co	89	He	2.427	ppb	3.2	884.54	1000	
60	Ni	89	He	11.311	ppb	9.2	1661.27	1000	
63	Cu	89	He	27.298	ppb	1.7	7460.03	2000	
66	Zn	89	He	147.670	ppb	1.2	5450.14	2000	
75	As	89	He	3.460	ppb	2.0	110.01	1000	
78	Se	89	H2	1.985	ppb	15.5	33.83	1000	
88	Sr	89	He	26.250	ppb	2.9	4137.44	2000	
95	Mo	89	He	2.620	ppb	6.6	474.47	1000	
107	Ag	89	He	0.342	ppb	0.4	215.57	100	
111	Cd	89	He	2.084	ppb	6.8	164.07	1000	
118	Sn	159	He	48.683	ppb	2.6	9575.97	1000	
121	Sb	159	No Gas	0.718	ppb	23.6	1251.45	1000	
137	Ba	159	No Gas	90.169	ppb	15.7	59684.03	2000	
182	W	159	No Gas	0.418	ppb	32.9	594.01	1000	
205	Tl	209	No Gas	0.401	ppb	18.4	1228.11	1000	
208	Pb	209	No Gas	97.353	ppb	14.9	407183.58	2000	
232	Th	209	No Gas	2.921	ppb	14.2	12754.20	1000	
238	U	209	No Gas	0.851	ppb	19.2	3454.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	838231.35	8.4	1023754.81	81.88	29.5	120.4	
Sc	45	No Gas	2579097.24	10.3	2927134.09	88.11	29.5	120.4	
Sc	45	H2	312122.91	0.3	374925.7	83.25	29.5	120.4	
Sc	45	He	62185.84	1.3	75429.93	82.44	29.5	120.4	
Ge	72	No Gas	660302.74	9.0	682196.39	96.79	29.5	120.4	
Ge	72	H2	123794.15	1.2	145757.5	84.93	29.5	120.4	
Ge	72	He	52210.13	0.9	59866.13	87.21	29.5	120.4	
Y	89	H2	2306004.93	1.2	2441196.5	94.46	29.5	120.4	
Y	89	He	469211.75	0.8	531537.69	88.27	29.5	120.4	
Tb	159	No Gas	8071452.17	10.4	7041897.33	114.62	29.5	120.4	
Tb	159	He	2879937.84	1.6	2795586.52	103.02	29.5	120.4	
Bi	209	No Gas	4531514.32	10.2	3760534.49	120.5	29.5	120.4	6020/DoD

Sample Report

Sample Name SN5717-020R

File Name 241SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b

Acq Time 7/30/2020 3:23:13 AM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Fail

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.022	ppb	221.9	24.44	100	
11	B	6	No Gas	5.785	ppb	17.5	1950.21	1000	
23	Na	45	He	358.178	ppb	2.4	14333.02	200000	
24	Mg	45	He	17.666	ppb	5.0	946.77	200000	
27	Al	45	He	119.330	ppb	6.0	511.14	200000	
28	Si	45	H2	132.556	ppb	8.9	1455.04	10000	
39	K	45	He	49.143	ppb	37.3	9695.65	200000	
40	Ca	45	H2	95.083	ppb	1.2	8234.90	200000	
51	V	89	He	2.950	ppb	11.2	650.04	1000	
52	Cr	89	He	0.586	ppb	13.7	177.97	2000	
55	Mn	89	He	3.906	ppb	7.3	417.27	2000	
56	Fe	89	H2	118.175	ppb	2.1	46529.00	100000	
59	Co	89	He	0.068	ppb	87.0	53.34	1000	
60	Ni	89	He	-3.109	ppb	N/A	277.79	1000	
63	Cu	89	He	1.064	ppb	13.6	373.35	2000	
66	Zn	89	He	7.613	ppb	27.7	367.80	2000	
75	As	89	He	0.243	ppb	26.3	11.33	1000	
78	Se	89	H2	0.097	ppb	78.6	2.00	1000	
88	Sr	89	He	0.513	ppb	0.6	81.11	2000	
95	Mo	89	He	0.130	ppb	43.4	31.11	1000	
107	Ag	89	He	0.021	ppb	75.8	18.89	100	
111	Cd	89	He	0.028	ppb	48.5	2.22	1000	
118	Sn	159	He	0.539	ppb	21.5	164.45	1000	
121	Sb	159	No Gas	0.076	ppb	21.8	193.55	1000	
137	Ba	159	No Gas	0.938	ppb	12.4	687.45	2000	
182	W	159	No Gas	0.042	ppb	73.1	110.12	1000	
205	Tl	209	No Gas	0.017	ppb	88.9	73.41	1000	
208	Pb	209	No Gas	3.633	ppb	7.2	15821.48	2000	
232	Th	209	No Gas	0.147	ppb	14.9	770.90	1000	
238	U	209	No Gas	0.009	ppb	69.9	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	825664.08	2.1	1023754.81	80.65	29.5	120.4	
Sc	45	No Gas	2638724.62	1.6	2927134.09	90.15	29.5	120.4	
Sc	45	H2	317792.09	0.4	374925.7	84.76	29.5	120.4	
Sc	45	He	62502.24	1.6	75429.93	82.86	29.5	120.4	
Ge	72	No Gas	673853.26	1.5	682196.39	98.78	29.5	120.4	
Ge	72	H2	123769.87	0.2	145757.5	84.91	29.5	120.4	
Ge	72	He	52688.99	2.1	59866.13	88.01	29.5	120.4	
Y	89	H2	2349824.66	0.4	2441196.5	96.26	29.5	120.4	
Y	89	He	470798.20	1.9	531537.69	88.57	29.5	120.4	
Tb	159	No Gas	8389304.67	0.9	7041897.33	119.13	29.5	120.4	
Tb	159	He	2873807.84	1.6	2795586.52	102.8	29.5	120.4	
Bi	209	No Gas	4638167.74	1.5	3760534.49	123.34	29.5	120.4	6020/DoD

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	242_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 3:25:43 AM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.550	ppb	5.1	22137.55	25	98.2	89.8	110.2	
11	B	6	No Gas	25.065	ppb	4.9	15824.67	25	100.26	89.8	110.2	
23	Na	45	He	5130.084	ppb	1.4	487261.47	5000	102.6	89.8	110.2	
24	Mg	45	He	4937.135	ppb	1.3	257932.49	5000	98.74	89.8	110.2	
27	Al	45	He	471.040	ppb	3.9	9854.82	500	94.21	89.8	110.2	
28	Si	45	H2	446.791	ppb	1.8	18315.45	500	89.36	89.8	110.2	> +/- 10%
39	K	45	He	4751.877	ppb	1.5	245731.97	5000	95.04	89.8	110.2	
40	Ca	45	H2	4770.937	ppb	1.9	1844599.75	5000	95.42	89.8	110.2	
51	V	89	He	23.797	ppb	2.4	20055.97	25	95.19	89.8	110.2	
52	Cr	89	He	24.157	ppb	2.8	25034.88	25	96.63	89.8	110.2	
55	Mn	89	He	23.984	ppb	0.3	11968.91	25	95.94	89.8	110.2	
56	Fe	89	H2	4596.941	ppb	2.3	7871633.96	5000	91.94	89.8	110.2	
59	Co	89	He	24.410	ppb	0.5	43619.38	25	97.64	89.8	110.2	
60	Ni	89	He	23.086	ppb	3.5	11814.24	25	92.34	89.8	110.2	
63	Cu	89	He	24.242	ppb	1.0	33283.80	25	96.97	89.8	110.2	
66	Zn	89	He	24.606	ppb	2.7	4617.60	25	98.42	89.8	110.2	
75	As	89	He	23.822	ppb	2.2	3709.58	25	95.29	89.8	110.2	
78	Se	89	H2	23.143	ppb	1.3	1986.39	25	92.57	89.8	110.2	
88	Sr	89	He	23.550	ppb	1.9	18809.06	25	94.2	89.8	110.2	
95	Mo	89	He	24.412	ppb	2.7	22036.19	25	97.65	89.8	110.2	
107	Ag	89	He	25.651	ppb	1.1	79682.65	25	102.6	89.8	110.2	
111	Cd	89	He	25.703	ppb	1.4	10252.11	25	102.81	89.8	110.2	
118	Sn	159	He	22.548	ppb	1.4	21974.13	25	90.19	89.8	110.2	
121	Sb	159	No Gas	22.520	ppb	5.9	191545.31	25	90.08	89.8	110.2	
137	Ba	159	No Gas	22.769	ppb	6.9	76722.79	25	91.08	89.8	110.2	
182	W	159	No Gas	23.636	ppb	4.5	158315.82	25	94.54	89.8	110.2	
205	Tl	209	No Gas	23.967	ppb	6.5	359014.72	25	95.87	89.8	110.2	
208	Pb	209	No Gas	23.965	ppb	5.1	499012.73	25	95.86	89.8	110.2	
232	Th	209	No Gas	23.509	ppb	6.4	506254.33	25	94.04	89.8	110.2	
238	U	209	No Gas	24.227	ppb	6.1	489743.68	25	96.91	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	839898.58	1.7	1023754.81	82.04	29.5	120.4	
Sc	45	No Gas	2684406.39	3.1	2927134.09	91.71	29.5	120.4	
Sc	45	H2	322992.87	2.0	374925.7	86.15	29.5	120.4	
Sc	45	He	64442.40	0.6	75429.93	85.43	29.5	120.4	
Ge	72	No Gas	669353.77	3.1	682196.39	98.12	29.5	120.4	
Ge	72	H2	127816.59	1.9	145757.5	87.69	29.5	120.4	
Ge	72	He	53601.78	0.4	59866.13	89.54	29.5	120.4	
Y	89	H2	2343102.81	1.5	2441196.5	95.98	29.5	120.4	
Y	89	He	475621.45	0.7	531537.69	89.48	29.5	120.4	
Tb	159	No Gas	8142778.14	3.0	7041897.33	115.63	29.5	120.4	
Tb	159	He	2863144.64	0.8	2795586.52	102.42	29.5	120.4	
Bi	209	No Gas	4472240.41	3.0	3760534.49	118.93	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	243_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG29A.b
Acq Time	7/30/2020 3:28:17 AM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.073	ppb	13.6	93.34	0.2	
11	B	6	No Gas	0.924	ppb	15.7	1982.43	4	
23	Na	45	He	11.177	ppb	51.5	9209.89	200	
24	Mg	45	He	-4.809	ppb	N/A	546.72	20	
27	Al	45	He	-0.618	ppb	N/A	16.67	20	
28	Si	45	H2	-0.115	ppb	N/A	410.47	100	
39	K	45	He	-11.130	ppb	N/A	9033.84	200	
40	Ca	45	H2	2.190	ppb	13.6	1859.08	20	
51	V	89	He	-0.006	ppb	N/A	160.01	1	
52	Cr	89	He	-0.007	ppb	N/A	51.32	1	
55	Mn	89	He	-0.011	ppb	N/A	27.33	0.4	
56	Fe	89	H2	1.533	ppb	9.2	8461.92	20	
59	Co	89	He	-0.003	ppb	N/A	24.45	0.2	
60	Ni	89	He	-0.915	ppb	N/A	138.90	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.005	ppb	294.6	93.33	0.6	
66	Zn	89	He	-0.274	ppb	N/A	42.22	2	
75	As	89	He	-0.004	ppb	N/A	3.33	1	
78	Se	89	H2	0.067	ppb	17.4	6.00	1	
88	Sr	89	He	0.024	ppb	27.8	18.89	1	
95	Mo	89	He	0.104	ppb	27.3	102.23	1	
107	Ag	89	He	0.005	ppb	43.4	22.22	0.2	
111	Cd	89	He	0.005	ppb	68.0	1.85	0.2	
118	Sn	159	He	0.135	ppb	9.1	190.01	1	
121	Sb	159	No Gas	0.027	ppb	15.3	280.32	0.2	
137	Ba	159	No Gas	0.031	ppb	55.8	133.48	0.4	
182	W	159	No Gas	0.110	ppb	9.0	760.89	1	
205	Tl	209	No Gas	0.048	ppb	12.7	717.48	0.2	
208	Pb	209	No Gas	0.037	ppb	17.7	867.65	0.2	
232	Th	209	No Gas	0.196	ppb	13.2	4195.41	1	
238	U	209	No Gas	0.036	ppb	31.6	717.49	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	900426.09	1.2	1023754.81	87.95	29.5	120.4	
Sc	45	No Gas	2677258.62	2.0	2927134.09	91.46	29.5	120.4	
Sc	45	H2	321921.68	1.4	374925.7	85.86	29.5	120.4	
Sc	45	He	65043.80	2.1	75429.93	86.23	29.5	120.4	
Ge	72	No Gas	655705.70	1.5	682196.39	96.12	29.5	120.4	
Ge	72	H2	126863.09	1.6	145757.5	87.04	29.5	120.4	
Ge	72	He	54053.40	0.9	59866.13	90.29	29.5	120.4	
Y	89	H2	2315032.92	1.3	2441196.5	94.83	29.5	120.4	
Y	89	He	478380.68	1.3	531537.69	90	29.5	120.4	
Tb	159	No Gas	7871212.66	2.1	7041897.33	111.78	29.5	120.4	
Tb	159	He	2857341.14	1.8	2795586.52	102.21	29.5	120.4	
Bi	209	No Gas	4342009.41	1.5	3760534.49	115.46	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP **ANALYSIS DATE**: 7/30/2020

METHOD: **ICP-MS** **FILE NAME**: LNG30A

☑ 200.8
☑ 6020
☑ DOD

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19502	07/21/20	07/21/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19522	07/30/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (16:35) fails high for Sb (0.241 ug/L) Ni (0.54 ug/L) Zn (2.689 ug/L)

Closing PQL (3:52) fails low for Ni and high for Na (775.483 ug/L) Zn (2.935 ug/L)

CCBs fail low at concentrations no less this for Ni (-2.414 ug/L)

CCBs fail high at concentrations no greater than these for Be (0.119 ug/L) Ca (10.278 ug/L) Na (121.005 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations. Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19502 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19502 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

REVIEWED
CD 7-31-20
KATAHDIN ANALYTICAL
METALS SECTION

Katahdin Analytical Services 4001126

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNG30A	07/30/2020	16:19	AP
CalStd	1	LNG30A	07/30/2020	16:22	AP
ICV	1	LNG30A	07/30/2020	16:30	AP
ICB	1	LNG30A	07/30/2020	16:33	AP
PQL	1	LNG30A	07/30/2020	16:35	AP
ICSA	1	LNG30A	07/30/2020	16:38	AP
ICSAB	1	LNG30A	07/30/2020	16:41	AP
LRS1	1	LNG30A	07/30/2020	16:44	AP
LRS2	1	LNG30A	07/30/2020	16:46	AP
RINSE	1	LNG30A	07/30/2020	16:49	AP
RINSE	1	LNG30A	07/30/2020	16:51	AP
CCV	1	LNG30A	07/30/2020	16:54	AP
CCB	1	LNG30A	07/30/2020	16:57	AP
SN5107-017	5	LNG30A	07/30/2020	16:59	AP
SN5107-017L	25	LNG30A	07/30/2020	17:02	AP
SN5107-017A	5	LNG30A	07/30/2020	17:05	AP
SN5107-017R	5	LNG30A	07/30/2020	17:07	AP
SN5107-017RL	25	LNG30A	07/30/2020	17:10	AP
SN5107-017RA	5	LNG30A	07/30/2020	17:13	AP
SN5107-017S	5	LNG30A	07/30/2020	17:15	AP
SN5107-017P	5	LNG30A	07/30/2020	17:18	AP
SN6056-021	5	LNG30A	07/30/2020	17:21	AP
SN6056-022	5	LNG30A	07/30/2020	17:23	AP
CCV	1	LNG30A	07/30/2020	17:26	AP
CCB	1	LNG30A	07/30/2020	17:28	AP
PBWNG21IMW2	5	LNG30A	07/30/2020	17:31	AP
LCSWNG21IMW2	5	LNG30A	07/30/2020	17:34	AP
SN5717-020	5	LNG30A	07/30/2020	17:36	AP
SN5830-002	5	LNG30A	07/30/2020	17:39	AP
SN5832-001	5	LNG30A	07/30/2020	17:42	AP
SN5832-002	5	LNG30A	07/30/2020	17:44	AP
SN5832-003	5	LNG30A	07/30/2020	17:47	AP
SN5832-004	5	LNG30A	07/30/2020	17:50	AP
SN5897-001	5	LNG30A	07/30/2020	17:52	AP
SN5897-002	5	LNG30A	07/30/2020	17:55	AP
CCV	1	LNG30A	07/30/2020	17:57	AP
CCB	1	LNG30A	07/30/2020	18:00	AP
SN5897-002L	25	LNG30A	07/30/2020	18:03	AP
SN5897-002A	5	LNG30A	07/30/2020	18:05	AP
SN5897-002S	5	LNG30A	07/30/2020	18:08	AP
SN5897-002P	5	LNG30A	07/30/2020	18:10	AP
SN5946-001	5	LNG30A	07/30/2020	18:13	AP
SN6056-012	50	LNG30A	07/30/2020	18:16	AP
SN5717-020R	5	LNG30A	07/30/2020	18:18	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5830-002R	5	LNG30A	07/30/2020	18:21	AP
SN5832-001R	5	LNG30A	07/30/2020	18:23	AP
SN5832-002R	5	LNG30A	07/30/2020	18:26	AP
CCV	1	LNG30A	07/30/2020	18:29	AP
CCB	1	LNG30A	07/30/2020	18:31	AP
SN5832-003R	5	LNG30A	07/30/2020	18:34	AP
SN5832-004R	5	LNG30A	07/30/2020	18:37	AP
SN5897-001R	5	LNG30A	07/30/2020	18:39	AP
PBWNG23IMW1	1	LNG30A	07/30/2020	18:42	AP
LCSWNG23IMW1	5	LNG30A	07/30/2020	18:45	AP
SN5815-002	1	LNG30A	07/30/2020	18:47	AP
SN5815-002	10	LNG30A	07/30/2020	18:50	AP
SN5815-007	10	LNG30A	07/30/2020	18:53	AP
SN5815-014	10	LNG30A	07/30/2020	18:55	AP
SN6071-001	1	LNG30A	07/30/2020	18:58	AP
CCV	1	LNG30A	07/30/2020	19:00	AP
CCB	1	LNG30A	07/30/2020	19:03	AP
PBWNG23IMW2	5	LNG30A	07/30/2020	19:06	AP
LCSWNG23IMW2	5	LNG30A	07/30/2020	19:08	AP
SN5815-004	5	LNG30A	07/30/2020	19:11	AP
SN5815-004	25	LNG30A	07/30/2020	19:14	AP
SN5815-016	5	LNG30A	07/30/2020	19:16	AP
SN5815-016	25	LNG30A	07/30/2020	19:19	AP
SN6059-001	5	LNG30A	07/30/2020	19:22	AP
SN6059-001L	25	LNG30A	07/30/2020	19:24	AP
SN6059-001A	5	LNG30A	07/30/2020	19:27	AP
SN6059-001S	5	LNG30A	07/30/2020	19:29	AP
CCV	1	LNG30A	07/30/2020	19:32	AP
CCB	1	LNG30A	07/30/2020	19:34	AP
SN6059-001P	5	LNG30A	07/30/2020	19:37	AP
SN6059-002	5	LNG30A	07/30/2020	19:40	AP
SN6059-003	5	LNG30A	07/30/2020	19:42	AP
SN6090-001	5	LNG30A	07/30/2020	19:45	AP
PBSNG28IMS1	5	LNG30A	07/30/2020	19:48	AP
LCSONG28IMS1	5	LNG30A	07/30/2020	19:50	AP
SN6056-001	5	LNG30A	07/30/2020	19:53	AP
SN6056-002	5	LNG30A	07/30/2020	19:56	AP
SN6056-003	5	LNG30A	07/30/2020	19:59	AP
PBWNG29IMW2	5	LNG30A	07/30/2020	20:01	AP
CCV	1	LNG30A	07/30/2020	20:04	AP
CCB	1	LNG30A	07/30/2020	20:07	AP
LCSWNG29IMW2	5	LNG30A	07/30/2020	20:09	AP
SN6056-004	5	LNG30A	07/30/2020	20:12	AP
SN6061-002	5	LNG30A	07/30/2020	20:14	AP
SN6054-006	10	LNG30A	07/30/2020	20:17	AP
SN6054-006	25	LNG30A	07/30/2020	20:20	AP
SN6054-007	25	LNG30A	07/30/2020	20:22	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN6054-008	25	LNG30A	07/30/2020	20:25	AP
SN6054-009	25	LNG30A	07/30/2020	20:28	AP
SN6054-010	25	LNG30A	07/30/2020	20:30	AP
SN6054-011	25	LNG30A	07/30/2020	20:33	AP
CCV	1	LNG30A	07/30/2020	20:36	AP
CCB	1	LNG30A	07/30/2020	20:38	AP
SN6054-012L	50	LNG30A	07/30/2020	20:41	AP
SN6054-012	25	LNG30A	07/30/2020	20:44	AP
SN6054-012S	25	LNG30A	07/30/2020	20:46	AP
SN6054-012P	25	LNG30A	07/30/2020	20:49	AP
SN6054-013	25	LNG30A	07/30/2020	20:52	AP
SN6032-001	5	LNG30A	07/30/2020	20:54	AP
rinse	11	LNG30A	07/30/2020	20:57	AP
rinse	1	LNG30A	07/30/2020	21:00	AP
rinse	1	LNG30A	07/30/2020	21:02	AP
rinse	1	LNG30A	07/30/2020	21:05	AP
CCV	1	LNG30A	07/30/2020	21:08	AP
CCB	1	LNG30A	07/30/2020	21:10	AP
CCV	1	LNG30A	07/30/2020	21:13	AP
CCB	1	LNG30A	07/30/2020	21:16	AP
PQL	1	LNG30A	07/30/2020	21:18	AP
RINSE	1	LNG30A	07/30/2020	21:21	AP
RINSE	1	LNG30A	07/30/2020	21:24	AP

US EPA Tune Check Report

Acq/Date Batch	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq. Date-Time	7/30/2020 3:58:05 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

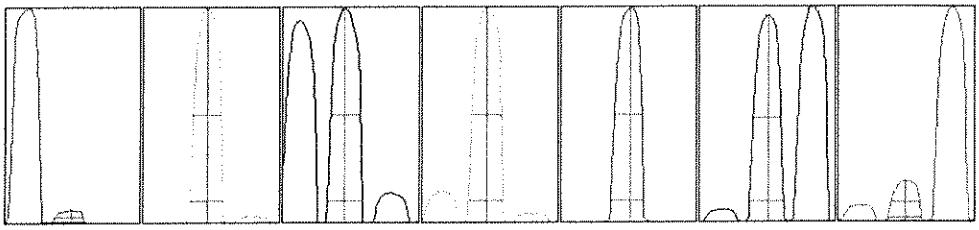
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	2681	26808.89	0.418	5.000	
9	1044	10439.15	0.163	5.000	
24	47134	471341.59	0.367	5.000	
59	8651	86505.87	0.434	5.000	
115	155848	1558480.31	0.253	5.000	
205	10103	101028.09	0.412	5.000	
208	22352	223524.34	0.353	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2691	2667	2670	2687	2689
9	1044	1046	1045	1043	1042
24	46880	47141	47114	47170	47366
59	8617	8633	8642	8714	8647
115	155206	155784	156023	155985	156243
205	10056	10064	10113	10154	10127
208	22253	22292	22372	22398	22447

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4523.74	7.00	6.90 - 7.10	
9	1743.36	8.95	8.90 - 9.10	
24	74394.64	23.90	23.90 - 24.10	
59	13713.23	58.95	58.90 - 59.10	
115	262497.70	115.05	114.90 - 115.10	
205	16879.65	205.05	204.90 - 205.10	
208	37087.67	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.62	0.695	0.900	
9	0.62	0.728	0.900	
24	0.67	0.772	0.900	
59	0.66	0.764	0.900	
115	0.62	0.727	0.900	
205	0.62	0.764	0.900	
208	0.63	0.735	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	12.4 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-55 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	480	4804.18	1.304	5.000	
89	77304	773042.25	1.381	5.000	
205	8265	82653.63	1.165	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	474	481	489	475	482
89	75638	77224	77840	77294	78526
205	8148	8256	8291	8223	8409

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	1.6 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	1566	15656.50	1.314	5.000	
89	15722	157216.05	0.665	5.000	
205	4648	46477.92	0.877	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	1549	1550	1553	1589	1588
89	15655	15613	15675	15819	15847
205	4590	4632	4646	4675	4696

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	0.99 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	1.2 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-55 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.4 mV	Analog HV	2427 V	Pulse HV	1192 V

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	010_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:30:29 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.708	ppb	2.9	27529.10	20	103.54	89.6	110.4	
11	B	6	No Gas	18.871	ppb	3.2	18254.28	20	94.35	89.6	110.4	
23	Na	45	He	4111.215	ppb	4.0	469380.50	4000	102.78	89.6	110.4	
24	Mg	45	He	4031.243	ppb	3.4	250513.73	4000	100.78	89.6	110.4	
27	Al	45	He	381.148	ppb	5.5	9330.02	400	95.29	89.6	110.4	
28	Si	45	H2	415.514	ppb	3.1	20393.85	400	103.88	89.6	110.4	
39	K	45	He	3996.978	ppb	3.1	236907.39	4000	99.92	89.6	110.4	
40	Ca	45	H2	3952.142	ppb	0.3	1737888.69	4000	98.8	89.6	110.4	
51	V	89	He	20.700	ppb	5.3	18246.79	20	103.5	89.6	110.4	
52	Cr	89	He	21.164	ppb	2.7	22503.07	20	105.82	89.6	110.4	
55	Mn	89	He	21.399	ppb	2.6	10680.79	20	106.99	89.6	110.4	
56	Fe	89	H2	3914.756	ppb	0.9	6715509.34	4000	97.87	89.6	110.4	
59	Co	89	He	21.138	ppb	3.6	38269.96	20	105.69	89.6	110.4	
60	Ni	89	He	21.082	ppb	2.2	11848.76	20	105.41	89.6	110.4	
63	Cu	89	He	20.994	ppb	4.1	29250.18	20	104.97	89.6	110.4	
66	Zn	89	He	21.800	ppb	6.0	4021.83	20	109	89.6	110.4	
75	As	89	He	20.868	ppb	3.8	3201.39	20	104.34	89.6	110.4	
78	Se	89	H2	20.241	ppb	1.3	1654.86	20	101.2	89.6	110.4	
88	Sr	89	He	20.340	ppb	3.8	15762.88	20	101.7	89.6	110.4	
95	Mo	89	He	41.407	ppb	4.0	35772.01	40	103.52	89.6	110.4	
107	Ag	89	He	21.371	ppb	4.2	62489.68	20	106.85	89.6	110.4	
111	Cd	89	He	20.983	ppb	4.4	7879.41	20	104.92	89.6	110.4	
118	Sn	159	He	20.407	ppb	4.3	16995.70	20	102.04	89.6	110.4	
121	Sb	159	No Gas	20.820	ppb	2.2	137959.35	20	104.1	89.6	110.4	
137	Ba	159	No Gas	21.089	ppb	2.8	55527.56	20	105.44	89.6	110.4	
182	W	159	No Gas	20.326	ppb	2.8	102003.58	20	101.63	89.6	110.4	
205	Tl	209	No Gas	21.708	ppb	2.6	234252.25	20	108.54	89.6	110.4	
208	Pb	209	No Gas	20.854	ppb	1.4	313370.36	20	104.27	89.6	110.4	
232	Th	209	No Gas	20.706	ppb	2.4	314232.34	20	103.53	89.6	110.4	
238	U	209	No Gas	20.512	ppb	2.4	291922.51	20	102.56	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1374068.33	0.2	1419082.7	96.83	29.5	120.4	
Sc	45	No Gas	3022194.19	1.0	3146924.08	96.04	29.5	120.4	
Sc	45	H2	380255.44	0.8	384460.42	98.91	29.5	120.4	
Sc	45	He	72876.45	2.9	75345.71	96.72	29.5	120.4	
Ge	72	No Gas	666653.45	0.7	687904.62	96.91	29.5	120.4	
Ge	72	H2	138706.11	1.4	138854.33	99.89	29.5	120.4	
Ge	72	He	54915.47	2.3	57203.55	96	29.5	120.4	
Y	89	H2	2383573.67	0.9	2377183.3	100.27	29.5	120.4	
Y	89	He	475557.29	3.4	498269.57	95.44	29.5	120.4	
Tb	159	No Gas	6492818.72	1.2	6611594.34	98.2	29.5	120.4	
Tb	159	He	2485379.22	3.6	2564694.13	96.91	29.5	120.4	
Bi	209	No Gas	3334924.78	1.1	3381664.78	98.62	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	011_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:33:12 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.087	ppb	19.5	175.57	0.2	
11	B	6	No Gas	0.550	ppb	33.4	2486.98	4	
23	Na	45	He	-0.943	ppb	N/A	8986.14	200	
24	Mg	45	He	-1.388	ppb	N/A	851.20	20	
27	Al	45	He	-0.036	ppb	N/A	12.22	20	
28	Si	45	H2	0.528	ppb	155.6	540.62	100	
39	K	45	He	-4.803	ppb	N/A	10966.00	200	
40	Ca	45	H2	1.226	ppb	24.4	1895.75	20	
51	V	89	He	-0.105	ppb	N/A	161.12	1	
52	Cr	89	He	-0.004	ppb	N/A	63.32	1	
55	Mn	89	He	0.038	ppb	7.1	74.66	0.4	
56	Fe	89	H2	3.508	ppb	13.6	16094.12	20	
59	Co	89	He	-0.002	ppb	N/A	60.01	0.2	
60	Ni	89	He	-0.058	ppb	N/A	1451.24	0.4	
63	Cu	89	He	-0.003	ppb	N/A	87.78	0.6	
66	Zn	89	He	0.182	ppb	82.6	76.67	2	
75	As	89	He	-0.012	ppb	N/A	3.00	1	
78	Se	89	H2	0.033	ppb	37.2	3.33	1	
88	Sr	89	He	0.007	ppb	89.9	12.22	1	
95	Mo	89	He	0.171	ppb	15.4	158.90	1	
107	Ag	89	He	0.006	ppb	28.6	25.56	0.2	
111	Cd	89	He	0.004	ppb	155.5	1.85	0.2	
118	Sn	159	He	0.079	ppb	16.8	125.56	1	
121	Sb	159	No Gas	0.027	ppb	48.1	230.26	0.2	
137	Ba	159	No Gas	0.020	ppb	59.0	63.41	0.4	
182	W	159	No Gas	0.076	ppb	23.0	413.81	1	
205	Tl	209	No Gas	0.017	ppb	29.4	440.50	0.2	
208	Pb	209	No Gas	0.010	ppb	19.5	440.50	0.2	
232	Th	209	No Gas	0.052	ppb	19.0	904.38	1	
238	U	209	No Gas	0.023	ppb	27.2	333.72	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1399848.16	0.4	1419082.7	98.64	29.5	120.4	
Sc	45	No Gas	3077466.11	0.8	3146924.08	97.79	29.5	120.4	
Sc	45	H2	375947.08	1.0	384460.42	97.79	29.5	120.4	
Sc	45	He	73807.34	0.9	75345.71	97.96	29.5	120.4	
Ge	72	No Gas	675485.60	1.2	687904.62	98.19	29.5	120.4	
Ge	72	H2	135719.54	1.5	138854.33	97.74	29.5	120.4	
Ge	72	He	56075.01	0.2	57203.55	98.03	29.5	120.4	
Y	89	H2	2354767.21	1.4	2377183.3	99.06	29.5	120.4	
Y	89	He	488983.05	0.4	498269.57	98.14	29.5	120.4	
Tb	159	No Gas	6580139.62	1.1	6611594.34	99.52	29.5	120.4	
Tb	159	He	2547637.71	0.4	2564694.13	99.33	29.5	120.4	
Bi	209	No Gas	3384628.75	0.8	3381664.78	100.09	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	012LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:35:51 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.240	ppb	12.2	385.58	0.2	120	79.5	120.4
11	B	6	No Gas	4.054	ppb	6.1	5616.86	4	101.35	79.5	120.4
23	Na	45	He	207.919	ppb	1.3	33047.96	200	103.96	79.5	120.4
24	Mg	45	He	22.502	ppb	5.6	2375.93	20	112.51	79.5	120.4
27	Al	45	He	19.969	ppb	10.7	513.36	20	99.84	79.5	120.4
28	Si	45	H2	102.287	ppb	2.2	5366.91	100	102.29	79.5	120.4
39	K	45	He	199.857	ppb	3.7	22929.73	200	99.93	79.5	120.4
40	Ca	45	H2	22.961	ppb	2.5	11371.59	20	114.8	79.5	120.4
51	V	89	He	0.939	ppb	5.3	1106.75	1	93.9	79.5	120.4
52	Cr	89	He	1.066	ppb	2.9	1242.50	1	106.6	79.5	120.4
55	Mn	89	He	0.481	ppb	13.3	303.95	0.4	120.25	79.5	120.4
56	Fe	89	H2	23.677	ppb	1.5	50366.18	20	118.38	79.5	120.4
59	Co	89	He	0.211	ppb	13.0	460.04	0.2	105.5	79.5	120.4
60	Ni	89	He	0.540	ppb	6.6	1772.40	0.4	135	79.5	120.4
63	Cu	89	He	0.619	ppb	4.0	987.85	0.6	103.17	79.5	120.4
66	Zn	89	He	2.689	ppb	10.6	553.36	2	134.45	79.5	120.4
75	As	89	He	1.009	ppb	3.1	165.69	1	100.9	79.5	120.4
78	Se	89	H2	1.030	ppb	8.0	84.00	1	103	79.5	120.4
88	Sr	89	He	0.981	ppb	11.1	796.72	1	98.1	79.5	120.4
95	Mo	89	He	1.066	ppb	8.2	964.52	1	106.6	79.5	120.4
107	Ag	89	He	0.213	ppb	7.8	654.49	0.2	106.5	79.5	120.4
111	Cd	89	He	0.234	ppb	1.6	91.85	0.2	117	79.5	120.4
118	Sn	159	He	1.022	ppb	3.8	928.96	1	102.2	79.5	120.4
121	Sb	159	No Gas	0.241	ppb	7.7	1681.99	0.2	120.5	79.5	120.4
137	Ba	159	No Gas	0.413	ppb	8.4	1121.30	0.4	103.25	79.5	120.4
182	W	159	No Gas	1.028	ppb	7.3	5296.93	1	102.8	79.5	120.4
205	Tl	209	No Gas	0.211	ppb	8.8	2579.81	0.2	105.5	79.5	120.4
208	Pb	209	No Gas	0.215	ppb	4.5	3587.57	0.2	107.5	79.5	120.4
232	Th	209	No Gas	0.203	ppb	6.0	3250.72	0.2	101.5	79.5	120.4
238	U	209	No Gas	0.211	ppb	9.3	3073.85	0.2	105.5	79.5	120.4

QC Flag

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA
Failed DoD □ Failed 6020/EPA
Failed DoD

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1412334.98	0.0	1419082.7	99.52	29.5	120.4	
Sc	45	No Gas	3134610.57	1.2	3146924.08	99.61	29.5	120.4	
Sc	45	H2	377001.38	1.3	384460.42	98.06	29.5	120.4	
Sc	45	He	74608.13	0.3	75345.71	99.02	29.5	120.4	
Ge	72	No Gas	682154.83	0.8	687904.62	99.16	29.5	120.4	
Ge	72	H2	138061.76	0.7	138854.33	99.43	29.5	120.4	
Ge	72	He	56608.63	0.2	57203.55	98.96	29.5	120.4	
Y	89	H2	2360910.98	0.7	2377183.3	99.32	29.5	120.4	
Y	89	He	493922.49	0.9	498269.57	99.13	29.5	120.4	
Tb	159	No Gas	6632921.78	1.3	6611594.34	100.32	29.5	120.4	
Tb	159	He	2548416.96	0.5	2564694.13	99.37	29.5	120.4	
Bi	209	No Gas	3400933.99	1.3	3381664.78	100.57	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	013ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:38:35 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.007	ppb	41.0	61.12	0.2	-50	50	
B	11	6	No Gas	0.561	ppb	3.4	2274.70	4	-50	100	
Na	23	45	He	95197.084	ppb	1.7	10063928.16	100000	80	120	
Mg	24	45	He	95742.450	ppb	1.8	5591380.82	100000	80	120	
Al	27	45	He	91086.767	ppb	2.4	2100424.78	100000	80	120	
Si	28	45	H2	2.191	ppb	138.0	553.96	100	-50	50	
K	39	45	He	93008.703	ppb	2.1	4965518.69	100000	80	120	
Ca	40	45	H2	102707.341	ppb	5.7	40000168.57	100000	80	120	
V	51	89	He	-0.115	ppb	N/A	143.34	1	-50	100	
Cr	52	89	He	0.278	ppb	16.8	347.94	0.78	-100	100	
Mn	55	89	He	0.461	ppb	15.1	273.29	0.0826	100	100	
Fe	56	89	H2	100408.063	ppb	4.9	154628159.38	100000	80	120	
Co	59	89	He	0.301	ppb	6.4	586.72	0.2	-50	100	
Ni	60	89	He	0.226	ppb	141.4	1499.03	0.114	100	100	
Cu	63	89	He	0.291	ppb	7.4	477.80	-0.043	100	100	
Zn	66	89	He	0.459	ppb	14.1	121.12	-0.7632	100	100	
As	75	89	He	0.031	ppb	93.9	9.33	1	-50	100	
Se	78	89	H2	0.103	ppb	36.9	8.17	1	-50	100	
Sr	88	89	He	0.795	ppb	2.5	602.26	0.0578	100	100	
Mo	95	89	He	2029.065	ppb	1.5	1696385.08	2000	80	120	
Ag	107	89	He	0.022	ppb	29.2	68.89	0.2	-50	50	
Cd	111	89	He	0.311	ppb	14.5	113.34	0.268	100	100	
Sn	118	159	He	0.331	ppb	21.7	333.35	-0.24	100	100	
Sb	121	159	No Gas	0.164	ppb	9.0	1148.01	0.089	100	100	
Ba	137	159	No Gas	0.155	ppb	11.5	423.81	-0.0794	100	100	
W	182	159	No Gas	0.191	ppb	8.6	994.48	0.32	-100	100	
Tl	205	209	No Gas	-0.010	ppb	N/A	136.82	0.2	-50	50	
Pb	208	209	No Gas	0.076	ppb	3.0	1378.24	0.03	100	100	
Th	232	209	No Gas	0.024	ppb	36.7	450.51	0.2	-50	50	
U	238	209	No Gas	0.002	ppb	84.4	30.03	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1275617.94	1.4	1419082.7	89.89	29.5	120.4	
Sc	45	No Gas	2946881.26	0.6	3146924.08	93.64	29.5	120.4	
Sc	45	H2	337605.00	4.5	384460.42	87.81	29.5	120.4	
Sc	45	He	68699.70	1.8	75345.71	91.18	29.5	120.4	
Ge	72	No Gas	646362.52	0.9	687904.62	93.96	29.5	120.4	
Ge	72	H2	120467.84	3.5	138854.33	86.76	29.5	120.4	
Ge	72	He	51826.43	1.2	57203.55	90.6	29.5	120.4	
Y	89	H2	2145414.51	3.7	2377183.3	90.25	29.5	120.4	
Y	89	He	459933.18	1.4	498269.57	92.31	29.5	120.4	
Tb	159	No Gas	6569450.18	0.7	6611594.34	99.36	29.5	120.4	
Tb	159	He	2498275.36	1.1	2564694.13	97.41	29.5	120.4	
Bi	209	No Gas	3220689.27	0.6	3381664.78	95.24	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	014ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:41:18 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.709	ppb	1.4	25060.10	20	79.5	120.4	
11	B	6	No Gas	20.850	ppb	0.6	18176.38	20	79.5	120.4	
23	Na	45	He	98907.614	ppb	1.5	10627778.34	100000	79.5	120.4	
24	Mg	45	He	99425.844	ppb	1.4	5902078.73	100000	79.5	120.4	
27	Al	45	He	94763.961	ppb	1.5	2221330.73	100000	79.5	120.4	
28	Si	45	H2	499.263	ppb	1.9	22927.30	500	79.5	120.4	
39	K	45	He	96892.764	ppb	1.4	5257748.01	100000	79.5	120.4	
40	Ca	45	H2	100832.278	ppb	0.7	41624580.21	100000	79.5	120.4	
51	V	89	He	20.585	ppb	1.3	17852.97	20	79.5	120.4	
52	Cr	89	He	20.757	ppb	1.4	21701.98	20	79.5	120.4	
55	Mn	89	He	20.674	ppb	0.9	10148.48	20	79.5	120.4	
56	Fe	89	H2	98301.020	ppb	0.3	160907718.72	100000	79.5	120.4	
59	Co	89	He	20.545	ppb	3.7	36578.97	20	79.5	120.4	
60	Ni	89	He	19.584	ppb	2.5	10920.16	20	79.5	120.4	
63	Cu	89	He	19.831	ppb	0.4	27181.55	20	79.5	120.4	
66	Zn	89	He	20.031	ppb	3.1	3638.38	20	79.5	120.4	
75	As	89	He	20.724	ppb	2.0	3126.70	20	79.5	120.4	
78	Se	89	H2	20.920	ppb	2.0	1634.36	20	79.5	120.4	
88	Sr	89	He	21.373	ppb	0.7	16290.14	20	79.5	120.4	
95	Mo	89	He	2107.984	ppb	1.4	1790832.06	2000	79.5	120.4	
107	Ag	89	He	19.968	ppb	1.5	57427.84	20	79.5	120.4	
111	Cd	89	He	20.229	ppb	1.7	7471.39	20	79.5	120.4	
118	Sn	159	He	20.554	ppb	1.1	17300.57	20	79.5	120.4	
121	Sb	159	No Gas	20.396	ppb	2.0	138630.33	20	79.5	120.4	
137	Ba	159	No Gas	20.545	ppb	2.1	55490.39	20	79.5	120.4	
182	W	159	No Gas	21.113	ppb	1.4	108695.30	20	79.5	120.4	
205	Tl	209	No Gas	21.201	ppb	0.9	224444.54	20	79.5	120.4	
208	Pb	209	No Gas	21.209	ppb	1.6	312625.50	20	79.5	120.4	
232	Th	209	No Gas	22.054	ppb	1.8	328354.27	20	79.5	120.4	
238	U	209	No Gas	21.811	ppb	1.4	304520.40	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1251054.66	2.1	1419082.7	88.16	29.5	120.4	
Sc	45	No Gas	2930602.95	2.6	3146924.08	93.13	29.5	120.4	
Sc	45	H2	357247.63	1.1	384460.42	92.92	29.5	120.4	
Sc	45	He	69820.61	0.8	75345.71	92.67	29.5	120.4	
Ge	72	No Gas	645757.46	2.1	687904.62	93.87	29.5	120.4	
Ge	72	H2	127853.81	1.5	138854.33	92.08	29.5	120.4	
Ge	72	He	52882.99	0.6	57203.55	92.45	29.5	120.4	
Y	89	H2	2277642.77	0.5	2377183.3	95.81	29.5	120.4	
Y	89	He	467329.54	0.8	498269.57	93.79	29.5	120.4	
Tb	159	No Gas	6661965.80	2.5	6611594.34	100.76	29.5	120.4	
Tb	159	He	2509630.22	1.2	2564694.13	97.85	29.5	120.4	
Bi	209	No Gas	3271751.06	1.8	3381664.78	96.75	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	015_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:44:03 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	99.707	ppb	4.8	132300.04	100	99.71	89.5	110.4	
11	B	6	No Gas	474.306	ppb	5.0	411256.31	500	94.86	89.5	110.4	
51	V	89	He	1006.280	ppb	0.3	877278.30	1000	100.63	89.5	110.4	
52	Cr	89	He	2012.534	ppb	0.2	2137551.23	2000	100.63	89.5	110.4	
55	Mn	89	He	2018.965	ppb	0.4	1004452.06	2000	100.95	89.5	110.4	
59	Co	89	He	1025.685	ppb	0.6	1857745.70	1000	102.57	89.5	110.4	
60	Ni	89	He	1044.824	ppb	0.4	518154.00	1000	104.48	89.5	110.4	
63	Cu	89	He	1978.320	ppb	0.6	2753646.42	2000	98.92	89.5	110.4	
66	Zn	89	He	2059.510	ppb	0.4	376929.44	2000	102.98	89.5	110.4	
75	As	89	He	1013.093	ppb	0.1	155511.30	1000	101.31	89.5	110.4	
78	Se	89	H2	1033.648	ppb	0.5	82614.24	1000	103.36	89.5	110.4	
88	Sr	89	He	1995.235	ppb	0.1	1548797.72	2000	99.76	89.5	110.4	
95	Mo	89	He	1031.721	ppb	0.3	893030.15	1000	103.17	89.5	110.4	
107	Ag	89	He	110.779	ppb	0.5	324568.72	100	110.78	89.5	110.4	> +/- 10%
111	Cd	89	He	1048.582	ppb	0.3	394583.68	1000	104.86	89.5	110.4	
118	Sn	159	He	978.114	ppb	0.4	837684.87	1000	97.81	89.5	110.4	
121	Sb	159	No Gas	955.398	ppb	4.1	6841173.48	1000	95.54	89.5	110.4	
137	Ba	159	No Gas	1928.525	ppb	3.9	5488724.73	2000	96.43	89.5	110.4	
182	W	159	No Gas	994.668	ppb	4.0	5394319.60	1000	99.47	89.5	110.4	
205	Tl	209	No Gas	974.065	ppb	3.4	11522455.70	1000	97.41	89.5	110.4	
208	Pb	209	No Gas	1925.640	ppb	4.2	31721664.56	2000	96.28	89.5	110.4	
232	Th	209	No Gas	976.777	ppb	4.8	16257953.84	1000	97.68	89.5	110.4	
238	U	209	No Gas	961.818	ppb	4.7	15017337.33	1000	96.18	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1374812.77	2.4	1419082.7	96.88	29.5	120.4	
Sc	45	No Gas	3136669.81	2.4	3146924.08	99.67	29.5	120.4	
Ge	72	No Gas	698545.82	2.3	687904.62	101.55	29.5	120.4	
Tb	159	No Gas	7022570.38	2.1	6611594.34	106.22	29.5	120.4	
Bi	209	No Gas	3661103.73	2.1	3381664.78	108.26	29.5	120.4	
Sc	45	H2	365025.20	0.2	384460.42	94.94	29.5	120.4	
Ge	72	H2	135209.11	0.4	138854.33	97.37	29.5	120.4	
Y	89	H2	2330908.72	0.3	2377183.3	98.05	29.5	120.4	
Sc	45	He	70918.57	0.7	75345.71	94.12	29.5	120.4	
Ge	72	He	54604.08	0.4	57203.55	95.46	29.5	120.4	
Y	89	He	476115.57	0.3	498269.57	95.55	29.5	120.4	
Tb	159	He	2561667.60	0.5	2564694.13	99.88	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 4:46:37 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.358	ppb	21.2	466.69	100	
11	B	6	No Gas	11.914	ppb	12.8	10756.59	1000	
23	Na	45	He	194833.461	ppb	1.6	21995463.44	200000	
24	Mg	45	He	195212.002	ppb	1.7	12178844.40	200000	
27	Al	45	He	189045.182	ppb	2.0	4657588.12	200000	
28	Si	45	H2	9576.900	ppb	0.2	438290.90	10000	
39	K	45	He	192548.825	ppb	1.8	10970786.84	200000	
40	Ca	45	H2	197524.277	ppb	0.7	82951273.76	200000	
51	V	89	He	0.048	ppb	117.2	291.13	1000	
52	Cr	89	He	1.662	ppb	1.8	1837.79	2000	
55	Mn	89	He	7.878	ppb	2.8	3987.85	2000	
56	Fe	89	H2	96676.027	ppb	1.1	160207098.12	100000	
59	Co	89	He	0.706	ppb	6.9	1344.61	1000	
60	Ni	89	He	2.577	ppb	14.5	2725.92	1000	
63	Cu	89	He	1.303	ppb	5.5	1911.31	2000	
66	Zn	89	He	1.860	ppb	11.7	383.35	2000	
75	As	89	He	0.365	ppb	3.9	61.01	1000	
78	Se	89	H2	0.817	ppb	14.2	65.17	1000	
88	Sr	89	He	1.324	ppb	6.6	1037.86	2000	
95	Mo	89	He	1.820	ppb	6.7	1587.93	1000	
107	Ag	89	He	0.111	ppb	3.5	333.35	100	
111	Cd	89	He	0.219	ppb	25.1	82.96	1000	
118	Sn	159	He	1.409	ppb	8.1	1234.55	1000	
121	Sb	159	No Gas	1.327	ppb	35.8	9030.12	1000	
137	Ba	159	No Gas	2.657	ppb	34.1	7156.78	2000	
182	W	159	No Gas	2.844	ppb	21.0	14598.10	1000	
205	Tl	209	No Gas	1.102	ppb	32.6	11571.95	1000	
208	Pb	209	No Gas	2.347	ppb	35.9	33890.90	2000	
232	Th	209	No Gas	3.963	ppb	53.7	57474.79	1000	
238	U	209	No Gas	2.029	ppb	55.3	27558.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1206284.90	0.6	1419082.7	85	29.5	120.4	
Sc	45	No Gas	2934228.42	0.8	3146924.08	93.24	29.5	120.4	
Sc	45	H2	363417.39	1.0	384460.42	94.53	29.5	120.4	
Sc	45	He	73381.64	0.6	75345.71	97.39	29.5	120.4	
Ge	72	No Gas	637067.83	0.5	687904.62	92.61	29.5	120.4	
Ge	72	H2	128342.55	1.0	138854.33	92.43	29.5	120.4	
Ge	72	He	54420.54	1.2	57203.55	95.13	29.5	120.4	
Y	89	H2	2305869.30	1.0	2377183.3	97	29.5	120.4	
Y	89	He	477968.36	0.9	498269.57	95.93	29.5	120.4	
Tb	159	No Gas	6629498.10	0.3	6611594.34	100.27	29.5	120.4	
Tb	159	He	2498056.53	1.1	2564694.13	97.4	29.5	120.4	
Bi	209	No Gas	3176605.35	0.7	3381664.78	93.94	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 017SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 4:49:21 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.111	ppb	18.5	216.68	100	
11	B	6	No Gas	2.709	ppb	3.7	4566.43	1000	
23	Na	45	He	182.188	ppb	10.1	31315.51	200000	
24	Mg	45	He	30.804	ppb	43.4	3011.67	200000	
27	Al	45	He	30.783	ppb	37.1	813.39	200000	
28	Si	45	H2	1.756	ppb	177.4	630.72	10000	
39	K	45	He	46.961	ppb	22.4	14655.97	200000	
40	Ca	45	H2	55.819	ppb	11.8	27008.81	200000	
51	V	89	He	0.076	ppb	65.2	336.69	1000	
52	Cr	89	He	0.068	ppb	43.6	147.98	2000	
55	Mn	89	He	0.170	ppb	22.1	148.64	2000	
56	Fe	89	H2	42.518	ppb	9.5	86710.35	100000	
59	Co	89	He	0.077	ppb	7.4	215.57	1000	
60	Ni	89	He	0.627	ppb	37.4	1876.87	1000	
63	Cu	89	He	0.204	ppb	7.7	402.24	2000	
66	Zn	89	He	0.115	ppb	81.2	66.67	2000	
75	As	89	He	0.058	ppb	37.2	14.67	1000	
78	Se	89	H2	0.211	ppb	6.3	18.67	1000	
88	Sr	89	He	0.048	ppb	30.9	46.67	2000	
95	Mo	89	He	0.483	ppb	7.5	454.47	1000	
107	Ag	89	He	0.011	ppb	7.0	43.34	100	
111	Cd	89	He	0.048	ppb	5.5	19.63	1000	
118	Sn	159	He	0.275	ppb	11.4	301.12	1000	
121	Sb	159	No Gas	0.060	ppb	9.1	480.54	1000	
137	Ba	159	No Gas	0.072	ppb	32.1	213.58	2000	
182	W	159	No Gas	0.220	ppb	3.4	1214.75	1000	
205	Tl	209	No Gas	0.047	ppb	14.0	810.93	1000	
208	Pb	209	No Gas	0.130	ppb	7.0	2382.76	2000	
232	Th	209	No Gas	0.041	ppb	15.0	764.22	1000	
238	U	209	No Gas	0.038	ppb	10.0	580.67	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1457783.40	1.3	1419082.7	102.73	29.5	120.4	
Sc	45	No Gas	3318095.40	2.1	3146924.08	105.44	29.5	120.4	
Sc	45	H2	396613.64	0.9	384460.42	103.16	29.5	120.4	
Sc	45	He	77690.13	1.8	75345.71	103.11	29.5	120.4	
Ge	72	No Gas	728328.62	0.9	687904.62	105.88	29.5	120.4	
Ge	72	H2	145729.79	0.5	138854.33	104.95	29.5	120.4	
Ge	72	He	58779.10	2.4	57203.55	102.75	29.5	120.4	
Y	89	H2	2487006.32	0.6	2377183.3	104.62	29.5	120.4	
Y	89	He	510626.36	2.7	498269.57	102.48	29.5	120.4	
Tb	159	No Gas	6993790.38	1.8	6611594.34	105.78	29.5	120.4	
Tb	159	He	2617001.92	2.2	2564694.13	102.04	29.5	120.4	
Bi	209	No Gas	3549561.21	1.7	3381664.78	104.96	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	018SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:51:56 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.080	ppb	8.5	173.34	100	
11	B	6	No Gas	1.626	ppb	4.4	3572.79	1000	
23	Na	45	He	84.018	ppb	6.9	19655.29	200000	
24	Mg	45	He	4.383	ppb	10.3	1280.15	200000	
27	Al	45	He	5.337	ppb	3.4	153.34	200000	
28	Si	45	H2	-0.342	ppb	N/A	523.93	10000	
39	K	45	He	10.779	ppb	65.7	12504.88	200000	
40	Ca	45	H2	7.382	ppb	3.5	4790.97	200000	
51	V	89	He	0.109	ppb	35.7	367.80	1000	
52	Cr	89	He	0.016	ppb	20.9	88.65	2000	
55	Mn	89	He	0.094	ppb	51.4	107.32	2000	
56	Fe	89	H2	12.426	ppb	3.4	33035.73	100000	
59	Co	89	He	0.071	ppb	30.4	204.46	1000	
60	Ni	89	He	0.389	ppb	60.1	1751.29	1000	
63	Cu	89	He	0.134	ppb	10.3	296.68	2000	
66	Zn	89	He	0.108	ppb	46.7	65.56	2000	
75	As	89	He	0.017	ppb	89.8	8.00	1000	
78	Se	89	H2	0.118	ppb	26.4	10.83	1000	
88	Sr	89	He	0.013	ppb	64.1	17.78	2000	
95	Mo	89	He	0.305	ppb	13.6	290.01	1000	
107	Ag	89	He	0.005	ppb	40.7	24.45	100	
111	Cd	89	He	0.030	ppb	26.8	12.59	1000	
118	Sn	159	He	0.144	ppb	31.2	186.67	1000	
121	Sb	159	No Gas	0.019	ppb	23.0	186.88	1000	
137	Ba	159	No Gas	0.041	ppb	24.9	126.81	2000	
182	W	159	No Gas	0.089	ppb	15.8	503.90	1000	
205	Tl	209	No Gas	0.008	ppb	56.9	357.07	1000	
208	Pb	209	No Gas	0.057	ppb	15.9	1204.71	2000	
232	Th	209	No Gas	0.019	ppb	22.9	403.79	1000	
238	U	209	No Gas	0.009	ppb	16.8	146.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1456760.19	0.8	1419082.7	102.66	29.5	120.4	
Sc	45	No Gas	3289917.82	1.0	3146924.08	104.54	29.5	120.4	
Sc	45	H2	394108.55	1.1	384460.42	102.51	29.5	120.4	
Sc	45	He	77861.44	1.9	75345.71	103.34	29.5	120.4	
Ge	72	No Gas	721842.25	0.6	687904.62	104.93	29.5	120.4	
Ge	72	H2	145451.05	1.6	138854.33	104.75	29.5	120.4	
Ge	72	He	59138.01	0.8	57203.55	103.38	29.5	120.4	
Y	89	H2	2494186.47	0.8	2377183.3	104.92	29.5	120.4	
Y	89	He	510162.40	1.1	498269.57	102.39	29.5	120.4	
Tb	159	No Gas	6924589.20	0.6	6611594.34	104.73	29.5	120.4	
Tb	159	He	2623975.78	1.4	2564694.13	102.31	29.5	120.4	
Bi	209	No Gas	3512223.14	0.7	3381664.78	103.86	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	019_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:54:38 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.199	ppb	5.2	33356.97	25	96.8	89.8	110.2	
11	B	6	No Gas	24.199	ppb	5.2	23705.72	25	96.8	89.8	110.2	
23	Na	45	He	5130.730	ppb	1.3	605295.62	5000	102.61	89.8	110.2	
24	Mg	45	He	4964.065	ppb	1.3	319729.68	5000	99.28	89.8	110.2	
27	Al	45	He	490.459	ppb	1.0	12453.62	500	98.09	89.8	110.2	
28	Si	45	H2	490.270	ppb	0.7	24080.24	500	98.05	89.8	110.2	
39	K	45	He	4984.144	ppb	1.3	303526.02	5000	99.68	89.8	110.2	
40	Ca	45	H2	5002.815	ppb	0.6	2209370.32	5000	100.06	89.8	110.2	
51	V	89	He	25.081	ppb	1.0	23136.28	25	100.32	89.8	110.2	
52	Cr	89	He	25.456	ppb	0.4	28363.17	25	101.82	89.8	110.2	
55	Mn	89	He	25.796	ppb	0.5	13486.66	25	103.18	89.8	110.2	
56	Fe	89	H2	5023.182	ppb	0.5	8698114.58	5000	100.46	89.8	110.2	
59	Co	89	He	25.583	ppb	1.7	48558.01	25	102.33	89.8	110.2	
60	Ni	89	He	25.886	ppb	2.8	14906.18	25	103.54	89.8	110.2	
63	Cu	89	He	25.380	ppb	1.5	37065.48	25	101.52	89.8	110.2	
66	Zn	89	He	25.534	ppb	1.8	4933.29	25	102.14	89.8	110.2	
75	As	89	He	25.083	ppb	1.5	4034.37	25	100.33	89.8	110.2	
78	Se	89	H2	25.735	ppb	0.7	2124.40	25	102.94	89.8	110.2	
88	Sr	89	He	24.575	ppb	0.5	19970.65	25	98.3	89.8	110.2	
95	Mo	89	He	25.186	ppb	2.2	22820.81	25	100.74	89.8	110.2	
107	Ag	89	He	25.317	ppb	0.9	77634.31	25	101.27	89.8	110.2	
111	Cd	89	He	25.317	ppb	0.9	9970.42	25	101.27	89.8	110.2	
118	Sn	159	He	24.791	ppb	0.2	21540.07	25	99.16	89.8	110.2	
121	Sb	159	No Gas	24.553	ppb	4.9	173584.56	25	98.21	89.8	110.2	
137	Ba	159	No Gas	24.675	ppb	5.5	69316.93	25	98.7	89.8	110.2	
182	W	159	No Gas	23.837	ppb	4.5	127627.84	25	95.35	89.8	110.2	
205	Tl	209	No Gas	24.404	ppb	5.3	278333.92	25	97.62	89.8	110.2	
208	Pb	209	No Gas	24.443	ppb	5.2	388216.13	25	97.77	89.8	110.2	
232	Th	209	No Gas	23.843	ppb	5.7	382430.71	25	95.37	89.8	110.2	
238	U	209	No Gas	23.936	ppb	6.1	360019.93	25	95.74	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1426248.48	2.0	1419082.7	100.5	29.5	120.4	
Sc	45	No Gas	3267813.84	2.2	3146924.08	103.84	29.5	120.4	
Sc	45	H2	381964.95	1.0	384460.42	99.35	29.5	120.4	
Sc	45	He	75542.27	1.2	75345.71	100.26	29.5	120.4	
Ge	72	No Gas	715520.82	2.0	687904.62	104.01	29.5	120.4	
Ge	72	H2	139996.45	0.5	138854.33	100.82	29.5	120.4	
Ge	72	He	57582.61	0.5	57203.55	100.66	29.5	120.4	
Y	89	H2	2406714.36	0.1	2377183.3	101.24	29.5	120.4	
Y	89	He	498272.09	0.2	498269.57	100	29.5	120.4	
Tb	159	No Gas	6931769.20	1.9	6611594.34	104.84	29.5	120.4	
Tb	159	He	2591821.66	0.6	2564694.13	101.06	29.5	120.4	
Bi	209	No Gas	3527821.84	2.3	3381664.78	104.32	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	020_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 4:57:16 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.119	ppb	7.8	223.35	0.2	Failed DoD
11	B	6	No Gas	1.433	ppb	3.6	3324.94	4	
23	Na	45	He	38.253	ppb	3.7	13725.30	200	
24	Mg	45	He	3.781	ppb	57.1	1200.14	20	
27	Al	45	He	1.628	ppb	34.5	54.45	20	
28	Si	45	H2	0.498	ppb	203.6	550.63	100	
39	K	45	He	10.316	ppb	50.9	12084.68	200	
40	Ca	45	H2	4.493	ppb	6.5	3387.20	20	
51	V	89	He	0.051	ppb	25.0	310.01	1	
52	Cr	89	He	0.013	ppb	89.9	83.98	1	
55	Mn	89	He	0.059	ppb	11.4	87.98	0.4	
56	Fe	89	H2	9.577	ppb	4.3	27116.26	20	
59	Co	89	He	0.038	ppb	37.1	137.79	0.2	
60	Ni	89	He	0.157	ppb	92.4	1606.82	0.4	
63	Cu	89	He	0.085	ppb	24.7	221.12	0.6	
66	Zn	89	He	0.113	ppb	63.3	65.56	2	
75	As	89	He	0.016	ppb	219.1	7.67	1	
78	Se	89	H2	0.082	ppb	18.8	7.50	1	
88	Sr	89	He	0.007	ppb	126.5	12.22	1	
95	Mo	89	He	0.221	ppb	5.1	208.90	1	
107	Ag	89	He	0.008	ppb	16.0	32.22	0.2	
111	Cd	89	He	0.013	ppb	21.6	5.56	0.2	
118	Sn	159	He	0.134	ppb	26.5	175.56	1	
121	Sb	159	No Gas	0.030	ppb	57.8	263.63	0.2	
137	Ba	159	No Gas	0.034	ppb	32.6	106.79	0.4	
182	W	159	No Gas	0.114	ppb	9.4	634.05	1	
205	Tl	209	No Gas	0.022	ppb	49.7	517.26	0.2	
208	Pb	209	No Gas	0.039	ppb	8.3	917.71	0.2	
232	Th	209	No Gas	0.102	ppb	14.5	1748.78	1	
238	U	209	No Gas	0.031	ppb	35.5	480.55	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1426747.18	2.6	1419082.7	100.54	29.5	120.4	
Sc	45	No Gas	3249680.22	2.4	3146924.08	103.27	29.5	120.4	
Sc	45	H2	384024.84	0.5	384460.42	99.89	29.5	120.4	
Sc	45	He	75399.12	1.4	75345.71	100.07	29.5	120.4	
Ge	72	No Gas	714031.98	2.6	687904.62	103.8	29.5	120.4	
Ge	72	H2	141223.35	1.0	138854.33	101.71	29.5	120.4	
Ge	72	He	57802.05	0.9	57203.55	101.05	29.5	120.4	
Y	89	H2	2421487.52	0.7	2377183.3	101.86	29.5	120.4	
Y	89	He	503555.55	0.1	498269.57	101.06	29.5	120.4	
Tb	159	No Gas	6890101.49	2.3	6611594.34	104.21	29.5	120.4	
Tb	159	He	2598771.23	0.4	2564694.13	101.33	29.5	120.4	
Bi	209	No Gas	3512121.92	3.1	3381664.78	103.86	29.5	120.4	

Sample Report

Sample Name SN5107-017

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 4:59:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.353	ppb	37.5	158.90	100	
11	B	6	No Gas	8.053	ppb	5.5	3542.78	1000	
23	Na	45	He	269.624	ppb	8.8	15268.38	200000	
24	Mg	45	He	94.818	ppb	7.7	2135.86	200000	
27	Al	45	He	1270.054	ppb	3.1	6328.27	200000	
28	Si	45	H2	728.616	ppb	4.3	7223.25	10000	
39	K	45	He	76.437	ppb	24.8	12158.08	200000	
40	Ca	45	H2	472.570	ppb	3.8	41370.02	200000	
51	V	89	He	8.049	ppb	5.0	1712.39	1000	
52	Cr	89	He	8.954	ppb	1.5	2040.45	2000	
55	Mn	89	He	30.573	ppb	3.3	3209.12	2000	
56	Fe	89	H2	939.120	ppb	3.1	328343.16	100000	
59	Co	89	He	0.356	ppb	21.4	197.79	1000	
60	Ni	89	He	1.621	ppb	28.4	1661.27	1000	
63	Cu	89	He	2.026	ppb	10.1	677.82	2000	
66	Zn	89	He	10.362	ppb	14.4	436.69	2000	
75	As	89	He	0.954	ppb	18.4	35.33	1000	
78	Se	89	H2	1.042	ppb	5.7	17.50	1000	
88	Sr	89	He	36.374	ppb	2.0	5862.56	2000	
95	Mo	89	He	1.726	ppb	7.3	316.68	1000	
107	Ag	89	He	0.053	ppb	8.6	40.00	100	
111	Cd	89	He	0.304	ppb	30.0	24.07	1000	
118	Sn	159	He	45.583	ppb	3.3	7929.28	1000	
121	Sb	159	No Gas	0.186	ppb	16.3	317.02	1000	
137	Ba	159	No Gas	23.385	ppb	0.5	13181.22	2000	
182	W	159	No Gas	0.431	ppb	27.4	490.56	1000	
205	Tl	209	No Gas	0.037	ppb	72.7	353.74	1000	
208	Pb	209	No Gas	10.461	ppb	1.8	34009.31	2000	
232	Th	209	No Gas	7.518	ppb	3.8	24578.27	1000	
238	U	209	No Gas	1.235	ppb	5.4	3778.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1450576.59	0.8	1419082.7	102.22	29.5	120.4	
Sc	45	No Gas	3230806.32	1.6	3146924.08	102.67	29.5	120.4	
Sc	45	H2	366923.83	3.3	384460.42	95.44	29.5	120.4	
Sc	45	He	74056.43	0.7	75345.71	98.29	29.5	120.4	
Ge	72	No Gas	713193.47	1.0	687904.62	103.68	29.5	120.4	
Ge	72	H2	135022.94	3.0	138854.33	97.24	29.5	120.4	
Ge	72	He	56073.12	1.0	57203.55	98.02	29.5	120.4	
Y	89	H2	2358517.08	2.8	2377183.3	99.21	29.5	120.4	
Y	89	He	493733.59	1.5	498269.57	99.09	29.5	120.4	
Tb	159	No Gas	6945119.62	1.5	6611594.34	105.04	29.5	120.4	
Tb	159	He	2582882.93	1.1	2564694.13	100.71	29.5	120.4	
Bi	209	No Gas	3577841.33	1.0	3381664.78	105.8	29.5	120.4	

Sample Report

Sample Name SN5107-017L

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:02:31 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.244	ppb	46.2	122.23	100	
11	B	6	No Gas	17.816	ppb	19.9	2554.76	1000	
23	Na	45	He	640.117	ppb	9.8	12028.42	200000	
24	Mg	45	He	376.849	ppb	18.0	1886.93	200000	
27	Al	45	He	1482.547	ppb	6.4	1484.58	200000	
28	Si	45	H2	658.585	ppb	18.3	1792.10	10000	
39	K	45	He	411.747	ppb	33.3	12206.41	200000	
40	Ca	45	H2	721.756	ppb	3.1	14168.65	200000	
51	V	89	He	10.614	ppb	1.3	640.04	1000	
52	Cr	89	He	9.889	ppb	12.6	501.92	2000	
55	Mn	89	He	33.257	ppb	1.9	740.55	2000	
56	Fe	89	H2	1132.261	ppb	1.2	90225.66	100000	
59	Co	89	He	0.903	ppb	27.8	131.12	1000	
60	Ni	89	He	-3.842	ppb	N/A	1413.46	1000	
63	Cu	89	He	3.477	ppb	24.3	294.46	2000	
66	Zn	89	He	14.764	ppb	14.1	154.45	2000	
75	As	89	He	1.105	ppb	25.6	12.00	1000	
78	Se	89	H2	1.491	ppb	60.6	5.67	1000	
88	Sr	89	He	37.556	ppb	10.5	1211.21	2000	
95	Mo	89	He	6.195	ppb	10.1	228.90	1000	
107	Ag	89	He	0.185	ppb	43.3	30.00	100	
111	Cd	89	He	1.142	ppb	20.1	18.15	1000	
118	Sn	159	He	44.337	ppb	1.9	1579.04	1000	
121	Sb	159	No Gas	1.012	ppb	5.5	333.71	1000	
137	Ba	159	No Gas	26.337	ppb	3.6	2923.60	2000	
182	W	159	No Gas	1.395	ppb	41.3	320.36	1000	
205	Tl	209	No Gas	0.298	ppb	40.5	393.78	1000	
208	Pb	209	No Gas	11.367	ppb	5.2	7415.81	2000	
232	Th	209	No Gas	6.942	ppb	4.9	4495.85	1000	
238	U	209	No Gas	1.862	ppb	17.6	1111.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1361060.65	2.6	1419082.7	95.91	29.5	120.4	
Sc	45	No Gas	3163839.88	3.6	3146924.08	100.54	29.5	120.4	
Sc	45	H2	383188.65	2.0	384460.42	99.67	29.5	120.4	
Sc	45	He	73962.18	2.0	75345.71	98.16	29.5	120.4	
Ge	72	No Gas	701445.63	2.0	687904.62	101.97	29.5	120.4	
Ge	72	H2	138483.46	0.9	138854.33	99.73	29.5	120.4	
Ge	72	He	56984.41	2.6	57203.55	99.62	29.5	120.4	
Y	89	H2	2447646.18	1.5	2377183.3	102.96	29.5	120.4	
Y	89	He	492748.22	3.0	498269.57	98.89	29.5	120.4	
Tb	159	No Gas	6823091.15	3.6	6611594.34	103.2	29.5	120.4	
Tb	159	He	2564942.82	2.6	2564694.13	100.01	29.5	120.4	
Bi	209	No Gas	3478209.44	3.1	3381664.78	102.85	29.5	120.4	

Sample Report

Sample Name SN5107-017A

File Name 023SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:05:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.472	ppb	7.3	2945.96	100	
11	B	6	No Gas	205.344	ppb	4.7	38862.96	1000	
23	Na	45	He	10955.170	ppb	4.7	258945.95	200000	
24	Mg	45	He	1191.228	ppb	4.9	15958.89	200000	
27	Al	45	He	2310.575	ppb	3.5	11519.56	200000	
28	Si	45	H2	5486.053	ppb	2.1	53448.90	10000	
39	K	45	He	10601.866	ppb	5.4	133217.40	200000	
40	Ca	45	H2	1543.818	ppb	0.7	138186.70	200000	
51	V	89	He	61.789	ppb	6.3	11403.88	1000	
52	Cr	89	He	63.580	ppb	5.1	14048.46	2000	
55	Mn	89	He	52.309	ppb	7.3	5440.75	2000	
56	Fe	89	H2	1992.744	ppb	0.2	708663.83	100000	
59	Co	89	He	11.555	ppb	5.8	4396.59	1000	
60	Ni	89	He	22.835	ppb	5.6	3831.77	1000	
63	Cu	89	He	34.448	ppb	4.4	10021.72	2000	
66	Zn	89	He	122.268	ppb	9.1	4672.06	2000	
75	As	89	He	52.286	ppb	4.2	1666.95	1000	
78	Se	89	H2	51.355	ppb	1.6	859.16	1000	
88	Sr	89	He	88.730	ppb	5.8	14264.54	2000	
95	Mo	89	He	54.435	ppb	5.4	9761.60	1000	
107	Ag	89	He	11.509	ppb	3.2	6992.05	100	
111	Cd	89	He	11.582	ppb	1.9	903.37	1000	
118	Sn	159	He	97.216	ppb	6.8	16754.28	1000	
121	Sb	159	No Gas	10.772	ppb	2.3	15629.87	1000	
137	Ba	159	No Gas	44.162	ppb	3.4	25389.31	2000	
182	W	159	No Gas	51.023	ppb	4.7	55895.81	1000	
205	Tl	209	No Gas	10.938	ppb	3.2	25858.27	1000	
208	Pb	209	No Gas	20.705	ppb	3.3	67775.61	2000	
232	Th	209	No Gas	18.312	ppb	4.5	60392.30	1000	
238	U	209	No Gas	11.800	ppb	5.4	36444.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1428166.59	2.1	1419082.7	100.64	29.5	120.4	
Sc	45	No Gas	3293981.16	1.4	3146924.08	104.67	29.5	120.4	
Sc	45	H2	383421.37	0.8	384460.42	99.73	29.5	120.4	
Sc	45	He	74225.88	3.8	75345.71	98.51	29.5	120.4	
Ge	72	No Gas	734941.31	1.9	687904.62	106.84	29.5	120.4	
Ge	72	H2	138985.86	1.0	138854.33	100.09	29.5	120.4	
Ge	72	He	56578.37	2.4	57203.55	98.91	29.5	120.4	
Y	89	H2	2437578.93	0.2	2377183.3	102.54	29.5	120.4	
Y	89	He	493440.18	3.5	498269.57	99.03	29.5	120.4	
Tb	159	No Gas	7087725.87	1.0	6611594.34	107.2	29.5	120.4	
Tb	159	He	2573283.28	4.1	2564694.13	100.33	29.5	120.4	
Bi	209	No Gas	3619561.72	1.4	3381664.78	107.03	29.5	120.4	

Sample Report

Sample Name SN5107-017R

File Name 024SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:07:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.281	ppb	15.0	135.56	100	
11	B	6	No Gas	13.870	ppb	13.7	4490.86	1000	
23	Na	45	He	144.074	ppb	14.8	12435.84	200000	
24	Mg	45	He	96.572	ppb	5.5	2162.55	200000	
27	Al	45	He	1194.288	ppb	3.6	5965.93	200000	
28	Si	45	H2	760.015	ppb	4.1	7691.46	10000	
39	K	45	He	59.955	ppb	45.8	11996.38	200000	
40	Ca	45	H2	533.602	ppb	1.7	47657.49	200000	
51	V	89	He	6.493	ppb	3.0	1426.79	1000	
52	Cr	89	He	3.025	ppb	4.0	731.89	2000	
55	Mn	89	He	7.124	ppb	5.7	787.88	2000	
56	Fe	89	H2	462.880	ppb	0.9	168719.95	100000	
59	Co	89	He	0.227	ppb	42.4	148.90	1000	
60	Ni	89	He	-1.780	ppb	N/A	1307.89	1000	
63	Cu	89	He	1.475	ppb	4.4	517.81	2000	
66	Zn	89	He	5.831	ppb	6.0	263.34	2000	
75	As	89	He	0.495	ppb	13.7	20.67	1000	
78	Se	89	H2	0.541	ppb	6.0	9.50	1000	
88	Sr	89	He	26.460	ppb	1.2	4253.04	2000	
95	Mo	89	He	0.689	ppb	27.9	130.01	1000	
107	Ag	89	He	0.046	ppb	42.2	35.56	100	
111	Cd	89	He	0.286	ppb	25.3	22.59	1000	
118	Sn	159	He	41.623	ppb	1.0	7305.59	1000	
121	Sb	159	No Gas	0.062	ppb	50.4	146.83	1000	
137	Ba	159	No Gas	12.588	ppb	7.9	7383.64	2000	
182	W	159	No Gas	0.293	ppb	19.4	357.07	1000	
205	Tl	209	No Gas	-0.008	ppb	N/A	256.96	1000	
208	Pb	209	No Gas	4.690	ppb	10.5	15791.61	2000	
232	Th	209	No Gas	1.850	ppb	4.9	6288.65	1000	
238	U	209	No Gas	0.416	ppb	11.7	1308.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1416042.19	2.5	1419082.7	99.79	29.5	120.4	
Sc	45	No Gas	3292590.08	2.9	3146924.08	104.63	29.5	120.4	
Sc	45	H2	375434.15	0.8	384460.42	97.65	29.5	120.4	
Sc	45	He	74230.59	0.2	75345.71	98.52	29.5	120.4	
Ge	72	No Gas	733287.48	2.9	687904.62	106.6	29.5	120.4	
Ge	72	H2	135166.15	0.4	138854.33	97.34	29.5	120.4	
Ge	72	He	56114.79	0.6	57203.55	98.1	29.5	120.4	
Y	89	H2	2381487.68	0.4	2377183.3	100.18	29.5	120.4	
Y	89	He	492159.46	0.7	498269.57	98.77	29.5	120.4	
Tb	159	No Gas	7231643.85	3.0	6611594.34	109.38	29.5	120.4	
Tb	159	He	2603760.22	0.3	2564694.13	101.52	29.5	120.4	
Bi	209	No Gas	3671742.29	3.3	3381664.78	108.58	29.5	120.4	

Sample Report

Sample Name SN5107-017RL

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:10:28 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.874	ppb	25.1	101.11	100	
11	B	6	No Gas	24.067	ppb	9.5	2737.02	1000	
23	Na	45	He	15.815	ppb	762.8	9299.98	200000	
24	Mg	45	He	96.110	ppb	44.9	1197.91	200000	
27	Al	45	He	1219.481	ppb	2.9	1240.10	200000	
28	Si	45	H2	781.708	ppb	1.9	1992.38	10000	
39	K	45	He	-62.925	ppb	N/A	11264.39	200000	
40	Ca	45	H2	608.323	ppb	2.0	11925.43	200000	
51	V	89	He	8.923	ppb	17.2	581.15	1000	
52	Cr	89	He	3.924	ppb	17.5	241.30	2000	
55	Mn	89	He	8.074	ppb	11.3	222.63	2000	
56	Fe	89	H2	549.418	ppb	0.8	48058.79	100000	
59	Co	89	He	0.478	ppb	48.5	100.01	1000	
60	Ni	89	He	-15.778	ppb	N/A	1173.42	1000	
63	Cu	89	He	1.951	ppb	39.7	206.68	2000	
66	Zn	89	He	53.670	ppb	10.6	451.13	2000	
75	As	89	He	0.630	ppb	23.9	9.00	1000	
78	Se	89	H2	0.609	ppb	63.0	2.67	1000	
88	Sr	89	He	27.874	ppb	8.0	905.62	2000	
95	Mo	89	He	1.546	ppb	38.5	62.22	1000	
107	Ag	89	He	0.046	ppb	156.5	13.33	100	
111	Cd	89	He	0.450	ppb	36.4	7.41	1000	
118	Sn	159	He	44.074	ppb	3.6	1592.38	1000	
121	Sb	159	No Gas	0.125	ppb	98.9	86.77	1000	
137	Ba	159	No Gas	15.196	ppb	0.5	1698.67	2000	
182	W	159	No Gas	0.437	ppb	59.3	120.14	1000	
205	Tl	209	No Gas	-0.323	ppb	N/A	116.80	1000	
208	Pb	209	No Gas	5.321	ppb	6.7	3657.64	2000	
232	Th	209	No Gas	1.875	ppb	7.2	1301.53	1000	
238	U	209	No Gas	0.509	ppb	14.9	310.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1344579.84	1.4	1419082.7	94.75	29.5	120.4	
Sc	45	No Gas	3108436.74	3.6	3146924.08	98.78	29.5	120.4	
Sc	45	H2	375626.79	1.0	384460.42	97.7	29.5	120.4	
Sc	45	He	74922.20	1.4	75345.71	99.44	29.5	120.4	
Ge	72	No Gas	693687.75	1.9	687904.62	100.84	29.5	120.4	
Ge	72	H2	136605.32	2.0	138854.33	98.38	29.5	120.4	
Ge	72	He	56716.09	0.7	57203.55	99.15	29.5	120.4	
Y	89	H2	2389679.23	1.1	2377183.3	100.53	29.5	120.4	
Y	89	He	494659.61	0.5	498269.57	99.28	29.5	120.4	
Tb	159	No Gas	6849617.05	3.2	6611594.34	103.6	29.5	120.4	
Tb	159	He	2600408.26	0.6	2564694.13	101.39	29.5	120.4	
Bi	209	No Gas	3503415.25	2.8	3381664.78	103.6	29.5	120.4	

Sample Report

Sample Name SN5107-017RA

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:13:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.789	ppb	7.1	3023.76	100	
11	B	6	No Gas	213.738	ppb	2.7	40265.82	1000	
23	Na	45	He	10889.142	ppb	1.1	261196.07	200000	
24	Mg	45	He	1130.213	ppb	1.9	15411.57	200000	
27	Al	45	He	2166.666	ppb	4.0	10955.67	200000	
28	Si	45	H2	5686.154	ppb	2.9	54584.90	10000	
39	K	45	He	10409.917	ppb	0.8	132933.11	200000	
40	Ca	45	H2	1605.761	ppb	2.0	141642.73	200000	
51	V	89	He	60.446	ppb	1.3	11213.72	1000	
52	Cr	89	He	56.772	ppb	0.9	12607.30	2000	
55	Mn	89	He	28.870	ppb	1.3	3042.45	2000	
56	Fe	89	H2	1566.838	ppb	0.6	547168.76	100000	
59	Co	89	He	11.465	ppb	7.4	4381.02	1000	
60	Ni	89	He	20.511	ppb	2.4	3608.38	1000	
63	Cu	89	He	33.504	ppb	2.4	9791.55	2000	
66	Zn	89	He	115.068	ppb	5.5	4421.97	2000	
75	As	89	He	54.340	ppb	2.7	1739.64	1000	
78	Se	89	H2	52.144	ppb	1.5	853.16	1000	
88	Sr	89	He	79.204	ppb	2.1	12791.91	2000	
95	Mo	89	He	53.521	ppb	2.5	9640.41	1000	
107	Ag	89	He	11.369	ppb	3.1	6933.14	100	
111	Cd	89	He	11.584	ppb	4.0	906.71	1000	
118	Sn	159	He	95.919	ppb	1.0	16857.75	1000	
121	Sb	159	No Gas	10.865	ppb	2.5	15997.43	1000	
137	Ba	159	No Gas	33.410	ppb	2.1	19495.94	2000	
182	W	159	No Gas	50.857	ppb	3.7	56543.60	1000	
205	Tl	209	No Gas	10.829	ppb	2.6	26102.49	1000	
208	Pb	209	No Gas	15.197	ppb	3.4	50796.35	2000	
232	Th	209	No Gas	12.727	ppb	2.9	42827.43	1000	
238	U	209	No Gas	10.971	ppb	3.7	34546.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1423969.79	1.3	1419082.7	100.34	29.5	120.4	
Sc	45	No Gas	3270177.17	1.0	3146924.08	103.92	29.5	120.4	
Sc	45	H2	378046.08	1.2	384460.42	98.33	29.5	120.4	
Sc	45	He	75223.60	0.9	75345.71	99.84	29.5	120.4	
Ge	72	No Gas	729966.93	1.6	687904.62	106.11	29.5	120.4	
Ge	72	H2	136154.47	1.2	138854.33	98.06	29.5	120.4	
Ge	72	He	56780.43	0.6	57203.55	99.26	29.5	120.4	
Y	89	H2	2384125.73	0.9	2377183.3	100.29	29.5	120.4	
Y	89	He	495073.89	1.1	498269.57	99.36	29.5	120.4	
Tb	159	No Gas	7191914.83	0.8	6611594.34	108.78	29.5	120.4	
Tb	159	He	2619231.45	0.5	2564694.13	102.13	29.5	120.4	
Bi	209	No Gas	3689687.00	1.2	3381664.78	109.11	29.5	120.4	

Sample Report

Sample Name SN5107-017S

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:15:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.303	ppb	0.8	13096.32	100	
11	B	6	No Gas	492.708	ppb	3.8	88522.83	1000	
23	Na	45	He	7294.508	ppb	5.0	173772.95	200000	
24	Mg	45	He	5069.044	ppb	4.3	64220.31	200000	
27	Al	45	He	3382.136	ppb	3.7	16691.46	200000	
28	Si	45	H2	980.461	ppb	2.4	9957.90	10000	
39	K	45	He	9829.522	ppb	3.5	123186.72	200000	
40	Ca	45	H2	2858.258	ppb	1.8	254040.26	200000	
51	V	89	He	503.209	ppb	2.9	89862.88	1000	
52	Cr	89	He	213.263	ppb	2.9	46343.81	2000	
55	Mn	89	He	529.693	ppb	3.1	53891.73	2000	
56	Fe	89	H2	1632.631	ppb	1.2	584870.53	100000	
59	Co	89	He	519.456	ppb	2.9	192294.17	1000	
60	Ni	89	He	519.045	ppb	2.1	53925.89	1000	
63	Cu	89	He	258.588	ppb	2.8	73632.15	2000	
66	Zn	89	He	517.796	ppb	3.8	19399.66	2000	
75	As	89	He	83.749	ppb	2.6	2631.54	1000	
78	Se	89	H2	86.388	ppb	1.6	1450.68	1000	
88	Sr	89	He	535.458	ppb	2.9	84929.31	2000	
95	Mo	89	He	97.800	ppb	2.0	17305.98	1000	
107	Ag	89	He	52.364	ppb	4.0	31348.03	100	
111	Cd	89	He	256.797	ppb	2.9	19743.40	1000	
118	Sn	159	He	504.611	ppb	3.3	86935.66	1000	
121	Sb	159	No Gas	80.116	ppb	4.1	114243.44	1000	
137	Ba	159	No Gas	1996.839	ppb	3.0	1131294.48	2000	
182	W	159	No Gas	76.681	ppb	2.9	82812.96	1000	
205	Tl	209	No Gas	103.238	ppb	3.2	238447.35	1000	
208	Pb	209	No Gas	116.339	ppb	3.9	374123.46	2000	
232	Th	209	No Gas	115.702	ppb	4.4	375768.13	1000	
238	U	209	No Gas	104.998	ppb	3.3	319826.32	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397980.59	0.6	1419082.7	98.51	29.5	120.4	
Sc	45	No Gas	3138292.79	1.0	3146924.08	99.73	29.5	120.4	
Sc	45	H2	382567.48	2.0	384460.42	99.51	29.5	120.4	
Sc	45	He	73496.35	3.2	75345.71	97.55	29.5	120.4	
Ge	72	No Gas	711897.46	1.5	687904.62	103.49	29.5	120.4	
Ge	72	H2	136096.89	0.9	138854.33	98.01	29.5	120.4	
Ge	72	He	55903.50	2.0	57203.55	97.73	29.5	120.4	
Y	89	H2	2447612.87	1.1	2377183.3	102.96	29.5	120.4	
Y	89	He	486579.69	2.2	498269.57	97.65	29.5	120.4	
Tb	159	No Gas	6987199.41	1.0	6611594.34	105.68	29.5	120.4	
Tb	159	He	2576028.23	2.0	2564694.13	100.44	29.5	120.4	
Bi	209	No Gas	3569445.31	1.1	3381664.78	105.55	29.5	120.4	

Sample Report

Sample Name SN5107-017P

File Name 028SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:18:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.505	ppb	2.0	13074.13	100	
11	B	6	No Gas	504.499	ppb	0.4	90063.70	1000	
23	Na	45	He	7286.930	ppb	1.1	175986.18	200000	
24	Mg	45	He	5113.562	ppb	0.3	65658.05	200000	
27	Al	45	He	3363.577	ppb	2.9	16821.49	200000	
28	Si	45	H2	1380.035	ppb	3.2	13224.26	10000	
39	K	45	He	9771.483	ppb	1.1	124157.44	200000	
40	Ca	45	H2	3077.512	ppb	4.1	261595.32	200000	
51	V	89	He	507.264	ppb	1.2	91607.53	1000	
52	Cr	89	He	213.661	ppb	0.9	46956.21	2000	
55	Mn	89	He	532.020	ppb	1.1	54742.70	2000	
56	Fe	89	H2	1693.767	ppb	4.4	577554.70	100000	
59	Co	89	He	520.370	ppb	0.2	194808.41	1000	
60	Ni	89	He	517.050	ppb	0.4	54326.15	1000	
63	Cu	89	He	259.127	ppb	0.7	74618.23	2000	
66	Zn	89	He	509.118	ppb	2.8	19294.98	2000	
75	As	89	He	91.360	ppb	0.3	2902.62	1000	
78	Se	89	H2	97.506	ppb	6.2	1558.85	1000	
88	Sr	89	He	523.982	ppb	1.6	84046.55	2000	
95	Mo	89	He	98.282	ppb	1.2	17584.05	1000	
107	Ag	89	He	52.583	ppb	2.1	31839.21	100	
111	Cd	89	He	253.584	ppb	0.9	19717.41	1000	
118	Sn	159	He	515.396	ppb	0.4	89488.29	1000	
121	Sb	159	No Gas	84.781	ppb	1.3	123594.06	1000	
137	Ba	159	No Gas	1959.154	ppb	1.2	1134674.30	2000	
182	W	159	No Gas	79.384	ppb	2.0	87622.73	1000	
205	Tl	209	No Gas	103.398	ppb	0.1	242088.65	1000	
208	Pb	209	No Gas	114.020	ppb	1.4	371711.18	2000	
232	Th	209	No Gas	112.846	ppb	0.8	371525.29	1000	
238	U	209	No Gas	102.224	ppb	0.7	315636.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1389544.80	1.8	1419082.7	97.92	29.5	120.4	
Sc	45	No Gas	3196836.10	2.9	3146924.08	101.59	29.5	120.4	
Sc	45	H2	366273.82	3.3	384460.42	95.27	29.5	120.4	
Sc	45	He	74430.65	0.9	75345.71	98.79	29.5	120.4	
Ge	72	No Gas	719588.77	2.0	687904.62	104.61	29.5	120.4	
Ge	72	H2	133122.29	2.4	138854.33	95.87	29.5	120.4	
Ge	72	He	56546.47	0.1	57203.55	98.85	29.5	120.4	
Y	89	H2	2333002.61	2.9	2377183.3	98.14	29.5	120.4	
Y	89	He	491896.90	0.5	498269.57	98.72	29.5	120.4	
Tb	159	No Gas	7142527.39	2.7	6611594.34	108.03	29.5	120.4	
Tb	159	He	2595198.09	0.7	2564694.13	101.19	29.5	120.4	
Bi	209	No Gas	3617544.63	2.3	3381664.78	106.98	29.5	120.4	

Sample Report

Sample Name SN6056-021

File Name 029SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:21:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.348	ppb	7.0	701.15	100	
11	B	6	No Gas	38.542	ppb	5.0	8889.70	1000	
23	Na	45	He	285.189	ppb	3.4	15976.64	200000	
24	Mg	45	He	11523.656	ppb	3.6	149303.93	200000	
27	Al	45	He	82014.116	ppb	3.5	416975.64	200000	
28	Si	45	H2	3688.832	ppb	1.6	36969.19	10000	
39	K	45	He	5481.330	ppb	3.8	75917.74	200000	
40	Ca	45	H2	6964.167	ppb	0.7	633232.15	200000	
51	V	89	He	156.312	ppb	5.1	29195.51	1000	
52	Cr	89	He	89.529	ppb	2.9	20274.80	2000	
55	Mn	89	He	1239.870	ppb	4.8	131055.22	2000	
56	Fe	89	H2	71336.286	ppb	0.4	26004481.27	100000	
59	Co	89	He	38.776	ppb	5.6	14977.99	1000	
60	Ni	89	He	72.677	ppb	5.7	9164.44	1000	
63	Cu	89	He	58.713	ppb	5.4	17450.36	2000	
66	Zn	89	He	511.496	ppb	4.4	19926.00	2000	
75	As	89	He	22.329	ppb	3.0	733.77	1000	
78	Se	89	H2	3.448	ppb	8.3	60.67	1000	
88	Sr	89	He	40.924	ppb	5.8	6751.91	2000	
95	Mo	89	He	12.657	ppb	4.9	2334.73	1000	
107	Ag	89	He	0.437	ppb	8.5	280.01	100	
111	Cd	89	He	2.442	ppb	4.7	195.56	1000	
118	Sn	159	He	61.142	ppb	4.1	10611.16	1000	
121	Sb	159	No Gas	0.867	ppb	6.4	1354.90	1000	
137	Ba	159	No Gas	367.192	ppb	5.7	218604.38	2000	
182	W	159	No Gas	0.585	ppb	6.1	694.13	1000	
205	Tl	209	No Gas	2.295	ppb	7.0	5847.92	1000	
208	Pb	209	No Gas	180.774	ppb	5.6	610785.71	2000	
232	Th	209	No Gas	14.032	ppb	4.1	48008.53	1000	
238	U	209	No Gas	3.287	ppb	2.7	10536.23	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1417875.60	2.0	1419082.7	99.91	29.5	120.4	
Sc	45	No Gas	3367016.40	1.9	3146924.08	106.99	29.5	120.4	
Sc	45	H2	392568.50	0.2	384460.42	102.11	29.5	120.4	
Sc	45	He	75765.21	3.0	75345.71	100.56	29.5	120.4	
Ge	72	No Gas	745862.96	2.4	687904.62	108.43	29.5	120.4	
Ge	72	H2	137862.15	1.0	138854.33	99.29	29.5	120.4	
Ge	72	He	56889.66	3.1	57203.55	99.45	29.5	120.4	
Y	89	H2	2535254.02	0.4	2377183.3	106.65	29.5	120.4	
Y	89	He	506221.96	3.9	498269.57	101.6	29.5	120.4	
Tb	159	No Gas	7346087.88	2.0	6611594.34	111.11	29.5	120.4	
Tb	159	He	2583627.18	3.5	2564694.13	100.74	29.5	120.4	
Bi	209	No Gas	3753958.67	2.6	3381664.78	111.01	29.5	120.4	

Sample Report

Sample Name SN6056-022

File Name 030SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:23:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.358	ppb	4.2	974.51	100	
11	B	6	No Gas	37.956	ppb	3.7	8757.37	1000	
23	Na	45	He	324.028	ppb	6.6	17459.94	200000	
24	Mg	45	He	17304.309	ppb	0.9	231486.74	200000	
27	Al	45	He	122004.047	ppb	0.2	641845.63	200000	
28	Si	45	H2	3527.630	ppb	0.7	35356.14	10000	
39	K	45	He	8227.588	ppb	1.5	111920.16	200000	
40	Ca	45	H2	7224.739	ppb	0.9	656478.31	200000	
51	V	89	He	248.221	ppb	1.2	48243.32	1000	
52	Cr	89	He	127.626	ppb	0.8	30127.15	2000	
55	Mn	89	He	1742.498	ppb	0.4	192259.99	2000	
56	Fe	89	H2	145177.424	ppb	0.5	53149248.21	100000	
59	Co	89	He	44.674	ppb	0.5	18008.43	1000	
60	Ni	89	He	91.347	ppb	1.5	11614.11	1000	
63	Cu	89	He	84.447	ppb	0.9	26160.74	2000	
66	Zn	89	He	501.540	ppb	1.8	20395.46	2000	
75	As	89	He	46.796	ppb	1.5	1597.93	1000	
78	Se	89	H2	3.758	ppb	5.0	66.33	1000	
88	Sr	89	He	48.376	ppb	3.7	8332.81	2000	
95	Mo	89	He	12.517	ppb	1.4	2409.20	1000	
107	Ag	89	He	0.612	ppb	8.3	405.58	100	
111	Cd	89	He	1.394	ppb	12.1	116.67	1000	
118	Sn	159	He	59.625	ppb	2.5	10615.63	1000	
121	Sb	159	No Gas	0.994	ppb	6.5	1551.81	1000	
137	Ba	159	No Gas	396.268	ppb	6.1	236937.80	2000	
182	W	159	No Gas	0.509	ppb	6.5	610.70	1000	
205	Tl	209	No Gas	2.630	ppb	8.3	6569.06	1000	
208	Pb	209	No Gas	263.398	ppb	5.8	877870.72	2000	
232	Th	209	No Gas	22.165	ppb	6.8	74716.59	1000	
238	U	209	No Gas	5.116	ppb	4.4	16168.65	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1413372.38	2.8	1419082.7	99.6	29.5	120.4	
Sc	45	No Gas	3449458.84	3.4	3146924.08	109.61	29.5	120.4	
Sc	45	H2	392338.33	0.8	384460.42	102.05	29.5	120.4	
Sc	45	He	78343.00	0.8	75345.71	103.98	29.5	120.4	
Ge	72	No Gas	754986.15	3.6	687904.62	109.75	29.5	120.4	
Ge	72	H2	136126.98	0.2	138854.33	98.04	29.5	120.4	
Ge	72	He	58702.40	0.8	57203.55	102.62	29.5	120.4	
Y	89	H2	2546737.14	0.8	2377183.3	107.13	29.5	120.4	
Y	89	He	527820.92	0.3	498269.57	105.93	29.5	120.4	
Tb	159	No Gas	7382534.89	3.4	6611594.34	111.66	29.5	120.4	
Tb	159	He	2647725.03	0.8	2564694.13	103.24	29.5	120.4	
Bi	209	No Gas	3704961.66	3.4	3381664.78	109.56	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	031_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 5:26:18 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	26.907	ppb	3.4	34690.16	25	107.63	89.8	110.2	
11	B	6	No Gas	26.797	ppb	2.0	24356.77	25	107.19	89.8	110.2	
23	Na	45	He	4998.415	ppb	1.3	607656.74	5000	99.97	89.8	110.2	
24	Mg	45	He	4852.006	ppb	0.7	321933.21	5000	97.04	89.8	110.2	
27	Al	45	He	470.946	ppb	0.8	12317.94	500	94.19	89.8	110.2	
28	Si	45	H2	479.189	ppb	2.3	23699.44	500	95.84	89.8	110.2	
39	K	45	He	4851.360	ppb	0.7	304643.61	5000	97.03	89.8	110.2	
40	Ca	45	H2	5027.571	ppb	0.8	2234755.90	5000	100.55	89.8	110.2	
51	V	89	He	25.034	ppb	1.0	23754.05	25	100.14	89.8	110.2	
52	Cr	89	He	25.416	ppb	0.5	29129.23	25	101.66	89.8	110.2	
55	Mn	89	He	25.054	ppb	0.6	13474.67	25	100.22	89.8	110.2	
56	Fe	89	H2	5012.658	ppb	0.6	8849890.83	5000	100.25	89.8	110.2	
59	Co	89	He	25.444	ppb	2.4	49668.67	25	101.78	89.8	110.2	
60	Ni	89	He	24.378	ppb	1.3	14529.10	25	97.51	89.8	110.2	
63	Cu	89	He	25.210	ppb	1.4	37867.74	25	100.84	89.8	110.2	
66	Zn	89	He	24.753	ppb	5.1	4922.16	25	99.01	89.8	110.2	
75	As	89	He	24.526	ppb	0.7	4057.71	25	98.1	89.8	110.2	
78	Se	89	H2	25.178	ppb	0.6	2119.23	25	100.71	89.8	110.2	
88	Sr	89	He	24.139	ppb	2.1	20179.93	25	96.56	89.8	110.2	
95	Mo	89	He	24.495	ppb	1.3	22830.86	25	97.98	89.8	110.2	
107	Ag	89	He	25.201	ppb	1.6	79482.43	25	100.8	89.8	110.2	
111	Cd	89	He	24.904	ppb	2.7	10087.18	25	99.62	89.8	110.2	
118	Sn	159	He	24.331	ppb	0.3	21849.50	25	97.32	89.8	110.2	
121	Sb	159	No Gas	26.485	ppb	5.0	185052.10	25	105.94	89.8	110.2	
137	Ba	159	No Gas	26.931	ppb	5.2	74768.28	25	107.72	89.8	110.2	
182	W	159	No Gas	26.093	ppb	4.5	138079.28	25	104.37	89.8	110.2	
205	Tl	209	No Gas	26.542	ppb	4.8	298048.00	25	106.17	89.8	110.2	
208	Pb	209	No Gas	26.655	ppb	3.8	416915.80	25	106.62	89.8	110.2	
232	Th	209	No Gas	26.607	ppb	4.5	420297.59	25	106.43	89.8	110.2	
238	U	209	No Gas	26.517	ppb	3.3	392906.38	25	106.07	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1333878.83	1.9	1419082.7	94	29.5	120.4	
Sc	45	No Gas	3170921.25	4.0	3146924.08	100.76	29.5	120.4	
Sc	45	H2	384452.12	0.9	384460.42	100	29.5	120.4	
Sc	45	He	77811.17	1.0	75345.71	103.27	29.5	120.4	
Ge	72	No Gas	707512.10	2.3	687904.62	102.85	29.5	120.4	
Ge	72	H2	141021.29	0.9	138854.33	101.56	29.5	120.4	
Ge	72	He	59215.35	0.7	57203.55	103.52	29.5	120.4	
Y	89	H2	2453912.55	0.8	2377183.3	103.23	29.5	120.4	
Y	89	He	512533.73	0.8	498269.57	102.86	29.5	120.4	
Tb	159	No Gas	6855783.44	4.2	6611594.34	103.69	29.5	120.4	
Tb	159	He	2678699.65	1.1	2564694.13	104.45	29.5	120.4	
Bi	209	No Gas	3474639.13	3.4	3381664.78	102.75	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	032_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 5:28:56 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.088	ppb	39.6	173.34	0.2	
11	B	6	No Gas	1.037	ppb	28.4	2854.82	4	
23	Na	45	He	-6.796	ppb	N/A	8672.24	200	
24	Mg	45	He	1.312	ppb	147.4	1062.34	20	
27	Al	45	He	1.102	ppb	24.0	42.22	20	
28	Si	45	H2	2.374	ppb	165.4	600.68	100	
39	K	45	He	-0.740	ppb	N/A	11667.91	200	
40	Ca	45	H2	2.452	ppb	13.0	2336.95	20	
51	V	89	He	-0.017	ppb	N/A	250.01	1	
52	Cr	89	He	0.004	ppb	84.1	74.66	1	
55	Mn	89	He	0.052	ppb	50.7	85.32	0.4	
56	Fe	89	H2	7.742	ppb	11.0	22596.55	20	
59	Co	89	He	0.010	ppb	165.4	84.45	0.2	
60	Ni	89	He	-1.115	ppb	N/A	953.40	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.001	ppb	N/A	94.45	0.6	
66	Zn	89	He	0.108	ppb	16.5	65.56	2	
75	As	89	He	-0.007	ppb	N/A	4.00	1	
78	Se	89	H2	0.048	ppb	33.0	4.50	1	
88	Sr	89	He	0.008	ppb	51.3	13.33	1	
95	Mo	89	He	0.126	ppb	13.7	123.34	1	
107	Ag	89	He	0.013	ppb	22.1	50.00	0.2	
111	Cd	89	He	0.009	ppb	35.9	4.07	0.2	
118	Sn	159	He	0.119	ppb	21.3	164.46	1	
121	Sb	159	No Gas	0.022	ppb	45.7	203.56	0.2	
137	Ba	159	No Gas	0.038	ppb	57.2	116.80	0.4	
182	W	159	No Gas	0.111	ppb	23.7	620.72	1	
205	Tl	209	No Gas	0.015	ppb	72.3	430.49	0.2	
208	Pb	209	No Gas	0.032	ppb	26.6	814.26	0.2	
232	Th	209	No Gas	0.151	ppb	12.6	2503.06	1	
238	U	209	No Gas	0.032	ppb	58.3	487.23	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1372395.93	1.7	1419082.7	96.71	29.5	120.4	
Sc	45	No Gas	3225472.68	3.0	3146924.08	102.5	29.5	120.4	
Sc	45	H2	362326.22	5.6	384460.42	94.24	29.5	120.4	
Sc	45	He	76945.27	2.3	75345.71	102.12	29.5	120.4	
Ge	72	No Gas	713335.88	1.3	687904.62	103.7	29.5	120.4	
Ge	72	H2	135964.72	3.1	138854.33	97.92	29.5	120.4	
Ge	72	He	58706.51	1.3	57203.55	102.63	29.5	120.4	
Y	89	H2	2292301.21	5.7	2377183.3	96.43	29.5	120.4	
Y	89	He	510204.09	0.9	498269.57	102.4	29.5	120.4	
Tb	159	No Gas	6888354.07	3.0	6611594.34	104.19	29.5	120.4	
Tb	159	He	2629797.57	0.9	2564694.13	102.54	29.5	120.4	
Bi	209	No Gas	3493308.47	2.3	3381664.78	103.3	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	033_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 5:31:35 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.164	ppb	41.0	105.56	0.5	
B	11	6	No Gas	5.826	ppb	11.8	3121.55	10	
Na	23	45	He	16.771	ppb	72.8	9831.05	500	
Mg	24	45	He	7.049	ppb	71.4	1066.78	50	
Al	27	45	He	6.834	ppb	33.0	48.89	50	
Si	28	45	H2	19.089	ppb	109.3	714.15	250	
K	39	45	He	2.528	ppb	1451.2	11692.88	500	
Ca	40	45	H2	36.812	ppb	29.3	4706.51	50	
V	51	89	He	2.964	ppb	19.7	810.05	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.349	ppb	29.9	147.98	2.5	
Mn	55	89	He	0.483	ppb	79.7	107.32	1	
Fe	56	89	H2	23.914	ppb	33.2	19161.13	50	
Co	59	89	He	-0.037	ppb	N/A	51.11	0.5	
Ni	60	89	He	-4.441	ppb	N/A	1062.30	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	0.425	ppb	27.7	221.12	1.5	
Zn	66	89	He	15.379	ppb	11.9	641.15	5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
As	75	89	He	0.193	ppb	48.4	11.33	2.5	
Se	78	89	H2	0.077	ppb	68.4	2.00	2.5	
Sr	88	89	He	0.115	ppb	100.9	25.56	2.5	
Mo	95	89	He	0.266	ppb	27.4	55.56	2.5	
Ag	107	89	He	0.016	ppb	48.9	17.78	0.5	
Cd	111	89	He	0.037	ppb	38.4	3.33	0.5	
Sn	118	159	He	1.150	ppb	12.0	261.13	2.5	
Sb	121	159	No Gas	0.020	ppb	120.6	83.43	0.5	
Ba	137	159	No Gas	0.091	ppb	39.5	63.40	1	
W	182	159	No Gas	0.068	ppb	42.4	103.45	2.5	
Tl	205	209	No Gas	-0.059	ppb	N/A	133.48	0.5	
Pb	208	209	No Gas	0.052	ppb	70.4	480.54	0.5	
Th	232	209	No Gas	0.410	ppb	6.0	1458.39	2.5	
U	238	209	No Gas	0.006	ppb	76.4	26.69	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443949.13	1.8	1419082.7	101.75	29.5	120.4	
Sc	45	No Gas	3377870.77	1.6	3146924.08	107.34	29.5	120.4	
Sc	45	H2	395965.70	15.0	384460.42	102.99	29.5	120.4	
Sc	45	He	76613.89	2.4	75345.71	101.68	29.5	120.4	
Ge	72	No Gas	745090.53	1.5	687904.62	108.31	29.5	120.4	
Ge	72	H2	143488.15	10.9	138854.33	103.34	29.5	120.4	
Ge	72	He	58213.80	1.1	57203.55	101.77	29.5	120.4	
Y	89	H2	2504975.80	13.8	2377183.3	105.38	29.5	120.4	
Y	89	He	504703.53	1.7	498269.57	101.29	29.5	120.4	
Tb	159	No Gas	7128578.36	1.4	6611594.34	107.82	29.5	120.4	
Tb	159	He	2615445.59	2.0	2564694.13	101.98	29.5	120.4	
Bi	209	No Gas	3610304.97	2.2	3381664.78	106.76	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	034LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 5:34:10 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.412	ppb	4.7	14153.97	50	20.16	79.5	120.4	
B	11	6	No Gas	513.632	ppb	4.4	95507.68	500	20.55	79.5	120.4	
Na	23	45	He	11279.162	ppb	0.7	277653.65	7500	30.08	79.5	120.4	6020□ DoD
Mg	24	45	He	5325.741	ppb	2.2	70962.88	5000	21.3	79.5	120.4	
Al	27	45	He	1989.868	ppb	1.5	10342.97	2000	19.9	79.5	120.4	
Si	28	45	H2	1063.188	ppb	2.1	10916.33	1000	21.26	0	200	
K	39	45	He	10591.850	ppb	0.3	138779.05	10000	21.18	79.5	120.4	
Ca	40	45	H2	2739.040	ppb	0.7	247159.68	2500	21.91	79.5	120.4	
V	51	89	He	543.538	ppb	0.8	101125.29	500	21.74	79.5	120.4	
Cr	52	89	He	220.982	ppb	0.9	50039.53	200	22.1	79.5	120.4	
Mn	55	89	He	553.802	ppb	0.8	58715.26	500	22.15	79.5	120.4	
Fe	56	89	H2	1147.851	ppb	1.1	416854.33	1000	22.96	79.5	120.4	
Co	59	89	He	563.170	ppb	1.8	217213.46	500	22.53	79.5	120.4	
Ni	60	89	He	565.816	ppb	2.0	61105.18	500	22.63	79.5	120.4	
Cu	63	89	He	277.154	ppb	1.4	82225.03	250	22.17	79.5	120.4	
Zn	66	89	He	579.838	ppb	2.7	22632.32	500	23.19	79.5	120.4	
As	75	89	He	109.802	ppb	3.2	3592.86	100	21.96	79.5	120.4	
Se	78	89	H2	108.954	ppb	1.7	1840.54	100	21.79	79.5	120.4	
Sr	88	89	He	522.870	ppb	1.3	86416.80	500	20.91	79.5	120.4	
Mo	95	89	He	109.366	ppb	2.6	20158.76	100	21.87	79.5	120.4	
Ag	107	89	He	55.566	ppb	1.3	34667.43	50	22.23	79.5	120.4	
Cd	111	89	He	269.740	ppb	0.7	21611.40	250	21.58	79.5	120.4	
Sn	118	159	He	526.169	ppb	1.5	93132.85	500	21.05	79.5	120.4	
Sb	121	159	No Gas	105.082	ppb	5.6	156475.13	100	21.02	79.5	120.4	
Ba	137	159	No Gas	2056.082	ppb	5.0	1216530.14	2000	20.56	79.5	120.4	
W	182	159	No Gas	103.394	ppb	6.4	116578.50	100	20.68	79.5	120.4	
Tl	205	209	No Gas	107.338	ppb	4.1	253329.86	100	21.47	79.5	120.4	
[Pb]	206	209	No Gas	106.306	ppb	4.2	87362.63	100	21.26	79.5	120.4	
[Pb]	207	209	No Gas	105.691	ppb	5.3	76446.59	100	21.14	79.5	120.4	
Pb	208	209	No Gas	106.078	ppb	5.0	348582.66	100	21.22	79.5	120.4	
Th	232	209	No Gas	104.972	ppb	5.8	348317.61	100	20.99	79.5	120.4	
U	238	209	No Gas	103.237	ppb	5.6	321254.59	100	20.65	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1448704.97	1.8	1419082.7	102.09	29.5	120.4	
Sc	45	No Gas	3412183.79	2.3	3146924.08	108.43	29.5	120.4	
Sc	45	H2	388236.73	0.6	384460.42	100.98	29.5	120.4	
Sc	45	He	77294.89	1.1	75345.71	102.59	29.5	120.4	
Ge	72	No Gas	753004.59	2.6	687904.62	109.46	29.5	120.4	
Ge	72	H2	140155.76	0.9	138854.33	100.94	29.5	120.4	
Ge	72	He	58517.21	0.9	57203.55	102.3	29.5	120.4	
Y	89	H2	2462480.62	1.0	2377183.3	103.59	29.5	120.4	
Y	89	He	506870.90	1.2	498269.57	101.73	29.5	120.4	
Tb	159	No Gas	7301581.90	2.4	6611594.34	110.44	29.5	120.4	
Tb	159	He	2645883.94	1.2	2564694.13	103.17	29.5	120.4	
Bi	209	No Gas	3648954.74	2.3	3381664.78	107.9	29.5	120.4	

Sample Report

Sample Name SN5717-020

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:36:50 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.291	ppb	19.0	135.56	100	
11	B	6	No Gas	11.931	ppb	3.5	4071.83	1000	
23	Na	45	He	199.389	ppb	9.4	14419.85	200000	
24	Mg	45	He	44.975	ppb	10.2	1591.31	200000	
27	Al	45	He	87.365	ppb	6.7	472.25	200000	
28	Si	45	H2	131.483	ppb	2.3	1782.10	10000	
39	K	45	He	106.026	ppb	12.8	13186.91	200000	
40	Ca	45	H2	100.701	ppb	4.1	10244.04	200000	
51	V	89	He	3.108	ppb	6.8	841.17	1000	
52	Cr	89	He	0.800	ppb	5.9	250.63	2000	
55	Mn	89	He	4.548	ppb	7.6	538.58	2000	
56	Fe	89	H2	141.595	ppb	3.2	60252.61	100000	
59	Co	89	He	0.240	ppb	40.9	157.79	1000	
60	Ni	89	He	-4.043	ppb	N/A	1108.98	1000	
63	Cu	89	He	1.037	ppb	12.7	403.36	2000	
66	Zn	89	He	22.018	ppb	12.0	902.29	2000	
75	As	89	He	0.272	ppb	62.5	14.00	1000	
78	Se	89	H2	0.297	ppb	11.1	5.67	1000	
88	Sr	89	He	0.403	ppb	27.0	73.34	2000	
95	Mo	89	He	0.355	ppb	36.4	72.22	1000	
107	Ag	89	He	0.034	ppb	63.8	28.89	100	
111	Cd	89	He	0.060	ppb	58.8	5.19	1000	
118	Sn	159	He	1.552	ppb	19.6	335.57	1000	
121	Sb	159	No Gas	0.136	ppb	12.6	253.62	1000	
137	Ba	159	No Gas	1.836	ppb	8.7	1077.92	2000	
182	W	159	No Gas	0.227	ppb	40.4	280.32	1000	
205	Tl	209	No Gas	-0.009	ppb	N/A	250.29	1000	
208	Pb	209	No Gas	3.736	ppb	3.4	12506.44	2000	
232	Th	209	No Gas	0.953	ppb	25.2	3257.42	1000	
238	U	209	No Gas	0.096	ppb	36.2	303.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1389705.47	1.2	1419082.7	97.93	29.5	120.4	
Sc	45	No Gas	3328707.57	0.3	3146924.08	105.78	29.5	120.4	
Sc	45	H2	380896.00	1.3	384460.42	99.07	29.5	120.4	
Sc	45	He	78143.99	0.8	75345.71	103.71	29.5	120.4	
Ge	72	No Gas	742550.63	0.9	687904.62	107.94	29.5	120.4	
Ge	72	H2	138887.35	1.6	138854.33	100.02	29.5	120.4	
Ge	72	He	58420.45	0.0	57203.55	102.13	29.5	120.4	
Y	89	H2	2442639.77	0.4	2377183.3	102.75	29.5	120.4	
Y	89	He	506804.58	0.7	498269.57	101.71	29.5	120.4	
Tb	159	No Gas	7166737.95	0.0	6611594.34	108.4	29.5	120.4	
Tb	159	He	2648809.93	0.8	2564694.13	103.28	29.5	120.4	
Bi	209	No Gas	3623050.61	1.1	3381664.78	107.14	29.5	120.4	

Sample Report

Sample Name SN5830-002

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:39:29 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.069	ppb	30.9	72.22	100	
11	B	6	No Gas	386.195	ppb	4.0	65753.33	1000	
23	Na	45	He	112442.405	ppb	2.0	2413732.48	200000	
24	Mg	45	He	14305.523	ppb	1.5	170052.86	200000	
27	Al	45	He	24.938	ppb	5.3	128.90	200000	
28	Si	45	H2	10686.735	ppb	8.7	93948.32	10000	
39	K	45	He	327.582	ppb	7.1	14132.34	200000	
40	Ca	45	H2	135570.563	ppb	8.0	10897445.25	200000	
51	V	89	He	1.542	ppb	28.3	502.25	1000	
52	Cr	89	He	0.452	ppb	17.2	156.64	2000	
55	Mn	89	He	313.727	ppb	0.2	30322.27	2000	
56	Fe	89	H2	28.808	ppb	13.0	19124.33	100000	
59	Co	89	He	0.614	ppb	7.3	275.58	1000	
60	Ni	89	He	-2.617	ppb	N/A	1146.76	1000	
63	Cu	89	He	1.038	ppb	11.4	367.80	2000	
66	Zn	89	He	18.488	ppb	7.4	696.71	2000	
75	As	89	He	0.225	ppb	25.5	11.33	1000	
78	Se	89	H2	0.227	ppb	28.7	4.17	1000	
88	Sr	89	He	1865.265	ppb	1.1	280795.83	2000	
95	Mo	89	He	0.955	ppb	11.7	166.68	1000	
107	Ag	89	He	0.013	ppb	142.0	14.44	100	
111	Cd	89	He	0.057	ppb	93.8	4.45	1000	
118	Sn	159	He	1.209	ppb	8.3	261.12	1000	
121	Sb	159	No Gas	0.049	ppb	43.6	126.81	1000	
137	Ba	159	No Gas	35.684	ppb	4.4	20859.52	2000	
182	W	159	No Gas	0.058	ppb	11.5	93.44	1000	
205	Tl	209	No Gas	-0.054	ppb	N/A	146.83	1000	
208	Pb	209	No Gas	0.049	ppb	42.2	477.20	2000	
232	Th	209	No Gas	0.116	ppb	27.3	493.90	1000	
238	U	209	No Gas	3.937	ppb	4.5	12249.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1317561.26	3.5	1419082.7	92.85	29.5	120.4	
Sc	45	No Gas	3173998.23	3.8	3146924.08	100.86	29.5	120.4	
Sc	45	H2	348960.00	6.4	384460.42	90.77	29.5	120.4	
Sc	45	He	69563.65	1.9	75345.71	92.33	29.5	120.4	
Ge	72	No Gas	710822.69	4.1	687904.62	103.33	29.5	120.4	
Ge	72	H2	127594.77	2.3	138854.33	91.89	29.5	120.4	
Ge	72	He	52654.27	2.2	57203.55	92.05	29.5	120.4	
Y	89	H2	2266600.43	5.7	2377183.3	95.35	29.5	120.4	
Y	89	He	461711.76	1.6	498269.57	92.66	29.5	120.4	
Tb	159	No Gas	7210892.60	3.1	6611594.34	109.06	29.5	120.4	
Tb	159	He	2515883.66	1.9	2564694.13	98.1	29.5	120.4	
Bi	209	No Gas	3647569.13	3.7	3381664.78	107.86	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:42:12 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.043	ppb	56.6	63.33	100	
11	B	6	No Gas	2157.176	ppb	1.9	346549.17	1000	
23	Na	45	He	1258600.099	ppb	2.4	27876211.48	200000	>LDR
24	Mg	45	He	261901.044	ppb	2.7	3206391.90	200000	
27	Al	45	He	11.585	ppb	8.9	68.89	200000	
28	Si	45	H2	8701.652	ppb	7.3	82843.99	10000	
39	K	45	He	8369.759	ppb	2.2	104449.35	200000	
40	Ca	45	H2	484231.136	ppb	6.0	42106523.26	200000	
51	V	89	He	3.720	ppb	14.3	887.84	1000	
52	Cr	89	He	0.916	ppb	2.7	257.96	2000	
55	Mn	89	He	30.953	ppb	3.2	3105.78	2000	
56	Fe	89	H2	181.634	ppb	6.1	73014.46	100000	
59	Co	89	He	0.632	ppb	17.8	288.91	1000	
60	Ni	89	He	3.643	ppb	0.9	1786.85	1000	
63	Cu	89	He	1.749	ppb	2.2	572.25	2000	
66	Zn	89	He	23.236	ppb	6.2	884.50	2000	
75	As	89	He	0.348	ppb	17.9	15.33	1000	
78	Se	89	H2	1.436	ppb	25.9	24.17	1000	
88	Sr	89	He	7372.300	ppb	1.6	1134727.54	2000	
95	Mo	89	He	0.662	ppb	6.0	120.01	1000	
107	Ag	89	He	0.022	ppb	97.0	20.00	100	
111	Cd	89	He	0.159	ppb	11.8	12.22	1000	
118	Sn	159	He	1.359	ppb	34.7	287.79	1000	
121	Sb	159	No Gas	0.083	ppb	8.4	170.19	1000	
137	Ba	159	No Gas	17.141	ppb	1.6	9701.09	2000	
182	W	159	No Gas	0.057	ppb	58.1	90.10	1000	
205	Tl	209	No Gas	-0.074	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	1.855	ppb	4.1	6003.88	2000	
232	Th	209	No Gas	0.088	ppb	26.6	377.10	1000	
238	U	209	No Gas	8.454	ppb	3.9	24665.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1272071.79	0.4	1419082.7	89.64	29.5	120.4	
Sc	45	No Gas	3076971.81	0.5	3146924.08	97.78	29.5	120.4	
Sc	45	H2	377085.55	5.5	384460.42	98.08	29.5	120.4	
Sc	45	He	72025.77	3.2	75345.71	95.59	29.5	120.4	
Ge	72	No Gas	684239.21	0.8	687904.62	99.47	29.5	120.4	
Ge	72	H2	133561.32	4.0	138854.33	96.19	29.5	120.4	
Ge	72	He	54565.92	2.0	57203.55	95.39	29.5	120.4	
Y	89	H2	2403564.08	4.4	2377183.3	101.11	29.5	120.4	
Y	89	He	472151.87	2.4	498269.57	94.76	29.5	120.4	
Tb	159	No Gas	6971259.97	0.2	6611594.34	105.44	29.5	120.4	
Tb	159	He	2537086.93	1.9	2564694.13	98.92	29.5	120.4	
Bi	209	No Gas	3417682.62	0.3	3381664.78	101.07	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:44:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.082	ppb	32.5	78.89	100	
11	B	6	No Gas	2082.985	ppb	4.5	361345.01	1000	
23	Na	45	He	1188991.773	ppb	1.0	26913268.36	200000	>LDR
24	Mg	45	He	218698.151	ppb	0.6	2736672.11	200000	
27	Al	45	He	89.627	ppb	10.0	455.58	200000	
28	Si	45	H2	8587.667	ppb	1.4	81606.02	10000	
39	K	45	He	11103.187	ppb	1.0	137929.80	200000	
40	Ca	45	H2	556832.892	ppb	1.6	48301915.39	200000	
51	V	89	He	5.309	ppb	3.3	1182.32	1000	
52	Cr	89	He	5.965	ppb	8.6	1342.49	2000	
55	Mn	89	He	239.450	ppb	1.6	24043.36	2000	
56	Fe	89	H2	6736.630	ppb	0.8	2292294.27	100000	
59	Co	89	He	2.476	ppb	10.2	964.56	1000	
60	Ni	89	He	5.525	ppb	20.5	2001.33	1000	
63	Cu	89	He	2.288	ppb	3.4	732.27	2000	
66	Zn	89	He	22.829	ppb	11.1	883.39	2000	
75	As	89	He	0.834	ppb	29.1	30.67	1000	
78	Se	89	H2	0.310	ppb	21.3	5.67	1000	
88	Sr	89	He	9173.384	ppb	0.4	1434061.21	2000	
95	Mo	89	He	0.925	ppb	7.1	167.78	1000	
107	Ag	89	He	0.034	ppb	19.0	27.78	100	
111	Cd	89	He	0.078	ppb	10.8	6.30	1000	
118	Sn	159	He	1.209	ppb	8.2	266.68	1000	
121	Sb	159	No Gas	0.067	ppb	48.0	153.51	1000	
137	Ba	159	No Gas	18.575	ppb	8.0	10873.20	2000	
182	W	159	No Gas	0.111	ppb	24.0	153.51	1000	
205	Tl	209	No Gas	-0.078	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	3.198	ppb	8.0	10436.74	2000	
232	Th	209	No Gas	0.061	ppb	1.8	303.68	1000	
238	U	209	No Gas	5.911	ppb	4.8	17765.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1374265.69	2.4	1419082.7	96.84	29.5	120.4	
Sc	45	No Gas	3251200.41	2.8	3146924.08	103.31	29.5	120.4	
Sc	45	H2	375356.36	0.6	384460.42	97.63	29.5	120.4	
Sc	45	He	73575.33	1.1	75345.71	97.65	29.5	120.4	
Ge	72	No Gas	714330.20	2.4	687904.62	103.84	29.5	120.4	
Ge	72	H2	133212.34	1.1	138854.33	95.94	29.5	120.4	
Ge	72	He	55240.26	1.3	57203.55	96.57	29.5	120.4	
Y	89	H2	2357046.34	0.7	2377183.3	99.15	29.5	120.4	
Y	89	He	479435.63	0.9	498269.57	96.22	29.5	120.4	
Tb	159	No Gas	7217731.98	2.5	6611594.34	109.17	29.5	120.4	
Tb	159	He	2571357.71	1.0	2564694.13	100.26	29.5	120.4	
Bi	209	No Gas	3523363.03	3.1	3381664.78	104.19	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:47:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.054	ppb	78.3	72.23	100	
11	B	6	No Gas	2129.477	ppb	3.3	374847.53	1000	
23	Na	45	He	1211245.874	ppb	2.9	27370105.60	200000	>LDR
24	Mg	45	He	223652.011	ppb	3.3	2793650.65	200000	
27	Al	45	He	54.395	ppb	7.7	281.12	200000	
28	Si	45	H2	9239.592	ppb	2.7	83327.43	10000	
39	K	45	He	11260.635	ppb	3.3	139486.43	200000	
40	Ca	45	H2	597302.437	ppb	2.8	49193008.16	200000	
51	V	89	He	4.748	ppb	0.8	1073.41	1000	
52	Cr	89	He	3.698	ppb	4.0	848.55	2000	
55	Mn	89	He	261.448	ppb	3.4	25987.15	2000	
56	Fe	89	H2	7637.693	ppb	3.1	2498553.54	100000	
59	Co	89	He	2.674	ppb	8.2	1026.79	1000	
60	Ni	89	He	3.581	ppb	45.9	1790.18	1000	
63	Cu	89	He	1.951	ppb	8.3	631.15	2000	
66	Zn	89	He	23.548	ppb	6.5	900.06	2000	
75	As	89	He	0.901	ppb	17.9	32.33	1000	
78	Se	89	H2	0.227	ppb	10.2	4.17	1000	
88	Sr	89	He	9333.010	ppb	3.9	1444395.29	2000	
95	Mo	89	He	0.916	ppb	14.2	164.45	1000	
107	Ag	89	He	0.027	ppb	23.8	23.33	100	
111	Cd	89	He	0.065	ppb	50.4	5.18	1000	
118	Sn	159	He	0.952	ppb	23.4	220.01	1000	
121	Sb	159	No Gas	0.042	ppb	68.9	116.80	1000	
137	Ba	159	No Gas	18.621	ppb	3.9	10950.14	2000	
182	W	159	No Gas	0.066	ppb	28.6	103.45	1000	
205	Tl	209	No Gas	-0.082	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	1.816	ppb	7.4	6100.77	2000	
232	Th	209	No Gas	0.045	ppb	44.4	253.62	1000	
238	U	209	No Gas	5.934	ppb	5.0	17956.24	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1394243.24	1.8	1419082.7	98.25	29.5	120.4	
Sc	45	No Gas	3230506.43	1.2	3146924.08	102.66	29.5	120.4	
Sc	45	H2	356593.91	3.4	384460.42	92.75	29.5	120.4	
Sc	45	He	73472.92	2.0	75345.71	97.51	29.5	120.4	
Ge	72	No Gas	711835.46	1.8	687904.62	103.48	29.5	120.4	
Ge	72	H2	127535.39	2.9	138854.33	91.85	29.5	120.4	
Ge	72	He	54520.94	1.7	57203.55	95.31	29.5	120.4	
Y	89	H2	2268514.84	3.0	2377183.3	95.43	29.5	120.4	
Y	89	He	474890.65	2.2	498269.57	95.31	29.5	120.4	
Tb	159	No Gas	7246396.28	1.3	6611594.34	109.6	29.5	120.4	
Tb	159	He	2546643.21	2.2	2564694.13	99.3	29.5	120.4	
Bi	209	No Gas	3545794.89	1.6	3381664.78	104.85	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:50:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.064	ppb	48.1	74.45	100	
11	B	6	No Gas	739.185	ppb	4.6	130765.90	1000	
23	Na	45	He	352861.756	ppb	1.5	8096300.29	200000	
24	Mg	45	He	46015.350	ppb	1.7	583935.97	200000	
27	Al	45	He	30.197	ppb	17.2	164.45	200000	
28	Si	45	H2	7848.759	ppb	1.2	73818.38	10000	
39	K	45	He	3427.735	ppb	1.1	50977.30	200000	
40	Ca	45	H2	166775.823	ppb	0.9	14309859.92	200000	
51	V	89	He	5.998	ppb	5.2	1312.33	1000	
52	Cr	89	He	0.972	ppb	9.6	275.95	2000	
55	Mn	89	He	65.838	ppb	3.3	6697.72	2000	
56	Fe	89	H2	213.767	ppb	2.9	82321.57	100000	
59	Co	89	He	0.537	ppb	10.9	260.02	1000	
60	Ni	89	He	-5.666	ppb	N/A	893.39	1000	
63	Cu	89	He	1.566	ppb	9.5	533.36	2000	
66	Zn	89	He	45.290	ppb	2.1	1723.50	2000	
75	As	89	He	0.658	ppb	17.1	25.33	1000	
78	Se	89	H2	0.496	ppb	24.3	8.67	1000	
88	Sr	89	He	1805.485	ppb	1.2	284305.43	2000	
95	Mo	89	He	0.844	ppb	15.0	154.45	1000	
107	Ag	89	He	0.021	ppb	27.1	20.00	100	
111	Cd	89	He	0.044	ppb	37.5	3.70	1000	
118	Sn	159	He	1.079	ppb	26.7	246.68	1000	
121	Sb	159	No Gas	0.189	ppb	3.4	320.36	1000	
137	Ba	159	No Gas	57.661	ppb	8.4	32365.46	2000	
182	W	159	No Gas	0.039	ppb	40.4	70.08	1000	
205	Tl	209	No Gas	-0.082	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.151	ppb	29.4	774.21	2000	
232	Th	209	No Gas	0.026	ppb	59.8	186.88	1000	
238	U	209	No Gas	3.800	ppb	7.5	11321.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1388482.70	4.1	1419082.7	97.84	29.5	120.4	
Sc	45	No Gas	3102221.28	5.6	3146924.08	98.58	29.5	120.4	
Sc	45	H2	371253.27	1.1	384460.42	96.56	29.5	120.4	
Sc	45	He	74526.00	1.3	75345.71	98.91	29.5	120.4	
Ge	72	No Gas	696891.99	4.7	687904.62	101.31	29.5	120.4	
Ge	72	H2	134904.13	1.7	138854.33	97.16	29.5	120.4	
Ge	72	He	56129.13	0.8	57203.55	98.12	29.5	120.4	
Y	89	H2	2350021.08	2.0	2377183.3	98.86	29.5	120.4	
Y	89	He	482938.11	1.1	498269.57	96.92	29.5	120.4	
Tb	159	No Gas	6939091.91	5.6	6611594.34	104.95	29.5	120.4	
Tb	159	He	2596958.75	0.4	2564694.13	101.26	29.5	120.4	
Bi	209	No Gas	3497414.38	5.1	3381664.78	103.42	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 041SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:52:49 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	718.9	62.22	100	
11	B	6	No Gas	33.372	ppb	3.8	8115.90	1000	
23	Na	45	He	844.121	ppb	3.9	28519.65	200000	
24	Mg	45	He	63.188	ppb	17.4	1746.89	200000	
27	Al	45	He	25.600	ppb	18.5	141.12	200000	
28	Si	45	H2	22.735	ppb	35.4	727.49	10000	
39	K	45	He	9.099	ppb	427.9	11451.14	200000	
40	Ca	45	H2	118.133	ppb	7.0	11592.88	200000	
51	V	89	He	6.943	ppb	1.4	1496.80	1000	
52	Cr	89	He	0.389	ppb	21.5	151.98	2000	
55	Mn	89	He	0.551	ppb	38.3	111.32	2000	
56	Fe	89	H2	11.865	ppb	9.6	14393.35	100000	
59	Co	89	He	-0.027	ppb	N/A	53.34	1000	
60	Ni	89	He	-7.054	ppb	N/A	763.38	1000	
63	Cu	89	He	0.746	ppb	1.7	305.57	2000	
66	Zn	89	He	16.329	ppb	3.3	655.60	2000	
75	As	89	He	0.310	ppb	6.7	14.67	1000	
78	Se	89	H2	0.060	ppb	71.5	1.67	1000	
88	Sr	89	He	1.109	ppb	16.4	183.34	2000	
95	Mo	89	He	0.151	ppb	43.8	33.34	1000	
107	Ag	89	He	0.013	ppb	105.9	15.56	100	
111	Cd	89	He	0.014	ppb	56.7	1.48	1000	
118	Sn	159	He	0.666	ppb	34.2	175.56	1000	
121	Sb	159	No Gas	0.008	ppb	301.0	66.74	1000	
137	Ba	159	No Gas	0.263	ppb	52.1	163.52	2000	
182	W	159	No Gas	0.025	ppb	134.8	56.73	1000	
205	Tl	209	No Gas	-0.081	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	-0.010	ppb	N/A	286.99	2000	
232	Th	209	No Gas	0.017	ppb	138.1	170.19	1000	
238	U	209	No Gas	0.018	ppb	73.6	63.40	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1443357.37	0.4	1419082.7	101.71	29.5	120.4	
Sc	45	No Gas	3193140.61	1.2	3146924.08	101.47	29.5	120.4	
Sc	45	H2	375442.48	4.0	384460.42	97.65	29.5	120.4	
Sc	45	He	74510.29	1.2	75345.71	98.89	29.5	120.4	
Ge	72	No Gas	721041.48	1.0	687904.62	104.82	29.5	120.4	
Ge	72	H2	134958.21	2.6	138854.33	97.19	29.5	120.4	
Ge	72	He	56857.87	0.6	57203.55	99.4	29.5	120.4	
Y	89	H2	2391738.27	4.3	2377183.3	100.61	29.5	120.4	
Y	89	He	488554.36	0.6	498269.57	98.05	29.5	120.4	
Tb	159	No Gas	7156460.94	1.0	6611594.34	108.24	29.5	120.4	
Tb	159	He	2603698.36	0.8	2564694.13	101.52	29.5	120.4	
Bi	209	No Gas	3688825.21	1.5	3381664.78	109.08	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 042SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 5:55:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.050	ppb	140.7	74.45	100	
11	B	6	No Gas	21.925	ppb	4.4	6090.40	1000	
23	Na	45	He	646.244	ppb	5.9	23619.06	200000	
24	Mg	45	He	49.324	ppb	30.8	1544.63	200000	
27	Al	45	He	12.244	ppb	19.6	73.34	200000	
28	Si	45	H2	18.312	ppb	69.2	684.11	10000	
39	K	45	He	17.199	ppb	134.9	11377.77	200000	
40	Ca	45	H2	92.240	ppb	5.2	9317.83	200000	
51	V	89	He	8.240	ppb	7.8	1703.49	1000	
52	Cr	89	He	0.458	ppb	36.5	163.97	2000	
55	Mn	89	He	0.818	ppb	14.9	136.64	2000	
56	Fe	89	H2	18.619	ppb	3.7	16658.43	100000	
59	Co	89	He	-0.007	ppb	N/A	60.00	1000	
60	Ni	89	He	-6.828	ppb	N/A	774.50	1000	
63	Cu	89	He	0.659	ppb	18.0	277.79	2000	
66	Zn	89	He	16.104	ppb	7.0	637.82	2000	
75	As	89	He	0.307	ppb	22.5	14.33	1000	
78	Se	89	H2	0.071	ppb	47.8	1.83	1000	
88	Sr	89	He	0.862	ppb	13.0	142.23	2000	
95	Mo	89	He	0.090	ppb	42.5	22.22	1000	
107	Ag	89	He	0.006	ppb	151.1	11.11	100	
111	Cd	89	He	0.019	ppb	82.9	1.85	1000	
118	Sn	159	He	0.867	ppb	25.6	207.79	1000	
121	Sb	159	No Gas	0.012	ppb	35.2	73.42	1000	
137	Ba	159	No Gas	0.516	ppb	22.8	317.03	2000	
182	W	159	No Gas	0.018	ppb	130.6	50.05	1000	
205	Tl	209	No Gas	-0.101	ppb	N/A	36.71	1000	
208	Pb	209	No Gas	-0.015	ppb	N/A	276.98	2000	
232	Th	209	No Gas	0.010	ppb	27.1	150.17	1000	
238	U	209	No Gas	0.003	ppb	60.3	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1455630.83	1.5	1419082.7	102.58	29.5	120.4	
Sc	45	No Gas	3284262.53	1.2	3146924.08	104.36	29.5	120.4	
Sc	45	H2	373634.39	1.0	384460.42	97.18	29.5	120.4	
Sc	45	He	73440.68	4.7	75345.71	97.47	29.5	120.4	
Ge	72	No Gas	732524.90	2.2	687904.62	106.49	29.5	120.4	
Ge	72	H2	135039.34	1.7	138854.33	97.25	29.5	120.4	
Ge	72	He	56113.99	2.9	57203.55	98.1	29.5	120.4	
Y	89	H2	2381837.74	1.2	2377183.3	100.2	29.5	120.4	
Y	89	He	482168.63	4.1	498269.57	96.77	29.5	120.4	
Tb	159	No Gas	7324951.56	1.4	6611594.34	110.79	29.5	120.4	
Tb	159	He	2578483.44	4.2	2564694.13	100.54	29.5	120.4	
Bi	209	No Gas	3750226.11	2.3	3381664.78	110.9	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	043_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 5:57:58 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.427	ppb	6.0	32931.56	25	97.71	89.8	110.2	
11	B	6	No Gas	26.757	ppb	3.3	25431.94	25	107.03	89.8	110.2	
23	Na	45	He	5284.846	ppb	0.9	586036.71	5000	105.7	89.8	110.2	
24	Mg	45	He	5060.458	ppb	1.2	306473.00	5000	101.21	89.8	110.2	
27	Al	45	He	492.899	ppb	2.3	11767.44	500	98.58	89.8	110.2	
28	Si	45	H2	483.218	ppb	0.2	22529.44	500	96.64	89.8	110.2	
39	K	45	He	4941.175	ppb	0.8	283057.56	5000	98.82	89.8	110.2	
40	Ca	45	H2	5047.287	ppb	0.3	2115371.22	5000	100.95	89.8	110.2	
51	V	89	He	25.278	ppb	0.9	22063.54	25	101.11	89.8	110.2	
52	Cr	89	He	25.497	ppb	1.0	26882.51	25	101.99	89.8	110.2	
55	Mn	89	He	25.496	ppb	1.2	12614.01	25	101.98	89.8	110.2	
56	Fe	89	H2	5011.208	ppb	0.4	8346082.56	5000	100.22	89.8	110.2	
59	Co	89	He	25.495	ppb	1.9	45788.48	25	101.98	89.8	110.2	
60	Ni	89	He	23.244	ppb	1.6	12811.82	25	92.98	89.8	110.2	
63	Cu	89	He	25.371	ppb	0.6	35060.42	25	101.48	89.8	110.2	
66	Zn	89	He	25.419	ppb	1.4	4647.62	25	101.68	89.8	110.2	
75	As	89	He	24.960	ppb	1.3	3798.94	25	99.84	89.8	110.2	
78	Se	89	H2	25.892	ppb	2.2	2055.73	25	103.57	89.8	110.2	
88	Sr	89	He	24.546	ppb	1.4	18875.80	25	98.18	89.8	110.2	
95	Mo	89	He	24.811	ppb	1.1	21273.80	25	99.24	89.8	110.2	
107	Ag	89	He	26.078	ppb	0.9	75669.59	25	104.31	89.8	110.2	
111	Cd	89	He	25.425	ppb	0.8	9475.25	25	101.7	89.8	110.2	
118	Sn	159	He	23.787	ppb	2.0	20378.25	25	95.15	89.8	110.2	
121	Sb	159	No Gas	23.970	ppb	6.5	175746.74	25	95.88	89.8	110.2	
137	Ba	159	No Gas	24.021	ppb	6.0	70001.52	25	96.08	89.8	110.2	
182	W	159	No Gas	23.872	ppb	5.0	132575.74	25	95.49	89.8	110.2	
205	Tl	209	No Gas	24.323	ppb	5.4	291483.89	25	97.29	89.8	110.2	
208	Pb	209	No Gas	24.340	ppb	5.6	406178.11	25	97.36	89.8	110.2	
232	Th	209	No Gas	23.603	ppb	6.6	397755.45	25	94.41	89.8	110.2	
238	U	209	No Gas	24.169	ppb	6.4	381959.06	25	96.68	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1394830.26	1.5	1419082.7	98.29	29.5	120.4	
Sc	45	No Gas	3208226.03	2.2	3146924.08	101.95	29.5	120.4	
Sc	45	H2	362482.07	0.4	384460.42	94.28	29.5	120.4	
Sc	45	He	71033.53	0.8	75345.71	94.28	29.5	120.4	
Ge	72	No Gas	710313.74	1.4	687904.62	103.26	29.5	120.4	
Ge	72	H2	131104.62	0.2	138854.33	94.42	29.5	120.4	
Ge	72	He	54463.45	0.6	57203.55	95.21	29.5	120.4	
Y	89	H2	2314815.88	0.6	2377183.3	97.38	29.5	120.4	
Y	89	He	471502.74	0.2	498269.57	94.63	29.5	120.4	
Tb	159	No Gas	7190676.14	2.0	6611594.34	108.76	29.5	120.4	
Tb	159	He	2555339.48	0.8	2564694.13	99.64	29.5	120.4	
Bi	209	No Gas	3706023.76	1.8	3381664.78	109.59	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	044_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:00:31 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.063	ppb	41.0	150.01	0.2	
11	B	6	No Gas	2.416	ppb	18.3	4248.56	4	Failed DoD
23	Na	45	He	73.935	ppb	6.8	16618.07	200	
24	Mg	45	He	3.937	ppb	73.5	1124.58	20	
27	Al	45	He	0.038	ppb	37.2	13.33	20	
28	Si	45	H2	0.869	ppb	73.6	527.26	100	
39	K	45	He	4.126	ppb	64.3	10910.99	200	
40	Ca	45	H2	3.515	ppb	4.1	2739.26	20	
51	V	89	He	0.072	ppb	77.9	303.35	1	
52	Cr	89	He	-0.009	ppb	N/A	55.32	1	
55	Mn	89	He	0.006	ppb	232.0	55.32	0.4	
56	Fe	89	H2	3.734	ppb	4.0	15956.82	20	
59	Co	89	He	0.000	ppb	N/A	60.00	0.2	
60	Ni	89	He	-1.622	ppb	N/A	624.48	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.005	ppb	174.2	95.56	0.6	
66	Zn	89	He	0.116	ppb	29.0	61.11	2	
75	As	89	He	0.000	ppb	14289.2	4.67	1	
78	Se	89	H2	0.034	ppb	38.0	3.33	1	
88	Sr	89	He	0.033	ppb	49.8	31.11	1	
95	Mo	89	He	0.113	ppb	29.8	101.12	1	
107	Ag	89	He	0.008	ppb	11.2	30.00	0.2	
111	Cd	89	He	0.009	ppb	40.2	3.70	0.2	
118	Sn	159	He	0.099	ppb	32.0	140.01	1	
121	Sb	159	No Gas	0.033	ppb	31.3	310.35	0.2	
137	Ba	159	No Gas	0.022	ppb	75.8	80.09	0.4	
182	W	159	No Gas	0.091	ppb	14.6	557.30	1	
205	Tl	209	No Gas	0.015	ppb	74.5	487.23	0.2	
208	Pb	209	No Gas	0.022	ppb	42.9	737.51	0.2	
232	Th	209	No Gas	0.141	ppb	23.8	2629.92	1	
238	U	209	No Gas	0.033	ppb	54.7	580.67	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1450463.51	10.5	1419082.7	102.21	29.5	120.4	
Sc	45	No Gas	3267934.72	15.1	3146924.08	103.85	29.5	120.4	
Sc	45	H2	356255.16	0.7	384460.42	92.66	29.5	120.4	
Sc	45	He	70166.47	2.5	75345.71	93.13	29.5	120.4	
Ge	72	No Gas	706398.32	10.0	687904.62	102.69	29.5	120.4	
Ge	72	H2	131411.14	1.0	138854.33	94.64	29.5	120.4	
Ge	72	He	53600.44	3.0	57203.55	93.7	29.5	120.4	
Y	89	H2	2279598.87	0.8	2377183.3	95.89	29.5	120.4	
Y	89	He	465193.38	2.7	498269.57	93.36	29.5	120.4	
Tb	159	No Gas	7421068.23	15.1	6611594.34	112.24	29.5	120.4	
Tb	159	He	2507666.54	2.8	2564694.13	97.78	29.5	120.4	
Bi	209	No Gas	3854791.92	14.2	3381664.78	113.99	29.5	120.4	

Sample Report

Sample Name SN5897-002L

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:03:11 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.134	ppb	113.0	65.56	100	
11	B	6	No Gas	44.194	ppb	14.3	3556.12	1000	
23	Na	45	He	1668.886	ppb	4.2	15983.27	200000	
24	Mg	45	He	77.729	ppb	16.8	1086.79	200000	
27	Al	45	He	18.347	ppb	56.9	30.00	200000	
28	Si	45	H2	59.224	ppb	115.3	584.00	10000	
39	K	45	He	-110.512	ppb	N/A	10535.87	200000	
40	Ca	45	H2	288.037	ppb	1.3	5933.68	200000	
51	V	89	He	6.813	ppb	3.1	476.69	1000	
52	Cr	89	He	0.568	ppb	31.8	87.98	2000	
55	Mn	89	He	4.239	ppb	34.9	135.31	2000	
56	Fe	89	H2	39.620	ppb	11.4	12322.51	100000	
59	Co	89	He	-0.319	ppb	N/A	37.78	1000	
60	Ni	89	He	-41.028	ppb	N/A	617.81	1000	
63	Cu	89	He	0.720	ppb	43.1	127.78	2000	
66	Zn	89	He	25.465	ppb	11.4	223.34	2000	
75	As	89	He	0.437	ppb	44.7	7.33	1000	
78	Se	89	H2	0.119	ppb	235.7	1.00	1000	
88	Sr	89	He	0.743	ppb	80.8	28.89	2000	
95	Mo	89	He	0.697	ppb	69.9	30.00	1000	
107	Ag	89	He	0.082	ppb	0.7	16.67	100	
111	Cd	89	He	0.077	ppb	149.9	1.48	1000	
118	Sn	159	He	1.868	ppb	24.3	121.12	1000	
121	Sb	159	No Gas	-0.070	ppb	N/A	33.37	1000	
137	Ba	159	No Gas	6.684	ppb	7.0	770.89	2000	
182	W	159	No Gas	0.269	ppb	79.1	86.76	1000	
205	Tl	209	No Gas	-0.453	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	-0.004	ppb	N/A	313.68	2000	
232	Th	209	No Gas	0.690	ppb	8.2	570.66	1000	
238	U	209	No Gas	0.036	ppb	39.9	30.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1400981.90	3.2	1419082.7	98.72	29.5	120.4	
Sc	45	No Gas	3084447.75	3.3	3146924.08	98.01	29.5	120.4	
Sc	45	H2	350267.99	0.8	384460.42	91.11	29.5	120.4	
Sc	45	He	70765.12	0.4	75345.71	93.92	29.5	120.4	
Ge	72	No Gas	682424.38	3.7	687904.62	99.2	29.5	120.4	
Ge	72	H2	128034.86	1.0	138854.33	92.21	29.5	120.4	
Ge	72	He	54015.05	0.2	57203.55	94.43	29.5	120.4	
Y	89	H2	2258844.76	1.0	2377183.3	95.02	29.5	120.4	
Y	89	He	467012.52	0.4	498269.57	93.73	29.5	120.4	
Tb	159	No Gas	7024507.74	3.6	6611594.34	106.25	29.5	120.4	
Tb	159	He	2528425.15	0.7	2564694.13	98.59	29.5	120.4	
Bi	209	No Gas	3659923.78	3.5	3381664.78	108.23	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:05:44 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.509	ppb	15.2	2867.05	100	
11	B	6	No Gas	209.786	ppb	11.2	38541.10	1000	
23	Na	45	He	11623.465	ppb	0.9	253728.29	200000	
24	Mg	45	He	1128.334	ppb	1.1	14036.75	200000	
27	Al	45	He	1031.898	ppb	4.4	4765.42	200000	
28	Si	45	H2	5035.659	ppb	4.4	43896.27	10000	
39	K	45	He	10506.576	ppb	1.5	122273.05	200000	
40	Ca	45	H2	1162.630	ppb	4.2	93351.16	200000	
51	V	89	He	57.112	ppb	4.0	9876.01	1000	
52	Cr	89	He	54.307	ppb	0.7	11228.44	2000	
55	Mn	89	He	24.117	ppb	2.2	2374.45	2000	
56	Fe	89	H2	1136.365	ppb	3.5	371048.70	100000	
59	Co	89	He	11.185	ppb	1.4	3980.87	1000	
60	Ni	89	He	15.571	ppb	3.9	2885.96	1000	
63	Cu	89	He	33.183	ppb	1.0	9027.69	2000	
66	Zn	89	He	130.128	ppb	2.1	4649.84	2000	
75	As	89	He	51.872	ppb	2.8	1545.92	1000	
78	Se	89	H2	53.504	ppb	4.1	812.66	1000	
88	Sr	89	He	54.053	ppb	1.1	8128.25	2000	
95	Mo	89	He	54.067	ppb	2.8	9065.52	1000	
107	Ag	89	He	11.608	ppb	2.6	6590.70	100	
111	Cd	89	He	11.885	ppb	4.3	865.96	1000	
118	Sn	159	He	52.736	ppb	1.3	8942.15	1000	
121	Sb	159	No Gas	11.203	ppb	17.1	15646.50	1000	
137	Ba	159	No Gas	21.649	ppb	16.5	11992.23	2000	
182	W	159	No Gas	52.939	ppb	16.7	55873.40	1000	
205	Tl	209	No Gas	10.995	ppb	14.5	26008.97	1000	
208	Pb	209	No Gas	10.899	ppb	14.6	35843.27	2000	
232	Th	209	No Gas	11.593	ppb	13.2	38334.88	1000	
238	U	209	No Gas	10.810	ppb	15.8	33402.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1393188.75	6.5	1419082.7	98.18	29.5	120.4	
Sc	45	No Gas	3006350.73	9.4	3146924.08	95.53	29.5	120.4	
Sc	45	H2	343143.48	3.6	384460.42	89.25	29.5	120.4	
Sc	45	He	68613.09	1.3	75345.71	91.06	29.5	120.4	
Ge	72	No Gas	675010.25	7.6	687904.62	98.13	29.5	120.4	
Ge	72	H2	124208.45	3.4	138854.33	89.45	29.5	120.4	
Ge	72	He	52981.93	0.4	57203.55	92.62	29.5	120.4	
Y	89	H2	2214805.72	2.9	2377183.3	93.17	29.5	120.4	
Y	89	He	460814.54	0.4	498269.57	92.48	29.5	120.4	
Tb	159	No Gas	6894544.20	9.3	6611594.34	104.28	29.5	120.4	
Tb	159	He	2519631.44	0.6	2564694.13	98.24	29.5	120.4	
Bi	209	No Gas	3650156.10	8.6	3381664.78	107.94	29.5	120.4	

Sample Report

Sample Name SN5897-002S

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:08:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	47.952	ppb	7.4	13045.18	100	
11	B	6	No Gas	484.075	ppb	6.7	87316.94	1000	
23	Na	45	He	7846.526	ppb	2.4	177781.67	200000	
24	Mg	45	He	5309.555	ppb	2.0	64164.41	200000	
27	Al	45	He	1960.599	ppb	0.5	9241.11	200000	
28	Si	45	H2	1032.919	ppb	6.2	9630.73	10000	
39	K	45	He	10171.140	ppb	2.5	121263.36	200000	
40	Ca	45	H2	2688.118	ppb	1.2	220033.89	200000	
51	V	89	He	529.424	ppb	2.2	90154.77	1000	
52	Cr	89	He	217.287	ppb	2.3	45033.02	2000	
55	Mn	89	He	542.315	ppb	2.2	52623.93	2000	
56	Fe	89	H2	1148.941	ppb	0.5	382951.40	100000	
59	Co	89	He	548.136	ppb	1.6	193519.59	1000	
60	Ni	89	He	540.220	ppb	1.2	53468.30	1000	
63	Cu	89	He	271.811	ppb	1.7	73811.99	2000	
66	Zn	89	He	549.678	ppb	3.1	19640.03	2000	
75	As	89	He	104.414	ppb	0.8	3128.03	1000	
78	Se	89	H2	104.710	ppb	1.8	1623.69	1000	
88	Sr	89	He	513.345	ppb	2.8	77652.77	2000	
95	Mo	89	He	108.355	ppb	2.3	18281.71	1000	
107	Ag	89	He	55.993	ppb	2.2	31974.12	100	
111	Cd	89	He	269.997	ppb	2.9	19797.16	1000	
118	Sn	159	He	494.870	ppb	2.1	84678.89	1000	
121	Sb	159	No Gas	98.771	ppb	4.9	143749.26	1000	
137	Ba	159	No Gas	1944.608	ppb	6.1	1124278.85	2000	
182	W	159	No Gas	99.880	ppb	5.9	110065.48	1000	
205	Tl	209	No Gas	103.887	ppb	5.8	247741.24	1000	
208	Pb	209	No Gas	102.547	ppb	5.8	340536.15	2000	
232	Th	209	No Gas	100.265	ppb	7.4	336168.05	1000	
238	U	209	No Gas	101.106	ppb	6.6	317925.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1403795.27	1.7	1419082.7	98.92	29.5	120.4	
Sc	45	No Gas	3064678.16	2.2	3146924.08	97.39	29.5	120.4	
Sc	45	H2	352144.74	0.7	384460.42	91.59	29.5	120.4	
Sc	45	He	70097.95	1.1	75345.71	93.04	29.5	120.4	
Ge	72	No Gas	689790.17	2.7	687904.62	100.27	29.5	120.4	
Ge	72	H2	126593.63	2.0	138854.33	91.17	29.5	120.4	
Ge	72	He	53596.84	1.0	57203.55	93.69	29.5	120.4	
Y	89	H2	2260033.60	0.8	2377183.3	95.07	29.5	120.4	
Y	89	He	463948.75	1.1	498269.57	93.11	29.5	120.4	
Tb	159	No Gas	7133892.81	1.7	6611594.34	107.9	29.5	120.4	
Tb	159	He	2557940.93	1.3	2564694.13	99.74	29.5	120.4	
Bi	209	No Gas	3687427.32	2.0	3381664.78	109.04	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:10:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.503	ppb	4.8	13743.64	100	
11	B	6	No Gas	503.513	ppb	3.0	90801.21	1000	
23	Na	45	He	8035.218	ppb	0.3	182279.41	200000	
24	Mg	45	He	5388.355	ppb	2.1	65258.02	200000	
27	Al	45	He	2007.571	ppb	3.4	9483.48	200000	
28	Si	45	H2	1064.028	ppb	5.5	9704.16	10000	
39	K	45	He	10284.012	ppb	1.2	122781.92	200000	
40	Ca	45	H2	2755.152	ppb	1.0	220733.72	200000	
51	V	89	He	534.372	ppb	0.2	91595.09	1000	
52	Cr	89	He	219.334	ppb	0.4	45756.59	2000	
55	Mn	89	He	548.741	ppb	0.2	53597.99	2000	
56	Fe	89	H2	1143.363	ppb	1.2	374860.06	100000	
59	Co	89	He	552.216	ppb	1.3	196234.82	1000	
60	Ni	89	He	543.040	ppb	0.7	54088.63	1000	
63	Cu	89	He	273.575	ppb	1.2	74778.98	2000	
66	Zn	89	He	562.281	ppb	1.4	20223.04	2000	
75	As	89	He	107.964	ppb	1.7	3255.07	1000	
78	Se	89	H2	107.661	ppb	2.4	1641.69	1000	
88	Sr	89	He	515.406	ppb	0.9	78480.58	2000	
95	Mo	89	He	107.981	ppb	0.9	18338.47	1000	
107	Ag	89	He	57.315	ppb	1.4	32942.97	100	
111	Cd	89	He	271.163	ppb	0.2	20014.50	1000	
118	Sn	159	He	509.958	ppb	0.4	87140.94	1000	
121	Sb	159	No Gas	102.027	ppb	2.4	148349.32	1000	
137	Ba	159	No Gas	2014.686	ppb	3.5	1163829.27	2000	
182	W	159	No Gas	104.454	ppb	3.1	115013.06	1000	
205	Tl	209	No Gas	106.664	ppb	2.5	254831.20	1000	
208	Pb	209	No Gas	104.564	ppb	3.0	347911.46	2000	
232	Th	209	No Gas	104.896	ppb	2.6	352443.71	1000	
238	U	209	No Gas	103.625	ppb	3.9	326502.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1403621.50	1.1	1419082.7	98.91	29.5	120.4	
Sc	45	No Gas	3073555.01	2.0	3146924.08	97.67	29.5	120.4	
Sc	45	H2	344727.05	1.1	384460.42	89.67	29.5	120.4	
Sc	45	He	70253.86	0.1	75345.71	93.24	29.5	120.4	
Ge	72	No Gas	695003.98	1.4	687904.62	101.03	29.5	120.4	
Ge	72	H2	125131.78	0.9	138854.33	90.12	29.5	120.4	
Ge	72	He	53501.67	0.3	57203.55	93.53	29.5	120.4	
Y	89	H2	2222808.07	0.4	2377183.3	93.51	29.5	120.4	
Y	89	He	466932.89	0.5	498269.57	93.71	29.5	120.4	
Tb	159	No Gas	7124036.91	2.1	6611594.34	107.75	29.5	120.4	
Tb	159	He	2553998.29	0.4	2564694.13	99.58	29.5	120.4	
Bi	209	No Gas	3691882.38	1.7	3381664.78	109.17	29.5	120.4	

Sample Report

Sample Name SN5946-001

File Name 049SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:13:33 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.147	ppb	36.3	93.34	100	
11	B	6	No Gas	629.447	ppb	5.5	107227.15	1000	
23	Na	45	He	152402.618	ppb	3.7	3235394.73	200000	
24	Mg	45	He	48863.759	ppb	4.0	572785.35	200000	
27	Al	45	He	29.044	ppb	3.3	146.67	200000	
28	Si	45	H2	9758.355	ppb	0.4	86473.70	10000	
39	K	45	He	1273.692	ppb	5.7	24091.03	200000	
40	Ca	45	H2	196588.287	ppb	0.6	15915079.76	200000	
51	V	89	He	3.909	ppb	7.6	895.62	1000	
52	Cr	89	He	0.594	ppb	3.9	184.64	2000	
55	Mn	89	He	943.988	ppb	4.9	90440.19	2000	
56	Fe	89	H2	5442.230	ppb	0.9	1774605.40	100000	
59	Co	89	He	0.478	ppb	36.4	226.68	1000	
60	Ni	89	He	-8.058	ppb	N/A	620.04	1000	
63	Cu	89	He	0.714	ppb	24.8	277.79	2000	
66	Zn	89	He	16.460	ppb	9.5	618.93	2000	
75	As	89	He	0.911	ppb	18.3	31.67	1000	
78	Se	89	H2	0.358	ppb	28.2	6.17	1000	
88	Sr	89	He	1906.842	ppb	5.0	284893.28	2000	
95	Mo	89	He	1.484	ppb	7.1	253.34	1000	
107	Ag	89	He	0.080	ppb	43.7	52.22	100	
111	Cd	89	He	0.179	ppb	37.1	13.33	1000	
118	Sn	159	He	1.996	ppb	10.4	395.58	1000	
121	Sb	159	No Gas	0.117	ppb	32.4	223.58	1000	
137	Ba	159	No Gas	134.875	ppb	4.4	77582.04	2000	
182	W	159	No Gas	0.196	ppb	35.6	243.61	1000	
205	Tl	209	No Gas	0.008	ppb	279.1	286.99	1000	
208	Pb	209	No Gas	0.064	ppb	43.9	517.25	2000	
232	Th	209	No Gas	0.876	ppb	22.2	2970.34	1000	
238	U	209	No Gas	0.873	ppb	6.1	2676.64	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1332689.15	1.8	1419082.7	93.91	29.5	120.4	
Sc	45	No Gas	3042774.18	1.2	3146924.08	96.69	29.5	120.4	
Sc	45	H2	350289.63	1.0	384460.42	91.11	29.5	120.4	
Sc	45	He	68894.59	3.1	75345.71	91.44	29.5	120.4	
Ge	72	No Gas	683360.83	1.6	687904.62	99.34	29.5	120.4	
Ge	72	H2	124948.11	2.0	138854.33	89.99	29.5	120.4	
Ge	72	He	52813.31	3.0	57203.55	92.33	29.5	120.4	
Y	89	H2	2256518.50	1.5	2377183.3	94.92	29.5	120.4	
Y	89	He	458764.07	3.8	498269.57	92.07	29.5	120.4	
Tb	159	No Gas	7094186.14	1.2	6611594.34	107.3	29.5	120.4	
Tb	159	He	2527472.84	3.5	2564694.13	98.55	29.5	120.4	
Bi	209	No Gas	3584141.57	1.5	3381664.78	105.99	29.5	120.4	

Sample Report

Sample Name SN6056-012

File Name 050SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:16:05 PM

Sample Type Sample

Total Dilution 50.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.718	ppb	20.1	181.12	100	
11	B	6	No Gas	227.314	ppb	3.2	5868.03	1000	
23	Na	45	He	3208.160	ppb	8.1	15639.33	200000	
24	Mg	45	He	34871.431	ppb	1.1	42692.77	200000	
27	Al	45	He	66436.532	ppb	0.4	31462.13	200000	
28	Si	45	H2	4921.849	ppb	3.2	4876.27	10000	
39	K	45	He	11117.580	ppb	1.1	22894.73	200000	
40	Ca	45	H2	53094.421	ppb	0.5	436325.50	200000	
51	V	89	He	140.429	ppb	4.6	2682.58	1000	
52	Cr	89	He	95.862	ppb	4.4	2091.12	2000	
55	Mn	89	He	1150.494	ppb	0.7	11441.90	2000	
56	Fe	89	H2	122543.867	ppb	0.8	4073054.84	100000	
59	Co	89	He	57.132	ppb	6.1	2120.33	1000	
60	Ni	89	He	62.607	ppb	3.6	2050.23	1000	
63	Cu	89	He	597.162	ppb	2.0	16628.26	2000	
66	Zn	89	He	1123.112	ppb	6.0	4130.76	2000	
75	As	89	He	67.094	ppb	2.9	209.69	1000	
78	Se	89	H2	2.434	ppb	0.1	4.50	1000	
88	Sr	89	He	106.641	ppb	3.6	1653.50	2000	
95	Mo	89	He	15.953	ppb	2.6	281.12	1000	
107	Ag	89	He	1.074	ppb	18.5	70.00	100	
111	Cd	89	He	2.970	ppb	29.2	22.59	1000	
118	Sn	159	He	67.994	ppb	3.4	1224.55	1000	
121	Sb	159	No Gas	93.763	ppb	3.1	13825.73	1000	
137	Ba	159	No Gas	341.637	ppb	5.5	19947.14	2000	
182	W	159	No Gas	0.845	ppb	30.0	123.47	1000	
205	Tl	209	No Gas	0.954	ppb	34.3	517.26	1000	
208	Pb	209	No Gas	11475.287	ppb	6.0	3906994.35	2000	
232	Th	209	No Gas	17.480	ppb	7.0	6128.39	1000	
238	U	209	No Gas	6.048	ppb	6.3	1959.03	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1368540.81	2.1	1419082.7	96.44	29.5	120.4	
Sc	45	No Gas	3128685.53	2.2	3146924.08	99.42	29.5	120.4	
Sc	45	H2	354548.48	0.2	384460.42	92.22	29.5	120.4	
Sc	45	He	70494.66	1.3	75345.71	93.56	29.5	120.4	
Ge	72	No Gas	699211.29	1.9	687904.62	101.64	29.5	120.4	
Ge	72	H2	130295.87	0.9	138854.33	93.84	29.5	120.4	
Ge	72	He	54437.45	0.4	57203.55	95.16	29.5	120.4	
Y	89	H2	2306926.82	0.1	2377183.3	97.04	29.5	120.4	
Y	89	He	473683.99	0.1	498269.57	95.07	29.5	120.4	
Tb	159	No Gas	7201895.31	2.6	6611594.34	108.93	29.5	120.4	
Tb	159	He	2564694.81	0.5	2564694.13	100	29.5	120.4	
Bi	209	No Gas	3784617.87	2.5	3381664.78	111.92	29.5	120.4	

Sample Report

Sample Name SN5717-020R

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:18:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.123	ppb	63.4	86.67	100	
11	B	6	No Gas	9.556	ppb	11.2	3508.33	1000	
23	Na	45	He	739.717	ppb	47.4	24272.51	200000	
24	Mg	45	He	110.710	ppb	49.5	2182.57	200000	
27	Al	45	He	120.101	ppb	7.2	571.14	200000	
28	Si	45	H2	165.971	ppb	12.9	1898.91	10000	
39	K	45	He	101.083	ppb	35.0	11644.55	200000	
40	Ca	45	H2	402.100	ppb	7.0	32983.67	200000	
51	V	89	He	3.027	ppb	1.0	754.49	1000	
52	Cr	89	He	0.967	ppb	12.2	263.29	2000	
55	Mn	89	He	4.845	ppb	10.5	520.59	2000	
56	Fe	89	H2	173.669	ppb	6.5	65075.97	100000	
59	Co	89	He	0.253	ppb	53.3	148.90	1000	
60	Ni	89	He	-7.812	ppb	N/A	650.04	1000	
63	Cu	89	He	1.249	ppb	17.6	425.58	2000	
66	Zn	89	He	8.143	ppb	14.6	330.02	2000	
75	As	89	He	0.201	ppb	67.4	10.67	1000	
78	Se	89	H2	0.189	ppb	33.8	3.50	1000	
88	Sr	89	He	2.700	ppb	84.5	413.36	2000	
95	Mo	89	He	0.168	ppb	41.9	34.44	1000	
107	Ag	89	He	0.071	ppb	74.6	47.78	100	
111	Cd	89	He	0.112	ppb	134.1	8.52	1000	
118	Sn	159	He	1.078	ppb	14.5	242.23	1000	
121	Sb	159	No Gas	0.196	ppb	37.5	323.70	1000	
137	Ba	159	No Gas	2.051	ppb	17.2	1148.00	2000	
182	W	159	No Gas	0.156	ppb	3.9	193.55	1000	
205	Tl	209	No Gas	-0.009	ppb	N/A	246.95	1000	
208	Pb	209	No Gas	5.019	ppb	4.5	16522.62	2000	
232	Th	209	No Gas	0.344	ppb	10.6	1231.45	1000	
238	U	209	No Gas	0.099	ppb	0.6	310.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1334537.82	3.1	1419082.7	94.04	29.5	120.4	
Sc	45	No Gas	2965194.75	5.0	3146924.08	94.23	29.5	120.4	
Sc	45	H2	342442.99	5.4	384460.42	89.07	29.5	120.4	
Sc	45	He	69324.08	0.9	75345.71	92.01	29.5	120.4	
Ge	72	No Gas	663950.75	3.9	687904.62	96.52	29.5	120.4	
Ge	72	H2	126808.25	3.9	138854.33	91.32	29.5	120.4	
Ge	72	He	53060.77	0.3	57203.55	92.76	29.5	120.4	
Y	89	H2	2227171.29	5.5	2377183.3	93.69	29.5	120.4	
Y	89	He	462833.79	0.4	498269.57	92.89	29.5	120.4	
Tb	159	No Gas	6876466.91	5.2	6611594.34	104.01	29.5	120.4	
Tb	159	He	2550345.41	0.5	2564694.13	99.44	29.5	120.4	
Bi	209	No Gas	3590836.54	3.8	3381664.78	106.19	29.5	120.4	

Sample Report

Sample Name SN5830-002R

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:21:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.046	ppb	58.7	65.56	100	
11	B	6	No Gas	380.394	ppb	2.2	64026.76	1000	
23	Na	45	He	114362.531	ppb	0.4	2427732.34	200000	
24	Mg	45	He	14473.337	ppb	0.7	170131.89	200000	
27	Al	45	He	80.407	ppb	14.1	383.35	200000	
28	Si	45	H2	10608.217	ppb	2.1	92074.43	10000	
39	K	45	He	314.666	ppb	1.4	13833.84	200000	
40	Ca	45	H2	135109.165	ppb	1.6	10719268.45	200000	
51	V	89	He	2.764	ppb	12.7	701.15	1000	
52	Cr	89	He	0.456	ppb	11.3	155.97	2000	
55	Mn	89	He	313.013	ppb	1.4	29940.85	2000	
56	Fe	89	H2	18.367	ppb	3.7	15576.19	100000	
59	Co	89	He	0.443	ppb	21.5	213.35	1000	
60	Ni	89	He	-6.766	ppb	N/A	741.16	1000	
63	Cu	89	He	0.903	ppb	10.2	327.79	2000	
66	Zn	89	He	3.235	ppb	4.5	153.34	2000	
75	As	89	He	0.341	ppb	10.5	14.67	1000	
78	Se	89	H2	0.144	ppb	34.9	2.83	1000	
88	Sr	89	He	1847.609	ppb	0.3	275302.09	2000	
95	Mo	89	He	0.645	ppb	13.6	113.34	1000	
107	Ag	89	He	0.001	ppb	293.4	7.78	100	
111	Cd	89	He	0.011	ppb	144.7	1.11	1000	
118	Sn	159	He	0.722	ppb	25.0	181.12	1000	
121	Sb	159	No Gas	0.068	ppb	45.1	150.17	1000	
137	Ba	159	No Gas	34.923	ppb	4.8	19686.53	2000	
182	W	159	No Gas	0.011	ppb	138.8	40.04	1000	
205	Tl	209	No Gas	-0.090	ppb	N/A	60.07	1000	
208	Pb	209	No Gas	0.107	ppb	13.0	654.07	2000	
232	Th	209	No Gas	0.050	ppb	47.5	270.31	1000	
238	U	209	No Gas	3.959	ppb	3.9	12056.09	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1300797.31	1.1	1419082.7	91.66	29.5	120.4	
Sc	45	No Gas	2983367.87	2.3	3146924.08	94.8	29.5	120.4	
Sc	45	H2	343329.51	1.9	384460.42	89.3	29.5	120.4	
Sc	45	He	68780.53	0.7	75345.71	91.29	29.5	120.4	
Ge	72	No Gas	677313.44	1.5	687904.62	98.46	29.5	120.4	
Ge	72	H2	126113.60	1.1	138854.33	90.82	29.5	120.4	
Ge	72	He	53037.77	0.6	57203.55	92.72	29.5	120.4	
Y	89	H2	2239158.79	1.1	2377183.3	94.19	29.5	120.4	
Y	89	He	456954.64	0.7	498269.57	91.71	29.5	120.4	
Tb	159	No Gas	6951883.65	2.6	6611594.34	105.15	29.5	120.4	
Tb	159	He	2542568.66	0.6	2564694.13	99.14	29.5	120.4	
Bi	209	No Gas	3566018.00	2.5	3381664.78	105.45	29.5	120.4	

Sample Report

Sample Name SN5832-001R

File Name 053SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:23:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.069	ppb	N/A	36.67	100	
11	B	6	No Gas	2033.999	ppb	6.3	334813.47	1000	
23	Na	45	He	1302115.490	ppb	2.3	27736688.21	200000	>LDR
24	Mg	45	He	270386.120	ppb	2.4	3183698.70	200000	
27	Al	45	He	15.566	ppb	35.6	84.45	200000	
28	Si	45	H2	9344.991	ppb	0.5	80865.12	10000	
39	K	45	He	8378.918	ppb	2.4	100540.13	200000	
40	Ca	45	H2	523433.642	ppb	0.9	41368249.38	200000	
51	V	89	He	4.272	ppb	3.6	947.84	1000	
52	Cr	89	He	0.859	ppb	6.4	236.63	2000	
55	Mn	89	He	31.367	ppb	2.5	3029.78	2000	
56	Fe	89	H2	183.897	ppb	1.7	67630.57	100000	
59	Co	89	He	0.510	ppb	16.3	235.57	1000	
60	Ni	89	He	0.595	ppb	67.9	1432.35	1000	
63	Cu	89	He	1.830	ppb	5.7	572.25	2000	
66	Zn	89	He	7.591	ppb	8.1	304.46	2000	
75	As	89	He	0.390	ppb	14.7	16.00	1000	
78	Se	89	H2	0.954	ppb	26.7	15.00	1000	
88	Sr	89	He	7460.403	ppb	2.2	1105425.57	2000	
95	Mo	89	He	0.480	ppb	6.8	85.56	1000	
107	Ag	89	He	0.013	ppb	96.1	14.45	100	
111	Cd	89	He	0.150	ppb	40.2	11.11	1000	
118	Sn	159	He	0.698	ppb	33.9	173.34	1000	
121	Sb	159	No Gas	0.133	ppb	47.4	243.61	1000	
137	Ba	159	No Gas	15.301	ppb	3.3	8715.85	2000	
182	W	159	No Gas	0.026	ppb	141.9	56.73	1000	
205	Tl	209	No Gas	-0.067	ppb	N/A	110.12	1000	
208	Pb	209	No Gas	2.057	ppb	10.2	6744.93	2000	
232	Th	209	No Gas	0.063	ppb	11.7	307.02	1000	
238	U	209	No Gas	8.087	ppb	5.4	23996.85	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1303265.72	0.8	1419082.7	91.84	29.5	120.4	
Sc	45	No Gas	3011679.67	1.2	3146924.08	95.7	29.5	120.4	
Sc	45	H2	341978.89	0.6	384460.42	88.95	29.5	120.4	
Sc	45	He	69258.42	2.4	75345.71	91.92	29.5	120.4	
Ge	72	No Gas	669326.37	1.5	687904.62	97.3	29.5	120.4	
Ge	72	H2	122685.30	0.4	138854.33	88.36	29.5	120.4	
Ge	72	He	52818.13	2.0	57203.55	92.33	29.5	120.4	
Y	89	H2	2199628.66	0.5	2377183.3	92.53	29.5	120.4	
Y	89	He	454536.06	2.1	498269.57	91.22	29.5	120.4	
Tb	159	No Gas	7017156.91	1.5	6611594.34	106.13	29.5	120.4	
Tb	159	He	2485114.44	2.3	2564694.13	96.9	29.5	120.4	
Bi	209	No Gas	3477421.05	1.8	3381664.78	102.83	29.5	120.4	

Sample Report

Sample Name SN5832-002R

File Name 054SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:26:23 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.033	ppb	N/A	48.89	100	
11	B	6	No Gas	2007.557	ppb	5.4	353221.98	1000	
23	Na	45	He	1209800.255	ppb	0.8	26609998.44	200000	>LDR
24	Mg	45	He	222976.732	ppb	1.0	2711214.92	200000	
27	Al	45	He	78.364	ppb	2.1	388.91	200000	
28	Si	45	H2	8795.061	ppb	1.2	78844.14	10000	
39	K	45	He	11055.494	ppb	0.3	133502.16	200000	
40	Ca	45	H2	574016.039	ppb	0.9	46982828.19	200000	
51	V	89	He	5.033	ppb	2.5	1088.97	1000	
52	Cr	89	He	4.817	ppb	3.9	1053.19	2000	
55	Mn	89	He	250.901	ppb	1.6	24200.96	2000	
56	Fe	89	H2	6569.725	ppb	1.1	2145399.62	100000	
59	Co	89	He	2.569	ppb	9.8	960.11	1000	
60	Ni	89	He	1.662	ppb	18.5	1553.48	1000	
63	Cu	89	He	1.863	ppb	4.6	588.92	2000	
66	Zn	89	He	10.416	ppb	9.9	408.91	2000	
75	As	89	He	0.787	ppb	22.9	28.00	1000	
78	Se	89	H2	0.217	ppb	16.4	4.00	1000	
88	Sr	89	He	9310.125	ppb	0.9	1398240.93	2000	
95	Mo	89	He	0.679	ppb	25.2	120.01	1000	
107	Ag	89	He	0.025	ppb	77.8	21.11	100	
111	Cd	89	He	0.072	ppb	42.4	5.56	1000	
118	Sn	159	He	0.541	ppb	6.3	148.90	1000	
121	Sb	159	No Gas	0.085	ppb	29.1	180.21	1000	
137	Ba	159	No Gas	18.150	ppb	4.0	10683.03	2000	
182	W	159	No Gas	0.046	ppb	68.9	80.09	1000	
205	Tl	209	No Gas	-0.078	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	2.196	ppb	5.8	7359.10	2000	
232	Th	209	No Gas	0.019	ppb	33.8	170.19	1000	
238	U	209	No Gas	5.678	ppb	4.9	17284.50	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1393149.85	1.1	1419082.7	98.17	29.5	120.4	
Sc	45	No Gas	3197181.13	0.9	3146924.08	101.6	29.5	120.4	
Sc	45	H2	354198.41	1.9	384460.42	92.13	29.5	120.4	
Sc	45	He	71492.30	0.6	75345.71	94.89	29.5	120.4	
Ge	72	No Gas	699073.76	1.3	687904.62	101.62	29.5	120.4	
Ge	72	H2	126314.75	2.9	138854.33	90.97	29.5	120.4	
Ge	72	He	53278.15	0.6	57203.55	93.14	29.5	120.4	
Y	89	H2	2262006.33	2.0	2377183.3	95.15	29.5	120.4	
Y	89	He	460599.38	0.6	498269.57	92.44	29.5	120.4	
Tb	159	No Gas	7251601.77	0.8	6611594.34	109.68	29.5	120.4	
Tb	159	He	2521479.67	0.5	2564694.13	98.32	29.5	120.4	
Bi	209	No Gas	3566286.89	1.0	3381664.78	105.46	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	055_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:29:03 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.937	ppb	2.0	34124.34	25	99.75	89.8	110.2	
11	B	6	No Gas	31.125	ppb	2.8	29686.83	25	124.5	89.8	110.2	> +/- 10%
23	Na	45	He	5634.781	ppb	3.0	600779.45	5000	112.7	89.8	110.2	> +/- 10%
24	Mg	45	He	5329.838	ppb	2.5	310619.53	5000	106.6	89.8	110.2	
27	Al	45	He	515.929	ppb	2.2	11854.20	500	103.19	89.8	110.2	
28	Si	45	H2	474.825	ppb	2.5	22332.44	500	94.96	89.8	110.2	
39	K	45	He	5156.176	ppb	2.0	283835.36	5000	103.12	89.8	110.2	
40	Ca	45	H2	4969.830	ppb	1.3	2100419.52	5000	99.4	89.8	110.2	
51	V	89	He	25.978	ppb	1.6	21803.06	25	103.91	89.8	110.2	
52	Cr	89	He	26.511	ppb	3.0	26876.59	25	106.04	89.8	110.2	
55	Mn	89	He	26.611	ppb	3.5	12657.38	25	106.44	89.8	110.2	
56	Fe	89	H2	4880.886	ppb	1.6	8267467.59	5000	97.62	89.8	110.2	
59	Co	89	He	26.863	ppb	2.3	46397.12	25	107.45	89.8	110.2	
60	Ni	89	He	24.807	ppb	2.9	13056.51	25	99.23	89.8	110.2	
63	Cu	89	He	26.566	ppb	2.8	35299.82	25	106.26	89.8	110.2	
66	Zn	89	He	27.052	ppb	5.1	4753.22	25	108.21	89.8	110.2	
75	As	89	He	26.108	ppb	4.0	3820.61	25	104.43	89.8	110.2	
78	Se	89	H2	24.856	ppb	1.9	2007.39	25	99.42	89.8	110.2	
88	Sr	89	He	25.787	ppb	2.7	19069.35	25	103.15	89.8	110.2	
95	Mo	89	He	26.481	ppb	2.1	21837.01	25	105.92	89.8	110.2	
107	Ag	89	He	27.228	ppb	3.0	75974.97	25	108.91	89.8	110.2	
111	Cd	89	He	26.506	ppb	2.9	9500.09	25	106.02	89.8	110.2	
118	Sn	159	He	24.843	ppb	2.5	20728.80	25	99.37	89.8	110.2	
121	Sb	159	No Gas	25.382	ppb	1.6	183591.07	25	101.53	89.8	110.2	
137	Ba	159	No Gas	25.498	ppb	2.4	73286.17	25	101.99	89.8	110.2	
182	W	159	No Gas	25.397	ppb	2.2	139114.32	25	101.59	89.8	110.2	
205	Tl	209	No Gas	25.678	ppb	1.6	305378.68	25	102.71	89.8	110.2	
208	Pb	209	No Gas	25.894	ppb	2.2	428793.75	25	103.58	89.8	110.2	
232	Th	209	No Gas	25.527	ppb	2.7	426909.27	25	102.11	89.8	110.2	
238	U	209	No Gas	25.865	ppb	2.7	405665.89	25	103.46	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1415097.10	1.0	1419082.7	99.72	29.5	120.4	
Sc	45	No Gas	3126058.00	1.3	3146924.08	99.34	29.5	120.4	
Sc	45	H2	365581.40	1.9	384460.42	95.09	29.5	120.4	
Sc	45	He	68376.43	1.4	75345.71	90.75	29.5	120.4	
Ge	72	No Gas	696659.84	0.8	687904.62	101.27	29.5	120.4	
Ge	72	H2	133896.65	1.5	138854.33	96.43	29.5	120.4	
Ge	72	He	53140.19	3.0	57203.55	92.9	29.5	120.4	
Y	89	H2	2354688.27	2.0	2377183.3	99.05	29.5	120.4	
Y	89	He	453627.34	2.5	498269.57	91.04	29.5	120.4	
Tb	159	No Gas	7088893.30	1.6	6611594.34	107.22	29.5	120.4	
Tb	159	He	2490014.86	2.3	2564694.13	97.09	29.5	120.4	
Bi	209	No Gas	3676405.78	1.8	3381664.78	108.72	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	056_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:31:43 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.049	ppb	34.3	122.23	0.2	
11	B	6	No Gas	3.356	ppb	6.9	4864.31	4	Failed DoD
23	Na	45	He	121.005	ppb	4.0	21900.94	200	Failed DoD
24	Mg	45	He	3.007	ppb	43.4	1082.35	20	
27	Al	45	He	0.320	ppb	205.2	20.00	20	
28	Si	45	H2	1.725	ppb	97.8	580.66	100	
39	K	45	He	0.806	ppb	606.9	10830.98	200	
40	Ca	45	H2	10.278	ppb	1.0	5661.33	20	Failed DoD
51	V	89	He	0.032	ppb	11.5	272.24	1	
52	Cr	89	He	-0.008	ppb	N/A	55.99	1	
55	Mn	89	He	-0.007	ppb	N/A	49.32	0.4	
56	Fe	89	H2	1.196	ppb	25.0	12125.34	20	
59	Co	89	He	0.000	ppb	N/A	60.01	0.2	
60	Ni	89	He	-2.031	ppb	N/A	430.02	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.013	ppb	173.9	106.67	0.6	
66	Zn	89	He	0.064	ppb	40.1	52.23	2	
75	As	89	He	-0.007	ppb	N/A	3.67	1	
78	Se	89	H2	0.038	ppb	21.3	3.67	1	
88	Sr	89	He	0.136	ppb	20.6	110.01	1	
95	Mo	89	He	0.105	ppb	18.0	95.56	1	
107	Ag	89	He	0.007	ppb	60.5	26.67	0.2	
111	Cd	89	He	0.006	ppb	102.8	2.59	0.2	
118	Sn	159	He	0.101	ppb	20.3	144.45	1	
121	Sb	159	No Gas	0.029	ppb	3.2	253.62	0.2	
137	Ba	159	No Gas	0.031	ppb	77.0	96.77	0.4	
182	W	159	No Gas	0.089	ppb	0.9	500.57	1	
205	Tl	209	No Gas	-0.003	ppb	N/A	236.94	0.2	
208	Pb	209	No Gas	0.011	ppb	43.1	487.21	0.2	
232	Th	209	No Gas	0.081	ppb	23.0	1441.72	1	
238	U	209	No Gas	0.020	ppb	35.2	317.03	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1374881.81	0.8	1419082.7	96.89	29.5	120.4	
Sc	45	No Gas	3009148.13	1.5	3146924.08	95.62	29.5	120.4	
Sc	45	H2	365116.56	2.4	384460.42	94.97	29.5	120.4	
Sc	45	He	70822.82	1.7	75345.71	94	29.5	120.4	
Ge	72	No Gas	670494.19	1.0	687904.62	97.47	29.5	120.4	
Ge	72	H2	132394.61	2.4	138854.33	95.35	29.5	120.4	
Ge	72	He	54443.13	1.0	57203.55	95.17	29.5	120.4	
Y	89	H2	2343505.22	2.3	2377183.3	98.58	29.5	120.4	
Y	89	He	468452.61	1.2	498269.57	94.02	29.5	120.4	
Tb	159	No Gas	6897211.84	0.8	6611594.34	104.32	29.5	120.4	
Tb	159	He	2550889.66	1.2	2564694.13	99.46	29.5	120.4	
Bi	209	No Gas	3597274.94	0.8	3381664.78	106.38	29.5	120.4	

Sample Report

Sample Name SN5832-003R

File Name 057SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:34:28 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.141	ppb	56.8	94.45	100	
11	B	6	No Gas	2064.377	ppb	3.1	358179.57	1000	
23	Na	45	He	1193922.871	ppb	1.1	26117169.17	200000	>LDR
24	Mg	45	He	221466.308	ppb	1.2	2678127.37	200000	
27	Al	45	He	70.210	ppb	8.4	347.80	200000	
28	Si	45	H2	8731.715	ppb	1.4	78367.92	10000	
39	K	45	He	11025.576	ppb	1.1	132446.50	200000	
40	Ca	45	H2	563230.139	ppb	1.1	46155698.75	200000	
51	V	89	He	4.979	ppb	9.4	1081.19	1000	
52	Cr	89	He	3.366	ppb	2.1	756.55	2000	
55	Mn	89	He	258.228	ppb	0.9	24947.51	2000	
56	Fe	89	H2	7116.144	ppb	0.5	2343074.22	100000	
59	Co	89	He	2.769	ppb	13.1	1031.22	1000	
60	Ni	89	He	0.674	ppb	72.0	1461.24	1000	
63	Cu	89	He	2.462	ppb	14.4	752.28	2000	
66	Zn	89	He	9.424	ppb	10.4	374.46	2000	
75	As	89	He	0.627	ppb	25.2	23.33	1000	
78	Se	89	H2	0.140	ppb	14.7	2.83	1000	
88	Sr	89	He	9197.078	ppb	0.9	1383558.66	2000	
95	Mo	89	He	1.090	ppb	11.5	188.90	1000	
107	Ag	89	He	0.036	ppb	81.3	27.78	100	
111	Cd	89	He	0.056	ppb	1.1	4.44	1000	
118	Sn	159	He	0.762	ppb	22.9	186.68	1000	
121	Sb	159	No Gas	0.085	ppb	20.0	173.53	1000	
137	Ba	159	No Gas	18.505	ppb	2.2	10455.74	2000	
182	W	159	No Gas	0.148	ppb	9.0	186.88	1000	
205	Tl	209	No Gas	-0.073	ppb	N/A	96.77	1000	
208	Pb	209	No Gas	1.705	ppb	5.7	5616.77	2000	
232	Th	209	No Gas	0.548	ppb	17.2	1832.19	1000	
238	U	209	No Gas	5.973	ppb	6.5	17655.74	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1373661.23	0.7	1419082.7	96.8	29.5	120.4	
Sc	45	No Gas	3043449.04	0.7	3146924.08	96.71	29.5	120.4	
Sc	45	H2	354578.60	1.0	384460.42	92.23	29.5	120.4	
Sc	45	He	71101.42	1.1	75345.71	94.37	29.5	120.4	
Ge	72	No Gas	667583.73	0.9	687904.62	97.05	29.5	120.4	
Ge	72	H2	125143.72	1.5	138854.33	90.13	29.5	120.4	
Ge	72	He	53032.03	1.1	57203.55	92.71	29.5	120.4	
Y	89	H2	2281220.12	1.3	2377183.3	95.96	29.5	120.4	
Y	89	He	461366.25	1.1	498269.57	92.59	29.5	120.4	
Tb	159	No Gas	6960634.76	0.6	6611594.34	105.28	29.5	120.4	
Tb	159	He	2527830.90	0.8	2564694.13	98.56	29.5	120.4	
Bi	209	No Gas	3462324.70	0.8	3381664.78	102.39	29.5	120.4	

Sample Report

Sample Name SN5832-004R

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:37:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.018	ppb	N/A	54.45	100	
11	B	6	No Gas	683.778	ppb	1.7	124807.64	1000	
23	Na	45	He	355828.020	ppb	2.1	7866944.38	200000	
24	Mg	45	He	46325.183	ppb	2.5	566418.89	200000	
27	Al	45	He	33.067	ppb	11.8	172.23	200000	
28	Si	45	H2	7760.092	ppb	0.7	70796.80	10000	
39	K	45	He	3450.766	ppb	2.9	49372.47	200000	
40	Ca	45	H2	165725.802	ppb	0.5	13792623.68	200000	
51	V	89	He	5.723	ppb	7.3	1220.10	1000	
52	Cr	89	He	0.737	ppb	28.1	217.96	2000	
55	Mn	89	He	65.803	ppb	1.5	6466.33	2000	
56	Fe	89	H2	205.078	ppb	1.9	78133.62	100000	
59	Co	89	He	0.474	ppb	24.3	228.91	1000	
60	Ni	89	He	-8.823	ppb	N/A	556.70	1000	
63	Cu	89	He	1.117	ppb	25.0	392.24	2000	
66	Zn	89	He	31.810	ppb	4.7	1181.20	2000	
75	As	89	He	0.687	ppb	8.9	25.33	1000	
78	Se	89	H2	0.559	ppb	15.9	9.50	1000	
88	Sr	89	He	1792.726	ppb	1.2	272661.87	2000	
95	Mo	89	He	0.842	ppb	9.2	148.89	1000	
107	Ag	89	He	0.010	ppb	107.6	13.33	100	
111	Cd	89	He	0.041	ppb	38.6	3.33	1000	
118	Sn	159	He	1.101	ppb	28.4	245.57	1000	
121	Sb	159	No Gas	0.175	ppb	18.2	310.35	1000	
137	Ba	159	No Gas	53.223	ppb	2.4	31020.65	2000	
182	W	159	No Gas	0.091	ppb	65.0	130.15	1000	
205	Tl	209	No Gas	-0.082	ppb	N/A	80.09	1000	
208	Pb	209	No Gas	0.140	ppb	27.5	774.21	2000	
232	Th	209	No Gas	0.072	ppb	52.0	350.40	1000	
238	U	209	No Gas	3.599	ppb	4.4	11157.48	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1429135.99	0.5	1419082.7	100.71	29.5	120.4	
Sc	45	No Gas	3170578.41	0.4	3146924.08	100.75	29.5	120.4	
Sc	45	H2	360100.17	0.9	384460.42	93.66	29.5	120.4	
Sc	45	He	71827.76	2.6	75345.71	95.33	29.5	120.4	
Ge	72	No Gas	707798.54	0.4	687904.62	102.89	29.5	120.4	
Ge	72	H2	130598.21	0.6	138854.33	94.05	29.5	120.4	
Ge	72	He	54462.53	1.5	57203.55	95.21	29.5	120.4	
Y	89	H2	2312359.75	0.8	2377183.3	97.27	29.5	120.4	
Y	89	He	466484.89	1.7	498269.57	93.62	29.5	120.4	
Tb	159	No Gas	7184667.60	0.3	6611594.34	108.67	29.5	120.4	
Tb	159	He	2549434.04	1.7	2564694.13	99.4	29.5	120.4	
Bi	209	No Gas	3629801.23	0.2	3381664.78	107.34	29.5	120.4	

Sample Report

Sample Name SN5897-001R

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:39:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.004	ppb	1053.9	62.22	100	
11	B	6	No Gas	21.956	ppb	6.3	6179.32	1000	
23	Na	45	He	882.050	ppb	6.5	28988.12	200000	
24	Mg	45	He	32.279	ppb	7.2	1337.94	200000	
27	Al	45	He	9.053	ppb	22.7	57.78	200000	
28	Si	45	H2	16.465	ppb	106.3	647.40	10000	
39	K	45	He	11.912	ppb	248.2	11329.44	200000	
40	Ca	45	H2	132.388	ppb	2.5	12436.98	200000	
51	V	89	He	5.902	ppb	0.6	1285.66	1000	
52	Cr	89	He	0.358	ppb	17.1	142.64	2000	
55	Mn	89	He	0.613	ppb	21.0	115.31	2000	
56	Fe	89	H2	-0.789	ppb	N/A	9734.17	100000	
59	Co	89	He	-0.060	ppb	N/A	40.00	1000	
60	Ni	89	He	-10.244	ppb	N/A	431.13	1000	
63	Cu	89	He	0.485	ppb	25.7	226.68	2000	
66	Zn	89	He	1.736	ppb	79.2	105.56	2000	
75	As	89	He	0.243	ppb	15.3	12.33	1000	
78	Se	89	H2	0.001	ppb	1917.3	0.67	1000	
88	Sr	89	He	0.976	ppb	11.3	158.90	2000	
95	Mo	89	He	0.116	ppb	49.4	26.67	1000	
107	Ag	89	He	-0.001	ppb	N/A	6.67	100	
111	Cd	89	He	0.000	ppb	4680.8	0.37	1000	
118	Sn	159	He	0.723	ppb	39.5	184.45	1000	
121	Sb	159	No Gas	0.018	ppb	184.5	83.43	1000	
137	Ba	159	No Gas	0.186	ppb	53.3	123.47	2000	
182	W	159	No Gas	0.043	ppb	17.3	80.09	1000	
205	Tl	209	No Gas	-0.108	ppb	N/A	20.02	1000	
208	Pb	209	No Gas	-0.026	ppb	N/A	243.61	2000	
232	Th	209	No Gas	0.027	ppb	54.7	210.24	1000	
238	U	209	No Gas	0.004	ppb	81.6	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1474719.28	1.9	1419082.7	103.92	29.5	120.4	
Sc	45	No Gas	3270954.90	2.4	3146924.08	103.94	29.5	120.4	
Sc	45	H2	363360.68	1.2	384460.42	94.51	29.5	120.4	
Sc	45	He	73502.42	1.1	75345.71	97.55	29.5	120.4	
Ge	72	No Gas	729843.54	2.2	687904.62	106.1	29.5	120.4	
Ge	72	H2	130733.79	1.0	138854.33	94.15	29.5	120.4	
Ge	72	He	55597.91	1.2	57203.55	97.19	29.5	120.4	
Y	89	H2	2316139.08	0.9	2377183.3	97.43	29.5	120.4	
Y	89	He	479265.30	0.1	498269.57	96.19	29.5	120.4	
Tb	159	No Gas	7455678.99	2.5	6611594.34	112.77	29.5	120.4	
Tb	159	He	2590283.90	0.5	2564694.13	101	29.5	120.4	
Bi	209	No Gas	3836929.69	3.2	3381664.78	113.46	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW1
File Name	060_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:42:27 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	-0.006	ppb	N/A	50.00	0.1	
B	11	6	No Gas	1.842	ppb	12.5	3643.92	2	
Na	23	45	He	110.462	ppb	6.6	20921.64	100	200.8 PB Fails DoD
Mg	24	45	He	7.918	ppb	9.9	1389.06	10	
Al	27	45	He	11.631	ppb	18.1	291.12	10	200.8 PB Fails DoD
Si	28	45	H2	5.970	ppb	19.6	764.21	50	
K	39	45	He	3.165	ppb	362.8	11044.37	100	
Ca	40	45	H2	9.225	ppb	2.9	5147.79	10	
V	51	89	He	0.681	ppb	9.3	833.39	0.5	200.8 PB Fails DoD
Cr	52	89	He	0.222	ppb	21.9	297.28	0.5	
Mn	55	89	He	0.190	ppb	9.8	146.64	0.2	
Fe	56	89	H2	3.337	ppb	4.5	15482.69	10	
Co	59	89	He	-0.020	ppb	N/A	24.45	0.1	
Ni	60	89	He	-1.913	ppb	N/A	490.03	0.2	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
Cu	63	89	He	0.082	ppb	20.3	201.12	0.3	
Zn	66	89	He	8.698	ppb	11.2	1613.49	1	200.8 PB Fails DoD□ 200.8 PB Fails non-DoD
As	75	89	He	0.015	ppb	126.0	7.00	0.5	
Se	78	89	H2	0.002	ppb	159.4	0.83	0.5	
Sr	88	89	He	0.029	ppb	40.7	28.89	0.5	
Mo	95	89	He	0.046	ppb	30.1	45.56	0.5	
Ag	107	89	He	0.001	ppb	134.7	10.00	0.1	
Cd	111	89	He	0.006	ppb	74.2	2.59	0.1	
Sn	118	159	He	0.134	ppb	35.8	172.24	0.5	
Sb	121	159	No Gas	0.000	ppb	N/A	53.39	0.1	
Ba	137	159	No Gas	0.042	ppb	17.6	130.15	0.2	
W	182	159	No Gas	0.003	ppb	112.1	46.72	0.5	
Tl	205	209	No Gas	-0.018	ppb	N/A	56.73	0.1	
[Pb]	206	209	No Gas	0.016	ppb	53.3	160.18	0.1	
[Pb]	207	209	No Gas	0.025	ppb	38.9	136.82	0.1	
Pb	208	209	No Gas	0.019	ppb	25.2	634.05	0.1	
Th	232	209	No Gas	0.001	ppb	158.7	130.15	0.5	
U	238	209	No Gas	0.000	ppb	N/A	3.34	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1409616.10	3.1	1419082.7	99.33	29.5	120.4	
Sc	45	No Gas	3106375.41	4.3	3146924.08	98.71	29.5	120.4	
Sc	45	H2	360305.96	1.1	384460.42	93.72	29.5	120.4	
Sc	45	He	71435.78	2.8	75345.71	94.81	29.5	120.4	
Ge	72	No Gas	688496.34	2.9	687904.62	100.09	29.5	120.4	
Ge	72	H2	131561.59	2.5	138854.33	94.75	29.5	120.4	
Ge	72	He	54893.87	2.4	57203.55	95.96	29.5	120.4	
Y	89	H2	2305550.16	1.4	2377183.3	96.99	29.5	120.4	
Y	89	He	470981.15	3.3	498269.57	94.52	29.5	120.4	
Tb	159	No Gas	7051558.44	4.0	6611594.34	106.65	29.5	120.4	
Tb	159	He	2551474.91	3.6	2564694.13	99.48	29.5	120.4	
Bi	209	No Gas	3662773.71	3.7	3381664.78	108.31	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW1
File Name	061_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:45:07 PM
Sample Type	LCS
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	50.581	ppb	1.0	14187.43	50	20.23	79.5	120.4	
B	11	6	No Gas	511.382	ppb	1.7	95000.02	500	20.46	79.5	120.4	
Na	23	45	He	8235.498	ppb	1.0	192185.56	7500	21.96	79.5	120.4	
Mg	24	45	He	5502.192	ppb	1.2	68609.31	5000	22.01	79.5	120.4	
Al	27	45	He	1973.995	ppb	1.0	9603.56	2000	19.74	79.5	120.4	
Si	28	45	H2	1081.504	ppb	3.7	10328.55	1000	21.63	79.5	120.4	
K	39	45	He	10522.229	ppb	1.4	129130.50	10000	21.04	79.5	120.4	
Ca	40	45	H2	2763.299	ppb	1.1	232156.24	2500	22.11	79.5	120.4	
V	51	89	He	528.494	ppb	1.0	92408.11	500	21.14	79.5	120.4	
Cr	52	89	He	214.543	ppb	0.4	45659.56	200	21.45	79.5	120.4	
Mn	55	89	He	540.082	ppb	0.9	53812.01	500	21.6	79.5	120.4	
Fe	56	89	H2	1098.687	ppb	0.2	374068.13	1000	21.97	79.5	120.4	
Co	59	89	He	550.203	ppb	0.4	199452.48	500	22.01	79.5	120.4	
Ni	60	89	He	532.758	ppb	1.5	54162.10	500	21.31	79.5	120.4	
Cu	63	89	He	267.448	ppb	1.5	74569.16	250	21.4	79.5	120.4	
Zn	66	89	He	555.538	ppb	2.1	20381.09	500	22.22	79.5	120.4	
As	75	89	He	108.506	ppb	0.4	3337.44	100	21.7	79.5	120.4	
Se	78	89	H2	109.163	ppb	3.8	1726.86	100	21.83	79.5	120.4	
Sr	88	89	He	530.185	ppb	0.8	82351.10	500	21.21	79.5	120.4	
Mo	95	89	He	108.759	ppb	2.5	18841.34	100	21.75	79.5	120.4	
Ag	107	89	He	54.891	ppb	1.9	32183.47	50	21.96	79.5	120.4	
Cd	111	89	He	277.958	ppb	2.2	20926.97	250	22.24	79.5	120.4	
Sn	118	159	He	515.924	ppb	1.6	89085.11	500	20.64	79.5	120.4	
Sb	121	159	No Gas	106.822	ppb	2.0	153523.83	100	21.36	79.5	120.4	
Ba	137	159	No Gas	2073.310	ppb	2.3	1183847.05	2000	20.73	79.5	120.4	
W	182	159	No Gas	107.205	ppb	1.7	116682.50	100	21.44	79.5	120.4	
Tl	205	209	No Gas	111.108	ppb	2.2	261958.60	100	22.22	79.5	120.4	
Pb	208	209	No Gas	109.939	ppb	2.2	360968.28	100	21.99	79.5	120.4	
Th	232	209	No Gas	105.393	ppb	1.0	349519.94	100	21.08	79.5	120.4	
U	238	209	No Gas	108.561	ppb	2.5	337541.64	100	21.71	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1446566.24	1.2	1419082.7	101.94	29.5	120.4	
Sc	45	No Gas	3121452.25	2.1	3146924.08	99.19	29.5	120.4	
Sc	45	H2	361533.70	1.9	384460.42	94.04	29.5	120.4	
Sc	45	He	72356.13	0.5	75345.71	96.03	29.5	120.4	
Ge	72	No Gas	690822.57	1.4	687904.62	100.42	29.5	120.4	
Ge	72	H2	131780.81	1.2	138854.33	94.91	29.5	120.4	
Ge	72	He	55394.70	0.9	57203.55	96.84	29.5	120.4	
Y	89	H2	2305860.52	0.8	2377183.3	97	29.5	120.4	
Y	89	He	476330.82	0.8	498269.57	95.6	29.5	120.4	
Tb	159	No Gas	7043180.66	2.4	6611594.34	106.53	29.5	120.4	
Tb	159	He	2580964.96	0.7	2564694.13	100.63	29.5	120.4	
Bi	209	No Gas	3644284.34	2.3	3381664.78	107.77	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 062SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:47:47 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	224.837	ppb	2.5	300035.83	100	>LDR
11	B	6	No Gas	1737.036	ppb	2.7	1509868.78	1000	>LDR
23	Na	45	He	118.727	ppb	8.0	21189.21	200000	
24	Mg	45	He	4.446	ppb	36.9	1142.35	200000	
27	Al	45	He	1025.297	ppb	2.4	23873.93	200000	
28	Si	45	H2	109.684	ppb	3.0	5380.26	10000	
39	K	45	He	-4.467	ppb	N/A	10320.78	200000	
40	Ca	45	H2	21.912	ppb	1.0	10271.85	200000	
51	V	89	He	363.859	ppb	2.9	307909.40	1000	
52	Cr	89	He	680.923	ppb	3.0	701691.17	2000	
55	Mn	89	He	1695.188	ppb	3.0	818228.40	2000	
56	Fe	89	H2	3087.820	ppb	2.2	5063613.85	100000	
59	Co	89	He	736.037	ppb	2.7	1293464.67	1000	
60	Ni	89	He	1595.187	ppb	2.9	766780.03	1000	>LDR
63	Cu	89	He	298.967	ppb	2.9	403809.67	2000	
66	Zn	89	He	1036.981	ppb	2.8	184153.01	2000	
75	As	89	He	205.488	ppb	2.6	30607.47	1000	
78	Se	89	H2	484.596	ppb	2.3	37843.90	1000	
88	Sr	89	He	101.040	ppb	2.4	76105.27	2000	
95	Mo	89	He	343.026	ppb	2.9	288065.85	1000	
107	Ag	89	He	189.323	ppb	2.2	538220.29	100	>LDR
111	Cd	89	He	735.403	ppb	2.7	268492.01	1000	
118	Sn	159	He	1.341	ppb	7.4	1204.54	1000	
121	Sb	159	No Gas	269.262	ppb	1.9	1916228.02	1000	
137	Ba	159	No Gas	1782.371	ppb	2.4	5041311.39	2000	
182	W	159	No Gas	0.139	ppb	13.0	777.56	1000	
205	Tl	209	No Gas	514.827	ppb	1.5	6064954.27	1000	
208	Pb	209	No Gas	935.833	ppb	2.1	15354087.87	2000	
232	Th	209	No Gas	0.406	ppb	28.7	6836.30	1000	
238	U	209	No Gas	0.027	ppb	29.2	433.83	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1382113.35	0.7	1419082.7	97.39	29.5	120.4	
Sc	45	No Gas	3034775.24	0.9	3146924.08	96.44	29.5	120.4	
Sc	45	H2	354890.05	2.9	384460.42	92.31	29.5	120.4	
Sc	45	He	69334.39	1.9	75345.71	92.02	29.5	120.4	
Ge	72	No Gas	677733.07	1.1	687904.62	98.52	29.5	120.4	
Ge	72	H2	127561.66	2.7	138854.33	91.87	29.5	120.4	
Ge	72	He	52953.53	1.1	57203.55	92.57	29.5	120.4	
Y	89	H2	2278255.65	2.3	2377183.3	95.84	29.5	120.4	
Y	89	He	462124.14	2.3	498269.57	92.75	29.5	120.4	
Tb	159	No Gas	6975701.70	1.2	6611594.34	105.51	29.5	120.4	
Tb	159	He	2557187.86	1.9	2564694.13	99.71	29.5	120.4	
Bi	209	No Gas	3644313.28	1.2	3381664.78	107.77	29.5	120.4	

Sample Report

Sample Name	SN5815-002
File Name	063SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 6:50:27 PM
Sample Type	Sample
Total Dilution	10.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	233.088	ppb	3.9	30812.37	100	
11	B	6	No Gas	1963.188	ppb	3.0	170526.38	1000	
23	Na	45	He	2204.598	ppb	3.7	32101.79	200000	
24	Mg	45	He	-7.311	ppb	N/A	840.09	200000	
27	Al	45	He	1317.257	ppb	1.2	3083.77	200000	
28	Si	45	H2	125.758	ppb	7.7	1037.86	10000	
39	K	45	He	-18.548	ppb	N/A	10475.86	200000	
40	Ca	45	H2	40.152	ppb	5.2	2905.96	200000	
51	V	89	He	360.612	ppb	0.7	30713.16	1000	
52	Cr	89	He	691.783	ppb	0.5	71299.46	2000	
55	Mn	89	He	1725.685	ppb	0.5	83287.24	2000	
56	Fe	89	H2	3279.178	ppb	0.3	539643.56	100000	
59	Co	89	He	754.683	ppb	0.9	132590.15	1000	
60	Ni	89	He	1620.242	ppb	0.6	79085.77	1000	
63	Cu	89	He	301.778	ppb	0.3	40812.59	2000	
66	Zn	89	He	1118.920	ppb	1.8	19891.54	2000	
75	As	89	He	209.908	ppb	1.7	3128.70	1000	
78	Se	89	H2	507.846	ppb	0.6	3916.71	1000	
88	Sr	89	He	104.149	ppb	1.8	7844.72	2000	
95	Mo	89	He	346.381	ppb	1.1	29073.84	1000	
107	Ag	89	He	211.834	ppb	1.0	60179.37	100	
111	Cd	89	He	757.938	ppb	0.9	27653.43	1000	
118	Sn	159	He	2.189	ppb	25.3	243.35	1000	
121	Sb	159	No Gas	282.641	ppb	3.8	203599.18	1000	
137	Ba	159	No Gas	1805.176	ppb	4.5	516643.01	2000	
182	W	159	No Gas	0.144	ppb	40.6	106.79	1000	
205	Tl	209	No Gas	538.560	ppb	3.5	644944.22	1000	
208	Pb	209	No Gas	982.114	ppb	3.6	1637647.44	2000	
232	Th	209	No Gas	0.088	ppb	51.7	263.63	1000	
238	U	209	No Gas	0.010	ppb	96.5	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1367551.41	2.3	1419082.7	96.37	29.5	120.4	
Sc	45	No Gas	3026563.33	2.4	3146924.08	96.18	29.5	120.4	
Sc	45	H2	351487.35	0.1	384460.42	91.42	29.5	120.4	
Sc	45	He	69453.70	1.2	75345.71	92.18	29.5	120.4	
Ge	72	No Gas	670914.58	2.4	687904.62	97.53	29.5	120.4	
Ge	72	H2	127339.68	1.6	138854.33	91.71	29.5	120.4	
Ge	72	He	53306.45	0.3	57203.55	93.19	29.5	120.4	
Y	89	H2	2248824.06	0.4	2377183.3	94.6	29.5	120.4	
Y	89	He	461622.49	0.7	498269.57	92.65	29.5	120.4	
Tb	159	No Gas	7063548.92	2.6	6611594.34	106.84	29.5	120.4	
Tb	159	He	2532026.33	0.3	2564694.13	98.73	29.5	120.4	
Bi	209	No Gas	3705000.26	2.2	3381664.78	109.56	29.5	120.4	

Sample Report

Sample Name SN5815-007

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:53:02 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.001	ppb	21.7	327.79	100	
11	B	6	No Gas	290.606	ppb	1.7	27417.84	1000	
23	Na	45	He	937.633	ppb	9.0	18054.72	200000	
24	Mg	45	He	23.851	ppb	99.5	995.67	200000	
27	Al	45	He	82.344	ppb	12.0	198.90	200000	
28	Si	45	H2	1301.482	ppb	2.8	6178.25	10000	
39	K	45	He	-36.458	ppb	N/A	10095.69	200000	
40	Ca	45	H2	74.965	ppb	2.7	4279.68	200000	
51	V	89	He	1.799	ppb	44.1	381.13	1000	
52	Cr	89	He	1.364	ppb	25.6	197.97	2000	
55	Mn	89	He	4.079	ppb	9.9	241.96	2000	
56	Fe	89	H2	507.188	ppb	1.9	91075.28	100000	
59	Co	89	He	1.000	ppb	14.6	228.91	1000	
60	Ni	89	He	-17.159	ppb	N/A	561.14	1000	
63	Cu	89	He	2.136	ppb	13.4	365.57	2000	
66	Zn	89	He	12.702	ppb	12.2	258.90	2000	
75	As	89	He	0.241	ppb	52.7	8.00	1000	
78	Se	89	H2	1.723	ppb	16.7	13.83	1000	
88	Sr	89	He	1.110	ppb	23.1	87.78	2000	
95	Mo	89	He	2.541	ppb	9.3	213.34	1000	
107	Ag	89	He	0.325	ppb	15.0	96.67	100	
111	Cd	89	He	0.667	ppb	19.3	24.07	1000	
118	Sn	159	He	1503.547	ppb	4.1	124112.12	1000	
121	Sb	159	No Gas	0.921	ppb	29.5	720.82	1000	
137	Ba	159	No Gas	3.541	ppb	32.9	1031.21	2000	
182	W	159	No Gas	0.046	ppb	132.9	53.39	1000	
205	Tl	209	No Gas	0.604	ppb	56.5	1011.20	1000	
208	Pb	209	No Gas	2.793	ppb	19.2	5016.03	2000	
232	Th	209	No Gas	0.130	ppb	10.5	333.71	1000	
238	U	209	No Gas	0.006	ppb	222.8	16.68	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1393092.08	2.1	1419082.7	98.17	29.5	120.4	
Sc	45	No Gas	3049821.15	2.2	3146924.08	96.91	29.5	120.4	
Sc	45	H2	348180.52	0.9	384460.42	90.56	29.5	120.4	
Sc	45	He	67602.87	3.9	75345.71	89.72	29.5	120.4	
Ge	72	No Gas	672997.16	2.6	687904.62	97.83	29.5	120.4	
Ge	72	H2	125179.63	2.1	138854.33	90.15	29.5	120.4	
Ge	72	He	51988.49	4.0	57203.55	90.88	29.5	120.4	
Y	89	H2	2234368.56	1.0	2377183.3	93.99	29.5	120.4	
Y	89	He	449542.87	3.4	498269.57	90.22	29.5	120.4	
Tb	159	No Gas	7082133.99	2.2	6611594.34	107.12	29.5	120.4	
Tb	159	He	2470547.95	3.7	2564694.13	96.33	29.5	120.4	
Bi	209	No Gas	3721236.86	2.2	3381664.78	110.04	29.5	120.4	

Sample Report

Sample Name SN5815-014

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:55:43 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.100	ppb	7.8	201.12	100	
11	B	6	No Gas	66.605	ppb	1.7	7646.74	1000	
23	Na	45	He	96956.800	ppb	0.5	1047065.46	200000	
24	Mg	45	He	26313.947	ppb	0.7	156689.16	200000	
27	Al	45	He	8.953	ppb	41.1	33.33	200000	
28	Si	45	H2	13.809	ppb	82.7	533.94	10000	
39	K	45	He	17218.744	ppb	0.2	103633.98	200000	
40	Ca	45	H2	46628.881	ppb	0.4	1864443.60	200000	
51	V	89	He	0.481	ppb	67.7	283.35	1000	
52	Cr	89	He	0.444	ppb	47.2	109.98	2000	
55	Mn	89	He	1.573	ppb	18.1	128.65	2000	
56	Fe	89	H2	0.708	ppb	330.1	9694.20	100000	
59	Co	89	He	0.338	ppb	50.0	120.01	1000	
60	Ni	89	He	-18.714	ppb	N/A	503.36	1000	
63	Cu	89	He	0.080	ppb	91.8	98.89	2000	
66	Zn	89	He	13.658	ppb	19.1	284.46	2000	
75	As	89	He	0.000	ppb	N/A	4.67	1000	
78	Se	89	H2	0.487	ppb	20.3	4.33	1000	
88	Sr	89	He	5.285	ppb	4.6	406.69	2000	
95	Mo	89	He	1.267	ppb	16.9	113.34	1000	
107	Ag	89	He	0.169	ppb	34.0	55.56	100	
111	Cd	89	He	0.273	ppb	36.2	10.37	1000	
118	Sn	159	He	7.049	ppb	7.8	656.71	1000	
121	Sb	159	No Gas	0.109	ppb	51.7	130.14	1000	
137	Ba	159	No Gas	0.552	ppb	14.9	166.86	2000	
182	W	159	No Gas	-0.009	ppb	N/A	23.36	1000	
205	Tl	209	No Gas	-0.066	ppb	N/A	193.55	1000	
208	Pb	209	No Gas	0.459	ppb	4.4	1061.21	2000	
232	Th	209	No Gas	0.016	ppb	115.6	136.82	1000	
238	U	209	No Gas	0.004	ppb	184.3	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1361973.34	0.9	1419082.7	95.98	29.5	120.4	
Sc	45	No Gas	3025445.37	2.0	3146924.08	96.14	29.5	120.4	
Sc	45	H2	345805.81	0.9	384460.42	89.95	29.5	120.4	
Sc	45	He	69650.01	0.8	75345.71	92.44	29.5	120.4	
Ge	72	No Gas	669413.36	1.6	687904.62	97.31	29.5	120.4	
Ge	72	H2	125369.85	0.3	138854.33	90.29	29.5	120.4	
Ge	72	He	53564.87	0.7	57203.55	93.64	29.5	120.4	
Y	89	H2	2219129.23	0.4	2377183.3	93.35	29.5	120.4	
Y	89	He	464710.68	0.6	498269.57	93.26	29.5	120.4	
Tb	159	No Gas	6971636.42	1.9	6611594.34	105.45	29.5	120.4	
Tb	159	He	2539856.85	0.1	2564694.13	99.03	29.5	120.4	
Bi	209	No Gas	3618903.96	1.7	3381664.78	107.02	29.5	120.4	

Sample Report

Sample Name SN6071-001

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 6:58:18 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.105	ppb	7.6	186.67	100	
11	B	6	No Gas	53.177	ppb	2.8	45591.59	1000	
23	Na	45	He	85244.978	ppb	0.6	8996031.34	200000	
24	Mg	45	He	5453.967	ppb	1.2	318739.25	200000	
27	Al	45	He	22.113	ppb	2.8	521.14	200000	
28	Si	45	H2	2672.888	ppb	0.8	116441.72	10000	
39	K	45	He	10552.828	ppb	0.9	571618.56	200000	
40	Ca	45	H2	20000.570	ppb	0.2	7973209.53	200000	
51	V	89	He	1.021	ppb	5.9	1087.86	1000	
52	Cr	89	He	0.638	ppb	2.1	709.89	2000	
55	Mn	89	He	9.355	ppb	1.1	4497.92	2000	
56	Fe	89	H2	68.369	ppb	0.5	117446.51	100000	
59	Co	89	He	0.151	ppb	15.4	320.03	1000	
60	Ni	89	He	2.317	ppb	8.1	2472.53	1000	
63	Cu	89	He	14.634	ppb	0.3	19548.60	2000	
66	Zn	89	He	69.802	ppb	2.3	12244.65	2000	
75	As	89	He	0.433	ppb	2.2	68.01	1000	
78	Se	89	H2	0.220	ppb	8.9	17.17	1000	
88	Sr	89	He	89.020	ppb	1.2	66030.02	2000	
95	Mo	89	He	12.960	ppb	1.3	10725.64	1000	
107	Ag	89	He	0.016	ppb	11.9	52.23	100	
111	Cd	89	He	0.048	ppb	10.6	17.78	1000	
118	Sn	159	He	0.407	ppb	4.6	400.02	1000	
121	Sb	159	No Gas	0.508	ppb	6.2	3547.75	1000	
137	Ba	159	No Gas	7.397	ppb	2.8	20234.68	2000	
182	W	159	No Gas	0.104	ppb	16.4	570.65	1000	
205	Tl	209	No Gas	0.047	ppb	63.4	774.23	1000	
208	Pb	209	No Gas	0.386	ppb	10.2	6234.27	2000	
232	Th	209	No Gas	0.018	ppb	33.0	377.09	1000	
238	U	209	No Gas	0.012	ppb	28.7	186.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1309269.42	2.0	1419082.7	92.26	29.5	120.4	
Sc	45	No Gas	2929444.10	2.6	3146924.08	93.09	29.5	120.4	
Sc	45	H2	344941.14	0.9	384460.42	89.72	29.5	120.4	
Sc	45	He	68561.43	1.0	75345.71	91	29.5	120.4	
Ge	72	No Gas	649230.26	1.6	687904.62	94.38	29.5	120.4	
Ge	72	H2	125696.93	0.4	138854.33	90.52	29.5	120.4	
Ge	72	He	52521.23	0.2	57203.55	91.81	29.5	120.4	
Y	89	H2	2197339.68	0.3	2377183.3	92.43	29.5	120.4	
Y	89	He	454935.32	0.6	498269.57	91.3	29.5	120.4	
Tb	159	No Gas	6745064.55	2.4	6611594.34	102.02	29.5	120.4	
Tb	159	He	2518724.35	0.2	2564694.13	98.21	29.5	120.4	
Bi	209	No Gas	3411333.14	1.8	3381664.78	100.88	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	067_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:00:58 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.833	ppb	6.0	32547.42	25	99.33	89.8	110.2	
11	B	6	No Gas	27.708	ppb	6.0	25532.06	25	110.83	89.8	110.2	> +/- 10%
23	Na	45	He	5310.338	ppb	1.1	573971.49	5000	106.21	89.8	110.2	
24	Mg	45	He	5072.052	ppb	0.7	299448.25	5000	101.44	89.8	110.2	
27	Al	45	He	485.762	ppb	1.8	11304.82	500	97.15	89.8	110.2	
28	Si	45	H2	484.128	ppb	1.6	21707.13	500	96.83	89.8	110.2	
39	K	45	He	4932.442	ppb	0.8	275456.40	5000	98.65	89.8	110.2	
40	Ca	45	H2	5052.464	ppb	0.9	2036645.66	5000	101.05	89.8	110.2	
51	V	89	He	24.746	ppb	0.9	21169.80	25	98.98	89.8	110.2	
52	Cr	89	He	25.236	ppb	1.0	26071.84	25	100.94	89.8	110.2	
55	Mn	89	He	25.289	ppb	1.8	12261.11	25	101.16	89.8	110.2	
56	Fe	89	H2	5004.626	ppb	0.4	8021151.28	5000	100.09	89.8	110.2	
59	Co	89	He	25.330	ppb	1.4	44575.47	25	101.32	89.8	110.2	
60	Ni	89	He	23.054	ppb	0.8	12462.60	25	92.22	89.8	110.2	
63	Cu	89	He	25.154	ppb	0.7	34061.13	25	100.62	89.8	110.2	
66	Zn	89	He	25.369	ppb	3.2	4545.33	25	101.48	89.8	110.2	
75	As	89	He	24.879	ppb	0.9	3710.57	25	99.52	89.8	110.2	
78	Se	89	H2	25.489	ppb	0.9	1947.55	25	101.96	89.8	110.2	
88	Sr	89	He	24.603	ppb	1.7	18537.49	25	98.41	89.8	110.2	
95	Mo	89	He	24.992	ppb	1.2	20997.85	25	99.97	89.8	110.2	
107	Ag	89	He	26.078	ppb	0.8	74147.86	25	104.31	89.8	110.2	
111	Cd	89	He	25.738	ppb	1.5	9398.52	25	102.95	89.8	110.2	
118	Sn	159	He	23.968	ppb	0.8	20344.82	25	95.87	89.8	110.2	
121	Sb	159	No Gas	24.702	ppb	6.7	173133.69	25	98.81	89.8	110.2	
137	Ba	159	No Gas	25.151	ppb	6.3	70061.17	25	100.6	89.8	110.2	
182	W	159	No Gas	24.972	ppb	7.7	132504.50	25	99.89	89.8	110.2	
205	Tl	209	No Gas	25.571	ppb	6.3	295395.26	25	102.28	89.8	110.2	
208	Pb	209	No Gas	25.429	ppb	6.1	409105.48	25	101.72	89.8	110.2	
232	Th	209	No Gas	25.321	ppb	6.9	411364.17	25	101.28	89.8	110.2	
238	U	209	No Gas	25.588	ppb	6.6	389851.87	25	102.35	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1357065.21	3.5	1419082.7	95.63	29.5	120.4	
Sc	45	No Gas	2988981.11	4.7	3146924.08	94.98	29.5	120.4	
Sc	45	H2	348668.14	1.7	384460.42	90.69	29.5	120.4	
Sc	45	He	69244.41	0.9	75345.71	91.9	29.5	120.4	
Ge	72	No Gas	665194.19	4.3	687904.62	96.7	29.5	120.4	
Ge	72	H2	126893.47	0.8	138854.33	91.39	29.5	120.4	
Ge	72	He	53081.12	0.2	57203.55	92.79	29.5	120.4	
Y	89	H2	2227638.47	0.6	2377183.3	93.71	29.5	120.4	
Y	89	He	462016.19	0.6	498269.57	92.72	29.5	120.4	
Tb	159	No Gas	6882986.98	4.9	6611594.34	104.1	29.5	120.4	
Tb	159	He	2531884.22	0.3	2564694.13	98.72	29.5	120.4	
Bi	209	No Gas	3577101.66	4.4	3381664.78	105.78	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	068_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:03:36 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.105	ppb	22.7	194.45	0.2	Failed DoD
11	B	6	No Gas	3.325	ppb	3.6	4794.31	4	Failed DoD
23	Na	45	He	60.138	ppb	5.1	15011.11	200	
24	Mg	45	He	1.274	ppb	121.8	960.10	20	
27	Al	45	He	0.279	ppb	212.4	18.89	20	
28	Si	45	H2	1.642	ppb	60.9	547.30	100	
39	K	45	He	-0.973	ppb	N/A	10547.57	200	
40	Ca	45	H2	2.127	ppb	11.8	2113.57	20	
51	V	89	He	-0.038	ppb	N/A	208.90	1	
52	Cr	89	He	0.004	ppb	167.5	67.32	1	
55	Mn	89	He	0.022	ppb	10.4	62.66	0.4	
56	Fe	89	H2	1.509	ppb	4.5	12028.57	20	
59	Co	89	He	0.005	ppb	42.8	68.89	0.2	
60	Ni	89	He	-1.947	ppb	N/A	464.47	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.006	ppb	270.4	95.56	0.6	
66	Zn	89	He	0.068	ppb	96.5	52.23	2	
75	As	89	He	-0.009	ppb	N/A	3.33	1	
78	Se	89	H2	0.075	ppb	32.0	6.33	1	
88	Sr	89	He	0.001	ppb	692.8	6.67	1	
95	Mo	89	He	0.120	ppb	5.8	106.67	1	
107	Ag	89	He	0.014	ppb	29.2	46.67	0.2	
111	Cd	89	He	0.013	ppb	57.7	5.19	0.2	
118	Sn	159	He	0.165	ppb	26.2	196.68	1	
121	Sb	159	No Gas	0.031	ppb	3.1	263.63	0.2	
137	Ba	159	No Gas	0.032	ppb	10.5	100.11	0.4	
182	W	159	No Gas	0.092	ppb	17.9	513.92	1	
205	Tl	209	No Gas	0.008	ppb	57.7	363.75	0.2	
208	Pb	209	No Gas	0.019	ppb	3.8	610.69	0.2	
232	Th	209	No Gas	0.121	ppb	20.9	2059.14	1	
238	U	209	No Gas	0.020	ppb	11.6	307.01	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1362265.95	0.7	1419082.7	96	29.5	120.4	
Sc	45	No Gas	2963383.70	1.6	3146924.08	94.17	29.5	120.4	
Sc	45	H2	347207.27	1.8	384460.42	90.31	29.5	120.4	
Sc	45	He	69595.44	0.2	75345.71	92.37	29.5	120.4	
Ge	72	No Gas	659458.90	1.1	687904.62	95.86	29.5	120.4	
Ge	72	H2	126459.82	1.0	138854.33	91.07	29.5	120.4	
Ge	72	He	53128.42	0.5	57203.55	92.88	29.5	120.4	
Y	89	H2	2226986.93	1.2	2377183.3	93.68	29.5	120.4	
Y	89	He	462108.10	0.1	498269.57	92.74	29.5	120.4	
Tb	159	No Gas	6813996.36	1.3	6611594.34	103.06	29.5	120.4	
Tb	159	He	2517331.61	0.2	2564694.13	98.15	29.5	120.4	
Bi	209	No Gas	3552058.73	1.3	3381664.78	105.04	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW2
File Name	069_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:06:19 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.363	ppb	28.1	155.56	0.5	
B	11	6	No Gas	14.243	ppb	3.7	4480.84	10	PB 6020 Fails DoD
Na	23	45	He	643.289	ppb	6.8	22058.24	500	PB 6020 Fails DoD
Mg	24	45	He	21.501	ppb	28.1	1124.57	50	
Al	27	45	He	8.715	ppb	70.4	52.22	50	
Si	28	45	H2	11.397	ppb	120.4	567.31	250	
K	39	45	He	-21.977	ppb	N/A	10230.72	500	
Ca	40	45	H2	74.617	ppb	3.0	7138.69	50	PB 6020 Fails DoD
V	51	89	He	2.476	ppb	4.0	654.49	2.5	
Cr	52	89	He	0.422	ppb	28.6	149.31	2.5	
Mn	55	89	He	0.694	ppb	21.5	117.98	1	
Fe	56	89	H2	9.117	ppb	6.1	12509.43	50	
Co	59	89	He	0.104	ppb	57.6	95.56	0.5	
Ni	60	89	He	-9.530	ppb	N/A	480.03	1	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Cu	63	89	He	5.622	ppb	2.7	1592.38	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	5.304	ppb	10.7	226.68	5	PB 6020 Fails DoD
As	75	89	He	0.261	ppb	6.5	12.33	2.5	
Se	78	89	H2	0.560	ppb	9.2	9.17	2.5	
Sr	88	89	He	0.346	ppb	7.7	57.78	2.5	
Mo	95	89	He	0.403	ppb	19.5	73.34	2.5	
Ag	107	89	He	0.139	ppb	4.3	85.56	0.5	
Cd	111	89	He	0.195	ppb	46.8	14.44	0.5	
Sn	118	159	He	1.504	ppb	11.0	312.24	2.5	
Sb	121	159	No Gas	0.164	ppb	17.4	290.33	0.5	
Ba	137	159	No Gas	0.927	ppb	19.7	540.61	1	
W	182	159	No Gas	0.160	ppb	50.9	203.56	2.5	
Tl	205	209	No Gas	0.030	ppb	83.9	350.40	0.5	
Pb	208	209	No Gas	1.418	ppb	5.3	5042.72	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.424	ppb	7.3	1541.84	2.5	
U	238	209	No Gas	0.029	ppb	29.7	100.11	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1391886.39	2.3	1419082.7	98.08	29.5	120.4	
Sc	45	No Gas	3033901.97	2.7	3146924.08	96.41	29.5	120.4	
Sc	45	H2	342080.97	1.1	384460.42	88.98	29.5	120.4	
Sc	45	He	68719.48	1.2	75345.71	91.21	29.5	120.4	
Ge	72	No Gas	674981.98	2.5	687904.62	98.12	29.5	120.4	
Ge	72	H2	123604.94	1.5	138854.33	89.02	29.5	120.4	
Ge	72	He	52574.37	0.6	57203.55	91.91	29.5	120.4	
Y	89	H2	2222923.78	0.2	2377183.3	93.51	29.5	120.4	
Y	89	He	458130.28	0.8	498269.57	91.94	29.5	120.4	
Tb	159	No Gas	7065945.52	2.1	6611594.34	106.87	29.5	120.4	
Tb	159	He	2528659.27	0.7	2564694.13	98.59	29.5	120.4	
Bi	209	No Gas	3701664.50	2.7	3381664.78	109.46	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	070LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:08:56 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	49.002	ppb	5.3	13398.86	50	19.6	79.5	120.4	
B	11	6	No Gas	507.973	ppb	5.6	91994.53	500	20.32	79.5	120.4	
Na	23	45	He	8731.271	ppb	4.0	189631.36	7500	23.28	79.5	120.4	
Mg	24	45	He	5813.015	ppb	3.5	67596.13	5000	23.25	79.5	120.4	
Al	27	45	He	2125.209	ppb	3.9	9648.00	2000	21.25	79.5	120.4	
Si	28	45	H2	1050.227	ppb	7.2	9784.29	1000	21	0	200	
K	39	45	He	11074.954	ppb	4.5	126273.43	10000	22.15	79.5	120.4	
Ca	40	45	H2	2710.127	ppb	5.4	221858.75	2500	21.68	79.5	120.4	
V	51	89	He	564.547	ppb	4.6	92915.86	500	22.58	79.5	120.4	
Cr	52	89	He	228.498	ppb	4.5	45776.00	200	22.85	79.5	120.4	
Mn	55	89	He	571.708	ppb	5.2	53614.14	500	22.87	79.5	120.4	
Fe	56	89	H2	1083.546	ppb	5.8	366343.73	1000	21.67	79.5	120.4	
Co	59	89	He	582.903	ppb	5.5	198872.56	500	23.32	79.5	120.4	DoD
Ni	60	89	He	570.733	ppb	4.4	54529.25	500	22.83	79.5	120.4	
Cu	63	89	He	287.622	ppb	5.3	75477.68	250	23.01	79.5	120.4	
Zn	66	89	He	572.962	ppb	5.8	19782.39	500	22.92	79.5	120.4	
As	75	89	He	114.378	ppb	5.5	3310.76	100	22.88	79.5	120.4	
Se	78	89	H2	107.594	ppb	2.1	1691.20	100	21.52	79.5	120.4	
Sr	88	89	He	555.787	ppb	5.3	81254.47	500	22.23	79.5	120.4	
Mo	95	89	He	116.752	ppb	3.2	19049.42	100	23.35	79.5	120.4	DoD
Ag	107	89	He	59.225	ppb	4.4	32694.59	50	23.69	79.5	120.4	DoD
Cd	111	89	He	291.878	ppb	5.4	20684.40	250	23.35	79.5	120.4	DoD
Sn	118	159	He	539.423	ppb	5.8	88919.53	500	21.58	79.5	120.4	
Sb	121	159	No Gas	102.097	ppb	7.4	150007.54	100	20.42	79.5	120.4	
Ba	137	159	No Gas	2008.134	ppb	6.8	1172338.53	2000	20.08	79.5	120.4	
W	182	159	No Gas	105.384	ppb	6.7	117261.85	100	21.08	79.5	120.4	
Tl	205	209	No Gas	107.503	ppb	7.5	258498.37	100	21.5	79.5	120.4	
[Pb]	206	209	No Gas	107.066	ppb	6.6	89656.71	100	21.41	79.5	120.4	
[Pb]	207	209	No Gas	106.277	ppb	7.8	78327.13	100	21.26	79.5	120.4	
Pb	208	209	No Gas	106.123	ppb	7.6	355330.00	100	21.22	79.5	120.4	
Th	232	209	No Gas	105.649	ppb	9.2	357152.37	100	21.13	79.5	120.4	
U	238	209	No Gas	105.845	ppb	7.3	335658.47	100	21.17	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1410578.25	1.5	1419082.7	99.4	29.5	120.4	
Sc	45	No Gas	3088269.70	2.2	3146924.08	98.14	29.5	120.4	
Sc	45	H2	352693.10	4.0	384460.42	91.74	29.5	120.4	
Sc	45	He	67576.49	3.5	75345.71	89.69	29.5	120.4	
Ge	72	No Gas	690573.89	1.5	687904.62	100.39	29.5	120.4	
Ge	72	H2	128103.02	2.8	138854.33	92.26	29.5	120.4	
Ge	72	He	51507.48	3.5	57203.55	90.04	29.5	120.4	
Y	89	H2	2292445.85	4.1	2377183.3	96.44	29.5	120.4	
Y	89	He	449007.34	4.3	498269.57	90.11	29.5	120.4	
Tb	159	No Gas	7203472.11	1.7	6611594.34	108.95	29.5	120.4	
Tb	159	He	2467792.97	4.1	2564694.13	96.22	29.5	120.4	
Bi	209	No Gas	3719984.12	2.6	3381664.78	110	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:11:31 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	220.080	ppb	4.4	57834.10	100	
11	B	6	No Gas	1711.331	ppb	4.5	294278.97	1000	
23	Na	45	He	326.001	ppb	5.8	15452.27	200000	
24	Mg	45	He	9.159	ppb	22.5	986.77	200000	
27	Al	45	He	1045.687	ppb	1.5	4866.56	200000	
28	Si	45	H2	105.918	ppb	14.3	1381.61	10000	
39	K	45	He	-9.405	ppb	N/A	10429.12	200000	
40	Ca	45	H2	51.322	ppb	1.5	5305.63	200000	
51	V	89	He	367.692	ppb	1.3	62341.97	1000	
52	Cr	89	He	698.485	ppb	1.8	143820.09	2000	
55	Mn	89	He	1713.548	ppb	1.0	165248.09	2000	
56	Fe	89	H2	3155.550	ppb	0.8	1021102.97	100000	
59	Co	89	He	757.453	ppb	0.6	265917.19	1000	
60	Ni	89	He	1626.527	ppb	1.2	157279.39	1000	
63	Cu	89	He	304.795	ppb	0.8	82299.91	2000	
66	Zn	89	He	1059.074	ppb	0.1	37599.25	2000	
75	As	89	He	211.241	ppb	1.2	6288.11	1000	
78	Se	89	H2	495.697	ppb	1.0	7582.05	1000	
88	Sr	89	He	101.072	ppb	1.2	15210.00	2000	
95	Mo	89	He	350.608	ppb	0.6	58817.03	1000	
107	Ag	89	He	776.354	ppb	0.5	440804.19	100	>LDR
111	Cd	89	He	747.358	ppb	0.7	54500.36	1000	
118	Sn	159	He	2.073	ppb	6.2	410.02	1000	
121	Sb	159	No Gas	270.781	ppb	3.6	392911.98	1000	
137	Ba	159	No Gas	1718.263	ppb	2.6	990704.05	2000	
182	W	159	No Gas	0.296	ppb	18.3	353.73	1000	
205	Tl	209	No Gas	502.136	ppb	3.8	1202733.27	1000	
208	Pb	209	No Gas	928.999	ppb	3.6	3098874.31	2000	
232	Th	209	No Gas	1.345	ppb	34.0	4636.15	1000	
238	U	209	No Gas	0.114	ppb	33.7	367.08	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1359698.31	0.7	1419082.7	95.82	29.5	120.4	
Sc	45	No Gas	3048294.44	1.9	3146924.08	96.87	29.5	120.4	
Sc	45	H2	342547.21	1.1	384460.42	89.1	29.5	120.4	
Sc	45	He	69136.40	0.6	75345.71	91.76	29.5	120.4	
Ge	72	No Gas	684577.66	1.0	687904.62	99.52	29.5	120.4	
Ge	72	H2	124807.91	1.0	138854.33	89.88	29.5	120.4	
Ge	72	He	53236.27	0.3	57203.55	93.06	29.5	120.4	
Y	89	H2	2230280.43	0.8	2377183.3	93.82	29.5	120.4	
Y	89	He	461344.48	0.7	498269.57	92.59	29.5	120.4	
Tb	159	No Gas	7108899.90	1.7	6611594.34	107.52	29.5	120.4	
Tb	159	He	2539310.73	1.0	2564694.13	99.01	29.5	120.4	
Bi	209	No Gas	3703975.59	1.9	3381664.78	109.53	29.5	120.4	

Sample Report

Sample Name	SN5815-004
File Name	072SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:14:11 PM
Sample Type	Sample
Total Dilution	25.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	228.952	ppb	3.3	12262.26	100	
11	B	6	No Gas	1861.293	ppb	1.4	66535.76	1000	
23	Na	45	He	1098.140	ppb	11.3	13234.07	200000	
24	Mg	45	He	56.957	ppb	54.5	1015.67	200000	
27	Al	45	He	1093.916	ppb	4.7	1031.18	200000	
28	Si	45	H2	147.871	ppb	52.7	720.82	10000	
39	K	45	He	36.665	ppb	972.6	10637.55	200000	
40	Ca	45	H2	77.200	ppb	8.3	2453.63	200000	
51	V	89	He	363.695	ppb	3.5	12511.51	1000	
52	Cr	89	He	704.815	ppb	3.8	29040.42	2000	
55	Mn	89	He	1733.891	ppb	4.0	33440.73	2000	
56	Fe	89	H2	3362.676	ppb	5.2	221282.40	100000	
59	Co	89	He	763.653	ppb	3.2	53609.57	1000	
60	Ni	89	He	1614.967	ppb	3.8	32312.53	1000	
63	Cu	89	He	304.217	ppb	3.2	16480.19	2000	
66	Zn	89	He	1088.987	ppb	5.6	7751.30	2000	
75	As	89	He	210.468	ppb	5.0	1254.86	1000	
78	Se	89	H2	526.590	ppb	5.9	1583.02	1000	
88	Sr	89	He	101.995	ppb	2.8	3071.56	2000	
95	Mo	89	He	352.650	ppb	2.8	11824.40	1000	
107	Ag	89	He	776.382	ppb	3.7	88060.77	100	
111	Cd	89	He	757.124	ppb	3.6	11030.88	1000	
118	Sn	159	He	1.954	ppb	26.1	123.34	1000	
121	Sb	159	No Gas	276.166	ppb	1.6	81536.87	1000	
137	Ba	159	No Gas	1772.201	ppb	1.2	207834.93	2000	
182	W	159	No Gas	0.317	ppb	14.5	100.11	1000	
205	Tl	209	No Gas	522.103	ppb	1.8	253398.47	1000	
208	Pb	209	No Gas	951.891	ppb	2.2	643047.65	2000	
232	Th	209	No Gas	0.110	ppb	82.3	190.21	1000	
238	U	209	No Gas	0.041	ppb	45.3	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1380520.93	0.5	1419082.7	97.28	29.5	120.4	
Sc	45	No Gas	3130718.89	0.9	3146924.08	99.49	29.5	120.4	
Sc	45	H2	341172.94	4.3	384460.42	88.74	29.5	120.4	
Sc	45	He	69411.24	2.7	75345.71	92.12	29.5	120.4	
Ge	72	No Gas	693827.28	1.2	687904.62	100.86	29.5	120.4	
Ge	72	H2	124417.25	2.9	138854.33	89.6	29.5	120.4	
Ge	72	He	53210.25	2.1	57203.55	93.02	29.5	120.4	
Y	89	H2	2194156.01	3.8	2377183.3	92.3	29.5	120.4	
Y	89	He	461126.60	3.2	498269.57	92.55	29.5	120.4	
Tb	159	No Gas	7230189.27	0.6	6611594.34	109.36	29.5	120.4	
Tb	159	He	2512874.16	3.0	2564694.13	97.98	29.5	120.4	
Bi	209	No Gas	3749849.56	1.1	3381664.78	110.89	29.5	120.4	

Sample Report

Sample Name	SN5815-016
File Name	073SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:16:51 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.433	ppb	26.9	165.56	100	
11	B	6	No Gas	24.062	ppb	0.7	5896.96	1000	
23	Na	45	He	92549.507	ppb	0.3	2012788.08	200000	
24	Mg	45	He	25264.116	ppb	0.6	303323.31	200000	
27	Al	45	He	13.817	ppb	29.1	77.78	200000	
28	Si	45	H2	18.719	ppb	35.9	644.07	10000	
39	K	45	He	16635.423	ppb	0.9	192414.37	200000	
40	Ca	45	H2	44565.954	ppb	1.8	3600257.48	200000	
51	V	89	He	2.279	ppb	3.9	627.81	1000	
52	Cr	89	He	0.298	ppb	23.0	125.31	2000	
55	Mn	89	He	0.411	ppb	61.8	91.98	2000	
56	Fe	89	H2	-4.115	ppb	N/A	8425.19	100000	
59	Co	89	He	0.063	ppb	181.4	82.23	1000	
60	Ni	89	He	-8.795	ppb	N/A	555.59	1000	
63	Cu	89	He	0.317	ppb	11.3	173.34	2000	
66	Zn	89	He	4.460	ppb	19.0	198.90	2000	
75	As	89	He	0.279	ppb	12.1	13.00	1000	
78	Se	89	H2	0.539	ppb	21.4	9.00	1000	
88	Sr	89	He	4.590	ppb	3.9	698.93	2000	
95	Mo	89	He	1.098	ppb	10.0	191.12	1000	
107	Ag	89	He	0.126	ppb	41.0	78.89	100	
111	Cd	89	He	0.112	ppb	8.3	8.52	1000	
118	Sn	159	He	0.807	ppb	8.5	195.56	1000	
121	Sb	159	No Gas	0.150	ppb	13.0	260.29	1000	
137	Ba	159	No Gas	0.590	ppb	19.5	337.05	2000	
182	W	159	No Gas	0.034	ppb	42.3	63.41	1000	
205	Tl	209	No Gas	0.069	ppb	39.3	417.14	1000	
208	Pb	209	No Gas	0.316	ppb	13.5	1294.81	2000	
232	Th	209	No Gas	0.065	ppb	44.5	313.69	1000	
238	U	209	No Gas	0.001	ppb	314.4	10.01	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1323990.57	1.5	1419082.7	93.3	29.5	120.4	
Sc	45	No Gas	2948671.59	1.3	3146924.08	93.7	29.5	120.4	
Sc	45	H2	349490.70	1.3	384460.42	90.9	29.5	120.4	
Sc	45	He	70405.99	0.8	75345.71	93.44	29.5	120.4	
Ge	72	No Gas	664383.74	0.5	687904.62	96.58	29.5	120.4	
Ge	72	H2	126075.06	0.8	138854.33	90.8	29.5	120.4	
Ge	72	He	53251.47	0.6	57203.55	93.09	29.5	120.4	
Y	89	H2	2261822.05	0.7	2377183.3	95.15	29.5	120.4	
Y	89	He	462900.46	0.5	498269.57	92.9	29.5	120.4	
Tb	159	No Gas	6815410.11	1.3	6611594.34	103.08	29.5	120.4	
Tb	159	He	2544765.41	0.5	2564694.13	99.22	29.5	120.4	
Bi	209	No Gas	3482830.60	1.0	3381664.78	102.99	29.5	120.4	

Sample Report

Sample Name SN5815-016

File Name 074SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:19:28 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	1.263	ppb	40.1	123.34	100	
11	B	6	No Gas	66.086	ppb	6.9	4225.20	1000	
23	Na	45	He	95218.339	ppb	1.6	425250.55	200000	
24	Mg	45	He	25444.609	ppb	1.3	62430.31	200000	
27	Al	45	He	8.925	ppb	61.7	21.11	200000	
28	Si	45	H2	87.413	ppb	47.4	627.38	10000	
39	K	45	He	16337.026	ppb	2.5	46872.05	200000	
40	Ca	45	H2	46090.065	ppb	7.3	734547.89	200000	
51	V	89	He	2.578	ppb	24.0	333.35	1000	
52	Cr	89	He	0.271	ppb	32.9	75.99	2000	
55	Mn	89	He	0.467	ppb	8.2	61.99	2000	
56	Fe	89	H2	-28.653	ppb	N/A	7744.06	100000	
59	Co	89	He	0.053	ppb	383.7	64.45	1000	
60	Ni	89	He	-50.242	ppb	N/A	441.14	1000	
63	Cu	89	He	0.382	ppb	90.9	110.00	2000	
66	Zn	89	He	10.683	ppb	14.2	117.78	2000	
75	As	89	He	0.546	ppb	112.5	8.00	1000	
78	Se	89	H2	0.346	ppb	58.6	1.67	1000	
88	Sr	89	He	4.411	ppb	15.8	141.12	2000	
95	Mo	89	He	1.347	ppb	30.8	52.23	1000	
107	Ag	89	He	0.225	ppb	24.9	33.33	100	
111	Cd	89	He	0.151	ppb	30.0	2.59	1000	
118	Sn	159	He	0.990	ppb	34.1	92.22	1000	
121	Sb	159	No Gas	0.085	ppb	165.7	76.75	1000	
137	Ba	159	No Gas	0.439	ppb	73.0	60.07	2000	
182	W	159	No Gas	-0.005	ppb	N/A	26.70	1000	
205	Tl	209	No Gas	-0.416	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.147	ppb	59.3	407.13	2000	
232	Th	209	No Gas	-0.004	ppb	N/A	106.79	1000	
238	U	209	No Gas	-0.006	ppb	N/A	3.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1367403.45	1.7	1419082.7	96.36	29.5	120.4	
Sc	45	No Gas	3045787.92	2.3	3146924.08	96.79	29.5	120.4	
Sc	45	H2	345093.01	5.2	384460.42	89.76	29.5	120.4	
Sc	45	He	71114.01	1.0	75345.71	94.38	29.5	120.4	
Ge	72	No Gas	675575.06	1.8	687904.62	98.21	29.5	120.4	
Ge	72	H2	127570.68	3.1	138854.33	91.87	29.5	120.4	
Ge	72	He	54175.41	0.8	57203.55	94.71	29.5	120.4	
Y	89	H2	2219102.80	5.1	2377183.3	93.35	29.5	120.4	
Y	89	He	469329.53	1.2	498269.57	94.19	29.5	120.4	
Tb	159	No Gas	6924593.37	2.6	6611594.34	104.73	29.5	120.4	
Tb	159	He	2553904.77	1.0	2564694.13	99.58	29.5	120.4	
Bi	209	No Gas	3598008.22	2.3	3381664.78	106.4	29.5	120.4	

Sample Report

Sample Name SN6059-001

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:22:04 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.235	ppb	17.5	114.45	100	
11	B	6	No Gas	966.941	ppb	6.6	161805.43	1000	
23	Na	45	He	490899.431	ppb	1.1	10391321.27	200000	
24	Mg	45	He	58998.549	ppb	1.3	690706.04	200000	
27	Al	45	He	10.619	ppb	44.0	61.12	200000	
28	Si	45	H2	8815.006	ppb	1.6	74590.61	10000	
39	K	45	He	927.739	ppb	6.7	20368.76	200000	
40	Ca	45	H2	336499.797	ppb	2.0	25996104.89	200000	
51	V	89	He	2.544	ppb	16.0	660.04	1000	
52	Cr	89	He	1.304	ppb	11.6	326.61	2000	
55	Mn	89	He	1283.431	ppb	0.0	121848.22	2000	
56	Fe	89	H2	8940.442	ppb	2.0	2792475.45	100000	
59	Co	89	He	0.216	ppb	15.3	133.35	1000	
60	Ni	89	He	-7.684	ppb	N/A	650.04	1000	
63	Cu	89	He	0.760	ppb	4.2	287.79	2000	
66	Zn	89	He	7.213	ppb	21.3	291.12	2000	
75	As	89	He	0.538	ppb	22.1	20.33	1000	
78	Se	89	H2	0.532	ppb	37.9	8.50	1000	
88	Sr	89	He	3520.898	ppb	0.7	521372.25	2000	
95	Mo	89	He	0.757	ppb	18.6	131.12	1000	
107	Ag	89	He	0.087	ppb	34.1	55.56	100	
111	Cd	89	He	0.031	ppb	28.3	2.59	1000	
118	Sn	159	He	0.739	ppb	29.2	181.12	1000	
121	Sb	159	No Gas	0.116	ppb	7.8	220.25	1000	
137	Ba	159	No Gas	74.119	ppb	5.4	42273.89	2000	
182	W	159	No Gas	0.004	ppb	628.3	33.37	1000	
205	Tl	209	No Gas	-0.078	ppb	N/A	86.77	1000	
208	Pb	209	No Gas	0.087	ppb	26.8	580.65	2000	
232	Th	209	No Gas	0.047	ppb	25.8	256.96	1000	
238	U	209	No Gas	1.781	ppb	4.2	5353.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1317532.16	1.9	1419082.7	92.84	29.5	120.4	
Sc	45	No Gas	3027018.50	2.3	3146924.08	96.19	29.5	120.4	
Sc	45	H2	334365.58	2.2	384460.42	86.97	29.5	120.4	
Sc	45	He	68771.61	0.9	75345.71	91.27	29.5	120.4	
Ge	72	No Gas	673665.30	2.6	687904.62	97.93	29.5	120.4	
Ge	72	H2	120861.59	1.6	138854.33	87.04	29.5	120.4	
Ge	72	He	52233.26	0.6	57203.55	91.31	29.5	120.4	
Y	89	H2	2166494.72	2.0	2377183.3	91.14	29.5	120.4	
Y	89	He	454116.36	0.4	498269.57	91.14	29.5	120.4	
Tb	159	No Gas	7036159.27	2.2	6611594.34	106.42	29.5	120.4	
Tb	159	He	2504070.61	0.9	2564694.13	97.64	29.5	120.4	
Bi	209	No Gas	3518288.19	1.6	3381664.78	104.04	29.5	120.4	

Sample Report

Sample Name SN6059-001L

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:24:40 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.615	ppb	60.9	88.89	100	
11	B	6	No Gas	995.606	ppb	6.7	35952.39	1000	
23	Na	45	He	475597.624	ppb	1.2	2104079.79	200000	
24	Mg	45	He	57098.636	ppb	3.0	139969.67	200000	
27	Al	45	He	24.928	ppb	24.6	36.67	200000	
28	Si	45	H2	8248.851	ppb	4.6	15458.95	10000	
39	K	45	He	933.630	ppb	16.1	12981.76	200000	
40	Ca	45	H2	313341.548	ppb	2.5	5224505.48	200000	
51	V	89	He	4.115	ppb	16.5	387.80	1000	
52	Cr	89	He	1.388	ppb	27.0	123.31	2000	
55	Mn	89	He	1241.120	ppb	2.2	24473.36	2000	
56	Fe	89	H2	8552.284	ppb	1.9	582327.02	100000	
59	Co	89	He	-0.416	ppb	N/A	31.12	1000	
60	Ni	89	He	-46.844	ppb	N/A	508.91	1000	
63	Cu	89	He	0.641	ppb	30.8	124.45	2000	
66	Zn	89	He	17.373	ppb	11.5	166.67	2000	
75	As	89	He	0.489	ppb	163.9	7.67	1000	
78	Se	89	H2	0.524	ppb	32.2	2.33	1000	
88	Sr	89	He	3422.791	ppb	1.7	105093.45	2000	
95	Mo	89	He	0.851	ppb	35.3	35.56	1000	
107	Ag	89	He	0.224	ppb	33.5	33.34	100	
111	Cd	89	He	0.225	ppb	49.9	3.70	1000	
118	Sn	159	He	0.459	ppb	74.4	74.45	1000	
121	Sb	159	No Gas	0.228	ppb	120.2	120.13	1000	
137	Ba	159	No Gas	71.866	ppb	11.2	8261.75	2000	
182	W	159	No Gas	-0.024	ppb	N/A	23.36	1000	
205	Tl	209	No Gas	-0.502	ppb	N/A	36.70	1000	
208	Pb	209	No Gas	0.033	ppb	512.4	343.72	2000	
232	Th	209	No Gas	0.021	ppb	204.6	126.81	1000	
238	U	209	No Gas	1.565	ppb	2.4	987.81	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1360608.84	2.1	1419082.7	95.88	29.5	120.4	
Sc	45	No Gas	3098296.44	4.0	3146924.08	98.45	29.5	120.4	
Sc	45	H2	360743.84	1.7	384460.42	93.83	29.5	120.4	
Sc	45	He	71619.90	0.7	75345.71	95.06	29.5	120.4	
Ge	72	No Gas	693155.90	2.8	687904.62	100.76	29.5	120.4	
Ge	72	H2	130939.51	1.6	138854.33	94.3	29.5	120.4	
Ge	72	He	54917.88	1.3	57203.55	96	29.5	120.4	
Y	89	H2	2328317.82	1.5	2377183.3	97.94	29.5	120.4	
Y	89	He	470839.12	1.4	498269.57	94.49	29.5	120.4	
Tb	159	No Gas	7101301.49	4.3	6611594.34	107.41	29.5	120.4	
Tb	159	He	2559476.12	1.5	2564694.13	99.8	29.5	120.4	
Bi	209	No Gas	3671949.55	3.9	3381664.78	108.58	29.5	120.4	

Sample Report

Sample Name SN6059-001A

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:27:13 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.322	ppb	2.9	2700.35	100	
11	B	6	No Gas	1153.958	ppb	4.8	194282.47	1000	
23	Na	45	He	503869.420	ppb	1.3	10601774.73	200000	
24	Mg	45	He	59990.500	ppb	1.4	698087.50	200000	
27	Al	45	He	971.360	ppb	3.8	4469.75	200000	
28	Si	45	H2	14249.882	ppb	7.0	117258.11	10000	
39	K	45	He	11043.658	ppb	2.4	127513.70	200000	
40	Ca	45	H2	348850.579	ppb	7.1	26269498.22	200000	
51	V	89	He	57.421	ppb	1.1	9782.62	1000	
52	Cr	89	He	55.206	ppb	0.3	11246.45	2000	
55	Mn	89	He	1304.863	ppb	1.2	123866.73	2000	
56	Fe	89	H2	10299.881	ppb	7.1	3128256.06	100000	
59	Co	89	He	13.103	ppb	1.8	4585.54	1000	
60	Ni	89	He	15.804	ppb	5.2	2865.96	1000	
63	Cu	89	He	33.214	ppb	2.2	8903.13	2000	
66	Zn	89	He	114.928	ppb	2.5	4050.73	2000	
75	As	89	He	53.787	ppb	1.0	1579.26	1000	
78	Se	89	H2	56.405	ppb	4.9	816.32	1000	
88	Sr	89	He	3566.040	ppb	1.4	527980.51	2000	
95	Mo	89	He	55.222	ppb	1.8	9122.23	1000	
107	Ag	89	He	11.285	ppb	4.1	6315.03	100	
111	Cd	89	He	12.072	ppb	6.1	866.71	1000	
118	Sn	159	He	52.817	ppb	3.3	8944.39	1000	
121	Sb	159	No Gas	10.548	ppb	7.7	15288.99	1000	
137	Ba	159	No Gas	97.887	ppb	1.4	56187.26	2000	
182	W	159	No Gas	50.913	ppb	4.2	55711.93	1000	
205	Tl	209	No Gas	11.005	ppb	5.2	25443.73	1000	
208	Pb	209	No Gas	10.672	ppb	4.9	34313.07	2000	
232	Th	209	No Gas	11.144	ppb	5.6	35995.13	1000	
238	U	209	No Gas	12.885	ppb	3.4	38924.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1327325.91	1.2	1419082.7	93.53	29.5	120.4	
Sc	45	No Gas	3059545.43	1.7	3146924.08	97.22	29.5	120.4	
Sc	45	H2	326820.39	6.5	384460.42	85.01	29.5	120.4	
Sc	45	He	68364.50	1.6	75345.71	90.73	29.5	120.4	
Ge	72	No Gas	682942.31	0.5	687904.62	99.28	29.5	120.4	
Ge	72	H2	119619.92	5.4	138854.33	86.15	29.5	120.4	
Ge	72	He	52368.16	1.0	57203.55	91.55	29.5	120.4	
Y	89	H2	2112557.59	5.6	2377183.3	88.87	29.5	120.4	
Y	89	He	454070.80	0.8	498269.57	91.13	29.5	120.4	
Tb	159	No Gas	7075855.45	1.2	6611594.34	107.02	29.5	120.4	
Tb	159	He	2516909.63	0.9	2564694.13	98.14	29.5	120.4	
Bi	209	No Gas	3538804.31	1.1	3381664.78	104.65	29.5	120.4	

Sample Report

Sample Name SN6059-001S

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:29:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	48.932	ppb	9.8	12899.50	100	
11	B	6	No Gas	1448.109	ppb	8.2	249364.68	1000	
23	Na	45	He	496184.222	ppb	0.8	10692321.22	200000	
24	Mg	45	He	63913.072	ppb	1.4	761619.06	200000	
27	Al	45	He	1864.901	ppb	2.1	8778.55	200000	
28	Si	45	H2	9715.388	ppb	2.5	85361.48	10000	
39	K	45	He	10798.478	ppb	0.6	127944.04	200000	
40	Ca	45	H2	332064.507	ppb	1.6	26654148.22	200000	
51	V	89	He	520.105	ppb	1.0	87896.29	1000	
52	Cr	89	He	208.420	ppb	0.8	42868.81	2000	
55	Mn	89	He	1798.566	ppb	0.7	173074.57	2000	
56	Fe	89	H2	9801.724	ppb	0.5	3161885.47	100000	
59	Co	89	He	521.530	ppb	0.8	182717.29	1000	
60	Ni	89	He	500.860	ppb	1.0	49294.32	1000	
63	Cu	89	He	255.868	ppb	1.1	68954.01	2000	
66	Zn	89	He	508.700	ppb	1.4	18042.21	2000	
75	As	89	He	107.089	ppb	2.0	3183.38	1000	
78	Se	89	H2	105.230	ppb	1.8	1615.35	1000	
88	Sr	89	He	4020.956	ppb	0.0	603582.19	2000	
95	Mo	89	He	108.069	ppb	1.9	18094.77	1000	
107	Ag	89	He	51.808	ppb	1.7	29359.16	100	
111	Cd	89	He	261.399	ppb	0.7	19021.60	1000	
118	Sn	159	He	495.132	ppb	0.5	84168.99	1000	
121	Sb	159	No Gas	98.120	ppb	12.3	144223.11	1000	
137	Ba	159	No Gas	1978.765	ppb	12.0	1155772.16	2000	
182	W	159	No Gas	102.328	ppb	12.5	113891.24	1000	
205	Tl	209	No Gas	104.277	ppb	11.5	241294.62	1000	
208	Pb	209	No Gas	103.722	ppb	11.8	334169.93	2000	
232	Th	209	No Gas	106.497	ppb	15.2	346055.42	1000	
238	U	209	No Gas	108.645	ppb	13.4	331341.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1362558.94	3.7	1419082.7	96.02	29.5	120.4	
Sc	45	No Gas	3101035.28	5.9	3146924.08	98.54	29.5	120.4	
Sc	45	H2	347318.96	0.5	384460.42	90.34	29.5	120.4	
Sc	45	He	70009.76	0.9	75345.71	92.92	29.5	120.4	
Ge	72	No Gas	689554.44	4.6	687904.62	100.24	29.5	120.4	
Ge	72	H2	124221.68	0.4	138854.33	89.46	29.5	120.4	
Ge	72	He	53097.16	0.5	57203.55	92.82	29.5	120.4	
Y	89	H2	2237619.94	0.4	2377183.3	94.13	29.5	120.4	
Y	89	He	460348.03	0.4	498269.57	92.39	29.5	120.4	
Tb	159	No Gas	7234296.70	5.8	6611594.34	109.42	29.5	120.4	
Tb	159	He	2540745.43	0.3	2564694.13	99.07	29.5	120.4	
Bi	209	No Gas	3591838.12	6.1	3381664.78	106.22	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	079_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:32:22 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.746	ppb	4.2	31632.04	25	94.98	89.8	110.2	
11	B	6	No Gas	29.969	ppb	2.8	27898.81	25	119.88	89.8	110.2	> +/- 10%
23	Na	45	He	5307.623	ppb	0.3	587492.04	5000	106.15	89.8	110.2	
24	Mg	45	He	5109.760	ppb	0.3	308915.76	5000	102.2	89.8	110.2	
27	Al	45	He	494.220	ppb	1.2	11778.56	500	98.84	89.8	110.2	
28	Si	45	H2	470.083	ppb	2.5	21570.32	500	94.02	89.8	110.2	
39	K	45	He	4942.156	ppb	0.9	282609.86	5000	98.84	89.8	110.2	
40	Ca	45	H2	5048.698	ppb	1.3	2081256.32	5000	100.97	89.8	110.2	
51	V	89	He	25.310	ppb	3.0	21994.47	25	101.24	89.8	110.2	
52	Cr	89	He	25.441	ppb	1.6	26707.63	25	101.76	89.8	110.2	
55	Mn	89	He	25.755	ppb	0.4	12687.41	25	103.02	89.8	110.2	
56	Fe	89	H2	4931.251	ppb	1.0	8196053.05	5000	98.63	89.8	110.2	
59	Co	89	He	25.842	ppb	0.9	46212.20	25	103.37	89.8	110.2	
60	Ni	89	He	23.075	ppb	1.2	12673.97	25	92.3	89.8	110.2	
63	Cu	89	He	25.475	ppb	1.6	35051.56	25	101.9	89.8	110.2	
66	Zn	89	He	25.462	ppb	1.7	4635.38	25	101.85	89.8	110.2	
75	As	89	He	24.919	ppb	1.8	3776.26	25	99.68	89.8	110.2	
78	Se	89	H2	25.272	ppb	2.8	2002.39	25	101.09	89.8	110.2	
88	Sr	89	He	24.580	ppb	1.9	18820.11	25	98.32	89.8	110.2	
95	Mo	89	He	25.403	ppb	2.6	21685.63	25	101.61	89.8	110.2	
107	Ag	89	He	26.234	ppb	0.6	75798.07	25	104.94	89.8	110.2	
111	Cd	89	He	25.845	ppb	0.5	9590.89	25	103.38	89.8	110.2	
118	Sn	159	He	24.364	ppb	1.8	20962.38	25	97.46	89.8	110.2	
121	Sb	159	No Gas	23.528	ppb	4.1	173560.58	25	94.11	89.8	110.2	
137	Ba	159	No Gas	23.831	ppb	3.6	69863.30	25	95.32	89.8	110.2	
182	W	159	No Gas	23.628	ppb	3.4	131997.81	25	94.51	89.8	110.2	
205	Tl	209	No Gas	24.083	ppb	4.9	291139.99	25	96.33	89.8	110.2	
208	Pb	209	No Gas	24.072	ppb	4.7	405242.00	25	96.29	89.8	110.2	
232	Th	209	No Gas	23.615	ppb	5.0	401504.32	25	94.46	89.8	110.2	
238	U	209	No Gas	23.755	ppb	6.1	378746.01	25	95.02	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1377364.41	0.3	1419082.7	97.06	29.5	120.4	
Sc	45	No Gas	3158026.61	0.1	3146924.08	100.35	29.5	120.4	
Sc	45	H2	356543.30	0.3	384460.42	92.74	29.5	120.4	
Sc	45	He	70906.34	0.4	75345.71	94.11	29.5	120.4	
Ge	72	No Gas	697133.71	0.7	687904.62	101.34	29.5	120.4	
Ge	72	H2	130535.68	1.7	138854.33	94.01	29.5	120.4	
Ge	72	He	54194.77	1.0	57203.55	94.74	29.5	120.4	
Y	89	H2	2310016.86	0.1	2377183.3	97.17	29.5	120.4	
Y	89	He	469492.10	0.7	498269.57	94.22	29.5	120.4	
Tb	159	No Gas	7228659.41	0.5	6611594.34	109.33	29.5	120.4	
Tb	159	He	2566437.74	0.2	2564694.13	100.07	29.5	120.4	
Bi	209	No Gas	3736982.37	0.9	3381664.78	110.51	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	080_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:34:56 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.074	ppb	32.8	160.01	0.2	
11	B	6	No Gas	3.132	ppb	20.7	4777.64	4	Failed DoD
23	Na	45	He	65.279	ppb	2.2	15963.33	200	
24	Mg	45	He	1.121	ppb	50.3	975.66	20	
27	Al	45	He	0.305	ppb	136.1	20.00	20	
28	Si	45	H2	0.133	ppb	200.5	487.22	100	
39	K	45	He	0.616	ppb	764.6	10907.60	200	
40	Ca	45	H2	4.217	ppb	15.3	2984.87	20	
51	V	89	He	-0.038	ppb	N/A	213.34	1	
52	Cr	89	He	0.002	ppb	695.7	67.32	1	
55	Mn	89	He	-0.006	ppb	N/A	49.99	0.4	
56	Fe	89	H2	0.699	ppb	33.3	10926.49	20	
59	Co	89	He	-0.009	ppb	N/A	44.45	0.2	
60	Ni	89	He	-1.975	ppb	N/A	461.14	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.004	ppb	N/A	84.45	0.6	
66	Zn	89	He	0.233	ppb	27.7	83.34	2	
75	As	89	He	0.004	ppb	101.4	5.33	1	
78	Se	89	H2	0.058	ppb	33.2	5.17	1	
88	Sr	89	He	0.029	ppb	17.4	28.89	1	
95	Mo	89	He	0.109	ppb	11.0	100.00	1	
107	Ag	89	He	0.010	ppb	30.1	35.56	0.2	
111	Cd	89	He	0.004	ppb	113.3	1.85	0.2	
118	Sn	159	He	0.128	ppb	6.9	168.90	1	
121	Sb	159	No Gas	0.026	ppb	37.5	246.95	0.2	
137	Ba	159	No Gas	0.026	ppb	50.5	86.77	0.4	
182	W	159	No Gas	0.082	ppb	18.9	483.88	1	
205	Tl	209	No Gas	0.005	ppb	116.2	350.40	0.2	
208	Pb	209	No Gas	0.009	ppb	28.3	483.88	0.2	
232	Th	209	No Gas	0.072	ppb	9.0	1354.94	1	
238	U	209	No Gas	0.022	ppb	23.9	377.09	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1416872.05	9.7	1419082.7	99.84	29.5	120.4	
Sc	45	No Gas	3196407.70	14.2	3146924.08	101.57	29.5	120.4	
Sc	45	H2	351069.47	1.4	384460.42	91.31	29.5	120.4	
Sc	45	He	71393.23	0.6	75345.71	94.75	29.5	120.4	
Ge	72	No Gas	697854.49	9.7	687904.62	101.45	29.5	120.4	
Ge	72	H2	128755.82	2.3	138854.33	92.73	29.5	120.4	
Ge	72	He	54652.09	0.6	57203.55	95.54	29.5	120.4	
Y	89	H2	2267641.28	1.9	2377183.3	95.39	29.5	120.4	
Y	89	He	472540.77	0.4	498269.57	94.84	29.5	120.4	
Tb	159	No Gas	7287523.50	14.5	6611594.34	110.22	29.5	120.4	
Tb	159	He	2565670.41	0.4	2564694.13	100.04	29.5	120.4	
Bi	209	No Gas	3783328.17	13.4	3381664.78	111.88	29.5	120.4	

Sample Report

Sample Name SN6059-001P

File Name 081SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:37:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	49.724	ppb	7.4	13075.23	100	
11	B	6	No Gas	1465.001	ppb	4.1	251613.43	1000	
23	Na	45	He	495180.715	ppb	1.3	10663967.76	200000	
24	Mg	45	He	64172.080	ppb	1.1	764269.54	200000	
27	Al	45	He	1884.852	ppb	1.1	8869.70	200000	
28	Si	45	H2	10067.905	ppb	3.6	84925.35	10000	
39	K	45	He	10896.581	ppb	1.7	128922.05	200000	
40	Ca	45	H2	343616.327	ppb	2.6	26488552.11	200000	
51	V	89	He	529.768	ppb	0.7	89682.81	1000	
52	Cr	89	He	211.874	ppb	0.5	43654.99	2000	
55	Mn	89	He	1803.465	ppb	0.5	173852.49	2000	
56	Fe	89	H2	10117.348	ppb	3.2	3146334.95	100000	
59	Co	89	He	530.049	ppb	0.5	186025.24	1000	
60	Ni	89	He	512.728	ppb	1.7	50518.52	1000	
63	Cu	89	He	258.414	ppb	0.6	69762.32	2000	
66	Zn	89	He	515.437	ppb	0.8	18311.44	2000	
75	As	89	He	108.296	ppb	2.6	3224.73	1000	
78	Se	89	H2	109.185	ppb	3.0	1616.02	1000	
88	Sr	89	He	4028.300	ppb	0.5	605734.82	2000	
95	Mo	89	He	111.494	ppb	1.8	18701.11	1000	
107	Ag	89	He	52.962	ppb	0.7	30066.32	100	
111	Cd	89	He	264.129	ppb	0.8	19253.76	1000	
118	Sn	159	He	503.191	ppb	0.8	85451.78	1000	
121	Sb	159	No Gas	102.161	ppb	5.9	146612.91	1000	
137	Ba	159	No Gas	2049.695	ppb	4.4	1168888.20	2000	
182	W	159	No Gas	107.272	ppb	4.9	116588.24	1000	
205	Tl	209	No Gas	108.287	ppb	5.2	245442.72	1000	
208	Pb	209	No Gas	107.230	ppb	5.1	338453.32	2000	
232	Th	209	No Gas	111.651	ppb	5.2	355875.65	1000	
238	U	209	No Gas	112.925	ppb	6.1	337494.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1357238.61	1.9	1419082.7	95.64	29.5	120.4	
Sc	45	No Gas	3019709.13	1.4	3146924.08	95.96	29.5	120.4	
Sc	45	H2	333697.70	2.6	384460.42	86.8	29.5	120.4	
Sc	45	He	69975.26	2.2	75345.71	92.87	29.5	120.4	
Ge	72	No Gas	668336.09	2.1	687904.62	97.16	29.5	120.4	
Ge	72	H2	121972.97	0.9	138854.33	87.84	29.5	120.4	
Ge	72	He	53156.73	0.5	57203.55	92.93	29.5	120.4	
Y	89	H2	2158515.42	2.6	2377183.3	90.8	29.5	120.4	
Y	89	He	461144.88	0.6	498269.57	92.55	29.5	120.4	
Tb	159	No Gas	7035049.13	1.6	6611594.34	106.4	29.5	120.4	
Tb	159	He	2538241.92	0.8	2564694.13	98.97	29.5	120.4	
Bi	209	No Gas	3505386.70	2.7	3381664.78	103.66	29.5	120.4	

Sample Report

Sample Name SN6059-002

File Name 082SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:40:19 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.278	ppb	37.3	127.78	100	
11	B	6	No Gas	993.312	ppb	4.4	169154.09	1000	
23	Na	45	He	482951.930	ppb	0.6	10479404.87	200000	
24	Mg	45	He	58009.567	ppb	0.6	696171.08	200000	
27	Al	45	He	12.843	ppb	37.6	73.33	200000	
28	Si	45	H2	8409.194	ppb	2.8	74398.96	10000	
39	K	45	He	893.404	ppb	3.1	20507.20	200000	
40	Ca	45	H2	323113.069	ppb	2.0	26093751.28	200000	
51	V	89	He	2.335	ppb	20.4	643.37	1000	
52	Cr	89	He	1.309	ppb	8.2	337.28	2000	
55	Mn	89	He	1259.977	ppb	0.9	123119.61	2000	
56	Fe	89	H2	8716.752	ppb	2.1	2829510.64	100000	
59	Co	89	He	0.280	ppb	52.8	160.01	1000	
60	Ni	89	He	-7.959	ppb	N/A	642.26	1000	
63	Cu	89	He	0.892	ppb	17.1	332.24	2000	
66	Zn	89	He	6.665	ppb	9.5	280.01	2000	
75	As	89	He	0.485	ppb	32.1	19.33	1000	
78	Se	89	H2	0.530	ppb	29.4	8.83	1000	
88	Sr	89	He	3456.704	ppb	0.3	526812.06	2000	
95	Mo	89	He	0.865	ppb	15.5	153.34	1000	
107	Ag	89	He	0.051	ppb	34.0	36.67	100	
111	Cd	89	He	0.091	ppb	58.4	7.04	1000	
118	Sn	159	He	1.291	ppb	8.4	280.01	1000	
121	Sb	159	No Gas	0.202	ppb	20.3	350.39	1000	
137	Ba	159	No Gas	76.863	ppb	6.1	44748.49	2000	
182	W	159	No Gas	0.214	ppb	18.6	266.97	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	263.63	1000	
208	Pb	209	No Gas	0.101	ppb	22.5	637.39	2000	
232	Th	209	No Gas	0.526	ppb	31.6	1825.54	1000	
238	U	209	No Gas	1.942	ppb	9.0	5938.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1340914.47	2.1	1419082.7	94.49	29.5	120.4	
Sc	45	No Gas	3111564.92	3.2	3146924.08	98.88	29.5	120.4	
Sc	45	H2	349520.01	2.0	384460.42	90.91	29.5	120.4	
Sc	45	He	70493.24	0.9	75345.71	93.56	29.5	120.4	
Ge	72	No Gas	688230.58	2.0	687904.62	100.05	29.5	120.4	
Ge	72	H2	125086.93	1.8	138854.33	90.09	29.5	120.4	
Ge	72	He	54060.83	0.9	57203.55	94.51	29.5	120.4	
Y	89	H2	2251338.55	1.9	2377183.3	94.71	29.5	120.4	
Y	89	He	467382.96	0.3	498269.57	93.8	29.5	120.4	
Tb	159	No Gas	7185924.34	3.2	6611594.34	108.69	29.5	120.4	
Tb	159	He	2563109.98	0.9	2564694.13	99.94	29.5	120.4	
Bi	209	No Gas	3582879.71	2.6	3381664.78	105.95	29.5	120.4	

Sample Report

Sample Name SN6059-003

File Name 083SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:42:59 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.217	ppb	14.7	115.56	100	
11	B	6	No Gas	467.229	ppb	2.7	83287.24	1000	
23	Na	45	He	127234.322	ppb	0.9	2787539.45	200000	
24	Mg	45	He	18823.282	ppb	1.1	228160.46	200000	
27	Al	45	He	9.246	ppb	13.6	56.67	200000	
28	Si	45	H2	8601.834	ppb	2.8	77146.83	10000	
39	K	45	He	562.031	ppb	0.7	17007.45	200000	
40	Ca	45	H2	74987.972	ppb	1.5	6140892.34	200000	
51	V	89	He	2.483	ppb	9.2	672.26	1000	
52	Cr	89	He	0.356	ppb	8.8	139.31	2000	
55	Mn	89	He	672.844	ppb	1.1	66119.57	2000	
56	Fe	89	H2	3009.270	ppb	1.3	1002880.93	100000	
59	Co	89	He	0.073	ppb	205.0	86.67	1000	
60	Ni	89	He	-9.553	ppb	N/A	490.03	1000	
63	Cu	89	He	0.619	ppb	43.6	258.90	2000	
66	Zn	89	He	3.423	ppb	16.2	164.45	2000	
75	As	89	He	3.607	ppb	2.8	114.01	1000	
78	Se	89	H2	0.161	ppb	51.0	3.17	1000	
88	Sr	89	He	646.408	ppb	0.5	99043.20	2000	
95	Mo	89	He	2.813	ppb	16.5	486.70	1000	
107	Ag	89	He	0.053	ppb	31.7	37.78	100	
111	Cd	89	He	0.050	ppb	120.8	4.07	1000	
118	Sn	159	He	1.209	ppb	16.1	267.79	1000	
121	Sb	159	No Gas	0.043	ppb	51.0	120.13	1000	
137	Ba	159	No Gas	14.531	ppb	1.6	8615.78	2000	
182	W	159	No Gas	0.062	ppb	69.1	100.11	1000	
205	Tl	209	No Gas	-0.066	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	0.031	ppb	42.1	423.81	2000	
232	Th	209	No Gas	0.086	ppb	27.5	400.45	1000	
238	U	209	No Gas	0.192	ppb	3.2	610.70	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1385492.30	1.5	1419082.7	97.63	29.5	120.4	
Sc	45	No Gas	3176315.08	1.6	3146924.08	100.93	29.5	120.4	
Sc	45	H2	354305.79	0.9	384460.42	92.16	29.5	120.4	
Sc	45	He	71011.21	0.7	75345.71	94.25	29.5	120.4	
Ge	72	No Gas	712940.29	1.4	687904.62	103.64	29.5	120.4	
Ge	72	H2	129416.50	3.2	138854.33	93.2	29.5	120.4	
Ge	72	He	54642.02	0.4	57203.55	95.52	29.5	120.4	
Y	89	H2	2296031.06	1.1	2377183.3	96.59	29.5	120.4	
Y	89	He	469869.18	0.2	498269.57	94.3	29.5	120.4	
Tb	159	No Gas	7303114.27	1.8	6611594.34	110.46	29.5	120.4	
Tb	159	He	2581852.70	0.1	2564694.13	100.67	29.5	120.4	
Bi	209	No Gas	3687545.07	1.4	3381664.78	109.05	29.5	120.4	

Sample Report

Sample Name SN6090-001

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:45:38 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.048	ppb	49.7	71.12	100	
11	B	6	No Gas	230.076	ppb	3.1	42513.39	1000	
23	Na	45	He	39987.222	ppb	1.1	890154.15	200000	
24	Mg	45	He	18333.639	ppb	1.3	224291.36	200000	
27	Al	45	He	22.530	ppb	2.6	121.12	200000	
28	Si	45	H2	5725.224	ppb	2.5	52052.51	10000	
39	K	45	He	13062.276	ppb	1.0	156131.64	200000	
40	Ca	45	H2	111941.930	ppb	1.5	9263025.83	200000	
51	V	89	He	2.316	ppb	4.2	648.93	1000	
52	Cr	89	He	1.220	ppb	9.2	323.28	2000	
55	Mn	89	He	166.985	ppb	0.6	16582.06	2000	
56	Fe	89	H2	501.274	ppb	2.3	176402.82	100000	
59	Co	89	He	0.342	ppb	62.8	184.46	1000	
60	Ni	89	He	-2.908	ppb	N/A	1147.87	1000	
63	Cu	89	He	17.667	ppb	5.1	4982.18	2000	
66	Zn	89	He	127.255	ppb	3.5	4674.30	2000	
75	As	89	He	1.525	ppb	3.9	51.34	1000	
78	Se	89	H2	0.169	ppb	69.8	3.33	1000	
88	Sr	89	He	488.471	ppb	0.4	75452.84	2000	
95	Mo	89	He	2.422	ppb	8.9	423.36	1000	
107	Ag	89	He	0.130	ppb	21.2	83.34	100	
111	Cd	89	He	0.895	ppb	17.0	67.41	1000	
118	Sn	159	He	1.298	ppb	14.8	285.57	1000	
121	Sb	159	No Gas	0.350	ppb	8.9	590.67	1000	
137	Ba	159	No Gas	337.734	ppb	3.7	204312.79	2000	
182	W	159	No Gas	0.061	ppb	41.3	100.11	1000	
205	Tl	209	No Gas	-0.086	ppb	N/A	73.42	1000	
208	Pb	209	No Gas	1.049	ppb	3.9	3894.58	2000	
232	Th	209	No Gas	0.040	ppb	14.6	253.62	1000	
238	U	209	No Gas	2.027	ppb	4.3	6539.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1401940.01	1.9	1419082.7	98.79	29.5	120.4	
Sc	45	No Gas	3232950.23	1.8	3146924.08	102.73	29.5	120.4	
Sc	45	H2	358040.53	1.1	384460.42	93.13	29.5	120.4	
Sc	45	He	71663.59	0.8	75345.71	95.11	29.5	120.4	
Ge	72	No Gas	722534.57	1.5	687904.62	105.03	29.5	120.4	
Ge	72	H2	128695.40	1.2	138854.33	92.68	29.5	120.4	
Ge	72	He	54833.85	0.2	57203.55	95.86	29.5	120.4	
Y	89	H2	2310476.25	1.4	2377183.3	97.19	29.5	120.4	
Y	89	He	473669.32	0.7	498269.57	95.06	29.5	120.4	
Tb	159	No Gas	7463160.51	2.3	6611594.34	112.88	29.5	120.4	
Tb	159	He	2603236.18	0.2	2564694.13	101.5	29.5	120.4	
Bi	209	No Gas	3776490.24	2.3	3381664.78	111.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG28IMS1
File Name	085_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:48:20 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.049	ppb	124.2	73.34	0.5	
B	11	6	No Gas	14.149	ppb	12.0	4635.34	10	PB 6020 Fails DoD
Na	23	45	He	459.879	ppb	4.4	18980.31	500	
Mg	24	45	He	19.266	ppb	54.9	1146.79	50	
Al	27	45	He	14.420	ppb	27.3	82.23	50	
Si	28	45	H2	7.529	ppb	22.6	553.96	250	
K	39	45	He	33.427	ppb	122.6	11294.41	500	
Ca	40	45	H2	81.513	ppb	0.8	7973.62	50	PB 6020 Fails DoD
V	51	89	He	2.904	ppb	14.2	748.94	2.5	PB 6020 Fails DoD
Cr	52	89	He	0.795	ppb	13.8	232.63	2.5	
Mn	55	89	He	1.075	ppb	22.0	159.31	1	PB 6020 Fails DoD
Fe	56	89	H2	15.402	ppb	16.4	15044.87	50	
Co	59	89	He	-0.077	ppb	N/A	33.34	0.5	
Ni	60	89	He	-9.794	ppb	N/A	468.91	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.811	ppb	11.4	313.35	1.5	
Zn	66	89	He	6.305	ppb	5.7	270.01	5	PB 6020 Fails DoD
As	75	89	He	0.369	ppb	46.6	16.00	2.5	
Se	78	89	H2	0.138	ppb	46.3	2.83	2.5	
Sr	88	89	He	0.392	ppb	10.6	66.67	2.5	
Mo	95	89	He	0.144	ppb	20.7	31.11	2.5	
Ag	107	89	He	0.033	ppb	45.3	26.67	0.5	
Cd	111	89	He	0.020	ppb	43.2	1.85	0.5	
Sn	118	159	He	40.873	ppb	4.2	7129.91	2.5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.036	ppb	97.0	113.46	0.5	
Ba	137	159	No Gas	0.430	ppb	27.7	276.98	1	
W	182	159	No Gas	0.037	ppb	61.2	73.42	2.5	
Tl	205	209	No Gas	-0.075	ppb	N/A	103.45	0.5	
Pb	208	209	No Gas	0.173	ppb	24.7	941.07	0.5	
Th	232	209	No Gas	0.040	ppb	29.1	260.29	2.5	
U	238	209	No Gas	0.011	ppb	70.9	43.38	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1446123.14	2.4	1419082.7	101.91	29.5	120.4	
Sc	45	No Gas	3296518.36	3.7	3146924.08	104.75	29.5	120.4	
Sc	45	H2	354898.48	1.9	384460.42	92.31	29.5	120.4	
Sc	45	He	71731.32	1.3	75345.71	95.2	29.5	120.4	
Ge	72	No Gas	726611.83	1.7	687904.62	105.63	29.5	120.4	
Ge	72	H2	127866.34	0.5	138854.33	92.09	29.5	120.4	
Ge	72	He	54327.47	0.6	57203.55	94.97	29.5	120.4	
Y	89	H2	2304471.16	1.1	2377183.3	96.94	29.5	120.4	
Y	89	He	472379.39	0.5	498269.57	94.8	29.5	120.4	
Tb	159	No Gas	7568315.30	3.4	6611594.34	114.47	29.5	120.4	
Tb	159	He	2587215.76	0.4	2564694.13	100.88	29.5	120.4	
Bi	209	No Gas	3885481.07	2.8	3381664.78	114.9	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSONG28IMS1
File Name	086LCSO.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 7:50:56 PM
Sample Type	LCSO
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	46.941	ppb	8.5	13058.52	50	18.78	79.5	120.4	
B	11	6	No Gas	481.686	ppb	7.4	88856.00	500	19.27	79.5	120.4	
Na	23	45	He	8075.351	ppb	1.2	184630.35	7500	21.53	79.5	120.4	
Mg	24	45	He	5307.644	ppb	0.1	64816.25	5000	21.23	79.5	120.4	
Al	27	45	He	1943.513	ppb	0.9	9255.55	2000	19.44	79.5	120.4	
Si	28	45	H2	955.583	ppb	4.2	8962.83	1000	19.11	79.5	120.4	
K	39	45	He	10054.491	ppb	0.5	121259.37	10000	20.11	79.5	120.4	
Ca	40	45	H2	2651.098	ppb	1.3	217404.23	2500	21.21	79.5	120.4	
V	51	89	He	508.479	ppb	0.2	87682.45	500	20.34	79.5	120.4	
Cr	52	89	He	210.309	ppb	1.5	44136.45	200	21.03	79.5	120.4	
Mn	55	89	He	526.809	ppb	0.4	51760.89	500	21.07	79.5	120.4	
Fe	56	89	H2	1059.554	ppb	1.2	357757.73	1000	21.19	79.5	120.4	
Co	59	89	He	536.207	ppb	1.2	191669.05	500	21.45	79.5	120.4	
Ni	60	89	He	523.077	ppb	1.2	52460.24	500	20.92	79.5	120.4	
Cu	63	89	He	265.799	ppb	0.7	73081.45	250	21.26	79.5	120.4	
Zn	66	89	He	526.613	ppb	1.2	19054.69	500	21.06	79.5	120.4	
As	75	89	He	102.886	ppb	1.0	3120.69	100	20.58	79.5	120.4	
Se	78	89	H2	103.581	ppb	2.3	1623.52	100	20.72	79.5	120.4	
Sr	88	89	He	500.779	ppb	1.1	76700.71	500	20.03	79.5	120.4	
Mo	95	89	He	107.546	ppb	1.5	18372.92	100	21.51	79.5	120.4	
Ag	107	89	He	54.163	ppb	0.2	31316.83	50	21.67	79.5	120.4	
Cd	111	89	He	264.590	ppb	0.6	19645.08	250	21.17	79.5	120.4	
Sn	118	159	He	532.413	ppb	0.1	92024.30	500	21.3	79.5	120.4	
Sb	121	159	No Gas	95.888	ppb	9.2	145811.68	100	19.18	79.5	120.4	
Ba	137	159	No Gas	1878.873	ppb	9.3	1135104.39	2000	18.79	79.5	120.4	
W	182	159	No Gas	97.920	ppb	9.4	112752.05	100	19.58	79.5	120.4	
Tl	205	209	No Gas	102.358	ppb	8.4	252184.46	100	20.47	79.5	120.4	
[Pb]	206	209	No Gas	101.509	ppb	7.5	87104.43	100	20.3	79.5	120.4	
[Pb]	207	209	No Gas	99.283	ppb	9.3	74964.20	100	19.86	79.5	120.4	
Pb	208	209	No Gas	100.133	ppb	9.1	343491.73	100	20.03	79.5	120.4	
Th	232	209	No Gas	97.576	ppb	10.9	337875.21	100	19.52	79.5	120.4	
U	238	209	No Gas	98.915	ppb	10.0	321253.25	100	19.78	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1436049.88	2.4	1419082.7	101.2	29.5	120.4	
Sc	45	No Gas	3220808.82	3.1	3146924.08	102.35	29.5	120.4	
Sc	45	H2	352764.17	0.5	384460.42	91.76	29.5	120.4	
Sc	45	He	70825.43	0.5	75345.71	94	29.5	120.4	
Ge	72	No Gas	726951.30	3.1	687904.62	105.68	29.5	120.4	
Ge	72	H2	127116.06	0.7	138854.33	91.55	29.5	120.4	
Ge	72	He	54345.65	0.5	57203.55	95	29.5	120.4	
Y	89	H2	2284548.43	0.4	2377183.3	96.1	29.5	120.4	
Y	89	He	469689.25	0.4	498269.57	94.26	29.5	120.4	
Tb	159	No Gas	7463943.71	3.2	6611594.34	112.89	29.5	120.4	
Tb	159	He	2583450.81	0.5	2564694.13	100.73	29.5	120.4	
Bi	209	No Gas	3813944.51	3.5	3381664.78	112.78	29.5	120.4	

Sample Report

Sample Name SN6056-001

File Name 087SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:53:40 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.847	ppb	6.6	1324.56	100	
11	B	6	No Gas	67.150	ppb	3.4	13361.05	1000	
23	Na	45	He	652.819	ppb	6.0	22382.60	200000	
24	Mg	45	He	28970.488	ppb	0.7	341244.62	200000	
27	Al	45	He	105463.452	ppb	0.4	489376.17	200000	
28	Si	45	H2	2788.424	ppb	4.4	23888.90	10000	
39	K	45	He	11756.169	ppb	0.4	136548.06	200000	
40	Ca	45	H2	27791.431	ppb	5.5	2143056.89	200000	
51	V	89	He	186.769	ppb	0.4	33762.33	1000	
52	Cr	89	He	139.167	ppb	1.1	30491.20	2000	
55	Mn	89	He	4384.663	ppb	0.2	449056.41	2000	
56	Fe	89	H2	178712.004	ppb	6.1	59765760.32	100000	
59	Co	89	He	67.646	ppb	0.8	25282.12	1000	
60	Ni	89	He	173.608	ppb	2.6	19159.33	1000	
63	Cu	89	He	173.644	ppb	0.5	49842.06	2000	
66	Zn	89	He	832.577	ppb	2.1	31405.20	2000	
75	As	89	He	66.965	ppb	0.7	2120.73	1000	
78	Se	89	H2	4.005	ppb	8.7	64.50	1000	
88	Sr	89	He	76.898	ppb	1.0	12293.70	2000	
95	Mo	89	He	15.501	ppb	2.9	2768.16	1000	
107	Ag	89	He	0.532	ppb	11.3	328.91	100	
111	Cd	89	He	3.070	ppb	3.3	238.15	1000	
118	Sn	159	He	49.931	ppb	3.2	8595.26	1000	
121	Sb	159	No Gas	1.243	ppb	4.3	1928.96	1000	
137	Ba	159	No Gas	586.012	ppb	5.6	350421.84	2000	
182	W	159	No Gas	0.647	ppb	4.2	767.55	1000	
205	Tl	209	No Gas	2.380	ppb	5.6	6161.72	1000	
208	Pb	209	No Gas	289.954	ppb	6.1	996448.77	2000	
232	Th	209	No Gas	25.726	ppb	5.1	89445.13	1000	
238	U	209	No Gas	7.259	ppb	8.6	23632.15	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1354874.11	3.3	1419082.7	95.48	29.5	120.4	
Sc	45	No Gas	3137362.33	3.5	3146924.08	99.7	29.5	120.4	
Sc	45	H2	333960.30	4.0	384460.42	86.86	29.5	120.4	
Sc	45	He	69102.74	1.2	75345.71	91.71	29.5	120.4	
Ge	72	No Gas	698105.26	3.3	687904.62	101.48	29.5	120.4	
Ge	72	H2	115711.65	5.6	138854.33	83.33	29.5	120.4	
Ge	72	He	52163.95	0.8	57203.55	91.19	29.5	120.4	
Y	89	H2	2331211.76	5.1	2377183.3	98.07	29.5	120.4	
Y	89	He	490025.88	0.8	498269.57	98.35	29.5	120.4	
Tb	159	No Gas	7382594.75	3.5	6611594.34	111.66	29.5	120.4	
Tb	159	He	2556996.44	0.6	2564694.13	99.7	29.5	120.4	
Bi	209	No Gas	3821653.92	4.1	3381664.78	113.01	29.5	120.4	

Sample Report

Sample Name SN6056-002

File Name 088SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:56:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.359	ppb	5.1	1439.02	100	
11	B	6	No Gas	67.377	ppb	2.1	13236.46	1000	
23	Na	45	He	627.485	ppb	4.4	22479.32	200000	
24	Mg	45	He	30235.617	ppb	2.0	366374.45	200000	
27	Al	45	He	109625.769	ppb	1.7	523346.88	200000	
28	Si	45	H2	2355.970	ppb	3.3	21283.79	10000	
39	K	45	He	11061.136	ppb	2.1	132818.70	200000	
40	Ca	45	H2	31546.833	ppb	1.0	2560034.08	200000	
51	V	89	He	189.803	ppb	2.9	35310.61	1000	
52	Cr	89	He	137.754	ppb	0.7	31069.01	2000	
55	Mn	89	He	5087.694	ppb	1.3	536314.58	2000	
56	Fe	89	H2	181052.110	ppb	0.3	63620799.39	100000	
59	Co	89	He	72.643	ppb	1.9	27943.23	1000	
60	Ni	89	He	166.617	ppb	2.3	18985.63	1000	
63	Cu	89	He	203.814	ppb	1.5	60200.36	2000	
66	Zn	89	He	975.960	ppb	1.4	37884.42	2000	
75	As	89	He	66.827	ppb	1.4	2178.41	1000	
78	Se	89	H2	4.224	ppb	2.6	71.50	1000	
88	Sr	89	He	80.352	ppb	1.1	13222.37	2000	
95	Mo	89	He	16.493	ppb	1.8	3031.55	1000	
107	Ag	89	He	0.619	ppb	12.1	392.25	100	
111	Cd	89	He	3.782	ppb	4.7	301.86	1000	
118	Sn	159	He	47.600	ppb	2.9	8326.21	1000	
121	Sb	159	No Gas	1.160	ppb	9.6	1812.13	1000	
137	Ba	159	No Gas	570.386	ppb	2.9	343195.86	2000	
182	W	159	No Gas	0.411	ppb	16.6	500.57	1000	
205	Tl	209	No Gas	2.605	ppb	3.6	6732.70	1000	
208	Pb	209	No Gas	233.527	ppb	3.9	804877.95	2000	
232	Th	209	No Gas	24.333	ppb	6.5	84808.53	1000	
238	U	209	No Gas	7.937	ppb	3.4	25929.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1337897.15	2.1	1419082.7	94.28	29.5	120.4	
Sc	45	No Gas	3144247.10	1.4	3146924.08	99.91	29.5	120.4	
Sc	45	H2	350981.41	0.9	384460.42	91.29	29.5	120.4	
Sc	45	He	71098.00	0.7	75345.71	94.36	29.5	120.4	
Ge	72	No Gas	695161.48	1.7	687904.62	101.05	29.5	120.4	
Ge	72	H2	123404.87	1.8	138854.33	88.87	29.5	120.4	
Ge	72	He	53501.19	0.8	57203.55	93.53	29.5	120.4	
Y	89	H2	2444492.40	0.7	2377183.3	102.83	29.5	120.4	
Y	89	He	504391.19	0.4	498269.57	101.23	29.5	120.4	
Tb	159	No Gas	7420437.94	1.3	6611594.34	112.23	29.5	120.4	
Tb	159	He	2597743.42	0.7	2564694.13	101.29	29.5	120.4	
Bi	209	No Gas	3828193.60	2.0	3381664.78	113.2	29.5	120.4	

Sample Report

Sample Name SN6056-003

File Name 089SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 7:59:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	4.956	ppb	2.3	1343.44	100	
11	B	6	No Gas	58.262	ppb	2.8	11774.04	1000	
23	Na	45	He	556.937	ppb	5.2	20968.42	200000	
24	Mg	45	He	28685.840	ppb	1.8	348176.34	200000	
27	Al	45	He	106401.456	ppb	2.0	508729.70	200000	
28	Si	45	H2	2328.767	ppb	3.7	20906.43	10000	
39	K	45	He	11119.934	ppb	2.4	133668.48	200000	
40	Ca	45	H2	29405.621	ppb	0.6	2370546.89	200000	
51	V	89	He	187.011	ppb	0.9	34634.48	1000	
52	Cr	89	He	136.045	ppb	0.8	30540.63	2000	
55	Mn	89	He	4330.721	ppb	1.5	454392.41	2000	
56	Fe	89	H2	175670.610	ppb	1.0	61369977.81	100000	
59	Co	89	He	69.154	ppb	2.5	26475.82	1000	
60	Ni	89	He	154.721	ppb	2.3	17655.00	1000	
63	Cu	89	He	161.959	ppb	0.8	47634.26	2000	
66	Zn	89	He	790.222	ppb	1.6	30538.65	2000	
75	As	89	He	64.728	ppb	3.9	2100.06	1000	
78	Se	89	H2	4.219	ppb	7.6	71.00	1000	
88	Sr	89	He	77.549	ppb	2.1	12701.84	2000	
95	Mo	89	He	15.299	ppb	1.8	2799.29	1000	
107	Ag	89	He	0.536	ppb	4.6	338.91	100	
111	Cd	89	He	3.015	ppb	2.7	239.64	1000	
118	Sn	159	He	49.257	ppb	2.1	8574.13	1000	
121	Sb	159	No Gas	1.091	ppb	5.0	1715.37	1000	
137	Ba	159	No Gas	526.820	ppb	3.3	318297.30	2000	
182	W	159	No Gas	0.499	ppb	15.0	604.02	1000	
205	Tl	209	No Gas	2.498	ppb	2.8	6462.22	1000	
208	Pb	209	No Gas	212.317	ppb	3.2	731182.06	2000	
232	Th	209	No Gas	23.056	ppb	3.2	80311.42	1000	
238	U	209	No Gas	7.172	ppb	6.9	23397.97	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1345853.87	1.9	1419082.7	94.84	29.5	120.4	
Sc	45	No Gas	3194093.38	1.3	3146924.08	101.5	29.5	120.4	
Sc	45	H2	348638.70	0.6	384460.42	90.68	29.5	120.4	
Sc	45	He	71207.83	0.9	75345.71	94.51	29.5	120.4	
Ge	72	No Gas	707033.49	2.0	687904.62	102.78	29.5	120.4	
Ge	72	H2	122794.47	2.1	138854.33	88.43	29.5	120.4	
Ge	72	He	53294.58	0.8	57203.55	93.17	29.5	120.4	
Y	89	H2	2430238.93	0.8	2377183.3	102.23	29.5	120.4	
Y	89	He	502051.09	0.9	498269.57	100.76	29.5	120.4	
Tb	159	No Gas	7451306.76	0.9	6611594.34	112.7	29.5	120.4	
Tb	159	He	2585962.65	1.3	2564694.13	100.83	29.5	120.4	
Bi	209	No Gas	3824402.10	1.8	3381664.78	113.09	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	090_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:01:41 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.023	ppb	238.3	61.12	0.5	
B	11	6	No Gas	6.935	ppb	13.4	3067.10	10	
Na	23	45	He	150.960	ppb	8.9	11630.94	500	
Mg	24	45	He	-3.670	ppb	N/A	828.97	50	
Al	27	45	He	22.537	ppb	26.3	115.56	50	
Si	28	45	H2	2.801	ppb	268.7	493.89	250	
K	39	45	He	-44.082	ppb	N/A	9970.75	500	
Ca	40	45	H2	38.360	ppb	3.4	4277.46	50	
V	51	89	He	0.824	ppb	17.3	374.47	2.5	
Cr	52	89	He	0.151	ppb	57.6	93.32	2.5	
Mn	55	89	He	1.572	ppb	3.2	200.63	1	PB 6020 Fails DoD
Fe	56	89	H2	78.826	ppb	12.6	35076.37	50	PB 6020 Fails DoD
Co	59	89	He	-0.055	ppb	N/A	40.00	0.5	
Ni	60	89	He	-10.837	ppb	N/A	353.35	1	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
Cu	63	89	He	0.324	ppb	35.7	172.23	1.5	
Zn	66	89	He	2.748	ppb	5.5	135.56	5	
As	75	89	He	0.128	ppb	65.8	8.33	2.5	
Se	78	89	H2	0.024	ppb	234.6	1.00	2.5	
Sr	88	89	He	0.102	ppb	35.4	21.11	2.5	
Mo	95	89	He	0.138	ppb	43.8	28.89	2.5	
Ag	107	89	He	0.019	ppb	66.2	17.78	0.5	
Cd	111	89	He	0.016	ppb	112.2	1.48	0.5	
Sn	118	159	He	0.526	ppb	11.1	147.78	2.5	
Sb	121	159	No Gas	0.009	ppb	215.3	70.08	0.5	
Ba	137	159	No Gas	0.548	ppb	31.1	340.38	1	
W	182	159	No Gas	0.024	ppb	189.0	56.73	2.5	
Tl	205	209	No Gas	-0.101	ppb	N/A	36.71	0.5	
Pb	208	209	No Gas	0.221	ppb	42.1	1094.57	0.5	
Th	232	209	No Gas	0.244	ppb	30.7	967.80	2.5	
U	238	209	No Gas	0.008	ppb	89.2	33.37	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1333223.10	2.2	1419082.7	93.95	29.5	120.4	
Sc	45	No Gas	3143873.74	2.0	3146924.08	99.9	29.5	120.4	
Sc	45	H2	342670.29	5.2	384460.42	89.13	29.5	120.4	
Sc	45	He	68577.35	2.2	75345.71	91.02	29.5	120.4	
Ge	72	No Gas	700386.71	2.5	687904.62	101.81	29.5	120.4	
Ge	72	H2	123072.47	3.2	138854.33	88.63	29.5	120.4	
Ge	72	He	51979.31	0.5	57203.55	90.87	29.5	120.4	
Y	89	H2	2243319.57	4.3	2377183.3	94.37	29.5	120.4	
Y	89	He	454850.20	1.1	498269.57	91.29	29.5	120.4	
Tb	159	No Gas	7393951.28	1.6	6611594.34	111.83	29.5	120.4	
Tb	159	He	2547397.62	1.0	2564694.13	99.33	29.5	120.4	
Bi	209	No Gas	3814018.44	2.1	3381664.78	112.79	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	091_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:04:28 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.937	ppb	13.7	31259.05	25	99.75	89.8	110.2	
11	B	6	No Gas	25.233	ppb	14.0	22413.53	25	100.93	89.8	110.2	
23	Na	45	He	5243.945	ppb	0.8	560366.56	5000	104.88	89.8	110.2	
24	Mg	45	He	5059.092	ppb	1.4	295225.71	5000	101.18	89.8	110.2	
27	Al	45	He	483.273	ppb	0.8	11118.00	500	96.65	89.8	110.2	
28	Si	45	H2	465.836	ppb	3.9	20591.02	500	93.17	89.8	110.2	
39	K	45	He	4902.855	ppb	0.8	270708.14	5000	98.06	89.8	110.2	
40	Ca	45	H2	4947.766	ppb	1.7	1964814.68	5000	98.96	89.8	110.2	
51	V	89	He	25.374	ppb	0.2	21381.32	25	101.5	89.8	110.2	
52	Cr	89	He	25.427	ppb	0.9	25882.20	25	101.71	89.8	110.2	
55	Mn	89	He	25.492	ppb	1.1	12176.37	25	101.97	89.8	110.2	
56	Fe	89	H2	4891.119	ppb	1.9	7845834.99	5000	97.82	89.8	110.2	
59	Co	89	He	25.658	ppb	0.6	44491.01	25	102.63	89.8	110.2	
60	Ni	89	He	23.731	ppb	1.1	12599.43	25	94.92	89.8	110.2	
63	Cu	89	He	25.617	ppb	1.3	34175.86	25	102.47	89.8	110.2	
66	Zn	89	He	25.721	ppb	1.8	4539.79	25	102.88	89.8	110.2	
75	As	89	He	25.044	ppb	1.9	3679.90	25	100.18	89.8	110.2	
78	Se	89	H2	24.595	ppb	1.8	1880.87	25	98.38	89.8	110.2	
88	Sr	89	He	24.341	ppb	0.7	18071.37	25	97.36	89.8	110.2	
95	Mo	89	He	25.348	ppb	1.3	20983.35	25	101.39	89.8	110.2	
107	Ag	89	He	26.387	ppb	1.2	73921.49	25	105.55	89.8	110.2	
111	Cd	89	He	26.010	ppb	0.2	9358.50	25	104.04	89.8	110.2	
118	Sn	159	He	23.830	ppb	2.6	20278.10	25	95.32	89.8	110.2	
121	Sb	159	No Gas	24.327	ppb	16.8	174746.23	25	97.31	89.8	110.2	
137	Ba	159	No Gas	24.066	ppb	17.9	68636.81	25	96.26	89.8	110.2	
182	W	159	No Gas	24.399	ppb	18.0	132585.25	25	97.6	89.8	110.2	
205	Tl	209	No Gas	24.883	ppb	15.3	297014.50	25	99.53	89.8	110.2	
208	Pb	209	No Gas	24.758	ppb	15.4	411513.14	25	99.03	89.8	110.2	
232	Th	209	No Gas	24.735	ppb	18.8	414134.15	25	98.94	89.8	110.2	
238	U	209	No Gas	24.876	ppb	16.7	391236.37	25	99.5	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1307263.72	9.3	1419082.7	92.12	29.5	120.4	
Sc	45	No Gas	3032232.13	12.9	3146924.08	96.36	29.5	120.4	
Sc	45	H2	343542.88	2.4	384460.42	89.36	29.5	120.4	
Sc	45	He	68444.45	0.9	75345.71	90.84	29.5	120.4	
Ge	72	No Gas	670282.40	9.0	687904.62	97.44	29.5	120.4	
Ge	72	H2	125604.91	3.1	138854.33	90.46	29.5	120.4	
Ge	72	He	52757.01	0.3	57203.55	92.23	29.5	120.4	
Y	89	H2	2229872.48	1.6	2377183.3	93.8	29.5	120.4	
Y	89	He	455214.39	0.3	498269.57	91.36	29.5	120.4	
Tb	159	No Gas	7141053.50	12.8	6611594.34	108.01	29.5	120.4	
Tb	159	He	2538366.04	0.6	2564694.13	98.97	29.5	120.4	
Bi	209	No Gas	3732759.14	11.4	3381664.78	110.38	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	092_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:07:04 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.062	ppb	5.7	135.56	0.2	
11	B	6	No Gas	1.205	ppb	11.0	2922.62	4	
23	Na	45	He	17.422	ppb	10.4	10341.95	200	
24	Mg	45	He	-0.504	ppb	N/A	846.76	20	
27	Al	45	He	0.432	ppb	39.4	22.22	20	
28	Si	45	H2	1.165	ppb	36.6	527.26	100	
39	K	45	He	-0.010	ppb	N/A	10500.82	200	
40	Ca	45	H2	1.424	ppb	11.8	1832.41	20	
51	V	89	He	-0.110	ppb	N/A	146.67	1	
52	Cr	89	He	-0.010	ppb	N/A	52.66	1	
55	Mn	89	He	0.075	ppb	39.8	87.32	0.4	
56	Fe	89	H2	3.350	ppb	11.5	15154.96	20	
59	Co	89	He	-0.019	ppb	N/A	26.67	0.2	
60	Ni	89	He	-2.192	ppb	N/A	343.35	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	-0.001	ppb	N/A	85.56	0.6	
66	Zn	89	He	0.135	ppb	38.9	63.34	2	
75	As	89	He	-0.009	ppb	N/A	3.33	1	
78	Se	89	H2	0.050	ppb	34.2	4.50	1	
88	Sr	89	He	0.005	ppb	172.0	10.00	1	
95	Mo	89	He	0.105	ppb	24.9	93.34	1	
107	Ag	89	He	0.009	ppb	43.3	32.22	0.2	
111	Cd	89	He	0.005	ppb	58.8	2.22	0.2	
118	Sn	159	He	0.099	ppb	2.5	141.12	1	
121	Sb	159	No Gas	0.028	ppb	32.2	253.62	0.2	
137	Ba	159	No Gas	0.031	ppb	58.9	100.11	0.4	
182	W	159	No Gas	0.103	ppb	9.1	590.68	1	
205	Tl	209	No Gas	0.008	ppb	91.3	373.76	0.2	
208	Pb	209	No Gas	0.021	ppb	17.1	664.09	0.2	
232	Th	209	No Gas	0.118	ppb	10.5	2085.85	1	
238	U	209	No Gas	0.032	ppb	28.2	507.24	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1335902.36	0.5	1419082.7	94.14	29.5	120.4	
Sc	45	No Gas	3043814.33	0.2	3146924.08	96.72	29.5	120.4	
Sc	45	H2	347420.11	0.4	384460.42	90.37	29.5	120.4	
Sc	45	He	68941.03	0.5	75345.71	91.5	29.5	120.4	
Ge	72	No Gas	671504.51	1.1	687904.62	97.62	29.5	120.4	
Ge	72	H2	126211.81	0.7	138854.33	90.9	29.5	120.4	
Ge	72	He	52660.42	0.7	57203.55	92.06	29.5	120.4	
Y	89	H2	2253408.35	0.7	2377183.3	94.79	29.5	120.4	
Y	89	He	457355.35	0.9	498269.57	91.79	29.5	120.4	
Tb	159	No Gas	7039089.20	0.4	6611594.34	106.47	29.5	120.4	
Tb	159	He	2527689.10	0.9	2564694.13	98.56	29.5	120.4	
Bi	209	No Gas	3668200.39	1.0	3381664.78	108.47	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	093LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:09:39 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	48.296	ppb	5.1	12743.81	50	19.32	79.5	120.4	
B	11	6	No Gas	494.917	ppb	5.9	86528.96	500	19.8	79.5	120.4	
Na	23	45	He	8561.440	ppb	0.9	187816.90	7500	22.83	79.5	120.4	
Mg	24	45	He	5418.744	ppb	0.6	63642.14	5000	21.67	79.5	120.4	
Al	27	45	He	1980.602	ppb	1.2	9074.28	2000	19.81	79.5	120.4	
Si	28	45	H2	1019.130	ppb	3.0	9173.19	1000	20.38	0	200	
K	39	45	He	10455.700	ppb	0.5	120895.93	10000	20.91	79.5	120.4	
Ca	40	45	H2	2675.724	ppb	1.3	211216.93	2500	21.41	79.5	120.4	
V	51	89	He	523.546	ppb	0.6	87381.93	500	20.94	79.5	120.4	
Cr	52	89	He	215.859	ppb	0.6	43846.14	200	21.59	79.5	120.4	
Mn	55	89	He	538.798	ppb	0.4	51241.81	500	21.55	79.5	120.4	
Fe	56	89	H2	1081.879	ppb	0.8	352875.80	1000	21.64	79.5	120.4	
Co	59	89	He	547.921	ppb	0.2	189585.28	500	21.92	79.5	120.4	
Ni	60	89	He	537.271	ppb	0.5	52122.30	500	21.49	79.5	120.4	
Cu	63	89	He	270.807	ppb	0.7	72070.81	250	21.66	79.5	120.4	
Zn	66	89	He	534.803	ppb	1.0	18729.75	500	21.39	79.5	120.4	
As	75	89	He	109.123	ppb	2.6	3203.39	100	21.82	79.5	120.4	
Se	78	89	H2	107.144	ppb	2.3	1623.02	100	21.43	79.5	120.4	
Sr	88	89	He	517.449	ppb	0.9	76719.80	500	20.7	79.5	120.4	
Mo	95	89	He	110.198	ppb	0.6	18222.69	100	22.04	79.5	120.4	
Ag	107	89	He	55.674	ppb	0.4	31159.90	50	22.27	79.5	120.4	
Cd	111	89	He	278.422	ppb	1.0	20009.31	250	22.27	79.5	120.4	
Sn	118	159	He	502.021	ppb	0.3	85076.92	500	20.08	79.5	120.4	
Sb	121	159	No Gas	101.252	ppb	4.6	145659.22	100	20.25	79.5	120.4	
Ba	137	159	No Gas	1974.923	ppb	5.3	1128783.06	2000	19.75	79.5	120.4	
W	182	159	No Gas	102.786	ppb	4.6	111980.59	100	20.56	79.5	120.4	
Tl	205	209	No Gas	104.264	ppb	4.6	248408.20	100	20.85	79.5	120.4	
[Pb]	206	209	No Gas	103.532	ppb	5.5	85887.03	100	20.71	79.5	120.4	
[Pb]	207	209	No Gas	102.710	ppb	6.1	75003.70	100	20.54	79.5	120.4	
Pb	208	209	No Gas	103.572	ppb	5.4	343603.01	100	20.71	79.5	120.4	
Th	232	209	No Gas	102.200	ppb	6.0	342389.42	100	20.44	79.5	120.4	
U	238	209	No Gas	102.860	ppb	6.0	323149.46	100	20.57	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1361188.60	1.6	1419082.7	95.92	29.5	120.4	
Sc	45	No Gas	3003982.31	0.6	3146924.08	95.46	29.5	120.4	
Sc	45	H2	339595.77	0.5	384460.42	88.33	29.5	120.4	
Sc	45	He	68136.93	0.5	75345.71	90.43	29.5	120.4	
Ge	72	No Gas	670752.27	1.1	687904.62	97.51	29.5	120.4	
Ge	72	H2	122772.22	0.5	138854.33	88.42	29.5	120.4	
Ge	72	He	52585.23	0.6	57203.55	91.93	29.5	120.4	
Y	89	H2	2208078.05	0.4	2377183.3	92.89	29.5	120.4	
Y	89	He	454643.62	0.7	498269.57	91.24	29.5	120.4	
Tb	159	No Gas	7048641.01	0.7	6611594.34	106.61	29.5	120.4	
Tb	159	He	2532900.47	0.7	2564694.13	98.76	29.5	120.4	
Bi	209	No Gas	3682048.25	0.9	3381664.78	108.88	29.5	120.4	

Sample Report

Sample Name	SN6056-004
File Name	094SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:12:10 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.302	ppb	30.3	131.12	100	
11	B	6	No Gas	14.909	ppb	6.9	4334.13	1000	
23	Na	45	He	192.932	ppb	6.6	12489.44	200000	
24	Mg	45	He	8.380	ppb	78.1	966.77	200000	
27	Al	45	He	149.753	ppb	9.3	700.05	200000	
28	Si	45	H2	17.291	ppb	64.2	610.70	10000	
39	K	45	He	13.126	ppb	97.3	10559.17	200000	
40	Ca	45	H2	77.757	ppb	4.1	7302.14	200000	
51	V	89	He	0.817	ppb	21.2	370.02	1000	
52	Cr	89	He	0.686	ppb	22.0	199.97	2000	
55	Mn	89	He	1.529	ppb	16.3	194.63	2000	
56	Fe	89	H2	41.455	ppb	1.2	22710.35	100000	
59	Co	89	He	0.129	ppb	94.4	102.23	1000	
60	Ni	89	He	-10.604	ppb	N/A	372.24	1000	
63	Cu	89	He	0.863	ppb	29.9	313.35	2000	
66	Zn	89	He	5.602	ppb	17.7	233.34	2000	
75	As	89	He	0.141	ppb	48.1	8.67	1000	
78	Se	89	H2	0.277	ppb	47.6	4.83	1000	
88	Sr	89	He	0.186	ppb	32.0	33.33	2000	
95	Mo	89	He	0.397	ppb	13.7	71.11	1000	
107	Ag	89	He	0.033	ppb	103.2	25.56	100	
111	Cd	89	He	0.053	ppb	62.7	4.07	1000	
118	Sn	159	He	1.716	ppb	4.7	347.80	1000	
121	Sb	159	No Gas	0.184	ppb	39.7	323.70	1000	
137	Ba	159	No Gas	2.769	ppb	42.2	1621.91	2000	
182	W	159	No Gas	0.348	ppb	26.4	413.80	1000	
205	Tl	209	No Gas	0.063	ppb	66.2	433.83	1000	
208	Pb	209	No Gas	0.408	ppb	8.6	1695.28	2000	
232	Th	209	No Gas	1.620	ppb	36.9	5637.69	1000	
238	U	209	No Gas	0.185	ppb	60.9	600.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1311090.12	2.3	1419082.7	92.39	29.5	120.4	
Sc	45	No Gas	3018071.45	2.3	3146924.08	95.91	29.5	120.4	
Sc	45	H2	338094.83	0.2	384460.42	87.94	29.5	120.4	
Sc	45	He	68408.40	1.0	75345.71	90.79	29.5	120.4	
Ge	72	No Gas	676122.99	2.5	687904.62	98.29	29.5	120.4	
Ge	72	H2	122045.96	0.8	138854.33	87.89	29.5	120.4	
Ge	72	He	51851.03	0.9	57203.55	90.64	29.5	120.4	
Y	89	H2	2210250.82	0.7	2377183.3	92.98	29.5	120.4	
Y	89	He	450833.26	1.1	498269.57	90.48	29.5	120.4	
Tb	159	No Gas	7130999.75	2.4	6611594.34	107.86	29.5	120.4	
Tb	159	He	2527049.81	0.9	2564694.13	98.53	29.5	120.4	
Bi	209	No Gas	3727045.95	2.2	3381664.78	110.21	29.5	120.4	

Sample Report

Sample Name SN6061-002

File Name 095SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:14:55 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.087	ppb	50.0	76.67	100	
11	B	6	No Gas	6.298	ppb	17.4	2923.74	1000	
23	Na	45	He	159.324	ppb	2.1	11697.78	200000	
24	Mg	45	He	9.313	ppb	18.7	971.22	200000	
27	Al	45	He	13.442	ppb	11.4	73.34	200000	
28	Si	45	H2	12.642	ppb	5.4	577.32	10000	
39	K	45	He	1.618	ppb	1324.4	10362.47	200000	
40	Ca	45	H2	48.521	ppb	9.0	5075.53	200000	
51	V	89	He	1.035	ppb	14.3	408.91	1000	
52	Cr	89	He	0.452	ppb	25.5	153.97	2000	
55	Mn	89	He	0.959	ppb	16.1	141.97	2000	
56	Fe	89	H2	23.330	ppb	56.4	17203.61	100000	
59	Co	89	He	-0.015	ppb	N/A	53.34	1000	
60	Ni	89	He	-10.967	ppb	N/A	340.02	1000	
63	Cu	89	He	0.447	ppb	17.1	204.46	2000	
66	Zn	89	He	2.885	ppb	20.6	140.01	2000	
75	As	89	He	0.003	ppb	1195.0	4.67	1000	
78	Se	89	H2	0.132	ppb	61.5	2.67	1000	
88	Sr	89	He	0.146	ppb	53.5	27.78	2000	
95	Mo	89	He	0.125	ppb	43.7	26.67	1000	
107	Ag	89	He	0.039	ppb	35.7	28.89	100	
111	Cd	89	He	0.057	ppb	81.0	4.44	1000	
118	Sn	159	He	1.766	ppb	10.0	357.80	1000	
121	Sb	159	No Gas	0.033	ppb	75.6	103.45	1000	
137	Ba	159	No Gas	0.465	ppb	47.8	283.66	2000	
182	W	159	No Gas	0.069	ppb	30.2	106.79	1000	
205	Tl	209	No Gas	-0.088	ppb	N/A	66.74	1000	
208	Pb	209	No Gas	0.101	ppb	8.0	670.77	2000	
232	Th	209	No Gas	0.110	ppb	28.0	497.24	1000	
238	U	209	No Gas	0.013	ppb	26.6	50.06	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1317704.09	3.6	1419082.7	92.86	29.5	120.4	
Sc	45	No Gas	3062630.57	5.7	3146924.08	97.32	29.5	120.4	
Sc	45	H2	341770.60	1.7	384460.42	88.9	29.5	120.4	
Sc	45	He	67924.17	0.5	75345.71	90.15	29.5	120.4	
Ge	72	No Gas	681140.47	3.9	687904.62	99.02	29.5	120.4	
Ge	72	H2	122422.82	0.8	138854.33	88.17	29.5	120.4	
Ge	72	He	52082.74	0.2	57203.55	91.05	29.5	120.4	
Y	89	H2	2240819.28	0.7	2377183.3	94.26	29.5	120.4	
Y	89	He	453770.12	0.6	498269.57	91.07	29.5	120.4	
Tb	159	No Gas	7292508.71	5.3	6611594.34	110.3	29.5	120.4	
Tb	159	He	2538301.26	0.4	2564694.13	98.97	29.5	120.4	
Bi	209	No Gas	3780747.62	4.4	3381664.78	111.8	29.5	120.4	

Sample Report

Sample Name SN6054-006

File Name 096SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:17:36 PM

Sample Type Sample

Total Dilution 10.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.082	ppb	N/A	48.89	100	
11	B	6	No Gas	3206.993	ppb	8.1	297729.21	1000	
23	Na	45	He	627768.832	ppb	76.5	2726765.06	200000	
24	Mg	45	He	16525.700	ppb	75.1	39376.38	200000	
27	Al	45	He	410.147	ppb	67.0	428.93	200000	
28	Si	45	H2	5638.447	ppb	22.5	28299.90	10000	
39	K	45	He	140385.438	ppb	75.9	319690.95	200000	
40	Ca	45	H2	47981.360	ppb	5.8	2051228.37	200000	
51	V	89	He	14.916	ppb	94.1	620.07	1000	
52	Cr	89	He	38.869	ppb	78.2	1678.70	2000	
55	Mn	89	He	93.863	ppb	80.3	1939.42	2000	
56	Fe	89	H2	1472.122	ppb	3.2	258583.91	100000	
59	Co	89	He	14.502	ppb	86.7	1057.98	1000	
60	Ni	89	He	83.362	ppb	86.5	1771.40	1000	
63	Cu	89	He	4.188	ppb	77.7	242.24	2000	
66	Zn	89	He	63.664	ppb	83.3	515.60	2000	
75	As	89	He	33.908	ppb	75.1	229.36	1000	
78	Se	89	H2	1.096	ppb	30.7	9.83	1000	
88	Sr	89	He	114.560	ppb	84.9	3731.92	2000	
95	Mo	89	He	1.772	ppb	58.4	74.45	1000	
107	Ag	89	He	0.085	ppb	94.8	10.00	100	
111	Cd	89	He	0.064	ppb	111.1	2.22	1000	
118	Sn	159	He	11.112	ppb	90.8	432.26	1000	
121	Sb	159	No Gas	25.160	ppb	4.8	19615.84	1000	
137	Ba	159	No Gas	97.994	ppb	5.7	30262.14	2000	
182	W	159	No Gas	1.368	ppb	12.6	827.62	1000	
205	Tl	209	No Gas	-0.207	ppb	N/A	30.03	1000	
208	Pb	209	No Gas	5.990	ppb	5.6	10530.46	2000	
232	Th	209	No Gas	0.696	ppb	16.0	1314.90	1000	
238	U	209	No Gas	1.188	ppb	9.9	1922.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1465448.94	9.7	1419082.7	103.27	29.5	120.4	
Sc	45	No Gas	3265520.64	11.5	3146924.08	103.77	29.5	120.4	
Sc	45	H2	362014.98	55.4	384460.42	94.16	29.5	120.4	
Sc	45	He	51617.19	133.3	75345.71	68.51	29.5	120.4	
Ge	72	No Gas	703753.60	12.5	687904.62	102.3	29.5	120.4	
Ge	72	H2	130324.17	55.4	138854.33	93.86	29.5	120.4	
Ge	72	He	40085.92	134.3	57203.55	70.08	29.5	120.4	
Y	89	H2	2322185.32	55.2	2377183.3	97.69	29.5	120.4	
Y	89	He	350759.36	135.0	498269.57	70.4	29.5	120.4	
Tb	159	No Gas	7611155.10	11.3	6611594.34	115.12	29.5	120.4	
Tb	159	He	1941455.71	134.5	2564694.13	75.7	29.5	120.4	
Bi	209	No Gas	3772044.80	11.5	3381664.78	111.54	29.5	120.4	

Sample Report

Sample Name SN6054-006

File Name 097SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:20:19 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.054	ppb	330.2	57.78	100	
11	B	6	No Gas	4947.239	ppb	4.3	166847.97	1000	
23	Na	45	He	1331770.039	ppb	1.3	5677780.55	200000	
24	Mg	45	He	34301.368	ppb	0.7	81603.97	200000	
27	Al	45	He	938.225	ppb	13.9	885.61	200000	
28	Si	45	H2	13015.948	ppb	2.4	23228.06	10000	
39	K	45	He	319973.275	ppb	1.5	697559.60	200000	
40	Ca	45	H2	99989.551	ppb	1.5	1606629.37	200000	
51	V	89	He	32.964	ppb	1.8	1345.67	1000	
52	Cr	89	He	88.325	ppb	3.2	3676.50	2000	
55	Mn	89	He	215.710	ppb	2.3	4184.55	2000	
56	Fe	89	H2	2967.895	ppb	1.1	201540.62	100000	
59	Co	89	He	31.066	ppb	5.3	2227.00	1000	
60	Ni	89	He	85.159	ppb	5.0	3010.43	1000	
63	Cu	89	He	7.399	ppb	5.3	483.36	2000	
66	Zn	89	He	131.011	ppb	7.1	963.40	2000	
75	As	89	He	90.476	ppb	3.6	539.40	1000	
78	Se	89	H2	2.658	ppb	9.0	8.83	1000	
88	Sr	89	He	277.673	ppb	1.5	8308.35	2000	
95	Mo	89	He	4.685	ppb	20.3	162.23	1000	
107	Ag	89	He	0.065	ppb	95.8	14.45	100	
111	Cd	89	He	0.334	ppb	26.4	5.18	1000	
118	Sn	159	He	20.135	ppb	6.6	741.16	1000	
121	Sb	159	No Gas	36.232	ppb	10.9	10589.22	1000	
137	Ba	159	No Gas	136.507	ppb	6.2	15803.60	2000	
182	W	159	No Gas	2.321	ppb	21.4	540.62	1000	
205	Tl	209	No Gas	-0.537	ppb	N/A	20.02	1000	
208	Pb	209	No Gas	8.429	ppb	11.9	5793.68	2000	
232	Th	209	No Gas	0.839	ppb	11.8	664.09	1000	
238	U	209	No Gas	1.724	ppb	5.3	1071.25	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1327492.05	1.5	1419082.7	93.55	29.5	120.4	
Sc	45	No Gas	3097205.53	3.4	3146924.08	98.42	29.5	120.4	
Sc	45	H2	347416.25	1.6	384460.42	90.36	29.5	120.4	
Sc	45	He	69211.21	1.6	75345.71	91.86	29.5	120.4	
Ge	72	No Gas	683782.82	2.9	687904.62	99.4	29.5	120.4	
Ge	72	H2	127234.00	1.7	138854.33	91.63	29.5	120.4	
Ge	72	He	53545.97	1.5	57203.55	93.61	29.5	120.4	
Y	89	H2	2248771.09	1.2	2377183.3	94.6	29.5	120.4	
Y	89	He	458436.19	0.8	498269.57	92.01	29.5	120.4	
Tb	159	No Gas	7140764.83	3.2	6611594.34	108	29.5	120.4	
Tb	159	He	2535951.80	0.9	2564694.13	98.88	29.5	120.4	
Bi	209	No Gas	3617807.63	2.8	3381664.78	106.98	29.5	120.4	

Sample Report

Sample Name SN6054-007

File Name 098SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:22:59 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	1200.9	56.67	100	
11	B	6	No Gas	5277.634	ppb	4.1	179951.53	1000	
23	Na	45	He	1404915.493	ppb	2.3	6102224.93	200000	
24	Mg	45	He	36173.745	ppb	2.3	87635.59	200000	
27	Al	45	He	941.847	ppb	3.5	904.51	200000	
28	Si	45	H2	13880.658	ppb	2.3	24578.48	10000	
39	K	45	He	339273.697	ppb	2.2	752975.12	200000	
40	Ca	45	H2	108484.997	ppb	0.6	1731795.93	200000	
51	V	89	He	34.467	ppb	6.6	1416.79	1000	
52	Cr	89	He	90.859	ppb	1.7	3832.50	2000	
55	Mn	89	He	222.755	ppb	1.4	4380.57	2000	
56	Fe	89	H2	3617.878	ppb	0.5	241826.99	100000	
59	Co	89	He	32.895	ppb	4.3	2387.05	1000	
60	Ni	89	He	91.210	ppb	5.8	3168.25	1000	
63	Cu	89	He	7.758	ppb	4.8	510.03	2000	
66	Zn	89	He	140.517	ppb	6.7	1044.52	2000	
75	As	89	He	93.774	ppb	3.9	566.74	1000	
78	Se	89	H2	3.168	ppb	34.1	10.33	1000	
88	Sr	89	He	290.411	ppb	4.0	8808.70	2000	
95	Mo	89	He	5.633	ppb	10.8	196.68	1000	
107	Ag	89	He	0.102	ppb	74.2	18.89	100	
111	Cd	89	He	0.381	ppb	13.4	5.93	1000	
118	Sn	159	He	18.932	ppb	6.7	707.82	1000	
121	Sb	159	No Gas	44.171	ppb	4.1	12880.48	1000	
137	Ba	159	No Gas	144.128	ppb	4.3	16642.47	2000	
182	W	159	No Gas	2.079	ppb	28.1	483.88	1000	
205	Tl	209	No Gas	-0.508	ppb	N/A	33.37	1000	
208	Pb	209	No Gas	7.125	ppb	8.6	4902.53	2000	
232	Th	209	No Gas	0.796	ppb	14.8	627.39	1000	
238	U	209	No Gas	1.620	ppb	4.5	997.82	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1343501.74	2.7	1419082.7	94.67	29.5	120.4	
Sc	45	No Gas	3092587.77	2.9	3146924.08	98.27	29.5	120.4	
Sc	45	H2	345138.87	1.3	384460.42	89.77	29.5	120.4	
Sc	45	He	70529.95	1.9	75345.71	93.61	29.5	120.4	
Ge	72	No Gas	684669.05	2.8	687904.62	99.53	29.5	120.4	
Ge	72	H2	126443.27	1.1	138854.33	91.06	29.5	120.4	
Ge	72	He	53682.89	1.4	57203.55	93.85	29.5	120.4	
Y	89	H2	2232660.11	0.2	2377183.3	93.92	29.5	120.4	
Y	89	He	464907.65	1.7	498269.57	93.3	29.5	120.4	
Tb	159	No Gas	7120963.09	3.1	6611594.34	107.7	29.5	120.4	
Tb	159	He	2565393.94	1.8	2564694.13	100.03	29.5	120.4	
Bi	209	No Gas	3584397.09	3.1	3381664.78	106	29.5	120.4	

Sample Report

Sample Name SN6054-008

File Name 099SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:25:42 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.176	ppb	127.7	64.45	100	
11	B	6	No Gas	5828.846	ppb	3.9	196783.34	1000	
23	Na	45	He	1764429.703	ppb	0.5	7607217.37	200000	
24	Mg	45	He	53063.064	ppb	0.5	127217.59	200000	
27	Al	45	He	2123.689	ppb	3.2	2009.11	200000	
28	Si	45	H2	12871.412	ppb	4.9	22900.32	10000	
39	K	45	He	484727.372	ppb	0.2	1063594.85	200000	
40	Ca	45	H2	129543.451	ppb	2.4	2074934.24	200000	
51	V	89	He	138.483	ppb	1.6	4932.14	1000	
52	Cr	89	He	136.579	ppb	4.0	5700.12	2000	
55	Mn	89	He	164.130	ppb	2.7	3225.13	2000	
56	Fe	89	H2	12301.645	ppb	1.1	800909.01	100000	
59	Co	89	He	43.023	ppb	6.2	3087.22	1000	
60	Ni	89	He	149.240	ppb	1.4	4269.71	1000	
63	Cu	89	He	6.055	ppb	13.5	415.57	2000	
66	Zn	89	He	345.691	ppb	5.8	2498.10	2000	
75	As	89	He	78.288	ppb	9.2	471.39	1000	
78	Se	89	H2	7.624	ppb	29.0	24.00	1000	
88	Sr	89	He	205.575	ppb	2.2	6208.32	2000	
95	Mo	89	He	10.123	ppb	15.2	346.69	1000	
107	Ag	89	He	0.279	ppb	54.0	38.89	100	
111	Cd	89	He	0.306	ppb	15.1	4.81	1000	
118	Sn	159	He	32.061	ppb	3.4	1146.76	1000	
121	Sb	159	No Gas	36.722	ppb	8.0	10445.71	1000	
137	Ba	159	No Gas	9.165	ppb	22.2	1037.87	2000	
182	W	159	No Gas	7.003	ppb	11.4	1528.46	1000	
205	Tl	209	No Gas	-0.463	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	2.095	ppb	3.8	1631.87	2000	
232	Th	209	No Gas	0.952	ppb	8.6	717.49	1000	
238	U	209	No Gas	1.842	ppb	14.3	1111.30	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1331192.66	1.8	1419082.7	93.81	29.5	120.4	
Sc	45	No Gas	3044872.03	3.3	3146924.08	96.76	29.5	120.4	
Sc	45	H2	346388.34	1.1	384460.42	90.1	29.5	120.4	
Sc	45	He	70012.02	1.0	75345.71	92.92	29.5	120.4	
Ge	72	No Gas	676176.52	2.6	687904.62	98.3	29.5	120.4	
Ge	72	H2	126151.08	0.4	138854.33	90.85	29.5	120.4	
Ge	72	He	53651.94	0.4	57203.55	93.79	29.5	120.4	
Y	89	H2	2237807.65	1.2	2377183.3	94.14	29.5	120.4	
Y	89	He	462650.38	1.3	498269.57	92.85	29.5	120.4	
Tb	159	No Gas	6947849.90	3.6	6611594.34	105.09	29.5	120.4	
Tb	159	He	2539434.16	0.5	2564694.13	99.02	29.5	120.4	
Bi	209	No Gas	3517121.68	3.1	3381664.78	104.01	29.5	120.4	

Sample Report

Sample Name SN6054-009

File Name 100SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:28:17 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.164	ppb	233.6	63.34	100	
11	B	6	No Gas	12128.727	ppb	1.4	404615.27	1000	
23	Na	45	He	2867763.754	ppb	3.7	12117558.28	200000	
24	Mg	45	He	62329.412	ppb	4.3	146347.16	200000	
27	Al	45	He	1557.046	ppb	3.5	1449.02	200000	
28	Si	45	H2	20961.536	ppb	2.9	36788.07	10000	
39	K	45	He	804445.340	ppb	3.6	1723756.35	200000	
40	Ca	45	H2	70180.052	ppb	3.4	1118043.98	200000	
51	V	89	He	195.100	ppb	3.0	6680.73	1000	
52	Cr	89	He	492.069	ppb	2.8	19872.35	2000	
55	Mn	89	He	179.168	ppb	5.6	3427.81	2000	
56	Fe	89	H2	13101.297	ppb	2.8	846333.82	100000	
59	Co	89	He	69.205	ppb	3.6	4810.07	1000	
60	Ni	89	He	296.118	ppb	9.1	6911.96	1000	
63	Cu	89	He	38.639	ppb	5.1	2123.58	2000	
66	Zn	89	He	357.227	ppb	3.2	2516.99	2000	
75	As	89	He	250.471	ppb	1.5	1462.24	1000	
78	Se	89	H2	3.659	ppb	28.2	11.83	1000	
88	Sr	89	He	286.950	ppb	4.0	8447.34	2000	
95	Mo	89	He	12.992	ppb	4.1	432.24	1000	
107	Ag	89	He	0.326	ppb	14.8	43.33	100	
111	Cd	89	He	0.340	ppb	34.9	5.19	1000	
118	Sn	159	He	197.846	ppb	3.5	6577.38	1000	
121	Sb	159	No Gas	34.019	ppb	6.7	9483.89	1000	
137	Ba	159	No Gas	109.398	ppb	5.0	12068.97	2000	
182	W	159	No Gas	6.207	ppb	7.0	1334.90	1000	
205	Tl	209	No Gas	-0.488	ppb	N/A	40.05	1000	
208	Pb	209	No Gas	11.979	ppb	4.0	7602.76	2000	
232	Th	209	No Gas	0.497	ppb	21.7	410.47	1000	
238	U	209	No Gas	1.786	ppb	11.3	1037.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1321762.80	2.2	1419082.7	93.14	29.5	120.4	
Sc	45	No Gas	2996881.52	3.9	3146924.08	95.23	29.5	120.4	
Sc	45	H2	344549.02	3.3	384460.42	89.62	29.5	120.4	
Sc	45	He	68693.91	3.0	75345.71	91.17	29.5	120.4	
Ge	72	No Gas	663533.26	2.4	687904.62	96.46	29.5	120.4	
Ge	72	H2	124895.43	1.9	138854.33	89.95	29.5	120.4	
Ge	72	He	52394.91	3.0	57203.55	91.59	29.5	120.4	
Y	89	H2	2222866.91	2.5	2377183.3	93.51	29.5	120.4	
Y	89	He	451405.13	2.7	498269.57	90.59	29.5	120.4	
Tb	159	No Gas	6805531.91	4.2	6611594.34	102.93	29.5	120.4	
Tb	159	He	2466199.30	2.5	2564694.13	96.16	29.5	120.4	
Bi	209	No Gas	3390132.02	2.9	3381664.78	100.25	29.5	120.4	

Sample Report

Sample Name SN6054-010

File Name 101SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:30:57 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	152.2	61.12	100	
11	B	6	No Gas	6490.617	ppb	4.0	229854.06	1000	
23	Na	45	He	1109042.290	ppb	0.9	4873821.88	200000	
24	Mg	45	He	21662.471	ppb	0.8	53438.43	200000	
27	Al	45	He	728.433	ppb	6.5	710.04	200000	
28	Si	45	H2	8301.145	ppb	3.9	15171.48	10000	
39	K	45	He	343261.853	ppb	0.7	770374.68	200000	
40	Ca	45	H2	51776.072	ppb	1.1	842783.87	200000	
51	V	89	He	159.390	ppb	2.6	5723.60	1000	
52	Cr	89	He	281.210	ppb	2.8	11843.49	2000	
55	Mn	89	He	101.838	ppb	0.3	2051.12	2000	
56	Fe	89	H2	27032.770	ppb	0.5	1759161.50	100000	
59	Co	89	He	24.571	ppb	7.6	1815.82	1000	
60	Ni	89	He	94.221	ppb	2.2	3259.38	1000	
63	Cu	89	He	25.829	ppb	1.7	1506.81	2000	
66	Zn	89	He	358.119	ppb	2.3	2625.91	2000	
75	As	89	He	173.664	ppb	2.0	1056.16	1000	
78	Se	89	H2	4.225	ppb	33.7	13.67	1000	
88	Sr	89	He	92.723	ppb	2.8	2844.85	2000	
95	Mo	89	He	23.584	ppb	8.1	811.17	1000	
107	Ag	89	He	0.148	ppb	29.0	24.44	100	
111	Cd	89	He	0.151	ppb	28.1	2.59	1000	
118	Sn	159	He	61.920	ppb	1.9	2179.15	1000	
121	Sb	159	No Gas	137.686	ppb	1.8	39722.61	1000	
137	Ba	159	No Gas	95.914	ppb	2.0	10993.55	2000	
182	W	159	No Gas	3.996	ppb	16.5	901.04	1000	
205	Tl	209	No Gas	-0.544	ppb	N/A	16.68	1000	
208	Pb	209	No Gas	5.372	ppb	10.8	3767.77	2000	
232	Th	209	No Gas	0.739	ppb	3.1	590.67	1000	
238	U	209	No Gas	9.770	ppb	3.4	5971.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1397798.11	1.8	1419082.7	98.5	29.5	120.4	
Sc	45	No Gas	3145106.17	1.8	3146924.08	99.94	29.5	120.4	
Sc	45	H2	351666.53	1.2	384460.42	91.47	29.5	120.4	
Sc	45	He	71316.55	1.0	75345.71	94.65	29.5	120.4	
Ge	72	No Gas	692669.97	1.2	687904.62	100.69	29.5	120.4	
Ge	72	H2	128452.92	1.2	138854.33	92.51	29.5	120.4	
Ge	72	He	54718.00	0.5	57203.55	95.65	29.5	120.4	
Y	89	H2	2251385.55	1.1	2377183.3	94.71	29.5	120.4	
Y	89	He	469477.62	0.7	498269.57	94.22	29.5	120.4	
Tb	159	No Gas	7061156.07	1.8	6611594.34	106.8	29.5	120.4	
Tb	159	He	2560972.02	0.4	2564694.13	99.85	29.5	120.4	
Bi	209	No Gas	3577499.64	1.6	3381664.78	105.79	29.5	120.4	

Sample Report

Sample Name SN6054-011

File Name 102SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b

Acq Time 7/30/2020 8:33:33 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.480	ppb	63.8	81.11	100	
11	B	6	No Gas	5079.093	ppb	10.6	174959.44	1000	
23	Na	45	He	1220020.152	ppb	1.0	5344464.69	200000	
24	Mg	45	He	57189.486	ppb	1.5	139166.73	200000	
27	Al	45	He	13672.856	ppb	0.1	13068.64	200000	
28	Si	45	H2	9177.351	ppb	2.9	16698.35	10000	
39	K	45	He	408966.659	ppb	0.9	912980.30	200000	
40	Ca	45	H2	142496.632	ppb	0.8	2314407.17	200000	
51	V	89	He	114.915	ppb	2.5	4197.44	1000	
52	Cr	89	He	229.559	ppb	2.3	9684.92	2000	
55	Mn	89	He	349.000	ppb	1.8	6903.79	2000	
56	Fe	89	H2	15796.329	ppb	0.2	1039071.84	100000	
59	Co	89	He	25.142	ppb	3.0	1858.04	1000	
60	Ni	89	He	98.699	ppb	3.0	3348.30	1000	
63	Cu	89	He	15.380	ppb	7.0	933.40	2000	
66	Zn	89	He	58.567	ppb	14.3	463.36	2000	
75	As	89	He	64.458	ppb	5.4	395.05	1000	
78	Se	89	H2	9.818	ppb	20.4	31.17	1000	
88	Sr	89	He	122.456	ppb	0.8	3757.32	2000	
95	Mo	89	He	6.326	ppb	21.2	222.23	1000	
107	Ag	89	He	0.091	ppb	113.2	17.78	100	
111	Cd	89	He	0.152	ppb	115.4	2.59	1000	
118	Sn	159	He	29.385	ppb	6.1	1063.41	1000	
121	Sb	159	No Gas	7.714	ppb	16.8	2172.61	1000	
137	Ba	159	No Gas	47.593	ppb	16.1	5213.53	2000	
182	W	159	No Gas	2.873	ppb	23.1	627.38	1000	
205	Tl	209	No Gas	-0.506	ppb	N/A	33.37	1000	
208	Pb	209	No Gas	3.178	ppb	21.1	2249.26	2000	
232	Th	209	No Gas	10.535	ppb	13.2	6662.65	1000	
238	U	209	No Gas	8.029	ppb	12.9	4696.17	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1360657.54	5.2	1419082.7	95.88	29.5	120.4	
Sc	45	No Gas	2997568.09	7.1	3146924.08	95.25	29.5	120.4	
Sc	45	H2	351213.44	0.5	384460.42	91.35	29.5	120.4	
Sc	45	He	71101.74	0.9	75345.71	94.37	29.5	120.4	
Ge	72	No Gas	670621.78	5.1	687904.62	97.49	29.5	120.4	
Ge	72	H2	127135.44	0.7	138854.33	91.56	29.5	120.4	
Ge	72	He	54272.46	1.5	57203.55	94.88	29.5	120.4	
Y	89	H2	2266812.75	0.1	2377183.3	95.36	29.5	120.4	
Y	89	He	469727.14	1.0	498269.57	94.27	29.5	120.4	
Tb	159	No Gas	6788861.15	6.7	6611594.34	102.68	29.5	120.4	
Tb	159	He	2558175.21	1.1	2564694.13	99.75	29.5	120.4	
Bi	209	No Gas	3437070.73	6.1	3381664.78	101.64	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	103_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:36:12 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.280	ppb	5.8	31711.12	25	93.12	89.8	110.2	
11	B	6	No Gas	30.462	ppb	4.6	28966.41	25	121.85	89.8	110.2	> +/- 10%
23	Na	45	He	5304.998	ppb	1.1	595813.39	5000	106.1	89.8	110.2	
24	Mg	45	He	5060.188	ppb	0.4	310421.41	5000	101.2	89.8	110.2	
27	Al	45	He	477.637	ppb	1.0	11550.60	500	95.53	89.8	110.2	
28	Si	45	H2	502.675	ppb	3.3	23121.08	500	100.54	89.8	110.2	
39	K	45	He	4945.515	ppb	0.8	286949.52	5000	98.91	89.8	110.2	
40	Ca	45	H2	5049.540	ppb	0.5	2089516.93	5000	100.99	89.8	110.2	
51	V	89	He	24.748	ppb	1.0	21755.20	25	98.99	89.8	110.2	
52	Cr	89	He	25.212	ppb	0.6	26766.32	25	100.85	89.8	110.2	
55	Mn	89	He	25.292	ppb	2.0	12599.99	25	101.17	89.8	110.2	
56	Fe	89	H2	5010.000	ppb	0.1	8299020.39	5000	100.2	89.8	110.2	
59	Co	89	He	25.407	ppb	0.8	45946.73	25	101.63	89.8	110.2	
60	Ni	89	He	22.889	ppb	2.8	12725.07	25	91.56	89.8	110.2	
63	Cu	89	He	25.184	ppb	0.5	35043.73	25	100.74	89.8	110.2	
66	Zn	89	He	25.282	ppb	6.1	4654.27	25	101.13	89.8	110.2	
75	As	89	He	25.212	ppb	2.1	3863.63	25	100.85	89.8	110.2	
78	Se	89	H2	25.157	ppb	2.3	1986.72	25	100.63	89.8	110.2	
88	Sr	89	He	24.623	ppb	2.5	19064.92	25	98.49	89.8	110.2	
95	Mo	89	He	24.756	ppb	2.2	21372.86	25	99.02	89.8	110.2	
107	Ag	89	He	26.102	ppb	0.5	76265.16	25	104.41	89.8	110.2	
111	Cd	89	He	25.532	ppb	0.8	9580.51	25	102.13	89.8	110.2	
118	Sn	159	He	23.787	ppb	1.3	20581.83	25	95.15	89.8	110.2	
121	Sb	159	No Gas	23.588	ppb	4.8	169996.37	25	94.35	89.8	110.2	
137	Ba	159	No Gas	24.002	ppb	4.7	68742.93	25	96.01	89.8	110.2	
182	W	159	No Gas	23.643	ppb	3.7	129040.93	25	94.57	89.8	110.2	
205	Tl	209	No Gas	24.205	ppb	4.7	284606.60	25	96.82	89.8	110.2	
208	Pb	209	No Gas	24.086	ppb	5.0	394373.51	25	96.34	89.8	110.2	
232	Th	209	No Gas	23.563	ppb	6.0	389620.07	25	94.25	89.8	110.2	
238	U	209	No Gas	23.914	ppb	5.9	370837.61	25	95.66	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1408998.18	1.3	1419082.7	99.29	29.5	120.4	
Sc	45	No Gas	3150186.40	0.6	3146924.08	100.1	29.5	120.4	
Sc	45	H2	357894.97	0.6	384460.42	93.09	29.5	120.4	
Sc	45	He	71948.96	0.6	75345.71	95.49	29.5	120.4	
Ge	72	No Gas	694039.53	1.1	687904.62	100.89	29.5	120.4	
Ge	72	H2	129439.83	1.0	138854.33	93.22	29.5	120.4	
Ge	72	He	54884.30	0.6	57203.55	95.95	29.5	120.4	
Y	89	H2	2302318.46	0.3	2377183.3	96.85	29.5	120.4	
Y	89	He	474757.57	0.2	498269.57	95.28	29.5	120.4	
Tb	159	No Gas	7063425.66	0.7	6611594.34	106.83	29.5	120.4	
Tb	159	He	2580742.60	0.3	2564694.13	100.63	29.5	120.4	
Bi	209	No Gas	3634990.12	0.9	3381664.78	107.49	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	104_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\07-July\LNG30A.b
Acq Time	7/30/2020 8:38:52 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.058	ppb	25.8	135.56	0.2	
11	B	6	No Gas	4.280	ppb	7.3	5750.21	4	Fail All Methods□ Failed DoD
23	Na	45	He	86.995	ppb	11.0	18372.25	200	
24	Mg	45	He	4.682	ppb	22.9	1193.47	20	
27	Al	45	He	0.354	ppb	102.0	21.11	20	
28	Si	45	H2	6.936	ppb	11.6	800.92	100	
39	K	45	He	4.187	ppb	152.1	11121.05	200	
40	Ca	45	H2	1.133	ppb	27.1	1762.40	20	
51	V	89	He	-0.063	ppb	N/A	192.23	1	
52	Cr	89	He	0.009	ppb	174.1	74.66	1	
55	Mn	89	He	-0.021	ppb	N/A	42.66	0.4	
56	Fe	89	H2	0.238	ppb	282.0	10221.84	20	
59	Co	89	He	-0.017	ppb	N/A	31.11	0.2	
60	Ni	89	He	-2.283	ppb	N/A	310.02	0.4	Fail All Methods□ Failed DoD
63	Cu	89	He	0.017	ppb	115.9	112.23	0.6	
66	Zn	89	He	0.136	ppb	103.6	65.56	2	
75	As	89	He	-0.009	ppb	N/A	3.33	1	
78	Se	89	H2	0.039	ppb	40.1	3.67	1	
88	Sr	89	He	0.009	ppb	49.3	13.33	1	
95	Mo	89	He	0.110	ppb	19.3	101.11	1	
107	Ag	89	He	0.007	ppb	79.1	28.89	0.2	
111	Cd	89	He	0.010	ppb	18.0	4.07	0.2	
118	Sn	159	He	0.129	ppb	25.8	167.78	1	
121	Sb	159	No Gas	0.017	ppb	14.5	170.19	0.2	
137	Ba	159	No Gas	0.014	ppb	50.2	50.06	0.4	
182	W	159	No Gas	0.093	ppb	30.8	523.93	1	
205	Tl	209	No Gas	-0.004	ppb	N/A	223.59	0.2	
208	Pb	209	No Gas	0.005	ppb	149.8	393.77	0.2	
232	Th	209	No Gas	0.067	ppb	9.8	1191.39	1	
238	U	209	No Gas	0.023	ppb	18.3	353.73	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	1395843.29	0.3	1419082.7	98.36	29.5	120.4	
Sc	45	No Gas	3092119.72	0.8	3146924.08	98.26	29.5	120.4	
Sc	45	H2	357016.54	0.6	384460.42	92.86	29.5	120.4	
Sc	45	He	71504.13	1.2	75345.71	94.9	29.5	120.4	
Ge	72	No Gas	683722.47	0.7	687904.62	99.39	29.5	120.4	
Ge	72	H2	129855.11	0.8	138854.33	93.52	29.5	120.4	
Ge	72	He	54622.07	0.7	57203.55	95.49	29.5	120.4	
Y	89	H2	2280445.10	2.1	2377183.3	95.93	29.5	120.4	
Y	89	He	472456.05	1.0	498269.57	94.82	29.5	120.4	
Tb	159	No Gas	6922800.94	0.7	6611594.34	104.71	29.5	120.4	
Tb	159	He	2543807.48	0.5	2564694.13	99.19	29.5	120.4	
Bi	209	No Gas	3577028.28	0.8	3381664.78	105.78	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800)

ANALYST: AP/KC

REVIEWED
mc 8/10/20
KATAHDIN ANALYTICAL
METALS SECTION

ANALYSIS DATE: 8/03/2020

METHOD: **ICP-MS**
- ☑ 200.8
- ☑ 6020
- ☑ DOD

FILE NAME: LNH03A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19522	07/30/20	10/08/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (18:06) fails high for Zn (2.730 ug/L)

Closing PQL (21:44) fails high for Na (264.716 ug/L) Zn (2.804 ug/L)

CCB (10:02) fails low for Ni (-0.206 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

AP 8/4/20

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH03A	08/03/2020	17:54	AP
CalStd	1	LNH03A	08/03/2020	17:57	AP
ICV	1	LNH03A	08/03/2020	18:01	AP
ICB	1	LNH03A	08/03/2020	18:04	AP
PQL	1	LNH03A	08/03/2020	18:06	AP
ICSA	1	LNH03A	08/03/2020	18:09	AP
ICSAB	1	LNH03A	08/03/2020	18:12	AP
LRS1	1	LNH03A	08/03/2020	18:15	AP
LRS2	1	LNH03A	08/03/2020	18:17	AP
RINSE	1	LNH03A	08/03/2020	18:20	AP
RINSE	1	LNH03A	08/03/2020	18:23	AP
CCV	1	LNH03A	08/03/2020	18:25	AP
CCB	1	LNH03A	08/03/2020	18:28	AP
SN5107-032	5	LNH03A	08/03/2020	18:31	AP
PBWNG13IMW1	5	LNH03A	08/03/2020	18:33	AP
LCSWNG13IMW1	5	LNH03A	08/03/2020	18:36	AP
SN5589-006	5	LNH03A	08/03/2020	18:38	AP
PBWNG21IMW2	5	LNH03A	08/03/2020	18:41	AP
LCSWNG21IMW2	5	LNH03A	08/03/2020	18:43	AP
SN5832-001	5	LNH03A	08/03/2020	18:46	AP
SN5832-002	5	LNH03A	08/03/2020	18:49	AP
SN5832-003	5	LNH03A	08/03/2020	18:52	AP
SN5832-004	5	LNH03A	08/03/2020	18:54	AP
CCV	1	LNH03A	08/03/2020	18:57	AP
CCB	1	LNH03A	08/03/2020	18:59	AP
SN5897-001	5	LNH03A	08/03/2020	19:02	AP
SN5897-002	5	LNH03A	08/03/2020	19:05	AP
SN5897-002L	25	LNH03A	08/03/2020	19:07	AP
SN5897-002A	5	LNH03A	08/03/2020	19:10	AP
SN5897-002S	5	LNH03A	08/03/2020	19:12	AP
SN5897-002P	5	LNH03A	08/03/2020	19:15	AP
LCSWNG23IMW1	1	LNH03A	08/03/2020	19:18	AP
SN5815-002	1	LNH03A	08/03/2020	19:20	AP
SN6071-001	1	LNH03A	08/03/2020	19:23	AP
PBWNG23IMW2	5	LNH03A	08/03/2020	19:25	AP
CCV	1	LNH03A	08/03/2020	19:28	AP
CCB	1	LNH03A	08/03/2020	19:30	AP
LCSWNG23IMW2	5	LNH03A	08/03/2020	19:33	AP
SN5815-004	5	LNH03A	08/03/2020	19:36	AP
SN6056-021	5	LNH03A	08/03/2020	19:38	AP
SN6056-022	5	LNH03A	08/03/2020	19:41	AP
PBWNG29IMW2	5	LNH03A	08/03/2020	19:44	AP
LCSWNG29IMW2	5	LNH03A	08/03/2020	19:46	AP
SN5717-020R	5	LNH03A	08/03/2020	19:49	AP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SN5830-002R	5	LNH03A	08/03/2020	19:51	AP
SN5832-001R	5	LNH03A	08/03/2020	19:54	AP
SN5832-002R	5	LNH03A	08/03/2020	19:57	AP
CCV	1	LNH03A	08/03/2020	19:59	AP
CCB	1	LNH03A	08/03/2020	20:02	AP
SN5832-003R	5	LNH03A	08/03/2020	20:05	AP
SN5832-004R	5	LNH03A	08/03/2020	20:07	AP
SN5897-001R	5	LNH03A	08/03/2020	20:10	AP
SN6056-004	5	LNH03A	08/03/2020	20:12	AP
SN6061-002	5	LNH03A	08/03/2020	20:15	AP
PBWNG30IMW1	1	LNH03A	08/03/2020	20:18	AP
LCSWNG30IMW1	1	LNH03A	08/03/2020	20:20	AP
SN5923-001R	1	LNH03A	08/03/2020	20:23	AP
RINSE	1	LNH03A	08/03/2020	20:26	AP
RINSE	1	LNH03A	08/03/2020	20:28	AP
CCV	1	LNH03A	08/03/2020	20:31	AP
CCB	1	LNH03A	08/03/2020	20:33	AP
SN6032-001	5	LNH03A	08/03/2020	20:36	AP
RINSE	1	LNH03A	08/03/2020	20:39	AP
RINSE	1	LNH03A	08/03/2020	20:41	AP
RINSE	1	LNH03A	08/03/2020	20:44	AP
RINSE	1	LNH03A	08/03/2020	20:46	AP
RINSE	1	LNH03A	08/03/2020	20:49	AP
RINSE	1	LNH03A	08/03/2020	20:52	AP
RINSE	1	LNH03A	08/03/2020	20:54	AP
RINSE	1	LNH03A	08/03/2020	20:57	AP
RINSE	1	LNH03A	08/03/2020	20:59	AP
CCV	1	LNH03A	08/03/2020	21:02	AP
CCB	1	LNH03A	08/03/2020	21:05	AP
SN6054-011	25	LNH03A	08/03/2020	21:07	AP
RINSE	1	LNH03A	08/03/2020	21:10	AP
RINSE	1	LNH03A	08/03/2020	21:12	AP
RINSE	1	LNH03A	08/03/2020	21:15	AP
RINSE	1	LNH03A	08/03/2020	21:18	AP
SN6054-012	25	LNH03A	08/03/2020	21:20	AP
RINSE	1	LNH03A	08/03/2020	21:23	AP
RINSE	1	LNH03A	08/03/2020	21:25	AP
RINSE	1	LNH03A	08/03/2020	21:28	AP
RINSE	1	LNH03A	08/03/2020	21:31	AP
CCV	1	LNH03A	08/03/2020	21:33	AP
CCB	1	LNH03A	08/03/2020	21:36	AP
CCV	1	LNH03A	08/03/2020	21:38	AP
CCB	1	LNH03A	08/03/2020	21:41	AP
PQL	1	LNH03A	08/03/2020	21:44	AP
RINSE	1	LNH03A	08/03/2020	21:46	AP
RINSE	1	LNH03A	08/03/2020	21:49	AP

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq. Date-Time	8/3/2020 2:37:44 PM
Report Comment	----
Instrument Name	G8421A SG18503526

[No Gas]

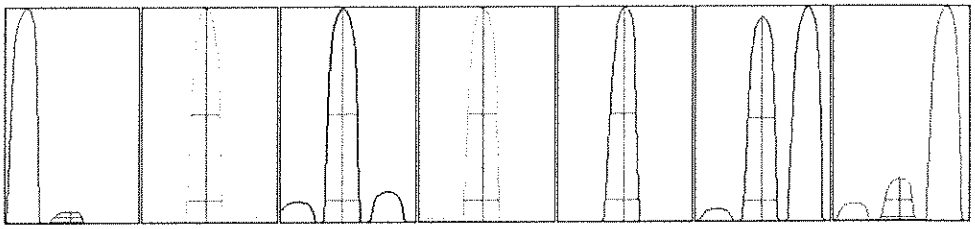
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	12081	120808.54	0.206	5.000	
9	4904	49044.14	0.331	5.000	
24	170677	1706773.69	0.110	5.000	
59	34140	341404.62	0.184	5.000	
115	398728	3987280.46	0.059	5.000	
205	25818	258184.10	0.285	5.000	
208	56594	565944.26	0.352	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	12080	12080	12071	12052	12121
9	4912	4898	4880	4909	4923
24	170566	170913	170641	170449	170818
59	34163	34076	34153	34228	34083
115	398748	398362	398716	399016	398798
205	25771	25892	25793	25736	25900
208	56282	56753	56771	56630	56536

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	19554.00	7.00	6.90 - 7.10	
9	8070.45	8.95	8.90 - 9.10	
24	272052.73	23.90	23.90 - 24.10	
59	55681.03	58.95	58.90 - 59.10	
115	701804.38	115.00	114.90 - 115.10	
205	43699.92	205.00	204.90 - 205.10	
208	95566.28	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.758	0.900	
24	0.65	0.772	0.900	
59	0.64	0.769	0.900	
115	0.59	0.749	0.900	
205	0.61	0.748	0.900	
208	0.61	0.734	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.3 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-85 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	180 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	2642	26418.35	1.351	5.000	
89	231830	2318298.55	1.446	5.000	
205	24368	243682.46	0.896	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2602	2615	2635	2684	2673
89	226516	230903	233865	232732	235134
205	24055	24263	24437	24457	24631

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.3 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	6801	68012.04	1.413	5.000	
89	48660	486604.91	1.750	5.000	
205	12529	125290.96	1.177	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	6669	6752	6800	6883	6903
89	47472	48056	49157	49178	49440
205	12275	12547	12644	12564	12617

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.07 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.3 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

Calibration Blank Report

Sample Name	CalBlank
File Name	026CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 5:54:12 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
11	B	6	No Gas	1351.22	6.4
23	Na	45	He	12519.42	1.9
24	Mg	45	He	46.67	24.7
27	Al	45	He	81.12	13.2
28	Si	45	H2	941.09	13.8
39	K	45	He	20085.14	1.1
40	Ca	45	H2	3396.10	2.3
51	V	89	He	171.12	6.3
52	Cr	89	He	1037.19	2.1
55	Mn	89	He	130.65	7.9
56	Fe	89	H2	2873.52	3.8
59	Co	89	He	17.78	21.7
60	Ni	89	He	732.27	5.4
63	Cu	89	He	761.16	9.4
66	Zn	89	He	325.57	7.2
75	As	89	He	10.33	5.6
78	Se	89	H2	0.67	86.6
88	Sr	89	He	25.56	19.9
95	Mo	89	He	36.67	9.1
107	Ag	89	He	16.67	40.0
111	Cd	89	He	1.11	100.0
118	Sn	159	He	424.47	5.2
121	Sb	159	No Gas	253.62	19.9
137	Ba	159	No Gas	56.73	20.4
182	W	159	No Gas	86.76	52.0
205	Tl	209	No Gas	106.79	44.3
208	Pb	209	No Gas	186.88	29.5
232	Th	209	No Gas	307.02	22.9
238	U	209	No Gas	10.01	100.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	7044915.45	6.0
Sc	45	No Gas	13133308.16	11.1
Sc	45	H2	1716173.87	2.0
Sc	45	He	411218.26	0.7
Ge	72	No Gas	2426863.86	7.7
Ge	72	H2	518471.77	1.2
Ge	72	He	247072.74	0.7
Y	89	H2	9189572.79	1.8
Y	89	He	2049271.57	0.8
Tb	159	No Gas	18495507.50	10.5
Tb	159	He	8005546.34	1.0
Bi	209	No Gas	8721584.14	9.0

Calibration Standard Report

Sample Name	CalStd
File Name	027CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 5:57:53 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	340630.16	0.9
11	B	6	No Gas	227261.75	0.8
23	Na	45	He	7263335.68	0.5
24	Mg	45	He	3845910.64	0.5
27	Al	45	He	144250.24	0.8
28	Si	45	H2	234616.31	1.4
39	K	45	He	3096399.38	1.0
40	Ca	45	H2	21256052.74	1.2
51	V	89	He	249249.84	0.6
52	Cr	89	He	321099.75	0.5
55	Mn	89	He	139969.25	0.8
56	Fe	89	H2	82575095.52	0.5
59	Co	89	He	535538.03	0.7
60	Ni	89	He	148773.81	0.8
63	Cu	89	He	407934.04	0.5
66	Zn	89	He	45965.50	0.8
75	As	89	He	31721.79	1.0
78	Se	89	H2	15493.24	0.6
88	Sr	89	He	161626.93	1.0
95	Mo	89	He	192019.13	0.4
107	Ag	89	He	622192.83	0.5
111	Cd	89	He	74553.80	0.9
118	Sn	159	He	152263.17	1.2
121	Sb	159	No Gas	975301.20	1.1
137	Ba	159	No Gas	373924.83	0.9
182	W	159	No Gas	777544.36	0.8
205	Tl	209	No Gas	1434436.50	1.5
208	Pb	209	No Gas	2022401.04	0.3
232	Th	209	No Gas	2007592.12	1.0
238	U	209	No Gas	1923749.54	0.5

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7385781.35	1.6	7044915.45	104.84	29.5	120.4	
Sc	45	No Gas	14070301.78	1.3	13133308.16	107.13	29.5	120.4	
Sc	45	H2	1711184.08	1.4	1716173.87	99.71	29.5	120.4	
Sc	45	He	412996.87	0.4	411218.26	100.43	29.5	120.4	
Ge	72	No Gas	2518094.36	0.7	2426863.86	103.76	29.5	120.4	
Ge	72	H2	521468.86	1.2	518471.77	100.58	29.5	120.4	
Ge	72	He	250077.79	0.6	247072.74	101.22	29.5	120.4	
Y	89	H2	9101176.48	1.1	9189572.79	99.04	29.5	120.4	
Y	89	He	2072910.99	0.8	2049271.57	101.15	29.5	120.4	
Tb	159	No Gas	19835813.18	1.2	18495507.5	107.25	29.5	120.4	
Tb	159	He	7984785.30	0.4	8005546.34	99.74	29.5	120.4	
Bi	209	No Gas	9048766.88	1.2	8721584.14	103.75	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	028_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:01:33 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.224	ppb	2.8	140081.58	20	101.12	89.6	110.4	
11	B	6	No Gas	19.892	ppb	5.0	92757.79	20	99.46	89.6	110.4	
23	Na	45	He	3938.394	ppb	1.1	2823283.05	4000	98.46	89.6	110.4	
24	Mg	45	He	3978.055	ppb	0.7	1505955.00	4000	99.45	89.6	110.4	
27	Al	45	He	377.956	ppb	0.7	53713.84	400	94.49	89.6	110.4	
28	Si	45	H2	423.047	ppb	1.0	98857.30	400	105.76	89.6	110.4	
39	K	45	He	3937.999	ppb	0.8	1212247.06	4000	98.45	89.6	110.4	
40	Ca	45	H2	3926.520	ppb	0.4	8269780.22	4000	98.16	89.6	110.4	
51	V	89	He	20.222	ppb	0.4	99206.02	20	101.11	89.6	110.4	
52	Cr	89	He	20.371	ppb	0.4	129227.28	20	101.85	89.6	110.4	
55	Mn	89	He	20.395	ppb	0.5	56209.32	20	101.98	89.6	110.4	
56	Fe	89	H2	3987.145	ppb	0.4	32531527.46	4000	99.68	89.6	110.4	
59	Co	89	He	20.462	ppb	0.4	215469.02	20	102.31	89.6	110.4	
60	Ni	89	He	20.571	ppb	1.3	60611.97	20	102.86	89.6	110.4	
63	Cu	89	He	20.728	ppb	0.5	166715.47	20	103.64	89.6	110.4	
66	Zn	89	He	20.735	ppb	1.0	18930.17	20	103.68	89.6	110.4	
75	As	89	He	20.083	ppb	0.7	12532.71	20	100.42	89.6	110.4	
78	Se	89	H2	20.374	ppb	0.7	6237.94	20	101.87	89.6	110.4	
88	Sr	89	He	19.687	ppb	0.9	62582.17	20	98.44	89.6	110.4	
95	Mo	89	He	41.068	ppb	0.5	155068.00	40	102.67	89.6	110.4	
107	Ag	89	He	20.971	ppb	0.4	256577.30	20	104.86	89.6	110.4	
111	Cd	89	He	20.823	ppb	1.1	30526.26	20	104.12	89.6	110.4	
118	Sn	159	He	19.592	ppb	1.3	59419.69	20	97.96	89.6	110.4	
121	Sb	159	No Gas	21.145	ppb	3.0	406624.87	20	105.72	89.6	110.4	
137	Ba	159	No Gas	20.990	ppb	3.0	154720.74	20	104.95	89.6	110.4	
182	W	159	No Gas	20.222	ppb	2.7	309966.78	20	101.11	89.6	110.4	
205	Tl	209	No Gas	22.113	ppb	2.8	637681.64	20	110.56	89.6	110.4	> +/- 10%
208	Pb	209	No Gas	21.024	ppb	1.7	855032.15	20	105.12	89.6	110.4	
232	Th	209	No Gas	20.683	ppb	3.2	834850.06	20	103.42	89.6	110.4	
238	U	209	No Gas	20.898	ppb	2.2	808278.39	20	104.49	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7512439.94	2.8	7044915.45	106.64	29.5	120.4	
Sc	45	No Gas	14023905.91	2.6	13133308.16	106.78	29.5	120.4	
Sc	45	H2	1695049.83	0.5	1716173.87	98.77	29.5	120.4	
Sc	45	He	406500.57	0.9	411218.26	98.85	29.5	120.4	
Ge	72	No Gas	2546947.27	2.6	2426863.86	104.95	29.5	120.4	
Ge	72	H2	520779.46	0.6	518471.77	100.45	29.5	120.4	
Ge	72	He	246603.37	1.5	247072.74	99.81	29.5	120.4	
Y	89	H2	8991857.16	0.1	9189572.79	97.85	29.5	120.4	
Y	89	He	2037880.54	1.2	2049271.57	99.44	29.5	120.4	
Tb	159	No Gas	19554817.76	2.3	18495507.5	105.73	29.5	120.4	
Tb	159	He	7917260.72	1.3	8005546.34	98.9	29.5	120.4	
Bi	209	No Gas	9098173.90	2.1	8721584.14	104.32	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	029_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:04:16 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.005	ppb	20.8	35.55	0.2	
11	B	6	No Gas	0.299	ppb	12.7	2835.94	4	
23	Na	45	He	1.558	ppb	23.7	13551.46	200	
24	Mg	45	He	0.667	ppb	46.8	300.03	20	
27	Al	45	He	0.081	ppb	61.5	92.22	20	
28	Si	45	H2	-0.209	ppb	N/A	881.03	100	
39	K	45	He	2.205	ppb	101.0	20618.91	200	
40	Ca	45	H2	1.205	ppb	0.8	5888.09	20	
51	V	89	He	-0.002	ppb	N/A	160.01	1	
52	Cr	89	He	0.003	ppb	209.9	1050.52	1	
55	Mn	89	He	0.000	ppb	N/A	129.31	0.4	
56	Fe	89	H2	1.485	ppb	1.8	14947.92	20	
59	Co	89	He	0.004	ppb	39.4	57.78	0.2	
60	Ni	89	He	-0.039	ppb	N/A	614.48	0.4	
63	Cu	89	He	0.012	ppb	36.4	852.28	0.6	
66	Zn	89	He	-0.039	ppb	N/A	288.91	2	
75	As	89	He	0.011	ppb	27.9	17.00	1	
78	Se	89	H2	0.028	ppb	7.6	9.17	1	
88	Sr	89	He	0.003	ppb	96.2	34.44	1	
95	Mo	89	He	0.096	ppb	22.2	398.91	1	
107	Ag	89	He	0.008	ppb	20.3	113.34	0.2	
111	Cd	89	He	0.003	ppb	79.6	5.18	0.2	
118	Sn	159	He	0.114	ppb	13.9	763.38	1	
121	Sb	159	No Gas	0.018	ppb	15.2	620.72	0.2	
137	Ba	159	No Gas	0.005	ppb	154.6	96.78	0.4	
182	W	159	No Gas	0.068	ppb	6.6	1141.34	1	
205	Tl	209	No Gas	0.013	ppb	18.5	487.22	0.2	
208	Pb	209	No Gas	0.016	ppb	8.3	864.32	0.2	
232	Th	209	No Gas	0.032	ppb	5.7	1635.27	1	
238	U	209	No Gas	0.011	ppb	13.7	423.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7560579.69	2.9	7044915.45	107.32	29.5	120.4	
Sc	45	No Gas	14130688.73	2.4	13133308.16	107.59	29.5	120.4	
Sc	45	H2	1693754.63	1.0	1716173.87	98.69	29.5	120.4	
Sc	45	He	408474.69	0.6	411218.26	99.33	29.5	120.4	
Ge	72	No Gas	2567260.09	2.6	2426863.86	105.79	29.5	120.4	
Ge	72	H2	509125.66	0.5	518471.77	98.2	29.5	120.4	
Ge	72	He	245603.66	0.3	247072.74	99.41	29.5	120.4	
Y	89	H2	9003688.68	0.9	9189572.79	97.98	29.5	120.4	
Y	89	He	2038976.08	1.0	2049271.57	99.5	29.5	120.4	
Tb	159	No Gas	19731632.21	2.3	18495507.5	106.68	29.5	120.4	
Tb	159	He	7912043.42	0.7	8005546.34	98.83	29.5	120.4	
Bi	209	No Gas	9222018.46	2.2	8721584.14	105.74	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	030LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:06:55 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.216	ppb	8.2	1513.47	0.2	108	79.5	120.4
11	B	6	No Gas	5.289	ppb	3.4	25979.65	4	132.22	79.5	120.4
23	Na	45	He	211.496	ppb	0.5	163223.46	200	105.75	79.5	120.4
24	Mg	45	He	21.426	ppb	1.7	8151.76	20	107.13	79.5	120.4
27	Al	45	He	20.528	ppb	4.4	2991.54	20	102.64	79.5	120.4
28	Si	45	H2	107.897	ppb	2.1	26069.41	100	107.9	79.5	120.4
39	K	45	He	208.966	ppb	1.0	83080.28	200	104.48	79.5	120.4
40	Ca	45	H2	21.814	ppb	0.7	49592.21	20	109.07	79.5	120.4
51	V	89	He	0.992	ppb	2.0	5071.09	1	99.2	79.5	120.4
52	Cr	89	He	0.997	ppb	1.0	7367.94	1	99.7	79.5	120.4
55	Mn	89	He	0.441	ppb	3.3	1355.83	0.4	110.25	79.5	120.4
56	Fe	89	H2	21.267	ppb	1.9	178025.22	20	106.34	79.5	120.4
59	Co	89	He	0.209	ppb	0.8	2235.89	0.2	104.5	79.5	120.4
60	Ni	89	He	0.412	ppb	6.5	1944.65	0.4	103	79.5	120.4
63	Cu	89	He	0.587	ppb	0.7	5507.95	0.6	97.83	79.5	120.4
66	Zn	89	He	2.730	ppb	2.9	2798.16	2	136.5	79.5	120.4
75	As	89	He	1.015	ppb	4.4	648.75	1	101.5	79.5	120.4
78	Se	89	H2	1.065	ppb	1.5	329.99	1	106.5	79.5	120.4
88	Sr	89	He	1.039	ppb	2.4	3357.21	1	103.9	79.5	120.4
95	Mo	89	He	1.034	ppb	3.2	3974.06	1	103.4	79.5	120.4
107	Ag	89	He	0.220	ppb	2.6	2738.16	0.2	110	79.5	120.4
111	Cd	89	He	0.227	ppb	4.4	337.41	0.2	113.5	79.5	120.4
118	Sn	159	He	0.920	ppb	0.7	3222.73	1	92	79.5	120.4
121	Sb	159	No Gas	0.238	ppb	6.2	4792.87	0.2	119	79.5	120.4
137	Ba	159	No Gas	0.428	ppb	2.6	3183.95	0.4	107	79.5	120.4
182	W	159	No Gas	1.034	ppb	2.8	15777.32	1	103.4	79.5	120.4
205	Tl	209	No Gas	0.227	ppb	4.9	6619.10	0.2	113.5	79.5	120.4
208	Pb	209	No Gas	0.219	ppb	3.5	9041.46	0.2	109.5	79.5	120.4
232	Th	209	No Gas	0.175	ppb	2.9	7350.42	0.2	87.5	79.5	120.4
238	U	209	No Gas	0.220	ppb	4.3	8475.71	0.2	110	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag
Failed DoD □ Failed 6020/EPA

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7583302.57	0.9	7044915.45	107.64	29.5	120.4	
Sc	45	No Gas	13880421.29	0.5	13133308.16	105.69	29.5	120.4	
Sc	45	H2	1705886.74	1.0	1716173.87	99.4	29.5	120.4	
Sc	45	He	406273.59	0.4	411218.26	98.8	29.5	120.4	
Ge	72	No Gas	2506681.72	0.1	2426863.86	103.29	29.5	120.4	
Ge	72	H2	528787.47	0.5	518471.77	101.99	29.5	120.4	
Ge	72	He	247451.94	0.6	247072.74	100.15	29.5	120.4	
Y	89	H2	9079419.62	0.8	9189572.79	98.8	29.5	120.4	
Y	89	He	2056070.82	0.8	2049271.57	100.33	29.5	120.4	
Tb	159	No Gas	19358699.16	0.1	18495507.5	104.67	29.5	120.4	
Tb	159	He	7994539.61	0.5	8005546.34	99.86	29.5	120.4	
Bi	209	No Gas	9039029.76	0.9	8721584.14	103.64	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	031ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:09:34 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.000	ppb	86.6	2.22	0.2	-50	50	
B	11	6	No Gas	1.820	ppb	4.7	8937.49	4	-50	100	
Na	23	45	He	95386.022	ppb	0.3	69320802.53	100000	80	120	
Mg	24	45	He	94432.861	ppb	0.5	36393839.73	100000	80	120	
Al	27	45	He	88966.953	ppb	0.7	12853232.17	100000	80	120	
Si	28	45	H2	10.737	ppb	4.3	3370.81	100	-50	50	
K	39	45	He	96264.662	ppb	0.3	29696032.46	100000	80	120	
Ca	40	45	H2	99092.749	ppb	0.5	205899468.05	100000	80	120	
V	51	89	He	0.004	ppb	124.1	191.12	1	-50	100	
Cr	52	89	He	0.255	ppb	3.6	2644.44	0.78	-100	100	
Mn	55	89	He	0.459	ppb	2.8	1397.82	0.0826	100	100	
Fe	56	89	H2	96088.069	ppb	0.0	773524016.77	100000	80	120	
Co	59	89	He	0.292	ppb	2.3	3105.02	0.2	-50	100	
Ni	60	89	He	0.160	ppb	9.1	1197.87	0.114	100	100	
Cu	63	89	He	0.238	ppb	8.0	2671.47	-0.043	100	100	
Zn	66	89	He	0.327	ppb	4.6	618.93	-0.7632	100	100	
As	75	89	He	0.038	ppb	4.0	34.33	1	-50	100	
Se	78	89	H2	0.068	ppb	15.9	21.00	1	-50	100	
Sr	88	89	He	0.761	ppb	2.6	2450.31	0.0578	100	100	
Mo	95	89	He	2015.726	ppb	0.3	7633441.00	2000	80	120	
Ag	107	89	He	0.023	ppb	11.6	300.02	0.2	-50	50	
Cd	111	89	He	0.322	ppb	5.0	475.20	0.268	100	100	
Sn	118	159	He	0.254	ppb	4.4	1138.98	-0.24	100	100	
Sb	121	159	No Gas	0.163	ppb	7.3	3287.43	0.089	100	100	
Ba	137	159	No Gas	0.181	ppb	9.8	1348.26	-0.0794	100	100	
W	182	159	No Gas	0.194	ppb	12.7	2967.00	0.32	-100	100	
Tl	205	209	No Gas	0.004	ppb	14.6	190.21	0.2	-50	50	
Pb	208	209	No Gas	0.085	ppb	3.0	3273.82	0.03	100	100	
Th	232	209	No Gas	0.015	ppb	18.0	834.30	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	84.2	50.06	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6851542.29	2.4	7044915.45	97.26	29.5	120.4	
Sc	45	No Gas	13742505.04	2.4	13133308.16	104.64	29.5	120.4	
Sc	45	H2	1672858.00	1.8	1716173.87	97.48	29.5	120.4	
Sc	45	He	413871.70	1.1	411218.26	100.65	29.5	120.4	
Ge	72	No Gas	2450223.76	2.6	2426863.86	100.96	29.5	120.4	
Ge	72	H2	490428.40	1.3	518471.77	94.59	29.5	120.4	
Ge	72	He	243414.47	1.2	247072.74	98.52	29.5	120.4	
Y	89	H2	8872551.62	2.1	9189572.79	96.55	29.5	120.4	
Y	89	He	2044420.75	1.1	2049271.57	99.76	29.5	120.4	
Tb	159	No Gas	18895298.61	2.8	18495507.5	102.16	29.5	120.4	
Tb	159	He	7609176.28	0.5	8005546.34	95.05	29.5	120.4	
Bi	209	No Gas	8167890.62	3.2	8721584.14	93.65	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	032ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:12:21 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	21.179	ppb	2.1	126727.22	20	79.5	120.4	
11	B	6	No Gas	21.530	ppb	3.3	86642.60	20	79.5	120.4	
23	Na	45	He	97315.266	ppb	0.5	71485396.21	100000	79.5	120.4	
24	Mg	45	He	95652.147	ppb	0.6	37261948.61	100000	79.5	120.4	
27	Al	45	He	89527.562	ppb	0.4	13073820.22	100000	79.5	120.4	
28	Si	45	H2	470.359	ppb	1.8	109890.42	500	79.5	120.4	
39	K	45	He	98044.019	ppb	0.2	30570186.26	100000	79.5	120.4	
40	Ca	45	H2	100823.125	ppb	0.2	212436265.72	100000	79.5	120.4	
51	V	89	He	20.903	ppb	0.5	102883.11	20	79.5	120.4	
52	Cr	89	He	20.656	ppb	0.3	131457.16	20	79.5	120.4	
55	Mn	89	He	20.689	ppb	0.6	57206.24	20	79.5	120.4	
56	Fe	89	H2	99101.751	ppb	0.6	804150588.93	100000	79.5	120.4	
59	Co	89	He	20.428	ppb	0.1	215834.66	20	79.5	120.4	
60	Ni	89	He	19.662	ppb	0.9	58156.26	20	79.5	120.4	
63	Cu	89	He	19.417	ppb	0.8	156733.13	20	79.5	120.4	
66	Zn	89	He	19.474	ppb	0.4	17858.69	20	79.5	120.4	
75	As	89	He	21.278	ppb	0.7	13321.16	20	79.5	120.4	
78	Se	89	H2	20.196	ppb	0.8	6150.58	20	79.5	120.4	
88	Sr	89	He	20.688	ppb	0.9	65976.83	20	79.5	120.4	
95	Mo	89	He	2085.861	ppb	0.1	7900219.74	2000	79.5	120.4	
107	Ag	89	He	18.773	ppb	0.4	230440.37	20	79.5	120.4	
111	Cd	89	He	19.301	ppb	0.2	28388.67	20	79.5	120.4	
118	Sn	159	He	20.748	ppb	0.6	59527.83	20	79.5	120.4	
121	Sb	159	No Gas	20.994	ppb	3.7	389404.81	20	79.5	120.4	
137	Ba	159	No Gas	20.716	ppb	2.5	147322.23	20	79.5	120.4	
182	W	159	No Gas	20.355	ppb	3.5	300928.53	20	79.5	120.4	
205	Tl	209	No Gas	21.670	ppb	4.5	546560.78	20	79.5	120.4	
208	Pb	209	No Gas	21.356	ppb	4.0	759626.74	20	79.5	120.4	
232	Th	209	No Gas	22.310	ppb	3.6	787812.30	20	79.5	120.4	
238	U	209	No Gas	22.031	ppb	4.0	745329.78	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6488816.77	2.5	7044915.45	92.11	29.5	120.4	
Sc	45	No Gas	14118349.52	3.0	13133308.16	107.5	29.5	120.4	
Sc	45	H2	1696455.73	1.1	1716173.87	98.85	29.5	120.4	
Sc	45	He	418332.44	0.1	411218.26	101.73	29.5	120.4	
Ge	72	No Gas	2481225.54	3.2	2426863.86	102.24	29.5	120.4	
Ge	72	H2	483055.95	1.1	518471.77	93.17	29.5	120.4	
Ge	72	He	246294.59	0.8	247072.74	99.69	29.5	120.4	
Y	89	H2	8943480.46	1.4	9189572.79	97.32	29.5	120.4	
Y	89	He	2044690.47	0.6	2049271.57	99.78	29.5	120.4	
Tb	159	No Gas	18868303.05	3.4	18495507.5	102.02	29.5	120.4	
Tb	159	He	7493294.61	0.2	8005546.34	93.6	29.5	120.4	
Bi	209	No Gas	7963806.44	3.9	8721584.14	91.31	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	033_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:15:11 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	104.735	ppb	1.4	643037.76	100	104.74	89.5	110.4	
11	B	6	No Gas	486.555	ppb	2.4	1981976.67	500	97.31	89.5	110.4	
51	V	89	He	1052.120	ppb	6.0	4986005.90	1000	105.21	89.5	110.4	
52	Cr	89	He	2071.466	ppb	6.2	12613526.21	2000	103.57	89.5	110.4	
55	Mn	89	He	2030.687	ppb	5.6	5403491.95	2000	101.53	89.5	110.4	
59	Co	89	He	1050.611	ppb	6.0	10704094.21	1000	105.06	89.5	110.4	
60	Ni	89	He	1070.539	ppb	6.1	3015830.41	1000	107.05	89.5	110.4	
63	Cu	89	He	2053.508	ppb	5.7	15910354.35	2000	102.68	89.5	110.4	
66	Zn	89	He	2037.644	ppb	5.8	1769720.72	2000	101.88	89.5	110.4	
75	As	89	He	1034.888	ppb	5.7	624421.78	1000	103.49	89.5	110.4	
78	Se	89	H2	982.870	ppb	1.1	303556.19	1000	98.29	89.5	110.4	
88	Sr	89	He	1987.784	ppb	5.8	6111921.23	2000	99.39	89.5	110.4	
95	Mo	89	He	1074.944	ppb	6.3	3926084.21	1000	107.49	89.5	110.4	
107	Ag	89	He	113.157	ppb	5.4	1339731.07	100	113.16	89.5	110.4	> +/- 10%
111	Cd	89	He	1047.514	ppb	5.8	1485874.28	1000	104.75	89.5	110.4	
118	Sn	159	He	1015.328	ppb	5.6	2967545.30	1000	101.53	89.5	110.4	
121	Sb	159	No Gas	1021.420	ppb	0.6	19726215.10	1000	102.14	89.5	110.4	
137	Ba	159	No Gas	2004.915	ppb	1.4	14845083.00	2000	100.25	89.5	110.4	
182	W	159	No Gas	966.653	ppb	0.4	14885636.88	1000	96.67	89.5	110.4	
205	Tl	209	No Gas	1020.042	ppb	1.7	29617929.80	1000	102	89.5	110.4	
208	Pb	209	No Gas	1980.374	ppb	0.6	81077798.48	2000	99.02	89.5	110.4	
232	Th	209	No Gas	971.971	ppb	1.8	39497610.80	1000	97.2	89.5	110.4	
238	U	209	No Gas	961.885	ppb	2.1	37463073.00	1000	96.19	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6655518.25	0.4	7044915.45	94.47	29.5	120.4	
Sc	45	No Gas	14185822.72	1.0	13133308.16	108.01	29.5	120.4	
Ge	72	No Gas	2583687.22	0.8	2426863.86	106.46	29.5	120.4	
Tb	159	No Gas	19642592.76	1.7	18495507.5	106.2	29.5	120.4	
Bi	209	No Gas	9158736.33	0.4	8721584.14	105.01	29.5	120.4	
Sc	45	H2	1682566.05	0.9	1716173.87	98.04	29.5	120.4	
Ge	72	H2	498727.81	0.7	518471.77	96.19	29.5	120.4	
Y	89	H2	9072189.16	1.4	9189572.79	98.72	29.5	120.4	
Sc	45	He	390671.94	4.3	411218.26	95	29.5	120.4	
Ge	72	He	241108.03	3.4	247072.74	97.59	29.5	120.4	
Y	89	He	1975491.60	4.6	2049271.57	96.4	29.5	120.4	
Tb	159	He	7696733.15	4.6	8005546.34	96.14	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:17:46 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.074	ppb	57.7	442.26	100	
11	B	6	No Gas	6.368	ppb	15.1	26395.28	1000	
23	Na	45	He	188771.809	ppb	1.4	144584035.61	200000	
24	Mg	45	He	186643.003	ppb	1.3	75816888.31	200000	
27	Al	45	He	182664.096	ppb	1.5	27814825.70	200000	
28	Si	45	H2	9123.488	ppb	0.9	2141940.41	10000	
39	K	45	He	197627.207	ppb	0.5	64248404.91	200000	
40	Ca	45	H2	199626.666	ppb	0.8	426054078.10	200000	
51	V	89	He	0.158	ppb	2.0	991.18	1000	
52	Cr	89	He	1.329	ppb	1.6	9844.98	2000	
55	Mn	89	He	7.428	ppb	0.9	21539.15	2000	
56	Fe	89	H2	97526.021	ppb	0.6	791683528.97	100000	
59	Co	89	He	0.555	ppb	3.9	6141.80	1000	
60	Ni	89	He	1.713	ppb	2.2	5990.41	1000	
63	Cu	89	He	1.026	ppb	4.3	9400.13	2000	
66	Zn	89	He	1.457	ppb	7.5	1707.95	2000	
75	As	89	He	0.223	ppb	9.7	156.69	1000	
78	Se	89	H2	0.410	ppb	9.4	125.50	1000	
88	Sr	89	He	1.163	ppb	2.9	3899.58	2000	
95	Mo	89	He	1.052	ppb	5.6	4204.14	1000	
107	Ag	89	He	0.097	ppb	2.9	1264.55	100	
111	Cd	89	He	0.098	ppb	9.0	151.86	1000	
118	Sn	159	He	1.139	ppb	8.2	3647.29	1000	
121	Sb	159	No Gas	0.855	ppb	42.6	15743.16	1000	
137	Ba	159	No Gas	1.654	ppb	40.7	11553.42	2000	
182	W	159	No Gas	1.512	ppb	20.9	21946.74	1000	
205	Tl	209	No Gas	0.763	ppb	49.4	18764.99	1000	
208	Pb	209	No Gas	1.564	ppb	45.0	54131.27	2000	
232	Th	209	No Gas	0.963	ppb	40.6	33264.42	1000	
238	U	209	No Gas	0.786	ppb	46.9	25796.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6464910.78	0.9	7044915.45	91.77	29.5	120.4	
Sc	45	No Gas	13484754.90	1.2	13133308.16	102.68	29.5	120.4	
Sc	45	H2	1718067.20	3.3	1716173.87	100.11	29.5	120.4	
Sc	45	He	436333.16	2.9	411218.26	106.11	29.5	120.4	
Ge	72	No Gas	2345488.82	0.6	2426863.86	96.65	29.5	120.4	
Ge	72	H2	491427.94	2.7	518471.77	94.78	29.5	120.4	
Ge	72	He	252754.20	2.0	247072.74	102.3	29.5	120.4	
Y	89	H2	8946136.55	2.2	9189572.79	97.35	29.5	120.4	
Y	89	He	2135889.65	2.2	2049271.57	104.23	29.5	120.4	
Tb	159	No Gas	18453137.22	0.4	18495507.5	99.77	29.5	120.4	
Tb	159	He	7498519.54	0.5	8005546.34	93.67	29.5	120.4	
Bi	209	No Gas	7731046.92	0.4	8721584.14	88.64	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	035SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:20:38 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.014	ppb	15.8	91.12	100	
11	B	6	No Gas	0.895	ppb	2.1	5252.26	1000	
23	Na	45	He	120.693	ppb	49.5	103611.15	200000	
24	Mg	45	He	81.084	ppb	84.1	32376.61	200000	
27	Al	45	He	73.113	ppb	89.6	11013.30	200000	
28	Si	45	H2	1.855	ppb	33.8	1425.00	10000	
39	K	45	He	112.736	ppb	61.5	56776.41	200000	
40	Ca	45	H2	44.708	ppb	2.4	102184.61	200000	
51	V	89	He	0.155	ppb	98.4	964.98	1000	
52	Cr	89	He	0.295	ppb	110.7	2998.32	2000	
55	Mn	89	He	0.279	ppb	107.0	932.42	2000	
56	Fe	89	H2	28.271	ppb	1.9	243402.47	100000	
59	Co	89	He	0.149	ppb	102.6	1646.87	1000	
60	Ni	89	He	-0.044	ppb	N/A	623.59	1000	
63	Cu	89	He	0.330	ppb	88.6	3528.67	2000	
66	Zn	89	He	0.275	ppb	108.2	592.33	2000	
75	As	89	He	0.194	ppb	88.5	136.36	1000	
78	Se	89	H2	0.131	ppb	13.7	42.33	1000	
88	Sr	89	He	0.279	ppb	105.3	949.68	2000	
95	Mo	89	He	0.740	ppb	72.4	2942.05	1000	
107	Ag	89	He	0.025	ppb	84.5	335.63	100	
111	Cd	89	He	0.161	ppb	104.2	246.72	1000	
118	Sn	159	He	0.450	ppb	48.3	1772.56	1000	
121	Sb	159	No Gas	0.092	ppb	11.4	1985.72	1000	
137	Ba	159	No Gas	0.141	ppb	5.2	1071.25	2000	
182	W	159	No Gas	0.205	ppb	4.2	3157.24	1000	
205	Tl	209	No Gas	0.081	ppb	6.3	2316.15	1000	
208	Pb	209	No Gas	0.185	ppb	6.7	7349.08	2000	
232	Th	209	No Gas	0.076	ppb	8.0	3230.69	1000	
238	U	209	No Gas	0.068	ppb	2.7	2526.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7106922.87	1.3	7044915.45	100.88	29.5	120.4	
Sc	45	No Gas	14805813.31	0.7	13133308.16	112.73	29.5	120.4	
Sc	45	H2	1777282.73	1.4	1716173.87	103.56	29.5	120.4	
Sc	45	He	427062.42	0.8	411218.26	103.85	29.5	120.4	
Ge	72	No Gas	2630392.96	0.5	2426863.86	108.39	29.5	120.4	
Ge	72	H2	523697.51	0.6	518471.77	101.01	29.5	120.4	
Ge	72	He	257626.38	0.4	247072.74	104.27	29.5	120.4	
Y	89	H2	9374967.55	0.6	9189572.79	102.02	29.5	120.4	
Y	89	He	2107813.08	1.0	2049271.57	102.86	29.5	120.4	
Tb	159	No Gas	19059304.16	1.1	18495507.5	103.05	29.5	120.4	
Tb	159	He	7889075.37	1.0	8005546.34	98.55	29.5	120.4	
Bi	209	No Gas	8658066.61	1.5	8721584.14	99.27	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	036SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:23:12 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.003	ppb	63.9	21.11	100	
11	B	6	No Gas	0.507	ppb	6.2	3515.00	1000	
23	Na	45	He	24.766	ppb	6.0	31124.88	200000	
24	Mg	45	He	3.805	ppb	8.6	1540.21	200000	
27	Al	45	He	3.033	ppb	2.5	528.92	200000	
28	Si	45	H2	-0.068	ppb	N/A	924.40	10000	
39	K	45	He	11.238	ppb	19.5	24089.50	200000	
40	Ca	45	H2	3.951	ppb	7.4	11775.29	200000	
51	V	89	He	0.017	ppb	40.9	258.90	1000	
52	Cr	89	He	0.018	ppb	17.5	1179.17	2000	
55	Mn	89	He	-0.006	ppb	N/A	117.98	2000	
56	Fe	89	H2	2.148	ppb	4.5	20821.91	100000	
59	Co	89	He	0.007	ppb	31.4	93.34	1000	
60	Ni	89	He	-0.189	ppb	N/A	182.23	1000	
63	Cu	89	He	0.029	ppb	20.1	1014.52	2000	
66	Zn	89	He	-0.008	ppb	N/A	325.57	2000	
75	As	89	He	0.018	ppb	78.3	22.33	1000	
78	Se	89	H2	0.048	ppb	19.6	15.83	1000	
88	Sr	89	He	0.006	ppb	26.8	45.56	2000	
95	Mo	89	He	0.153	ppb	14.0	631.15	1000	
107	Ag	89	He	0.003	ppb	17.3	58.89	100	
111	Cd	89	He	0.007	ppb	46.0	12.22	1000	
118	Sn	159	He	0.150	ppb	9.1	875.62	1000	
121	Sb	159	No Gas	0.032	ppb	37.4	897.70	1000	
137	Ba	159	No Gas	0.052	ppb	39.4	450.51	2000	
182	W	159	No Gas	0.072	ppb	5.0	1214.76	1000	
205	Tl	209	No Gas	0.021	ppb	33.0	710.81	1000	
208	Pb	209	No Gas	0.055	ppb	22.4	2439.48	2000	
232	Th	209	No Gas	0.027	ppb	14.0	1394.99	1000	
238	U	209	No Gas	0.019	ppb	35.2	747.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7007000.55	2.2	7044915.45	99.46	29.5	120.4	
Sc	45	No Gas	14563941.76	2.2	13133308.16	110.89	29.5	120.4	
Sc	45	H2	1710438.31	1.2	1716173.87	99.67	29.5	120.4	
Sc	45	He	421051.34	0.8	411218.26	102.39	29.5	120.4	
Ge	72	No Gas	2622797.70	2.3	2426863.86	108.07	29.5	120.4	
Ge	72	H2	507331.99	0.5	518471.77	97.85	29.5	120.4	
Ge	72	He	255045.08	0.6	247072.74	103.23	29.5	120.4	
Y	89	H2	9206520.78	0.4	9189572.79	100.18	29.5	120.4	
Y	89	He	2097279.00	0.5	2049271.57	102.34	29.5	120.4	
Tb	159	No Gas	19901742.48	2.7	18495507.5	107.6	29.5	120.4	
Tb	159	He	7959677.59	0.9	8005546.34	99.43	29.5	120.4	
Bi	209	No Gas	9061253.85	1.8	8721584.14	103.89	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	037_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:25:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	26.016	ppb	2.9	157651.08	25	104.06	89.8	110.2	
11	B	6	No Gas	25.582	ppb	3.7	104067.41	25	102.33	89.8	110.2	
23	Na	45	He	5001.873	ppb	1.5	3686515.92	5000	100.04	89.8	110.2	
24	Mg	45	He	4945.307	ppb	1.4	1926623.29	5000	98.91	89.8	110.2	
27	Al	45	He	484.475	ppb	4.5	70829.56	500	96.9	89.8	110.2	
28	Si	45	H2	464.964	ppb	1.3	111056.75	500	92.99	89.8	110.2	
39	K	45	He	4983.748	ppb	1.4	1573416.05	5000	99.67	89.8	110.2	
40	Ca	45	H2	4842.390	ppb	0.6	10432774.71	5000	96.85	89.8	110.2	
51	V	89	He	25.208	ppb	1.6	126823.73	25	100.83	89.8	110.2	
52	Cr	89	He	25.271	ppb	1.1	164208.27	25	101.08	89.8	110.2	
55	Mn	89	He	25.052	ppb	0.4	70801.51	25	100.21	89.8	110.2	
56	Fe	89	H2	4920.502	ppb	0.2	41384287.83	5000	98.41	89.8	110.2	
59	Co	89	He	25.392	ppb	1.1	274313.53	25	101.57	89.8	110.2	
60	Ni	89	He	25.252	ppb	0.7	76158.92	25	101.01	89.8	110.2	
63	Cu	89	He	25.531	ppb	0.4	210481.71	25	102.12	89.8	110.2	
66	Zn	89	He	25.524	ppb	0.0	23831.05	25	102.1	89.8	110.2	
75	As	89	He	25.185	ppb	0.7	16120.73	25	100.74	89.8	110.2	
78	Se	89	H2	24.718	ppb	0.4	7801.33	25	98.87	89.8	110.2	
88	Sr	89	He	24.145	ppb	1.5	78731.65	25	96.58	89.8	110.2	
95	Mo	89	He	25.585	ppb	1.9	99120.43	25	102.34	89.8	110.2	
107	Ag	89	He	25.071	ppb	0.6	314678.43	25	100.28	89.8	110.2	
111	Cd	89	He	24.903	ppb	1.1	37451.75	25	99.61	89.8	110.2	
118	Sn	159	He	25.039	ppb	1.5	75410.37	25	100.16	89.8	110.2	
121	Sb	159	No Gas	26.706	ppb	4.1	480591.02	25	106.82	89.8	110.2	
137	Ba	159	No Gas	26.469	ppb	3.3	182528.83	25	105.88	89.8	110.2	
182	W	159	No Gas	25.002	ppb	4.1	358650.28	25	100.01	89.8	110.2	
205	Tl	209	No Gas	26.218	ppb	4.6	699860.31	25	104.87	89.8	110.2	
208	Pb	209	No Gas	26.207	ppb	3.6	986089.45	25	104.83	89.8	110.2	
232	Th	209	No Gas	24.697	ppb	5.1	922538.44	25	98.79	89.8	110.2	
238	U	209	No Gas	25.409	ppb	5.7	909632.32	25	101.64	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6566142.37	3.5	7044915.45	93.2	29.5	120.4	
Sc	45	No Gas	13506248.38	4.6	13133308.16	102.84	29.5	120.4	
Sc	45	H2	1734075.46	0.2	1716173.87	101.04	29.5	120.4	
Sc	45	He	418369.18	0.4	411218.26	101.74	29.5	120.4	
Ge	72	No Gas	2470190.52	4.0	2426863.86	101.79	29.5	120.4	
Ge	72	H2	516508.32	0.3	518471.77	99.62	29.5	120.4	
Ge	72	He	255893.56	0.4	247072.74	103.57	29.5	120.4	
Y	89	H2	9269179.48	0.0	9189572.79	100.87	29.5	120.4	
Y	89	He	2090760.04	0.4	2049271.57	102.02	29.5	120.4	
Tb	159	No Gas	18293838.89	4.3	18495507.5	98.91	29.5	120.4	
Tb	159	He	7874746.20	0.1	8005546.34	98.37	29.5	120.4	
Bi	209	No Gas	8416114.78	3.4	8721584.14	96.5	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	038_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:28:24 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.052	ppb	82.2	333.35	0.2	
11	B	6	No Gas	0.624	ppb	12.4	3967.34	4	
23	Na	45	He	15.841	ppb	5.7	24166.95	200	
24	Mg	45	He	3.514	ppb	7.0	1404.62	20	
27	Al	45	He	2.166	ppb	7.7	395.58	20	
28	Si	45	H2	0.243	ppb	161.9	977.79	100	
39	K	45	He	9.291	ppb	27.5	23131.64	200	
40	Ca	45	H2	3.210	ppb	23.5	10039.53	20	
51	V	89	He	0.014	ppb	25.0	243.35	1	
52	Cr	89	He	0.019	ppb	50.7	1169.17	1	
55	Mn	89	He	-0.009	ppb	N/A	106.65	0.4	
56	Fe	89	H2	3.040	ppb	12.9	27899.22	20	
59	Co	89	He	0.010	ppb	11.3	126.67	0.2	
60	Ni	89	He	-0.150	ppb	N/A	295.57	0.4	
63	Cu	89	He	0.019	ppb	40.8	921.18	0.6	
66	Zn	89	He	-0.074	ppb	N/A	261.12	2	
75	As	89	He	0.018	ppb	59.5	22.00	1	
78	Se	89	H2	0.041	ppb	10.4	13.33	1	
88	Sr	89	He	0.013	ppb	48.2	67.78	1	
95	Mo	89	He	0.125	ppb	21.1	515.59	1	
107	Ag	89	He	0.011	ppb	36.7	151.12	0.2	
111	Cd	89	He	0.014	ppb	33.0	21.85	0.2	
118	Sn	159	He	0.180	ppb	18.0	958.96	1	
121	Sb	159	No Gas	0.071	ppb	47.8	1635.30	0.2	
137	Ba	159	No Gas	0.037	ppb	79.4	333.71	0.4	
182	W	159	No Gas	0.130	ppb	22.1	2099.20	1	
205	Tl	209	No Gas	0.055	ppb	50.5	1692.02	0.2	
208	Pb	209	No Gas	0.053	ppb	45.5	2322.72	0.2	
232	Th	209	No Gas	0.165	ppb	45.4	6929.88	1	
238	U	209	No Gas	0.070	ppb	69.6	2690.07	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6914207.51	0.5	7044915.45	98.14	29.5	120.4	
Sc	45	No Gas	14313940.10	0.2	13133308.16	108.99	29.5	120.4	
Sc	45	H2	1679773.33	1.9	1716173.87	97.88	29.5	120.4	
Sc	45	He	414875.44	0.6	411218.26	100.89	29.5	120.4	
Ge	72	No Gas	2582697.22	0.9	2426863.86	106.42	29.5	120.4	
Ge	72	H2	502150.21	1.0	518471.77	96.85	29.5	120.4	
Ge	72	He	251966.45	0.6	247072.74	101.98	29.5	120.4	
Y	89	H2	9075921.75	1.8	9189572.79	98.76	29.5	120.4	
Y	89	He	2069413.11	0.7	2049271.57	100.98	29.5	120.4	
Tb	159	No Gas	19642938.59	0.4	18495507.5	106.2	29.5	120.4	
Tb	159	He	7888365.72	0.6	8005546.34	98.54	29.5	120.4	
Bi	209	No Gas	9007025.14	0.4	8721584.14	103.27	29.5	120.4	

Sample Report

Sample Name SN5107-032

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:31:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.252	ppb	19.5	310.01	100	
11	B	6	No Gas	12.861	ppb	3.3	11765.19	1000	
23	Na	45	He	170.803	ppb	16.3	37304.53	200000	
24	Mg	45	He	282.341	ppb	7.8	21743.40	200000	
27	Al	45	He	9411.085	ppb	0.8	271113.34	200000	
28	Si	45	H2	1843.306	ppb	2.7	84836.04	10000	
39	K	45	He	246.067	ppb	15.3	35273.31	200000	
40	Ca	45	H2	843.902	ppb	0.4	352791.95	200000	
51	V	89	He	9.776	ppb	2.1	9734.83	1000	
52	Cr	89	He	8.601	ppb	3.6	11845.50	2000	
55	Mn	89	He	13.398	ppb	1.4	7488.66	2000	
56	Fe	89	H2	1112.435	ppb	0.6	1822068.02	100000	
59	Co	89	He	0.477	ppb	9.9	1022.35	1000	
60	Ni	89	He	2.613	ppb	3.3	2246.93	1000	
63	Cu	89	He	5.352	ppb	2.6	9315.68	2000	
66	Zn	89	He	14.179	ppb	4.0	2864.85	2000	
75	As	89	He	0.932	ppb	11.0	126.35	1000	
78	Se	89	H2	1.333	ppb	13.5	82.50	1000	
88	Sr	89	He	8.972	ppb	1.3	5721.40	2000	
95	Mo	89	He	1.096	ppb	12.0	863.40	1000	
107	Ag	89	He	3.569	ppb	1.9	8738.66	100	
111	Cd	89	He	0.163	ppb	39.8	48.89	1000	
118	Sn	159	He	39.892	ppb	1.3	24211.38	1000	
121	Sb	159	No Gas	0.254	ppb	5.8	1261.48	1000	
137	Ba	159	No Gas	21.436	ppb	5.2	32151.28	2000	
182	W	159	No Gas	0.427	ppb	7.6	1418.33	1000	
205	Tl	209	No Gas	0.077	ppb	10.4	560.64	1000	
208	Pb	209	No Gas	29.118	ppb	3.7	240258.80	2000	
232	Th	209	No Gas	3.718	ppb	5.5	30748.97	1000	
238	U	209	No Gas	0.676	ppb	6.1	5310.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6667733.96	1.7	7044915.45	94.65	29.5	120.4	
Sc	45	No Gas	14347824.92	0.8	13133308.16	109.25	29.5	120.4	
Sc	45	H2	1667266.27	1.4	1716173.87	97.15	29.5	120.4	
Sc	45	He	412522.35	0.8	411218.26	100.32	29.5	120.4	
Ge	72	No Gas	2573914.48	0.7	2426863.86	106.06	29.5	120.4	
Ge	72	H2	483359.01	1.3	518471.77	93.23	29.5	120.4	
Ge	72	He	248266.97	0.8	247072.74	100.48	29.5	120.4	
Y	89	H2	9012541.08	0.9	9189572.79	98.07	29.5	120.4	
Y	89	He	2035674.38	1.1	2049271.57	99.34	29.5	120.4	
Tb	159	No Gas	19856112.21	1.1	18495507.5	107.36	29.5	120.4	
Tb	159	He	7842148.22	0.7	8005546.34	97.96	29.5	120.4	
Bi	209	No Gas	9220961.26	0.6	8721584.14	105.73	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG13IMW1
File Name	040_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:33:36 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.004	ppb	42.2	4.44	0.5	
B	11	6	No Gas	3.700	ppb	7.9	4191.87	10	
Na	23	45	He	81.692	ppb	3.7	23986.75	500	
Mg	24	45	He	11.136	ppb	6.6	886.76	50	
Al	27	45	He	48.320	ppb	5.2	1447.90	50	
Si	28	45	H2	15.471	ppb	22.2	1625.24	250	
K	39	45	He	29.262	ppb	46.6	21576.55	500	
Ca	40	45	H2	16.295	ppb	2.1	10085.06	50	
V	51	89	He	0.255	ppb	41.4	410.02	2.5	
Cr	52	89	He	0.271	ppb	18.8	1345.16	2.5	
Mn	55	89	He	1.220	ppb	3.1	785.21	1	PB 6020 Fails DoD
Fe	56	89	H2	6.525	ppb	6.4	13504.98	50	
Co	59	89	He	0.034	ppb	37.4	86.67	0.5	
Ni	60	89	He	-0.698	ppb	N/A	315.57	1	
Cu	63	89	He	0.636	ppb	12.6	1739.07	1.5	
Zn	66	89	He	1.147	ppb	13.3	518.92	5	
As	75	89	He	0.103	ppb	19.8	22.67	2.5	
Se	78	89	H2	0.111	ppb	7.6	7.50	2.5	
Sr	88	89	He	0.024	ppb	61.9	40.00	2.5	
Mo	95	89	He	0.271	ppb	19.7	235.57	2.5	
Ag	107	89	He	0.018	ppb	23.0	58.89	0.5	
Cd	111	89	He	0.017	ppb	28.5	5.93	0.5	
Sn	118	159	He	0.999	ppb	16.0	987.85	2.5	
Sb	121	159	No Gas	0.074	ppb	21.8	563.98	0.5	
Ba	137	159	No Gas	0.065	ppb	10.0	160.18	1	
W	182	159	No Gas	0.114	ppb	14.1	450.51	2.5	
Tl	205	209	No Gas	0.019	ppb	75.7	223.59	0.5	
Pb	208	209	No Gas	0.123	ppb	16.5	1201.38	0.5	
Th	232	209	No Gas	0.131	ppb	19.5	1388.30	2.5	
U	238	209	No Gas	0.014	ppb	26.6	116.80	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6506324.01	1.3	7044915.45	92.35	29.5	120.4	
Sc	45	No Gas	14252245.39	0.8	13133308.16	108.52	29.5	120.4	
Sc	45	H2	1673263.57	0.8	1716173.87	97.5	29.5	120.4	
Sc	45	He	405801.01	2.7	411218.26	98.68	29.5	120.4	
Ge	72	No Gas	2566768.60	0.6	2426863.86	105.76	29.5	120.4	
Ge	72	H2	487989.88	0.6	518471.77	94.12	29.5	120.4	
Ge	72	He	246214.97	2.2	247072.74	99.65	29.5	120.4	
Y	89	H2	9022690.91	0.7	9189572.79	98.18	29.5	120.4	
Y	89	He	1998620.79	2.6	2049271.57	97.53	29.5	120.4	
Tb	159	No Gas	20057196.37	0.2	18495507.5	108.44	29.5	120.4	
Tb	159	He	7672425.51	3.5	8005546.34	95.84	29.5	120.4	
Bi	209	No Gas	9171504.10	0.4	8721584.14	105.16	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG13IMW1
File Name	041LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:36:14 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.319	ppb	4.2	61947.23	50	20.53	79.5	120.4	
B	11	6	No Gas	494.723	ppb	3.7	397192.26	500	19.79	79.5	120.4	
Na	23	45	He	7300.485	ppb	1.0	1070902.13	7500	19.47	79.5	120.4	
Mg	24	45	He	5168.264	ppb	1.0	397452.89	5000	20.67	79.5	120.4	
Al	27	45	He	1813.690	ppb	0.5	52362.39	2000	18.14	79.5	120.4	
Si	28	45	H2	978.730	ppb	6.6	43862.67	1000	19.57	0	200	
K	39	45	He	10097.371	ppb	0.2	641214.82	10000	20.19	79.5	120.4	
Ca	40	45	H2	2549.553	ppb	7.9	1020773.40	2500	20.4	79.5	120.4	
V	51	89	He	522.902	ppb	0.2	510097.19	500	20.92	79.5	120.4	
Cr	52	89	He	211.829	ppb	0.6	266461.92	200	21.18	79.5	120.4	
Mn	55	89	He	516.027	ppb	0.1	282654.04	500	20.64	79.5	120.4	
Fe	56	89	H2	1067.658	ppb	7.4	1683114.49	1000	21.35	79.5	120.4	
Co	59	89	He	522.161	ppb	0.4	1094826.83	500	20.89	79.5	120.4	
Ni	60	89	He	533.715	ppb	0.7	310073.49	500	21.35	79.5	120.4	
Cu	63	89	He	264.819	ppb	0.4	422939.72	250	21.19	79.5	120.4	
Zn	66	89	He	512.597	ppb	0.6	91917.80	500	20.5	79.5	120.4	
As	75	89	He	105.266	ppb	0.6	13079.23	100	21.05	79.5	120.4	
Se	78	89	H2	101.175	ppb	6.5	5978.01	100	20.24	79.5	120.4	
Sr	88	89	He	489.132	ppb	0.3	309496.52	500	19.57	79.5	120.4	
Mo	95	89	He	106.139	ppb	0.3	79817.47	100	21.23	79.5	120.4	
Ag	107	89	He	53.229	ppb	0.3	129685.35	50	21.29	79.5	120.4	
Cd	111	89	He	253.936	ppb	0.4	74122.01	250	20.31	79.5	120.4	
Sn	118	159	He	498.713	ppb	0.6	296163.70	500	19.95	79.5	120.4	
Sb	121	159	No Gas	101.554	ppb	3.0	402540.90	100	20.31	79.5	120.4	
Ba	137	159	No Gas	1956.273	ppb	2.7	2971139.34	2000	19.56	79.5	120.4	
W	182	159	No Gas	97.210	ppb	3.2	307115.90	100	19.44	79.5	120.4	
Tl	205	209	No Gas	104.223	ppb	3.5	608000.94	100	20.84	79.5	120.4	
[Pb]	206	209	No Gas	100.359	ppb	3.8	209697.04	100	20.07	79.5	120.4	
[Pb]	207	209	No Gas	99.094	ppb	2.8	181006.44	100	19.82	79.5	120.4	
Pb	208	209	No Gas	101.006	ppb	3.0	830894.58	100	20.2	79.5	120.4	
Th	232	209	No Gas	98.739	ppb	4.7	806304.91	100	19.75	79.5	120.4	
U	238	209	No Gas	98.302	ppb	4.4	769085.59	100	19.66	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6543468.08	0.6	7044915.45	92.88	29.5	120.4	
Sc	45	No Gas	14386818.81	0.6	13133308.16	109.54	29.5	120.4	
Sc	45	H2	1611862.00	6.1	1716173.87	93.92	29.5	120.4	
Sc	45	He	412876.99	0.6	411218.26	100.4	29.5	120.4	
Ge	72	No Gas	2594021.66	0.1	2426863.86	106.89	29.5	120.4	
Ge	72	H2	472833.14	5.1	518471.77	91.2	29.5	120.4	
Ge	72	He	249724.63	1.0	247072.74	101.07	29.5	120.4	
Y	89	H2	8696362.93	5.3	9189572.79	94.63	29.5	120.4	
Y	89	He	2028958.06	0.5	2049271.57	99.01	29.5	120.4	
Tb	159	No Gas	20142218.59	0.7	18495507.5	108.9	29.5	120.4	
Tb	159	He	7796333.42	1.2	8005546.34	97.39	29.5	120.4	
Bi	209	No Gas	9199832.01	0.4	8721584.14	105.48	29.5	120.4	

Sample Report

Sample Name	SN5589-006
File Name	042SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:38:47 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	69.9	70.00	100	
11	B	6	No Gas	35.359	ppb	1.3	29159.14	1000	
23	Na	45	He	91123.091	ppb	2.4	13136725.01	200000	
24	Mg	45	He	4741.212	ppb	1.8	362271.37	200000	
27	Al	45	He	24.279	ppb	7.2	776.73	200000	
28	Si	45	H2	2613.103	ppb	1.5	119484.98	10000	
39	K	45	He	1763.983	ppb	3.6	127812.58	200000	
40	Ca	45	H2	14662.942	ppb	0.8	6054484.63	200000	
51	V	89	He	0.359	ppb	11.3	515.59	1000	
52	Cr	89	He	0.410	ppb	15.8	1527.14	2000	
55	Mn	89	He	1.178	ppb	2.2	767.88	2000	
56	Fe	89	H2	17.871	ppb	7.6	31882.12	100000	
59	Co	89	He	0.373	ppb	8.6	791.19	1000	
60	Ni	89	He	1.488	ppb	8.1	1573.48	1000	
63	Cu	89	He	3.071	ppb	6.9	5599.10	2000	
66	Zn	89	He	2.904	ppb	13.5	833.39	2000	
75	As	89	He	1.150	ppb	11.6	151.69	1000	
78	Se	89	H2	0.385	ppb	11.8	24.17	1000	
88	Sr	89	He	69.195	ppb	2.2	43429.68	2000	
95	Mo	89	He	0.361	ppb	8.5	305.57	1000	
107	Ag	89	He	0.038	ppb	32.8	107.78	100	
111	Cd	89	He	0.101	ppb	12.5	30.37	1000	
118	Sn	159	He	0.895	ppb	2.6	938.96	1000	
121	Sb	159	No Gas	0.266	ppb	25.8	1334.90	1000	
137	Ba	159	No Gas	7.575	ppb	11.1	11634.76	2000	
182	W	159	No Gas	0.311	ppb	12.7	1081.25	1000	
205	Tl	209	No Gas	0.139	ppb	23.6	921.07	1000	
208	Pb	209	No Gas	0.530	ppb	5.1	4535.44	2000	
232	Th	209	No Gas	0.618	ppb	29.5	5350.56	1000	
238	U	209	No Gas	0.169	ppb	42.1	1328.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6455249.66	1.0	7044915.45	91.63	29.5	120.4	
Sc	45	No Gas	14469245.61	1.1	13133308.16	110.17	29.5	120.4	
Sc	45	H2	1661333.83	0.9	1716173.87	96.8	29.5	120.4	
Sc	45	He	410308.23	1.9	411218.26	99.78	29.5	120.4	
Ge	72	No Gas	2599686.05	0.7	2426863.86	107.12	29.5	120.4	
Ge	72	H2	489400.92	1.2	518471.77	94.39	29.5	120.4	
Ge	72	He	249456.09	1.3	247072.74	100.96	29.5	120.4	
Y	89	H2	8966643.31	1.2	9189572.79	97.57	29.5	120.4	
Y	89	He	2012127.11	2.0	2049271.57	98.19	29.5	120.4	
Tb	159	No Gas	20265964.84	0.4	18495507.5	109.57	29.5	120.4	
Tb	159	He	7754021.90	2.0	8005546.34	96.86	29.5	120.4	
Bi	209	No Gas	9157347.23	1.3	8721584.14	105	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG21IMW2
File Name	043_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:41:26 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.056	ppb	139.1	66.67	0.5	
B	11	6	No Gas	5.837	ppb	11.3	5874.74	10	
Na	23	45	He	88.185	ppb	5.2	25865.19	500	
Mg	24	45	He	21.150	ppb	3.3	1706.89	50	
Al	27	45	He	16.135	ppb	8.1	557.81	50	
Si	28	45	H2	22.180	ppb	2.4	1918.94	250	
K	39	45	He	16.297	ppb	41.6	21594.88	500	
Ca	40	45	H2	26.388	ppb	2.7	14177.52	50	
V	51	89	He	0.245	ppb	12.7	415.58	2.5	
Cr	52	89	He	0.339	ppb	29.3	1476.48	2.5	
Mn	55	89	He	0.174	ppb	18.7	228.63	1	
Fe	56	89	H2	12.858	ppb	2.8	23713.06	50	
Co	59	89	He	0.066	ppb	19.3	157.79	0.5	
Ni	60	89	He	-0.488	ppb	N/A	450.02	1	
Cu	63	89	He	0.445	ppb	14.6	1489.02	1.5	
Zn	66	89	He	13.260	ppb	6.3	2738.14	5	PB 6020 Fails DoD□ PB 6020 Fails Non-DoD
As	75	89	He	0.115	ppb	29.4	25.00	2.5	
Se	78	89	H2	0.115	ppb	36.8	7.67	2.5	
Sr	88	89	He	0.098	ppb	27.8	88.89	2.5	
Mo	95	89	He	0.315	ppb	19.5	277.79	2.5	
Ag	107	89	He	0.020	ppb	31.4	66.67	0.5	
Cd	111	89	He	0.040	ppb	26.3	12.96	0.5	
Sn	118	159	He	0.845	ppb	14.7	924.51	2.5	
Sb	121	159	No Gas	0.302	ppb	107.0	1475.30	0.5	
Ba	137	159	No Gas	1.145	ppb	149.2	1799.73	1	PB 6020 Fails DoD
W	182	159	No Gas	0.288	ppb	112.2	1001.29	2.5	
Tl	205	209	No Gas	0.244	ppb	135.6	1539.09	0.5	
Pb	208	209	No Gas	0.446	ppb	130.7	3872.60	0.5	
Th	232	209	No Gas	0.272	ppb	126.9	2554.33	2.5	
U	238	209	No Gas	0.257	ppb	142.5	2026.89	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6492701.38	2.0	7044915.45	92.16	29.5	120.4	
Sc	45	No Gas	14447610.43	1.5	13133308.16	110.01	29.5	120.4	
Sc	45	H2	1661177.72	2.3	1716173.87	96.8	29.5	120.4	
Sc	45	He	421230.97	0.6	411218.26	102.43	29.5	120.4	
Ge	72	No Gas	2602279.87	2.3	2426863.86	107.23	29.5	120.4	
Ge	72	H2	485479.11	2.2	518471.77	93.64	29.5	120.4	
Ge	72	He	252454.90	0.8	247072.74	102.18	29.5	120.4	
Y	89	H2	8962255.27	1.7	9189572.79	97.53	29.5	120.4	
Y	89	He	2064435.35	0.7	2049271.57	100.74	29.5	120.4	
Tb	159	No Gas	20239453.03	1.3	18495507.5	109.43	29.5	120.4	
Tb	159	He	7882111.20	0.5	8005546.34	98.46	29.5	120.4	
Bi	209	No Gas	9267067.37	1.3	8721584.14	106.25	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG21IMW2
File Name	044LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:43:59 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	54.591	ppb	3.8	65984.87	50	21.84	79.5	120.4	
B	11	6	No Gas	515.290	ppb	3.7	414236.38	500	20.61	79.5	120.4	
Na	23	45	He	7683.974	ppb	0.8	1130411.50	7500	20.49	79.5	120.4	
Mg	24	45	He	5374.544	ppb	1.0	414752.40	5000	21.5	79.5	120.4	
Al	27	45	He	1917.749	ppb	1.4	55551.30	2000	19.18	79.5	120.4	
Si	28	45	H2	939.260	ppb	5.2	45202.06	1000	18.79	0	200	
K	39	45	He	10629.949	ppb	0.2	676313.56	10000	21.26	79.5	120.4	
Ca	40	45	H2	2516.465	ppb	5.3	1081719.45	2500	20.13	79.5	120.4	
V	51	89	He	542.506	ppb	0.7	530578.12	500	21.7	79.5	120.4	
Cr	52	89	He	221.374	ppb	0.1	279150.36	200	22.14	79.5	120.4	
Mn	55	89	He	538.123	ppb	0.6	295513.36	500	21.52	79.5	120.4	
Fe	56	89	H2	1020.745	ppb	5.1	1714689.46	1000	20.41	79.5	120.4	
Co	59	89	He	546.016	ppb	0.6	1147784.97	500	21.84	79.5	120.4	
Ni	60	89	He	555.199	ppb	0.7	323360.77	500	22.21	79.5	120.4	
Cu	63	89	He	274.077	ppb	0.4	438825.25	250	21.93	79.5	120.4	
Zn	66	89	He	548.256	ppb	0.3	98542.57	500	21.93	79.5	120.4	
As	75	89	He	107.518	ppb	0.6	13393.91	100	21.5	79.5	120.4	
Se	78	89	H2	99.182	ppb	3.3	6244.79	100	19.84	79.5	120.4	
Sr	88	89	He	509.806	ppb	0.7	323416.66	500	20.39	79.5	120.4	
Mo	95	89	He	109.688	ppb	0.8	82701.24	100	21.94	79.5	120.4	
Ag	107	89	He	55.138	ppb	0.3	134683.30	50	22.06	79.5	120.4	
Cd	111	89	He	265.119	ppb	0.5	77585.56	250	21.21	79.5	120.4	
Sn	118	159	He	523.989	ppb	1.0	310677.74	500	20.96	79.5	120.4	
Sb	121	159	No Gas	107.655	ppb	3.9	427469.75	100	21.53	79.5	120.4	
Ba	137	159	No Gas	2081.241	ppb	3.9	3166691.45	2000	20.81	79.5	120.4	
W	182	159	No Gas	103.247	ppb	3.7	326765.30	100	20.65	79.5	120.4	
Tl	205	209	No Gas	111.169	ppb	3.6	648033.32	100	22.23	79.5	120.4	
[Pb]	206	209	No Gas	106.375	ppb	2.3	222118.99	100	21.28	79.5	120.4	
[Pb]	207	209	No Gas	105.211	ppb	3.1	192031.84	100	21.04	79.5	120.4	
Pb	208	209	No Gas	107.319	ppb	2.8	882185.12	100	21.46	79.5	120.4	
Th	232	209	No Gas	105.997	ppb	4.0	864844.57	100	21.2	79.5	120.4	
U	238	209	No Gas	105.479	ppb	3.8	824569.42	100	21.1	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6554302.87	1.9	7044915.45	93.04	29.5	120.4	
Sc	45	No Gas	14373305.82	2.0	13133308.16	109.44	29.5	120.4	
Sc	45	H2	1727142.73	3.5	1716173.87	100.64	29.5	120.4	
Sc	45	He	414317.02	1.0	411218.26	100.75	29.5	120.4	
Ge	72	No Gas	2599473.94	2.0	2426863.86	107.11	29.5	120.4	
Ge	72	H2	491870.01	1.8	518471.77	94.87	29.5	120.4	
Ge	72	He	250141.94	0.7	247072.74	101.24	29.5	120.4	
Y	89	H2	9252990.48	3.6	9189572.79	100.69	29.5	120.4	
Y	89	He	2034239.67	0.7	2049271.57	99.27	29.5	120.4	
Tb	159	No Gas	20188542.76	1.8	18495507.5	109.15	29.5	120.4	
Tb	159	He	7784565.09	1.0	8005546.34	97.24	29.5	120.4	
Bi	209	No Gas	9194910.63	1.3	8721584.14	105.43	29.5	120.4	

Sample Report

Sample Name SN5832-001

File Name 045SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:46:36 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.059	ppb	45.5	70.00	100	
11	B	6	No Gas	2089.943	ppb	3.3	1647698.15	1000	
23	Na	45	He	1239637.327	ppb	0.5	178312559.61	200000	>LDR
24	Mg	45	He	250535.345	ppb	0.2	19112676.24	200000	
27	Al	45	He	15.308	ppb	31.0	517.81	200000	
28	Si	45	H2	8467.853	ppb	3.9	395112.73	10000	
39	K	45	He	8275.747	ppb	1.1	525000.10	200000	
40	Ca	45	H2	480150.849	ppb	4.5	203244979.19	200000	
51	V	89	He	1.228	ppb	2.9	1350.11	1000	
52	Cr	89	He	0.866	ppb	8.2	2086.45	2000	
55	Mn	89	He	28.237	ppb	1.1	15402.28	2000	
56	Fe	89	H2	357.858	ppb	89.3	602316.95	100000	
59	Co	89	He	0.605	ppb	7.8	1271.26	1000	
60	Ni	89	He	8.045	ppb	2.7	5323.44	1000	
63	Cu	89	He	1.441	ppb	3.2	3013.77	2000	
66	Zn	89	He	19.001	ppb	0.8	3672.84	2000	
75	As	89	He	0.415	ppb	9.3	61.01	1000	
78	Se	89	H2	1.731	ppb	60.2	108.66	1000	
88	Sr	89	He	7061.467	ppb	0.4	4414204.03	2000	
95	Mo	89	He	0.590	ppb	8.6	474.47	1000	
107	Ag	89	He	0.034	ppb	40.8	98.89	100	
111	Cd	89	He	0.167	ppb	14.0	49.26	1000	
118	Sn	159	He	1.426	ppb	0.3	1233.44	1000	
121	Sb	159	No Gas	0.261	ppb	24.9	1238.12	1000	
137	Ba	159	No Gas	17.662	ppb	7.7	25436.59	2000	
182	W	159	No Gas	0.258	ppb	35.0	857.66	1000	
205	Tl	209	No Gas	0.166	ppb	41.3	964.47	1000	
208	Pb	209	No Gas	2.028	ppb	5.9	15037.02	2000	
232	Th	209	No Gas	0.767	ppb	16.9	5868.02	1000	
238	U	209	No Gas	8.586	ppb	4.8	59873.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6440142.26	0.2	7044915.45	91.42	29.5	120.4	
Sc	45	No Gas	13927007.35	0.8	13133308.16	106.04	29.5	120.4	
Sc	45	H2	1706654.60	5.2	1716173.87	99.45	29.5	120.4	
Sc	45	He	409613.76	1.1	411218.26	99.61	29.5	120.4	
Ge	72	No Gas	2447739.32	1.4	2426863.86	100.86	29.5	120.4	
Ge	72	H2	485532.78	3.5	518471.77	93.65	29.5	120.4	
Ge	72	He	240092.94	1.0	247072.74	97.18	29.5	120.4	
Y	89	H2	9025086.33	3.9	9189572.79	98.21	29.5	120.4	
Y	89	He	2004649.59	1.4	2049271.57	97.82	29.5	120.4	
Tb	159	No Gas	19061624.99	0.4	18495507.5	103.06	29.5	120.4	
Tb	159	He	7637357.04	0.8	8005546.34	95.4	29.5	120.4	
Bi	209	No Gas	8199175.45	0.4	8721584.14	94.01	29.5	120.4	

Sample Report

Sample Name SN5832-002

File Name 046SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:49:16 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.025	ppb	43.0	31.11	100	
11	B	6	No Gas	2100.094	ppb	2.7	1712256.35	1000	
23	Na	45	He	1218876.339	ppb	2.8	174844456.63	200000	>LDR
24	Mg	45	He	218174.589	ppb	3.1	16598072.11	200000	
27	Al	45	He	87.795	ppb	6.0	2583.66	200000	
28	Si	45	H2	8445.267	ppb	1.2	393258.10	10000	
39	K	45	He	11562.436	ppb	2.1	723663.78	200000	
40	Ca	45	H2	560959.629	ppb	0.3	237050945.36	200000	
51	V	89	He	1.520	ppb	6.5	1621.27	1000	
52	Cr	89	He	6.076	ppb	3.4	8481.69	2000	
55	Mn	89	He	241.352	ppb	2.3	129853.27	2000	
56	Fe	89	H2	6637.265	ppb	1.4	10817037.18	100000	
59	Co	89	He	2.714	ppb	10.1	5597.07	1000	
60	Ni	89	He	10.877	ppb	1.7	6903.07	1000	
63	Cu	89	He	1.833	ppb	3.6	3608.38	2000	
66	Zn	89	He	21.126	ppb	3.4	4021.84	2000	
75	As	89	He	0.698	ppb	12.2	95.01	1000	
78	Se	89	H2	0.216	ppb	20.3	13.83	1000	
88	Sr	89	He	9244.131	ppb	2.4	5741741.30	2000	
95	Mo	89	He	0.836	ppb	10.0	652.26	1000	
107	Ag	89	He	0.022	ppb	50.1	68.89	100	
111	Cd	89	He	0.103	ppb	40.8	30.37	1000	
118	Sn	159	He	1.203	ppb	20.0	1093.42	1000	
121	Sb	159	No Gas	0.137	ppb	16.2	770.88	1000	
137	Ba	159	No Gas	19.511	ppb	2.9	28091.33	2000	
182	W	159	No Gas	0.077	ppb	26.4	317.03	1000	
205	Tl	209	No Gas	0.013	ppb	45.5	166.86	1000	
208	Pb	209	No Gas	3.445	ppb	5.1	25525.25	2000	
232	Th	209	No Gas	0.069	ppb	20.8	794.27	1000	
238	U	209	No Gas	5.948	ppb	3.3	41646.53	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6660004.45	0.4	7044915.45	94.54	29.5	120.4	
Sc	45	No Gas	13978706.34	0.8	13133308.16	106.44	29.5	120.4	
Sc	45	H2	1701173.96	2.2	1716173.87	99.13	29.5	120.4	
Sc	45	He	408692.27	2.5	411218.26	99.39	29.5	120.4	
Ge	72	No Gas	2449565.76	0.4	2426863.86	100.94	29.5	120.4	
Ge	72	H2	484823.13	1.8	518471.77	93.51	29.5	120.4	
Ge	72	He	241518.38	1.5	247072.74	97.75	29.5	120.4	
Y	89	H2	8979714.19	1.9	9189572.79	97.72	29.5	120.4	
Y	89	He	1992545.47	2.2	2049271.57	97.23	29.5	120.4	
Tb	159	No Gas	19053155.55	1.1	18495507.5	103.02	29.5	120.4	
Tb	159	He	7574593.98	2.0	8005546.34	94.62	29.5	120.4	
Bi	209	No Gas	8230503.55	0.8	8721584.14	94.37	29.5	120.4	

Sample Report

Sample Name SN5832-003

File Name 047SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:52:01 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.013	ppb	49.6	15.56	100	
11	B	6	No Gas	2158.716	ppb	1.6	1718515.77	1000	
23	Na	45	He	1216033.247	ppb	0.5	174780340.85	200000	>LDR
24	Mg	45	He	219826.496	ppb	0.6	16757459.47	200000	
27	Al	45	He	49.663	ppb	4.9	1500.14	200000	
28	Si	45	H2	8756.639	ppb	7.4	389079.47	10000	
39	K	45	He	11602.193	ppb	0.4	727440.97	200000	
40	Ca	45	H2	594448.458	ppb	8.1	239613876.43	200000	
51	V	89	He	0.954	ppb	7.3	1081.19	1000	
52	Cr	89	He	3.447	ppb	1.8	5256.04	2000	
55	Mn	89	He	255.652	ppb	0.3	137723.12	2000	
56	Fe	89	H2	7483.803	ppb	8.2	11758924.03	100000	
59	Co	89	He	2.797	ppb	2.6	5781.61	1000	
60	Ni	89	He	9.239	ppb	2.0	5977.05	1000	
63	Cu	89	He	1.417	ppb	4.5	2961.53	2000	
66	Zn	89	He	20.365	ppb	1.0	3894.01	2000	
75	As	89	He	0.734	ppb	10.8	99.68	1000	
78	Se	89	H2	0.216	ppb	10.6	13.33	1000	
88	Sr	89	He	9132.709	ppb	0.7	5680310.33	2000	
95	Mo	89	He	0.765	ppb	2.8	601.14	1000	
107	Ag	89	He	0.005	ppb	60.0	28.89	100	
111	Cd	89	He	0.054	ppb	26.3	16.67	1000	
118	Sn	159	He	0.998	ppb	5.3	976.74	1000	
121	Sb	159	No Gas	0.125	ppb	23.5	734.18	1000	
137	Ba	159	No Gas	19.380	ppb	1.9	28137.73	2000	
182	W	159	No Gas	0.097	ppb	9.8	380.43	1000	
205	Tl	209	No Gas	0.024	ppb	54.0	223.59	1000	
208	Pb	209	No Gas	1.791	ppb	5.0	13371.08	2000	
232	Th	209	No Gas	0.056	ppb	40.6	697.48	1000	
238	U	209	No Gas	6.133	ppb	1.3	42986.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6502697.83	0.9	7044915.45	92.3	29.5	120.4	
Sc	45	No Gas	14088419.70	2.5	13133308.16	107.27	29.5	120.4	
Sc	45	H2	1627801.96	6.0	1716173.87	94.85	29.5	120.4	
Sc	45	He	409312.28	0.6	411218.26	99.54	29.5	120.4	
Ge	72	No Gas	2466461.35	1.2	2426863.86	101.63	29.5	120.4	
Ge	72	H2	468026.98	4.2	518471.77	90.27	29.5	120.4	
Ge	72	He	241851.77	0.9	247072.74	97.89	29.5	120.4	
Y	89	H2	8684486.37	6.0	9189572.79	94.5	29.5	120.4	
Y	89	He	1994574.85	0.6	2049271.57	97.33	29.5	120.4	
Tb	159	No Gas	19211932.35	2.2	18495507.5	103.87	29.5	120.4	
Tb	159	He	7575364.26	0.2	8005546.34	94.63	29.5	120.4	
Bi	209	No Gas	8240723.56	1.5	8721584.14	94.49	29.5	120.4	

Sample Report

Sample Name SN5832-004

File Name 048SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 6:54:41 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.010	ppb	69.4	12.22	100	
11	B	6	No Gas	693.479	ppb	4.8	566606.59	1000	
23	Na	45	He	365627.903	ppb	0.8	52960428.15	200000	
24	Mg	45	He	46868.886	ppb	0.6	3600136.82	200000	
27	Al	45	He	21.219	ppb	5.2	692.27	200000	
28	Si	45	H2	7397.892	ppb	1.4	346655.75	10000	
39	K	45	He	3648.410	ppb	0.6	244302.92	200000	
40	Ca	45	H2	164400.438	ppb	1.3	69876376.74	200000	
51	V	89	He	1.062	ppb	7.5	1202.31	1000	
52	Cr	89	He	0.751	ppb	9.9	1963.79	2000	
55	Mn	89	He	65.623	ppb	0.8	35979.83	2000	
56	Fe	89	H2	200.158	ppb	0.1	332125.13	100000	
59	Co	89	He	0.540	ppb	6.5	1146.80	1000	
60	Ni	89	He	0.242	ppb	21.5	863.40	1000	
63	Cu	89	He	1.103	ppb	2.9	2506.99	2000	
66	Zn	89	He	45.272	ppb	2.1	8392.82	2000	
75	As	89	He	0.547	ppb	11.1	78.01	1000	
78	Se	89	H2	0.440	ppb	9.7	27.83	1000	
88	Sr	89	He	1804.996	ppb	0.5	1139544.83	2000	
95	Mo	89	He	0.806	ppb	12.1	641.15	1000	
107	Ag	89	He	0.006	ppb	88.6	30.00	100	
111	Cd	89	He	0.031	ppb	12.4	10.00	1000	
118	Sn	159	He	0.769	ppb	9.2	868.95	1000	
121	Sb	159	No Gas	0.193	ppb	11.9	1044.55	1000	
137	Ba	159	No Gas	52.971	ppb	5.0	80943.02	2000	
182	W	159	No Gas	0.056	ppb	28.2	270.31	1000	
205	Tl	209	No Gas	0.006	ppb	125.0	143.49	1000	
208	Pb	209	No Gas	0.121	ppb	22.8	1161.32	2000	
232	Th	209	No Gas	0.019	ppb	44.2	467.20	1000	
238	U	209	No Gas	3.598	ppb	5.8	27514.62	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6668380.28	1.9	7044915.45	94.66	29.5	120.4	
Sc	45	No Gas	14633681.19	1.6	13133308.16	111.42	29.5	120.4	
Sc	45	H2	1710886.69	0.8	1716173.87	99.69	29.5	120.4	
Sc	45	He	412451.49	1.4	411218.26	100.3	29.5	120.4	
Ge	72	No Gas	2615857.46	1.1	2426863.86	107.79	29.5	120.4	
Ge	72	H2	489652.46	2.2	518471.77	94.44	29.5	120.4	
Ge	72	He	250182.28	0.7	247072.74	101.26	29.5	120.4	
Y	89	H2	9066147.29	0.5	9189572.79	98.66	29.5	120.4	
Y	89	He	2024511.34	0.6	2049271.57	98.79	29.5	120.4	
Tb	159	No Gas	20264127.34	1.8	18495507.5	109.56	29.5	120.4	
Tb	159	He	7788482.24	0.3	8005546.34	97.29	29.5	120.4	
Bi	209	No Gas	8996591.27	2.2	8721584.14	103.15	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	049_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:57:18 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.804	ppb	3.2	167175.42	25	103.22	89.8	110.2	
11	B	6	No Gas	27.278	ppb	2.3	118505.65	25	109.11	89.8	110.2	
23	Na	45	He	5082.047	ppb	0.6	3761022.32	5000	101.64	89.8	110.2	
24	Mg	45	He	4962.757	ppb	0.4	1941454.94	5000	99.26	89.8	110.2	
27	Al	45	He	471.404	ppb	0.7	69210.48	500	94.28	89.8	110.2	
28	Si	45	H2	463.920	ppb	1.1	110872.89	500	92.78	89.8	110.2	
39	K	45	He	4935.657	ppb	0.3	1564906.09	5000	98.71	89.8	110.2	
40	Ca	45	H2	4855.446	ppb	0.1	10466140.89	5000	97.11	89.8	110.2	
51	V	89	He	25.504	ppb	0.8	127826.12	25	102.02	89.8	110.2	
52	Cr	89	He	25.335	ppb	0.2	163996.30	25	101.34	89.8	110.2	
55	Mn	89	He	25.210	ppb	1.4	70970.93	25	100.84	89.8	110.2	
56	Fe	89	H2	4865.378	ppb	0.2	41053054.53	5000	97.31	89.8	110.2	
59	Co	89	He	25.537	ppb	0.6	274826.96	25	102.15	89.8	110.2	
60	Ni	89	He	25.527	ppb	0.5	76684.99	25	102.11	89.8	110.2	
63	Cu	89	He	25.607	ppb	1.1	210290.01	25	102.43	89.8	110.2	
66	Zn	89	He	25.383	ppb	2.0	23608.51	25	101.53	89.8	110.2	
75	As	89	He	25.037	ppb	0.5	15964.56	25	100.15	89.8	110.2	
78	Se	89	H2	24.529	ppb	0.8	7766.48	25	98.12	89.8	110.2	
88	Sr	89	He	24.026	ppb	1.5	78054.19	25	96.1	89.8	110.2	
95	Mo	89	He	25.234	ppb	0.9	97390.67	25	100.94	89.8	110.2	
107	Ag	89	He	25.158	ppb	1.0	314559.32	25	100.63	89.8	110.2	
111	Cd	89	He	24.967	ppb	0.3	37404.86	25	99.87	89.8	110.2	
118	Sn	159	He	24.679	ppb	1.2	74711.71	25	98.72	89.8	110.2	
121	Sb	159	No Gas	26.272	ppb	1.3	506045.18	25	105.09	89.8	110.2	
137	Ba	159	No Gas	25.761	ppb	1.3	190191.22	25	103.04	89.8	110.2	
182	W	159	No Gas	24.886	ppb	1.3	382074.71	25	99.54	89.8	110.2	
205	Tl	209	No Gas	26.303	ppb	2.1	750459.52	25	105.21	89.8	110.2	
208	Pb	209	No Gas	25.970	ppb	0.9	1044767.91	25	103.88	89.8	110.2	
232	Th	209	No Gas	24.593	ppb	2.2	982034.98	25	98.37	89.8	110.2	
238	U	209	No Gas	25.204	ppb	2.2	964141.22	25	100.82	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7023004.63	1.3	7044915.45	99.69	29.5	120.4	
Sc	45	No Gas	14147456.65	1.8	13133308.16	107.72	29.5	120.4	
Sc	45	H2	1734947.24	0.9	1716173.87	101.09	29.5	120.4	
Sc	45	He	420098.85	0.8	411218.26	102.16	29.5	120.4	
Ge	72	No Gas	2587254.38	1.6	2426863.86	106.61	29.5	120.4	
Ge	72	H2	521401.01	1.4	518471.77	100.56	29.5	120.4	
Ge	72	He	257295.42	0.8	247072.74	104.14	29.5	120.4	
Y	89	H2	9299256.12	0.8	9189572.79	101.19	29.5	120.4	
Y	89	He	2082787.55	0.8	2049271.57	101.64	29.5	120.4	
Tb	159	No Gas	19578825.26	2.3	18495507.5	105.86	29.5	120.4	
Tb	159	He	7915326.83	0.4	8005546.34	98.87	29.5	120.4	
Bi	209	No Gas	8997792.47	2.2	8721584.14	103.17	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	050_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 6:59:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.027	ppb	50.7	172.23	0.2	
11	B	6	No Gas	1.688	ppb	2.5	8581.71	4	
23	Na	45	He	45.212	ppb	2.3	47410.40	200	
24	Mg	45	He	2.288	ppb	0.9	968.99	20	
27	Al	45	He	0.128	ppb	12.4	104.45	20	
28	Si	45	H2	-0.145	ppb	N/A	934.40	100	
39	K	45	He	7.070	ppb	9.8	23360.21	200	
40	Ca	45	H2	5.205	ppb	1.9	14915.02	20	
51	V	89	He	0.005	ppb	146.5	201.12	1	
52	Cr	89	He	0.008	ppb	30.5	1127.84	1	
55	Mn	89	He	-0.014	ppb	N/A	95.98	0.4	
56	Fe	89	H2	1.468	ppb	10.5	15502.51	20	
59	Co	89	He	0.004	ppb	14.2	66.67	0.2	
60	Ni	89	He	-0.158	ppb	N/A	278.90	0.4	
63	Cu	89	He	-0.001	ppb	N/A	780.05	0.6	
66	Zn	89	He	-0.042	ppb	N/A	298.90	2	
75	As	89	He	0.012	ppb	30.0	18.67	1	
78	Se	89	H2	0.025	ppb	29.5	8.67	1	
88	Sr	89	He	0.055	ppb	23.8	210.01	1	
95	Mo	89	He	0.067	ppb	11.1	303.35	1	
107	Ag	89	He	0.006	ppb	41.8	88.89	0.2	
111	Cd	89	He	0.005	ppb	8.7	8.52	0.2	
118	Sn	159	He	0.125	ppb	16.1	807.84	1	
121	Sb	159	No Gas	0.029	ppb	39.6	847.65	0.2	
137	Ba	159	No Gas	0.022	ppb	39.6	223.59	0.4	
182	W	159	No Gas	0.092	ppb	11.0	1541.82	1	
205	Tl	209	No Gas	0.030	ppb	50.3	977.82	0.2	
208	Pb	209	No Gas	0.022	ppb	44.4	1094.58	0.2	
232	Th	209	No Gas	0.129	ppb	24.7	5574.21	1	
238	U	209	No Gas	0.033	ppb	45.6	1288.17	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7010331.70	1.0	7044915.45	99.51	29.5	120.4	
Sc	45	No Gas	14642670.49	2.6	13133308.16	111.49	29.5	120.4	
Sc	45	H2	1766430.12	2.0	1716173.87	102.93	29.5	120.4	
Sc	45	He	431715.71	0.5	411218.26	104.98	29.5	120.4	
Ge	72	No Gas	2611480.37	1.4	2426863.86	107.61	29.5	120.4	
Ge	72	H2	520585.10	2.4	518471.77	100.41	29.5	120.4	
Ge	72	He	262005.54	0.3	247072.74	106.04	29.5	120.4	
Y	89	H2	9433603.79	1.4	9189572.79	102.66	29.5	120.4	
Y	89	He	2127140.84	0.5	2049271.57	103.8	29.5	120.4	
Tb	159	No Gas	20059065.39	2.6	18495507.5	108.45	29.5	120.4	
Tb	159	He	8049567.52	0.8	8005546.34	100.55	29.5	120.4	
Bi	209	No Gas	9202000.84	2.3	8721584.14	105.51	29.5	120.4	

Sample Report

Sample Name SN5897-001

File Name 051SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:02:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	63.0	18.89	100	
11	B	6	No Gas	10.224	ppb	5.5	10003.80	1000	
23	Na	45	He	187.158	ppb	1.9	39742.30	200000	
24	Mg	45	He	11.582	ppb	10.2	937.88	200000	
27	Al	45	He	5.845	ppb	13.3	250.01	200000	
28	Si	45	H2	21.363	ppb	15.9	1918.92	10000	
39	K	45	He	40.703	ppb	12.6	22691.18	200000	
40	Ca	45	H2	32.374	ppb	3.1	16977.39	200000	
51	V	89	He	0.172	ppb	47.0	338.90	1000	
52	Cr	89	He	0.317	ppb	12.7	1433.15	2000	
55	Mn	89	He	0.164	ppb	28.8	220.63	2000	
56	Fe	89	H2	4.950	ppb	4.6	11063.28	100000	
59	Co	89	He	0.019	ppb	19.2	57.78	1000	
60	Ni	89	He	-0.673	ppb	N/A	336.68	1000	
63	Cu	89	He	0.749	ppb	11.3	1960.22	2000	
66	Zn	89	He	14.342	ppb	5.8	2901.52	2000	
75	As	89	He	0.075	ppb	82.1	19.67	1000	
78	Se	89	H2	0.078	ppb	10.9	5.50	1000	
88	Sr	89	He	0.184	ppb	10.3	142.23	2000	
95	Mo	89	He	0.113	ppb	22.8	122.23	1000	
107	Ag	89	He	0.014	ppb	81.6	50.00	100	
111	Cd	89	He	0.005	ppb	113.9	2.59	1000	
118	Sn	159	He	0.916	ppb	12.5	967.85	1000	
121	Sb	159	No Gas	0.086	ppb	9.6	624.05	1000	
137	Ba	159	No Gas	0.095	ppb	15.6	210.24	2000	
182	W	159	No Gas	0.088	ppb	16.3	377.09	1000	
205	Tl	209	No Gas	0.010	ppb	49.9	173.53	1000	
208	Pb	209	No Gas	0.041	ppb	11.8	550.62	2000	
232	Th	209	No Gas	0.162	ppb	15.6	1692.01	1000	
238	U	209	No Gas	0.013	ppb	70.8	113.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6937569.10	1.9	7044915.45	98.48	29.5	120.4	
Sc	45	No Gas	14703765.75	1.9	13133308.16	111.96	29.5	120.4	
Sc	45	H2	1693837.37	1.2	1716173.87	98.7	29.5	120.4	
Sc	45	He	413330.80	1.5	411218.26	100.51	29.5	120.4	
Ge	72	No Gas	2634597.57	2.2	2426863.86	108.56	29.5	120.4	
Ge	72	H2	491754.03	1.4	518471.77	94.85	29.5	120.4	
Ge	72	He	249701.93	0.7	247072.74	101.06	29.5	120.4	
Y	89	H2	9133850.72	0.6	9189572.79	99.39	29.5	120.4	
Y	89	He	2041499.90	1.3	2049271.57	99.62	29.5	120.4	
Tb	159	No Gas	20467836.50	1.6	18495507.5	110.66	29.5	120.4	
Tb	159	He	7890545.79	1.4	8005546.34	98.56	29.5	120.4	
Bi	209	No Gas	9458664.16	1.7	8721584.14	108.45	29.5	120.4	

Sample Report

Sample Name SN5897-002

File Name 052SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:05:02 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	51.0	6.67	100	
11	B	6	No Gas	8.377	ppb	2.6	8380.49	1000	
23	Na	45	He	161.912	ppb	11.1	34670.55	200000	
24	Mg	45	He	11.592	ppb	9.3	902.32	200000	
27	Al	45	He	9.464	ppb	17.6	340.02	200000	
28	Si	45	H2	25.330	ppb	10.4	2095.81	10000	
39	K	45	He	47.065	ppb	54.3	22185.55	200000	
40	Ca	45	H2	29.807	ppb	1.7	15853.78	200000	
51	V	89	He	0.189	ppb	23.6	346.68	1000	
52	Cr	89	He	0.376	ppb	15.4	1463.15	2000	
55	Mn	89	He	0.309	ppb	16.1	291.29	2000	
56	Fe	89	H2	9.328	ppb	3.7	18359.09	100000	
59	Co	89	He	0.015	ppb	59.5	48.89	1000	
60	Ni	89	He	-0.619	ppb	N/A	356.69	1000	
63	Cu	89	He	0.930	ppb	11.7	2180.26	2000	
66	Zn	89	He	14.786	ppb	7.0	2892.63	2000	
75	As	89	He	0.073	ppb	57.5	18.67	1000	
78	Se	89	H2	0.040	ppb	42.5	3.17	1000	
88	Sr	89	He	0.208	ppb	22.9	152.23	2000	
95	Mo	89	He	0.081	ppb	54.5	95.56	1000	
107	Ag	89	He	0.011	ppb	12.9	42.22	100	
111	Cd	89	He	0.003	ppb	210.0	1.85	1000	
118	Sn	159	He	0.878	ppb	22.7	924.51	1000	
121	Sb	159	No Gas	0.066	ppb	28.6	537.28	1000	
137	Ba	159	No Gas	0.519	ppb	13.1	854.31	2000	
182	W	159	No Gas	0.047	ppb	40.5	240.27	1000	
205	Tl	209	No Gas	0.002	ppb	201.0	126.81	1000	
208	Pb	209	No Gas	0.019	ppb	41.3	353.72	2000	
232	Th	209	No Gas	0.054	ppb	20.1	764.21	1000	
238	U	209	No Gas	0.004	ppb	58.1	40.05	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6887853.70	1.2	7044915.45	97.77	29.5	120.4	
Sc	45	No Gas	14288746.05	1.1	13133308.16	108.8	29.5	120.4	
Sc	45	H2	1689557.33	1.2	1716173.87	98.45	29.5	120.4	
Sc	45	He	398191.15	5.4	411218.26	96.83	29.5	120.4	
Ge	72	No Gas	2567349.81	0.5	2426863.86	105.79	29.5	120.4	
Ge	72	H2	491645.98	1.0	518471.77	94.83	29.5	120.4	
Ge	72	He	243861.88	3.5	247072.74	98.7	29.5	120.4	
Y	89	H2	9155801.10	1.2	9189572.79	99.63	29.5	120.4	
Y	89	He	1983943.69	5.2	2049271.57	96.81	29.5	120.4	
Tb	159	No Gas	20266503.03	0.4	18495507.5	109.58	29.5	120.4	
Tb	159	He	7738981.69	5.4	8005546.34	96.67	29.5	120.4	
Bi	209	No Gas	9248470.75	1.1	8721584.14	106.04	29.5	120.4	

Sample Report

Sample Name SN5897-002L

File Name 053SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:07:40 PM

Sample Type Sample

Total Dilution 25.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	125.8	5.55	100	
11	B	6	No Gas	21.216	ppb	10.0	5129.98	1000	
23	Na	45	He	496.446	ppb	11.0	27273.16	200000	
24	Mg	45	He	34.676	ppb	27.0	586.73	200000	
27	Al	45	He	28.908	ppb	35.5	251.12	200000	
28	Si	45	H2	9.686	ppb	34.3	1024.51	10000	
39	K	45	He	143.774	ppb	38.4	22185.57	200000	
40	Ca	45	H2	64.201	ppb	5.1	8796.37	200000	
51	V	89	He	0.234	ppb	72.9	218.90	1000	
52	Cr	89	He	0.190	ppb	66.8	1094.51	2000	
55	Mn	89	He	-0.147	ppb	N/A	115.31	2000	
56	Fe	89	H2	10.805	ppb	6.1	6448.67	100000	
59	Co	89	He	0.052	ppb	0.8	40.00	1000	
60	Ni	89	He	-3.808	ppb	N/A	288.91	1000	
63	Cu	89	He	0.914	ppb	24.3	1064.52	2000	
66	Zn	89	He	12.381	ppb	4.8	778.94	2000	
75	As	89	He	-0.017	ppb	N/A	10.00	1000	
78	Se	89	H2	0.268	ppb	54.4	4.00	1000	
88	Sr	89	He	0.766	ppb	35.7	124.45	2000	
95	Mo	89	He	0.201	ppb	55.3	67.78	1000	
107	Ag	89	He	0.029	ppb	14.5	31.11	100	
111	Cd	89	He	0.037	ppb	50.7	3.33	1000	
118	Sn	159	He	0.966	ppb	28.9	545.59	1000	
121	Sb	159	No Gas	0.123	ppb	127.4	377.09	1000	
137	Ba	159	No Gas	0.643	ppb	44.0	260.29	2000	
182	W	159	No Gas	0.058	ppb	94.0	130.15	1000	
205	Tl	209	No Gas	-0.024	ppb	N/A	86.76	1000	
208	Pb	209	No Gas	0.108	ppb	40.8	383.76	2000	
232	Th	209	No Gas	0.022	ppb	27.5	367.09	1000	
238	U	209	No Gas	0.006	ppb	178.9	20.02	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7221924.95	1.6	7044915.45	102.51	29.5	120.4	
Sc	45	No Gas	14565148.28	0.9	13133308.16	110.9	29.5	120.4	
Sc	45	H2	1701635.99	0.7	1716173.87	99.15	29.5	120.4	
Sc	45	He	417620.21	0.3	411218.26	101.56	29.5	120.4	
Ge	72	No Gas	2623276.68	1.3	2426863.86	108.09	29.5	120.4	
Ge	72	H2	502233.01	0.5	518471.77	96.87	29.5	120.4	
Ge	72	He	252813.15	0.2	247072.74	102.32	29.5	120.4	
Y	89	H2	9146012.98	1.1	9189572.79	99.53	29.5	120.4	
Y	89	He	2066539.10	0.5	2049271.57	100.84	29.5	120.4	
Tb	159	No Gas	20389102.06	0.3	18495507.5	110.24	29.5	120.4	
Tb	159	He	8053350.85	0.2	8005546.34	100.6	29.5	120.4	
Bi	209	No Gas	9436854.86	0.7	8721584.14	108.2	29.5	120.4	

Sample Report

Sample Name SN5897-002A

File Name 054SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:10:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	10.513	ppb	3.7	13569.07	100	
11	B	6	No Gas	206.733	ppb	3.9	178252.54	1000	
23	Na	45	He	10633.203	ppb	0.3	1535183.15	200000	
24	Mg	45	He	1063.067	ppb	0.9	80791.23	200000	
27	Al	45	He	936.864	ppb	2.3	26752.47	200000	
28	Si	45	H2	4607.414	ppb	0.2	209938.39	10000	
39	K	45	He	10299.886	ppb	0.2	645704.13	200000	
40	Ca	45	H2	1046.399	ppb	0.8	435036.92	200000	
51	V	89	He	52.841	ppb	0.6	51228.44	1000	
52	Cr	89	He	53.378	ppb	1.2	67292.19	2000	
55	Mn	89	He	22.036	ppb	1.6	12082.32	2000	
56	Fe	89	H2	1033.059	ppb	0.5	1690318.31	100000	
59	Co	89	He	11.091	ppb	1.1	23060.49	1000	
60	Ni	89	He	21.688	ppb	1.4	13174.42	1000	
63	Cu	89	He	33.155	ppb	1.0	53120.88	2000	
66	Zn	89	He	121.529	ppb	2.4	21836.67	2000	
75	As	89	He	52.037	ppb	0.7	6412.18	1000	
78	Se	89	H2	48.428	ppb	1.1	2969.02	1000	
88	Sr	89	He	49.638	ppb	1.1	31145.00	2000	
95	Mo	89	He	53.178	ppb	1.3	39648.35	1000	
107	Ag	89	He	11.176	ppb	0.9	26994.37	100	
111	Cd	89	He	11.159	ppb	1.1	3228.57	1000	
118	Sn	159	He	50.195	ppb	0.5	30618.92	1000	
121	Sb	159	No Gas	11.002	ppb	2.5	44024.34	1000	
137	Ba	159	No Gas	21.354	ppb	3.1	32616.40	2000	
182	W	159	No Gas	50.026	ppb	4.5	158697.98	1000	
205	Tl	209	No Gas	10.994	ppb	5.5	65702.47	1000	
208	Pb	209	No Gas	10.571	ppb	3.3	89132.13	2000	
232	Th	209	No Gas	10.503	ppb	4.7	88026.40	1000	
238	U	209	No Gas	10.536	ppb	2.1	84331.34	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6997009.37	0.8	7044915.45	99.32	29.5	120.4	
Sc	45	No Gas	14222046.75	0.2	13133308.16	108.29	29.5	120.4	
Sc	45	H2	1661050.88	0.9	1716173.87	96.79	29.5	120.4	
Sc	45	He	407851.32	1.1	411218.26	99.18	29.5	120.4	
Ge	72	No Gas	2557804.72	0.8	2426863.86	105.4	29.5	120.4	
Ge	72	H2	483647.67	0.8	518471.77	93.28	29.5	120.4	
Ge	72	He	246261.03	1.3	247072.74	99.67	29.5	120.4	
Y	89	H2	9001822.55	0.4	9189572.79	97.96	29.5	120.4	
Y	89	He	2010521.29	0.9	2049271.57	98.11	29.5	120.4	
Tb	159	No Gas	20219851.37	0.3	18495507.5	109.32	29.5	120.4	
Tb	159	He	7909717.52	0.9	8005546.34	98.8	29.5	120.4	
Bi	209	No Gas	9411070.53	0.8	8721584.14	107.91	29.5	120.4	

Sample Report

Sample Name SN5897-002S

File Name 055SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:12:52 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	51.470	ppb	7.4	68030.24	100	
11	B	6	No Gas	499.313	ppb	6.5	439008.41	1000	
23	Na	45	He	7808.917	ppb	0.2	1132660.04	200000	
24	Mg	45	He	5465.425	ppb	0.6	415918.15	200000	
27	Al	45	He	1954.688	ppb	0.2	55835.30	200000	
28	Si	45	H2	998.596	ppb	1.4	46966.52	10000	
39	K	45	He	10524.060	ppb	0.6	660471.60	200000	
40	Ca	45	H2	2580.965	ppb	0.3	1085509.49	200000	
51	V	89	He	544.452	ppb	1.0	527998.87	1000	
52	Cr	89	He	221.763	ppb	1.0	277280.83	2000	
55	Mn	89	He	545.680	ppb	1.0	297134.70	2000	
56	Fe	89	H2	1076.815	ppb	1.0	1762614.04	100000	
59	Co	89	He	548.226	ppb	0.3	1142732.80	1000	
60	Ni	89	He	552.979	ppb	0.2	319363.01	1000	
63	Cu	89	He	276.426	ppb	0.6	438851.40	2000	
66	Zn	89	He	550.786	ppb	1.0	98160.32	2000	
75	As	89	He	106.318	ppb	1.4	13132.64	1000	
78	Se	89	H2	102.786	ppb	0.3	6303.81	1000	
88	Sr	89	He	512.224	ppb	0.7	322204.80	2000	
95	Mo	89	He	110.168	ppb	0.9	82361.71	1000	
107	Ag	89	He	56.093	ppb	0.6	135858.29	100	
111	Cd	89	He	269.098	ppb	1.1	78086.16	1000	
118	Sn	159	He	515.122	ppb	1.5	310459.62	1000	
121	Sb	159	No Gas	103.692	ppb	7.6	418770.10	1000	
137	Ba	159	No Gas	2018.828	ppb	6.9	3124263.89	2000	
182	W	159	No Gas	100.682	ppb	6.7	324124.54	1000	
205	Tl	209	No Gas	108.411	ppb	5.8	648135.28	1000	
208	Pb	209	No Gas	105.515	ppb	6.3	889480.34	2000	
232	Th	209	No Gas	102.153	ppb	6.6	854824.27	1000	
238	U	209	No Gas	102.634	ppb	6.5	822851.54	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7171858.64	2.1	7044915.45	101.8	29.5	120.4	
Sc	45	No Gas	14371101.11	1.6	13133308.16	109.42	29.5	120.4	
Sc	45	H2	1687913.45	0.9	1716173.87	98.35	29.5	120.4	
Sc	45	He	408553.65	0.8	411218.26	99.35	29.5	120.4	
Ge	72	No Gas	2590445.90	1.5	2426863.86	106.74	29.5	120.4	
Ge	72	H2	488346.06	1.4	518471.77	94.19	29.5	120.4	
Ge	72	He	246827.14	0.6	247072.74	99.9	29.5	120.4	
Y	89	H2	9005839.06	0.5	9189572.79	98	29.5	120.4	
Y	89	He	2017083.30	0.2	2049271.57	98.43	29.5	120.4	
Tb	159	No Gas	20544138.72	1.9	18495507.5	111.08	29.5	120.4	
Tb	159	He	7912885.02	0.4	8005546.34	98.84	29.5	120.4	
Bi	209	No Gas	9432969.62	1.4	8721584.14	108.16	29.5	120.4	

Sample Report

Sample Name SN5897-002P

File Name 056SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:15:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	54.748	ppb	3.5	71780.22	100	
11	B	6	No Gas	532.833	ppb	4.4	464521.82	1000	
23	Na	45	He	7983.031	ppb	0.2	1162207.58	200000	
24	Mg	45	He	5613.043	ppb	0.6	428830.94	200000	
27	Al	45	He	2008.522	ppb	1.5	57595.95	200000	
28	Si	45	H2	1017.546	ppb	0.9	47290.67	10000	
39	K	45	He	10781.637	ppb	0.2	678809.93	200000	
40	Ca	45	H2	2701.998	ppb	1.0	1123293.31	200000	
51	V	89	He	558.337	ppb	1.0	544291.71	1000	
52	Cr	89	He	227.262	ppb	0.7	285622.24	2000	
55	Mn	89	He	558.450	ppb	0.5	305690.41	2000	
56	Fe	89	H2	1116.762	ppb	0.5	1821672.01	100000	
59	Co	89	He	563.295	ppb	1.1	1180272.24	1000	
60	Ni	89	He	570.561	ppb	0.7	331223.33	1000	
63	Cu	89	He	283.300	ppb	0.6	452110.09	2000	
66	Zn	89	He	565.215	ppb	1.0	101251.56	2000	
75	As	89	He	110.561	ppb	0.3	13729.25	1000	
78	Se	89	H2	105.061	ppb	1.1	6421.36	1000	
88	Sr	89	He	522.412	ppb	0.7	330341.29	2000	
95	Mo	89	He	112.902	ppb	1.8	84839.79	1000	
107	Ag	89	He	57.804	ppb	1.2	140734.52	100	
111	Cd	89	He	275.062	ppb	0.7	80236.83	1000	
118	Sn	159	He	528.747	ppb	0.4	319503.60	1000	
121	Sb	159	No Gas	108.477	ppb	4.2	437943.22	1000	
137	Ba	159	No Gas	2130.711	ppb	3.5	3296313.96	2000	
182	W	159	No Gas	106.236	ppb	3.6	341859.16	1000	
205	Tl	209	No Gas	114.952	ppb	5.0	683258.14	1000	
208	Pb	209	No Gas	111.232	ppb	5.1	932271.75	2000	
232	Th	209	No Gas	109.834	ppb	4.7	913879.07	1000	
238	U	209	No Gas	110.057	ppb	6.3	877129.29	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7108705.54	1.3	7044915.45	100.91	29.5	120.4	
Sc	45	No Gas	14338824.36	1.1	13133308.16	109.18	29.5	120.4	
Sc	45	H2	1668622.51	1.4	1716173.87	97.23	29.5	120.4	
Sc	45	He	410164.98	0.3	411218.26	99.74	29.5	120.4	
Ge	72	No Gas	2557785.20	1.5	2426863.86	105.39	29.5	120.4	
Ge	72	H2	484007.66	2.3	518471.77	93.35	29.5	120.4	
Ge	72	He	247069.04	0.5	247072.74	100	29.5	120.4	
Y	89	H2	8975114.69	1.0	9189572.79	97.67	29.5	120.4	
Y	89	He	2027774.62	1.2	2049271.57	98.95	29.5	120.4	
Tb	159	No Gas	20524332.06	1.3	18495507.5	110.97	29.5	120.4	
Tb	159	He	7933444.05	0.4	8005546.34	99.1	29.5	120.4	
Bi	209	No Gas	9381115.58	2.6	8721584.14	107.56	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW1
File Name	057_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:18:02 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.521	ppb	3.2	336551.33	50	91.04	79.5	120.4	
B	11	6	No Gas	450.514	ppb	3.8	2209939.36	500	90.1	79.5	120.4	
Na	23	45	He	7372.658	ppb	4.8	5344726.99	7500	98.3	79.5	120.4	
Mg	24	45	He	5210.965	ppb	5.0	1998980.25	5000	104.22	79.5	120.4	
Al	27	45	He	1865.370	ppb	3.8	268347.29	2000	93.27	79.5	120.4	
Si	28	45	H2	1033.242	ppb	4.5	237873.65	1000	103.32	79.5	120.4	
K	39	45	He	10089.665	ppb	4.2	3116196.78	10000	100.9	79.5	120.4	
Ca	40	45	H2	2633.397	ppb	4.5	5495987.14	2500	105.34	79.5	120.4	
V	51	89	He	512.903	ppb	5.9	2534273.66	500	102.58	79.5	120.4	
Cr	52	89	He	203.005	ppb	5.2	1289970.26	200	101.5	79.5	120.4	
Mn	55	89	He	497.332	ppb	5.0	1379807.96	500	99.47	79.5	120.4	
Fe	56	89	H2	1058.547	ppb	4.8	8584263.23	1000	105.85	79.5	120.4	
Co	59	89	He	505.160	ppb	5.6	5366373.71	500	101.03	79.5	120.4	
Ni	60	89	He	503.544	ppb	5.7	1479497.58	500	100.71	79.5	120.4	
Cu	63	89	He	246.113	ppb	5.6	1988701.27	250	98.45	79.5	120.4	
Zn	66	89	He	514.715	ppb	5.7	466306.21	500	102.94	79.5	120.4	
As	75	89	He	104.161	ppb	5.2	65535.33	100	104.16	79.5	120.4	
Se	78	89	H2	105.626	ppb	4.1	32140.31	100	105.63	79.5	120.4	
Sr	88	89	He	501.128	ppb	5.2	1606501.14	500	100.23	79.5	120.4	
Mo	95	89	He	106.089	ppb	5.0	404114.96	100	106.09	79.5	120.4	
Ag	107	89	He	51.363	ppb	4.8	634045.42	50	102.73	79.5	120.4	
Cd	111	89	He	258.325	ppb	5.3	382043.77	250	103.33	79.5	120.4	
Sn	118	159	He	511.075	ppb	4.7	1542905.83	500	102.21	79.5	120.4	
Sb	121	159	No Gas	103.135	ppb	1.3	2042392.92	100	103.14	79.5	120.4	
Ba	137	159	No Gas	2009.185	ppb	1.1	15251764.04	2000	100.46	79.5	120.4	
W	182	159	No Gas	99.873	ppb	1.8	1576824.39	100	99.87	79.5	120.4	
Tl	205	209	No Gas	106.668	ppb	3.0	3114383.60	100	106.67	79.5	120.4	
Pb	208	209	No Gas	104.232	ppb	2.0	4290707.91	100	104.23	79.5	120.4	
Th	232	209	No Gas	102.945	ppb	2.4	4206687.06	100	102.94	79.5	120.4	
U	238	209	No Gas	102.484	ppb	3.7	4013253.92	100	102.48	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8014629.87	0.7	7044915.45	113.76	29.5	120.4	
Sc	45	No Gas	14338484.75	2.5	13133308.16	109.18	29.5	120.4	
Sc	45	H2	1681362.93	4.1	1716173.87	97.97	29.5	120.4	
Sc	45	He	412137.29	1.6	411218.26	100.22	29.5	120.4	
Ge	72	No Gas	2579312.11	1.2	2426863.86	106.28	29.5	120.4	
Ge	72	H2	499523.37	3.0	518471.77	96.35	29.5	120.4	
Ge	72	He	249521.45	1.8	247072.74	100.99	29.5	120.4	
Y	89	H2	8946310.58	4.0	9189572.79	97.35	29.5	120.4	
Y	89	He	2057626.70	2.2	2049271.57	100.41	29.5	120.4	
Tb	159	No Gas	20137251.51	2.4	18495507.5	108.88	29.5	120.4	
Tb	159	He	7939586.76	1.7	8005546.34	99.18	29.5	120.4	
Bi	209	No Gas	9208987.41	1.7	8721584.14	105.59	29.5	120.4	

Sample Report

Sample Name SN5815-002

File Name 058SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:20:36 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	220.718	ppb	8.6	1510877.98	100	>LDR
11	B	6	No Gas	1629.447	ppb	8.4	7396558.36	1000	>LDR
23	Na	45	He	65.663	ppb	4.1	61151.44	200000	
24	Mg	45	He	9.684	ppb	5.9	3831.90	200000	
27	Al	45	He	987.503	ppb	3.5	144733.20	200000	
28	Si	45	H2	116.616	ppb	2.8	28299.65	10000	
39	K	45	He	9.741	ppb	10.0	23547.19	200000	
40	Ca	45	H2	20.418	ppb	1.9	46957.76	200000	
51	V	89	He	362.189	ppb	2.7	1810998.44	1000	
52	Cr	89	He	664.473	ppb	2.9	4269715.83	2000	
55	Mn	89	He	1616.784	ppb	2.7	4538319.64	2000	
56	Fe	89	H2	3057.381	ppb	0.7	25511975.66	100000	
59	Co	89	He	713.551	ppb	2.8	7669972.80	1000	
60	Ni	89	He	1547.225	ppb	3.0	4598271.87	1000	>LDR
63	Cu	89	He	283.819	ppb	2.9	2320455.23	2000	
66	Zn	89	He	1002.047	ppb	2.5	918315.71	2000	
75	As	89	He	201.980	ppb	2.9	128569.10	1000	
78	Se	89	H2	471.656	ppb	0.7	147669.23	1000	
88	Sr	89	He	97.891	ppb	2.1	317584.17	2000	
95	Mo	89	He	337.961	ppb	3.0	1302370.93	1000	
107	Ag	89	He	171.468	ppb	3.6	2141206.41	100	>LDR
111	Cd	89	He	686.522	ppb	2.9	1027312.80	1000	
118	Sn	159	He	1.448	ppb	6.3	4876.65	1000	
121	Sb	159	No Gas	264.384	ppb	8.9	5301445.95	1000	
137	Ba	159	No Gas	1699.216	ppb	8.3	13064817.90	2000	
182	W	159	No Gas	0.371	ppb	33.8	6085.09	1000	
205	Tl	209	No Gas	500.823	ppb	9.2	15045119.27	1000	
208	Pb	209	No Gas	889.084	ppb	8.7	37665007.80	2000	
232	Th	209	No Gas	0.589	ppb	42.6	25391.59	1000	
238	U	209	No Gas	0.248	ppb	70.5	10173.93	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7432942.21	3.1	7044915.45	105.51	29.5	120.4	
Sc	45	No Gas	14679817.43	3.1	13133308.16	111.78	29.5	120.4	
Sc	45	H2	1717624.73	0.7	1716173.87	100.08	29.5	120.4	
Sc	45	He	419808.77	1.9	411218.26	102.09	29.5	120.4	
Ge	72	No Gas	2619356.95	2.8	2426863.86	107.93	29.5	120.4	
Ge	72	H2	509635.96	0.8	518471.77	98.3	29.5	120.4	
Ge	72	He	254686.09	1.9	247072.74	103.08	29.5	120.4	
Y	89	H2	9195646.26	0.7	9189572.79	100.07	29.5	120.4	
Y	89	He	2081195.58	2.1	2049271.57	101.56	29.5	120.4	
Tb	159	No Gas	20432815.25	3.2	18495507.5	110.47	29.5	120.4	
Tb	159	He	8078870.57	1.6	8005546.34	100.92	29.5	120.4	
Bi	209	No Gas	9495675.03	3.4	8721584.14	108.88	29.5	120.4	

Sample Report

Sample Name SN6071-001

File Name 059SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:23:13 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.100	ppb	15.4	658.93	100	
11	B	6	No Gas	61.042	ppb	1.3	266576.06	1000	
23	Na	45	He	82622.256	ppb	0.8	60879083.61	200000	
24	Mg	45	He	5279.237	ppb	0.7	2062831.06	200000	
27	Al	45	He	20.524	ppb	3.2	3089.32	200000	
28	Si	45	H2	2545.122	ppb	0.7	598115.43	10000	
39	K	45	He	10435.516	ppb	1.0	3282131.55	200000	
40	Ca	45	H2	19145.832	ppb	1.1	40859513.28	200000	
51	V	89	He	0.878	ppb	2.7	4516.44	1000	
52	Cr	89	He	0.652	ppb	1.9	5188.02	2000	
55	Mn	89	He	9.254	ppb	0.3	25848.17	2000	
56	Fe	89	H2	67.120	ppb	1.0	555376.52	100000	
59	Co	89	He	0.214	ppb	3.4	2298.13	1000	
60	Ni	89	He	3.952	ppb	2.2	12362.57	1000	
63	Cu	89	He	14.933	ppb	1.0	121594.40	2000	
66	Zn	89	He	77.827	ppb	1.8	70908.52	2000	
75	As	89	He	0.451	ppb	6.9	294.37	1000	
78	Se	89	H2	0.404	ppb	3.1	125.33	1000	
88	Sr	89	He	87.599	ppb	1.4	281333.86	2000	
95	Mo	89	He	12.734	ppb	2.1	48622.87	1000	
107	Ag	89	He	0.102	ppb	5.1	1276.77	100	
111	Cd	89	He	0.100	ppb	20.3	148.52	1000	
118	Sn	159	He	0.280	ppb	16.7	1254.55	1000	
121	Sb	159	No Gas	0.680	ppb	3.0	13505.33	1000	
137	Ba	159	No Gas	8.705	ppb	5.8	64977.00	2000	
182	W	159	No Gas	0.113	ppb	11.8	1845.54	1000	
205	Tl	209	No Gas	0.294	ppb	5.2	8402.26	1000	
208	Pb	209	No Gas	0.726	ppb	4.6	29085.81	2000	
232	Th	209	No Gas	0.032	ppb	13.3	1571.87	1000	
238	U	209	No Gas	0.012	ppb	6.5	473.88	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7105541.28	2.9	7044915.45	100.86	29.5	120.4	
Sc	45	No Gas	14368636.78	3.1	13133308.16	109.41	29.5	120.4	
Sc	45	H2	1718176.66	1.4	1716173.87	100.12	29.5	120.4	
Sc	45	He	419616.55	1.1	411218.26	102.04	29.5	120.4	
Ge	72	No Gas	2545568.13	3.0	2426863.86	104.89	29.5	120.4	
Ge	72	H2	508281.28	0.9	518471.77	98.03	29.5	120.4	
Ge	72	He	253176.01	0.5	247072.74	102.47	29.5	120.4	
Y	89	H2	9073838.31	1.2	9189572.79	98.74	29.5	120.4	
Y	89	He	2059675.08	0.8	2049271.57	100.51	29.5	120.4	
Tb	159	No Gas	19802162.76	2.6	18495507.5	107.06	29.5	120.4	
Tb	159	He	7857287.66	0.5	8005546.34	98.15	29.5	120.4	
Bi	209	No Gas	8904442.46	2.6	8721584.14	102.1	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG23IMW2
File Name	060_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:25:45 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.055	ppb	10.1	72.22	0.5	
B	11	6	No Gas	22.131	ppb	1.3	20727.78	10	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Na	23	45	He	467.449	ppb	3.0	79372.93	500	
Mg	24	45	He	10.329	ppb	9.8	831.20	50	
Al	27	45	He	5.675	ppb	14.9	242.23	50	
Si	28	45	H2	19.861	ppb	13.4	1832.16	250	
K	39	45	He	50.162	ppb	11.9	22973.08	500	
Ca	40	45	H2	31.715	ppb	3.1	16545.78	50	
V	51	89	He	0.244	ppb	13.4	405.58	2.5	
Cr	52	89	He	0.327	ppb	16.3	1431.82	2.5	
Mn	55	89	He	0.689	ppb	8.8	504.59	1	
Fe	56	89	H2	3.509	ppb	0.7	8598.91	50	
Co	59	89	He	0.132	ppb	25.9	293.36	0.5	
Ni	60	89	He	-0.624	ppb	N/A	362.24	1	
Cu	63	89	He	5.650	ppb	1.9	9722.58	1.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Zn	66	89	He	4.428	ppb	6.2	1108.98	5	
As	75	89	He	0.168	ppb	17.5	31.00	2.5	
Se	78	89	H2	0.328	ppb	15.2	20.83	2.5	
Sr	88	89	He	0.133	ppb	9.1	108.89	2.5	
Mo	95	89	He	0.378	ppb	14.2	318.90	2.5	
Ag	107	89	He	0.906	ppb	6.7	2213.61	0.5	PB 6020 Fails DoD
Cd	111	89	He	0.105	ppb	22.1	31.48	0.5	
Sn	118	159	He	1.788	ppb	6.0	1497.92	2.5	
Sb	121	159	No Gas	0.235	ppb	16.1	1208.09	0.5	
Ba	137	159	No Gas	0.974	ppb	12.0	1548.49	1	
W	182	159	No Gas	0.069	ppb	18.2	310.35	2.5	
Tl	205	209	No Gas	0.107	ppb	10.4	747.52	0.5	
Pb	208	209	No Gas	1.240	ppb	7.9	10533.57	0.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Th	232	209	No Gas	0.102	ppb	24.4	1168.03	2.5	
U	238	209	No Gas	0.006	ppb	87.7	60.06	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7148994.58	2.3	7044915.45	101.48	29.5	120.4	
Sc	45	No Gas	14327043.73	1.4	13133308.16	109.09	29.5	120.4	
Sc	45	H2	1678865.08	1.2	1716173.87	97.83	29.5	120.4	
Sc	45	He	407961.89	0.6	411218.26	99.21	29.5	120.4	
Ge	72	No Gas	2571869.80	1.8	2426863.86	105.98	29.5	120.4	
Ge	72	H2	496057.38	2.1	518471.77	95.68	29.5	120.4	
Ge	72	He	246494.30	0.0	247072.74	99.77	29.5	120.4	
Y	89	H2	9054799.07	1.1	9189572.79	98.53	29.5	120.4	
Y	89	He	2021095.89	0.8	2049271.57	98.63	29.5	120.4	
Tb	159	No Gas	20213785.67	2.1	18495507.5	109.29	29.5	120.4	
Tb	159	He	7923881.69	0.4	8005546.34	98.98	29.5	120.4	
Bi	209	No Gas	9326043.32	1.2	8721584.14	106.93	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	061_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:28:22 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.693	ppb	6.2	165735.09	25	98.77	89.8	110.2	
11	B	6	No Gas	26.454	ppb	5.7	119132.15	25	105.82	89.8	110.2	
23	Na	45	He	5007.867	ppb	0.5	3658110.77	5000	100.16	89.8	110.2	
24	Mg	45	He	5020.749	ppb	0.2	1938617.66	5000	100.41	89.8	110.2	
27	Al	45	He	478.543	ppb	0.8	69344.60	500	95.71	89.8	110.2	
28	Si	45	H2	479.850	ppb	0.6	113902.91	500	95.97	89.8	110.2	
39	K	45	He	4938.588	ppb	0.2	1545524.72	5000	98.77	89.8	110.2	
40	Ca	45	H2	4861.362	ppb	0.5	10411582.83	5000	97.23	89.8	110.2	
51	V	89	He	25.102	ppb	0.9	124189.87	25	100.41	89.8	110.2	
52	Cr	89	He	25.197	ppb	0.8	161005.48	25	100.79	89.8	110.2	
55	Mn	89	He	25.092	ppb	0.3	69735.85	25	100.37	89.8	110.2	
56	Fe	89	H2	4909.161	ppb	0.8	40888232.21	5000	98.18	89.8	110.2	
59	Co	89	He	25.249	ppb	0.3	268233.02	25	101	89.8	110.2	
60	Ni	89	He	24.960	ppb	0.2	74035.50	25	99.84	89.8	110.2	
63	Cu	89	He	25.343	ppb	0.6	205452.04	25	101.37	89.8	110.2	
66	Zn	89	He	25.459	ppb	1.3	23372.54	25	101.84	89.8	110.2	
75	As	89	He	25.024	ppb	1.2	15751.61	25	100.1	89.8	110.2	
78	Se	89	H2	24.795	ppb	1.0	7749.64	25	99.18	89.8	110.2	
88	Sr	89	He	24.087	ppb	0.7	77236.22	25	96.35	89.8	110.2	
95	Mo	89	He	25.330	ppb	1.4	96495.25	25	101.32	89.8	110.2	
107	Ag	89	He	25.214	ppb	1.0	311191.17	25	100.86	89.8	110.2	
111	Cd	89	He	25.189	ppb	1.2	37248.87	25	100.76	89.8	110.2	
118	Sn	159	He	24.518	ppb	0.2	74390.16	25	98.07	89.8	110.2	
121	Sb	159	No Gas	25.451	ppb	7.3	495559.39	25	101.8	89.8	110.2	
137	Ba	159	No Gas	25.104	ppb	6.7	187412.68	25	100.42	89.8	110.2	
182	W	159	No Gas	24.357	ppb	6.3	378097.06	25	97.43	89.8	110.2	
205	Tl	209	No Gas	25.587	ppb	6.3	740207.25	25	102.35	89.8	110.2	
208	Pb	209	No Gas	25.661	ppb	5.9	1046873.17	25	102.64	89.8	110.2	
232	Th	209	No Gas	23.917	ppb	6.6	968349.57	25	95.67	89.8	110.2	
238	U	209	No Gas	24.580	ppb	5.7	953958.80	25	98.32	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7282393.44	2.4	7044915.45	103.37	29.5	120.4	
Sc	45	No Gas	14126440.84	4.2	13133308.16	107.56	29.5	120.4	
Sc	45	H2	1723789.18	1.2	1716173.87	100.44	29.5	120.4	
Sc	45	He	414641.31	1.2	411218.26	100.83	29.5	120.4	
Ge	72	No Gas	2540408.21	2.7	2426863.86	104.68	29.5	120.4	
Ge	72	H2	515719.97	1.5	518471.77	99.47	29.5	120.4	
Ge	72	He	252925.07	0.5	247072.74	102.37	29.5	120.4	
Y	89	H2	9179164.78	0.1	9189572.79	99.89	29.5	120.4	
Y	89	He	2055963.32	1.2	2049271.57	100.33	29.5	120.4	
Tb	159	No Gas	19829861.51	4.0	18495507.5	107.21	29.5	120.4	
Tb	159	He	7932502.87	0.4	8005546.34	99.09	29.5	120.4	
Bi	209	No Gas	9136225.80	3.4	8721584.14	104.75	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	062_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:30:56 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.010	ppb	33.0	68.89	0.2	
11	B	6	No Gas	2.425	ppb	3.6	12254.47	4	Failed DoD
23	Na	45	He	15.664	ppb	28.4	23906.49	200	
24	Mg	45	He	1.913	ppb	82.8	780.29	20	
27	Al	45	He	0.222	ppb	56.3	113.34	20	
28	Si	45	H2	-0.194	ppb	N/A	894.36	100	
39	K	45	He	8.788	ppb	41.3	22858.21	200	
40	Ca	45	H2	1.226	ppb	3.3	5989.27	20	
51	V	89	He	0.018	ppb	90.4	258.90	1	
52	Cr	89	He	0.018	ppb	80.8	1152.51	1	
55	Mn	89	He	0.028	ppb	39.9	208.63	0.4	
56	Fe	89	H2	1.178	ppb	2.0	12649.65	20	
59	Co	89	He	0.027	ppb	67.9	306.71	0.2	
60	Ni	89	He	-0.165	ppb	N/A	248.90	0.4	
63	Cu	89	He	0.008	ppb	128.8	826.72	0.6	
66	Zn	89	He	-0.015	ppb	N/A	312.24	2	
75	As	89	He	0.017	ppb	44.2	21.00	1	
78	Se	89	H2	0.046	ppb	20.3	15.00	1	
88	Sr	89	He	0.015	ppb	106.3	74.45	1	
95	Mo	89	He	0.070	ppb	9.5	304.46	1	
107	Ag	89	He	0.072	ppb	14.9	903.41	0.2	
111	Cd	89	He	0.012	ppb	121.3	18.89	0.2	
118	Sn	159	He	0.145	ppb	11.2	861.17	1	
121	Sb	159	No Gas	0.033	ppb	13.5	941.08	0.2	
137	Ba	159	No Gas	0.028	ppb	6.8	276.98	0.4	
182	W	159	No Gas	0.077	ppb	14.9	1321.56	1	
205	Tl	209	No Gas	0.017	ppb	18.4	630.72	0.2	
208	Pb	209	No Gas	0.023	ppb	15.5	1164.66	0.2	
232	Th	209	No Gas	0.082	ppb	15.3	3738.11	1	
238	U	209	No Gas	0.014	ppb	10.7	584.01	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7318817.47	2.6	7044915.45	103.89	29.5	120.4	
Sc	45	No Gas	14392306.59	2.3	13133308.16	109.59	29.5	120.4	
Sc	45	H2	1710141.76	0.6	1716173.87	99.65	29.5	120.4	
Sc	45	He	412766.74	0.6	411218.26	100.38	29.5	120.4	
Ge	72	No Gas	2573955.58	2.4	2426863.86	106.06	29.5	120.4	
Ge	72	H2	510987.31	0.4	518471.77	98.56	29.5	120.4	
Ge	72	He	250255.26	0.5	247072.74	101.29	29.5	120.4	
Y	89	H2	9154891.65	0.9	9189572.79	99.62	29.5	120.4	
Y	89	He	2054501.10	1.0	2049271.57	100.26	29.5	120.4	
Tb	159	No Gas	20265710.81	2.4	18495507.5	109.57	29.5	120.4	
Tb	159	He	7952207.10	0.2	8005546.34	99.33	29.5	120.4	
Bi	209	No Gas	9391259.47	2.7	8721584.14	107.68	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	063LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:33:35 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	52.489	ppb	3.5	70682.86	50	21	79.5	120.4	
B	11	6	No Gas	527.310	ppb	3.8	472198.60	500	21.09	79.5	120.4	
Na	23	45	He	8131.766	ppb	0.3	1179031.42	7500	21.68	79.5	120.4	
Mg	24	45	He	5709.178	ppb	1.1	434466.46	5000	22.84	79.5	120.4	
Al	27	45	He	2013.160	ppb	1.5	57503.24	2000	20.13	79.5	120.4	
Si	28	45	H2	1054.622	ppb	1.6	49049.26	1000	21.09	0	200	
K	39	45	He	11123.533	ppb	1.2	696981.30	10000	22.25	79.5	120.4	
Ca	40	45	H2	2745.774	ppb	1.1	1143023.70	2500	21.97	79.5	120.4	
V	51	89	He	557.508	ppb	0.7	538791.29	500	22.3	79.5	120.4	
Cr	52	89	He	228.604	ppb	0.2	284811.88	200	22.86	79.5	120.4	
Mn	55	89	He	560.703	ppb	0.1	304258.25	500	22.43	79.5	120.4	
Fe	56	89	H2	1109.793	ppb	1.1	1811247.72	1000	22.2	79.5	120.4	
Co	59	89	He	565.544	ppb	0.1	1174759.66	500	22.62	79.5	120.4	
Ni	60	89	He	571.629	ppb	0.5	328961.24	500	22.87	79.5	120.4	
Cu	63	89	He	283.229	ppb	0.6	448070.73	250	22.66	79.5	120.4	
Zn	66	89	He	553.335	ppb	0.9	98272.07	500	22.13	79.5	120.4	
As	75	89	He	112.892	ppb	1.9	13896.45	100	22.58	79.5	120.4	
Se	78	89	H2	108.702	ppb	0.5	6647.45	100	21.74	79.5	120.4	
Sr	88	89	He	539.533	ppb	0.7	338216.92	500	21.58	79.5	120.4	
Mo	95	89	He	116.391	ppb	0.9	86712.68	100	23.28	79.5	120.4	DoD
Ag	107	89	He	58.249	ppb	1.4	140590.92	50	23.3	79.5	120.4	DoD
Cd	111	89	He	281.408	ppb	0.5	81375.35	250	22.51	79.5	120.4	
Sn	118	159	He	540.034	ppb	0.5	326530.23	500	21.6	79.5	120.4	
Sb	121	159	No Gas	110.017	ppb	3.8	435527.32	100	22	79.5	120.4	
Ba	137	159	No Gas	2100.522	ppb	4.7	3186293.32	2000	21.01	79.5	120.4	
W	182	159	No Gas	106.884	ppb	4.8	337253.82	100	21.38	79.5	120.4	
Tl	205	209	No Gas	114.851	ppb	4.8	675953.53	100	22.97	79.5	120.4	
[Pb]	206	209	No Gas	111.110	ppb	3.7	234232.24	100	22.22	79.5	120.4	
[Pb]	207	209	No Gas	110.592	ppb	4.9	203796.37	100	22.12	79.5	120.4	
Pb	208	209	No Gas	112.008	ppb	4.4	929584.48	100	22.4	79.5	120.4	
Th	232	209	No Gas	109.059	ppb	5.1	898466.16	100	21.81	79.5	120.4	
U	238	209	No Gas	109.057	ppb	4.8	860810.32	100	21.81	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7298118.96	0.9	7044915.45	103.59	29.5	120.4	
Sc	45	No Gas	14068607.07	0.9	13133308.16	107.12	29.5	120.4	
Sc	45	H2	1671058.85	0.9	1716173.87	97.37	29.5	120.4	
Sc	45	He	408574.66	0.4	411218.26	99.36	29.5	120.4	
Ge	72	No Gas	2529527.15	0.5	2426863.86	104.23	29.5	120.4	
Ge	72	H2	489953.00	1.6	518471.77	94.5	29.5	120.4	
Ge	72	He	246651.38	0.8	247072.74	99.83	29.5	120.4	
Y	89	H2	8979890.51	0.3	9189572.79	97.72	29.5	120.4	
Y	89	He	2010101.52	0.6	2049271.57	98.09	29.5	120.4	
Tb	159	No Gas	20118362.62	0.3	18495507.5	108.77	29.5	120.4	
Tb	159	He	7938695.37	0.3	8005546.34	99.16	29.5	120.4	
Bi	209	No Gas	9282218.56	0.4	8721584.14	106.43	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 064SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:36:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	257.948	ppb	8.2	336357.78	100	
11	B	6	No Gas	1972.192	ppb	6.9	1706989.71	1000	
23	Na	45	He	122.338	ppb	5.2	29663.73	200000	
24	Mg	45	He	9.695	ppb	3.9	775.63	200000	
27	Al	45	He	1147.001	ppb	0.6	32446.59	200000	
28	Si	45	H2	124.017	ppb	3.0	6595.63	10000	
39	K	45	He	35.783	ppb	17.1	21897.01	200000	
40	Ca	45	H2	18.594	ppb	2.6	11055.78	200000	
51	V	89	He	420.073	ppb	0.9	405669.77	1000	
52	Cr	89	He	770.199	ppb	0.3	956336.11	2000	
55	Mn	89	He	1861.139	ppb	0.4	1008714.55	2000	
56	Fe	89	H2	3465.141	ppb	0.7	5677632.12	100000	
59	Co	89	He	827.891	ppb	0.2	1718190.93	1000	
60	Ni	89	He	1797.110	ppb	0.1	1031768.15	1000	
63	Cu	89	He	340.434	ppb	0.5	537943.53	2000	
66	Zn	89	He	1158.742	ppb	0.5	205265.48	2000	
75	As	89	He	234.699	ppb	0.7	28851.60	1000	
78	Se	89	H2	528.684	ppb	1.0	32490.61	1000	
88	Sr	89	He	112.491	ppb	0.9	70472.66	2000	
95	Mo	89	He	393.555	ppb	0.5	292845.85	1000	
107	Ag	89	He	853.893	ppb	0.7	2058895.21	100	>LDR
111	Cd	89	He	815.461	ppb	0.3	235600.42	1000	
118	Sn	159	He	2.150	ppb	4.2	1704.61	1000	
121	Sb	159	No Gas	306.493	ppb	6.7	1219751.95	1000	
137	Ba	159	No Gas	1969.793	ppb	6.6	3005068.92	2000	
182	W	159	No Gas	0.303	ppb	19.4	1057.90	1000	
205	Tl	209	No Gas	589.699	ppb	5.7	3499960.20	1000	
208	Pb	209	No Gas	1048.422	ppb	5.5	8774409.07	2000	
232	Th	209	No Gas	0.705	ppb	24.0	6198.57	1000	
238	U	209	No Gas	0.173	ppb	57.0	1395.00	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7080537.11	3.3	7044915.45	100.51	29.5	120.4	
Sc	45	No Gas	14205366.85	1.9	13133308.16	108.16	29.5	120.4	
Sc	45	H2	1675579.43	0.8	1716173.87	97.63	29.5	120.4	
Sc	45	He	404178.08	0.8	411218.26	98.29	29.5	120.4	
Ge	72	No Gas	2547627.82	1.9	2426863.86	104.98	29.5	120.4	
Ge	72	H2	491932.30	1.0	518471.77	94.88	29.5	120.4	
Ge	72	He	245721.23	0.6	247072.74	99.45	29.5	120.4	
Y	89	H2	9024881.75	0.3	9189572.79	98.21	29.5	120.4	
Y	89	He	2008321.08	0.7	2049271.57	98	29.5	120.4	
Tb	159	No Gas	20253988.59	2.2	18495507.5	109.51	29.5	120.4	
Tb	159	He	7869929.74	0.2	8005546.34	98.31	29.5	120.4	
Bi	209	No Gas	9366566.96	1.7	8721584.14	107.4	29.5	120.4	

Sample Report

Sample Name SN6056-021

File Name 065SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:38:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	2.494	ppb	5.6	3181.58	100	
11	B	6	No Gas	54.795	ppb	5.9	47688.99	1000	
23	Na	45	He	342.654	ppb	3.3	61557.65	200000	
24	Mg	45	He	11075.176	ppb	0.5	842320.34	200000	
27	Al	45	He	78309.802	ppb	0.9	2232466.98	200000	
28	Si	45	H2	3502.018	ppb	0.1	160952.86	10000	
39	K	45	He	5336.172	ppb	0.4	344549.37	200000	
40	Ca	45	H2	6695.473	ppb	0.5	2786024.20	200000	
51	V	89	He	147.018	ppb	0.5	144569.00	1000	
52	Cr	89	He	85.343	ppb	0.3	108743.43	2000	
55	Mn	89	He	1177.952	ppb	0.5	649682.49	2000	
56	Fe	89	H2	69761.935	ppb	1.2	116231576.65	100000	
59	Co	89	He	36.430	ppb	1.0	76946.12	1000	
60	Ni	89	He	73.311	ppb	1.1	43528.65	1000	
63	Cu	89	He	56.439	ppb	0.7	91380.01	2000	
66	Zn	89	He	485.547	ppb	0.6	87707.34	2000	
75	As	89	He	20.866	ppb	1.6	2619.54	1000	
78	Se	89	H2	3.415	ppb	2.4	214.16	1000	
88	Sr	89	He	38.622	ppb	1.2	24638.40	2000	
95	Mo	89	He	12.373	ppb	2.6	9402.45	1000	
107	Ag	89	He	1.388	ppb	19.0	3425.16	100	
111	Cd	89	He	2.737	ppb	15.0	806.34	1000	
118	Sn	159	He	57.925	ppb	1.5	35045.38	1000	
121	Sb	159	No Gas	1.116	ppb	6.0	4652.65	1000	
137	Ba	159	No Gas	371.424	ppb	1.3	559451.85	2000	
182	W	159	No Gas	0.475	ppb	16.1	1578.52	1000	
205	Tl	209	No Gas	2.683	ppb	2.5	15804.12	1000	
208	Pb	209	No Gas	189.431	ppb	0.4	1563068.61	2000	
232	Th	209	No Gas	13.577	ppb	2.2	111533.96	1000	
238	U	209	No Gas	3.428	ppb	1.8	26912.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6918107.13	1.4	7044915.45	98.2	29.5	120.4	
Sc	45	No Gas	14011246.27	2.0	13133308.16	106.68	29.5	120.4	
Sc	45	H2	1673174.04	0.9	1716173.87	97.49	29.5	120.4	
Sc	45	He	408342.62	1.0	411218.26	99.3	29.5	120.4	
Ge	72	No Gas	2497215.90	2.2	2426863.86	102.9	29.5	120.4	
Ge	72	H2	478428.34	1.8	518471.77	92.28	29.5	120.4	
Ge	72	He	244083.07	0.7	247072.74	98.79	29.5	120.4	
Y	89	H2	9182224.40	1.3	9189572.79	99.92	29.5	120.4	
Y	89	He	2043541.83	0.7	2049271.57	99.72	29.5	120.4	
Tb	159	No Gas	19972822.34	2.2	18495507.5	107.99	29.5	120.4	
Tb	159	He	7858955.86	0.4	8005546.34	98.17	29.5	120.4	
Bi	209	No Gas	9228018.84	2.3	8721584.14	105.81	29.5	120.4	

Sample Report

Sample Name SN6056-022

File Name 066SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:41:20 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	3.454	ppb	5.5	4284.12	100	
11	B	6	No Gas	43.501	ppb	4.9	37066.41	1000	
23	Na	45	He	408.412	ppb	1.4	71412.38	200000	
24	Mg	45	He	17173.349	ppb	0.6	1313841.34	200000	
27	Al	45	He	120600.419	ppb	0.4	3458646.96	200000	
28	Si	45	H2	3206.337	ppb	1.6	148483.46	10000	
39	K	45	He	8135.558	ppb	0.5	517899.77	200000	
40	Ca	45	H2	6816.589	ppb	0.7	2856486.17	200000	
51	V	89	He	244.257	ppb	0.9	244164.63	1000	
52	Cr	89	He	125.413	ppb	0.6	162029.93	2000	
55	Mn	89	He	1657.211	ppb	0.7	929523.56	2000	
56	Fe	89	H2	139198.134	ppb	1.1	233659336.10	100000	
59	Co	89	He	43.547	ppb	0.5	93546.91	1000	
60	Ni	89	He	92.753	ppb	1.3	55811.34	1000	
63	Cu	89	He	82.070	ppb	1.3	134789.48	2000	
66	Zn	89	He	495.238	ppb	0.6	90975.39	2000	
75	As	89	He	46.635	ppb	1.1	5941.25	1000	
78	Se	89	H2	3.788	ppb	7.8	239.16	1000	
88	Sr	89	He	47.845	ppb	1.4	31032.71	2000	
95	Mo	89	He	12.757	ppb	1.6	9860.60	1000	
107	Ag	89	He	0.942	ppb	2.9	2368.08	100	
111	Cd	89	He	1.322	ppb	2.7	396.31	1000	
118	Sn	159	He	56.207	ppb	0.6	33834.38	1000	
121	Sb	159	No Gas	1.102	ppb	8.3	4615.93	1000	
137	Ba	159	No Gas	392.232	ppb	6.3	592586.97	2000	
182	W	159	No Gas	0.481	ppb	15.8	1601.88	1000	
205	Tl	209	No Gas	2.806	ppb	2.9	16348.72	1000	
208	Pb	209	No Gas	265.426	ppb	6.1	2164374.86	2000	
232	Th	209	No Gas	22.261	ppb	7.3	180430.70	1000	
238	U	209	No Gas	5.194	ppb	7.3	40294.45	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6727865.23	2.1	7044915.45	95.5	29.5	120.4	
Sc	45	No Gas	14104014.98	1.8	13133308.16	107.39	29.5	120.4	
Sc	45	H2	1685096.16	1.1	1716173.87	98.19	29.5	120.4	
Sc	45	He	410769.19	0.4	411218.26	99.89	29.5	120.4	
Ge	72	No Gas	2494806.20	2.3	2426863.86	102.8	29.5	120.4	
Ge	72	H2	477082.36	1.3	518471.77	92.02	29.5	120.4	
Ge	72	He	244559.84	0.3	247072.74	98.98	29.5	120.4	
Y	89	H2	9251026.95	1.1	9189572.79	100.67	29.5	120.4	
Y	89	He	2078387.82	0.8	2049271.57	101.42	29.5	120.4	
Tb	159	No Gas	20059193.31	2.7	18495507.5	108.45	29.5	120.4	
Tb	159	He	7816743.29	0.3	8005546.34	97.64	29.5	120.4	
Bi	209	No Gas	9129570.18	2.5	8721584.14	104.68	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	067_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:44:02 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.021	ppb	42.1	26.66	0.5	
B	11	6	No Gas	7.256	ppb	3.5	7378.82	10	
Na	23	45	He	60.613	ppb	7.5	20951.85	500	
Mg	24	45	He	10.748	ppb	31.2	857.90	50	
Al	27	45	He	26.824	ppb	66.4	841.47	50	
Si	28	45	H2	9.830	ppb	14.8	1361.59	250	
K	39	45	He	30.148	ppb	5.1	21601.61	500	
Ca	40	45	H2	16.304	ppb	11.7	10005.01	50	
V	51	89	He	0.177	ppb	39.2	337.79	2.5	
Cr	52	89	He	0.251	ppb	27.3	1323.83	2.5	
Mn	55	89	He	0.469	ppb	68.4	381.97	1	
Fe	56	89	H2	22.630	ppb	14.1	39690.96	50	
Co	59	89	He	0.067	ppb	79.0	155.58	0.5	
Ni	60	89	He	-0.802	ppb	N/A	256.68	1	
Cu	63	89	He	0.478	ppb	13.3	1495.69	1.5	
Zn	66	89	He	0.887	ppb	13.4	474.48	5	
As	75	89	He	0.081	ppb	54.9	20.00	2.5	
Se	78	89	H2	0.115	ppb	5.9	7.67	2.5	
Sr	88	89	He	0.058	ppb	76.2	61.12	2.5	
Mo	95	89	He	0.050	ppb	83.7	73.33	2.5	
Ag	107	89	He	0.429	ppb	6.7	1046.75	0.5	
Cd	111	89	He	0.021	ppb	139.6	7.04	0.5	
Sn	118	159	He	0.584	ppb	40.6	763.39	2.5	
Sb	121	159	No Gas	0.032	ppb	23.7	403.79	0.5	
Ba	137	159	No Gas	0.297	ppb	47.6	517.26	1	
W	182	159	No Gas	0.017	ppb	56.3	146.83	2.5	
Tl	205	209	No Gas	0.013	ppb	80.2	193.55	0.5	
Pb	208	209	No Gas	0.236	ppb	16.9	2182.51	0.5	
Th	232	209	No Gas	0.097	ppb	18.3	1138.00	2.5	
U	238	209	No Gas	0.002	ppb	117.8	23.36	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6837984.67	2.5	7044915.45	97.06	29.5	120.4	
Sc	45	No Gas	14185473.62	1.4	13133308.16	108.01	29.5	120.4	
Sc	45	H2	1665245.21	6.7	1716173.87	97.03	29.5	120.4	
Sc	45	He	405024.20	0.9	411218.26	98.49	29.5	120.4	
Ge	72	No Gas	2560606.61	1.3	2426863.86	105.51	29.5	120.4	
Ge	72	H2	484876.30	4.2	518471.77	93.52	29.5	120.4	
Ge	72	He	244317.52	0.7	247072.74	98.88	29.5	120.4	
Y	89	H2	9003346.67	5.8	9189572.79	97.97	29.5	120.4	
Y	89	He	2002025.16	0.7	2049271.57	97.69	29.5	120.4	
Tb	159	No Gas	20238530.53	1.3	18495507.5	109.42	29.5	120.4	
Tb	159	He	7829439.61	0.2	8005546.34	97.8	29.5	120.4	
Bi	209	No Gas	9391210.99	1.4	8721584.14	107.68	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	068LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:46:35 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	54.851	ppb	5.7	70625.73	50	21.94	79.5	120.4	
B	11	6	No Gas	549.493	ppb	6.3	470416.15	500	21.98	79.5	120.4	
Na	23	45	He	9003.486	ppb	0.9	1301621.84	7500	24.01	79.5	120.4	DoD
Mg	24	45	He	5941.441	ppb	0.8	451312.10	5000	23.77	79.5	120.4	DoD
Al	27	45	He	2168.473	ppb	2.0	61811.24	2000	21.68	79.5	120.4	
Si	28	45	H2	1044.503	ppb	0.9	48512.86	1000	20.89	0	200	
K	39	45	He	11766.061	ppb	0.9	734698.76	10000	23.53	79.5	120.4	DoD
Ca	40	45	H2	2831.993	ppb	0.3	1177075.06	2500	22.66	79.5	120.4	
V	51	89	He	581.430	ppb	0.4	566189.04	500	23.26	79.5	120.4	DoD
Cr	52	89	He	236.816	ppb	1.3	297236.64	200	23.68	79.5	120.4	DoD
Mn	55	89	He	587.617	ppb	0.5	321288.06	500	23.5	79.5	120.4	DoD
Fe	56	89	H2	1156.309	ppb	0.8	1865695.25	1000	23.13	79.5	120.4	
Co	59	89	He	585.169	ppb	0.7	1224753.62	500	23.41	79.5	120.4	DoD
Ni	60	89	He	594.472	ppb	0.8	344680.27	500	23.78	79.5	120.4	DoD
Cu	63	89	He	295.795	ppb	1.1	471470.23	250	23.66	79.5	120.4	DoD
Zn	66	89	He	576.237	ppb	0.7	103105.07	500	23.05	79.5	120.4	
As	75	89	He	117.246	ppb	1.3	14540.50	100	23.45	79.5	120.4	DoD
Se	78	89	H2	113.771	ppb	1.2	6878.55	100	22.75	79.5	120.4	
Sr	88	89	He	562.416	ppb	0.5	355242.50	500	22.5	79.5	120.4	
Mo	95	89	He	120.652	ppb	0.7	90567.91	100	24.13	79.5	120.4	6020□ DoD
Ag	107	89	He	60.644	ppb	0.6	147486.73	50	24.26	79.5	120.4	6020□ DoD
Cd	111	89	He	294.553	ppb	0.4	85829.90	250	23.56	79.5	120.4	DoD
Sn	118	159	He	564.965	ppb	0.2	338274.36	500	22.6	79.5	120.4	
Sb	121	159	No Gas	112.721	ppb	5.4	452865.38	100	22.54	79.5	120.4	
Ba	137	159	No Gas	2154.789	ppb	5.8	3317167.47	2000	21.55	79.5	120.4	
W	182	159	No Gas	109.080	ppb	6.1	349285.59	100	21.82	79.5	120.4	
Tl	205	209	No Gas	117.445	ppb	5.6	696304.99	100	23.49	79.5	120.4	DoD
[Pb]	206	209	No Gas	114.487	ppb	5.1	243125.37	100	22.9	79.5	120.4	
[Pb]	207	209	No Gas	113.785	ppb	5.5	211221.64	100	22.76	79.5	120.4	
Pb	208	209	No Gas	115.639	ppb	5.9	966730.82	100	23.13	79.5	120.4	DoD
Th	232	209	No Gas	111.347	ppb	6.7	923994.78	100	22.27	79.5	120.4	
U	238	209	No Gas	113.406	ppb	6.1	901685.70	100	22.68	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6983074.86	1.5	7044915.45	99.12	29.5	120.4	
Sc	45	No Gas	14250116.59	1.3	13133308.16	108.5	29.5	120.4	
Sc	45	H2	1668568.17	1.3	1716173.87	97.23	29.5	120.4	
Sc	45	He	407826.18	1.4	411218.26	99.18	29.5	120.4	
Ge	72	No Gas	2556548.96	1.3	2426863.86	105.34	29.5	120.4	
Ge	72	H2	480732.28	1.3	518471.77	92.72	29.5	120.4	
Ge	72	He	246026.05	1.1	247072.74	99.58	29.5	120.4	
Y	89	H2	8878655.11	0.7	9189572.79	96.62	29.5	120.4	
Y	89	He	2025487.40	1.2	2049271.57	98.84	29.5	120.4	
Tb	159	No Gas	20424713.72	0.8	18495507.5	110.43	29.5	120.4	
Tb	159	He	7861805.99	0.5	8005546.34	98.2	29.5	120.4	
Bi	209	No Gas	9353057.94	1.1	8721584.14	107.24	29.5	120.4	

Sample Report

Sample Name SN5717-020R

File Name 069SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:49:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.036	ppb	11.9	45.56	100	
11	B	6	No Gas	11.724	ppb	5.2	11162.47	1000	
23	Na	45	He	285.028	ppb	1.8	53083.62	200000	
24	Mg	45	He	48.777	ppb	2.8	3740.78	200000	
27	Al	45	He	118.647	ppb	2.5	3449.43	200000	
28	Si	45	H2	158.250	ppb	1.1	8148.08	10000	
39	K	45	He	173.510	ppb	3.6	30373.58	200000	
40	Ca	45	H2	81.549	ppb	0.4	37196.44	200000	
51	V	89	He	0.466	ppb	12.6	616.70	1000	
52	Cr	89	He	0.889	ppb	6.1	2114.45	2000	
55	Mn	89	He	4.707	ppb	3.1	2672.45	2000	
56	Fe	89	H2	147.004	ppb	0.5	243246.85	100000	
59	Co	89	He	0.206	ppb	8.5	444.49	1000	
60	Ni	89	He	0.170	ppb	45.5	813.38	1000	
63	Cu	89	He	1.208	ppb	3.6	2645.90	2000	
66	Zn	89	He	7.711	ppb	4.9	1679.05	2000	
75	As	89	He	0.105	ppb	81.7	23.00	1000	
78	Se	89	H2	0.182	ppb	15.1	11.83	1000	
88	Sr	89	He	0.472	ppb	10.6	320.02	2000	
95	Mo	89	He	0.178	ppb	30.5	167.78	1000	
107	Ag	89	He	0.389	ppb	7.1	952.30	100	
111	Cd	89	He	0.048	ppb	16.9	14.82	1000	
118	Sn	159	He	1.093	ppb	8.0	1071.20	1000	
121	Sb	159	No Gas	0.172	ppb	9.4	954.44	1000	
137	Ba	159	No Gas	1.434	ppb	12.4	2239.35	2000	
182	W	159	No Gas	0.142	ppb	19.2	540.62	1000	
205	Tl	209	No Gas	0.064	ppb	31.4	497.23	1000	
208	Pb	209	No Gas	3.913	ppb	5.0	32957.15	2000	
232	Th	209	No Gas	0.419	ppb	18.1	3811.57	1000	
238	U	209	No Gas	0.050	ppb	42.6	410.47	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6862655.59	1.3	7044915.45	97.41	29.5	120.4	
Sc	45	No Gas	14184658.95	0.9	13133308.16	108.01	29.5	120.4	
Sc	45	H2	1672737.08	1.0	1716173.87	97.47	29.5	120.4	
Sc	45	He	406687.59	0.8	411218.26	98.9	29.5	120.4	
Ge	72	No Gas	2537446.78	0.7	2426863.86	104.56	29.5	120.4	
Ge	72	H2	490622.67	0.8	518471.77	94.63	29.5	120.4	
Ge	72	He	245479.28	0.5	247072.74	99.36	29.5	120.4	
Y	89	H2	9013461.58	1.6	9189572.79	98.08	29.5	120.4	
Y	89	He	2003530.61	0.5	2049271.57	97.77	29.5	120.4	
Tb	159	No Gas	20135894.00	0.6	18495507.5	108.87	29.5	120.4	
Tb	159	He	7865811.27	0.2	8005546.34	98.25	29.5	120.4	
Bi	209	No Gas	9366236.53	0.8	8721584.14	107.39	29.5	120.4	

Sample Report

Sample Name SN5830-002R

File Name 070SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:51:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.020	ppb	42.4	25.55	100	
11	B	6	No Gas	397.857	ppb	5.6	333657.65	1000	
23	Na	45	He	119741.122	ppb	2.4	17367787.18	200000	
24	Mg	45	He	15100.519	ppb	3.2	1160768.71	200000	
27	Al	45	He	82.316	ppb	5.0	2452.52	200000	
28	Si	45	H2	10573.252	ppb	0.9	489391.08	10000	
39	K	45	He	402.735	ppb	4.6	44924.94	200000	
40	Ca	45	H2	138422.789	ppb	1.0	58160798.58	200000	
51	V	89	He	0.574	ppb	23.4	728.93	1000	
52	Cr	89	He	0.420	ppb	6.4	1555.81	2000	
55	Mn	89	He	327.450	ppb	2.7	179599.47	2000	
56	Fe	89	H2	19.104	ppb	0.6	33935.25	100000	
59	Co	89	He	0.635	ppb	0.4	1351.28	1000	
60	Ni	89	He	1.467	ppb	8.8	1577.93	1000	
63	Cu	89	He	1.116	ppb	6.7	2534.77	2000	
66	Zn	89	He	2.110	ppb	7.0	700.04	2000	
75	As	89	He	0.190	ppb	22.5	34.00	1000	
78	Se	89	H2	0.158	ppb	30.5	10.33	1000	
88	Sr	89	He	1910.462	ppb	2.5	1210084.06	2000	
95	Mo	89	He	0.761	ppb	4.0	608.93	1000	
107	Ag	89	He	0.321	ppb	10.4	797.83	100	
111	Cd	89	He	0.037	ppb	40.2	11.85	1000	
118	Sn	159	He	0.599	ppb	3.2	784.50	1000	
121	Sb	159	No Gas	0.093	ppb	27.1	647.41	1000	
137	Ba	159	No Gas	37.290	ppb	4.8	56928.20	2000	
182	W	159	No Gas	0.032	ppb	57.6	193.56	1000	
205	Tl	209	No Gas	0.008	ppb	56.2	156.84	1000	
208	Pb	209	No Gas	0.110	ppb	7.2	1094.59	2000	
232	Th	209	No Gas	0.065	ppb	32.2	847.65	1000	
238	U	209	No Gas	4.121	ppb	6.5	32124.22	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6833908.36	2.0	7044915.45	97	29.5	120.4	
Sc	45	No Gas	14305942.94	2.0	13133308.16	108.93	29.5	120.4	
Sc	45	H2	1691505.39	1.3	1716173.87	98.56	29.5	120.4	
Sc	45	He	412969.63	2.9	411218.26	100.43	29.5	120.4	
Ge	72	No Gas	2565625.64	2.1	2426863.86	105.72	29.5	120.4	
Ge	72	H2	491464.33	0.9	518471.77	94.79	29.5	120.4	
Ge	72	He	247398.62	1.5	247072.74	100.13	29.5	120.4	
Y	89	H2	8978756.04	0.6	9189572.79	97.71	29.5	120.4	
Y	89	He	2032085.16	2.7	2049271.57	99.16	29.5	120.4	
Tb	159	No Gas	20240294.00	2.3	18495507.5	109.43	29.5	120.4	
Tb	159	He	7952491.41	2.5	8005546.34	99.34	29.5	120.4	
Bi	209	No Gas	9172759.31	2.3	8721584.14	105.17	29.5	120.4	

Sample Report

Sample Name SN5832-001R

File Name 071SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:54:24 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	65.5	23.33	100	
11	B	6	No Gas	2192.615	ppb	5.6	1805789.97	1000	
23	Na	45	He	1348363.245	ppb	0.3	191299576.17	200000	>LDR
24	Mg	45	He	275904.774	ppb	0.4	20761204.83	200000	
27	Al	45	He	13.172	ppb	15.5	451.14	200000	
28	Si	45	H2	9554.583	ppb	1.0	432430.30	10000	
39	K	45	He	8943.883	ppb	0.6	558052.06	200000	
40	Ca	45	H2	545645.188	ppb	0.5	224109476.66	200000	
51	V	89	He	1.234	ppb	2.9	1336.78	1000	
52	Cr	89	He	0.854	ppb	13.4	2041.78	2000	
55	Mn	89	He	31.758	ppb	1.6	17055.17	2000	
56	Fe	89	H2	190.833	ppb	0.6	306431.97	100000	
59	Co	89	He	0.629	ppb	5.2	1302.37	1000	
60	Ni	89	He	8.500	ppb	3.6	5502.38	1000	
63	Cu	89	He	1.500	ppb	4.2	3061.57	2000	
66	Zn	89	He	6.770	ppb	9.9	1491.24	2000	
75	As	89	He	0.419	ppb	12.3	60.68	1000	
78	Se	89	H2	1.214	ppb	4.4	73.17	1000	
88	Sr	89	He	7656.497	ppb	0.6	4716604.41	2000	
95	Mo	89	He	0.442	ppb	14.2	358.91	1000	
107	Ag	89	He	0.325	ppb	6.5	785.61	100	
111	Cd	89	He	0.136	ppb	12.3	39.63	1000	
118	Sn	159	He	0.658	ppb	13.9	785.61	1000	
121	Sb	159	No Gas	0.206	ppb	11.8	1037.87	1000	
137	Ba	159	No Gas	17.000	ppb	6.3	24663.71	2000	
182	W	159	No Gas	0.022	ppb	88.4	153.51	1000	
205	Tl	209	No Gas	0.029	ppb	19.9	253.62	1000	
208	Pb	209	No Gas	2.317	ppb	4.4	17500.75	2000	
232	Th	209	No Gas	0.055	ppb	21.8	700.82	1000	
238	U	209	No Gas	8.990	ppb	5.2	63942.11	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6730070.88	1.0	7044915.45	95.53	29.5	120.4	
Sc	45	No Gas	13767471.05	1.4	13133308.16	104.83	29.5	120.4	
Sc	45	H2	1653439.77	2.4	1716173.87	96.34	29.5	120.4	
Sc	45	He	404031.96	0.4	411218.26	98.25	29.5	120.4	
Ge	72	No Gas	2417026.89	1.7	2426863.86	99.59	29.5	120.4	
Ge	72	H2	477108.53	2.2	518471.77	92.02	29.5	120.4	
Ge	72	He	238091.20	0.8	247072.74	96.36	29.5	120.4	
Y	89	H2	8770228.88	1.8	9189572.79	95.44	29.5	120.4	
Y	89	He	1975556.90	0.6	2049271.57	96.4	29.5	120.4	
Tb	159	No Gas	19201188.74	0.6	18495507.5	103.82	29.5	120.4	
Tb	159	He	7621043.91	0.1	8005546.34	95.2	29.5	120.4	
Bi	209	No Gas	8364300.57	1.1	8721584.14	95.9	29.5	120.4	

Sample Report

Sample Name SN5832-002R

File Name 072SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 7:57:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.019	ppb	47.9	23.34	100	
11	B	6	No Gas	2153.497	ppb	4.5	1791665.32	1000	
23	Na	45	He	1261697.599	ppb	0.7	177969346.41	200000	>LDR
24	Mg	45	He	227062.824	ppb	1.0	16987055.30	200000	
27	Al	45	He	78.251	ppb	2.6	2273.60	200000	
28	Si	45	H2	8703.580	ppb	0.7	392229.56	10000	
39	K	45	He	11876.147	ppb	1.3	730289.12	200000	
40	Ca	45	H2	586213.312	ppb	0.8	239738520.87	200000	
51	V	89	He	1.370	ppb	1.7	1465.68	1000	
52	Cr	89	He	5.534	ppb	2.3	7752.74	2000	
55	Mn	89	He	252.444	ppb	0.3	134713.89	2000	
56	Fe	89	H2	6716.294	ppb	0.3	10633158.62	100000	
59	Co	89	He	2.841	ppb	1.5	5817.20	1000	
60	Ni	89	He	10.416	ppb	1.1	6585.11	1000	
63	Cu	89	He	1.790	ppb	4.7	3513.90	2000	
66	Zn	89	He	9.985	ppb	2.0	2051.33	2000	
75	As	89	He	0.657	ppb	13.9	89.34	1000	
78	Se	89	H2	0.253	ppb	23.4	15.67	1000	
88	Sr	89	He	9407.141	ppb	0.8	5795862.76	2000	
95	Mo	89	He	0.692	ppb	8.4	542.25	1000	
107	Ag	89	He	0.297	ppb	9.1	721.16	100	
111	Cd	89	He	0.072	ppb	31.4	21.48	1000	
118	Sn	159	He	0.597	ppb	16.2	742.27	1000	
121	Sb	159	No Gas	0.129	ppb	23.0	750.86	1000	
137	Ba	159	No Gas	19.696	ppb	6.0	28719.69	2000	
182	W	159	No Gas	0.047	ppb	34.1	230.26	1000	
205	Tl	209	No Gas	0.018	ppb	56.8	196.89	1000	
208	Pb	209	No Gas	4.969	ppb	3.1	37176.15	2000	
232	Th	209	No Gas	0.027	ppb	77.6	490.56	1000	
238	U	209	No Gas	6.220	ppb	4.9	44056.73	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6800362.36	2.0	7044915.45	96.53	29.5	120.4	
Sc	45	No Gas	13972970.19	1.4	13133308.16	106.39	29.5	120.4	
Sc	45	H2	1646260.15	1.1	1716173.87	95.93	29.5	120.4	
Sc	45	He	401693.00	0.6	411218.26	97.68	29.5	120.4	
Ge	72	No Gas	2434496.67	1.2	2426863.86	100.31	29.5	120.4	
Ge	72	H2	467827.63	1.0	518471.77	90.23	29.5	120.4	
Ge	72	He	238944.58	1.0	247072.74	96.71	29.5	120.4	
Y	89	H2	8722607.61	1.0	9189572.79	94.92	29.5	120.4	
Y	89	He	1975720.13	0.7	2049271.57	96.41	29.5	120.4	
Tb	159	No Gas	19310386.52	1.4	18495507.5	104.41	29.5	120.4	
Tb	159	He	7539010.86	0.6	8005546.34	94.17	29.5	120.4	
Bi	209	No Gas	8331155.13	1.5	8721584.14	95.52	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	073_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 7:59:50 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.430	ppb	1.8	167005.20	25	97.72	89.8	110.2	
11	B	6	No Gas	27.328	ppb	2.6	125289.31	25	109.31	89.8	110.2	
23	Na	45	He	5100.478	ppb	0.3	3780759.82	5000	102.01	89.8	110.2	
24	Mg	45	He	4989.585	ppb	0.4	1955134.35	5000	99.79	89.8	110.2	
27	Al	45	He	477.435	ppb	0.3	70210.69	500	95.49	89.8	110.2	
28	Si	45	H2	473.007	ppb	0.8	114277.70	500	94.6	89.8	110.2	
39	K	45	He	4982.182	ppb	0.9	1581995.66	5000	99.64	89.8	110.2	
40	Ca	45	H2	4919.564	ppb	0.6	10723049.49	5000	98.39	89.8	110.2	
51	V	89	He	25.255	ppb	1.1	127690.12	25	101.02	89.8	110.2	
52	Cr	89	He	25.206	ppb	0.9	164599.08	25	100.82	89.8	110.2	
55	Mn	89	He	24.883	ppb	0.6	70672.44	25	99.53	89.8	110.2	
56	Fe	89	H2	4911.313	ppb	0.5	42245300.06	5000	98.23	89.8	110.2	
59	Co	89	He	25.290	ppb	0.8	274554.74	25	101.16	89.8	110.2	
60	Ni	89	He	25.040	ppb	2.2	75894.08	25	100.16	89.8	110.2	
63	Cu	89	He	25.052	ppb	0.5	207567.19	25	100.21	89.8	110.2	
66	Zn	89	He	25.135	ppb	0.5	23588.41	25	100.54	89.8	110.2	
75	As	89	He	24.756	ppb	0.2	15924.49	25	99.02	89.8	110.2	
78	Se	89	H2	24.620	ppb	0.5	7946.91	25	98.48	89.8	110.2	
88	Sr	89	He	24.475	ppb	2.0	80198.88	25	97.9	89.8	110.2	
95	Mo	89	He	25.248	ppb	0.8	98303.31	25	100.99	89.8	110.2	
107	Ag	89	He	25.248	ppb	0.6	318460.02	25	100.99	89.8	110.2	
111	Cd	89	He	24.888	ppb	0.0	37615.06	25	99.55	89.8	110.2	
118	Sn	159	He	24.993	ppb	0.9	76743.48	25	99.97	89.8	110.2	
121	Sb	159	No Gas	25.827	ppb	1.0	508613.36	25	103.31	89.8	110.2	
137	Ba	159	No Gas	25.613	ppb	0.9	193309.55	25	102.45	89.8	110.2	
182	W	159	No Gas	24.468	ppb	1.6	384132.92	25	97.87	89.8	110.2	
205	Tl	209	No Gas	25.698	ppb	2.3	754123.15	25	102.79	89.8	110.2	
208	Pb	209	No Gas	25.700	ppb	1.6	1063424.15	25	102.8	89.8	110.2	
232	Th	209	No Gas	24.136	ppb	1.2	991366.24	25	96.54	89.8	110.2	
238	U	209	No Gas	24.570	ppb	2.0	966990.08	25	98.28	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7410102.55	0.9	7044915.45	105.18	29.5	120.4	
Sc	45	No Gas	14316114.78	2.1	13133308.16	109.01	29.5	120.4	
Sc	45	H2	1754312.86	1.1	1716173.87	102.22	29.5	120.4	
Sc	45	He	420779.76	0.5	411218.26	102.33	29.5	120.4	
Ge	72	No Gas	2597250.83	0.3	2426863.86	107.02	29.5	120.4	
Ge	72	H2	528600.89	0.8	518471.77	101.95	29.5	120.4	
Ge	72	He	258398.68	0.6	247072.74	104.58	29.5	120.4	
Y	89	H2	9479867.45	0.6	9189572.79	103.16	29.5	120.4	
Y	89	He	2101062.26	0.6	2049271.57	102.53	29.5	120.4	
Tb	159	No Gas	20016965.81	2.1	18495507.5	108.23	29.5	120.4	
Tb	159	He	8028693.08	0.4	8005546.34	100.29	29.5	120.4	
Bi	209	No Gas	9254279.16	0.9	8721584.14	106.11	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	074_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:02:24 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.024	ppb	45.0	165.56	0.2	
11	B	6	No Gas	1.792	ppb	2.7	9583.52	4	
23	Na	45	He	43.702	ppb	3.2	45375.34	200	
24	Mg	45	He	2.151	ppb	13.1	895.65	20	
27	Al	45	He	0.082	ppb	170.7	95.56	20	
28	Si	45	H2	-0.067	ppb	N/A	944.43	100	
39	K	45	He	6.724	ppb	13.0	22801.23	200	
40	Ca	45	H2	5.216	ppb	4.7	14790.44	20	
51	V	89	He	0.002	ppb	231.3	184.45	1	
52	Cr	89	He	0.005	ppb	105.0	1094.51	1	
55	Mn	89	He	-0.017	ppb	N/A	85.98	0.4	
56	Fe	89	H2	1.398	ppb	8.1	14954.57	20	
59	Co	89	He	0.006	ppb	35.9	77.78	0.2	
60	Ni	89	He	-0.206	ppb	N/A	131.12	0.4	Failed DoD
63	Cu	89	He	-0.021	ppb	N/A	605.59	0.6	
66	Zn	89	He	-0.015	ppb	N/A	318.91	2	
75	As	89	He	0.013	ppb	31.7	19.00	1	
78	Se	89	H2	0.027	ppb	34.8	9.50	1	
88	Sr	89	He	0.061	ppb	0.8	225.57	1	
95	Mo	89	He	0.060	ppb	19.9	271.12	1	
107	Ag	89	He	0.027	ppb	14.8	353.35	0.2	
111	Cd	89	He	0.004	ppb	87.5	6.66	0.2	
118	Sn	159	He	0.126	ppb	15.2	815.61	1	
121	Sb	159	No Gas	0.037	ppb	32.9	1017.85	0.2	
137	Ba	159	No Gas	0.016	ppb	76.3	190.22	0.4	
182	W	159	No Gas	0.094	ppb	9.3	1595.21	1	
205	Tl	209	No Gas	0.028	ppb	34.5	951.10	0.2	
208	Pb	209	No Gas	0.023	ppb	34.7	1164.65	0.2	
232	Th	209	No Gas	0.111	ppb	17.0	5020.03	1	
238	U	209	No Gas	0.031	ppb	46.8	1268.18	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7440789.12	2.1	7044915.45	105.62	29.5	120.4	
Sc	45	No Gas	14770979.31	2.1	13133308.16	112.47	29.5	120.4	
Sc	45	H2	1748939.14	0.2	1716173.87	101.91	29.5	120.4	
Sc	45	He	423431.10	0.6	411218.26	102.97	29.5	120.4	
Ge	72	No Gas	2666580.29	2.5	2426863.86	109.88	29.5	120.4	
Ge	72	H2	523107.82	1.2	518471.77	100.89	29.5	120.4	
Ge	72	He	257316.61	0.5	247072.74	104.15	29.5	120.4	
Y	89	H2	9459753.69	0.6	9189572.79	102.94	29.5	120.4	
Y	89	He	2094960.60	0.2	2049271.57	102.23	29.5	120.4	
Tb	159	No Gas	20452021.92	1.5	18495507.5	110.58	29.5	120.4	
Tb	159	He	8068507.03	0.4	8005546.34	100.79	29.5	120.4	
Bi	209	No Gas	9500500.06	2.0	8721584.14	108.93	29.5	120.4	

Sample Report

Sample Name SN5832-003R

File Name 075SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:05:03 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.025	ppb	36.2	31.11	100	
11	B	6	No Gas	2178.161	ppb	0.5	1816432.02	1000	
23	Na	45	He	1265072.266	ppb	3.7	177541638.72	200000	>LDR
24	Mg	45	He	227878.837	ppb	3.5	16962539.05	200000	
27	Al	45	He	74.194	ppb	4.7	2149.13	200000	
28	Si	45	H2	8517.532	ppb	0.8	392775.74	10000	
39	K	45	He	12070.754	ppb	3.3	738238.52	200000	
40	Ca	45	H2	576900.664	ppb	0.4	241399589.74	200000	
51	V	89	He	0.948	ppb	4.6	1056.74	1000	
52	Cr	89	He	3.748	ppb	6.1	5522.76	2000	
55	Mn	89	He	265.980	ppb	3.7	140689.03	2000	
56	Fe	89	H2	7208.145	ppb	0.6	11793036.37	100000	
59	Co	89	He	2.976	ppb	6.2	6037.29	1000	
60	Ni	89	He	9.468	ppb	6.1	5994.83	1000	
63	Cu	89	He	1.888	ppb	3.7	3632.83	2000	
66	Zn	89	He	7.978	ppb	7.1	1686.83	2000	
75	As	89	He	0.685	ppb	19.2	91.68	1000	
78	Se	89	H2	0.228	ppb	23.2	14.67	1000	
88	Sr	89	He	9501.963	ppb	3.5	5803262.62	2000	
95	Mo	89	He	0.808	ppb	11.0	623.38	1000	
107	Ag	89	He	0.218	ppb	20.8	526.70	100	
111	Cd	89	He	0.077	ppb	21.5	22.59	1000	
118	Sn	159	He	0.914	ppb	18.2	917.85	1000	
121	Sb	159	No Gas	0.160	ppb	19.8	887.69	1000	
137	Ba	159	No Gas	19.503	ppb	2.3	28983.88	2000	
182	W	159	No Gas	0.078	ppb	34.1	330.38	1000	
205	Tl	209	No Gas	0.012	ppb	114.7	170.19	1000	
208	Pb	209	No Gas	1.800	ppb	1.2	13878.46	2000	
232	Th	209	No Gas	0.215	ppb	8.1	1922.30	1000	
238	U	209	No Gas	6.215	ppb	3.3	45028.52	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6812260.82	1.6	7044915.45	96.7	29.5	120.4	
Sc	45	No Gas	14124010.39	2.0	13133308.16	107.54	29.5	120.4	
Sc	45	H2	1684481.86	0.7	1716173.87	98.15	29.5	120.4	
Sc	45	He	399968.74	3.2	411218.26	97.26	29.5	120.4	
Ge	72	No Gas	2461100.86	1.6	2426863.86	101.41	29.5	120.4	
Ge	72	H2	480666.53	0.6	518471.77	92.71	29.5	120.4	
Ge	72	He	237846.78	2.7	247072.74	96.27	29.5	120.4	
Y	89	H2	9014277.50	1.2	9189572.79	98.09	29.5	120.4	
Y	89	He	1960033.86	3.3	2049271.57	95.65	29.5	120.4	
Tb	159	No Gas	19671728.18	2.0	18495507.5	106.36	29.5	120.4	
Tb	159	He	7480502.60	2.6	8005546.34	93.44	29.5	120.4	
Bi	209	No Gas	8514752.68	1.4	8721584.14	97.63	29.5	120.4	

Sample Report

Sample Name SN5832-004R

File Name 076SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:07:43 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.015	ppb	21.5	18.89	100	
11	B	6	No Gas	682.454	ppb	4.3	584805.78	1000	
23	Na	45	He	370540.920	ppb	0.8	52590966.20	200000	
24	Mg	45	He	47821.243	ppb	0.4	3599376.75	200000	
27	Al	45	He	33.184	ppb	8.6	1015.63	200000	
28	Si	45	H2	7471.401	ppb	0.4	346633.52	10000	
39	K	45	He	3656.073	ppb	2.1	239823.52	200000	
40	Ca	45	H2	166176.516	ppb	0.7	69933632.85	200000	
51	V	89	He	0.962	ppb	6.1	1086.75	1000	
52	Cr	89	He	0.741	ppb	7.5	1918.46	2000	
55	Mn	89	He	67.330	ppb	1.4	36276.56	2000	
56	Fe	89	H2	210.832	ppb	0.7	347884.59	100000	
59	Co	89	He	0.562	ppb	6.5	1173.48	1000	
60	Ni	89	He	0.009	ppb	1176.2	715.60	1000	
63	Cu	89	He	0.976	ppb	3.5	2264.71	2000	
66	Zn	89	He	32.024	ppb	0.5	5928.12	2000	
75	As	89	He	0.495	ppb	4.5	70.34	1000	
78	Se	89	H2	0.505	ppb	7.1	31.67	1000	
88	Sr	89	He	1829.908	ppb	0.4	1135436.01	2000	
95	Mo	89	He	0.743	ppb	6.4	583.37	1000	
107	Ag	89	He	0.199	ppb	13.0	491.14	100	
111	Cd	89	He	0.021	ppb	22.1	7.04	1000	
118	Sn	159	He	1.114	ppb	6.6	1072.30	1000	
121	Sb	159	No Gas	0.202	ppb	10.1	1094.61	1000	
137	Ba	159	No Gas	54.142	ppb	6.1	83632.13	2000	
182	W	159	No Gas	0.054	ppb	38.7	266.97	1000	
205	Tl	209	No Gas	0.018	ppb	45.8	216.91	1000	
208	Pb	209	No Gas	0.164	ppb	10.2	1528.41	2000	
232	Th	209	No Gas	0.050	ppb	12.0	724.17	1000	
238	U	209	No Gas	3.491	ppb	8.5	27016.10	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	6992031.06	1.4	7044915.45	99.25	29.5	120.4	
Sc	45	No Gas	14577363.20	1.5	13133308.16	111	29.5	120.4	
Sc	45	H2	1694086.40	1.1	1716173.87	98.71	29.5	120.4	
Sc	45	He	404132.47	0.7	411218.26	98.28	29.5	120.4	
Ge	72	No Gas	2611889.12	1.6	2426863.86	107.62	29.5	120.4	
Ge	72	H2	486956.67	1.4	518471.77	93.92	29.5	120.4	
Ge	72	He	245432.87	0.3	247072.74	99.34	29.5	120.4	
Y	89	H2	9019402.00	1.2	9189572.79	98.15	29.5	120.4	
Y	89	He	1989806.62	0.7	2049271.57	97.1	29.5	120.4	
Tb	159	No Gas	20485511.64	1.6	18495507.5	110.76	29.5	120.4	
Tb	159	He	7782904.33	0.1	8005546.34	97.22	29.5	120.4	
Bi	209	No Gas	9105232.62	1.8	8721584.14	104.4	29.5	120.4	

Sample Report

Sample Name SN5897-001R

File Name 077SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:10:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.004	ppb	69.3	5.55	100	
11	B	6	No Gas	14.353	ppb	7.2	13793.71	1000	
23	Na	45	He	627.632	ppb	88.1	99814.40	200000	
24	Mg	45	He	71.271	ppb	131.1	5308.87	200000	
27	Al	45	He	6.802	ppb	1.2	268.90	200000	
28	Si	45	H2	15.583	ppb	11.9	1625.24	10000	
39	K	45	He	49.358	ppb	30.7	22469.33	200000	
40	Ca	45	H2	51.479	ppb	3.7	24625.45	200000	
51	V	89	He	0.182	ppb	11.7	342.24	1000	
52	Cr	89	He	0.182	ppb	6.7	1237.17	2000	
55	Mn	89	He	0.606	ppb	31.3	454.59	2000	
56	Fe	89	H2	2.705	ppb	1.0	7276.64	100000	
59	Co	89	He	0.024	ppb	82.8	66.67	1000	
60	Ni	89	He	-0.924	ppb	N/A	186.67	1000	
63	Cu	89	He	0.526	ppb	7.3	1570.15	2000	
66	Zn	89	He	1.059	ppb	12.1	504.47	2000	
75	As	89	He	0.065	ppb	44.4	18.00	1000	
78	Se	89	H2	0.087	ppb	10.0	6.00	1000	
88	Sr	89	He	2.494	ppb	143.8	1575.13	2000	
95	Mo	89	He	0.023	ppb	164.4	53.33	1000	
107	Ag	89	He	0.178	ppb	10.1	443.36	100	
111	Cd	89	He	0.005	ppb	112.7	2.59	1000	
118	Sn	159	He	2.427	ppb	6.5	1879.09	1000	
121	Sb	159	No Gas	0.040	ppb	30.7	437.16	1000	
137	Ba	159	No Gas	0.284	ppb	12.2	497.23	2000	
182	W	159	No Gas	0.020	ppb	40.0	156.84	1000	
205	Tl	209	No Gas	-0.002	ppb	N/A	100.11	1000	
208	Pb	209	No Gas	0.033	ppb	16.3	477.20	2000	
232	Th	209	No Gas	0.013	ppb	23.4	437.17	1000	
238	U	209	No Gas	0.004	ppb	16.7	43.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7082297.31	0.2	7044915.45	100.53	29.5	120.4	
Sc	45	No Gas	14192915.23	0.3	13133308.16	108.07	29.5	120.4	
Sc	45	H2	1667775.32	1.4	1716173.87	97.18	29.5	120.4	
Sc	45	He	399966.95	1.2	411218.26	97.26	29.5	120.4	
Ge	72	No Gas	2547262.75	1.0	2426863.86	104.96	29.5	120.4	
Ge	72	H2	490310.85	0.8	518471.77	94.57	29.5	120.4	
Ge	72	He	244212.06	0.8	247072.74	98.84	29.5	120.4	
Y	89	H2	9055289.24	0.8	9189572.79	98.54	29.5	120.4	
Y	89	He	2001169.31	0.7	2049271.57	97.65	29.5	120.4	
Tb	159	No Gas	20273875.95	0.4	18495507.5	109.62	29.5	120.4	
Tb	159	He	7908092.25	0.9	8005546.34	98.78	29.5	120.4	
Bi	209	No Gas	9380010.62	0.7	8721584.14	107.55	29.5	120.4	

Sample Report

Sample Name SN6056-004

File Name 078SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:12:56 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	1.0	10.00	100	
11	B	6	No Gas	7.346	ppb	2.6	7938.00	1000	
23	Na	45	He	307.435	ppb	1.8	55300.92	200000	
24	Mg	45	He	27.456	ppb	8.3	2089.19	200000	
27	Al	45	He	151.750	ppb	2.7	4311.96	200000	
28	Si	45	H2	34.425	ppb	8.9	2486.47	10000	
39	K	45	He	89.973	ppb	5.3	24871.98	200000	
40	Ca	45	H2	77.819	ppb	12.0	35572.56	200000	
51	V	89	He	0.273	ppb	2.0	427.80	1000	
52	Cr	89	He	0.734	ppb	5.0	1912.46	2000	
55	Mn	89	He	0.985	ppb	2.0	656.57	2000	
56	Fe	89	H2	38.653	ppb	0.6	66440.95	100000	
59	Co	89	He	0.068	ppb	5.3	157.79	1000	
60	Ni	89	He	-0.365	ppb	N/A	504.47	1000	
63	Cu	89	He	1.009	ppb	8.6	2320.27	2000	
66	Zn	89	He	3.122	ppb	12.8	864.50	2000	
75	As	89	He	0.087	ppb	5.6	20.67	1000	
78	Se	89	H2	0.073	ppb	16.9	5.17	1000	
88	Sr	89	He	0.530	ppb	12.1	354.46	2000	
95	Mo	89	He	0.064	ppb	84.6	83.34	1000	
107	Ag	89	He	0.209	ppb	11.2	516.69	100	
111	Cd	89	He	0.014	ppb	31.6	5.18	1000	
118	Sn	159	He	0.529	ppb	18.4	741.16	1000	
121	Sb	159	No Gas	0.042	ppb	14.9	447.17	1000	
137	Ba	159	No Gas	1.640	ppb	11.5	2596.48	2000	
182	W	159	No Gas	0.018	ppb	46.8	150.17	1000	
205	Tl	209	No Gas	-0.010	ppb	N/A	53.39	1000	
208	Pb	209	No Gas	0.355	ppb	5.8	3217.10	2000	
232	Th	209	No Gas	0.013	ppb	73.7	443.84	1000	
238	U	209	No Gas	0.002	ppb	88.4	23.36	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7280383.88	1.0	7044915.45	103.34	29.5	120.4	
Sc	45	No Gas	14159076.49	0.4	13133308.16	107.81	29.5	120.4	
Sc	45	H2	1669670.80	0.4	1716173.87	97.29	29.5	120.4	
Sc	45	He	399590.87	0.5	411218.26	97.17	29.5	120.4	
Ge	72	No Gas	2548912.65	0.5	2426863.86	105.03	29.5	120.4	
Ge	72	H2	491566.38	1.1	518471.77	94.81	29.5	120.4	
Ge	72	He	242988.57	0.7	247072.74	98.35	29.5	120.4	
Y	89	H2	9068162.43	0.1	9189572.79	98.68	29.5	120.4	
Y	89	He	1993032.83	0.2	2049271.57	97.26	29.5	120.4	
Tb	159	No Gas	20494753.17	0.1	18495507.5	110.81	29.5	120.4	
Tb	159	He	7943886.34	0.8	8005546.34	99.23	29.5	120.4	
Bi	209	No Gas	9494062.90	0.7	8721584.14	108.86	29.5	120.4	

Sample Report

Sample Name	SN6061-002
File Name	079SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:15:35 PM
Sample Type	Sample
Total Dilution	5.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.008	ppb	16.6	11.11	100	
11	B	6	No Gas	6.035	ppb	5.4	6844.08	1000	
23	Na	45	He	165.029	ppb	3.6	35292.28	200000	
24	Mg	45	He	11.042	ppb	13.4	866.76	200000	
27	Al	45	He	8.729	ppb	18.2	322.24	200000	
28	Si	45	H2	13.296	ppb	2.9	1501.76	10000	
39	K	45	He	26.754	ppb	28.1	21092.67	200000	
40	Ca	45	H2	28.713	ppb	1.3	14999.54	200000	
51	V	89	He	0.179	ppb	29.4	337.79	1000	
52	Cr	89	He	0.377	ppb	6.4	1471.82	2000	
55	Mn	89	He	0.585	ppb	7.3	441.26	2000	
56	Fe	89	H2	3.996	ppb	6.2	9313.45	100000	
59	Co	89	He	0.024	ppb	48.2	66.67	1000	
60	Ni	89	He	-0.827	ppb	N/A	241.12	1000	
63	Cu	89	He	0.630	ppb	10.1	1725.73	2000	
66	Zn	89	He	1.211	ppb	7.4	528.92	2000	
75	As	89	He	0.068	ppb	60.0	18.33	1000	
78	Se	89	H2	0.052	ppb	23.7	3.83	1000	
88	Sr	89	He	0.186	ppb	30.7	140.01	2000	
95	Mo	89	He	0.015	ppb	107.6	46.67	1000	
107	Ag	89	He	0.210	ppb	4.8	518.92	100	
111	Cd	89	He	0.004	ppb	1.6	2.22	1000	
118	Sn	159	He	1.632	ppb	10.1	1412.36	1000	
121	Sb	159	No Gas	0.044	ppb	39.7	463.86	1000	
137	Ba	159	No Gas	0.793	ppb	20.4	1304.85	2000	
182	W	159	No Gas	0.009	ppb	229.0	123.47	1000	
205	Tl	209	No Gas	-0.004	ppb	N/A	90.10	1000	
208	Pb	209	No Gas	0.087	ppb	9.8	947.75	2000	
232	Th	209	No Gas	0.008	ppb	115.7	407.13	1000	
238	U	209	No Gas	0.003	ppb	24.4	33.37	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7358438.54	1.0	7044915.45	104.45	29.5	120.4	
Sc	45	No Gas	14145417.52	0.8	13133308.16	107.71	29.5	120.4	
Sc	45	H2	1646124.81	0.7	1716173.87	95.92	29.5	120.4	
Sc	45	He	399278.46	0.5	411218.26	97.1	29.5	120.4	
Ge	72	No Gas	2552132.25	0.9	2426863.86	105.16	29.5	120.4	
Ge	72	H2	484075.74	0.6	518471.77	93.37	29.5	120.4	
Ge	72	He	241606.24	0.3	247072.74	97.79	29.5	120.4	
Y	89	H2	8971400.77	0.3	9189572.79	97.63	29.5	120.4	
Y	89	He	1991602.91	0.8	2049271.57	97.19	29.5	120.4	
Tb	159	No Gas	20760636.64	1.1	18495507.5	112.25	29.5	120.4	
Tb	159	He	7971496.06	0.3	8005546.34	99.57	29.5	120.4	
Bi	209	No Gas	9589213.04	0.7	8721584.14	109.95	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG30IMW1
File Name	080_PBE.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:18:06 PM
Sample Type	PB200.8
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.001	ppb	42.6	4.44	0.1	
B	11	6	No Gas	1.160	ppb	2.7	6849.63	2	
Na	23	45	He	31.366	ppb	1.4	34914.42	100	
Mg	24	45	He	5.597	ppb	6.5	2173.66	10	
Al	27	45	He	5.688	ppb	5.9	891.18	10	
Si	28	45	H2	5.542	ppb	3.9	2215.96	50	
K	39	45	He	8.118	ppb	34.4	22409.12	100	
Ca	40	45	H2	2.408	ppb	4.2	8432.83	10	
V	51	89	He	-0.012	ppb	N/A	108.89	0.5	
Cr	52	89	He	-0.009	ppb	N/A	971.86	0.5	
Mn	55	89	He	0.067	ppb	13.0	312.61	0.2	
Fe	56	89	H2	1.025	ppb	4.7	11364.03	10	
Co	59	89	He	0.003	ppb	31.1	51.12	0.1	
Ni	60	89	He	-0.196	ppb	N/A	156.68	0.2	
Cu	63	89	He	0.006	ppb	161.4	803.39	0.3	
Zn	66	89	He	0.238	ppb	8.2	536.70	1	
As	75	89	He	-0.003	ppb	N/A	8.67	0.5	
Se	78	89	H2	0.014	ppb	35.8	5.17	0.5	
Sr	88	89	He	0.017	ppb	13.1	78.89	0.5	
Mo	95	89	He	-0.001	ppb	N/A	33.34	0.5	
Ag	107	89	He	0.014	ppb	9.5	186.68	0.1	
Cd	111	89	He	0.001	ppb	98.1	2.22	0.1	
Sn	118	159	He	-0.014	ppb	N/A	381.13	0.5	
Sb	121	159	No Gas	-0.002	ppb	N/A	243.61	0.1	
Ba	137	159	No Gas	0.033	ppb	17.7	317.03	0.2	
W	182	159	No Gas	0.001	ppb	113.1	103.45	0.5	
Tl	205	209	No Gas	-0.001	ppb	N/A	80.09	0.1	
[Pb]	206	209	No Gas	0.010	ppb	2.1	160.18	0.1	
[Pb]	207	209	No Gas	0.004	ppb	37.2	96.78	0.1	
Pb	208	209	No Gas	0.009	ppb	13.9	604.02	0.1	
Th	232	209	No Gas	-0.002	ppb	N/A	256.96	0.5	
U	238	209	No Gas	0.000	ppb	161.1	23.36	0.1	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7597529.14	0.7	7044915.45	107.84	29.5	120.4	
Sc	45	No Gas	14240471.11	0.9	13133308.16	108.43	29.5	120.4	
Sc	45	H2	1696846.88	0.6	1716173.87	98.87	29.5	120.4	
Sc	45	He	408305.85	0.8	411218.26	99.29	29.5	120.4	
Ge	72	No Gas	2565351.33	1.5	2426863.86	105.71	29.5	120.4	
Ge	72	H2	507429.46	1.2	518471.77	97.87	29.5	120.4	
Ge	72	He	249136.70	0.5	247072.74	100.84	29.5	120.4	
Y	89	H2	9145422.60	0.8	9189572.79	99.52	29.5	120.4	
Y	89	He	2034496.39	0.5	2049271.57	99.28	29.5	120.4	
Tb	159	No Gas	20300857.89	1.2	18495507.5	109.76	29.5	120.4	
Tb	159	He	8015996.41	0.7	8005546.34	100.13	29.5	120.4	
Bi	209	No Gas	9511775.50	1.4	8721584.14	109.06	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG30IMW1
File Name	081_LCS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:20:44 PM
Sample Type	LCS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	45.402	ppb	6.2	346253.31	50	90.8	79.5	120.4	
B	11	6	No Gas	447.084	ppb	6.5	2262134.81	500	89.42	79.5	120.4	
Na	23	45	He	8231.323	ppb	0.5	5785655.14	7500	109.75	79.5	120.4	
Mg	24	45	He	5445.165	ppb	0.2	2025872.64	5000	108.9	79.5	120.4	
Al	27	45	He	1934.501	ppb	0.2	269871.72	2000	96.73	79.5	120.4	
Si	28	45	H2	1006.545	ppb	1.0	230633.61	1000	100.65	79.5	120.4	
K	39	45	He	10675.372	ppb	0.3	3196278.04	10000	106.75	79.5	120.4	
Ca	40	45	H2	2606.626	ppb	0.4	5413936.52	2500	104.27	79.5	120.4	
V	51	89	He	533.684	ppb	0.2	2570256.18	500	106.74	79.5	120.4	
Cr	52	89	He	209.359	ppb	0.8	1296559.89	200	104.68	79.5	120.4	
Mn	55	89	He	513.637	ppb	0.3	1388834.39	500	102.73	79.5	120.4	
Fe	56	89	H2	1033.990	ppb	0.8	8416101.32	1000	103.4	79.5	120.4	
Co	59	89	He	525.753	ppb	0.6	5443540.54	500	105.15	79.5	120.4	
Ni	60	89	He	524.650	ppb	0.7	1502400.27	500	104.93	79.5	120.4	
Cu	63	89	He	254.949	ppb	0.6	2007836.04	250	101.98	79.5	120.4	
Zn	66	89	He	520.317	ppb	0.3	459443.22	500	104.06	79.5	120.4	
As	75	89	He	108.144	ppb	0.7	66312.33	100	108.14	79.5	120.4	
Se	78	89	H2	104.281	ppb	0.7	31840.65	100	104.28	79.5	120.4	
Sr	88	89	He	521.945	ppb	0.1	1630796.12	500	104.39	79.5	120.4	
Mo	95	89	He	109.615	ppb	0.2	406924.54	100	109.62	79.5	120.4	
Ag	107	89	He	53.095	ppb	0.6	638719.14	50	106.19	79.5	120.4	
Cd	111	89	He	270.377	ppb	0.3	389722.34	250	108.15	79.5	120.4	
Sn	118	159	He	527.933	ppb	1.1	1579707.23	500	105.59	79.5	120.4	
Sb	121	159	No Gas	104.635	ppb	5.6	2064076.11	100	104.64	79.5	120.4	
Ba	137	159	No Gas	2037.106	ppb	5.0	15406514.62	2000	101.86	79.5	120.4	
W	182	159	No Gas	101.234	ppb	5.8	1592067.15	100	101.23	79.5	120.4	
Tl	205	209	No Gas	109.126	ppb	4.5	3178184.24	100	109.13	79.5	120.4	
Pb	208	209	No Gas	106.180	ppb	5.2	4359973.83	100	106.18	79.5	120.4	
Th	232	209	No Gas	104.265	ppb	6.5	4248743.70	100	104.27	79.5	120.4	
U	238	209	No Gas	105.518	ppb	5.3	4121428.68	100	105.52	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8276161.08	2.6	7044915.45	117.48	29.5	120.4	
Sc	45	No Gas	14129579.29	2.8	13133308.16	107.59	29.5	120.4	
Sc	45	H2	1671290.49	1.1	1716173.87	97.38	29.5	120.4	
Sc	45	He	399522.08	0.7	411218.26	97.16	29.5	120.4	
Ge	72	No Gas	2527638.44	2.7	2426863.86	104.15	29.5	120.4	
Ge	72	H2	496574.25	0.6	518471.77	95.78	29.5	120.4	
Ge	72	He	245153.20	0.4	247072.74	99.22	29.5	120.4	
Y	89	H2	8968401.21	0.9	9189572.79	97.59	29.5	120.4	
Y	89	He	2003922.33	0.8	2049271.57	97.79	29.5	120.4	
Tb	159	No Gas	20077283.17	2.2	18495507.5	108.55	29.5	120.4	
Tb	159	He	7865715.09	0.7	8005546.34	98.25	29.5	120.4	
Bi	209	No Gas	9193021.34	2.3	8721584.14	105.41	29.5	120.4	

Sample Report

Sample Name SN5923-001R

File Name 082SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:23:17 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.262	ppb	3.5	1721.28	100	
11	B	6	No Gas	77.108	ppb	5.2	337331.24	1000	
23	Na	45	He	150182.768	ppb	0.1	107676640.35	200000	
24	Mg	45	He	12407.595	ppb	0.2	4717894.82	200000	
27	Al	45	He	349.877	ppb	0.5	49951.32	200000	
28	Si	45	H2	32519.731	ppb	0.5	7444705.90	10000	>LDR
39	K	45	He	42617.771	ppb	0.2	12981771.55	200000	
40	Ca	45	H2	56668.055	ppb	0.4	117975863.79	200000	
51	V	89	He	6.222	ppb	0.4	30452.62	1000	
52	Cr	89	He	6.643	ppb	0.8	42571.95	2000	
55	Mn	89	He	304.112	ppb	0.7	831163.04	2000	
56	Fe	89	H2	1927.984	ppb	0.8	15712709.55	100000	
59	Co	89	He	1.879	ppb	3.3	19675.25	1000	
60	Ni	89	He	7.353	ppb	2.0	21992.34	1000	
63	Cu	89	He	49.312	ppb	0.9	393131.21	2000	
66	Zn	89	He	79.373	ppb	1.2	71110.59	2000	
75	As	89	He	14.556	ppb	2.9	9029.25	1000	
78	Se	89	H2	0.877	ppb	6.2	268.66	1000	
88	Sr	89	He	284.287	ppb	1.0	897756.80	2000	
95	Mo	89	He	25.135	ppb	1.3	94334.42	1000	
107	Ag	89	He	0.054	ppb	9.4	676.71	100	
111	Cd	89	He	2.531	ppb	3.3	3688.69	1000	
118	Sn	159	He	1.053	ppb	8.3	3510.60	1000	
121	Sb	159	No Gas	0.896	ppb	1.3	17691.40	1000	
137	Ba	159	No Gas	73.123	ppb	5.4	544708.37	2000	
182	W	159	No Gas	0.611	ppb	6.4	9560.95	1000	
205	Tl	209	No Gas	0.631	ppb	3.1	17602.05	1000	
208	Pb	209	No Gas	12.823	ppb	5.6	500930.99	2000	
232	Th	209	No Gas	0.823	ppb	9.7	32294.88	1000	
238	U	209	No Gas	3.339	ppb	5.7	124039.14	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7130693.72	2.8	7044915.45	101.22	29.5	120.4	
Sc	45	No Gas	14469042.70	1.9	13133308.16	110.17	29.5	120.4	
Sc	45	H2	1676121.60	1.5	1716173.87	97.67	29.5	120.4	
Sc	45	He	408331.90	0.8	411218.26	99.3	29.5	120.4	
Ge	72	No Gas	2492841.32	2.3	2426863.86	102.72	29.5	120.4	
Ge	72	H2	489479.46	0.6	518471.77	94.41	29.5	120.4	
Ge	72	He	244814.12	1.0	247072.74	99.09	29.5	120.4	
Y	89	H2	8980875.77	1.3	9189572.79	97.73	29.5	120.4	
Y	89	He	2025510.13	1.5	2049271.57	98.84	29.5	120.4	
Tb	159	No Gas	19775319.01	2.4	18495507.5	106.92	29.5	120.4	
Tb	159	He	7736686.90	0.9	8005546.34	96.64	29.5	120.4	
Bi	209	No Gas	8744667.90	2.5	8721584.14	100.26	29.5	120.4	

Sample Report

Sample Name	RINSE
File Name	083SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:26:03 PM
Sample Type	Sample
Total Dilution	1.0000
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.003	ppb	41.9	17.78	100	
11	B	6	No Gas	1.870	ppb	4.5	10212.86	1000	
23	Na	45	He	59.087	ppb	3.3	53857.49	200000	
24	Mg	45	He	1.265	ppb	20.5	520.05	200000	
27	Al	45	He	0.397	ppb	52.5	134.45	200000	
28	Si	45	H2	3.775	ppb	14.6	1818.80	10000	
39	K	45	He	16.937	ppb	12.1	24658.48	200000	
40	Ca	45	H2	6.837	ppb	2.3	17884.10	200000	
51	V	89	He	0.007	ppb	121.0	198.90	1000	
52	Cr	89	He	-0.013	ppb	N/A	932.53	2000	
55	Mn	89	He	0.034	ppb	8.0	218.63	2000	
56	Fe	89	H2	0.315	ppb	10.3	5497.17	100000	
59	Co	89	He	0.013	ppb	34.0	148.90	1000	
60	Ni	89	He	-0.210	ppb	N/A	114.45	1000	
63	Cu	89	He	-0.025	ppb	N/A	543.37	2000	
66	Zn	89	He	0.033	ppb	58.7	345.57	2000	
75	As	89	He	0.006	ppb	95.6	14.00	1000	
78	Se	89	H2	0.020	ppb	20.2	6.83	1000	
88	Sr	89	He	0.028	ppb	21.6	111.12	2000	
95	Mo	89	He	0.035	ppb	25.8	166.68	1000	
107	Ag	89	He	0.016	ppb	7.3	212.23	100	
111	Cd	89	He	0.005	ppb	12.7	8.89	1000	
118	Sn	159	He	0.153	ppb	13.6	882.28	1000	
121	Sb	159	No Gas	0.010	ppb	23.4	470.53	1000	
137	Ba	159	No Gas	0.060	ppb	19.8	523.93	2000	
182	W	159	No Gas	0.022	ppb	24.9	443.85	1000	
205	Tl	209	No Gas	0.002	ppb	59.2	176.87	1000	
208	Pb	209	No Gas	0.011	ppb	23.4	650.73	2000	
232	Th	209	No Gas	0.006	ppb	23.2	577.33	1000	
238	U	209	No Gas	0.004	ppb	22.5	170.19	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7644031.57	1.3	7044915.45	108.5	29.5	120.4	
Sc	45	No Gas	14292879.98	0.6	13133308.16	108.83	29.5	120.4	
Sc	45	H2	1708441.47	1.9	1716173.87	99.55	29.5	120.4	
Sc	45	He	401204.78	3.0	411218.26	97.56	29.5	120.4	
Ge	72	No Gas	2577697.29	1.0	2426863.86	106.22	29.5	120.4	
Ge	72	H2	503535.45	1.0	518471.77	97.12	29.5	120.4	
Ge	72	He	244260.41	1.4	247072.74	98.86	29.5	120.4	
Y	89	H2	9187354.32	1.0	9189572.79	99.98	29.5	120.4	
Y	89	He	1996744.88	2.0	2049271.57	97.44	29.5	120.4	
Tb	159	No Gas	20415910.11	0.3	18495507.5	110.38	29.5	120.4	
Tb	159	He	7937194.88	2.5	8005546.34	99.15	29.5	120.4	
Bi	209	No Gas	9500692.76	0.7	8721584.14	108.93	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 084SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b

Acq Time 8/3/2020 8:28:37 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	45.3	15.55	100	
11	B	6	No Gas	1.153	ppb	4.3	6801.83	1000	
23	Na	45	He	31.496	ppb	6.7	34252.06	200000	
24	Mg	45	He	0.410	ppb	26.2	197.79	200000	
27	Al	45	He	0.327	ppb	9.0	124.45	200000	
28	Si	45	H2	0.502	ppb	126.6	1034.52	10000	
39	K	45	He	9.536	ppb	27.9	22350.66	200000	
40	Ca	45	H2	1.431	ppb	6.3	6283.83	200000	
51	V	89	He	0.011	ppb	56.4	220.01	1000	
52	Cr	89	He	-0.015	ppb	N/A	917.87	2000	
55	Mn	89	He	0.002	ppb	398.1	132.64	2000	
56	Fe	89	H2	0.082	ppb	6.3	3507.66	100000	
59	Co	89	He	0.009	ppb	42.3	106.68	1000	
60	Ni	89	He	-0.203	ppb	N/A	133.34	1000	
63	Cu	89	He	-0.026	ppb	N/A	538.92	2000	
66	Zn	89	He	0.038	ppb	100.6	351.13	2000	
75	As	89	He	0.004	ppb	190.4	12.67	1000	
78	Se	89	H2	0.018	ppb	61.9	6.33	1000	
88	Sr	89	He	0.010	ppb	59.5	56.67	2000	
95	Mo	89	He	0.020	ppb	43.9	108.89	1000	
107	Ag	89	He	0.018	ppb	11.9	232.23	100	
111	Cd	89	He	0.002	ppb	119.3	4.08	1000	
118	Sn	159	He	0.075	ppb	21.6	650.04	1000	
121	Sb	159	No Gas	0.004	ppb	84.1	357.07	1000	
137	Ba	159	No Gas	0.023	ppb	16.9	243.61	2000	
182	W	159	No Gas	0.007	ppb	56.5	203.56	1000	
205	Tl	209	No Gas	-0.001	ppb	N/A	86.77	1000	
208	Pb	209	No Gas	0.004	ppb	60.9	380.43	2000	
232	Th	209	No Gas	0.003	ppb	18.8	480.55	1000	
238	U	209	No Gas	0.002	ppb	27.6	83.43	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7581249.78	1.4	7044915.45	107.61	29.5	120.4	
Sc	45	No Gas	14160664.12	1.5	13133308.16	107.82	29.5	120.4	
Sc	45	H2	1671890.75	2.2	1716173.87	97.42	29.5	120.4	
Sc	45	He	399569.42	0.8	411218.26	97.17	29.5	120.4	
Ge	72	No Gas	2539596.72	2.1	2426863.86	104.65	29.5	120.4	
Ge	72	H2	497853.21	1.5	518471.77	96.02	29.5	120.4	
Ge	72	He	241981.07	0.4	247072.74	97.94	29.5	120.4	
Y	89	H2	9047202.09	1.8	9189572.79	98.45	29.5	120.4	
Y	89	He	1996719.66	0.8	2049271.57	97.44	29.5	120.4	
Tb	159	No Gas	20428267.89	1.4	18495507.5	110.45	29.5	120.4	
Tb	159	He	7976350.57	0.6	8005546.34	99.64	29.5	120.4	
Bi	209	No Gas	9528309.22	1.4	8721584.14	109.25	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	085_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:31:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.888	ppb	4.5	167636.86	25	95.55	89.8	110.2	
11	B	6	No Gas	24.529	ppb	5.6	115575.58	25	98.12	89.8	110.2	
23	Na	45	He	5086.339	ppb	0.8	3599484.65	5000	101.73	89.8	110.2	
24	Mg	45	He	5029.987	ppb	1.0	1881648.20	5000	100.6	89.8	110.2	
27	Al	45	He	481.539	ppb	1.0	67604.88	500	96.31	89.8	110.2	
28	Si	45	H2	470.159	ppb	1.5	108647.07	500	94.03	89.8	110.2	
39	K	45	He	4918.971	ppb	1.4	1491413.44	5000	98.38	89.8	110.2	
40	Ca	45	H2	4804.288	ppb	0.9	10015206.38	5000	96.09	89.8	110.2	
51	V	89	He	24.671	ppb	0.1	119933.24	25	98.68	89.8	110.2	
52	Cr	89	He	24.796	ppb	0.4	155689.71	25	99.18	89.8	110.2	
55	Mn	89	He	24.624	ppb	0.7	67239.61	25	98.5	89.8	110.2	
56	Fe	89	H2	4877.869	ppb	0.1	40020624.21	5000	97.56	89.8	110.2	
59	Co	89	He	24.872	ppb	0.4	259609.39	25	99.49	89.8	110.2	
60	Ni	89	He	24.514	ppb	0.5	71453.09	25	98.06	89.8	110.2	
63	Cu	89	He	24.981	ppb	0.4	198997.96	25	99.92	89.8	110.2	
66	Zn	89	He	24.799	ppb	1.5	22377.45	25	99.2	89.8	110.2	
75	As	89	He	24.362	ppb	0.6	15066.11	25	97.45	89.8	110.2	
78	Se	89	H2	24.571	ppb	1.3	7564.88	25	98.28	89.8	110.2	
88	Sr	89	He	23.640	ppb	0.8	74477.89	25	94.56	89.8	110.2	
95	Mo	89	He	25.239	ppb	1.1	94469.20	25	100.96	89.8	110.2	
107	Ag	89	He	25.320	ppb	0.3	307044.47	25	101.28	89.8	110.2	
111	Cd	89	He	24.925	ppb	1.1	36216.90	25	99.7	89.8	110.2	
118	Sn	159	He	23.906	ppb	1.2	73010.13	25	95.62	89.8	110.2	
121	Sb	159	No Gas	24.819	ppb	5.9	492930.76	25	99.28	89.8	110.2	
137	Ba	159	No Gas	24.576	ppb	4.5	187147.21	25	98.3	89.8	110.2	
182	W	159	No Gas	23.726	ppb	6.0	375599.70	25	94.9	89.8	110.2	
205	Tl	209	No Gas	24.909	ppb	6.0	744191.31	25	99.64	89.8	110.2	
208	Pb	209	No Gas	24.870	ppb	5.1	1047851.21	25	99.48	89.8	110.2	
232	Th	209	No Gas	23.397	ppb	5.5	978540.46	25	93.59	89.8	110.2	
238	U	209	No Gas	24.120	ppb	3.6	966780.94	25	96.48	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7610493.97	1.4	7044915.45	108.03	29.5	120.4	
Sc	45	No Gas	14014525.07	1.6	13133308.16	106.71	29.5	120.4	
Sc	45	H2	1677882.99	0.3	1716173.87	97.77	29.5	120.4	
Sc	45	He	401736.80	1.0	411218.26	97.69	29.5	120.4	
Ge	72	No Gas	2541583.73	1.8	2426863.86	104.73	29.5	120.4	
Ge	72	H2	498711.95	0.9	518471.77	96.19	29.5	120.4	
Ge	72	He	244273.54	0.6	247072.74	98.87	29.5	120.4	
Y	89	H2	9042081.66	0.3	9189572.79	98.4	29.5	120.4	
Y	89	He	2019976.45	0.6	2049271.57	98.57	29.5	120.4	
Tb	159	No Gas	20209309.42	2.5	18495507.5	109.27	29.5	120.4	
Tb	159	He	7983409.60	0.3	8005546.34	99.72	29.5	120.4	
Bi	209	No Gas	9430448.97	2.1	8721584.14	108.13	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	086_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH03A.b
Acq Time	8/3/2020 8:33:48 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	026CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.014	ppb	42.5	98.89	0.2	
11	B	6	No Gas	1.291	ppb	5.7	7309.87	4	
23	Na	45	He	38.281	ppb	3.5	38742.22	200	
24	Mg	45	He	3.174	ppb	6.4	1217.91	20	
27	Al	45	He	0.077	ppb	85.5	88.89	20	
28	Si	45	H2	0.083	ppb	600.4	921.05	100	
39	K	45	He	10.362	ppb	15.2	22435.80	200	
40	Ca	45	H2	2.405	ppb	4.4	8167.10	20	
51	V	89	He	0.025	ppb	21.4	286.68	1	
52	Cr	89	He	0.005	ppb	238.2	1040.52	1	
55	Mn	89	He	0.023	ppb	49.5	189.30	0.4	
56	Fe	89	H2	1.362	ppb	6.5	13848.98	20	
59	Co	89	He	0.030	ppb	5.0	331.14	0.2	
60	Ni	89	He	-0.189	ppb	N/A	175.56	0.4	
63	Cu	89	He	-0.010	ppb	N/A	665.60	0.6	
66	Zn	89	He	-0.042	ppb	N/A	280.01	2	
75	As	89	He	0.018	ppb	21.6	21.00	1	
78	Se	89	H2	0.035	ppb	14.7	11.33	1	
88	Sr	89	He	0.104	ppb	6.7	347.80	1	
95	Mo	89	He	0.064	ppb	26.7	274.46	1	
107	Ag	89	He	0.026	ppb	3.4	333.35	0.2	
111	Cd	89	He	0.014	ppb	16.2	21.11	0.2	
118	Sn	159	He	0.186	ppb	17.5	984.52	1	
121	Sb	159	No Gas	0.034	ppb	23.2	954.43	0.2	
137	Ba	159	No Gas	0.045	ppb	15.9	407.13	0.4	
182	W	159	No Gas	0.083	ppb	16.1	1418.32	1	
205	Tl	209	No Gas	0.025	ppb	41.9	864.35	0.2	
208	Pb	209	No Gas	0.019	ppb	25.9	997.80	0.2	
232	Th	209	No Gas	0.095	ppb	16.3	4308.89	1	
238	U	209	No Gas	0.026	ppb	13.3	1051.22	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7450625.05	2.4	7044915.45	105.76	29.5	120.4	
Sc	45	No Gas	14000485.31	1.0	13133308.16	106.6	29.5	120.4	
Sc	45	H2	1644648.06	1.2	1716173.87	95.83	29.5	120.4	
Sc	45	He	396717.45	0.9	411218.26	96.47	29.5	120.4	
Ge	72	No Gas	2529471.94	1.4	2426863.86	104.23	29.5	120.4	
Ge	72	H2	490346.96	1.1	518471.77	94.58	29.5	120.4	
Ge	72	He	241933.74	1.3	247072.74	97.92	29.5	120.4	
Y	89	H2	8946483.15	1.1	9189572.79	97.35	29.5	120.4	
Y	89	He	1997847.52	1.7	2049271.57	97.49	29.5	120.4	
Tb	159	No Gas	20280756.36	0.8	18495507.5	109.65	29.5	120.4	
Tb	159	He	7937498.42	0.8	8005546.34	99.15	29.5	120.4	
Bi	209	No Gas	9441538.29	1.0	8721584.14	108.25	29.5	120.4	

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: L (Agilent 7800) **ANALYST**: AP/KC **ANALYSIS DATE**: 8/04/2020

METHOD: ICP-MS
- ☑ 200.8
- ☑ 6020
- ☑ DOD

REVIEWED
AT 8/5/20
KATAHDIN ANALYTICAL
METALS SECTION

FILE NAME: LNH04A

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed
to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by
_____ (initials) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW19528	08/03/20	08/03/21	0 ug/L
Standard 1	MW19524	07/30/20	10/08/20	Varies by Element
ICV	MW19443	06/04/20	09/04/20	Varies by Element
PQL	MW19530	08/04/20	10/01/20	Varies by Element
LRS1	MW19429	05/26/20	08/26/20	Varies by Element
LRS2	MW19489	07/08/20	10/08/20	Varies by Element
ICSA	MW19525	07/30/20	08/07/20	Varies by Element
ICSAB	MW19526	07/30/20	08/07/20	Varies by Element
CCV	MW19523	07/30/20	10/08/20	Varies by Element
Internal Standard (ISTD)	MW19478	07/06/20	10/06/20	0.4 mg/L (Li,Sc,Ge/Y,Tb,Bi)

Additional Comments and Notes:

Opening PQL (14:49) fails low for B (0.550 ug/L)

Closing PQL (20:05) fails high for Na (370.493 ug/L) Cd (0.243 ug/L) and failed low for B (1.525 ug/L)

ICSA (14:51) fails low for Mn (0.498 ug/L), LRS1 (14:57) fails high for Ag (113.894 ug/L), CCV (19:14) failed high for B, CCV (19:46) failed high for Na (5562.452 ug/L) and had ISTD failure for Li, Sc in No Gas mode and Sc, Ge in Helium mode for 6020/DoD limits. Samples unaffected due to the failure because they were under analysis by EPA 200.8. CCB (19:49) fails low for B, Ca (13.94 ug/L), Mg (19.571 ug/L) and fails high for Na (417.181 ug/L). CCB (20:02) fails low for Na (184.967 ug/L) Mn (0.238 ug/L)

For high failing ICB/ICSA/CCBs/PQLs, reported samples less than ½ LOQ or >10x detected concentrations of failed analytes.

For low failing CCBs/PQLs, reported samples greater than 10x absolute value of failures, or greater than 10x LOQ, whichever is greater.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x, 25x, 50x diln.: 2.0 mL of sample, 5x dilute sample, or 10x dilute sample (pipet M25) + 8.0 mL of MW19528 (pipet M22)

10x or 20x diln.: 1.0 mL or 0.5 mL of sample (pipet M25) + 9.0mL or 9.5 mL of MW19528 (pipet M22)

Post Spike: 0.10 mL of MW19464 (pipet M27) into 10 mL final volume of appropriately diluted sample (pipet M22)

(Unless otherwise specified)

INSTRUMENT RUNLOG

Instrument: AGILENT 7800

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CalBlank	1	LNH04A	08/04/2020	14:36	KC
CalStd	1	LNH04A	08/04/2020	14:40	KC
ICV	1	LNH04A	08/04/2020	14:43	KC
ICB	1	LNH04A	08/04/2020	14:46	KC
PQL	1	LNH04A	08/04/2020	14:49	KC
ICSA	1	LNH04A	08/04/2020	14:51	KC
ICSAB	1	LNH04A	08/04/2020	14:54	KC
LRS1	1	LNH04A	08/04/2020	14:57	KC
LRS2	1	LNH04A	08/04/2020	14:59	KC
RINSE	1	LNH04A	08/04/2020	15:02	KC
RINSE	1	LNH04A	08/04/2020	15:05	KC
CCV	1	LNH04A	08/04/2020	15:08	KC
CCB	1	LNH04A	08/04/2020	15:10	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:10	KC
PBWNG23IMW2	5	LNH04A	08/04/2020	17:13	KC
SN5815-004	5	LNH04A	08/04/2020	17:15	KC
LCSONG28IMS1	5	LNH04A	08/04/2020	17:18	KC
LCSWNG23IMW2	5	LNH04A	08/04/2020	17:22	KC
PBSNG28IMS1	5	LNH04A	08/04/2020	17:24	KC
SN6056-001	5	LNH04A	08/04/2020	17:27	KC
SN6056-002	5	LNH04A	08/04/2020	17:30	KC
SN6056-003	5	LNH04A	08/04/2020	17:32	KC
LCSWNG29IMW2	5	LNH04A	08/04/2020	17:35	KC
CCV	1	LNH04A	08/04/2020	17:38	KC
CCB	1	LNH04A	08/04/2020	17:40	KC
PBWNG29IMW2	5	LNH04A	08/04/2020	17:43	KC
SN5717-020R	5	LNH04A	08/04/2020	17:46	KC
SN5830-002R	5	LNH04A	08/04/2020	17:48	KC
SN5832-001R	5	LNH04A	08/04/2020	17:51	KC
SN5832-002R	5	LNH04A	08/04/2020	17:54	KC
SN5832-003R	5	LNH04A	08/04/2020	17:57	KC
SN5832-004R	5	LNH04A	08/04/2020	17:59	KC
SN5897-001R	5	LNH04A	08/04/2020	18:02	KC
SN6056-004	5	LNH04A	08/04/2020	18:05	KC
SN6061-002	5	LNH04A	08/04/2020	18:07	KC
CCV	1	LNH04A	08/04/2020	18:10	KC
CCB	1	LNH04A	08/04/2020	18:13	KC
LCSWNG30IMW1	1	LNH04A	08/04/2020	18:15	KC
PBWNG30IMW1	1	LNH04A	08/04/2020	18:18	KC
SN5923-001R	1	LNH04A	08/04/2020	18:21	KC
LCSWNG30IW2	5	LNH04A	08/04/2020	18:23	KC
PBWNG30IW3	5	LNH04A	08/04/2020	18:26	KC
SN5946-001R	5	LNH04A	08/04/2020	18:29	KC
LCSWNG30IMW3	5	LNH04A	08/04/2020	18:31	KC

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
PBWNG30IMW3	5	LNH04A	08/04/2020	18:34	KC
SN5897-002R	5	LNH04A	08/04/2020	18:37	KC
LCSONG31IMS1	5	LNH04A	08/04/2020	18:39	KC
CCV	1	LNH04A	08/04/2020	18:42	KC
CCB	1	LNH04A	08/04/2020	18:45	KC
PBSNG31IMS1	5	LNH04A	08/04/2020	18:47	KC
SN6259-001	5	LNH04A	08/04/2020	18:50	KC
SN6259-001A	5	LNH04A	08/04/2020	18:53	KC
SN6259-001L	5	LNH04A	08/04/2020	18:55	KC
SN6259-001D	5	LNH04A	08/04/2020	18:58	KC
SN6259-001S	5	LNH04A	08/04/2020	19:01	KC
SN6259-002	5	LNH04A	08/04/2020	19:03	KC
SN6259-003	5	LNH04A	08/04/2020	19:06	KC
SN6259-004	5	LNH04A	08/04/2020	19:09	KC
LCSWNG31IMW1	1	LNH04A	08/04/2020	19:11	KC
CCV	1	LNH04A	08/04/2020	19:14	KC
CCB	1	LNH04A	08/04/2020	19:17	KC
PBWNG31IMW1	1	LNH04A	08/04/2020	19:19	KC
SN6071-001R	1	LNH04A	08/04/2020	19:22	KC
SN6071-002RA	1	LNH04A	08/04/2020	19:25	KC
SN6071-003RL	1	LNH04A	08/04/2020	19:27	KC
SN6071-004RP	1	LNH04A	08/04/2020	19:30	KC
SN6071-005RS	1	LNH04A	08/04/2020	19:33	KC
SN6310-001	1	LNH04A	08/04/2020	19:35	KC
SN6310-003	1	LNH04A	08/04/2020	19:38	KC
SN6347-001	1	LNH04A	08/04/2020	19:41	KC
SN6347-002	1	LNH04A	08/04/2020	19:43	KC
CCV	1	LNH04A	08/04/2020	19:46	KC
CCB	1	LNH04A	08/04/2020	19:49	KC
SN6347-003	1	LNH04A	08/04/2020	19:52	KC
SN6347-004	1	LNH04A	08/04/2020	19:54	KC
SN6349-001	1	LNH04A	08/04/2020	19:57	KC
CCV	1	LNH04A	08/04/2020	20:00	KC
CCB	1	LNH04A	08/04/2020	20:02	KC
PQL	1	LNH04A	08/04/2020	20:05	KC
RINSE	1	LNH04A	08/04/2020	20:07	KC
RINSE	1	LNH04A	08/04/2020	20:10	KC

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq. Date-Time	8/4/2020 1:59:45 PM
Report Comment	---
Instrument Name	G8421A SG18503526

[No Gas]

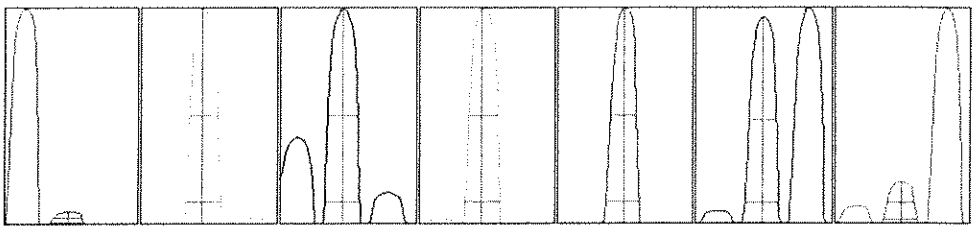
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	15287	152868.81	0.407	5.000	
9	6199	61986.07	0.517	5.000	
24	242790	2427898.98	0.188	5.000	
59	43961	439614.77	0.133	5.000	
115	469718	4697184.71	0.415	5.000	
205	25045	250446.03	0.721	5.000	
208	54819	548189.41	0.331	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	15388	15278	15219	15285	15265
9	6243	6193	6168	6218	6170
24	243427	242327	242646	242467	243082
59	43953	44021	43868	43970	43995
115	472930	468935	469961	467829	468937
205	24817	24899	25090	25177	25239
208	54777	55047	54917	54560	54794

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	24904.11	6.95	6.90 - 7.10	
9	10298.36	8.90	8.90 - 9.10	
24	385650.79	23.90	23.90 - 24.10	
59	71508.79	58.90	58.90 - 59.10	
115	829252.64	115.00	114.90 - 115.10	
205	42343.99	205.00	204.90 - 205.10	
208	92972.60	208.00	207.90 - 208.10	

US EPA Tune Check Report

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.730	0.900	
9	0.64	0.756	0.900	
24	0.65	0.772	0.900	
59	0.64	0.768	0.900	
115	0.59	0.744	0.900	
205	0.61	0.738	0.900	
208	0.61	0.736	0.900	

Integration Time [sec]	0.1
Acquisition Time [sec]	247
Y Axis	Linear

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[H2]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	3185	31854.68	1.519	5.000	
89	315279	3152788.75	1.753	5.000	
205	26625	266246.43	0.579	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	3120	3167	3177	3246	3217
89	306780	313481	316033	319491	320609
205	26407	26612	26562	26746	26795

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.6 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	5.5 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

[He]

Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
59	9442	94419.88	0.896	5.000	
89	66467	664670.81	1.502	5.000	
205	12117	121168.79	0.759	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9313	9400	9496	9518	9483
89	64791	66312	66953	67055	67224
205	11970	12082	12181	12179	12172

Integration Time [sec] 0.1

US EPA Tune Check Report

Tune Parameters

Plasma Parameters

Plasma Mode	General Purpose	Nebulizer Gas	1.09 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	1.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-55 V
Omega Bias	-95 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm

EM

Discriminator	3.3 mV	Analog HV	2430 V	Pulse HV	1191 V

Calibration Blank Report

Sample Name	CalBlank
File Name	006CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:36:32 PM
Sample Type	CalBlk
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	5.56	34.7
11	B	6	No Gas	1674.60	3.0
23	Na	45	He	32546.17	1.7
24	Mg	45	He	71.12	44.3
27	Al	45	He	102.23	11.5
28	Si	45	H2	820.93	16.0
39	K	45	He	25419.56	1.8
40	Ca	45	H2	4992.15	4.9
51	V	89	He	193.34	21.0
52	Cr	89	He	904.53	1.6
55	Mn	89	He	145.31	21.5
56	Fe	89	H2	2709.95	6.3
59	Co	89	He	48.89	70.0
60	Ni	89	He	307.79	2.3
63	Cu	89	He	443.36	13.3
66	Zn	89	He	354.46	16.1
75	As	89	He	11.67	35.7
78	Se	89	H2	1.83	15.7
88	Sr	89	He	30.00	19.2
95	Mo	89	He	14.44	13.4
107	Ag	89	He	36.67	41.7
111	Cd	89	He	1.48	86.6
118	Sn	159	He	417.80	5.6
121	Sb	159	No Gas	206.90	20.1
137	Ba	159	No Gas	113.46	18.4
182	W	159	No Gas	46.72	32.7
205	Tl	209	No Gas	707.49	14.9
208	Pb	209	No Gas	427.15	19.5
232	Th	209	No Gas	220.25	15.7
238	U	209	No Gas	3.34	173.2

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	8217096.81	0.9
Sc	45	No Gas	15952466.59	0.3
Sc	45	H2	1988810.56	1.0
Sc	45	He	477124.13	1.8
Ge	72	No Gas	2777617.47	0.3
Ge	72	H2	580378.32	0.4
Ge	72	He	274469.22	1.0
Y	89	H2	10106085.94	0.5
Y	89	He	2217336.32	1.8
Tb	159	No Gas	20085725.95	0.6
Tb	159	He	7863593.35	1.3
Bi	209	No Gas	9123990.23	0.8

Calibration Standard Report

Sample Name	CalStd
File Name	007CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:40:11 PM
Sample Type	CalStd
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	CPS	RSD
9	Be	6	No Gas	384461.06	2.3
11	B	6	No Gas	260953.90	1.7
23	Na	45	He	8652114.62	0.4
24	Mg	45	He	4586873.58	0.3
27	Al	45	He	171092.53	1.0
28	Si	45	H2	278231.03	0.6
39	K	45	He	3714690.06	0.5
40	Ca	45	H2	25207833.23	0.5
51	V	89	He	286108.46	0.2
52	Cr	89	He	363692.60	0.3
55	Mn	89	He	159585.18	0.2
56	Fe	89	H2	93166381.43	0.1
59	Co	89	He	596835.02	0.6
60	Ni	89	He	165099.09	0.7
63	Cu	89	He	447291.80	0.4
66	Zn	89	He	50399.73	1.5
75	As	89	He	34250.67	1.5
78	Se	89	H2	17385.37	0.6
88	Sr	89	He	176553.29	0.2
95	Mo	89	He	204935.60	0.8
107	Ag	89	He	642851.72	0.6
111	Cd	89	He	76887.16	0.6
118	Sn	159	He	158560.17	0.5
121	Sb	159	No Gas	1003993.83	1.1
137	Ba	159	No Gas	393421.76	0.8
182	W	159	No Gas	785290.52	2.2
205	Tl	209	No Gas	1439334.65	2.0
208	Pb	209	No Gas	2024853.78	1.3
232	Th	209	No Gas	1969899.48	2.6
238	U	209	No Gas	1893012.23	2.0

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8274033.33	1.8	8217096.81	100.69	29.5	120.4	
Sc	45	No Gas	16078081.26	0.6	15952466.59	100.79	29.5	120.4	
Sc	45	H2	2009707.68	1.1	1988810.56	101.05	29.5	120.4	
Sc	45	He	482059.92	0.3	477124.13	101.03	29.5	120.4	
Ge	72	No Gas	2766585.37	0.8	2777617.47	99.6	29.5	120.4	
Ge	72	H2	589816.30	0.6	580378.32	101.63	29.5	120.4	
Ge	72	He	277754.05	0.7	274469.22	101.2	29.5	120.4	
Y	89	H2	10192705.99	0.3	10106085.94	100.86	29.5	120.4	
Y	89	He	2234021.86	0.3	2217336.32	100.75	29.5	120.4	
Tb	159	No Gas	20223042.20	1.1	20085725.95	100.68	29.5	120.4	
Tb	159	He	7939919.26	0.5	7863593.35	100.97	29.5	120.4	
Bi	209	No Gas	8965649.71	1.5	9123990.23	98.26	29.5	120.4	

Initial Calibration Verification (ICV) Report

Sample Name	ICV
File Name	008_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:43:38 PM
Sample Type	ICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	20.374	ppb	4.6	157417.07	20	101.87	89.6	110.4	
11	B	6	No Gas	20.090	ppb	4.7	106363.25	20	100.45	89.6	110.4	
23	Na	45	He	3928.251	ppb	0.2	3425193.35	4000	98.21	89.6	110.4	
24	Mg	45	He	3933.843	ppb	0.4	1807832.25	4000	98.35	89.6	110.4	
27	Al	45	He	373.016	ppb	1.3	64004.87	400	93.25	89.6	110.4	
28	Si	45	H2	431.558	ppb	0.5	118107.88	400	107.89	89.6	110.4	
39	K	45	He	3913.140	ppb	0.5	1472029.45	4000	97.83	89.6	110.4	
40	Ca	45	H2	3927.752	ppb	0.8	9703349.30	4000	98.19	89.6	110.4	
51	V	89	He	20.009	ppb	1.0	114914.74	20	100.04	89.6	110.4	
52	Cr	89	He	20.243	ppb	0.8	148185.07	20	101.21	89.6	110.4	
55	Mn	89	He	20.309	ppb	0.6	65080.50	20	101.54	89.6	110.4	
56	Fe	89	H2	3950.736	ppb	0.4	36111755.06	4000	98.77	89.6	110.4	
59	Co	89	He	20.344	ppb	1.2	243507.81	20	101.72	89.6	110.4	
60	Ni	89	He	20.563	ppb	1.2	68263.65	20	102.81	89.6	110.4	
63	Cu	89	He	20.521	ppb	1.2	184327.03	20	102.61	89.6	110.4	
66	Zn	89	He	20.518	ppb	0.3	20948.60	20	102.59	89.6	110.4	
75	As	89	He	19.977	ppb	0.9	13727.92	20	99.88	89.6	110.4	
78	Se	89	H2	20.435	ppb	1.0	6971.76	20	102.18	89.6	110.4	
88	Sr	89	He	19.556	ppb	0.8	69260.67	20	97.78	89.6	110.4	
95	Mo	89	He	40.321	ppb	0.6	165706.21	40	100.8	89.6	110.4	
107	Ag	89	He	20.890	ppb	1.0	269315.88	20	104.45	89.6	110.4	
111	Cd	89	He	20.778	ppb	1.0	32036.75	20	103.89	89.6	110.4	
118	Sn	159	He	19.566	ppb	1.7	62774.75	20	97.83	89.6	110.4	
121	Sb	159	No Gas	20.671	ppb	4.8	417044.46	20	103.35	89.6	110.4	
137	Ba	159	No Gas	20.417	ppb	4.0	161470.30	20	102.08	89.6	110.4	
182	W	159	No Gas	19.787	ppb	5.4	312227.37	20	98.94	89.6	110.4	
205	Tl	209	No Gas	21.541	ppb	4.8	634965.67	20	107.71	89.6	110.4	
208	Pb	209	No Gas	20.519	ppb	4.2	850558.53	20	102.6	89.6	110.4	
232	Th	209	No Gas	20.376	ppb	4.7	821668.88	20	101.88	89.6	110.4	
238	U	209	No Gas	20.317	ppb	4.2	787260.91	20	101.58	89.6	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8316526.34	2.3	8217096.81	101.21	29.5	120.4	
Sc	45	No Gas	16124199.67	2.0	15952466.59	101.08	29.5	120.4	
Sc	45	H2	1968785.10	1.5	1988810.56	98.99	29.5	120.4	
Sc	45	He	482967.81	0.4	477124.13	101.22	29.5	120.4	
Ge	72	No Gas	2810822.31	2.2	2777617.47	101.2	29.5	120.4	
Ge	72	H2	578138.43	1.6	580378.32	99.61	29.5	120.4	
Ge	72	He	276977.77	0.5	274469.22	100.91	29.5	120.4	
Y	89	H2	9999162.04	1.2	10106085.94	98.94	29.5	120.4	
Y	89	He	2240076.70	0.8	2217336.32	101.03	29.5	120.4	
Tb	159	No Gas	20328726.22	2.4	20085725.95	101.21	29.5	120.4	
Tb	159	He	8000016.62	0.6	7863593.35	101.73	29.5	120.4	
Bi	209	No Gas	9177829.69	1.8	9123990.23	100.59	29.5	120.4	

Initial Calibration Blank (ICB) Report

Sample Name	ICB
File Name	009_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:46:21 PM
Sample Type	ICB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.008	ppb	17.9	64.45	0.2	
11	B	6	No Gas	0.498	ppb	15.1	4142.97	4	
23	Na	45	He	1.985	ppb	37.2	33803.72	200	
24	Mg	45	He	0.904	ppb	51.2	473.39	20	
27	Al	45	He	0.137	ppb	162.3	123.34	20	
28	Si	45	H2	0.288	ppb	109.7	884.34	100	
39	K	45	He	0.983	ppb	252.7	25458.00	200	
40	Ca	45	H2	1.054	ppb	4.7	7490.01	20	
51	V	89	He	-0.004	ppb	N/A	168.90	1	
52	Cr	89	He	0.011	ppb	62.5	974.53	1	
55	Mn	89	He	-0.009	ppb	N/A	116.65	0.4	
56	Fe	89	H2	1.563	ppb	3.6	16955.81	20	
59	Co	89	He	0.003	ppb	64.4	88.90	0.2	
60	Ni	89	He	-0.032	ppb	N/A	201.12	0.4	
63	Cu	89	He	0.007	ppb	76.1	502.25	0.6	
66	Zn	89	He	0.028	ppb	161.4	378.91	2	
75	As	89	He	0.005	ppb	82.1	15.00	1	
78	Se	89	H2	0.033	ppb	32.9	13.00	1	
88	Sr	89	He	0.003	ppb	109.8	41.11	1	
95	Mo	89	He	0.096	ppb	4.6	401.13	1	
107	Ag	89	He	0.008	ppb	35.5	140.00	0.2	
111	Cd	89	He	0.005	ppb	80.6	8.89	0.2	
118	Sn	159	He	0.106	ppb	0.2	752.27	1	
121	Sb	159	No Gas	0.014	ppb	18.9	470.53	0.2	
137	Ba	159	No Gas	0.005	ppb	100.4	143.49	0.4	
182	W	159	No Gas	0.071	ppb	3.4	1121.30	1	
205	Tl	209	No Gas	0.006	ppb	85.9	864.34	0.2	
208	Pb	209	No Gas	0.014	ppb	29.3	974.44	0.2	
232	Th	209	No Gas	0.049	ppb	16.7	2092.52	1	
238	U	209	No Gas	0.012	ppb	24.7	460.53	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8046753.19	4.2	8217096.81	97.93	29.5	120.4	
Sc	45	No Gas	15220932.58	7.3	15952466.59	95.41	29.5	120.4	
Sc	45	H2	1955024.14	0.9	1988810.56	98.3	29.5	120.4	
Sc	45	He	471071.78	1.6	477124.13	98.73	29.5	120.4	
Ge	72	No Gas	2675657.91	4.8	2777617.47	96.33	29.5	120.4	
Ge	72	H2	572622.34	1.4	580378.32	98.66	29.5	120.4	
Ge	72	He	270968.66	0.6	274469.22	98.72	29.5	120.4	
Y	89	H2	9992575.77	0.7	10106085.94	98.88	29.5	120.4	
Y	89	He	2199290.43	1.2	2217336.32	99.19	29.5	120.4	
Tb	159	No Gas	19466142.63	6.4	20085725.95	96.92	29.5	120.4	
Tb	159	He	7885458.91	1.4	7863593.35	100.28	29.5	120.4	
Bi	209	No Gas	8846730.59	4.8	9123990.23	96.96	29.5	120.4	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name	PQL
File Name	010LICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:49:00 PM
Sample Type	LLICV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High
9	Be	6	No Gas	0.207	ppb	5.2	1619.04	0.2	103.5	79.5	120.4
11	B	6	No Gas	0.550	ppb	1.7	4605.33	4	13.75	79.5	120.4
23	Na	45	He	208.685	ppb	0.3	209846.95	200	104.34	79.5	120.4
24	Mg	45	He	21.014	ppb	3.9	9577.25	20	105.07	79.5	120.4
27	Al	45	He	18.588	ppb	7.5	3237.15	20	92.94	79.5	120.4
28	Si	45	H2	95.604	ppb	3.8	26644.71	100	95.6	79.5	120.4
39	K	45	He	204.833	ppb	1.1	99870.64	200	102.42	79.5	120.4
40	Ca	45	H2	19.770	ppb	0.7	53445.02	20	98.85	79.5	120.4
51	V	89	He	1.017	ppb	0.8	5984.82	1	101.7	79.5	120.4
52	Cr	89	He	1.040	ppb	1.3	8419.67	1	104	79.5	120.4
55	Mn	89	He	0.403	ppb	1.6	1425.15	0.4	100.75	79.5	120.4
56	Fe	89	H2	21.554	ppb	1.0	199588.59	20	107.77	79.5	120.4
59	Co	89	He	0.232	ppb	10.4	2802.73	0.2	116	79.5	120.4
60	Ni	89	He	0.367	ppb	8.4	1513.48	0.4	91.75	79.5	120.4
63	Cu	89	He	0.627	ppb	0.3	6029.29	0.6	104.5	79.5	120.4
66	Zn	89	He	1.967	ppb	5.0	2315.84	2	98.35	79.5	120.4
75	As	89	He	0.998	ppb	2.3	692.09	1	99.8	79.5	120.4
78	Se	89	H2	1.019	ppb	3.0	349.16	1	101.9	79.5	120.4
88	Sr	89	He	0.978	ppb	1.5	3469.46	1	97.8	79.5	120.4
95	Mo	89	He	1.052	ppb	3.5	4308.62	1	105.2	79.5	120.4
107	Ag	89	He	0.224	ppb	4.1	2904.85	0.2	112	79.5	120.4
111	Cd	89	He	0.205	ppb	3.1	315.19	0.2	102.5	79.5	120.4
118	Sn	159	He	0.999	ppb	3.7	3597.29	1	99.9	79.5	120.4
121	Sb	159	No Gas	0.222	ppb	5.7	4732.81	0.2	111	79.5	120.4
137	Ba	159	No Gas	0.405	ppb	10.2	3344.15	0.4	101.25	79.5	120.4
182	W	159	No Gas	1.186	ppb	2.7	18941.60	1	118.6	79.5	120.4
205	Tl	209	No Gas	0.205	ppb	11.7	6889.62	0.2	102.5	79.5	120.4
208	Pb	209	No Gas	0.215	ppb	3.4	9512.03	0.2	107.5	79.5	120.4
232	Th	209	No Gas	0.212	ppb	5.3	8963.30	0.2	106	79.5	120.4
238	U	209	No Gas	0.213	ppb	0.8	8435.58	0.2	106.5	79.5	120.4

QC Flag
Failed DoD □ Failed 6020/EPA

Low Level Initial Calibration Verification (LLICV) Report

QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8392384.90	2.1	8217096.81	102.13	29.5	120.4	
Sc	45	No Gas	16134904.13	1.1	15952466.59	101.14	29.5	120.4	
Sc	45	H2	1957353.68	0.9	1988810.56	98.42	29.5	120.4	
Sc	45	He	475465.13	0.3	477124.13	99.65	29.5	120.4	
Ge	72	No Gas	2817344.28	1.3	2777617.47	101.43	29.5	120.4	
Ge	72	H2	571352.08	1.6	580378.32	98.44	29.5	120.4	
Ge	72	He	274266.17	0.5	274469.22	99.93	29.5	120.4	
Y	89	H2	9994530.53	1.2	10106085.94	98.9	29.5	120.4	
Y	89	He	2224480.66	0.7	2217336.32	100.32	29.5	120.4	
Tb	159	No Gas	20504829.14	1.1	20085725.95	102.09	29.5	120.4	
Tb	159	He	7974274.95	0.1	7863593.35	101.41	29.5	120.4	
Bi	209	No Gas	9366033.83	2.1	9123990.23	102.65	29.5	120.4	

Interference Check Solution A (ICS-A) Report

Sample Name	ICSA
File Name	011ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:51:44 PM
Sample Type	ICSA
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
Be	9	6	No Gas	0.001	ppb	21.7	14.44	0.2	-50	50	
B	11	6	No Gas	1.839	ppb	5.0	10506.39	4	-50	100	
Na	23	45	He	97712.433	ppb	0.4	83662234.29	100000	80	120	
Mg	24	45	He	95522.869	ppb	0.5	43506781.02	100000	80	120	
Al	27	45	He	90063.201	ppb	0.3	15291832.41	100000	80	120	
Si	28	45	H2	11.481	ppb	2.9	3884.92	100	-50	50	
K	39	45	He	96822.077	ppb	0.4	35492426.02	100000	80	120	
Ca	40	45	H2	99196.614	ppb	0.9	242020280.84	100000	80	120	
V	51	89	He	0.011	ppb	41.8	251.12	1	-50	100	
Cr	52	89	He	0.284	ppb	4.1	2882.45	0.78	-100	100	
Mn	55	89	He	0.498	ppb	2.9	1683.80	0.0826	100	100	DoD
Fe	56	89	H2	96110.210	ppb	0.3	862347797.42	100000	80	120	
Co	59	89	He	0.304	ppb	3.7	3567.38	0.2	-50	100	
Ni	60	89	He	0.292	ppb	9.0	1233.43	0.114	100	100	
Cu	63	89	He	0.299	ppb	4.8	3028.22	-0.043	100	100	
Zn	66	89	He	0.526	ppb	6.7	856.72	-0.7632	100	100	
As	75	89	He	0.041	ppb	28.4	38.34	1	-50	100	
Se	78	89	H2	0.063	ppb	11.4	23.00	1	-50	100	
Sr	88	89	He	0.793	ppb	1.5	2744.82	0.0578	100	100	
Mo	95	89	He	1994.739	ppb	0.3	7930697.94	2000	80	120	
Ag	107	89	He	0.019	ppb	2.6	276.68	0.2	-50	50	
Cd	111	89	He	0.363	ppb	4.0	542.98	0.268	100	100	
Sn	118	159	He	0.259	ppb	4.4	1157.88	-0.24	100	100	
Sb	121	159	No Gas	0.167	ppb	5.8	3417.60	0.089	100	100	
Ba	137	159	No Gas	0.178	ppb	15.9	1451.70	-0.0794	100	100	
W	182	159	No Gas	0.199	ppb	9.5	3037.10	0.32	-100	100	
Tl	205	209	No Gas	-0.004	ppb	N/A	520.59	0.2	-50	50	
Pb	208	209	No Gas	0.089	ppb	3.6	3624.27	0.03	100	100	
Th	232	209	No Gas	0.012	ppb	20.5	630.72	0.2	-50	50	
U	238	209	No Gas	0.001	ppb	35.5	43.38	0.2	-50	50	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7748549.32	2.4	8217096.81	94.3	29.5	120.4	
Sc	45	No Gas	16030186.92	1.3	15952466.59	100.49	29.5	120.4	
Sc	45	H2	1945402.03	1.3	1988810.56	97.82	29.5	120.4	
Sc	45	He	478682.74	0.7	477124.13	100.33	29.5	120.4	
Ge	72	No Gas	2711631.40	1.8	2777617.47	97.62	29.5	120.4	
Ge	72	H2	533819.61	0.6	580378.32	91.98	29.5	120.4	
Ge	72	He	266186.24	0.5	274469.22	96.98	29.5	120.4	
Y	89	H2	9816662.57	1.3	10106085.94	97.14	29.5	120.4	
Y	89	He	2167209.19	0.2	2217336.32	97.74	29.5	120.4	
Tb	159	No Gas	19421245.40	2.0	20085725.95	96.69	29.5	120.4	
Tb	159	He	7409865.31	0.2	7863593.35	94.23	29.5	120.4	
Bi	209	No Gas	8038552.49	2.3	9123990.23	88.1	29.5	120.4	

Interference Check Solution AB (ICS-AB) Report

Sample Name	ICSAB
File Name	012ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:54:33 PM
Sample Type	ICSB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Low	%High	QC Flag
9	Be	6	No Gas	20.693	ppb	3.4	145883.02	20	79.5	120.4	
11	B	6	No Gas	21.033	ppb	2.5	101543.81	20	79.5	120.4	
23	Na	45	He	100883.689	ppb	0.2	85967304.28	100000	79.5	120.4	
24	Mg	45	He	98059.540	ppb	0.7	44450161.56	100000	79.5	120.4	
27	Al	45	He	91061.634	ppb	1.1	15387737.69	100000	79.5	120.4	
28	Si	45	H2	477.315	ppb	1.5	124581.10	500	79.5	120.4	
39	K	45	He	98832.434	ppb	0.9	36056509.84	100000	79.5	120.4	
40	Ca	45	H2	102667.628	ppb	3.1	241900194.17	100000	79.5	120.4	
51	V	89	He	21.070	ppb	0.8	115633.69	20	79.5	120.4	
52	Cr	89	He	20.917	ppb	1.2	146290.42	20	79.5	120.4	
55	Mn	89	He	20.662	ppb	0.9	63272.72	20	79.5	120.4	
56	Fe	89	H2	100851.084	ppb	3.2	869428971.68	100000	79.5	120.4	
59	Co	89	He	20.647	ppb	0.7	236183.65	20	79.5	120.4	
60	Ni	89	He	19.842	ppb	0.7	62958.99	20	79.5	120.4	
63	Cu	89	He	19.538	ppb	0.6	167741.71	20	79.5	120.4	
66	Zn	89	He	19.653	ppb	2.4	19188.29	20	79.5	120.4	
75	As	89	He	21.185	ppb	1.9	13911.47	20	79.5	120.4	
78	Se	89	H2	20.679	ppb	3.2	6654.45	20	79.5	120.4	
88	Sr	89	He	20.157	ppb	0.6	68216.65	20	79.5	120.4	
95	Mo	89	He	2072.738	ppb	0.4	8139773.49	2000	79.5	120.4	
107	Ag	89	He	18.637	ppb	0.5	229620.75	20	79.5	120.4	
111	Cd	89	He	19.181	ppb	0.3	28262.87	20	79.5	120.4	
118	Sn	159	He	20.760	ppb	0.2	59288.97	20	79.5	120.4	
121	Sb	159	No Gas	20.865	ppb	2.5	392528.15	20	79.5	120.4	
137	Ba	159	No Gas	20.380	ppb	1.2	150280.33	20	79.5	120.4	
182	W	159	No Gas	19.938	ppb	2.2	293402.20	20	79.5	120.4	
205	Tl	209	No Gas	21.335	ppb	3.1	532963.92	20	79.5	120.4	
208	Pb	209	No Gas	20.984	ppb	1.7	737184.29	20	79.5	120.4	
232	Th	209	No Gas	21.795	ppb	3.1	744774.83	20	79.5	120.4	
238	U	209	No Gas	21.642	ppb	2.7	710596.88	20	79.5	120.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7586295.77	1.9	8217096.81	92.32	29.5	120.4	
Sc	45	No Gas	16103724.20	0.8	15952466.59	100.95	29.5	120.4	
Sc	45	H2	1879241.52	1.7	1988810.56	94.49	29.5	120.4	
Sc	45	He	476409.81	0.4	477124.13	99.85	29.5	120.4	
Ge	72	No Gas	2700792.99	0.6	2777617.47	97.23	29.5	120.4	
Ge	72	H2	504923.91	1.4	580378.32	87	29.5	120.4	
Ge	72	He	266074.12	0.3	274469.22	96.94	29.5	120.4	
Y	89	H2	9435047.32	1.8	10106085.94	93.36	29.5	120.4	
Y	89	He	2140670.37	0.7	2217336.32	96.54	29.5	120.4	
Tb	159	No Gas	18943390.83	0.8	20085725.95	94.31	29.5	120.4	
Tb	159	He	7123910.80	0.6	7863593.35	90.59	29.5	120.4	
Bi	209	No Gas	7775646.31	1.5	9123990.23	85.22	29.5	120.4	

Linear Range Sample (LRS) Report

Sample Name	LRS1
File Name	013_LRS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 2:57:23 PM
Sample Type	LRS
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	%Rec	%Low	%High	QC Flag
9	Be	6	No Gas	107.001	ppb	0.7	764161.40	100	107	89.5	110.4	
11	B	6	No Gas	477.001	ppb	1.5	2298740.92	500	95.4	89.5	110.4	
51	V	89	He	1052.031	ppb	1.4	5541589.92	1000	105.2	89.5	110.4	
52	Cr	89	He	2088.028	ppb	1.6	13955919.19	2000	104.4	89.5	110.4	
55	Mn	89	He	2002.743	ppb	1.4	5882839.65	2000	100.14	89.5	110.4	
59	Co	89	He	1070.216	ppb	1.1	11766793.02	1000	107.02	89.5	110.4	
60	Ni	89	He	1076.250	ppb	1.4	3267663.53	1000	107.62	89.5	110.4	
63	Cu	89	He	2073.581	ppb	1.5	17070438.77	2000	103.68	89.5	110.4	
66	Zn	89	He	2020.437	ppb	1.3	1862984.49	2000	101.02	89.5	110.4	
75	As	89	He	1028.228	ppb	1.2	648601.11	1000	102.82	89.5	110.4	
78	Se	89	H2	955.327	ppb	1.5	314262.66	1000	95.53	89.5	110.4	
88	Sr	89	He	1919.511	ppb	1.1	6242518.17	2000	95.98	89.5	110.4	
95	Mo	89	He	1062.621	ppb	1.6	4011523.66	1000	106.26	89.5	110.4	
107	Ag	89	He	113.894	ppb	0.9	1348861.63	100	113.89	89.5	110.4	> +/- 10%
111	Cd	89	He	1033.946	ppb	0.9	1464575.43	1000	103.39	89.5	110.4	
118	Sn	159	He	999.438	ppb	0.5	2925919.92	1000	99.94	89.5	110.4	
121	Sb	159	No Gas	1024.141	ppb	0.2	20397937.43	1000	102.41	89.5	110.4	
137	Ba	159	No Gas	1967.386	ppb	0.5	15354967.66	2000	98.37	89.5	110.4	
182	W	159	No Gas	956.108	ppb	0.4	14899921.69	1000	95.61	89.5	110.4	
205	Tl	209	No Gas	1033.242	ppb	0.5	29438057.02	1000	103.32	89.5	110.4	
208	Pb	209	No Gas	1979.943	ppb	0.2	79367669.25	2000	99	89.5	110.4	
232	Th	209	No Gas	982.535	ppb	0.4	38326584.40	1000	98.25	89.5	110.4	
238	U	209	No Gas	970.660	ppb	1.3	36390699.42	1000	97.07	89.5	110.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7682088.54	0.3	8217096.81	93.49	29.5	120.4	
Sc	45	No Gas	16232413.30	0.8	15952466.59	101.75	29.5	120.4	
Ge	72	No Gas	2833621.75	0.3	2777617.47	102.02	29.5	120.4	
Tb	159	No Gas	20062807.62	0.9	20085725.95	99.89	29.5	120.4	
Bi	209	No Gas	8875394.35	0.6	9123990.23	97.28	29.5	120.4	
Sc	45	H2	1864682.34	1.5	1988810.56	93.76	29.5	120.4	
Ge	72	H2	511019.54	0.7	580378.32	88.05	29.5	120.4	
Y	89	H2	9645631.96	1.9	10106085.94	95.44	29.5	120.4	
Sc	45	He	446788.56	1.4	477124.13	93.64	29.5	120.4	
Ge	72	He	260332.83	0.9	274469.22	94.85	29.5	120.4	
Y	89	He	2058045.28	1.1	2217336.32	92.82	29.5	120.4	
Tb	159	He	7348541.69	0.7	7863593.35	93.45	29.5	120.4	

Sample Report

Sample Name LRS2

File Name 014SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 2:59:59 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.038	ppb	13.0	263.34	100	
11	B	6	No Gas	8.789	ppb	11.2	41635.82	1000	
23	Na	45	He	196410.615	ppb	1.0	179523648.99	200000	
24	Mg	45	He	189486.903	ppb	1.0	92148144.18	200000	
27	Al	45	He	180205.771	ppb	1.9	32672867.57	200000	
28	Si	45	H2	8650.947	ppb	0.7	2312276.05	10000	
39	K	45	He	196926.736	ppb	2.1	77059280.13	200000	
40	Ca	45	H2	198865.952	ppb	0.7	482753517.25	200000	
51	V	89	He	0.347	ppb	100.2	2174.92	1000	
52	Cr	89	He	1.708	ppb	34.9	13359.85	2000	
55	Mn	89	He	7.714	ppb	5.9	24917.95	2000	
56	Fe	89	H2	97208.454	ppb	0.5	850119736.46	100000	
59	Co	89	He	0.783	ppb	41.2	9420.90	1000	
60	Ni	89	He	2.035	ppb	14.1	7060.15	1000	
63	Cu	89	He	1.353	ppb	41.7	12578.23	2000	
66	Zn	89	He	1.821	ppb	29.0	2190.38	2000	
75	As	89	He	0.436	ppb	71.9	310.39	1000	
78	Se	89	H2	0.415	ppb	1.8	137.32	1000	
88	Sr	89	He	1.471	ppb	38.1	5241.67	2000	
95	Mo	89	He	1.710	ppb	67.8	7025.02	1000	
107	Ag	89	He	0.116	ppb	24.4	1536.87	100	
111	Cd	89	He	0.240	ppb	115.4	368.22	1000	
118	Sn	159	He	1.453	ppb	11.5	4460.05	1000	
121	Sb	159	No Gas	0.567	ppb	6.7	10666.18	1000	
137	Ba	159	No Gas	1.059	ppb	2.1	7770.94	2000	
182	W	159	No Gas	1.291	ppb	3.0	18697.78	1000	
205	Tl	209	No Gas	0.389	ppb	14.4	9911.70	1000	
208	Pb	209	No Gas	0.809	ppb	8.1	27625.95	2000	
232	Th	209	No Gas	0.846	ppb	24.2	28021.28	1000	
238	U	209	No Gas	0.491	ppb	18.4	15527.31	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7283254.40	1.0	8217096.81	88.64	29.5	120.4	
Sc	45	No Gas	15559883.29	0.5	15952466.59	97.54	29.5	120.4	
Sc	45	H2	1935347.66	2.9	1988810.56	97.31	29.5	120.4	
Sc	45	He	511035.34	1.9	477124.13	107.11	29.5	120.4	
Ge	72	No Gas	2581065.46	0.9	2777617.47	92.92	29.5	120.4	
Ge	72	H2	499195.84	2.4	580378.32	86.01	29.5	120.4	
Ge	72	He	276421.32	2.1	274469.22	100.71	29.5	120.4	
Y	89	H2	9567143.16	2.1	10106085.94	94.67	29.5	120.4	
Y	89	He	2251059.76	1.8	2217336.32	101.52	29.5	120.4	
Tb	159	No Gas	18605837.92	0.6	20085725.95	92.63	29.5	120.4	
Tb	159	He	7052144.20	0.8	7863593.35	89.68	29.5	120.4	
Bi	209	No Gas	7463876.95	1.9	9123990.23	81.8	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 015SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 3:02:51 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.005	ppb	18.1	40.00	100	
11	B	6	No Gas	1.450	ppb	8.0	8832.99	1000	
23	Na	45	He	84.571	ppb	43.9	109847.81	200000	
24	Mg	45	He	46.634	ppb	71.1	22314.63	200000	
27	Al	45	He	39.562	ppb	70.2	7139.67	200000	
28	Si	45	H2	2.676	ppb	33.6	1571.85	10000	
39	K	45	He	73.924	ppb	45.0	54992.14	200000	
40	Ca	45	H2	54.386	ppb	7.9	142215.63	200000	
51	V	89	He	0.050	ppb	102.0	480.05	1000	
52	Cr	89	He	0.117	ppb	85.7	1753.32	2000	
55	Mn	89	He	0.118	ppb	102.4	519.96	2000	
56	Fe	89	H2	31.260	ppb	8.1	293065.66	100000	
59	Co	89	He	0.050	ppb	120.5	649.10	1000	
60	Ni	89	He	0.040	ppb	162.7	440.04	1000	
63	Cu	89	He	0.178	ppb	59.4	2023.93	2000	
66	Zn	89	He	0.081	ppb	170.5	435.58	2000	
75	As	89	He	0.079	ppb	54.7	65.34	1000	
78	Se	89	H2	0.095	ppb	10.1	34.83	1000	
88	Sr	89	He	0.088	ppb	108.8	341.16	2000	
95	Mo	89	He	0.390	ppb	45.9	1605.91	1000	
107	Ag	89	He	0.016	ppb	44.9	242.23	100	
111	Cd	89	He	0.054	ppb	104.2	84.82	1000	
118	Sn	159	He	0.382	ppb	12.0	1533.48	1000	
121	Sb	159	No Gas	0.059	ppb	15.1	1351.58	1000	
137	Ba	159	No Gas	0.034	ppb	17.9	367.08	2000	
182	W	159	No Gas	0.169	ppb	8.3	2626.57	1000	
205	Tl	209	No Gas	0.029	ppb	23.5	1428.35	1000	
208	Pb	209	No Gas	0.069	ppb	0.6	3003.51	2000	
232	Th	209	No Gas	0.046	ppb	15.7	1898.94	1000	
238	U	209	No Gas	0.026	ppb	12.3	937.76	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7934126.29	1.0	8217096.81	96.56	29.5	120.4	
Sc	45	No Gas	17446507.56	0.9	15952466.59	109.37	29.5	120.4	
Sc	45	H2	2010977.22	0.7	1988810.56	101.11	29.5	120.4	
Sc	45	He	500306.12	1.0	477124.13	104.86	29.5	120.4	
Ge	72	No Gas	2973943.61	0.6	2777617.47	107.07	29.5	120.4	
Ge	72	H2	549319.68	0.7	580378.32	94.65	29.5	120.4	
Ge	72	He	283459.57	0.6	274469.22	103.28	29.5	120.4	
Y	89	H2	10164485.69	0.6	10106085.94	100.58	29.5	120.4	
Y	89	He	2218331.42	1.5	2217336.32	100.04	29.5	120.4	
Tb	159	No Gas	19599113.59	1.4	20085725.95	97.58	29.5	120.4	
Tb	159	He	7463081.00	2.1	7863593.35	94.91	29.5	120.4	
Bi	209	No Gas	8402103.89	0.6	9123990.23	92.09	29.5	120.4	

Sample Report

Sample Name RINSE

File Name 016SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 3:05:30 PM

Sample Type Sample

Total Dilution 1.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	124.7	18.89	100	
11	B	6	No Gas	0.813	ppb	1.9	5676.87	1000	
23	Na	45	He	23.130	ppb	14.4	53087.13	200000	
24	Mg	45	He	8.518	ppb	16.5	3996.54	200000	
27	Al	45	He	7.348	ppb	14.4	1365.68	200000	
28	Si	45	H2	0.528	ppb	113.2	947.75	10000	
39	K	45	He	19.966	ppb	11.2	33227.05	200000	
40	Ca	45	H2	23.809	ppb	45.6	63226.79	200000	
51	V	89	He	0.013	ppb	61.1	263.35	1000	
52	Cr	89	He	0.038	ppb	5.3	1164.51	2000	
55	Mn	89	He	0.043	ppb	24.2	276.62	2000	
56	Fe	89	H2	14.760	ppb	44.9	138251.85	100000	
59	Co	89	He	0.012	ppb	13.1	191.13	1000	
60	Ni	89	He	-0.011	ppb	N/A	267.79	1000	
63	Cu	89	He	0.075	ppb	11.8	1092.31	2000	
66	Zn	89	He	0.000	ppb	4266.2	350.02	2000	
75	As	89	He	0.028	ppb	14.3	30.33	1000	
78	Se	89	H2	0.079	ppb	34.3	29.00	1000	
88	Sr	89	He	0.023	ppb	36.1	110.00	2000	
95	Mo	89	He	0.156	ppb	2.9	638.93	1000	
107	Ag	89	He	0.006	ppb	14.8	110.00	100	
111	Cd	89	He	0.011	ppb	33.7	17.78	1000	
118	Sn	159	He	0.158	ppb	14.6	870.06	1000	
121	Sb	159	No Gas	0.026	ppb	7.7	724.17	1000	
137	Ba	159	No Gas	0.007	ppb	63.0	170.19	2000	
182	W	159	No Gas	0.080	ppb	5.7	1301.52	1000	
205	Tl	209	No Gas	0.002	ppb	208.7	730.84	1000	
208	Pb	209	No Gas	0.021	ppb	13.4	1251.44	2000	
232	Th	209	No Gas	0.025	ppb	11.7	1164.70	1000	
238	U	209	No Gas	0.008	ppb	0.3	310.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7959901.50	0.6	8217096.81	96.87	29.5	120.4	
Sc	45	No Gas	17115808.33	0.6	15952466.59	107.29	29.5	120.4	
Sc	45	H2	1952941.49	0.4	1988810.56	98.2	29.5	120.4	
Sc	45	He	484660.11	1.4	477124.13	101.58	29.5	120.4	
Ge	72	No Gas	2935769.03	1.0	2777617.47	105.69	29.5	120.4	
Ge	72	H2	535710.32	0.7	580378.32	92.3	29.5	120.4	
Ge	72	He	279736.56	1.3	274469.22	101.92	29.5	120.4	
Y	89	H2	10033063.23	0.7	10106085.94	99.28	29.5	120.4	
Y	89	He	2188420.54	2.2	2217336.32	98.7	29.5	120.4	
Tb	159	No Gas	20210681.64	0.8	20085725.95	100.62	29.5	120.4	
Tb	159	He	7485579.82	1.9	7863593.35	95.19	29.5	120.4	
Bi	209	No Gas	8828077.04	0.3	9123990.23	96.76	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	017_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:08:13 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	25.750	ppb	1.6	187887.06	25	103	89.8	110.2	
11	B	6	No Gas	25.479	ppb	1.1	126981.44	25	101.92	89.8	110.2	
23	Na	45	He	5065.866	ppb	0.7	4443620.19	5000	101.32	89.8	110.2	
24	Mg	45	He	4962.063	ppb	1.0	2298981.06	5000	99.24	89.8	110.2	
27	Al	45	He	470.797	ppb	0.6	81416.75	500	94.16	89.8	110.2	
28	Si	45	H2	436.577	ppb	0.7	117454.71	500	87.32	89.8	110.2	> +/- 10%
39	K	45	He	4903.578	ppb	0.5	1853111.25	5000	98.07	89.8	110.2	
40	Ca	45	H2	4727.911	ppb	1.1	11479930.38	5000	94.56	89.8	110.2	
51	V	89	He	25.519	ppb	0.8	143433.37	25	102.08	89.8	110.2	
52	Cr	89	He	25.602	ppb	0.9	183234.66	25	102.41	89.8	110.2	
55	Mn	89	He	24.892	ppb	0.2	78061.34	25	99.57	89.8	110.2	
56	Fe	89	H2	4823.392	ppb	0.4	43641341.47	5000	96.47	89.8	110.2	
59	Co	89	He	25.642	ppb	1.1	300468.27	25	102.57	89.8	110.2	
60	Ni	89	He	25.595	ppb	1.5	83104.62	25	102.38	89.8	110.2	
63	Cu	89	He	25.888	ppb	0.2	227548.62	25	103.55	89.8	110.2	
66	Zn	89	He	25.197	ppb	1.5	25106.65	25	100.79	89.8	110.2	
75	As	89	He	25.245	ppb	1.1	16980.85	25	100.98	89.8	110.2	
78	Se	89	H2	23.864	ppb	0.9	8058.80	25	95.46	89.8	110.2	
88	Sr	89	He	23.458	ppb	0.6	81324.03	25	93.83	89.8	110.2	
95	Mo	89	He	25.072	ppb	0.6	100877.60	25	100.29	89.8	110.2	
107	Ag	89	He	25.180	ppb	0.4	317811.89	25	100.72	89.8	110.2	
111	Cd	89	He	24.759	ppb	0.5	37372.94	25	99.04	89.8	110.2	
118	Sn	159	He	24.639	ppb	0.9	74854.98	25	98.56	89.8	110.2	
121	Sb	159	No Gas	25.995	ppb	3.1	513698.67	25	103.98	89.8	110.2	
137	Ba	159	No Gas	25.282	ppb	2.8	195827.17	25	101.13	89.8	110.2	
182	W	159	No Gas	23.952	ppb	3.0	370273.17	25	95.81	89.8	110.2	
205	Tl	209	No Gas	25.497	ppb	2.4	714734.85	25	101.99	89.8	110.2	
208	Pb	209	No Gas	25.255	ppb	2.3	995622.95	25	101.02	89.8	110.2	
232	Th	209	No Gas	24.746	ppb	2.0	949198.28	25	98.98	89.8	110.2	
238	U	209	No Gas	24.903	ppb	2.6	917736.13	25	99.61	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	7850079.65	2.3	8217096.81	95.53	29.5	120.4	
Sc	45	No Gas	16559013.43	3.6	15952466.59	103.8	29.5	120.4	
Sc	45	H2	1935511.25	2.0	1988810.56	97.32	29.5	120.4	
Sc	45	He	486922.47	0.3	477124.13	102.05	29.5	120.4	
Ge	72	No Gas	2841535.94	2.2	2777617.47	102.3	29.5	120.4	
Ge	72	H2	529063.11	1.4	580378.32	91.16	29.5	120.4	
Ge	72	He	277665.54	0.6	274469.22	101.16	29.5	120.4	
Y	89	H2	9898776.66	1.7	10106085.94	97.95	29.5	120.4	
Y	89	He	2192999.31	0.8	2217336.32	98.9	29.5	120.4	
Tb	159	No Gas	19914913.73	4.0	20085725.95	99.15	29.5	120.4	
Tb	159	He	7585636.41	0.1	7863593.35	96.47	29.5	120.4	
Bi	209	No Gas	8729509.00	3.4	9123990.23	95.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	018_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 3:10:51 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	42.5	168.89	0.2	
11	B	6	No Gas	0.808	ppb	10.4	5683.54	4	
23	Na	45	He	7.248	ppb	10.5	38758.72	200	
24	Mg	45	He	2.691	ppb	29.6	1293.49	20	
27	Al	45	He	1.292	ppb	34.4	321.12	20	
28	Si	45	H2	0.221	ppb	27.8	844.31	100	
39	K	45	He	6.972	ppb	19.9	27991.41	200	
40	Ca	45	H2	1.445	ppb	8.6	8240.49	20	
51	V	89	He	0.005	ppb	45.3	218.90	1	
52	Cr	89	He	0.016	ppb	20.1	993.20	1	
55	Mn	89	He	0.023	ppb	17.6	212.63	0.4	
56	Fe	89	H2	2.151	ppb	9.1	21818.10	20	
59	Co	89	He	0.004	ppb	33.4	100.01	0.2	
60	Ni	89	He	-0.053	ppb	N/A	131.11	0.4	
63	Cu	89	He	0.038	ppb	11.8	763.38	0.6	
66	Zn	89	He	0.026	ppb	61.6	371.13	2	
75	As	89	He	0.015	ppb	44.3	21.67	1	
78	Se	89	H2	0.039	ppb	22.1	14.67	1	
88	Sr	89	He	0.009	ppb	10.1	60.00	1	
95	Mo	89	He	0.116	ppb	13.9	473.36	1	
107	Ag	89	He	0.008	ppb	24.6	138.89	0.2	
111	Cd	89	He	0.007	ppb	40.7	12.59	0.2	
118	Sn	159	He	0.155	ppb	15.8	874.51	1	
121	Sb	159	No Gas	0.040	ppb	20.1	1001.15	0.2	
137	Ba	159	No Gas	0.011	ppb	85.3	200.22	0.4	
182	W	159	No Gas	0.117	ppb	10.2	1852.22	1	
205	Tl	209	No Gas	0.020	ppb	52.7	1271.48	0.2	
208	Pb	209	No Gas	0.024	ppb	30.2	1378.25	0.2	
232	Th	209	No Gas	0.111	ppb	22.2	4545.89	1	
238	U	209	No Gas	0.036	ppb	34.8	1354.96	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8007969.93	2.2	8217096.81	97.45	29.5	120.4	
Sc	45	No Gas	16372813.80	2.7	15952466.59	102.63	29.5	120.4	
Sc	45	H2	1906789.03	0.7	1988810.56	95.88	29.5	120.4	
Sc	45	He	477474.61	0.9	477124.13	100.07	29.5	120.4	
Ge	72	No Gas	2838626.70	2.0	2777617.47	102.2	29.5	120.4	
Ge	72	H2	519000.04	0.1	580378.32	89.42	29.5	120.4	
Ge	72	He	273897.10	0.4	274469.22	99.79	29.5	120.4	
Y	89	H2	9769290.82	0.5	10106085.94	96.67	29.5	120.4	
Y	89	He	2164631.41	0.4	2217336.32	97.62	29.5	120.4	
Tb	159	No Gas	19963534.98	2.4	20085725.95	99.39	29.5	120.4	
Tb	159	He	7607538.50	0.7	7863593.35	96.74	29.5	120.4	
Bi	209	No Gas	8919384.17	2.6	9123990.23	97.76	29.5	120.4	

Sample Report

Sample Name LCSWNG23IMW2

File Name 019SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:10:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	62.107	ppb	4.2	99233.37	100	
11	B	6	No Gas	609.585	ppb	4.3	658504.74	1000	
23	Na	45	He	9632.324	ppb	0.9	1585445.47	200000	
24	Mg	45	He	6850.683	ppb	1.1	588464.03	200000	
27	Al	45	He	2448.286	ppb	1.2	78490.42	200000	
28	Si	45	H2	1322.797	ppb	0.7	67728.88	10000	
39	K	45	He	12918.140	ppb	0.1	916428.34	200000	
40	Ca	45	H2	3280.573	ppb	0.2	1513596.99	200000	
51	V	89	He	653.903	ppb	0.2	699151.11	1000	
52	Cr	89	He	266.419	ppb	0.3	362196.59	2000	
55	Mn	89	He	661.847	ppb	0.6	394646.11	2000	
56	Fe	89	H2	1323.541	ppb	0.9	2275791.46	100000	
59	Co	89	He	679.196	ppb	0.6	1515453.23	1000	
60	Ni	89	He	669.727	ppb	0.1	412898.32	1000	
63	Cu	89	He	338.034	ppb	0.2	565134.15	2000	
66	Zn	89	He	640.985	ppb	0.5	120251.65	2000	
75	As	89	He	132.271	ppb	0.6	16942.81	1000	
78	Se	89	H2	131.184	ppb	0.7	8409.99	1000	
88	Sr	89	He	635.692	ppb	0.4	419557.02	2000	
95	Mo	89	He	138.146	ppb	0.7	105851.27	1000	
107	Ag	89	He	69.390	ppb	0.4	166797.09	100	
111	Cd	89	He	336.148	ppb	0.2	96625.71	1000	
118	Sn	159	He	623.136	ppb	0.7	385180.09	1000	
121	Sb	159	No Gas	132.052	ppb	3.4	559123.28	1000	
137	Ba	159	No Gas	2527.723	ppb	3.7	4192348.87	2000	
182	W	159	No Gas	131.304	ppb	4.0	434878.68	1000	
205	Tl	209	No Gas	136.035	ppb	3.6	854381.66	1000	
208	Pb	209	No Gas	132.866	ppb	4.3	1173417.33	2000	
232	Th	209	No Gas	130.235	ppb	5.3	1118860.88	1000	
238	U	209	No Gas	128.830	ppb	5.5	1063466.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8597661.00	1.9	8217096.81	104.63	29.5	120.4	
Sc	45	No Gas	16149731.35	2.2	15952466.59	101.24	29.5	120.4	
Sc	45	H2	1833864.72	1.1	1988810.56	92.21	29.5	120.4	
Sc	45	He	451345.53	0.5	477124.13	94.6	29.5	120.4	
Ge	72	No Gas	2792317.14	2.4	2777617.47	100.53	29.5	120.4	
Ge	72	H2	517686.20	1.6	580378.32	89.2	29.5	120.4	
Ge	72	He	256873.63	0.3	274469.22	93.59	29.5	120.4	
Y	89	H2	9395661.79	1.2	10106085.94	92.97	29.5	120.4	
Y	89	He	2088039.03	0.5	2217336.32	94.17	29.5	120.4	
Tb	159	No Gas	21323516.63	1.3	20085725.95	106.16	29.5	120.4	
Tb	159	He	7750393.15	0.8	7863593.35	98.56	29.5	120.4	
Bi	209	No Gas	9779356.41	2.2	9123990.23	107.18	29.5	120.4	

Sample Report

Sample Name PBWNG23IMW2

File Name 020SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:13:05 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.031	ppb	21.6	54.45	100	
11	B	6	No Gas	8.555	ppb	11.8	10712.15	1000	
23	Na	45	He	315.270	ppb	1.6	82216.33	200000	
24	Mg	45	He	9.898	ppb	14.3	924.55	200000	
27	Al	45	He	6.773	ppb	5.3	315.57	200000	
28	Si	45	H2	18.388	ppb	33.0	1725.36	10000	
39	K	45	He	-8.382	ppb	N/A	23628.93	200000	
40	Ca	45	H2	13.898	ppb	18.2	11287.05	200000	
51	V	89	He	0.399	ppb	19.9	615.60	1000	
52	Cr	89	He	0.372	ppb	8.6	1373.15	2000	
55	Mn	89	He	0.614	ppb	11.3	509.26	2000	
56	Fe	89	H2	4.165	ppb	8.0	9994.72	100000	
59	Co	89	He	0.120	ppb	31.1	317.80	1000	
60	Ni	89	He	-0.143	ppb	N/A	204.46	1000	
63	Cu	89	He	5.951	ppb	2.6	10490.94	2000	
66	Zn	89	He	5.025	ppb	3.3	1290.11	2000	
75	As	89	He	0.120	ppb	44.7	26.67	1000	
78	Se	89	H2	0.149	ppb	33.5	11.50	1000	
88	Sr	89	He	0.172	ppb	23.8	143.34	2000	
95	Mo	89	He	0.239	ppb	9.3	198.90	1000	
107	Ag	89	He	0.029	ppb	28.2	105.56	100	
111	Cd	89	He	0.070	ppb	18.4	21.85	1000	
118	Sn	159	He	1.419	ppb	9.8	1296.77	1000	
121	Sb	159	No Gas	0.276	ppb	1.3	1404.98	1000	
137	Ba	159	No Gas	1.675	ppb	13.9	2940.30	2000	
182	W	159	No Gas	0.220	ppb	14.1	787.57	1000	
205	Tl	209	No Gas	0.001	ppb	2417.1	777.57	1000	
208	Pb	209	No Gas	1.096	ppb	8.0	10219.77	2000	
232	Th	209	No Gas	0.764	ppb	9.2	6869.57	1000	
238	U	209	No Gas	0.079	ppb	32.1	667.44	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8375975.68	3.1	8217096.81	101.93	29.5	120.4	
Sc	45	No Gas	16262014.57	3.0	15952466.59	101.94	29.5	120.4	
Sc	45	H2	1892258.31	7.5	1988810.56	95.15	29.5	120.4	
Sc	45	He	454361.64	1.6	477124.13	95.23	29.5	120.4	
Ge	72	No Gas	2808844.52	3.1	2777617.47	101.12	29.5	120.4	
Ge	72	H2	532439.90	5.6	580378.32	91.74	29.5	120.4	
Ge	72	He	259103.36	1.4	274469.22	94.4	29.5	120.4	
Y	89	H2	9735592.86	7.5	10106085.94	96.33	29.5	120.4	
Y	89	He	2114498.49	1.6	2217336.32	95.36	29.5	120.4	
Tb	159	No Gas	21585613.57	1.9	20085725.95	107.47	29.5	120.4	
Tb	159	He	7807643.22	1.4	7863593.35	99.29	29.5	120.4	
Bi	209	No Gas	9862761.48	2.1	9123990.23	108.1	29.5	120.4	

Sample Report

Sample Name SN5815-004

File Name 021SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:15:47 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	252.557	ppb	0.7	389666.87	100	
11	B	6	No Gas	1866.338	ppb	0.8	1943449.38	1000	
23	Na	45	He	15.675	ppb	24.9	33853.96	200000	
24	Mg	45	He	9.558	ppb	7.4	902.32	200000	
27	Al	45	He	1113.266	ppb	0.6	36319.31	200000	
28	Si	45	H2	121.719	ppb	4.6	7059.65	10000	
39	K	45	He	-15.337	ppb	N/A	23365.28	200000	
40	Ca	45	H2	17.638	ppb	1.3	12970.77	200000	
51	V	89	He	396.084	ppb	0.3	433493.37	1000	
52	Cr	89	He	732.605	ppb	0.4	1017790.02	2000	
55	Mn	89	He	1768.601	ppb	0.3	1079080.80	2000	
56	Fe	89	H2	3320.970	ppb	0.6	5858477.80	100000	
59	Co	89	He	809.630	ppb	0.3	1848780.77	1000	
60	Ni	89	He	1721.245	ppb	0.8	1085557.14	1000	
63	Cu	89	He	327.425	ppb	0.5	560233.49	2000	
66	Zn	89	He	1088.850	ppb	1.3	208824.34	2000	
75	As	89	He	222.687	ppb	0.7	29184.61	1000	
78	Se	89	H2	516.969	ppb	0.6	34020.35	1000	
88	Sr	89	He	107.393	ppb	1.2	72562.10	2000	
95	Mo	89	He	374.113	ppb	0.2	293341.42	1000	
107	Ag	89	He	842.000	ppb	1.1	2070917.11	100	>LDR
111	Cd	89	He	787.656	ppb	0.1	231715.62	1000	
118	Sn	159	He	1.438	ppb	3.6	1331.23	1000	
121	Sb	159	No Gas	301.927	ppb	0.1	1281511.06	1000	
137	Ba	159	No Gas	1930.115	ppb	0.7	3209530.88	2000	
182	W	159	No Gas	0.101	ppb	22.3	383.78	1000	
205	Tl	209	No Gas	569.360	ppb	0.6	3571658.77	1000	
208	Pb	209	No Gas	1021.329	ppb	1.1	9013277.32	2000	
232	Th	209	No Gas	0.126	ppb	22.0	1314.87	1000	
238	U	209	No Gas	0.021	ppb	113.5	180.21	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8298264.85	0.7	8217096.81	100.99	29.5	120.4	
Sc	45	No Gas	16115140.41	1.0	15952466.59	101.02	29.5	120.4	
Sc	45	H2	1870790.79	1.6	1988810.56	94.07	29.5	120.4	
Sc	45	He	458647.43	1.3	477124.13	96.13	29.5	120.4	
Ge	72	No Gas	2806732.73	0.7	2777617.47	101.05	29.5	120.4	
Ge	72	H2	531019.40	1.0	580378.32	91.5	29.5	120.4	
Ge	72	He	262734.14	0.3	274469.22	95.72	29.5	120.4	
Y	89	H2	9646451.74	1.8	10106085.94	95.45	29.5	120.4	
Y	89	He	2136968.70	0.4	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21373760.79	1.5	20085725.95	106.41	29.5	120.4	
Tb	159	He	7938905.09	0.1	7863593.35	100.96	29.5	120.4	
Bi	209	No Gas	9769566.20	1.0	9123990.23	107.08	29.5	120.4	

Sample Report

Sample Name LCSONG28IMS1

File Name 022SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:18:22 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	50.171	ppb	5.0	80559.59	100	
11	B	6	No Gas	506.013	ppb	3.9	549707.62	1000	
23	Na	45	He	7652.236	ppb	1.3	1289497.89	200000	
24	Mg	45	He	5452.238	ppb	1.7	477111.50	200000	
27	Al	45	He	1942.115	ppb	1.6	63440.41	200000	
28	Si	45	H2	988.485	ppb	2.2	51007.64	10000	
39	K	45	He	10501.062	ppb	1.4	763431.16	200000	
40	Ca	45	H2	2608.050	ppb	0.6	1209080.04	200000	
51	V	89	He	522.982	ppb	1.1	572352.12	1000	
52	Cr	89	He	215.837	ppb	1.6	300493.40	2000	
55	Mn	89	He	527.406	ppb	1.6	321910.42	2000	
56	Fe	89	H2	1066.627	ppb	0.5	1874993.08	100000	
59	Co	89	He	543.429	ppb	1.0	1241030.49	1000	
60	Ni	89	He	543.157	ppb	0.8	342793.95	1000	
63	Cu	89	He	271.066	ppb	0.9	463901.40	2000	
66	Zn	89	He	515.085	ppb	1.0	98972.76	2000	
75	As	89	He	104.712	ppb	0.7	13730.26	1000	
78	Se	89	H2	103.651	ppb	0.4	6792.18	1000	
88	Sr	89	He	506.847	ppb	1.7	342383.60	2000	
95	Mo	89	He	108.232	ppb	0.6	84877.86	1000	
107	Ag	89	He	55.603	ppb	0.6	136798.49	100	
111	Cd	89	He	270.014	ppb	1.0	79439.30	1000	
118	Sn	159	He	544.698	ppb	1.2	344653.65	1000	
121	Sb	159	No Gas	103.494	ppb	4.1	449166.24	1000	
137	Ba	159	No Gas	1982.191	ppb	4.3	3369343.00	2000	
182	W	159	No Gas	102.271	ppb	3.8	347185.81	1000	
205	Tl	209	No Gas	108.762	ppb	3.7	688410.47	1000	
208	Pb	209	No Gas	106.045	ppb	4.3	943768.32	2000	
232	Th	209	No Gas	104.291	ppb	4.5	902962.59	1000	
238	U	209	No Gas	105.413	ppb	5.2	876885.79	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8640513.54	1.7	8217096.81	105.15	29.5	120.4	
Sc	45	No Gas	16450602.52	2.5	15952466.59	103.12	29.5	120.4	
Sc	45	H2	1841240.99	0.6	1988810.56	92.58	29.5	120.4	
Sc	45	He	459786.99	1.3	477124.13	96.37	29.5	120.4	
Ge	72	No Gas	2826343.51	1.6	2777617.47	101.75	29.5	120.4	
Ge	72	H2	522434.64	0.5	580378.32	90.02	29.5	120.4	
Ge	72	He	262833.36	0.9	274469.22	95.76	29.5	120.4	
Y	89	H2	9602929.36	0.5	10106085.94	95.02	29.5	120.4	
Y	89	He	2137077.12	0.5	2217336.32	96.38	29.5	120.4	
Tb	159	No Gas	21857578.28	1.7	20085725.95	108.82	29.5	120.4	
Tb	159	He	7932188.56	0.5	7863593.35	100.87	29.5	120.4	
Bi	209	No Gas	9851646.82	1.4	9123990.23	107.98	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG23IMW2
File Name	023LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:22:09 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	58.855	ppb	3.6	95756.04	50	23.54	79.5	120.4	
B	11	6	No Gas	577.808	ppb	3.0	635729.37	500	23.11	79.5	120.4	
Na	23	45	He	9101.228	ppb	1.7	1515872.45	7500	24.27	79.5	120.4	6020□ DoD
Mg	24	45	He	6470.890	ppb	1.1	561860.42	5000	25.88	79.5	120.4	6020□ DoD
Al	27	45	He	2309.201	ppb	1.6	74832.91	2000	23.09	79.5	120.4	
Si	28	45	H2	1162.673	ppb	1.9	61957.22	1000	23.25	0	200	
K	39	45	He	12114.548	ppb	0.6	870245.46	10000	24.23	79.5	120.4	6020□ DoD
Ca	40	45	H2	2952.589	ppb	1.7	1416043.97	2500	23.62	79.5	120.4	DoD
V	51	89	He	618.194	ppb	0.1	672417.36	500	24.73	79.5	120.4	6020□ DoD
Cr	52	89	He	253.641	ppb	0.2	350835.94	200	25.36	79.5	120.4	6020□ DoD
Mn	55	89	He	619.592	ppb	0.7	375860.75	500	24.78	79.5	120.4	6020□ DoD
Fe	56	89	H2	1182.697	ppb	1.6	2146576.45	1000	23.65	79.5	120.4	DoD
Co	59	89	He	645.688	ppb	0.9	1465576.66	500	25.83	79.5	120.4	6020□ DoD
Ni	60	89	He	642.008	ppb	0.6	402666.57	500	25.68	79.5	120.4	6020□ DoD
Cu	63	89	He	319.962	ppb	0.2	544198.01	250	25.6	79.5	120.4	6020□ DoD
Zn	66	89	He	608.988	ppb	0.7	116245.35	500	24.36	79.5	120.4	6020□ DoD
As	75	89	He	125.367	ppb	1.3	16337.02	100	25.07	79.5	120.4	6020□ DoD
Se	78	89	H2	118.758	ppb	1.4	8035.79	100	23.75	79.5	120.4	
Sr	88	89	He	599.982	ppb	0.7	402844.46	500	24	79.5	120.4	DoD
Mo	95	89	He	129.705	ppb	1.1	101102.67	100	25.94	79.5	120.4	6020□ DoD
Ag	107	89	He	65.889	ppb	0.4	161121.93	50	26.36	79.5	120.4	6020□ DoD
Cd	111	89	He	319.679	ppb	0.9	93482.99	250	25.57	79.5	120.4	6020□ DoD
Sn	118	159	He	590.381	ppb	0.5	371982.62	500	23.62	79.5	120.4	DoD
Sb	121	159	No Gas	124.479	ppb	3.4	532713.45	100	24.9	79.5	120.4	6020□ DoD
Ba	137	159	No Gas	2365.631	ppb	2.7	3965733.72	2000	23.66	79.5	120.4	DoD
W	182	159	No Gas	122.871	ppb	3.7	411315.12	100	24.57	79.5	120.4	6020□ DoD
Tl	205	209	No Gas	130.529	ppb	2.6	817821.95	100	26.11	79.5	120.4	6020□ DoD
[Pb]	206	209	No Gas	125.268	ppb	3.1	280798.48	100	25.05	79.5	120.4	6020□ DoD
[Pb]	207	209	No Gas	124.465	ppb	3.2	243257.24	100	24.89	79.5	120.4	6020□ DoD
Pb	208	209	No Gas	126.117	ppb	3.4	1111151.24	100	25.22	79.5	120.4	6020□ DoD
Th	232	209	No Gas	123.476	ppb	4.1	1058308.67	100	24.7	79.5	120.4	6020□ DoD
U	238	209	No Gas	122.524	ppb	4.1	1009069.44	100	24.5	79.5	120.4	6020□ DoD

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8753136.47	1.5	8217096.81	106.52	29.5	120.4	
Sc	45	No Gas	16328359.24	1.2	15952466.59	102.36	29.5	120.4	
Sc	45	H2	1905725.19	0.6	1988810.56	95.82	29.5	120.4	
Sc	45	He	456257.06	1.2	477124.13	95.63	29.5	120.4	
Ge	72	No Gas	2818020.31	1.9	2777617.47	101.45	29.5	120.4	
Ge	72	H2	536615.25	1.8	580378.32	92.46	29.5	120.4	
Ge	72	He	261561.88	0.8	274469.22	95.3	29.5	120.4	
Y	89	H2	9916963.59	0.8	10106085.94	98.13	29.5	120.4	
Y	89	He	2124154.27	0.4	2217336.32	95.8	29.5	120.4	
Tb	159	No Gas	21550305.79	1.0	20085725.95	107.29	29.5	120.4	
Tb	159	He	7899893.29	0.6	7863593.35	100.46	29.5	120.4	
Bi	209	No Gas	9753033.11	1.6	9123990.23	106.89	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBSNG28IMS1
File Name	024_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:24:49 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.047	ppb	19.4	81.11	0.5	
B	11	6	No Gas	11.117	ppb	9.0	13695.86	10	PB 6020 Fails DoD
Na	23	45	He	-17.046	ppb	N/A	28018.19	500	
Mg	24	45	He	15.173	ppb	6.9	1369.06	50	
Al	27	45	He	13.795	ppb	5.6	537.81	50	
Si	28	45	H2	7.648	ppb	9.5	1174.69	250	
K	39	45	He	20.443	ppb	7.7	25444.61	500	
Ca	40	45	H2	25.365	ppb	2.7	16713.70	50	
V	51	89	He	0.326	ppb	25.7	533.37	2.5	
Cr	52	89	He	0.978	ppb	5.2	2189.11	2.5	
Mn	55	89	He	0.764	ppb	4.4	595.24	1	
Fe	56	89	H2	25.699	ppb	1.2	48849.10	50	
Co	59	89	He	0.144	ppb	26.6	368.92	0.5	
Ni	60	89	He	0.397	ppb	17.2	537.81	1	
Cu	63	89	He	0.497	ppb	10.1	1254.54	1.5	
Zn	66	89	He	3.047	ppb	26.9	907.84	5	
As	75	89	He	0.118	ppb	30.8	26.33	2.5	
Se	78	89	H2	0.152	ppb	10.6	12.00	2.5	
Sr	88	89	He	0.138	ppb	2.3	120.00	2.5	
Mo	95	89	He	0.240	ppb	4.7	198.90	2.5	
Ag	107	89	He	0.051	ppb	15.6	157.78	0.5	
Cd	111	89	He	0.067	ppb	26.7	20.74	0.5	
Sn	118	159	He	45.688	ppb	1.1	28908.52	2.5	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Sb	121	159	No Gas	0.141	ppb	23.2	824.28	0.5	
Ba	137	159	No Gas	1.432	ppb	33.3	2526.42	1	PB 6020 Fails DoD
W	182	159	No Gas	0.244	ppb	10.5	867.68	2.5	
Tl	205	209	No Gas	0.023	ppb	161.7	907.72	0.5	
Pb	208	209	No Gas	0.267	ppb	16.5	2829.96	0.5	
Th	232	209	No Gas	0.757	ppb	22.9	6776.23	2.5	
U	238	209	No Gas	0.110	ppb	44.2	914.40	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8567256.54	1.2	8217096.81	104.26	29.5	120.4	
Sc	45	No Gas	16074387.57	0.3	15952466.59	100.76	29.5	120.4	
Sc	45	H2	1883905.73	0.2	1988810.56	94.73	29.5	120.4	
Sc	45	He	450954.98	0.5	477124.13	94.52	29.5	120.4	
Ge	72	No Gas	2794993.49	1.0	2777617.47	100.63	29.5	120.4	
Ge	72	H2	531362.27	0.2	580378.32	91.55	29.5	120.4	
Ge	72	He	258235.86	0.8	274469.22	94.09	29.5	120.4	
Y	89	H2	9836562.26	0.7	10106085.94	97.33	29.5	120.4	
Y	89	He	2099307.31	1.4	2217336.32	94.68	29.5	120.4	
Tb	159	No Gas	21575522.73	0.4	20085725.95	107.42	29.5	120.4	
Tb	159	He	7827591.34	0.9	7863593.35	99.54	29.5	120.4	
Bi	209	No Gas	9820566.78	0.3	9123990.23	107.63	29.5	120.4	

Sample Report

Sample Name SN6056-001

File Name 025SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:27:30 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.547	ppb	5.4	8678.48	100	
11	B	6	No Gas	60.513	ppb	3.5	65529.63	1000	
23	Na	45	He	376.665	ppb	1.5	93873.15	200000	
24	Mg	45	He	30544.015	ppb	1.4	2689019.81	200000	
27	Al	45	He	112740.493	ppb	2.2	3699901.13	200000	
28	Si	45	H2	2768.574	ppb	1.5	145532.95	10000	
39	K	45	He	12355.430	ppb	1.7	899456.00	200000	
40	Ca	45	H2	27808.970	ppb	0.7	13214997.03	200000	
51	V	89	He	195.271	ppb	2.1	231184.67	1000	
52	Cr	89	He	145.435	ppb	1.3	219241.84	2000	
55	Mn	89	He	4430.226	ppb	2.3	2922458.68	2000	
56	Fe	89	H2	183450.083	ppb	0.7	349812450.13	100000	
59	Co	89	He	70.725	ppb	1.4	174683.68	1000	
60	Ni	89	He	193.185	ppb	1.3	132036.56	1000	
63	Cu	89	He	180.846	ppb	2.1	334793.49	2000	
66	Zn	89	He	838.810	ppb	1.9	174032.56	2000	
75	As	89	He	68.170	ppb	1.8	9669.09	1000	
78	Se	89	H2	3.762	ppb	5.0	269.49	1000	
88	Sr	89	He	76.897	ppb	2.9	56189.14	2000	
95	Mo	89	He	16.706	ppb	3.7	14178.92	1000	
107	Ag	89	He	0.595	ppb	4.0	1621.27	100	
111	Cd	89	He	3.146	ppb	3.2	1002.27	1000	
118	Sn	159	He	51.298	ppb	3.2	32770.61	1000	
121	Sb	159	No Gas	1.318	ppb	2.9	5794.39	1000	
137	Ba	159	No Gas	619.601	ppb	3.2	1027188.94	2000	
182	W	159	No Gas	0.520	ppb	7.8	1772.11	1000	
205	Tl	209	No Gas	2.762	ppb	7.7	17488.16	1000	
208	Pb	209	No Gas	313.047	ppb	2.8	2673118.28	2000	
232	Th	209	No Gas	26.976	ppb	2.6	224357.27	1000	
238	U	209	No Gas	8.040	ppb	5.3	64186.46	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414272.10	1.8	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	16382276.28	1.9	15952466.59	102.69	29.5	120.4	
Sc	45	H2	1893826.64	1.9	1988810.56	95.22	29.5	120.4	
Sc	45	He	462644.90	0.8	477124.13	96.97	29.5	120.4	
Ge	72	No Gas	2767794.29	1.7	2777617.47	99.65	29.5	120.4	
Ge	72	H2	515788.14	1.7	580378.32	88.87	29.5	120.4	
Ge	72	He	259776.88	0.6	274469.22	94.65	29.5	120.4	
Y	89	H2	10430929.52	1.7	10106085.94	103.21	29.5	120.4	
Y	89	He	2311003.27	1.1	2217336.32	104.22	29.5	120.4	
Tb	159	No Gas	21313525.93	1.6	20085725.95	106.11	29.5	120.4	
Tb	159	He	7918335.78	1.7	7863593.35	100.7	29.5	120.4	
Bi	209	No Gas	9454199.07	1.5	9123990.23	103.62	29.5	120.4	

Sample Report

Sample Name SN6056-002

File Name 026SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:30:09 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.839	ppb	5.1	9108.71	100	
11	B	6	No Gas	63.371	ppb	2.4	68352.58	1000	
23	Na	45	He	395.050	ppb	2.3	96432.89	200000	
24	Mg	45	He	32267.566	ppb	1.0	2826741.31	200000	
27	Al	45	He	118713.786	ppb	1.4	3876790.12	200000	
28	Si	45	H2	2356.790	ppb	1.4	123802.46	10000	
39	K	45	He	11727.522	ppb	1.8	850753.01	200000	
40	Ca	45	H2	32790.132	ppb	0.2	15554122.96	200000	
51	V	89	He	202.695	ppb	0.7	239804.35	1000	
52	Cr	89	He	147.020	ppb	1.0	221455.22	2000	
55	Mn	89	He	5184.177	ppb	0.9	3417477.23	2000	
56	Fe	89	H2	191409.471	ppb	0.5	368571248.27	100000	
59	Co	89	He	76.302	ppb	1.3	188314.34	1000	
60	Ni	89	He	184.529	ppb	0.4	126043.65	1000	
63	Cu	89	He	216.206	ppb	0.3	399898.64	2000	
66	Zn	89	He	993.500	ppb	1.6	205909.80	2000	
75	As	89	He	70.853	ppb	0.5	10042.05	1000	
78	Se	89	H2	4.319	ppb	4.7	312.32	1000	
88	Sr	89	He	83.602	ppb	1.8	61044.01	2000	
95	Mo	89	He	17.547	ppb	2.0	14880.84	1000	
107	Ag	89	He	0.631	ppb	3.5	1715.73	100	
111	Cd	89	He	3.900	ppb	0.8	1241.18	1000	
118	Sn	159	He	50.411	ppb	1.6	32045.57	1000	
121	Sb	159	No Gas	1.363	ppb	3.4	5961.33	1000	
137	Ba	159	No Gas	614.680	ppb	2.3	1014612.47	2000	
182	W	159	No Gas	0.533	ppb	9.5	1805.48	1000	
205	Tl	209	No Gas	2.837	ppb	5.5	18019.55	1000	
208	Pb	209	No Gas	253.150	ppb	3.4	2170958.91	2000	
232	Th	209	No Gas	26.828	ppb	4.3	224038.99	1000	
238	U	209	No Gas	8.700	ppb	4.3	69759.13	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8389790.95	1.6	8217096.81	102.1	29.5	120.4	
Sc	45	No Gas	16252937.99	0.9	15952466.59	101.88	29.5	120.4	
Sc	45	H2	1890615.16	1.0	1988810.56	95.06	29.5	120.4	
Sc	45	He	460355.02	0.8	477124.13	96.49	29.5	120.4	
Ge	72	No Gas	2767349.65	2.4	2777617.47	99.63	29.5	120.4	
Ge	72	H2	514796.66	1.0	580378.32	88.7	29.5	120.4	
Ge	72	He	259144.31	0.3	274469.22	94.42	29.5	120.4	
Y	89	H2	10533677.58	1.1	10106085.94	104.23	29.5	120.4	
Y	89	He	2309134.46	0.5	2217336.32	104.14	29.5	120.4	
Tb	159	No Gas	21215283.57	0.5	20085725.95	105.62	29.5	120.4	
Tb	159	He	7875383.98	0.5	7863593.35	100.15	29.5	120.4	
Bi	209	No Gas	9495985.13	1.9	9123990.23	104.08	29.5	120.4	

Sample Report

Sample Name SN6056-003

File Name 027SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:32:54 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	5.835	ppb	2.0	8953.06	100	
11	B	6	No Gas	61.934	ppb	2.5	65719.33	1000	
23	Na	45	He	403.730	ppb	1.4	97101.64	200000	
24	Mg	45	He	32785.013	ppb	0.9	2849632.29	200000	
27	Al	45	He	123748.440	ppb	1.1	4009670.46	200000	
28	Si	45	H2	2585.575	ppb	1.0	135181.04	10000	
39	K	45	He	12791.196	ppb	0.6	918495.98	200000	
40	Ca	45	H2	32343.356	ppb	0.3	15278967.83	200000	
51	V	89	He	213.740	ppb	1.0	251011.65	1000	
52	Cr	89	He	153.958	ppb	0.3	230173.43	2000	
55	Mn	89	He	4695.812	ppb	0.5	3072982.62	2000	
56	Fe	89	H2	194980.460	ppb	0.5	372888175.04	100000	
59	Co	89	He	77.564	ppb	0.8	190031.17	1000	
60	Ni	89	He	187.346	ppb	0.9	127025.58	1000	
63	Cu	89	He	183.233	ppb	0.7	336501.87	2000	
66	Zn	89	He	855.148	ppb	0.4	176000.86	2000	
75	As	89	He	71.782	ppb	1.4	10099.10	1000	
78	Se	89	H2	4.347	ppb	1.3	312.16	1000	
88	Sr	89	He	86.548	ppb	0.2	62735.34	2000	
95	Mo	89	He	17.499	ppb	1.9	14731.78	1000	
107	Ag	89	He	0.610	ppb	6.0	1646.83	100	
111	Cd	89	He	3.411	ppb	1.7	1077.83	1000	
118	Sn	159	He	54.805	ppb	0.6	34564.10	1000	
121	Sb	159	No Gas	1.278	ppb	3.1	5574.02	1000	
137	Ba	159	No Gas	613.893	ppb	1.5	1008093.76	2000	
182	W	159	No Gas	0.502	ppb	3.9	1695.35	1000	
205	Tl	209	No Gas	3.020	ppb	3.9	18975.82	1000	
208	Pb	209	No Gas	250.436	ppb	2.3	2129323.67	2000	
232	Th	209	No Gas	28.109	ppb	2.9	232747.78	1000	
238	U	209	No Gas	8.540	ppb	2.7	67897.78	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8247562.69	0.7	8217096.81	100.37	29.5	120.4	
Sc	45	No Gas	15985430.70	0.1	15952466.59	100.21	29.5	120.4	
Sc	45	H2	1882830.00	1.1	1988810.56	94.67	29.5	120.4	
Sc	45	He	456740.13	0.3	477124.13	95.73	29.5	120.4	
Ge	72	No Gas	2723166.38	0.3	2777617.47	98.04	29.5	120.4	
Ge	72	H2	504360.18	0.9	580378.32	86.9	29.5	120.4	
Ge	72	He	257722.23	0.6	274469.22	93.9	29.5	120.4	
Y	89	H2	10461881.72	1.2	10106085.94	103.52	29.5	120.4	
Y	89	He	2292266.04	0.4	2217336.32	103.38	29.5	120.4	
Tb	159	No Gas	21103607.60	0.6	20085725.95	105.07	29.5	120.4	
Tb	159	He	7820851.55	0.4	7863593.35	99.46	29.5	120.4	
Bi	209	No Gas	9411037.27	0.4	9123990.23	103.15	29.5	120.4	

Laboratory Control Sample (LCS) Report

Sample Name	LCSWNG29IMW2
File Name	028LCSW.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:35:34 PM
Sample Type	LCSW
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
Be	9	6	No Gas	51.039	ppb	2.1	79850.60	50	20.42	79.5	120.4	
B	11	6	No Gas	498.979	ppb	2.5	528103.56	500	19.96	79.5	120.4	
Na	23	45	He	8243.336	ppb	0.7	1351631.51	7500	21.98	79.5	120.4	
Mg	24	45	He	5489.615	ppb	0.9	468241.44	5000	21.96	79.5	120.4	
Al	27	45	He	2022.728	ppb	0.6	64403.47	2000	20.23	79.5	120.4	
Si	28	45	H2	1004.144	ppb	1.0	51044.76	1000	20.08	0	200	
K	39	45	He	10729.725	ppb	0.8	759845.70	10000	21.46	79.5	120.4	
Ca	40	45	H2	2630.997	ppb	0.9	1201791.68	2500	21.05	79.5	120.4	
V	51	89	He	534.419	ppb	0.7	574488.01	500	21.38	79.5	120.4	
Cr	52	89	He	218.028	ppb	0.5	298150.87	200	21.8	79.5	120.4	
Mn	55	89	He	532.240	ppb	1.0	319093.83	500	21.29	79.5	120.4	
Fe	56	89	H2	1106.255	ppb	0.3	1934088.11	1000	22.13	79.5	120.4	
Co	59	89	He	555.547	ppb	0.9	1246176.69	500	22.22	79.5	120.4	
Ni	60	89	He	555.589	ppb	1.2	344396.23	500	22.22	79.5	120.4	
Cu	63	89	He	276.482	ppb	0.6	464793.13	250	22.12	79.5	120.4	
Zn	66	89	He	525.614	ppb	1.0	99193.92	500	21.02	79.5	120.4	
As	75	89	He	107.898	ppb	1.0	13897.46	100	21.58	79.5	120.4	
Se	78	89	H2	104.315	ppb	0.6	6798.85	100	20.86	79.5	120.4	
Sr	88	89	He	519.043	ppb	0.5	344404.49	500	20.76	79.5	120.4	
Mo	95	89	He	112.674	ppb	1.0	86792.95	100	22.54	79.5	120.4	
Ag	107	89	He	57.228	ppb	0.3	138304.92	50	22.89	79.5	120.4	
Cd	111	89	He	278.198	ppb	1.4	80394.00	250	22.26	79.5	120.4	
Sn	118	159	He	507.573	ppb	0.7	320872.62	500	20.3	79.5	120.4	
Sb	121	159	No Gas	107.088	ppb	0.7	456357.25	100	21.42	79.5	120.4	
Ba	137	159	No Gas	2052.508	ppb	0.9	3425922.00	2000	20.53	79.5	120.4	
W	182	159	No Gas	104.342	ppb	3.5	347809.61	100	20.87	79.5	120.4	
Tl	205	209	No Gas	111.730	ppb	3.5	695740.63	100	22.35	79.5	120.4	
[Pb]	206	209	No Gas	108.308	ppb	3.6	241284.90	100	21.66	79.5	120.4	
[Pb]	207	209	No Gas	107.050	ppb	3.2	207938.21	100	21.41	79.5	120.4	
Pb	208	209	No Gas	109.521	ppb	2.9	959030.38	100	21.9	79.5	120.4	
Th	232	209	No Gas	108.692	ppb	3.7	925898.07	100	21.74	79.5	120.4	
U	238	209	No Gas	109.969	ppb	3.5	900102.97	100	21.99	79.5	120.4	

QC ISTD Table

Laboratory Control Sample (LCS) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8414203.28	0.3	8217096.81	102.4	29.5	120.4	
Sc	45	No Gas	15977792.23	1.1	15952466.59	100.16	29.5	120.4	
Sc	45	H2	1814197.17	0.2	1988810.56	91.22	29.5	120.4	
Sc	45	He	448141.29	0.7	477124.13	93.93	29.5	120.4	
Ge	72	No Gas	2783970.90	0.6	2777617.47	100.23	29.5	120.4	
Ge	72	H2	513579.99	0.7	580378.32	88.49	29.5	120.4	
Ge	72	He	259076.02	1.2	274469.22	94.39	29.5	120.4	
Y	89	H2	9551147.48	0.5	10106085.94	94.51	29.5	120.4	
Y	89	He	2099230.89	0.8	2217336.32	94.67	29.5	120.4	
Tb	159	No Gas	21453039.96	0.3	20085725.95	106.81	29.5	120.4	
Tb	159	He	7924243.91	1.0	7863593.35	100.77	29.5	120.4	
Bi	209	No Gas	9691154.98	1.0	9123990.23	106.22	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:38:15 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	24.307	ppb	2.3	186364.53	25	97.23	89.8	110.2	
11	B	6	No Gas	24.783	ppb	2.4	129810.02	25	99.13	89.8	110.2	
23	Na	45	He	4936.336	ppb	0.4	4056498.54	5000	98.73	89.8	110.2	
24	Mg	45	He	4919.331	ppb	0.4	2134834.12	5000	98.39	89.8	110.2	
27	Al	45	He	472.805	ppb	1.1	76586.68	500	94.56	89.8	110.2	
28	Si	45	H2	462.569	ppb	0.6	120450.47	500	92.51	89.8	110.2	
39	K	45	He	4781.172	ppb	0.4	1692994.11	5000	95.62	89.8	110.2	
40	Ca	45	H2	4777.773	ppb	0.6	11234613.45	5000	95.56	89.8	110.2	
51	V	89	He	24.416	ppb	0.5	134610.44	25	97.66	89.8	110.2	
52	Cr	89	He	24.654	ppb	0.8	173094.86	25	98.62	89.8	110.2	
55	Mn	89	He	24.278	ppb	0.7	74675.88	25	97.11	89.8	110.2	
56	Fe	89	H2	4810.929	ppb	0.4	43014883.79	5000	96.22	89.8	110.2	
59	Co	89	He	24.770	ppb	0.4	284694.68	25	99.08	89.8	110.2	
60	Ni	89	He	24.880	ppb	0.9	79241.46	25	99.52	89.8	110.2	
63	Cu	89	He	25.311	ppb	0.6	218208.61	25	101.24	89.8	110.2	
66	Zn	89	He	24.445	ppb	0.8	23897.82	25	97.78	89.8	110.2	
75	As	89	He	24.331	ppb	0.5	16052.98	25	97.32	89.8	110.2	
78	Se	89	H2	24.536	ppb	0.5	8188.03	25	98.14	89.8	110.2	
88	Sr	89	He	23.538	ppb	0.2	80036.55	25	94.15	89.8	110.2	
95	Mo	89	He	24.932	ppb	0.5	98389.91	25	99.73	89.8	110.2	
107	Ag	89	He	25.531	ppb	0.3	316052.43	25	102.12	89.8	110.2	
111	Cd	89	He	25.390	ppb	0.7	37589.53	25	101.56	89.8	110.2	
118	Sn	159	He	23.290	ppb	0.2	75049.23	25	93.16	89.8	110.2	
121	Sb	159	No Gas	24.954	ppb	2.3	531308.95	25	99.82	89.8	110.2	
137	Ba	159	No Gas	24.650	ppb	2.7	205683.89	25	98.6	89.8	110.2	
182	W	159	No Gas	24.112	ppb	2.3	401583.83	25	96.45	89.8	110.2	
205	Tl	209	No Gas	25.279	ppb	2.7	790102.97	25	101.12	89.8	110.2	
208	Pb	209	No Gas	24.960	ppb	2.7	1097068.96	25	99.84	89.8	110.2	
232	Th	209	No Gas	24.443	ppb	2.5	1045307.58	25	97.77	89.8	110.2	
238	U	209	No Gas	24.488	ppb	3.1	1006170.52	25	97.95	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8249750.82	2.0	8217096.81	100.4	29.5	120.4	
Sc	45	No Gas	15955520.89	2.0	15952466.59	100.02	29.5	120.4	
Sc	45	H2	1874122.13	0.7	1988810.56	94.23	29.5	120.4	
Sc	45	He	456076.55	0.7	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2815387.61	2.3	2777617.47	101.36	29.5	120.4	
Ge	72	H2	546262.17	1.0	580378.32	94.12	29.5	120.4	
Ge	72	He	265997.74	1.0	274469.22	96.91	29.5	120.4	
Y	89	H2	9781356.95	0.6	10106085.94	96.79	29.5	120.4	
Y	89	He	2150865.44	0.8	2217336.32	97	29.5	120.4	
Tb	159	No Gas	21444543.57	1.8	20085725.95	106.77	29.5	120.4	
Tb	159	He	8043335.92	0.7	7863593.35	102.29	29.5	120.4	
Bi	209	No Gas	9730939.35	2.0	9123990.23	106.65	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:40:53 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.031	ppb	34.1	243.35	0.2	
11	B	6	No Gas	0.953	ppb	6.8	6555.06	4	
23	Na	45	He	-11.487	ppb	N/A	21409.69	200	
24	Mg	45	He	0.807	ppb	10.3	411.15	20	
27	Al	45	He	0.897	ppb	24.7	238.90	20	
28	Si	45	H2	-0.153	ppb	N/A	724.17	100	
39	K	45	He	-5.547	ppb	N/A	22023.58	200	
40	Ca	45	H2	0.845	ppb	14.5	6609.58	20	
51	V	89	He	0.002	ppb	73.4	195.57	1	
52	Cr	89	He	-0.007	ppb	N/A	823.88	1	
55	Mn	89	He	0.047	ppb	13.7	284.62	0.4	
56	Fe	89	H2	3.363	ppb	4.4	32888.30	20	
59	Co	89	He	0.006	ppb	27.4	120.01	0.2	
60	Ni	89	He	-0.046	ppb	N/A	153.34	0.4	
63	Cu	89	He	-0.007	ppb	N/A	370.02	0.6	
66	Zn	89	He	0.004	ppb	366.8	346.68	2	
75	As	89	He	0.012	ppb	1.9	19.00	1	
78	Se	89	H2	0.020	ppb	10.7	8.67	1	
88	Sr	89	He	0.006	ppb	83.7	48.89	1	
95	Mo	89	He	0.050	ppb	14.4	212.24	1	
107	Ag	89	He	0.006	ppb	18.7	113.34	0.2	
111	Cd	89	He	0.006	ppb	47.7	10.74	0.2	
118	Sn	159	He	0.119	ppb	29.5	805.61	1	
121	Sb	159	No Gas	0.039	ppb	17.4	1031.20	0.2	
137	Ba	159	No Gas	0.044	ppb	31.3	480.56	0.4	
182	W	159	No Gas	0.109	ppb	10.7	1852.20	1	
205	Tl	209	No Gas	0.016	ppb	85.8	1231.46	0.2	
208	Pb	209	No Gas	0.035	ppb	24.1	1988.97	0.2	
232	Th	209	No Gas	0.142	ppb	23.7	6268.63	1	
238	U	209	No Gas	0.044	ppb	52.6	1812.19	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8182758.83	0.4	8217096.81	99.58	29.5	120.4	
Sc	45	No Gas	15666200.75	0.7	15952466.59	98.21	29.5	120.4	
Sc	45	H2	1852246.57	1.1	1988810.56	93.13	29.5	120.4	
Sc	45	He	448993.70	0.5	477124.13	94.1	29.5	120.4	
Ge	72	No Gas	2757896.34	0.6	2777617.47	99.29	29.5	120.4	
Ge	72	H2	545237.82	1.7	580378.32	93.95	29.5	120.4	
Ge	72	He	263284.53	0.2	274469.22	95.92	29.5	120.4	
Y	89	H2	9844348.27	1.7	10106085.94	97.41	29.5	120.4	
Y	89	He	2143499.60	0.8	2217336.32	96.67	29.5	120.4	
Tb	159	No Gas	21225946.91	0.4	20085725.95	105.68	29.5	120.4	
Tb	159	He	8006611.20	0.8	7863593.35	101.82	29.5	120.4	
Bi	209	No Gas	9664263.82	0.5	9123990.23	105.92	29.5	120.4	

Prep Blank (PB) Report

Sample Name	PBWNG29IMW2
File Name	031_PB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 5:43:35 PM
Sample Type	PB
Total Dilution	5.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Fail
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.021	ppb	16.7	37.78	0.5	
B	11	6	No Gas	3.532	ppb	5.2	5305.60	10	
Na	23	45	He	-47.697	ppb	N/A	23090.57	500	
Mg	24	45	He	9.416	ppb	10.5	875.65	50	
Al	27	45	He	6.763	ppb	12.0	313.35	50	
Si	28	45	H2	19.804	ppb	16.3	1742.03	250	
K	39	45	He	-21.531	ppb	N/A	22550.91	500	
Ca	40	45	H2	17.596	ppb	9.5	12581.53	50	
V	51	89	He	0.205	ppb	5.0	411.13	2.5	
Cr	52	89	He	0.400	ppb	6.4	1427.82	2.5	
Mn	55	89	He	1.690	ppb	5.4	1170.51	1	PB 6020 Fails DoD
Fe	56	89	H2	346.359	ppb	5.7	611629.96	50	PB 6020 Fails DoD PB 6020 Fails Non-DoD
Co	59	89	He	0.044	ppb	26.7	146.68	0.5	
Ni	60	89	He	-0.119	ppb	N/A	222.23	1	
Cu	63	89	He	0.859	ppb	10.8	1896.86	1.5	
Zn	66	89	He	0.789	ppb	45.0	493.36	5	
As	75	89	He	0.108	ppb	47.2	25.33	2.5	
Se	78	89	H2	0.080	ppb	39.4	7.00	2.5	
Sr	88	89	He	0.039	ppb	11.9	55.56	2.5	
Mo	95	89	He	0.128	ppb	20.8	114.45	2.5	
Ag	107	89	He	0.023	ppb	51.1	92.23	0.5	
Cd	111	89	He	0.012	ppb	53.3	4.81	0.5	
Sn	118	159	He	0.765	ppb	16.2	916.73	2.5	
Sb	121	159	No Gas	0.065	ppb	3.4	490.56	0.5	
Ba	137	159	No Gas	0.245	ppb	28.2	523.93	1	
W	182	159	No Gas	0.115	ppb	16.9	427.16	2.5	
Tl	205	209	No Gas	-0.077	ppb	N/A	276.98	0.5	
Pb	208	209	No Gas	0.148	ppb	23.1	1752.00	0.5	
Th	232	209	No Gas	0.217	ppb	6.7	2092.52	2.5	
U	238	209	No Gas	0.030	ppb	46.5	253.62	0.5	

QC ISTD Table

Prep Blank (PB) Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8205519.19	0.7	8217096.81	99.86	29.5	120.4	
Sc	45	No Gas	15720223.94	0.5	15952466.59	98.54	29.5	120.4	
Sc	45	H2	1818751.29	3.2	1988810.56	91.45	29.5	120.4	
Sc	45	He	451389.83	2.8	477124.13	94.61	29.5	120.4	
Ge	72	No Gas	2748144.90	0.6	2777617.47	98.94	29.5	120.4	
Ge	72	H2	522688.66	0.7	580378.32	90.06	29.5	120.4	
Ge	72	He	259385.03	1.8	274469.22	94.5	29.5	120.4	
Y	89	H2	9625871.99	2.1	10106085.94	95.25	29.5	120.4	
Y	89	He	2138229.53	2.0	2217336.32	96.43	29.5	120.4	
Tb	159	No Gas	21223388.85	0.7	20085725.95	105.66	29.5	120.4	
Tb	159	He	8032972.59	1.5	7863593.35	102.15	29.5	120.4	
Bi	209	No Gas	9725049.92	0.2	9123990.23	106.59	29.5	120.4	

Sample Report

Sample Name SN5717-020R

File Name 032SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:46:11 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.011	ppb	82.2	22.22	100	
11	B	6	No Gas	3.071	ppb	0.7	4924.33	1000	
23	Na	45	He	180.327	ppb	2.8	59140.22	200000	
24	Mg	45	He	45.514	ppb	5.4	3925.26	200000	
27	Al	45	He	117.365	ppb	2.9	3806.20	200000	
28	Si	45	H2	149.326	ppb	11.1	8429.19	10000	
39	K	45	He	108.791	ppb	8.7	31166.44	200000	
40	Ca	45	H2	73.314	ppb	1.0	38819.56	200000	
51	V	89	He	0.391	ppb	12.9	606.70	1000	
52	Cr	89	He	0.816	ppb	5.7	1979.78	2000	
55	Mn	89	He	4.261	ppb	3.7	2705.11	2000	
56	Fe	89	H2	145.103	ppb	1.1	260820.10	100000	
59	Co	89	He	0.096	ppb	5.9	264.47	1000	
60	Ni	89	He	0.741	ppb	8.6	754.50	1000	
63	Cu	89	He	0.772	ppb	5.1	1726.84	2000	
66	Zn	89	He	6.673	ppb	0.9	1599.04	2000	
75	As	89	He	0.099	ppb	33.5	24.00	1000	
78	Se	89	H2	0.056	ppb	24.1	5.50	1000	
88	Sr	89	He	0.354	ppb	9.2	264.46	2000	
95	Mo	89	He	0.147	ppb	18.9	127.78	1000	
107	Ag	89	He	0.022	ppb	53.0	87.78	100	
111	Cd	89	He	0.008	ppb	73.9	3.70	1000	
118	Sn	159	He	0.594	ppb	3.0	793.39	1000	
121	Sb	159	No Gas	0.072	ppb	15.1	530.61	1000	
137	Ba	159	No Gas	0.850	ppb	8.2	1545.16	2000	
182	W	159	No Gas	0.071	ppb	18.5	286.99	1000	
205	Tl	209	No Gas	-0.090	ppb	N/A	200.23	1000	
208	Pb	209	No Gas	3.744	ppb	3.8	33942.61	2000	
232	Th	209	No Gas	0.096	ppb	8.7	1077.94	1000	
238	U	209	No Gas	0.013	ppb	89.2	110.12	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8362222.45	1.4	8217096.81	101.77	29.5	120.4	
Sc	45	No Gas	16019545.75	0.8	15952466.59	100.42	29.5	120.4	
Sc	45	H2	1857469.68	1.1	1988810.56	93.4	29.5	120.4	
Sc	45	He	445623.85	0.8	477124.13	93.4	29.5	120.4	
Ge	72	No Gas	2791974.87	2.0	2777617.47	100.52	29.5	120.4	
Ge	72	H2	532047.83	1.7	580378.32	91.67	29.5	120.4	
Ge	72	He	257973.83	0.3	274469.22	93.99	29.5	120.4	
Y	89	H2	9734151.83	1.1	10106085.94	96.32	29.5	120.4	
Y	89	He	2110465.98	0.6	2217336.32	95.18	29.5	120.4	
Tb	159	No Gas	21525932.73	1.0	20085725.95	107.17	29.5	120.4	
Tb	159	He	7892781.06	0.7	7863593.35	100.37	29.5	120.4	
Bi	209	No Gas	9901607.82	1.5	9123990.23	108.52	29.5	120.4	

Sample Report

Sample Name SN5830-002R

File Name 033SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:48:51 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.017	ppb	41.2	31.11	100	
11	B	6	No Gas	436.909	ppb	4.9	449051.32	1000	
23	Na	45	He	140029.420	ppb	0.4	22669087.66	200000	
24	Mg	45	He	17637.762	ppb	0.7	1517493.12	200000	
27	Al	45	He	744.938	ppb	2.1	23990.89	200000	
28	Si	45	H2	12150.986	ppb	1.9	618471.51	10000	
39	K	45	He	425.831	ppb	2.0	53555.64	200000	
40	Ca	45	H2	156688.676	ppb	0.5	72371959.48	200000	
51	V	89	He	0.861	ppb	8.5	1110.09	1000	
52	Cr	89	He	0.448	ppb	15.8	1469.15	2000	
55	Mn	89	He	367.301	ppb	0.4	220666.42	2000	
56	Fe	89	H2	39.476	ppb	61.9	71331.02	100000	
59	Co	89	He	0.606	ppb	9.5	1409.06	1000	
60	Ni	89	He	2.466	ppb	8.0	1822.41	1000	
63	Cu	89	He	0.859	ppb	2.5	1866.86	2000	
66	Zn	89	He	3.426	ppb	13.1	981.18	2000	
75	As	89	He	0.172	ppb	8.0	33.33	1000	
78	Se	89	H2	0.094	ppb	21.2	7.83	1000	
88	Sr	89	He	2196.651	ppb	1.1	1460254.13	2000	
95	Mo	89	He	0.845	ppb	4.9	665.60	1000	
107	Ag	89	He	0.108	ppb	8.5	296.68	100	
111	Cd	89	He	0.090	ppb	13.2	27.41	1000	
118	Sn	159	He	0.618	ppb	2.8	798.95	1000	
121	Sb	159	No Gas	0.085	ppb	20.0	580.66	1000	
137	Ba	159	No Gas	42.075	ppb	4.5	70031.83	2000	
182	W	159	No Gas	0.042	ppb	23.5	190.21	1000	
205	Tl	209	No Gas	-0.103	ppb	N/A	110.13	1000	
208	Pb	209	No Gas	0.067	ppb	12.7	1014.49	2000	
232	Th	209	No Gas	0.070	ppb	8.8	807.60	1000	
238	U	209	No Gas	4.914	ppb	7.6	39175.71	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8172631.82	2.1	8217096.81	99.46	29.5	120.4	
Sc	45	No Gas	15903221.41	1.2	15952466.59	99.69	29.5	120.4	
Sc	45	H2	1841362.12	0.4	1988810.56	92.59	29.5	120.4	
Sc	45	He	452103.23	1.1	477124.13	94.76	29.5	120.4	
Ge	72	No Gas	2767608.11	2.3	2777617.47	99.64	29.5	120.4	
Ge	72	H2	515857.03	0.4	580378.32	88.88	29.5	120.4	
Ge	72	He	258068.93	0.8	274469.22	94.02	29.5	120.4	
Y	89	H2	9514198.97	0.5	10106085.94	94.14	29.5	120.4	
Y	89	He	2103217.38	1.1	2217336.32	94.85	29.5	120.4	
Tb	159	No Gas	21366988.01	1.7	20085725.95	106.38	29.5	120.4	
Tb	159	He	7804933.77	1.0	7863593.35	99.25	29.5	120.4	
Bi	209	No Gas	9450441.67	2.9	9123990.23	103.58	29.5	120.4	

Sample Report

Sample Name SN5832-001R

File Name 034SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:51:26 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.007	ppb	2.3	16.67	100	
11	B	6	No Gas	2411.085	ppb	0.9	2497542.25	1000	
23	Na	45	He	1594597.490	ppb	0.6	259561485.67	200000	>LDR
24	Mg	45	He	321717.918	ppb	0.2	27863434.86	200000	
27	Al	45	He	25.551	ppb	32.1	921.18	200000	
28	Si	45	H2	10702.565	ppb	1.2	544874.42	10000	
39	K	45	He	10199.854	ppb	1.1	734781.35	200000	
40	Ca	45	H2	612963.488	ppb	0.9	283096653.56	200000	
51	V	89	He	1.466	ppb	4.2	1743.51	1000	
52	Cr	89	He	1.082	ppb	2.4	2311.78	2000	
55	Mn	89	He	35.477	ppb	2.4	21210.14	2000	
56	Fe	89	H2	222.425	ppb	0.4	382849.08	100000	
59	Co	89	He	0.798	ppb	5.2	1820.26	1000	
60	Ni	89	He	10.672	ppb	5.3	6838.58	1000	
63	Cu	89	He	1.554	ppb	0.5	3003.76	2000	
66	Zn	89	He	8.026	ppb	0.8	1829.08	2000	
75	As	89	He	0.426	ppb	8.1	65.34	1000	
78	Se	89	H2	1.334	ppb	8.7	86.83	1000	
88	Sr	89	He	8630.799	ppb	0.2	5676904.64	2000	
95	Mo	89	He	0.527	ppb	5.8	415.58	1000	
107	Ag	89	He	0.073	ppb	11.9	210.01	100	
111	Cd	89	He	0.168	ppb	22.8	49.63	1000	
118	Sn	159	He	0.674	ppb	12.4	793.39	1000	
121	Sb	159	No Gas	0.198	ppb	18.1	977.79	1000	
137	Ba	159	No Gas	20.020	ppb	0.6	30719.67	2000	
182	W	159	No Gas	0.036	ppb	40.0	156.84	1000	
205	Tl	209	No Gas	-0.059	ppb	N/A	327.04	1000	
208	Pb	209	No Gas	2.660	ppb	0.5	20319.04	2000	
232	Th	209	No Gas	0.061	ppb	16.6	647.41	1000	
238	U	209	No Gas	10.715	ppb	1.6	75085.16	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8255559.02	1.5	8217096.81	100.47	29.5	120.4	
Sc	45	No Gas	15633162.51	1.3	15952466.59	98	29.5	120.4	
Sc	45	H2	1841301.78	1.1	1988810.56	92.58	29.5	120.4	
Sc	45	He	455118.09	0.8	477124.13	95.39	29.5	120.4	
Ge	72	No Gas	2625706.89	0.6	2777617.47	94.53	29.5	120.4	
Ge	72	H2	500441.04	0.7	580378.32	86.23	29.5	120.4	
Ge	72	He	254160.80	0.7	274469.22	92.6	29.5	120.4	
Y	89	H2	9353821.09	0.9	10106085.94	92.56	29.5	120.4	
Y	89	He	2081029.55	1.3	2217336.32	93.85	29.5	120.4	
Tb	159	No Gas	19652305.82	1.3	20085725.95	97.84	29.5	120.4	
Tb	159	He	7420953.01	1.1	7863593.35	94.37	29.5	120.4	
Bi	209	No Gas	8294041.56	1.0	9123990.23	90.9	29.5	120.4	

Sample Report

Sample Name SN5832-002R

File Name 035SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:54:14 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.023	ppb	51.8	41.11	100	
11	B	6	No Gas	2109.277	ppb	1.2	2236314.65	1000	
23	Na	45	He	1337828.489	ppb	0.7	218222671.65	200000	>LDR
24	Mg	45	He	237113.779	ppb	0.3	20580308.86	200000	
27	Al	45	He	80.034	ppb	5.6	2685.90	200000	
28	Si	45	H2	8624.631	ppb	0.7	446687.59	10000	
39	K	45	He	11813.818	ppb	1.2	848900.45	200000	
40	Ca	45	H2	584903.802	ppb	0.3	274738024.80	200000	
51	V	89	He	1.408	ppb	3.2	1681.27	1000	
52	Cr	89	He	4.990	ppb	0.3	7590.68	2000	
55	Mn	89	He	253.494	ppb	0.7	150648.58	2000	
56	Fe	89	H2	6675.977	ppb	0.4	11645832.92	100000	
59	Co	89	He	2.852	ppb	4.1	6384.15	1000	
60	Ni	89	He	11.335	ppb	1.0	7244.36	1000	
63	Cu	89	He	1.309	ppb	3.4	2594.78	2000	
66	Zn	89	He	8.610	ppb	4.1	1936.87	2000	
75	As	89	He	0.722	ppb	2.3	103.01	1000	
78	Se	89	H2	0.183	ppb	10.4	13.67	1000	
88	Sr	89	He	9438.274	ppb	0.5	6204585.05	2000	
95	Mo	89	He	0.735	ppb	7.5	574.48	1000	
107	Ag	89	He	0.036	ppb	41.1	121.12	100	
111	Cd	89	He	0.073	ppb	27.5	22.22	1000	
118	Sn	159	He	0.557	ppb	21.2	725.61	1000	
121	Sb	159	No Gas	0.097	ppb	15.7	594.01	1000	
137	Ba	159	No Gas	19.895	ppb	1.2	31285.06	2000	
182	W	159	No Gas	0.055	ppb	54.2	220.25	1000	
205	Tl	209	No Gas	-0.086	ppb	N/A	186.87	1000	
208	Pb	209	No Gas	2.455	ppb	1.0	19147.11	2000	
232	Th	209	No Gas	0.034	ppb	18.1	460.53	1000	
238	U	209	No Gas	6.544	ppb	0.8	46756.80	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8450046.00	1.0	8217096.81	102.83	29.5	120.4	
Sc	45	No Gas	15918589.80	1.5	15952466.59	99.79	29.5	120.4	
Sc	45	H2	1872639.63	1.1	1988810.56	94.16	29.5	120.4	
Sc	45	He	456104.89	1.5	477124.13	95.59	29.5	120.4	
Ge	72	No Gas	2675418.50	1.1	2777617.47	96.32	29.5	120.4	
Ge	72	H2	501196.32	1.2	580378.32	86.36	29.5	120.4	
Ge	72	He	258000.60	0.9	274469.22	94	29.5	120.4	
Y	89	H2	9540578.16	1.2	10106085.94	94.4	29.5	120.4	
Y	89	He	2079991.65	1.4	2217336.32	93.81	29.5	120.4	
Tb	159	No Gas	20138855.53	1.2	20085725.95	100.26	29.5	120.4	
Tb	159	He	7438550.38	0.5	7863593.35	94.59	29.5	120.4	
Bi	209	No Gas	8456983.04	0.6	9123990.23	92.69	29.5	120.4	

Sample Report

Sample Name SN5832-003R

File Name 036SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:57:00 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Fail

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.021	ppb	57.6	37.78	100	
11	B	6	No Gas	2224.715	ppb	2.7	2343474.76	1000	
23	Na	45	He	1401878.749	ppb	0.6	231954916.75	200000	>LDR
24	Mg	45	He	249499.248	ppb	0.4	21965833.56	200000	
27	Al	45	He	78.492	ppb	7.3	2674.80	200000	
28	Si	45	H2	8963.491	ppb	6.7	462361.06	10000	
39	K	45	He	12347.637	ppb	1.2	899007.00	200000	
40	Ca	45	H2	614762.346	ppb	6.8	287608804.60	200000	
51	V	89	He	1.146	ppb	5.1	1411.24	1000	
52	Cr	89	He	4.043	ppb	1.7	6354.95	2000	
55	Mn	89	He	277.431	ppb	0.5	166022.38	2000	
56	Fe	89	H2	7737.380	ppb	6.2	13446952.42	100000	
59	Co	89	He	3.088	ppb	4.3	6957.81	1000	
60	Ni	89	He	11.199	ppb	2.3	7212.10	1000	
63	Cu	89	He	1.788	ppb	1.5	3416.09	2000	
66	Zn	89	He	7.809	ppb	2.4	1800.19	2000	
75	As	89	He	0.740	ppb	4.0	106.01	1000	
78	Se	89	H2	0.144	ppb	31.5	11.17	1000	
88	Sr	89	He	9794.834	ppb	0.5	6484057.34	2000	
95	Mo	89	He	0.749	ppb	6.6	588.92	1000	
107	Ag	89	He	0.014	ppb	26.2	68.89	100	
111	Cd	89	He	0.071	ppb	30.3	21.85	1000	
118	Sn	159	He	0.764	ppb	6.0	840.06	1000	
121	Sb	159	No Gas	0.117	ppb	7.1	687.46	1000	
137	Ba	159	No Gas	20.395	ppb	3.4	32623.14	2000	
182	W	159	No Gas	0.034	ppb	24.9	156.84	1000	
205	Tl	209	No Gas	-0.087	ppb	N/A	183.54	1000	
208	Pb	209	No Gas	1.915	ppb	6.9	15100.56	2000	
232	Th	209	No Gas	0.027	ppb	23.0	407.13	1000	
238	U	209	No Gas	6.561	ppb	4.7	47125.55	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8397634.21	1.5	8217096.81	102.2	29.5	120.4	
Sc	45	No Gas	16250971.02	1.8	15952466.59	101.87	29.5	120.4	
Sc	45	H2	1869561.61	5.4	1988810.56	94	29.5	120.4	
Sc	45	He	462640.72	0.6	477124.13	96.96	29.5	120.4	
Ge	72	No Gas	2708804.99	2.6	2777617.47	97.52	29.5	120.4	
Ge	72	H2	496121.02	4.0	580378.32	85.48	29.5	120.4	
Ge	72	He	260990.72	0.5	274469.22	95.09	29.5	120.4	
Y	89	H2	9522742.41	4.6	10106085.94	94.23	29.5	120.4	
Y	89	He	2094490.54	0.9	2217336.32	94.46	29.5	120.4	
Tb	159	No Gas	20493462.20	2.1	20085725.95	102.03	29.5	120.4	
Tb	159	He	7365005.93	0.4	7863593.35	93.66	29.5	120.4	
Bi	209	No Gas	8506718.92	2.1	9123990.23	93.23	29.5	120.4	

Sample Report

Sample Name SN5832-004R

File Name 037SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 5:59:48 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.009	ppb	33.3	21.11	100	
11	B	6	No Gas	654.378	ppb	3.5	712802.07	1000	
23	Na	45	He	372170.706	ppb	1.9	62882552.00	200000	
24	Mg	45	He	47543.606	ppb	1.9	4272725.80	200000	
27	Al	45	He	33.600	ppb	2.9	1226.77	200000	
28	Si	45	H2	7197.238	ppb	0.8	379953.20	10000	
39	K	45	He	3531.287	ppb	1.3	280422.07	200000	
40	Ca	45	H2	160505.919	ppb	0.4	76828444.41	200000	
51	V	89	He	1.107	ppb	7.9	1403.46	1000	
52	Cr	89	He	0.734	ppb	4.7	1899.79	2000	
55	Mn	89	He	64.865	ppb	0.4	39898.26	2000	
56	Fe	89	H2	206.410	ppb	0.5	370279.82	100000	
59	Co	89	He	0.536	ppb	10.8	1277.93	1000	
60	Ni	89	He	0.723	ppb	14.4	755.60	1000	
63	Cu	89	He	0.752	ppb	2.9	1722.40	2000	
66	Zn	89	He	30.959	ppb	1.7	6299.42	2000	
75	As	89	He	0.573	ppb	15.1	86.68	1000	
78	Se	89	H2	0.404	ppb	30.9	28.67	1000	
88	Sr	89	He	1756.580	ppb	1.0	1192014.60	2000	
95	Mo	89	He	0.720	ppb	3.0	581.15	1000	
107	Ag	89	He	0.015	ppb	60.2	72.23	100	
111	Cd	89	He	0.036	ppb	27.5	12.22	1000	
118	Sn	159	He	2.023	ppb	7.4	1644.61	1000	
121	Sb	159	No Gas	0.245	ppb	13.8	1284.84	1000	
137	Ba	159	No Gas	52.071	ppb	3.1	88321.28	2000	
182	W	159	No Gas	0.024	ppb	2.1	130.15	1000	
205	Tl	209	No Gas	-0.101	ppb	N/A	120.14	1000	
208	Pb	209	No Gas	0.124	ppb	4.2	1485.03	2000	
232	Th	209	No Gas	0.011	ppb	19.9	313.69	1000	
238	U	209	No Gas	3.589	ppb	6.2	28404.38	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8670263.50	1.9	8217096.81	105.51	29.5	120.4	
Sc	45	No Gas	16851453.78	1.8	15952466.59	105.64	29.5	120.4	
Sc	45	H2	1908251.96	1.5	1988810.56	95.95	29.5	120.4	
Sc	45	He	472340.46	1.7	477124.13	99	29.5	120.4	
Ge	72	No Gas	2868652.83	1.9	2777617.47	103.28	29.5	120.4	
Ge	72	H2	514262.34	1.3	580378.32	88.61	29.5	120.4	
Ge	72	He	271909.71	1.3	274469.22	99.07	29.5	120.4	
Y	89	H2	9744303.44	1.5	10106085.94	96.42	29.5	120.4	
Y	89	He	2147092.50	0.9	2217336.32	96.83	29.5	120.4	
Tb	159	No Gas	21776692.45	1.3	20085725.95	108.42	29.5	120.4	
Tb	159	He	7671658.64	1.0	7863593.35	97.56	29.5	120.4	
Bi	209	No Gas	9374587.59	1.9	9123990.23	102.75	29.5	120.4	

Sample Report

Sample Name SN5897-001R

File Name 038SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:02:25 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	0.002	ppb	184.6	8.89	100	
11	B	6	No Gas	15.769	ppb	3.3	19680.76	1000	
23	Na	45	He	358.469	ppb	14.8	94181.37	200000	
24	Mg	45	He	32.683	ppb	30.4	3053.90	200000	
27	Al	45	He	6.644	ppb	9.3	328.91	200000	
28	Si	45	H2	21.056	ppb	33.2	1795.45	10000	
39	K	45	He	3.693	ppb	217.5	25825.05	200000	
40	Ca	45	H2	107.926	ppb	15.3	53637.11	200000	
51	V	89	He	0.277	ppb	10.0	503.36	1000	
52	Cr	89	He	0.296	ppb	17.1	1317.83	2000	
55	Mn	89	He	0.577	ppb	1.5	505.92	2000	
56	Fe	89	H2	3.611	ppb	17.8	8689.12	100000	
59	Co	89	He	0.001	ppb	593.0	51.11	1000	
60	Ni	89	He	-0.257	ppb	N/A	137.78	1000	
63	Cu	89	He	0.172	ppb	13.4	742.27	2000	
66	Zn	89	He	1.631	ppb	10.0	672.26	2000	
75	As	89	He	0.060	ppb	54.2	19.67	1000	
78	Se	89	H2	0.039	ppb	47.7	4.17	1000	
88	Sr	89	He	0.965	ppb	25.7	701.15	2000	
95	Mo	89	He	0.043	ppb	50.6	48.89	1000	
107	Ag	89	He	0.025	ppb	35.1	100.00	100	
111	Cd	89	He	0.002	ppb	145.8	2.22	1000	
118	Sn	159	He	2.432	ppb	3.3	1970.22	1000	
121	Sb	159	No Gas	0.032	ppb	16.1	370.42	1000	
137	Ba	159	No Gas	0.056	ppb	100.8	223.59	2000	
182	W	159	No Gas	0.007	ppb	85.4	76.75	1000	
205	Tl	209	No Gas	-0.108	ppb	N/A	83.43	1000	
208	Pb	209	No Gas	0.007	ppb	104.1	530.60	2000	
232	Th	209	No Gas	0.014	ppb	55.1	367.08	1000	
238	U	209	No Gas	0.003	ppb	51.1	26.69	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	9020287.78	3.0	8217096.81	109.77	29.5	120.4	
Sc	45	No Gas	17194237.59	2.1	15952466.59	107.78	29.5	120.4	
Sc	45	H2	1830423.72	10.7	1988810.56	92.04	29.5	120.4	
Sc	45	He	479648.39	2.7	477124.13	100.53	29.5	120.4	
Ge	72	No Gas	2955179.55	1.9	2777617.47	106.39	29.5	120.4	
Ge	72	H2	498849.91	7.8	580378.32	85.95	29.5	120.4	
Ge	72	He	276220.02	1.7	274469.22	100.64	29.5	120.4	
Y	89	H2	9436082.73	9.8	10106085.94	93.37	29.5	120.4	
Y	89	He	2197385.02	2.3	2217336.32	99.1	29.5	120.4	
Tb	159	No Gas	22209471.06	1.6	20085725.95	110.57	29.5	120.4	
Tb	159	He	7981030.37	2.1	7863593.35	101.49	29.5	120.4	
Bi	209	No Gas	9975353.54	1.1	9123990.23	109.33	29.5	120.4	

Sample Report

Sample Name SN6056-004

File Name 039SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:05:08 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.001	ppb	N/A	4.44	100	
11	B	6	No Gas	7.484	ppb	1.4	10064.96	1000	
23	Na	45	He	236.034	ppb	4.4	70933.11	200000	
24	Mg	45	He	21.351	ppb	11.7	1955.85	200000	
27	Al	45	He	203.436	ppb	2.6	6809.62	200000	
28	Si	45	H2	35.360	ppb	9.5	2656.54	10000	
39	K	45	He	53.703	ppb	22.1	28587.29	200000	
40	Ca	45	H2	84.856	ppb	5.3	45519.75	200000	
51	V	89	He	0.374	ppb	14.4	600.04	1000	
52	Cr	89	He	0.787	ppb	6.4	1980.45	2000	
55	Mn	89	He	0.825	ppb	17.4	647.90	2000	
56	Fe	89	H2	40.005	ppb	0.5	74842.27	100000	
59	Co	89	He	0.026	ppb	32.5	108.90	1000	
60	Ni	89	He	0.196	ppb	44.1	423.36	1000	
63	Cu	89	He	0.566	ppb	10.0	1406.80	2000	
66	Zn	89	He	3.463	ppb	9.1	1012.30	2000	
75	As	89	He	0.070	ppb	38.3	20.67	1000	
78	Se	89	H2	0.018	ppb	179.0	3.00	1000	
88	Sr	89	He	0.362	ppb	5.2	275.57	2000	
95	Mo	89	He	0.071	ppb	29.4	70.00	1000	
107	Ag	89	He	0.017	ppb	65.1	76.67	100	
111	Cd	89	He	0.000	ppb	2273.4	1.48	1000	
118	Sn	159	He	0.434	ppb	31.2	700.05	1000	
121	Sb	159	No Gas	0.043	ppb	49.6	413.81	1000	
137	Ba	159	No Gas	0.828	ppb	10.0	1541.80	2000	
182	W	159	No Gas	0.021	ppb	34.3	123.47	1000	
205	Tl	209	No Gas	-0.106	ppb	N/A	93.44	1000	
208	Pb	209	No Gas	0.334	ppb	6.8	3480.75	2000	
232	Th	209	No Gas	0.016	ppb	50.4	383.77	1000	
238	U	209	No Gas	0.001	ppb	60.5	13.35	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8812202.31	0.7	8217096.81	107.24	29.5	120.4	
Sc	45	No Gas	16646006.04	0.5	15952466.59	104.35	29.5	120.4	
Sc	45	H2	1913082.78	0.1	1988810.56	96.19	29.5	120.4	
Sc	45	He	464849.96	1.3	477124.13	97.43	29.5	120.4	
Ge	72	No Gas	2903040.99	0.4	2777617.47	104.52	29.5	120.4	
Ge	72	H2	525551.48	0.5	580378.32	90.55	29.5	120.4	
Ge	72	He	270359.12	0.4	274469.22	98.5	29.5	120.4	
Y	89	H2	9872263.79	1.0	10106085.94	97.69	29.5	120.4	
Y	89	He	2154473.16	1.1	2217336.32	97.16	29.5	120.4	
Tb	159	No Gas	21989019.67	0.7	20085725.95	109.48	29.5	120.4	
Tb	159	He	7978729.40	0.7	7863593.35	101.46	29.5	120.4	
Bi	209	No Gas	9997267.54	1.0	9123990.23	109.57	29.5	120.4	

Sample Report

Sample Name SN6061-002

File Name 040SMPL.d

Data Path Name D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b

Acq Time 8/4/2020 6:07:45 PM

Sample Type Sample

Total Dilution 5.0000

Sample QC Pass/Fial Pass

ISTD QC Pass/Fail Pass

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
9	Be	6	No Gas	-0.002	ppb	N/A	3.33	100	
11	B	6	No Gas	6.858	ppb	8.5	9207.78	1000	
23	Na	45	He	133.206	ppb	5.3	52721.72	200000	
24	Mg	45	He	12.223	ppb	1.9	1126.79	200000	
27	Al	45	He	8.387	ppb	15.2	368.91	200000	
28	Si	45	H2	15.081	ppb	5.5	1555.16	10000	
39	K	45	He	10.800	ppb	79.1	25004.05	200000	
40	Ca	45	H2	38.234	ppb	9.9	22703.40	200000	
51	V	89	He	0.286	ppb	6.6	491.14	1000	
52	Cr	89	He	0.429	ppb	6.9	1444.49	2000	
55	Mn	89	He	0.724	ppb	9.0	571.91	2000	
56	Fe	89	H2	4.808	ppb	1.3	11213.57	100000	
59	Co	89	He	0.005	ppb	25.5	57.78	1000	
60	Ni	89	He	-0.171	ppb	N/A	185.56	1000	
63	Cu	89	He	0.348	ppb	13.7	1006.74	2000	
66	Zn	89	He	2.188	ppb	11.0	748.94	2000	
75	As	89	He	0.087	ppb	40.6	22.33	1000	
78	Se	89	H2	0.013	ppb	85.9	2.67	1000	
88	Sr	89	He	0.206	ppb	9.5	165.56	2000	
95	Mo	89	He	0.038	ppb	27.3	43.33	1000	
107	Ag	89	He	0.011	ppb	23.0	62.22	100	
111	Cd	89	He	0.003	ppb	135.5	2.22	1000	
118	Sn	159	He	1.937	ppb	3.2	1623.49	1000	
121	Sb	159	No Gas	0.053	ppb	32.0	453.85	1000	
137	Ba	159	No Gas	0.815	ppb	4.6	1508.44	2000	
182	W	159	No Gas	0.016	ppb	53.9	106.79	1000	
205	Tl	209	No Gas	-0.109	ppb	N/A	76.75	1000	
208	Pb	209	No Gas	0.074	ppb	13.9	1117.93	2000	
232	Th	209	No Gas	0.009	ppb	100.5	320.36	1000	
238	U	209	No Gas	0.004	ppb	121.1	40.04	1000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8654673.64	0.8	8217096.81	105.33	29.5	120.4	
Sc	45	No Gas	16208664.76	0.7	15952466.59	101.61	29.5	120.4	
Sc	45	H2	1876725.83	0.6	1988810.56	94.36	29.5	120.4	
Sc	45	He	455221.73	2.4	477124.13	95.41	29.5	120.4	
Ge	72	No Gas	2822330.17	0.8	2777617.47	101.61	29.5	120.4	
Ge	72	H2	519355.05	0.8	580378.32	89.49	29.5	120.4	
Ge	72	He	265107.40	1.7	274469.22	96.59	29.5	120.4	
Y	89	H2	9775265.54	0.3	10106085.94	96.73	29.5	120.4	
Y	89	He	2103333.39	1.9	2217336.32	94.86	29.5	120.4	
Tb	159	No Gas	21854113.01	1.3	20085725.95	108.8	29.5	120.4	
Tb	159	He	7825092.94	1.8	7863593.35	99.51	29.5	120.4	
Bi	209	No Gas	9861449.12	2.4	9123990.23	108.08	29.5	120.4	

Continuing Calibration Verification (CCV) Report

Sample Name	CCV
File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:10:26 PM
Sample Type	CCV
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	ExpVal	% Rec	%Low	%High	QC Flag
9	Be	6	No Gas	23.778	ppb	4.1	196135.46	25	95.11	89.8	110.2	
11	B	6	No Gas	23.912	ppb	4.4	134806.95	25	95.65	89.8	110.2	
23	Na	45	He	5122.394	ppb	0.7	4277442.14	5000	102.45	89.8	110.2	
24	Mg	45	He	5027.147	ppb	0.7	2217426.34	5000	100.54	89.8	110.2	
27	Al	45	He	480.844	ppb	0.7	79169.71	500	96.17	89.8	110.2	
28	Si	45	H2	468.393	ppb	1.5	124498.18	500	93.68	89.8	110.2	
39	K	45	He	4857.495	ppb	0.4	1747965.21	5000	97.15	89.8	110.2	
40	Ca	45	H2	4831.785	ppb	1.0	11598583.99	5000	96.64	89.8	110.2	
51	V	89	He	24.721	ppb	0.8	137042.10	25	98.88	89.8	110.2	
52	Cr	89	He	25.025	ppb	0.6	176657.49	25	100.1	89.8	110.2	
55	Mn	89	He	24.320	ppb	0.7	75222.06	25	97.28	89.8	110.2	
56	Fe	89	H2	4866.365	ppb	0.5	43807343.72	5000	97.33	89.8	110.2	
59	Co	89	He	25.185	ppb	1.2	291051.91	25	100.74	89.8	110.2	
60	Ni	89	He	24.759	ppb	0.9	79294.07	25	99.04	89.8	110.2	
63	Cu	89	He	25.203	ppb	0.3	218488.14	25	100.81	89.8	110.2	
66	Zn	89	He	25.153	ppb	2.1	24714.85	25	100.61	89.8	110.2	
75	As	89	He	24.315	ppb	0.6	16130.42	25	97.26	89.8	110.2	
78	Se	89	H2	24.701	ppb	2.5	8299.59	25	98.8	89.8	110.2	
88	Sr	89	He	23.378	ppb	0.3	79933.02	25	93.51	89.8	110.2	
95	Mo	89	He	25.092	ppb	1.1	99563.44	25	100.37	89.8	110.2	
107	Ag	89	He	25.702	ppb	1.2	319906.46	25	102.81	89.8	110.2	
111	Cd	89	He	25.552	ppb	0.6	38039.99	25	102.21	89.8	110.2	
118	Sn	159	He	23.685	ppb	1.3	75783.72	25	94.74	89.8	110.2	
121	Sb	159	No Gas	24.777	ppb	3.8	540025.74	25	99.11	89.8	110.2	
137	Ba	159	No Gas	24.089	ppb	4.2	205762.98	25	96.36	89.8	110.2	
182	W	159	No Gas	23.993	ppb	2.7	409109.56	25	95.97	89.8	110.2	
205	Tl	209	No Gas	24.943	ppb	4.5	801630.70	25	99.77	89.8	110.2	
208	Pb	209	No Gas	24.696	ppb	3.7	1116221.67	25	98.78	89.8	110.2	
232	Th	209	No Gas	23.708	ppb	4.1	1042473.12	25	94.83	89.8	110.2	
238	U	209	No Gas	24.146	ppb	3.4	1020267.67	25	96.58	89.8	110.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8877116.18	1.9	8217096.81	108.03	29.5	120.4	
Sc	45	No Gas	16334820.08	1.5	15952466.59	102.4	29.5	120.4	
Sc	45	H2	1913286.36	1.1	1988810.56	96.2	29.5	120.4	
Sc	45	He	463576.82	1.1	477124.13	97.16	29.5	120.4	
Ge	72	No Gas	2867065.97	1.5	2777617.47	103.22	29.5	120.4	
Ge	72	H2	542141.90	1.4	580378.32	93.41	29.5	120.4	
Ge	72	He	272390.10	0.7	274469.22	99.24	29.5	120.4	
Y	89	H2	9848130.49	0.2	10106085.94	97.45	29.5	120.4	
Y	89	He	2162817.10	1.3	2217336.32	97.54	29.5	120.4	
Tb	159	No Gas	21955468.28	1.7	20085725.95	109.31	29.5	120.4	
Tb	159	He	7987880.09	0.9	7863593.35	101.58	29.5	120.4	
Bi	209	No Gas	10007463.36	1.7	9123990.23	109.68	29.5	120.4	

Continuing Calibration Blank (CCB) Report

Sample Name	CCB
File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\2020\08-Aug\LNH04A.b
Acq Time	8/4/2020 6:13:01 PM
Sample Type	CCB
Total Dilution	1.0000
Comment	---
ISTD Ref FileName	006CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass
Operator	**admin**

QC Analyte Table

Mass	Name	ISTD	Tune	Conc.	Units	RSD	CPS	Limit	QC Flag
9	Be	6	No Gas	0.022	ppb	58.4	185.57	0.2	
11	B	6	No Gas	0.954	ppb	0.7	7003.03	4	
23	Na	45	He	11.016	ppb	7.7	40816.51	200	
24	Mg	45	He	0.883	ppb	37.1	457.82	20	
27	Al	45	He	-0.118	ppb	N/A	80.00	20	
28	Si	45	H2	-0.204	ppb	N/A	724.15	100	
39	K	45	He	1.680	ppb	150.9	25335.99	200	
40	Ca	45	H2	1.262	ppb	3.9	7713.48	20	
51	V	89	He	-0.007	ppb	N/A	148.89	1	
52	Cr	89	He	-0.002	ppb	N/A	865.21	1	
55	Mn	89	He	-0.007	ppb	N/A	119.31	0.4	
56	Fe	89	H2	1.438	ppb	10.8	15342.18	20	
59	Co	89	He	-0.002	ppb	N/A	28.89	0.2	
60	Ni	89	He	-0.067	ppb	N/A	85.56	0.4	
63	Cu	89	He	-0.015	ppb	N/A	302.24	0.6	
66	Zn	89	He	-0.029	ppb	N/A	316.68	2	
75	As	89	He	0.009	ppb	31.4	17.00	1	
78	Se	89	H2	0.021	ppb	21.5	8.83	1	
88	Sr	89	He	0.019	ppb	22.9	93.33	1	
95	Mo	89	He	0.055	ppb	14.0	232.23	1	
107	Ag	89	He	0.003	ppb	20.6	78.89	0.2	
111	Cd	89	He	0.002	ppb	97.9	4.08	0.2	
118	Sn	159	He	0.090	ppb	23.8	703.39	1	
121	Sb	159	No Gas	0.026	ppb	27.4	777.56	0.2	
137	Ba	159	No Gas	0.010	ppb	60.4	206.90	0.4	
182	W	159	No Gas	0.099	ppb	13.3	1708.72	1	
205	Tl	209	No Gas	0.005	ppb	269.0	924.40	0.2	
208	Pb	209	No Gas	0.014	ppb	38.9	1061.21	0.2	
232	Th	209	No Gas	0.093	ppb	24.8	4258.91	1	
238	U	209	No Gas	0.030	ppb	32.2	1254.82	0.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	8734389.50	1.9	8217096.81	106.3	29.5	120.4	
Sc	45	No Gas	16195081.59	0.8	15952466.59	101.52	29.5	120.4	
Sc	45	H2	1884643.17	0.0	1988810.56	94.76	29.5	120.4	
Sc	45	He	464322.02	1.2	477124.13	97.32	29.5	120.4	
Ge	72	No Gas	2828200.29	0.8	2777617.47	101.82	29.5	120.4	
Ge	72	H2	531339.85	0.4	580378.32	91.55	29.5	120.4	
Ge	72	He	270842.54	0.8	274469.22	98.68	29.5	120.4	
Y	89	H2	9697175.90	0.3	10106085.94	95.95	29.5	120.4	
Y	89	He	2157670.11	1.1	2217336.32	97.31	29.5	120.4	
Tb	159	No Gas	21671276.34	0.8	20085725.95	107.89	29.5	120.4	
Tb	159	He	7890398.15	0.3	7863593.35	100.34	29.5	120.4	
Bi	209	No Gas	9829702.07	1.1	9123990.23	107.73	29.5	120.4	

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSC187 HCL: MSC186 Digestion Vessels: 28619010 Filter Paper: C703156

1:1 HNO3: MC2733 H2O2: MSC184 Boiling Stones: MSC174

Pipet	LCS / Spike	LCS/Spiking Information:
M11	☐ ☐	CLPP-SPK-1 (ID/Vol): MS2225 / 0.1 mL
M8	☐ ☐	CLPP-SPK-INT1 (ID/Vol): MW19476 / 1 mL
M2	☐ ☐	CLPP-SPK-INT2 (ID/Vol): MW19477 / 1 mL
—	☐ ☐	— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: 09

Heat Source ID : E
Start Time: 1126 /Temp. 95 °C
End Time: 1807 /Temp. 100 °C
Thermometer ID/Pos: IR1C25 / 6,6

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LC2ONG23IMS1	NG23IMS1	1.0	g	0.1	L	SL	IM	SF	07/23/2020	N/A
LCSONG23IMS1	NG23IMS1	↓	g		L	SL	IM	SF	07/23/2020	-
PBSNG23IMS1	NG23IMS1	↓	g		L	SL	IM	SF	07/23/2020	-
~~SN3050-001~~ 6050	NG23IMS1	1.36	g		L	SL	IM	SF	07/23/2020	A
SN3050-002 6050	NG23IMS1	1.19	g		L	SL	IM	SF	07/23/2020	↓
SN3050-003 6050	NG23IMS1	1.38	g	↓	L	SL	IM	SF	07/23/2020	↓

Cor ICP Analysis AP 7/23/20

EP 7/23/20

SN6056-005	1.03	AP 7/24/20
6	1.04	
7	1.46	
8	1.02	
9	1.32	
9S	1.34	
9P	1.31	
10	1.36	
11	1.01	
12	1.07	
13	1.01	
14	1.23	
15	1.07	
16	1.05	
17	1.01	

REVIEWED
AP 7/24/20
KATAHDIN ANALYTICAL
METALS SECTION

AP 7/21/20

 Digestion performed by: SF/CD On: 7/23/20

Katahdin Analytical Services 4001373

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSR187 HCL: MSR186 Digestion Vessels: MLD026000002 Filter Paper: 17031561

1:1 HNO3: MR2725 H2O2: MSR184 Boiling Stones: MSR174

Pipet	LCS / Spike
M11	☑ ☑
M21	☑ ☑
M21	☑ ☑
—	☐ ☐

LCS/Spiking Information:

CLPP-SPK-1 (ID/Vol): MS2225 / 0.1 mL

CLPP-SPK-INT1 (ID/Vol): MW19476 / 1.0 mL

CLPP-SPK-INT2 (ID/Vol): MW19477 / 1.0 mL

— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: 09

Heat Source ID : P

Start Time: 9:15 /Temp. 90 °C

End Time: 1708 /Temp. 95 °C

Thermometer ID/Pos: ALC30 / 1.6

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONG27IMS1	NG27IMS1	1.00	g	0.1	L	SL	IM	SF	07/27/2020	—
PBSNG27IMS1	NG27IMS1	1.00	g		L	SL	IM	SF	07/27/2020	—
SN6056-018	NG27IMS1	1.42	g		L	SL	IM	SF	07/27/2020	A
SN6056-018P	NG27IMS1	1.41	g		L	SL	IM	SF	07/27/2020	A
SN6056-018S	NG27IMS1	1.49	g		L	SL	IM	SF	07/27/2020	A
SN6056-019	NG27IMS1	1.29	g		L	SL	IM	SF	07/27/2020	A
SN6056-020	NG27IMS1	1.33	g		L	SL	IM	SF	07/27/2020	A
SN6056-021	NG27IMS1	1.38	g		L	SL	IM	SF	07/27/2020	B
SN6056-022	NG27IMS1	1.25	g	↓	L	SL	IM	SF	07/27/2020	A

REVIEWED

CD 7.30.20

KATAHDIN ANALYTICAL

METALS SECTION

 Digestion performed by: SF/EP On: 07/27/20

Katahdin Analytical Services 4001374

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 3050H-MS

Reagents and Consumables Information:

HNO3: MSR187 HCL: MSR186 Digestion Vessels: MLD026000021 Filter Paper: 17031561

1:1 HNO3: MR2733 H2O2: MSR184 Boiling Stones: MSR174

Pipet	LCS	Spike
M11	☑	☑
M21	☑	☑
M21	☑	☑
—	☐	☐

LCS/Spiking Information:

CLPP-SPK-1 (ID/Vol): MS2225 / 0.1 mL

CLPP-SPK-INT1 (ID/Vol): MW19519 / 1.0 mL

CLPP-SPK-INT2 (ID/Vol): MW19520 / 1.0 mL

— Spike (ID/Vol): — / — mL

LCSS: — Balance ID: Bal 09

Heat Source ID : D

Start Time: 9:45 /Temp. 90 °C

End Time: 15:33 /Temp. 95 °C

Thermometer ID/Pos: AL230 / 3:3

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONG28IMS1	NG28IMS1	1.0	g	0.1	L	SL	IM	EP	07/28/2020	—
PBSNG28IMS1	NG28IMS1	1.0	g		L	SL	IM	EP	07/28/2020	—
SN6056-001	NG28IMS1	1.01	g		L	SL	IM	EP	07/28/2020	—
SN6056-002	NG28IMS1	1.06	g		L	SL	IM	EP	07/28/2020	—
SN6056-003	NG28IMS1	1.02	g	↓	L	SL	IM	EP	07/28/2020	—

REVIEWED

CD 7.29.20

KATAHDIN ANALYTICAL

METALS SECTION

Katahdin Analytical Services 4001375

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

Metals Preparation Benchsheet

Method: 3010-MS

HNO3: MSR187 **HCL:** MSR186 **Digestion Vessels:** MLD026000021

1:1 HNO3: MR2733 **1:1 HCL:** MR2737

Pipet **LCS/Spiking Information:**

M11 **CLPP-SPK-1 (ID/Vol):** MS2225 / 0.05 mL

M21 **CLPP-SPK-INT1 (ID/Vol):** MW19519 / 0.500 mL

M21 **CLPP-SPK-INT2 (ID/Vol):** MW19520 / 0.500 mL

— — **Spike (ID/Vol):** — / — mL

Heat Source ID : D

Start Time: 8:01 **/Temp.** 90 °C

End Time: 16:00 **/Temp.** 92 °C

Thermometer ID/Pos: ALC30 / 14:8

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWNG29IMW2	NG29IMW2	0.05	L	0.05	L	AQ	IM	SF	07/29/2020	—	✓
PBWNG29IMW2	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	—	
SN5124-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5124-002RP	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5124-002RS	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	C	
SN5717-020R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	A	
SN5830-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	D	
SN5832-001R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5832-002R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	U	
SN5832-003R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5832-004R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN5897-001R	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	G	
SN6056-004	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	A	
SN6061-002	NG29IMW2		L		L	AQ	IM	SF	07/29/2020	2G	

SF 7/29/20

REVIEWED
CD 7-30-20
KATAHDIN ANALYTICAL
METALS SECTION

Digestion performed by: SF/EP **On:** 7/29/20

Katahdin Analytical Services 4001376

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet** **Method:** 821/R-91-100

~~Reagents and Consumables Information:~~

HNO3:_____ HCL:_____ Digestion Vessels:_____ Filter Paper:_____

1:1 HNO3:_____ H2O2:_____ Boiling Stones:_____

Pipet	LCS / Spike	LCS/Spiking Information:
W3	☐ ☐	CLPP-SPK-1 (ID/Vol): MS2225 / 0.2 mL
W10	☐ ☐	CLPP-SPK-INT1 (ID/Vol): MW1942D / 2.0 mL
W10	☐ ☐	CLPP-SPK-INT2 (ID/Vol): MW1942I / 2.0 mL
W5	☐ ☐	HgA Spike (ID/Vol): MW1940Z / 1.0 mL
		LCSS: — Balance ID: Bal07

~~Heat Source ID :~~_____

Start Time:_____/Temp._____°C

End Time:_____/Temp._____°C

Thermometer ID/Pos:_____/_____

EP 8/5/20

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle
LCSONH03ICS2	NH03ICS2	10.0	g	0.2	L	SL	IC	ZF	08/03/2020	—
PBSNH03ICS2	NH03ICS2	10.0	g		L	SL	IC	ZF	08/03/2020	—
SN6056-024	NH03ICS2	12.003	g		L	SL	IC	ZF	08/03/2020	—
SN6056-026	NH03ICS2	10.262	g		L	SL	IC	ZF	08/03/2020	—
SN6100-011	NH03ICS2	10.009	g		L	SL	IC	ZF	08/03/2020	—
SN6100-012	NH03ICS2	9.905	g		L	SL	IC	ZF	08/03/2020	—
SN6100-012P	NH03ICS2	10.290	g		L	SL	IC	ZF	08/03/2020	—
SN6100-012S	NH03ICS2	13.617	g		L	SL	IC	ZF	08/03/2020	—
SN6100-013	NH03ICS2	11.588	g		L	SL	IC	ZF	08/03/2020	—
SN6100-014	NH03ICS2	10.110	g		L	SL	IC	ZF	08/03/2020	—

REVIEWED
mc 8/6/20
KATAHDIN ANALYTICAL
METALS SECTION

 Digestion performed by: ZF On: 8/3/20

Katahdin Analytical Services 4001377

KATAHDIN ANALYTICAL
ACID VOLATILE SULFIDE PREPARATION
METHOD: EPA-821-R-51-100

REAGENT LOT #:	
IODINE STANDARD: W18710	STS SOLUTION - 0.0375 N: SWL4681
Na2S SOLUTION: W18561/62	NaOH - 0.5 N: W19044
HCl-6N: W19043	Pipet ID: W3,5,9,10
LCS PREP: 0.1mL SI; SEM: 0.2mL MS2225, 2.0mL MW#420:421, 1.0mL MW18802	
MS PREP: 1	

ZF 8/3/20

STANDARDIZATION OF I2		STANDARDIZATION OF S1			STANDARDIZATION OF S2		
VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) Na2S	VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) Na2S
15mL	10.0	30mL	7.20	0.1mL	30mL	6.75	0.1mL
1	10.0	1	7.10	1	1	6.95	1
1	10.0	1	7.40	1	1	6.95	1
	X:		X:			X:	

Prep Start Time	Prep End Time	Sample ID	Sample Wt. (g)	NaOH Trap Vol. (ml)
13:08	14:08	Blank	10g	170mL
		AVS LCS	1	
		SEM LCS		
		SN6056-24	12.603g	
		1 -26	10.262g	
		SN6100-11	10.609g	
		-12	9.905g	
		-12 AVS MS	10.575g	
		-12 AVS MSD	10.988g	
		-12 SEM MS	13.817g	
		-12 SEM MSD	10.290g	
		-13	11.588g	
		-14	10.110g	
		AVS LCS2	10g	
			ZF	8/3/20

NOTES:

ANALYST: ZF	DATE: 8/3/20
CHECKED BY:	DATE:

Katahdin Analytical Services, Inc. | **Metals Preparation Benchsheet**

Reagents and Consumables Information: | **Method:** 7470

HNO3: MSR197 H2SO4: MSR125 Digestion Vessles: MLD0260000021

KMNO4: MR2716 K2S2O8: MR2708 NH2OH-HCl: MR2735

Standards/Spiking Information:

1ppm A : MW19SD1

Pipet 1ppm B : MW19403

M11 LCSO = ~~500uL~~ 125uL of 1ppm A to 100mL MW 8/13/20

1 Spike(S/P) = ~~100uL~~ 25uL of 1ppm A to 100mL MW

M21 ICV = 600uL of 1ppm B to 100 mL

1 S10.0 = 1000uL of 1ppm A to 100 mL

Heat Source ID : A

Start Time: 10:13 /Temp: 90.0 °C

End Time: 12:13 /Temp. 90.0 °C

Thermometer ID/Pos: D1676 / 5:2

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSONH03ICS2	NH13HGW1	10 g ~~L~~		0.2	L	SL	HG	CD	08/13/2020	W19	✓
LCSWNH13HGW1	NH13HGW1	0.075	L	0.025	L	AQ	HG	CD	08/13/2020		
PBSNH03ICS2	NH13HGW1	10 g ~~L~~		0.2	L	SL	HG	CD	08/13/2020		
PBWNH13HGW1	NH13HGW1	0.025	L	0.025	L	AQ	HG	CD	08/13/2020		
SN6056-024	NH13HGW1	12.1639 ~~L~~		0.2	L	SL	HG	CD	08/13/2020		
SN6056-026	NH13HGW1	10.2629 ~~L~~		0.2	L	SL	HG	CD	08/13/2020		
SN6639-001	NH13HGW1	0.025	L	0.025	L	AQ	HG	CD	08/13/2020		
SN6668-001	NH13HGW1		L		L	AQ	HG	CD	08/13/2020		
SN6668-002	NH13HGW1		L		L	AQ	HG	CD	08/13/2020		

REVIEWED

EP 8/13/2020

KATAHDIN ANALYTICAL

METALS SECTION

Katahdin Analytical Services 4001379

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Quality Control Report

Blank Sample Summary Report

Acid Volatile Sulfide

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG283381	EPA 821	03-AUG-20	03-AUG-20	U 0.076 umole/g	0.10 umole/g	0.076

TOC in Soil

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG283174	Lloyd Kahn	30-JUL-20	N/A	U 300 ug/gdrywt	400 ug/gdrywt	300

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG282639	SW3540C	24-JUL-20	23-JUL-20	100 %	1 %	N/A
MBLANK	WG282918	SW3540C	28-JUL-20	27-JUL-20	100 %	1 %	N/A

Quality Control Report

Laboratory Control Sample Summary Report

Acid Volatile Sulfide

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG283381-2	LCS	WG283381	03-AUG-20	03-AUG-20	umole/g	23.893	23.	98	80-120	
WG283381-3	LCSD	WG283381	03-AUG-20	03-AUG-20	umole/g	23.893	23.	97	80-120	1

TOC In Soil

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG283174-2	LCS	WG283174	30-JUL-20	N/A	ug/gdrywt	400000.000	430000	107	80-120	

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG282639-2	LCS	WG282639	24-JUL-20	23-JUL-20	%	90	90.	100	90-110	
WG282918-2	LCS	WG282918	28-JUL-20	27-JUL-20	%	90	90.	100	90-110	

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG282639-4	SN6056-18	WG282639	24-JUL-20	%	11.	12.	11	20
WG282639-3	SN6056-9	WG282639	24-JUL-20	%	26.	36.	32*	20

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-1
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS01	SL	20-JUL-20 09:30:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services 5000008

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-2
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS02	SL	20-JUL-20 10:00:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services 5000009

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-3
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR04IS03	SL	20-JUL-20 10:30:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	96. %	1		N/A	SW3540C	WG282918	28-JUL-20 08:55:00	SW3540C	27-JUL-20	

Katahdin Analytical Services 5000010

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-5
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED01A	SL	20-JUL-20 12:38:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	41. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000011

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-6
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED02A	SL	20-JUL-20 12:44:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	53. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000012

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-7
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED02B	SL	20-JUL-20 12:45:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	58. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000013

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-8
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED03A	SL	20-JUL-20 12:50:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	18. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000014

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-9
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED04A	SL	20-JUL-20 13:10:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	26. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000015

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-10
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED05A	SL	20-JUL-20 13:15:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000016

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-11
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED06A	SL	20-JUL-20 13:20:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	65. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000017

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-12
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED07A	SL	20-JUL-20 13:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
TOC In Soil	110000 ug/gdrywt	2400	500	1800	LLOYDKAHN	WG283174	30-JUL-20 17:20:44	N/A	N/A	
Total Solids	38. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000018

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-13
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED08A	SL	20-JUL-20 13:34:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	20. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000019

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-14
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED01A	SL	20-JUL-20 14:57:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	46. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000020

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-15
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED02A	SL	20-JUL-20 15:01:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000021

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-16
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED02B	SL	20-JUL-20 15:02:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	7.9 %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000022

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-17
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED03A	SL	20-JUL-20 15:06:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	7.9 %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000023

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-18
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED04A	SL	20-JUL-20 15:10:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	11. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000024

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-19
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED05A	SL	20-JUL-20 15:18:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	21. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000025

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-20
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED06A	SL	20-JUL-20 15:22:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	12. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000026

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-21
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED07A	SL	20-JUL-20 15:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
TOC In Soil	58000 ug/gdrywt	1400	300	1100	LLOYDKAHN	WG283174	30-JUL-20 17:31:54	N/A	N/A	
Total Solids	49. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000027

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-22
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED08A	SL	20-JUL-20 15:32:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	65. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000028

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-24
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR05SED07A	SL	20-JUL-20 13:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Acid Volatile Sulfide	1.4 umole/g	0.26	0.099	0.20	EPA 821	WG283381	03-AUG-20 17:48:00	EPA 821	03-AUG-20	
Total Solids	38. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000029

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Naoum Tavantzis
AECOM
1600 Perimeter Park Drive
Morrisville,NC 27560

Lab Sample ID: SN6056-26
Report Date: 20-AUG-20
Project: Former Small Arms Ra
SDG: SN6056

Sample Description	Matrix	Date Sampled	Date Received
COR06SED07A	SL	20-JUL-20 15:25:00	22-JUL-20

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Acid Volatile Sulfide	U0.16 umole/g	0.20	0.078	0.16	EPA 821	WG283381	03-AUG-20 17:48:00	EPA 821	03-AUG-20	
Total Solids	49. %	1		N/A	SW3540C	WG282639	24-JUL-20 08:43:00	SW3540C	23-JUL-20	

Katahdin Analytical Services 5000030

Raw Data Section

WET CHEMISTRY BATCH REPORT
Aug 12 2020, 09:15 am
Batch: WG283381

Parameter: Acid Volatile Sulfide

Prep Date: 03-AUG-20

Date Analyzed: 03-AUG-20

Prep Method: EPA 821

Analyst Initials: ZF

Prep Chemist: ZF

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SN6056-24	SAMP	EPA 821	40.mL	40.mL	1	1.36	1.4 umole/g	38.	.1	0.099	0.26		
SN6056-26	SAMP	EPA 821	40.mL	40.mL	1	-.005	U0.16 umole/g	49.	.1	0.078	0.20		
SN6100-11	SAMP	EPA 821	40.mL	40.mL	1	-.024	U0.46 umole/g	16.	.1	0.23	0.61		
SN6100-12	SAMP	EPA 821	40.mL	40.mL	1	.186	U0.61 umole/g	12.	.1	0.30	0.80		
SN6100-13	SAMP	EPA 821	40.mL	40.mL	1	.012	U0.53 umole/g	14.	.1	0.26	0.70		
SN6100-14	SAMP	EPA 821	40.mL	40.mL	1	.323	J0.32 umole/g	12.	.1	0.30	0.80		
WG283381-1	MBLANK	EPA 821	40.mL	40.mL	1	-.003	U0.076 umole/g	NA	.1	0.038	0.10		
WG283381-2	LCS	EPA 821	1.0mL	40.mL	40	23.386	23. umole/g	NA	.1	1.5	4.0		98
WG283381-3	LCSD	EPA 821	1.0mL	40.mL	40	23.108	23. umole/g	NA	.1	1.5	4.0	1	97
WG283381-4	MS	EPA 821	1.0mL	40.mL	40	173.101	170 umole/g	NA	.1	12.	32.		95
WG283381-5	MSD	EPA 821	1.0mL	40.mL	40	168.633	170 umole/g	NA	.1	12.	32.	3	96

Comments:

SN6056-24	Use TS from SN6056-12
SN6056-26	Use TS from SN6056-21
SN6100-11	Use TS from SN6100-15
SN6100-12	MS/MSD, Use TS from SN6100-16
SN6100-13	Use TS from SN6100-17
SN6100-14	Use TS from SN6100-10
WG283381-1	SN6100-12
WG283381-2	SN6100-12
WG283381-3	SN6100-12
WG283381-4	SN6100-12
WG283381-5	SN6100-12

Entered by: for ZF Date: 08/12/20 Accepted by: Date: 08/12/20

Katahdin Analytical Services 5000032

Acid Volatile Sulfide Calculations

Standardization of Iodine

Iodine Normality = Normality $Na_2S_2O_3$ x mL $Na_2S_2O_3$ / mL I_2

Normality of $Na_2S_2O_3$:		0.0375	
Vol (mL) I_2	Vol (mL) 0.0375 N $Na_2S_2O_3$	Calc. Normality I_2	Mean Normality I_2
15	10	0.02500	
15	10	0.02500	**0.02500**
15	10	0.02500	

Standardization of Saturated Na_2S Stock "S1"

S" (mg/L) = (mL I_2 x Normality I_2) - (mL $Na_2S_2O_3$ x Normality $Na_2S_2O_3$) x 16000 / mL Na_2S Standard

			N $Na_2S_2O_3$:	0.0375
Vol (mL) I_2	Vol (mL) 0.0375 N $Na_2S_2O_3$	Vol (mL) Na_2S	Calc. S" Conc. (mg/L)	Mean S" Conc. Of **S1** (mg/L)
30	7.2	0.1	76800	
30	7.1	0.1	77400	**76600**
30	7.4	0.1	75600	

Prep of Sulfide Working Standard "W1"

Stock "S1" Added (mL)	Final Vol (mL)	Calc. Conc. **W1**(mg/L)
0.1	100	**76.60**

QC Sample Preparation

QC Sample Name (CCV, LCS, MS, etc.)	Source Standard (S1, W2, etc.)	Source Standard Conc.	Source Standard Added (mL)
CCVA	W1	76.60	0.5
CCVB	W2	78.70	0.5
LCS1	S1	76600.00	0.1
LCS2	S1	76600.00	0.1
SN6100-12 MS	S1	76600.00	0.1
SN6100-12 MSD	S1	76600.00	0.1

Standardization of Saturated Na_2S Stock "S2"

S" (mg/L) = (mL I_2 x Normality I_2) - (mL $Na_2S_2O_3$ x Normality $Na_2S_2O_3$) x 16000 / mL Na_2S Standard

			N $Na_2S_2O_3$:	0.0375
Vol (mL) I_2	Vol (mL) 0.0375 N $Na_2S_2O_3$	Vol (mL) Na_2S	Calc. S" Conc. (mg/L)	Mean S" Conc. Of **S2** (mg/L)
30	6.75	0.1	79500	
30	6.95	0.1	78300	**78700**
30	6.95	0.1	78300	

Prep of Sulfide Working Standard "W2"

Stock "S2" Added (mL)	Final Vol (mL)	Calc. Conc. **W2** (mg/L)
0.1	100	**78.70**

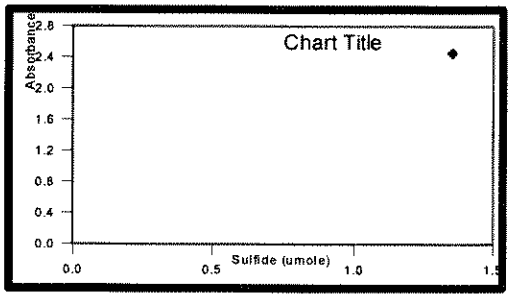
Calibration Standards

mL Working Std. "W2" Used	Abs. At 670 nm	Sulfide (ug) in Cal. Std.	Sulfide (umole) in Cal. Std.
0.00	0.003	0.00	0.000
0.04	0.063	3.15	0.098
0.10	0.153	7.87	0.245
0.30	0.434	23.61	0.736
0.50	0.711	39.35	1.227
0.70	0.961	55.09	1.718
0.90	1.235	70.83	2.209
1.00	1.350	78.70	2.455

Linear Regression, y=ax+b (Sulfide in umole)

Corr. Coeff (r) =	0.99973
Slope (a) =	0.55004
Y-Intercept (b) =	0.01634
Number of Data Points=	8

Calibration Plot



Sample Analysis (Reportable Results in Bold)

Katahdin Sample No.	SCRUBBER ANALYSIS: Analysis Vol (mL)	Abs. At 670 nm	Calc S" (ug)	Calc. S" (umole)	Calc. S" (mg/L)	CCV True Conc. (mg/L)	CCV Rcvy (%)	Sample Wet Weight (g)	Sample Percent Solids	Scrubber Final Vol. (mL)	Calc. S" Conc. (ug/g dry)	Calc. S" Conc. (umole/g dry)
CCVA	40.0	0.724	41.248	1.287	1.031	0.96	107.7%	10	100	170	17.53	0.547
CCVB	40.0	0.714	40.665	1.268	1.017	0.98	103.3%	10	100	170	17.28	0.539
CCB	40.0	0.002	-0.836	-0.026	-0.021			10	100	170	-0.36	-0.011
BLANK	40.0	0.012	-0.253	-0.008	-0.006			10	100	170	-0.11	**-0.003**
LCS1	1.0	0.773	44.104	1.376	44.104			10	100	170	749.76	**23.386**
LCS2	1.0	0.764	43.579	1.359	43.579			10	100	170	740.85	**23.108**
SN6056-24	40.0	0.871	49.816	1.554	1.245			12.603	38.53	170	43.60	**1.360**
SN6056-26	40.0	0.013	-0.195	-0.006	-0.005			10.262	48.604	170	-0.17	**-0.005**
SN6100-11	40.0	0.011	-0.311	-0.010	-0.008			10.609	16.469	170	-0.76	**-0.024**
SN6100-12	40.0	0.046	1.729	0.054	0.043			9.905	12.421	170	5.97	**0.186**
SN6100-12 MS	1.0	0.752	42.880	1.337	42.880			10.575	12.421	170	5549.62	173.101
SN6100-12 MSD	1.0	0.761	43.404	1.354	43.404			10.988	12.421	170	5406.38	**168.633**
SN6100-13	40.0	0.019	0.155	0.005	0.004			11.588	14.301	170	0.40	**0.012**
CCVB	40.0	0.712	40.548	1.265	1.014	0.98	103.0%	10	100	170	17.23	0.538
CCB	40.0	0.003	-0.777	-0.024	-0.019			10	100	170	-0.33	-0.010
SN6100-14	40.0	0.069	3.070	0.096	0.077			10.11	12.449	170	10.37	0.323
CCVB	40.0	0.711	40.490	1.263	1.012	0.98	102.9%	10	100	170	17.21	**0.537**
CCB	40.0	0.003	-0.777	-0.024	-0.019			10	100	170	-0.33	**-0.010**

Quality Control Sample Calculations

Sample or LCS or MS ID	Duplicate or MSD ID	Matrix Spike Sample ID	Dup RPD	Spk Added to LCS (umole/g dry)	LCS Rcvy (%)	Spk Added to MS (umole/g dry)	Matrix Spike Rcvy (%)
LCS1				23.893	97.88%		

LCS2				23.893	96.72%		
SN6100-12		SN6100-12 MS				181.898	95.06%
SN6100-12		SN6100-12 MSD				175.061	96.22%

KATAHDIN ANALYTICAL
ACID VOLATILE SULFIDE PREPARATION
METHOD: EPA-821-R-51-100

REAGENT LOT #:	
IODINE STANDARD: W18710	STS SOLUTION - 0.0375 N: SWL4631
Na2S SOLUTION: W18561/62	NaOH - 0.5 N: W19044
HCl-6N: W19043	Pipet ID: W3,5,9,10
LCS PREP: 0.1mL S1; SEM: 0.2mL MS2225, 2.0mL MWK420; 421, 1.0mL MW19402	
MS PREP: 1	

ZF 8/3/20

STANDARDIZATION OF I2		STANDARDIZATION OF S1			STANDARDIZATION OF S2		
VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) Na2S	VOL(ml) I2	VOL(ml) Na2S2O3	VOL(ml) Na2S
15mL	10.0	30mL	7.20	0.1mL	30mL	6.75	0.1mL
1	10.0	1	7.10	1	1	6.95	1
1	10.0	1	7.40	1	1	6.95	1
	X:		X:			X:	

Prep Start Time	Prep End Time	Sample ID	Sample Wt. (g)	NaOH Trap Vol. (ml)
13:08	14:08	Blank	10g	170mL
1	1	AVS LCS	1	1
		SEM LCS		
		SN6056-24	12.603g	
		1 -26	10.262g	
		SN6100-11	10.609g	
		-12	9.905g	
		-12 AVS MS	10.575g	
		-12 AVS MSD	10.988g	
		-12 SEM MS	13.817g	
		-12 SEM MSD	10.290g	
		-13	11.588g	
		-14	10.110g	
1	1	AVS LCS2	10g	1
			ZF	8/3/20

NOTES:

ANALYST: ZF	DATE: 8/3/20
CHECKED BY: SJL	DATE: 8/4/20

WG283381

Katahdin Analytical Services, Inc.

Acid Volatile Sulfide (Colorimetric) — **EPA Draft Method 821/R-91-100**

Reagents and Standards

Stock Na2S Standard ID:	W18561/62
Stock Na2S Std. Prep Date:	3/25/20
Working Na2S Standard ID:	W1 W2 0.1mL S1 S2 into 100 mL DI (decanted)
Working Na2S Std. Prep Date:	8/3/20
Mixed Diamine Reagent ID:	W18455

Cal. Std. ID	mL Working Std. Added	Cal. Std. ID	mL Working Std. Added
0.04	W2	0.9	W2
0.1	"	1.0	1
0.3	"	ICV	0.5mL W1
0.5	"	CCV	0.5mL W2
0.7	"	CCB/LCS	5A

Sequence Number	Katahdin Sample Number	Site ID (optional)	Sample Vol. Analyzed (mL)	Abs. @ 670 nm	Analysis Time (optional)
	Cal 0.00		40	0.003	17:35
	0.04		"	0.063	"
	0.10		"	0.153	"
	0.30		"	0.434	"
	0.50		"	0.711	"
	0.70		"	0.961	"
	0.90		"	1.235	"
	1.00		"	1.350	"
	ICV		"	0.724	"
	CCV		"	0.714	"
	CCB		"	0.002	"
	Blank		"	0.012	"
	LCS 1		1	0.773	"
	1 2		1	0.764	"
	SN6056-24		40	0.871	"
	1 -26		"	0.013	"
	SN6100-11		"	0.011	"
	-12		"	0.046	"
	-12 MS		1	0.752	"
	-12 MSD		1	0.761	"
	-13		40	0.019	"
	CCV		"	0.712	"
	CCB		"	0.003	"
	SN6100-14		"	0.061	"
	CCV		"	0.711	"
	CCB		"	0.003	17:48
					ZF 8/3/20

Analysis Performed By: ZF — Analysis Date: 8/3/20

Data Reviewed By: SC — Review Date: 8/4/20

Samplenum	Measuredate	Parameter	Result	Moisture
SN6100-10	*********	TOTAL SOLIDS	12.449%	87.551%
SN6100-11	*********	TOTAL SOLIDS	16.469%	83.531%
SN6100-12	*********	TOTAL SOLIDS	12.421%	87.579%
SN6100-13	*********	TOTAL SOLIDS	14.301%	85.699%
SN6100-14	*********	TOTAL SOLIDS	12.449%	87.551%
SN6100-15	*********	TOTAL SOLIDS	16.469%	83.531%
SN6100-16	*********	TOTAL SOLIDS	12.421%	87.579%
SN6100-17	*********	TOTAL SOLIDS	14.301%	85.699%

Samplenum	Measuredate	Parameter	Result	Moisture
SN6056-5	*********	TOTAL SOLIDS	41.117%	58.883%
SN6056-6	*********	TOTAL SOLIDS	52.971%	47.029%
SN6056-7	*********	TOTAL SOLIDS	58.447%	41.553%
SN6056-8	*********	TOTAL SOLIDS	18.384%	81.616%
SN6056-9	*********	TOTAL SOLIDS	26.147%	73.853%
SN6056-10	*********	TOTAL SOLIDS	11.296%	88.704%
SN6056-11	*********	TOTAL SOLIDS	65.161%	34.839%
SN6056-12	*********	TOTAL SOLIDS	38.53%	61.47%
SN6056-13	*********	TOTAL SOLIDS	20.558%	79.442%
SN6056-14	*********	TOTAL SOLIDS	45.696%	54.304%
SN6056-15	*********	TOTAL SOLIDS	11.329%	88.671%
SN6056-16	*********	TOTAL SOLIDS	7.886%	92.114%
SN6056-17	*********	TOTAL SOLIDS	7.898%	92.102%
SN6056-18	*********	TOTAL SOLIDS	10.676%	89.324%
SN6056-19	*********	TOTAL SOLIDS	21.009%	78.991%
SN6056-20	*********	TOTAL SOLIDS	11.774%	88.226%
SN6056-21	*********	TOTAL SOLIDS	48.604%	51.396%
SN6056-22	*********	TOTAL SOLIDS	65.168%	34.832%
SN6056-24	*********	TOTAL SOLIDS	38.53%	61.47%
SN6056-26	*********	TOTAL SOLIDS	48.604%	51.396%
SN6056-1	*********	TOTAL SOLIDS	96.421%	3.579%
SN6056-2	*********	TOTAL SOLIDS	95.867%	4.133%
SN6056-3	*********	TOTAL SOLIDS	96.1%	3.9%

WET CHEMISTRY BATCH REPORT
Jul 31 2020, 10:50 am
Batch: WG283173

Parameter: Carbon, Percent

Date Analyzed: 30-JUL-20

Analyst Initials: ZF

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SN5835-1	SAMP	SW846 9060A	109.8mg	0.10000g	1	24181	40. %	55.	.1	0.21	0.83		
SN6018-1	SAMP	SW846 9060A	128.2mg	0.10000g	1	11018	54. %	16.	.1	0.61	2.4		
SN6018-2	SAMP	SW846 9060A	131.9mg	0.10000g	1	11178	51. %	16.	.1	0.57	2.3		
WG283173-1	MBLANK	SW846 9060A	500mg	0.10000g	1	0	U0.10 %	NA	.1	0.025	0.10		
WG283173-2	LCS	SW846 9060A	40mg	0.10000g	1	17128	43. %	NA	.1	0.31	1.2		107

Comments:

WG283173-1 SN5835-1
WG283173-2 SN5835-1

Entered by: ZF Date: 7/31/20 Accepted by: [signature] Date: 7/31/20

Katahdin Analytical Services 5000039

WET CHEMISTRY BATCH REPORT
Jul 31 2020, 10:55 am
Batch: WG283174

Parameter: TOC In Soil

Date Analyzed: 30-JUL-20

Analyst Initials: ZF

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SN6056-12	SAMP	LLOYDKAHN	218.2mg	200.00ug	1	107954.49544	110000 ug/gdrywt	38.	400	500	2400		
SN6056-21	SAMP	LLOYDKAHN	288.1mg	200.00ug	1	58566.80619	58000 ug/gdrywt	49.	400	300	1400		
SN6100-10	SAMP	LLOYDKAHN	185.4mg	200.00ug	1	486299.09491	490000 ug/gdrywt	12.	400	1800	8700		
SN6100-15	SAMP	LLOYDKAHN	129.3mg	200.00ug	1	449789.25697	450000 ug/gdrywt	16.	400	2000	9400		
SN6100-16	SAMP	LLOYDKAHN	127.1mg	200.00ug	1	546459.12917	550000 ug/gdrywt	12.	400	2700	13000		
SN6100-17	SAMP	LLOYDKAHN	133.7mg	200.00ug	1	377972.53274	380000 ug/gdrywt	14.	400	2200	10000		
WG283174-1	MBLANK	LLOYDKAHN	500mg	200.00ug	1	0	U300 ug/gdrywt	NA	400	85.	400		
WG283174-2	LCS	LLOYDKAHN	40mg	200.00ug	1	428200	430000 ug/gdrywt	NA	400	85.	400		107
WG283174-3	MS	LLOYDKAHN	124.9mg	200.00ug	1	893396.46582	890000 ug/gdrywt	NA	400	2700	13000		134
WG283174-4	MSD	LLOYDKAHN	147.7mg	200.00ug	1	775272.09608	780000 ug/gdrywt	NA	400	2300	11000	14	105

Comments:

SN6100-16	MS/MSD
WG283174-1	SN6100-16
WG283174-2	SN6100-16
WG283174-3	SN6100-16
WG283174-4	SN6100-16

Entered by: ZF Date: 7/31/20 Accepted by: [signature] Date: 7/31/20

Katahdin Analytical Services 5000040

	Sample Name	Dilution	Result	Comment	Date / Time
1	CCV	1.000	SSM-TC:17154 ug		7/30/2020 3:55:54 PM
2	CCB	1.000	SSM-TC:0.000 ug		7/30/2020 4:02:18 PM
3	LCS	1.000	SSM-TC:17128 ug		7/30/2020 4:19:01 PM
4	SN5835-1	1.000	SSM-TC:24181 ug		7/30/2020 4:32:28 PM
5	SN6018-1	1.000	SSM-TC:11018 ug		7/30/2020 4:56:57 PM
6	SN6018-2	1.000	SSM-TC:11178 ug		7/30/2020 5:09:24 PM
7	SN6056-12	1.000	SSM-TC:9076 ug		7/30/2020 5:20:44 PM
8	SN6056-21	1.000	SSM-TC:8201 ug		7/30/2020 5:31:54 PM
9	SN6100-10	1.000	SSM-TC:11224 ug		7/30/2020 5:42:53 PM
10	SN6100-15	1.000	SSM-TC:9578 ug		7/30/2020 5:53:23 PM
11	SN6100-16	1.000	SSM-TC:8627 ug		7/30/2020 6:07:42 PM
12	SN6100-16 MS	1.000	SSM-TC:13860 ug		7/30/2020 6:18:06 PM
13	CCV	1.000	SSM-TC:16830 ug		7/30/2020 6:30:25 PM
14	CCB	1.000	SSM-TC:0.000 ug		7/30/2020 6:36:43 PM
15	SN6100-16 MSD	1.000	SSM-TC:14223 ug		7/30/2020 6:46:50 PM
16	SN6100-17	1.000	SSM-TC:7227 ug		7/30/2020 6:58:49 PM
17	CCV	1.000	SSM-TC:17504 ug		7/30/2020 7:11:04 PM
18	CCB	1.000	SSM-TC:0.000 ug		7/30/2020 7:17:18 PM
19					
20					
21					
22					
23					
24					
25					
26					
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42					
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44					
45					
46					
47					
48					

Instr.Information

System	SSM-5000A
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	short

Sample

Sample Name:	CCV
Sample ID:	<Untitled>
Origin:	tc method SOILS.met
Chk. Result	

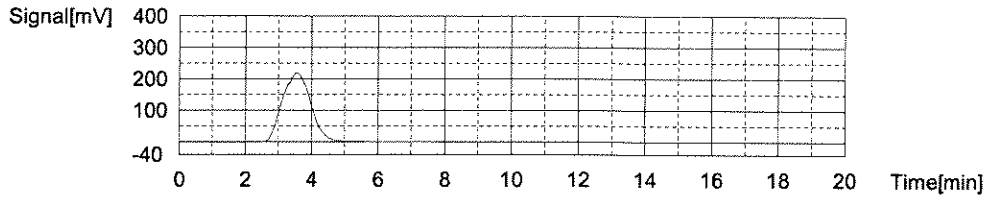
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:17154 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1323	1323	17154ug	17154ug	40.00mg	40uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 3:55:54 PM

Mean Area	1323
Mean CNV	1323
Mean Conc.	17154ug



Sample

Sample Name:	CCB
Sample ID:	<Untitled>
Origin:	tc method SOILS.met
Chk. Result	

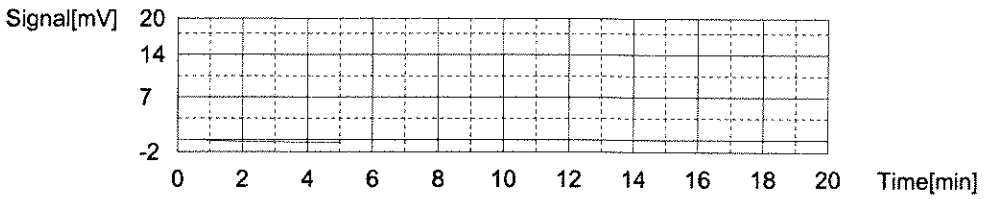
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	0.000	0.000	0.000ug	0.000ug	500.0mg	500uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 4:02:18 PM

Mean Area	0.000
Mean CNV	0.000
Mean Conc.	0.000ug



Katahdin Analytical Services 5000042

Sample

Sample Name: LCS
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

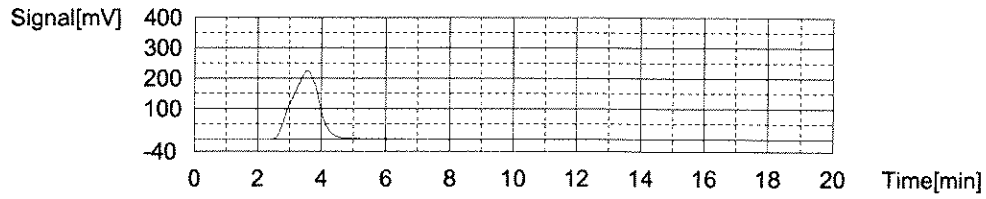
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:17128 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1321	1321	17128ug	17128ug	40.00mg	40uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 4:19:01 PM

Mean Area 1321
Mean CNV 1321
Mean Conc. 17128ug



Sample

Sample Name: SN5835-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

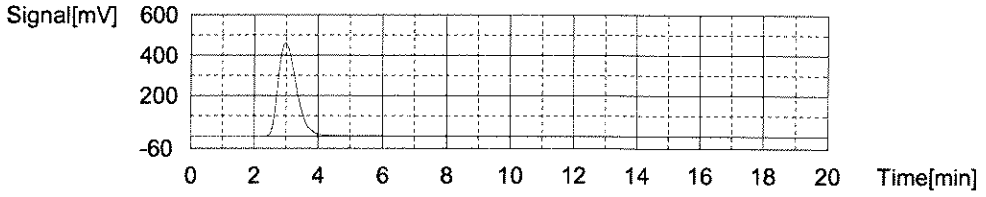
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:24181 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1865	1865	24181ug	24181ug	109.8mg	109uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 4:32:28 PM

Mean Area 1865
Mean CNV 1865
Mean Conc. 24181ug



Sample

Sample Name: SN6018-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:11018 ug

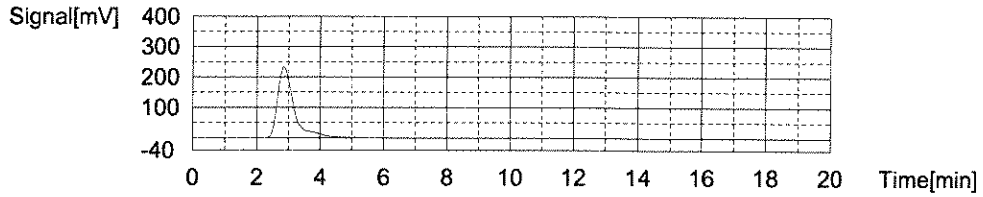
Katahdin Analytical Services 5000043

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	849.8	849.8	11018ug	11018ug	128.2mg	128uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 4:56:57 PM

Mean Area 849.8
Mean CNV 849.8
Mean Conc. 11018ug



Sample

Sample Name: SN6018-2
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

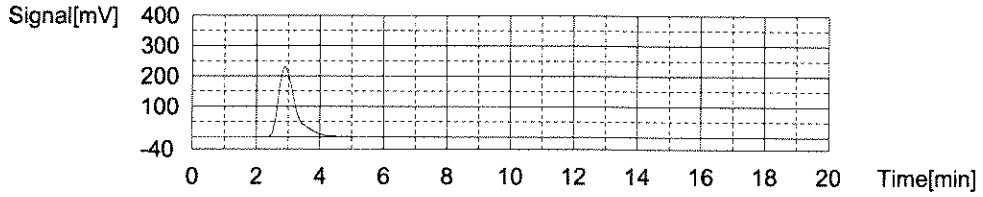
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:11178 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	862.1	862.1	11178ug	11178ug	131.9mg	131uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 5:09:24 PM

Mean Area 862.1
Mean CNV 862.1
Mean Conc. 11178ug



Sample

Sample Name: SN6056-12
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:9076 ug

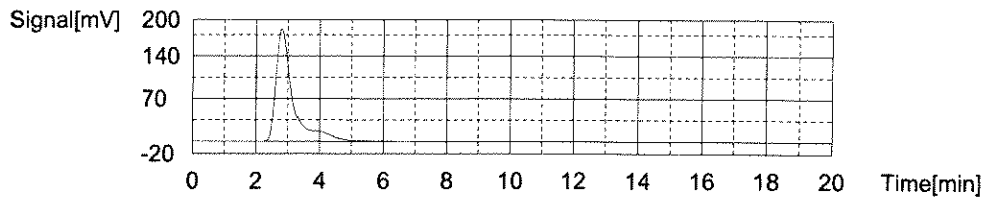
1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	700.0	700.0	9076ug	9076ug	218.2mg	218uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 5:20:44 PM

Katahdin Analytical Services 5000044

Mean Area 700.0
Mean CNV 700.0
Mean Conc. 9076ug



Sample

Sample Name: SN6056-21
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

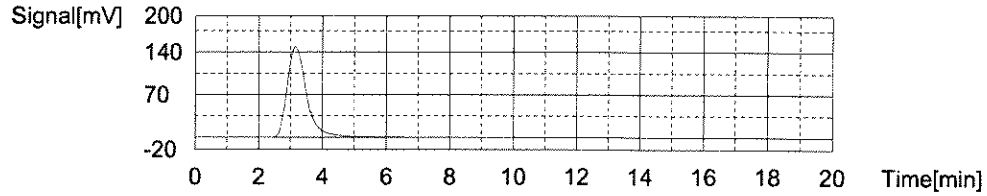
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:8201 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	632.5	632.5	8201ug	8201ug	288.1mg	288uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 5:31:54 PM

Mean Area 632.5
Mean CNV 632.5
Mean Conc. 8201ug



Sample

Sample Name: SN6100-10
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

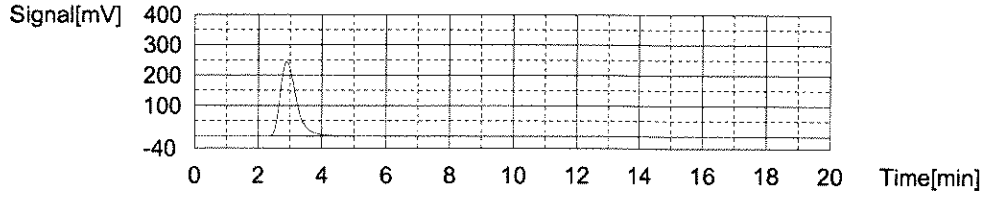
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:11224 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	865.7	865.7	11224ug	11224ug	185.4mg	185uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 5:42:53 PM

Mean Area 865.7
Mean CNV 865.7
Mean Conc. 11224ug



Katahdin Analytical Services 5000045

Sample

Sample Name: SN6100-15
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

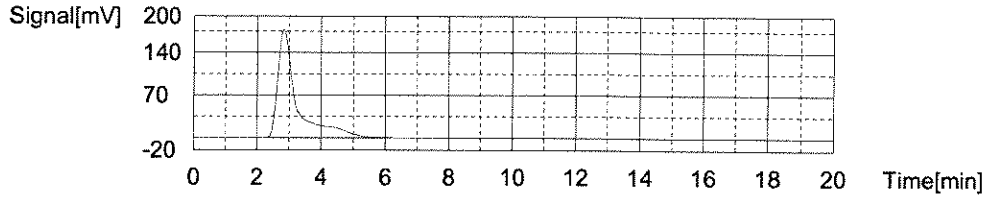
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:9578 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	738.7	738.7	9578ug	9578ug	129.3mg	129uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 5:53:23 PM

Mean Area 738.7
Mean CNV 738.7
Mean Conc. 9578ug



Sample

Sample Name: SN6100-16
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

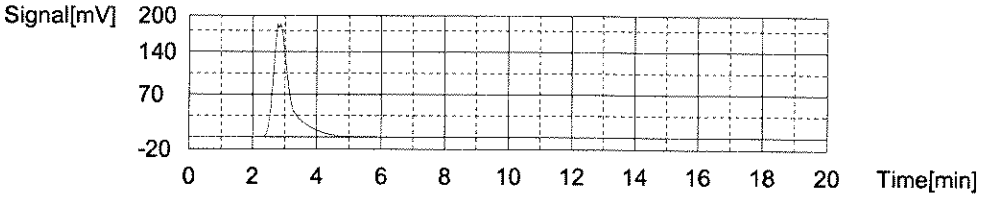
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:8627 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	665.4	665.4	8627ug	8627ug	127.1mg	127uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:07:42 PM

Mean Area 665.4
Mean CNV 665.4
Mean Conc. 8627ug



Sample

Sample Name: SN6100-16 MS
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

Katahdin Analytical Services 5000046

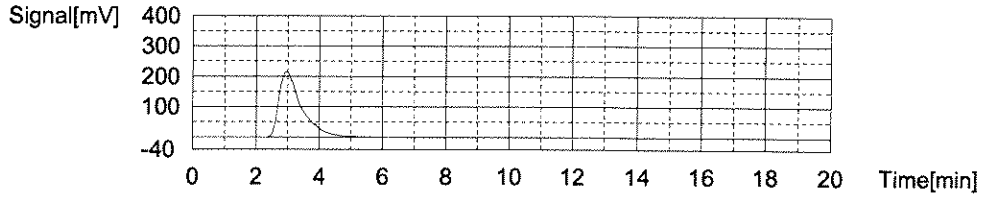
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:13860 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1069	1069	13860ug	13860ug	124.9mg	124uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:18:06 PM

Mean Area 1069
Mean CNV 1069
Mean Conc. 13860ug



Sample

Sample Name: CCV
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

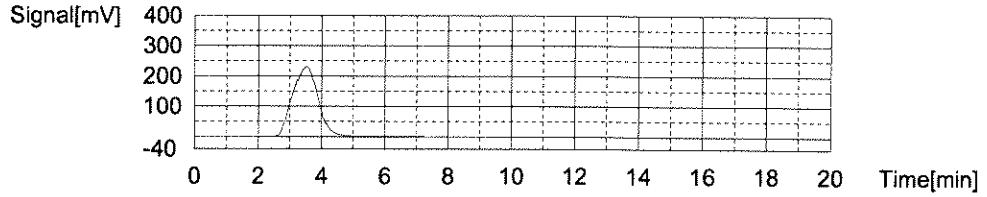
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:16830 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1298	1298	16830ug	16830ug	40.00mg	40uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:30:25 PM

Mean Area 1298
Mean CNV 1298
Mean Conc. 16830ug



Sample

Sample Name: CCB
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

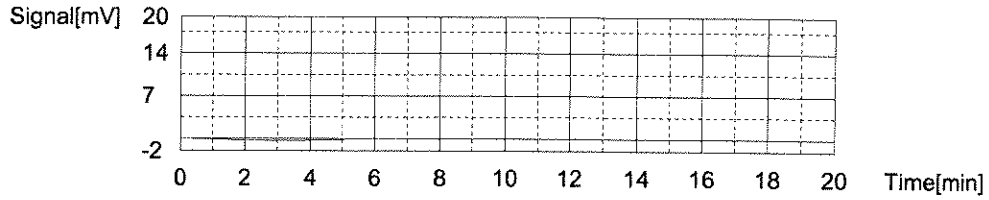
1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	0.000	0.000	0.000ug	0.000ug	500.0mg	500uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:36:43 PM

Katahdin Analytical Services 5000047

Mean Area 0.000
Mean CNV 0.000
Mean Conc. 0.000ug



Sample

Sample Name: SN6100-16 MSD
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

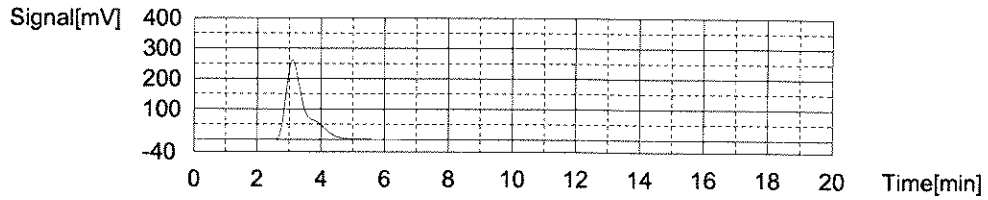
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:14223 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1097	1097	14223ug	14223ug	147.7mg	147uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:46:50 PM

Mean Area 1097
Mean CNV 1097
Mean Conc. 14223ug



Sample

Sample Name: SN6100-17
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

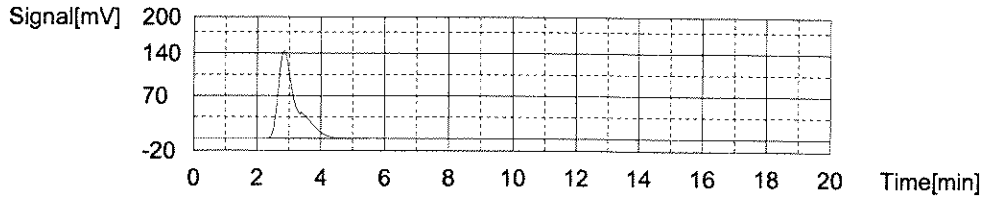
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:7227 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	557.4	557.4	7227ug	7227ug	133.7mg	133uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 6:58:49 PM

Mean Area 557.4
Mean CNV 557.4
Mean Conc. 7227ug



Katahdin Analytical Services 5000048

Sample

Sample Name: CCV
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

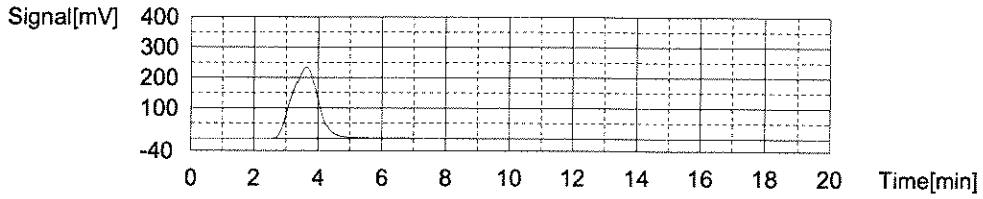
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:17504 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1350	1350	17504ug	17504ug	40.00mg	40uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 7:11:04 PM

Mean Area 1350
Mean CNV 1350
Mean Conc. 17504ug



Sample

Sample Name: CCB
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

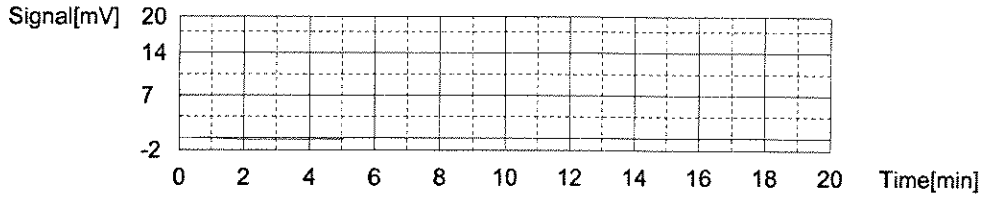
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	0.000	0.000	0.000ug	0.000ug	500.0mg	500uL		toc sl cal 072020.2020_07_20_11_20_06.cal	7/30/2020 7:17:18 PM

Mean Area 0.000
Mean CNV 0.000
Mean Conc. 0.000ug



Katahdin Analytical Services 5000049

Instr.Information

System	SSM-5000A
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	short

Cal. Curve

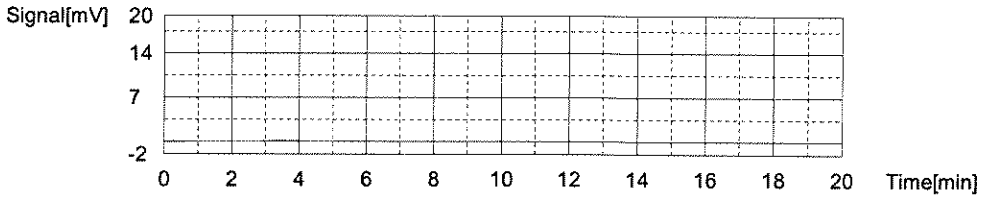
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	toc sl cal 072020.2020_07_20_11_20_06.cal

Type	Anal.	Density
Standard	SSM-TC	

AbsC: 0.000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	0.000	0.000	0.000ug	500.0mg	*******		7/20/2020 11:31:15 AM

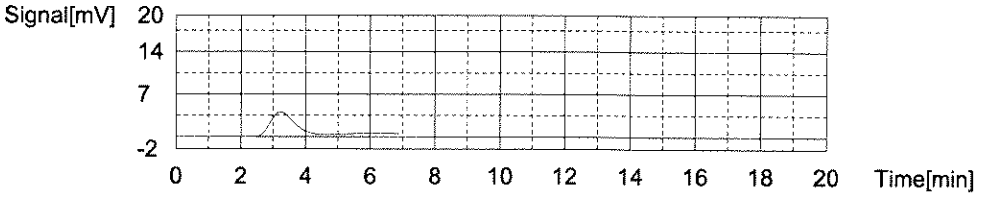
Mean Area 0.000
Mean CNV 0.000



AbsC: 100.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	22.10	22.10	100.0ug	0.2500mg	*******		7/20/2020 11:58:27 AM

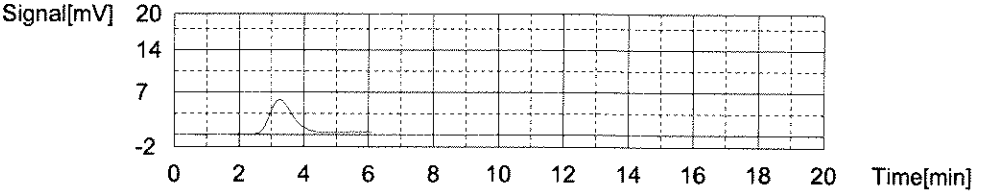
Mean Area 22.10
Mean CNV 22.10



AbsC: 200.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	27.60	27.60	200.0ug	0.5000mg	*******		7/20/2020 12:27:56 PM

Mean Area 27.60
Mean CNV 27.60

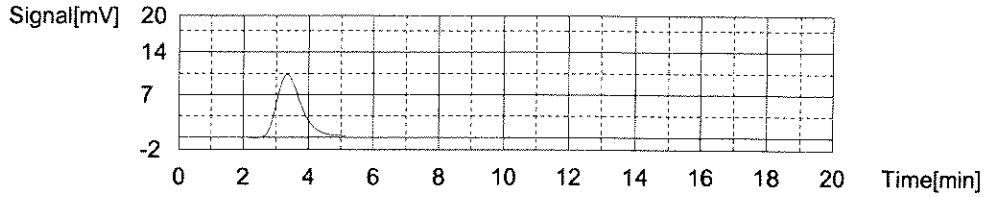


AbsC: 400.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	53.57	53.57	400.0ug	1.000mg	*******		7/20/2020 12:51:37 PM

Katahdin Analytical Services 5000050

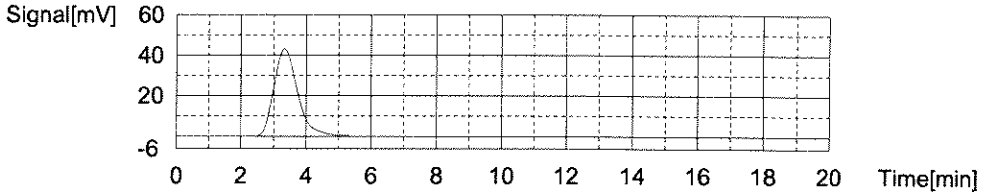
Mean Area 53.57
Mean CNV 53.57



AbsC: 2000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	217.0	217.0	2000ug	5.000mg	*******		7/20/2020 1:14:11 PM

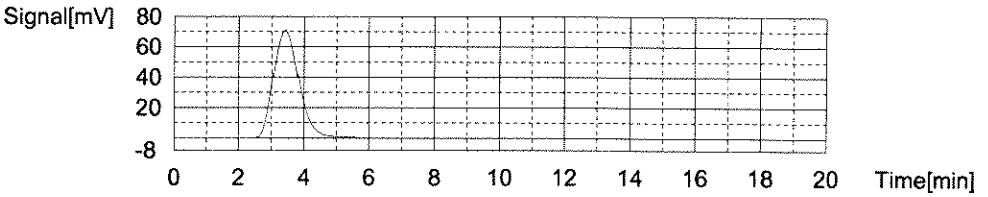
Mean Area 217.0
Mean CNV 217.0



AbsC: 4000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	387.9	387.9	4000ug	10.00mg	*******		7/20/2020 1:26:25 PM

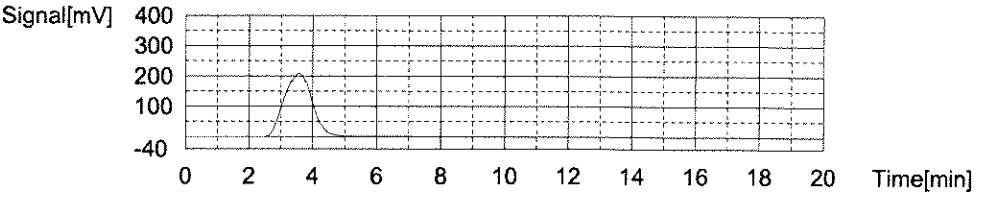
Mean Area 387.9
Mean CNV 387.9



AbsC: 16000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	1292	1292	16000ug	40.00mg	*******		7/20/2020 1:46:19 PM

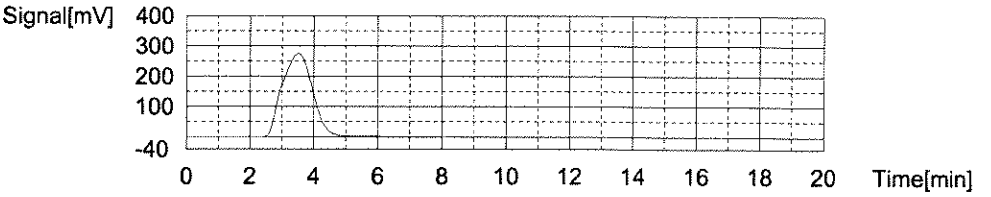
Mean Area 1292
Mean CNV 1292



AbsC: 24000ug

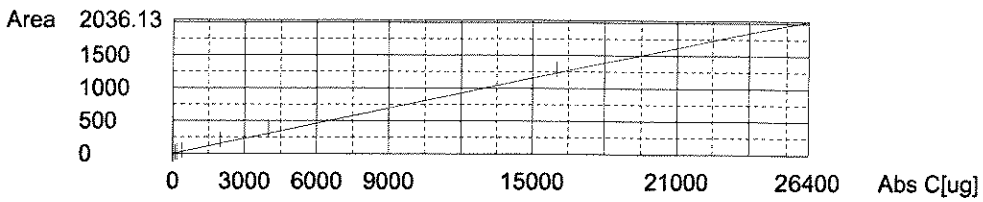
No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	1855	1855	24000ug	60.00mg	*******		7/20/2020 1:59:22 PM

Mean Area 1855
Mean CNV 1855



Katahdin Analytical Services 5000051

Slope:	0.07713
Intercept	0.000
r^2	0.998128



% Carbon : WG283173 R54641

LLOYD: WG283174 R54642

Katahdin Analytical Services

Carbon Analysis of Solid Samples - Shimadzu TOC-V_{CPH} / SSM-5000A

Analysis Type and Method (Check One)	
____Total Carbon (SW846 9060M)	____Total Inorganic Carbon (SW846 9060M)
____Total Organic Carbon (SW846 9060)	____Other (Specify):
✓ Total Organic Carbon (Lloyd Kahn)	✓ Percent Carbon (SW846 9060M)

Spiking Information			
LCS Spike Source ID / Compound:	WI8785	TV:	16,000 ug
CCV Spike Source ID / Compound:	WI8958	TV:	16,000 ug
MS Spike Source ID / Compound:	WI8785	TV:	4,000 ug
Acid Lot Number:			

Calibration Information	
Calibration Date:	7/20/20
Calibration Analyst:	ZF
Calibration Source ID:	WI8958
Pipette IDs:	WS, 3

Katahdin Sample Number	Sample Wt. (mg)	Sample Type * (Circle One)		% Recovery
CCV	40	(Wet)	Dry	107%
CCB	500	(Wet)	Dry	
LCS	40	(Wet)	Dry	107%
SN5835-1	109.8	Wet	(Dry)	
SN6018-1	128.2	Wet	(Dry)	
" -2	131.9	Wet	(Dry)	
SN6056-12	218.2	Wet	(Dry)	
" -21	288.1	Wet	(Dry)	
SN6100-10	165.4	Wet	(Dry)	
" -15	129.3	Wet	(Dry)	
" -16	127.1	Wet	(Dry)	
" -16MS	124.9	Wet	(Dry)	
CCV	40	(Wet)	Dry	105%
CCB	500	(Wet)	Dry	
SN6100-16MSD	147.7	Wet	(Dry)	
" -17	133.7	Wet	(Dry)	
CCV	40	(Wet)	Dry	109%
CCB	500	(Wet)	Dry	
		~~Wet~~	Dry	
		~~Wet~~	Dry	ZF 7/30/20
		~~Wet~~	~~Dry~~	

* "Wet" = field-moist sample (as received). "Dry" = oven-dried sample. "TV" = True Value

Analyst: ZF	Analysis Date: 7/30/20
Reviewer: SJC	Review Date: 7/31/20

TOTAL SOLIDS BATCH REPORT
Jul 24 2020, 09:37 am
Batch: WG282639

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SN6056-10	SL	SAMP	23-JUL-20	1.3 g	20.7403 g	3.496 g	3.496 g	JG	24-JUL-20	11.2960	11. %		
SN6056-11	SL	SAMP	23-JUL-20	1.3 g	29.774 g	19.854 g	19.854 g	JG	24-JUL-20	65.1610	65. %		
SN6056-12	SL	SAMP	23-JUL-20	1.3 g	25.7727 g	10.7293 g	10.7293 g	JG	24-JUL-20	38.5300	38. %		
SN6056-13	SL	SAMP	23-JUL-20	1.3 g	22.6011 g	5.6791 g	5.6791 g	JG	24-JUL-20	20.5580	20. %		
SN6056-14	SL	SAMP	23-JUL-20	1.3 g	30.1006 g	14.4608 g	14.4608 g	JG	24-JUL-20	45.6960	46. %		
SN6056-15	SL	SAMP	23-JUL-20	1.3 g	26.4157 g	4.1453 g	4.1453 g	JG	24-JUL-20	11.3290	11. %		
SN6056-16	SL	SAMP	23-JUL-20	1.3 g	29.9913 g	3.5625 g	3.5625 g	JG	24-JUL-20	7.8860	7.9 %		
SN6056-17	SL	SAMP	23-JUL-20	1.3 g	20.2027 g	2.793 g	2.793 g	JG	24-JUL-20	7.8980	7.9 %		
SN6056-18	SL	SAMP	23-JUL-20	1.3 g	22.9002 g	3.606 g	3.606 g	JG	24-JUL-20	10.6760	11. %		
SN6056-19	SL	SAMP	23-JUL-20	1.3 g	23.4947 g	5.9629 g	5.9629 g	JG	24-JUL-20	21.0090	21. %		
SN6056-20	SL	SAMP	23-JUL-20	1.3 g	21.8586 g	3.7206 g	3.7206 g	JG	24-JUL-20	11.7740	12. %		
SN6056-21	SL	SAMP	23-JUL-20	1.3 g	30.6381 g	15.5594 g	15.5594 g	JG	24-JUL-20	48.6040	49. %		
SN6056-22	SL	SAMP	23-JUL-20	1.3 g	29.8319 g	19.8938 g	19.8938 g	JG	24-JUL-20	65.1680	65. %		
SN6056-24	SL	SAMP	23-JUL-20	1.3 g	25.7727 g	10.7293 g	10.7293 g	JG	24-JUL-20	38.5300	38. %		
SN6056-26	SL	SAMP	23-JUL-20	1.3 g	30.6381 g	15.5594 g	15.5594 g	JG	24-JUL-20	48.6040	49. %		
SN6056-5	SL	SAMP	23-JUL-20	1.3 g	29.5487 g	12.9151 g	12.9151 g	JG	24-JUL-20	41.1170	41. %		
SN6056-6	SL	SAMP	23-JUL-20	1.3 g	30.7465 g	16.8982 g	16.8982 g	JG	24-JUL-20	52.9710	53. %		
SN6056-7	SL	SAMP	23-JUL-20	1.3 g	30.8391 g	18.5648 g	18.5648 g	JG	24-JUL-20	58.4470	58. %		
SN6056-8	SL	SAMP	23-JUL-20	1.3 g	25.4736 g	5.7441 g	5.7441 g	JG	24-JUL-20	18.3840	18. %		
SN6056-9	SL	SAMP	23-JUL-20	1.3 g	19.1202 g	5.9594 g	5.9594 g	JG	24-JUL-20	26.1470	26. %		
WG282639-1	SL	MBLANK	23-JUL-20	1.3 g	5.7937 g	5.7918 g	5.7918 g	JG	24-JUL-20	99.9580	100 %		
WG282639-2	SL	LCS	23-JUL-20	1.3 g	6.2464 g	5.7394 g	5.7394 g	JG	24-JUL-20	89.7500	90. %	100	
WG282639-3	SL	DUP	23-JUL-20	1.3 g	27.0903 g	10.5767 g	10.5767 g	JG	24-JUL-20	35.9700	36. %		32
WG282639-4	SL	DUP	23-JUL-20	1.3 g	31.9853 g	4.9747 g	4.9747 g	JG	24-JUL-20	11.9750	12. %		11

Comments:

SN6056-18	MS/MSD
SN6056-24	Use TS from SN6056-12
SN6056-26	Use TS from SN6056-21
SN6056-9	MS/MSD
WG282639-1	SN6056-9
WG282639-2	SN6056-9
WG282639-3	SN6056-9
WG282639-4	SN6056-18

Entered by: JG Date: 7/24/20 Accepted by: Date: 07/24/20

Katahdin Analytical Services 5000054

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

24-JUL-20 09:21 AM

Work Group: WG282639 **Created:** 24-JUL-20
Department: 100 Wetlab Prep **Operator:** **Due:**

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR Location
4	SN6056-5	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
5	SN6056-6	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
6	SN6056-7	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
14	SN6056-8	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
7	SN6056-9	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
9	SN6056-10	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
10	SN6056-11	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
11	SN6056-12	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
12	SN6056-13	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
13	SN6056-14	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
15	SN6056-15	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
16	SN6056-16	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
17	SN6056-17	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
18	SN6056-18	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
20	SN6056-19	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
21	SN6056-20	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
22	SN6056-21	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
23	SN6056-22	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
11	SN6056-24	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
22	SN6056-26	AECOM Environment	TS	Solid	ENT	U	03-AUG-20	
1	WG282639-1	MBLANK	TS	Solid	ENT	U	24-JUL-20	
2	WG282639-2	LCS	TS	Solid	ENT	U	24-JUL-20	
8	WG282639-3	DUP	TS	Solid	ENT	U	24-JUL-20	
19	WG282639-4	DUP	TS	Solid	ENT	U	24-JUL-20	

Comments:

SN6056-18	MS/MSD
SN6056-24	Use TS from SN6056-12
SN6056-26	Use TS from SN6056-21
SN6056-9	MS/MSD
WG282639-1	SN6056-9
WG282639-2	SN6056-9
WG282639-3	SN6056-9
WG282639-4	SN6056-18

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	(Y) / N
ANALYST IN:	JG		ANALYST OUT:	KD		In: ✓
DATE IN:	7/23/20		DATE OUT:	7/24/20		Out (TS): ✓
TIME IN:	17:22		TIME OUT:	7:30		Balance ID: Bal. 01
TEMP IN:	104°		TEMP OUT:	104°		S/N 1124016031

TOTAL SOLIDS BATCH REPORT
Aug 11 2020, 12:17 pm
Batch: WG282918

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SN6056-1	SL	SAMP	27-JUL-20	1.3 g	19.2627 g	18.6199 g	18.6199 g	JG	28-JUL-20	96.4210	96. %		
SN6056-2	SL	SAMP	27-JUL-20	1.3 g	17.5895 g	16.9163 g	16.9163 g	JG	28-JUL-20	95.8670	96. %		
SN6056-3	SL	SAMP	27-JUL-20	1.3 g	21.7211 g	20.9247 g	20.9247 g	JG	28-JUL-20	96.1000	96. %		
SN6100-1	SL	SAMP	27-JUL-20	1.3 g	18.7882 g	4.1802 g	4.1802 g	KD	28-JUL-20	16.4690	16. %		
SN6100-10	SL	SAMP	27-JUL-20	1.3 g	18.7836 g	3.4766 g	3.4766 g	JG	28-JUL-20	12.4490	12. %		
SN6100-11	SL	SAMP	27-JUL-20	1.3 g	18.7882 g	4.1802 g	4.1802 g	JG	28-JUL-20	16.4690	16. %		
SN6100-12	SL	SAMP	27-JUL-20	1.3 g	20.6049 g	3.6979 g	3.6979 g	JG	28-JUL-20	12.4210	12. %		
SN6100-13	SL	SAMP	27-JUL-20	1.3 g	20.7437 g	4.0807 g	4.0807 g	JG	28-JUL-20	14.3010	14. %		
SN6100-14	SL	SAMP	27-JUL-20	1.3 g	18.7836 g	3.4766 g	3.4766 g	JG	28-JUL-20	12.4490	12. %		
SN6100-15	SL	SAMP	27-JUL-20	1.3 g	18.7882 g	4.1802 g	4.1802 g	JG	28-JUL-20	16.4690	16. %		
SN6100-16	SL	SAMP	27-JUL-20	1.3 g	20.6049 g	3.6979 g	3.6979 g	JG	28-JUL-20	12.4210	12. %		
SN6100-17	SL	SAMP	27-JUL-20	1.3 g	20.7437 g	4.0807 g	4.0807 g	JG	28-JUL-20	14.3010	14. %		
SN6100-2	SL	SAMP	27-JUL-20	1.3 g	18.7882 g	4.1802 g	4.1802 g	KD	28-JUL-20	16.4690	16. %		
SN6100-3	SL	SAMP	27-JUL-20	1.3 g	18.7882 g	4.1802 g	4.1802 g	KD	28-JUL-20	16.4690	16. %		
SN6100-4	SL	SAMP	27-JUL-20	1.3 g	20.6049 g	3.6979 g	3.6979 g	KD	28-JUL-20	12.4210	12. %		
SN6100-5	SL	SAMP	27-JUL-20	1.3 g	20.6049 g	3.6979 g	3.6979 g	KD	28-JUL-20	12.4210	12. %		
SN6100-6	SL	SAMP	27-JUL-20	1.3 g	20.6049 g	3.6979 g	3.6979 g	KD	28-JUL-20	12.4210	12. %		
SN6100-7	SL	SAMP	27-JUL-20	1.3 g	20.7437 g	4.0807 g	4.0807 g	KD	28-JUL-20	14.3010	14. %		
SN6100-8	SL	SAMP	27-JUL-20	1.3 g	20.7437 g	4.0807 g	4.0807 g	KD	28-JUL-20	14.3010	14. %		
SN6100-9	SL	SAMP	27-JUL-20	1.3 g	20.7437 g	4.0807 g	4.0807 g	KD	28-JUL-20	14.3010	14. %		
WG282918-1	SL	MBLANK	27-JUL-20	1.3 g	5.7925 g	5.792 g	5.792 g	JG	28-JUL-20	99.9890	100 %		
WG282918-2	SL	LCS	27-JUL-20	1.3 g	6.2576 g	5.7399 g	5.7399 g	JG	28-JUL-20	89.5570	90. %	100	
WG282918-3	SL	DUP	27-JUL-20	1.3 g	21.3666 g	3.7108 g	3.7108 g	JG	28-JUL-20	12.0140	12. %		3
WG282918-4	SL	DUP	27-JUL-20	1.3 g	21.3666 g	3.7108 g	3.7108 g	JG	28-JUL-20	12.0140	12. %		3

Comments:

SN6056-1	Sample needs ISM prior to TS & metals.
SN6056-2	Sample needs ISM prior to TS & metals.
SN6056-3	Sample needs ISM prior to TS & metals.
SN6100-1	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-15. Use TS from SN6100-15.
SN6100-11	Use TS from SN6100-15
SN6100-12	MS/MSD, Use TS from SN6100-16
SN6100-13	Use TS from SN6100-17
SN6100-14	Use TS from SN6100-10
SN6100-16	MS/MSD
SN6100-2	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-15. Use TS from SN6100-15.
SN6100-3	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-15. Use TS from SN6100-15.
SN6100-4	MS/MSD, ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-16. Use TS from SN6100-16.
SN6100-5	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-16. Use TS from SN6100-16.
SN6100-6	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-16. Use TS from SN6100-16.
SN6100-7	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-17. Use TS from SN6100-17.
SN6100-8	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-17. Use TS from SN6100-17.
SN6100-9	ISM cancelled. Take metals 3050 aliquot from TOC jar labeled SN6100-17. Use TS from SN6100-17.
WG282918-1	SN6100-12
WG282918-2	SN6100-12
WG282918-3	SN6100-12
WG282918-4	SN6100-16

Entered by: _____ Date: 8/11/2020 Accepted by: _____ Date: 08/14/20

Katahdin Analytical Services 5000056

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

28-JUL-20 12:02 PM

Work Group: WG282918
Department: 100 Wetlab Prep

Operator:

Created: 28-JUL-20
Due:

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR Location
3	SN6056-1	[redacted]	TS	Solid	ENT	U	03-AUG-20	
4	SN6056-2	[redacted]	TS	Solid	ENT	U	03-AUG-20	
5	SN6056-3	[redacted]	TS	Solid	ENT	U	03-AUG-20	
6	SN6100-10	[redacted]	S	Solid	ENT	U	04-AUG-20	
7	SN6100-11	[redacted]	S	Solid	ENT	U	04-AUG-20	
8	SN6100-12	[redacted]	TS	Solid	ENT	U	04-AUG-20	
10	SN6100-13	[redacted]	TS	Solid	ENT	U	04-AUG-20	
6 rr	SN6100-14	[redacted]	S	Solid	ENT	U	04-AUG-20	
7	SN6100-15	[redacted]	TS	Solid	ENT	U	04-AUG-20	
8	SN6100-16	[redacted]	TS	Solid	ENT	U	04-AUG-20	
10	SN6100-17	[redacted]	TS	Solid	ENT	U	04-AUG-20	
1	WG282918-1	MBLANK	TS	Solid	ENT	U	28-JUL-20	
2	WG282918-2	LCS	TS	Solid	ENT	U	28-JUL-20	
9	WG282918-3	DUP	TS	Solid	ENT	U	28-JUL-20	
9	WG282918-4	DUP	TS	Solid	ENT	U	28-JUL-20	

Comments:

SN6056-1	Sample needs ISM prior to TS & metals.
SN6056-2	Sample needs ISM prior to TS & metals.
SN6056-3	Sample needs ISM prior to TS & metals.
SN6100-11	Use TS from SN6100-15
SN6100-12	MS/MSD, Use TS from SN6100-16
SN6100-13	Use TS from SN6100-17
SN6100-14	Use TS from SN6100-10
SN6100-16	MS/MSD
WG282918-1	SN6100-12
WG282918-2	SN6100-12
WG282918-3	SN6100-12
WG282918-4	SN6100-16

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	(Y) / N
ANALYST IN:	JL		ANALYST OUT:	KD		In: ✓
DATE IN:	7/27/20		DATE OUT:	7/28/20		Out (TS): ✓
TIME IN:	16:17		TIME OUT:	6:50		Balance ID: Bal. 01
TEMP IN:	104°		TEMP OUT:	103°		S/N 1124016031