

26 March 2025

Mr. Payson Long
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway
Albany, New York 12233

RE: National Heatset Printing Site
Operation & Maintenance and Monitoring Report (July – September 2024)
Soil Vapor Extraction System
1 Adams Boulevard, Town of Babylon, New York
New York State Department of Environmental Conservation Site No. 152140
EA Project No. 1602518

Dear Mr. Long:

This letter report provides an overview of the ongoing operation of the site soil vapor extraction (SVE) system at the National Heatset Printing Site in the Town of Babylon, New York (**Figure 1**). EA Engineering, P.C. and its affiliate EA Science and Technology (EA) initially assumed management of the onsite SVE system under New York State Department of Environmental Conservation (NYSDEC) Work Assignment Number (No.) D004441-29 in 2007. EA performed site management for the site from 2007 to February 2020 under multiple contracts; Environmental Assessments and Remediation performed site management from March to December 2020. EA is currently performing site management under NYSDEC Work Assignment No. D009806-18, which was approved on 18 November 2020. EA's assignment includes quarterly visits for the SVE system, quarterly system air sampling, and every fifth quarter groundwater sampling. The activities are being conducted under the NYSDEC State Superfund Standby Contract. Remedial system details are presented in the NYSDEC-approved Site Management Plan,¹ which includes the Operation & Maintenance (O&M) Manual for each system

The Site Visit and SVE System Maintenance Log table shows dates during the reporting period (July–September 2024), that an O&M or site visit was performed.

¹ EA. 2022. *National Heatset Printing Co. State Superfund Site, Suffolk County, Town of Babylon, New York. Site Management Plan – Revision 1. Draft*. February.

Site Visit and SVE System Maintenance Log

Date	Purpose	Personnel
12 September 2024	Quarterly visit. Conducted O&M on SVE System. Collected quarterly vapor samples from the SVE system.	EA
24 September 2024	D&D onsite to troubleshoot electrical panel of SVE blower.	EA and D&D
28 October 2024	D&D onsite to repair electrical panel of SVE blower and perform annual blower preventative maintenance	EA and D&D

Quarterly vapor samples were collected from the SVE System on 12 September 2024.

1. SOIL VAPOR EXTRACTION SYSTEM OPERATION

1.1 SOIL VAPOR EXTRACTION

The SVE system was in operation for a total of 94 hours out of an available 2861 hours (three percent of the total available) from 17 May 2024 through 12 September 2024. The SVE System was off upon arrival on 12 September 2024. The power was restored using a thermal overload relay and the system functioned during air sampling. The thermal overload relay was manually held to take all system readings. Quarterly O&M was performed on the SVE system on 12 September 2024, but the system shut off after air samples were collected. Troubleshooting was performed by D&D Electric on 24 September 2024, the SVE system remained down for the remainder of the quarter. Repairs will be scheduled during the 4th Quarter. A summary of the operational time associated with the SVE system is presented in **Table 1**. The location of the SVE system and associated monitoring wells are presented in **Figure 2**.

2. SOIL VAPOR EXTRACTION SYSTEM PERFORMANCE MONITORING

2.1 SOIL VAPOR EXTRACTION SYSTEM

Operational data for this period is based on the system measurements and vapor sample data collected during the 12 September 2024 quarterly visit. EA operated the SVE system with all five legs. The SVE blower flow rate during the 12 September 2024 site visit was 232 cubic feet per minute. Vapor points at 1 Adams Boulevard were monitored during the 12 September 2024 quarterly O&M visit. Vapor point monitoring data is included on the system data sheets, provided in **Attachment A**. A complete set of operational data collected is presented in **Table 2**.

3. RESULTS

3.1 SOIL VAPOR EXTRACTION SYSTEM

The SVE System air samples were collected on 12 September 2024 as part of the quarterly monitoring event. EA personnel collected 4-hour composite air samples from the system influent

and effluent using Summa® canisters and submitted the samples to ALS Environmental for analysis for volatile organic compounds via U.S. Environmental Protection Agency Method TO-15. Based on the effluent sampling results, a negligible amount of tetrachloroethene (PCE), trichloroethene (TCE), and dichloroethane (DCE) has been discharged during the year 2024 toward the permitted annual discharge limits of 270 pounds (lb), 120 lb, and 5,510 lb, respectively. A summary of the field monitoring results, laboratory air discharge analytical results, and estimated mass recovery are presented in **Table 2**; the laboratory data reports are presented in **Attachment B**.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the data collected from the SVE system during this reporting period, EA recommends returning the SVE system to operation following electric panel repair. EA also recommends scheduling blower annual preventative maintenance during the 4th Quarter 2024. When operating, PCE concentrations in the effluent continue to be equal to, or higher, than influent concentrations, indicating that the granular activated carbon is saturated and has reached its absorption capacity. Contaminant mass recovery has decreased to the point where emissions without treatment are within the permissible limits (6 New York Code of Rules and Regulations Part 212-2.2 Table 2). EA recommends removal of the spent carbon without replacement at this time.

Both onsite density-driven convection (DDC) Systems and the offsite DDC System have been shut down and remain off, as recommended in the Corrective Measures Work Plan² prepared by EA and approved by NYSDEC. Remedial Site Optimization investigation activities are being conducted as detailed in the work plan prepared by EA.

Please do not hesitate to contact me at 315-565-6557 with any questions you might have regarding this report.

Sincerely,

EA SCIENCE AND TECHNOLOGY

Megan Miller, EIT
Project Manager

² EA. 2022. *Corrective Measures Work Plan*. January.

Tables

- | | |
|---|---|
| 1 | Treatment System Run Time |
| 2 | Summary of Estimated Recovery Rate via Soil Vapor Extraction System |

Figure

- | | |
|---|-------------------|
| 1 | Site Location Map |
|---|-------------------|

Attachments

- | | |
|---|---|
| A | System Data Sheets |
| B | Laboratory Analytical Data – System Vapor Samples |

Tables

This page intentionally left blank

Table 1. Treatment System Run Time

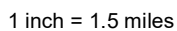
System Readings						
Date	Notes	SVE System				
		SVE Blower				
		Meter Reading (Hrs)	Time	Elapsed Runtime (Hrs)	Elapsed Available (Hrs)	Runtime (%)
08/22/22		62717.91	16:48	3317	3318	100
Quarterly Run-Time				3317	3318	100
11/30/22		65110.00	7:30	2393	2393	100
Quarterly Run-Time				2393	2393	100
02/21/23		67105.41	10:23	1995	1995	100
Quarterly Run-Time				1995	1995	100
04/26/23		68644.87	11:00	3535	3532	100
Quarterly Run-Time				3535	3532	100
07/13/23		70508.46	11:00	1864	1872	99.6
Quarterly Run-Time				1864	1872	99.6
11/20/23		73637.21	12:30	3129	3122	100
Quarterly Run-Time				3129	3122	100
02/16/24		75744.64	8:00	2107	2108	100
Quarterly Run-Time				2107	2108	100
05/16/24		76749.99	7:30	1005	2159	47
Quarterly Run-Time				1005	2159	47
09/12/24		76843.65	13:00	94	2861	3
Quarterly Run-Time				94	2861	3
Notes: --- = N/A No O&M events took place February 2020 during transition from EA to EAR - System was shut off between January and March 2020 events - Dates/Times/Hours during this period are assumptions used as place holders Hrs = Hours % = Percent Shaded cells indicate O&M events performed during a previous reporting period.						

Table 2. Summary of Estimated Recovery Rate via Soil Vapor Extraction System

Date	Field/System Data			Elapsed Run-Time (day)	Laboratory Results						Mass Discharged						Recovery Based on Laboratory Results							
	SVE Blower Flow Rate (cfm)	Applied Vacuum (in. H ₂ O)	System Discharge VOC Concentration (ppmv)		SYS INFLUENT			SYS EFFLUENT			PCE Discharge During Period: lb/hr	PCE Discharge During Period (lb)	TCE Discharge During Period (lb/hr)	TCE Discharge During Period (lb)	cis -1,2-DCE Discharge During Period (lb/hr)	cis -1,2-DCE Discharge During Period (lb)	PCE Recovery During Period: lb/hr	PCE Recovery During Period (lb)	TCE Recovery During Period (lb/hr)	TCE Recovery During Period (lb)	cis -1,2-DCE Recovery During Period (lb/hr)	cis -1,2-DCE Recovery During Period (lb)		
					PCE (mg/m ³)	TCE (mg/m ³)	cis -1,2-DCE (mg/m ³)	PCE (mg/m ³)	TCE (mg/m ³)	cis -1,2-DCE (mg/m ³)														
01/26/21	160	80	0.12	25	0.1490	0.0097	0.00595	0.01080	0.0008	0.0075	0.0000	0.0000	0.0000	0.0057	0.0000	0.0519	0.0001	1.0267	0.0000	0.0666	0.0000	0.0023		
02/24/21	160	80	0.02	90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
03/25/21	160	80	0.01	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/19/21	173	75	0.00	47	0.0062	0.0011	0.0031	0.0052	0.0003	0.0166	0.0000	0.0144	0.0000	0.0007	0.00001	0.0457	0.0000	0.0172	0.0000	0.0029	0.0000	0.0084		
05/19/21	250	70	0.00	24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
06/15/21	250	68	0.00	66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/20/21	250	67	0.00	30	0.0024	0.0016	0.0048	0.0011	0.0002	0.0103	0.0000	0.0034	0.0000	0.0005	0.00001	0.0324	0.0000	0.0077	0.0000	0.0049	0.0000	0.0150		
08/18/21	250	16	0.00	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
09/22/21	250	64	0.00	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/20/21	250	64	0.00	99	0.0841	0.0086	0.0075	0.0026	0.0002	0.0159	0.0000	0.0122	0.0000	0.0008	0.00001	0.0754	0.0001	0.3989	0.0000	0.0408	0.0000	0.0357		
11/18/21	250	60	0.00	29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12/14/21	250	51	0.00	83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
01/18/22	250	61	0.00	35	0.0115	0.0048	0.0052	0.0008	0.0002	0.0020	0.0000	0.0006	0.0000	0.0001	0.00000	0.0016	0.0000	0.0090	0.0000	0.0037	0.0000	0.0040		
04/06/22	230	58	0.00	29	0.0482	0.0047	0.0044	0.0044	0.0012	0.0198	0.0000	0.0027	0.0000	0.0007	0.00002	0.0120	0.0000	0.0291	0.0000	0.0028	0.0000	0.0026		
08/22/22	241	50	0.00	138	0.3510	0.0564	0.0452	0.0332	0.0699	0.0186	0.0000	0.0995	0.0001	0.2095	0.00002	0.0557	0.0003	1.0519	0.0001	0.1690	0.0000	0.1355		
11/30/22	224	5	0.00	100	0.0319	0.0091	0.0044	0.0610	0.0285	0.0139	0.0001	0.1226	0.0000	0.0573	0.00001	0.0279	0.0000	0.0641	0.0000	0.1219	0.0000	0.0088		
02/21/23	323	50	0.00	83	0.0556	0.0037	0.0022	0.0448	0.0274	0.0048	0.0001	0.1082	0.0000	0.0662	0.00001	0.0115	0.0001	0.1343	0.0000	0.0090	0.0000	0.0054		
4/26/2023	266	60	0.00	147	0.0089	0.0029	0.0022	0.0330	0.0160	0.0023	0.0000	0.1163	0.0000	0.0564	0.00000	0.0081	0.0000	0.0314	0.0000	0.0102	0.0000	0.0078		
7/13/2023	591	60	0.00	78	0.2600	0.0520	0.0150	0.0490	0.0770	0.0120	0.0001	0.2024	0.0002	0.3180	0.00003	0.0496	0.0006	1.0738	0.0001	0.2148	0.0000	0.0619		
11/20/2023	205	60	0.00	130	0.0710	0.0170	0.0047	0.0360	0.0520	0.0092	0.0000	0.0868	0.0000	0.1253	0.00001	0.0222	0.0001	0.1711	0.0000	0.0410	0.0000	0.0113		
2/16/2024	503	60	0.00	88	1.4000	0.0350	0.0088	0.0490	0.0200	0.0009	0.0001	0.1947	0.0000	0.0795	0.00000	0.0035	0.0026	5.5626	0.0001	0.1391	0.0000	0.0350		
5/16/2024	298	30	50.80	42	0.0180	0.0072	0.0012	0.9300	0.0025	0.0000	0.0010	1.0442	0.0000	0.0028	0.00000	0.0000	0.0000	0.0202	0.0000	0.0081	0.0000	0.0013		
9/12/2024	232	40	0.00	4	0.0000	0.0000	0.0000	0.0015	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
PERIOD TOTALS =												0.0001		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000
Notes: cfm = Cubic foot (feet) per minute cis -1,2-DCE = cis-1,2-Dichloroethene in. H ₂ O = Inch(es) of water lb = Pound(s) lb/hr = Pound(s) per hour mg/m ³ = Milligram(s) per cubic meter PCE = Tetrachloroethylene ppmv = Part(s) per million (vol./vol.) SVE = Soil vapor extraction TCE = Trichloroethene Mass Recovery (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr Mass Recovery (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day Mass emission limit for PCE is 1,000 lb/yr; TCE is 500 lb/year (6 NYCRR Part 212-2.2 Table 2) Shaded cells indicate O&M events performed during a previous reporting period.																								

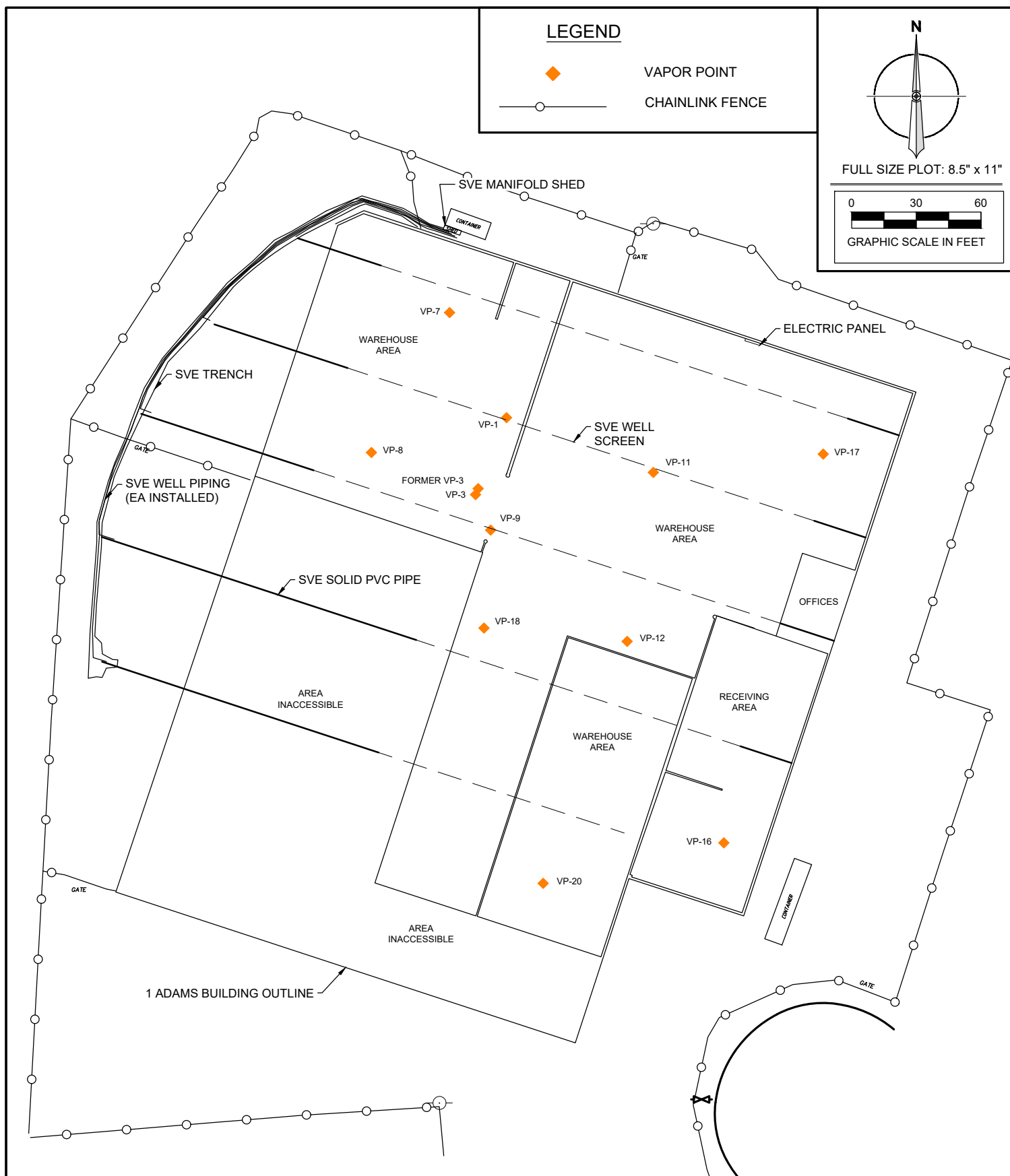
Figures

This page intentionally left blank



★ Site Location

Map Date: 1/27/2020
Source: ESRI, 2011



**EA Engineering, P.C.
and Its Affiliate
EA Science and Technology**

269 W Jefferson Street
Syracuse, New York 13202
(315) 431-4610

www.eaest.com

PROJECT NAME

NATIONAL HEATSET SITE (152140)

PROJECT ADDRESS

BABYLON, SUFFOLK COUNTY, NEW YORK

DRAWING TITLE

ONSITE TREATMENT SYSTEM LOCATION
SVE SYSTEM

FIGURE

2

DRAWING INFORMATION

DRAWN BY: KK

DESIGNED BY: MM

CHECKED BY: MM

PROJECT MANAGER: MM

DATE: 12 JUNE 2023

PROJECT NO: 1602518

Attachment A

System Data Sheets

This page intentionally left blank

National Heatset Printing Site
Farmingdale, NY

Soil Vapor Extraction System
Operation and Monitoring Form

Personnel: A. Stoogenke, J.Guy

Arrival Time: 1300

Departure Time: 1930

Run Timer

Last Run Timer

Date: 9/12/2024

Reading: 76843.65

Reading: 76749.99

Weather: 75 Clear

Time/Date of Last Reading 5/16/2024

System Status (On/Off/Alarms)

Arrival: Off. Power reset with thermal overload relay

Departure: Off.

Knockout Tank

Drained? No # Gallons N/A

Dilution Valve: 0 % Open

System Monitoring Data

Well Legs	Running?	Valve Position	Vacuum (in. H2O)	Flow (CFM)	PID (ppb)
1	Yes	Open	-5.413	2.55	0.2
2	Yes	Open	-8.271	87.45	2.4
3	Yes	Open	-3.482	69.65	0.0
4	Yes	Open	-1.165	1.6	0.0
5	Yes	Open	-5.016	70.30	0.0

System Component	Temp. (°F)	Pressure (+)/ Vacuum (-) (in. H2O)	Flow (CFM)	PID (ppb)
Blower Inlet	68.98 (60-70 °F)	40	231.56 (Sum of 5 legs)	0
Blower Outlet/ Carbon Influent	165	22	85.13	1.3
Mid	117.68	9	Not Required	0
SVE Effluent	103.28	5	Not Required	0

Vapor Samples

Influent	Start Time	1340	End Time	1800
	Initial		Final	
	(in. Hg)	-30	(in. Hg)	-7
Effluent	Start Time	1340	End Time	1800
	Initial		Final	
	(in. Hg)	-30	(in. Hg)	-9

Vapor Point Monitoring

	PID (ppb)	Pressure (in. H2O)		PID (ppb)	Pressure (in. H2O)
VP-1	0.0	-0.001	VP-12	0.0	-0.378
VP-3	0.0	-0.397	VP-13	0.0	-0.198
VP-3 (Fmr)	0.0	-0.001	VP-16	0.0	.0.045
VP-7	0.0	-0.185	VP-17	0.0	-0.145
VP-8	0.0	-0.826	VP-18	0.0	-0.476
VP-10	0.0	-0.625	VP-19	0.0	-0.649
VP-11	0.0	-0.618	VP-20	0.0	-0.258

Comments Blower ran during air sampling but shut off after air cans were pulled during readings. Thermal overload relay was manually held in order to take all readings at system.

Attachment B

Laboratory Analytical Data

System Vapor Samples

This page intentionally left blank



LABORATORY REPORT

October 9, 2024

Megan Miller
EA Engineering, Science, and Technology
6731 Collamer Road, Suite 2
East Syracuse, NY 13057

RE: Heatset / 1602518

Dear Megan:

Enclosed are the results of the samples submitted to our laboratory on September 23, 2024. For your reference, these analyses have been assigned our service request number P2403918.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

ALS | Environmental

By Sarah Mock at 4:45 pm, Oct 09, 2024

Sarah Mock
Project Manager



Client: EA Engineering, Science, and Technology
Project: Heatset / 1602518

Service Request No: P2403918
New York Lab ID: 11221

CASE NARRATIVE

The samples were received intact under chain of custody on September 23, 2024 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph/mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.4 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	https://dec.alaska.gov/spar/csp/lab-approval/list-of-approved-labs	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	https://internet.deq.louisiana.gov/portal/divisions/lalap/accredited-laboratories	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtm	2022028
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	006-999-456
New Jersey DEP (NELAP)	https://dep.nj.gov/dsr/oqa/certified-laboratories/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oklahoma DEQ (NELAP)	labaccreditation.deq.ok.gov/labaccreditation/	2207
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-012
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-23-14
Utah DOH (NELAP)	https://uphl.utah.gov/certifications/environmental-laboratory-certification/	CA016272023-15
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: EA Engineering, Science, and Technology
Project ID: Heatset / 1602518

Service Request: P2403918

Date Received: 9/23/2024
Time Received: 09:40

TO-15 - VOC Cans 62

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
INFLUENT-09122024	P2403918-001	Air	9/12/2024	13:40	SC02275	-2.96	3.65	X
EFFLUENT-09122024	P2403918-002	Air	9/12/2024	13:40	SC01640	-3.44	3.95	X



Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day Standard

ALS Project No. 12403915

Company Name & Address (Reporting Information) EA Engineering, Science, and Technology, INC.				Project Name Heatset					ALS Contact:		Comments e.g. Actual Preservative or specific instructions
									Analysis Method		
Project Manager Megan Miller				Project Number 1602518					JO-B		
Phone 7166802618				P.O. # / Billing Information 1602518							
Fax				NEAccountsPayable@eaest.com							
Email Address for Result Reporting m.miller@eaest.com				Sampler (Print & Sign) Jacob Gay Jacob Gay							
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume			
INFLUENT-09122024	1	9/12/24	1340	SC02275	GA00583	-30	-7	6L	✓		
EFFLUENT-09122024	2	9/12/24	1340	SC01640	GA01601	-30	-9	6L	✓		
Report Tier Levels - please select											
Tier I - Results (Default if not specified) ☒ Tier III (Results + QC & Calibration Summaries) _____											
Tier II (Results + QC Summaries) _____ Tier IV (Data Validation Package) 10% Surcharge _____											
EDD required Yes/ No Type: <u>NYSDEC</u> Units: _____											
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT											
Relinquished by: (Signature) Jacob Gay				Date: 9/16/24	Time: 1800	Received by: (Signature) Felix			Date: _____	Time: _____	
Relinquished by: (Signature) Felix				Date: _____	Time: _____	Received by: (Signature) _____			Date: 09-23-24	Time: 0940	
Project Requirements (MRLs, QAPP)											
Cooler / Blank Temperature _____ °C											

ALS Environmental
Sample Acceptance Check Form

Client: EA Engineering, Science, and Technology Work order: P2403918
Project: Heatset
Sample(s) received on: 9/23/24 Date opened: 9/23/24 by: ADDAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | Yes | No | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 Were custody seals on outside of cooler/Box/Container? | ☐ | ☒ | ☐ |
| Location of seal(s)? _____ Sealing Lid? | ☐ | ☐ | ☒ |
| Were signature and date included? | ☐ | ☐ | ☒ |
| Were seals intact? | ☐ | ☐ | ☒ |
| 9 Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |
| 12 Lab Notification: Analyst and PM were alerted of Short HT or RUSH samples? | ☐ | ☐ | ☒ |
| 13 Client Notification: Client has been notified regarding HT exceedances and/or other CoC discrepancies? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2403918-001.01	6.0 L Source Can					
P2403918-002.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: INFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-001

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC02275

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.96 Final Pressure (psig): 3.65

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.83	ND	0.48	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.7	0.81	0.55	0.16	
74-87-3	Chloromethane	1.4	0.84	0.67	0.41	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.86	ND	0.12	
75-01-4	Vinyl Chloride	ND	0.83	ND	0.32	
106-99-0	1,3-Butadiene	ND	0.83	ND	0.37	
74-83-9	Bromomethane	ND	0.80	ND	0.20	
75-00-3	Chloroethane	ND	0.86	ND	0.33	
67-64-1	Acetone	36	8.0	15	3.4	
75-69-4	Trichlorofluoromethane (CFC 11)	1.5	0.80	0.26	0.14	
67-63-0	2-Propanol (Isopropyl Alcohol)	3.5	1.5	1.4	0.63	
75-35-4	1,1-Dichloroethene	ND	0.70	ND	0.18	
75-09-2	Methylene Chloride	3.7	0.72	1.1	0.21	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.70	ND	0.092	
75-15-0	Carbon Disulfide	ND	1.6	ND	0.52	
156-60-5	trans-1,2-Dichloroethene	ND	0.83	ND	0.21	
75-34-3	1,1-Dichloroethane	ND	0.81	ND	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	0.84	ND	0.23	
108-05-4	Vinyl Acetate	ND	8.4	ND	2.4	
78-93-3	2-Butanone (MEK)	2.1	1.6	0.71	0.54	
156-59-2	cis-1,2-Dichloroethene	ND	0.81	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: INFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-001

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC02275

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.96 **Final Pressure (psig):** 3.65

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	ND	3.1	ND	0.87	
110-54-3	n-Hexane	ND	0.83	ND	0.23	
67-66-3	Chloroform	ND	0.84	ND	0.17	
109-99-9	Tetrahydrofuran (THF)	ND	1.6	ND	0.53	
107-06-2	1,2-Dichloroethane	ND	0.80	ND	0.20	
71-55-6	1,1,1-Trichloroethane	ND	0.81	ND	0.15	
71-43-2	Benzene	ND	0.80	ND	0.25	
56-23-5	Carbon Tetrachloride	ND	0.81	ND	0.13	
110-82-7	Cyclohexane	ND	1.7	ND	0.50	
78-87-5	1,2-Dichloropropane	ND	0.84	ND	0.18	
75-27-4	Bromodichloromethane	ND	0.83	ND	0.12	
79-01-6	Trichloroethene	ND	0.81	ND	0.15	
123-91-1	1,4-Dioxane	ND	0.81	ND	0.23	
142-82-5	n-Heptane	ND	0.83	ND	0.20	
10061-01-5	cis-1,3-Dichloropropene	ND	0.83	ND	0.18	
108-10-1	4-Methyl-2-pentanone	ND	1.6	ND	0.40	
10061-02-6	trans-1,3-Dichloropropene	ND	0.76	ND	0.17	
79-00-5	1,1,2-Trichloroethane	ND	0.86	ND	0.16	
108-88-3	Toluene	1.1	0.84	0.28	0.22	
591-78-6	2-Hexanone	ND	1.6	ND	0.39	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: INFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-001

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC02275

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.96 **Final Pressure (psig):** 3.65

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.80	ND	0.093	
106-93-4	1,2-Dibromoethane	ND	0.81	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.84	ND	0.12	
108-90-7	Chlorobenzene	ND	0.84	ND	0.18	
100-41-4	Ethylbenzene	ND	0.86	ND	0.20	
179601-23-1	m,p-Xylenes	1.8	1.7	0.41	0.38	
75-25-2	Bromoform	ND	0.86	ND	0.083	
100-42-5	Styrene	1.6	0.83	0.39	0.19	
95-47-6	o-Xylene	ND	0.84	ND	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.84	ND	0.12	
98-82-8	Cumene	ND	0.81	ND	0.17	
622-96-8	4-Ethyltoluene	ND	0.81	ND	0.17	
108-67-8	1,3,5-Trimethylbenzene	ND	0.84	ND	0.17	
95-63-6	1,2,4-Trimethylbenzene	ND	0.81	ND	0.17	
100-44-7	Benzyl Chloride	ND	3.2	ND	0.62	
541-73-1	1,3-Dichlorobenzene	ND	0.81	ND	0.13	
106-46-7	1,4-Dichlorobenzene	ND	0.81	ND	0.13	
95-50-1	1,2-Dichlorobenzene	ND	0.81	ND	0.13	
120-82-1	1,2,4-Trichlorobenzene	ND	1.7	ND	0.22	
91-20-3	Naphthalene	ND	0.80	ND	0.15	
87-68-3	Hexachlorobutadiene	ND	0.80	ND	0.075	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: EFFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-002

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01640

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.44 **Final Pressure (psig):** 3.95

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.88	ND	0.51	
75-71-8	Dichlorodifluoromethane (CFC 12)	1.8	0.86	0.37	0.17	
74-87-3	Chloromethane	0.98	0.90	0.47	0.43	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.91	ND	0.13	
75-01-4	Vinyl Chloride	ND	0.88	ND	0.34	
106-99-0	1,3-Butadiene	ND	0.88	ND	0.40	
74-83-9	Bromomethane	ND	0.85	ND	0.22	
75-00-3	Chloroethane	ND	0.91	ND	0.35	
67-64-1	Acetone	15	8.5	6.1	3.6	
75-69-4	Trichlorofluoromethane (CFC 11)	0.93	0.85	0.16	0.15	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.6	ND	0.67	
75-35-4	1,1-Dichloroethene	ND	0.75	ND	0.19	
75-09-2	Methylene Chloride	2.2	0.76	0.64	0.22	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.75	ND	0.098	
75-15-0	Carbon Disulfide	ND	1.7	ND	0.55	
156-60-5	trans-1,2-Dichloroethene	ND	0.88	ND	0.22	
75-34-3	1,1-Dichloroethane	ND	0.86	ND	0.21	
1634-04-4	Methyl tert-Butyl Ether	ND	0.90	ND	0.25	
108-05-4	Vinyl Acetate	ND	8.9	ND	2.5	
78-93-3	2-Butanone (MEK)	2.2	1.7	0.74	0.57	
156-59-2	cis-1,2-Dichloroethene	ND	0.86	ND	0.22	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: EFFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-002

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01640

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.44 **Final Pressure (psig):** 3.95

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	ND	3.3	ND	0.92	
110-54-3	n-Hexane	ND	0.88	ND	0.25	
67-66-3	Chloroform	ND	0.90	ND	0.18	
109-99-9	Tetrahydrofuran (THF)	ND	1.7	ND	0.56	
107-06-2	1,2-Dichloroethane	ND	0.85	ND	0.21	
71-55-6	1,1,1-Trichloroethane	ND	0.86	ND	0.16	
71-43-2	Benzene	ND	0.85	ND	0.27	
56-23-5	Carbon Tetrachloride	ND	0.86	ND	0.14	
110-82-7	Cyclohexane	ND	1.8	ND	0.53	
78-87-5	1,2-Dichloropropane	ND	0.90	ND	0.19	
75-27-4	Bromodichloromethane	ND	0.88	ND	0.13	
79-01-6	Trichloroethene	ND	0.86	ND	0.16	
123-91-1	1,4-Dioxane	ND	0.86	ND	0.24	
142-82-5	n-Heptane	ND	0.88	ND	0.21	
10061-01-5	cis-1,3-Dichloropropene	ND	0.88	ND	0.19	
108-10-1	4-Methyl-2-pentanone	ND	1.7	ND	0.43	
10061-02-6	trans-1,3-Dichloropropene	ND	0.81	ND	0.18	
79-00-5	1,1,2-Trichloroethane	ND	0.91	ND	0.17	
108-88-3	Toluene	1.2	0.90	0.33	0.24	
591-78-6	2-Hexanone	ND	1.7	ND	0.41	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: EFFLUENT-09122024
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P2403918-002

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: SC01640

Date Collected: 9/12/24
Date Received: 9/23/24
Date Analyzed: 10/4/24
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -3.44 **Final Pressure (psig):** 3.95

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.85	ND	0.099	
106-93-4	1,2-Dibromoethane	ND	0.86	ND	0.11	
127-18-4	Tetrachloroethene	1.5	0.90	0.22	0.13	
108-90-7	Chlorobenzene	ND	0.90	ND	0.19	
100-41-4	Ethylbenzene	ND	0.91	ND	0.21	
179601-23-1	m,p-Xylenes	2.1	1.8	0.49	0.41	
75-25-2	Bromoform	ND	0.91	ND	0.088	
100-42-5	Styrene	ND	0.88	ND	0.21	
95-47-6	o-Xylene	1.1	0.90	0.25	0.21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.90	ND	0.13	
98-82-8	Cumene	ND	0.86	ND	0.18	
622-96-8	4-Ethyltoluene	ND	0.86	ND	0.18	
108-67-8	1,3,5-Trimethylbenzene	ND	0.90	ND	0.18	
95-63-6	1,2,4-Trimethylbenzene	2.2	0.86	0.45	0.18	
100-44-7	Benzyl Chloride	ND	3.4	ND	0.66	
541-73-1	1,3-Dichlorobenzene	ND	0.86	ND	0.14	
106-46-7	1,4-Dichlorobenzene	ND	0.86	ND	0.14	
95-50-1	1,2-Dichlorobenzene	ND	0.86	ND	0.14	
120-82-1	1,2,4-Trichlorobenzene	ND	1.8	ND	0.24	
91-20-3	Naphthalene	ND	0.85	ND	0.16	
87-68-3	Hexachlorobutadiene	ND	0.85	ND	0.079	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: Method Blank
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P241003-MB

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/3/24
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	ND	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.54	ND	0.26	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.55	ND	0.079	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.53	ND	0.24	
74-83-9	Bromomethane	ND	0.51	ND	0.13	
75-00-3	Chloroethane	ND	0.55	ND	0.21	
67-64-1	Acetone	ND	5.1	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.51	ND	0.091	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	0.99	ND	0.40	
75-35-4	1,1-Dichloroethene	ND	0.45	ND	0.11	
75-09-2	Methylene Chloride	ND	0.46	ND	0.13	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.45	ND	0.059	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.33	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.52	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.4	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.35	
156-59-2	cis-1,2-Dichloroethene	ND	0.52	ND	0.13	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 2 of 3

Client: EA Engineering, Science, and Technology

Client Sample ID: Method Blank

Client Project ID: Heatset / 1602518

ALS Project ID: P2403918

ALS Sample ID: P241003-MB

Test Code: EPA TO-15

Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26

Analyst: Pruthuvi Heenatigala

Sample Type: 6.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 10/3/24

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
141-78-6	Ethyl Acetate	ND	2.0	ND	0.56	
110-54-3	n-Hexane	ND	0.53	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.34	
107-06-2	1,2-Dichloroethane	ND	0.51	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.52	ND	0.095	
71-43-2	Benzene	ND	0.51	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.52	ND	0.083	
110-82-7	Cyclohexane	ND	1.1	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.53	ND	0.079	
79-01-6	Trichloroethene	ND	0.52	ND	0.097	
123-91-1	1,4-Dioxane	ND	0.52	ND	0.14	
142-82-5	n-Heptane	ND	0.53	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.53	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	1.1	ND	0.26	
10061-02-6	trans-1,3-Dichloropropene	ND	0.49	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.55	ND	0.10	
108-88-3	Toluene	ND	0.54	ND	0.14	
591-78-6	2-Hexanone	ND	1.0	ND	0.25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 3 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: Method Blank
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P241003-MB

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/3/24
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
124-48-1	Dibromochloromethane	ND	0.51	ND	0.060	
106-93-4	1,2-Dibromoethane	ND	0.52	ND	0.068	
127-18-4	Tetrachloroethene	ND	0.54	ND	0.080	
108-90-7	Chlorobenzene	ND	0.54	ND	0.12	
100-41-4	Ethylbenzene	ND	0.55	ND	0.13	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.55	ND	0.053	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.54	ND	0.12	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.54	ND	0.079	
98-82-8	Cumene	ND	0.52	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.52	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.54	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	ND	0.11	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	ND	0.52	ND	0.087	
106-46-7	1,4-Dichlorobenzene	ND	0.52	ND	0.087	
95-50-1	1,2-Dichlorobenzene	ND	0.52	ND	0.087	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	ND	0.14	
91-20-3	Naphthalene	ND	0.51	ND	0.097	
87-68-3	Hexachlorobutadiene	ND	0.51	ND	0.048	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client: EA Engineering, Science, and Technology
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 9/12/24
Date(s) Received: 9/23/24
Date(s) Analyzed: 10/3 - 10/4/24

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P241003-MB	100	99	86	70-130	
Lab Control Sample	P241003-LCS	100	100	102	70-130	
Duplicate Lab Control Sample	P241003-DLCS	102	100	100	70-130	
INFLUENT-09122024	P2403918-001	101	101	103	70-130	
EFFLUENT-09122024	P2403918-002	101	101	99	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: Duplicate Lab Control Sample
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P241003-DLCS

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/4/24
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS µg/m³	LCS µg/m³	DLCS µg/m³	LCS	DLCS	Acceptance Limits			
115-07-1	Propene	42.4	41.9	42.6	99	100	50-133	1	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	40.8	33.5	35.4	82	87	66-122	6	25	
74-87-3	Chloromethane	41.6	33.8	35.9	81	86	56-131	6	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	41.6	36.3	37.7	87	91	63-120	4	25	
75-01-4	Vinyl Chloride	42.4	35.0	37.0	83	87	57-129	5	25	
106-99-0	1,3-Butadiene	42.4	36.8	39.7	87	94	62-132	8	25	
74-83-9	Bromomethane	42.0	34.7	36.5	83	87	72-120	5	25	
75-00-3	Chloroethane	42.4	35.1	36.7	83	87	67-123	5	25	
67-64-1	Acetone	212	178	189	84	89	61-120	6	25	
75-69-4	Trichlorofluoromethane (CFC 11)	42.0	33.8	36.3	80	86	65-122	7	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	83.6	71.6	76.5	86	92	59-132	7	25	
75-35-4	1,1-Dichloroethene	41.6	35.6	36.9	86	89	75-120	3	25	
75-09-2	Methylene Chloride	41.6	34.8	36.7	84	88	71-123	5	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	42.0	33.9	43.1	81	103	65-121	24	25	
75-15-0	Carbon Disulfide	86.0	72.4	91.3	84	106	69-115	23	25	
156-60-5	trans-1,2-Dichloroethene	43.6	39.2	39.8	90	91	67-123	1	25	
75-34-3	1,1-Dichloroethane	43.2	38.9	39.9	90	92	66-120	2	25	
1634-04-4	Methyl tert-Butyl Ether	43.2	43.8	44.6	101	103	65-124	2	25	
108-05-4	Vinyl Acetate	218	220	226	101	104	76-147	3	25	
78-93-3	2-Butanone (MEK)	82.8	77.1	79.5	93	96	70-125	3	25	
156-59-2	cis-1,2-Dichloroethene	43.2	39.3	40.8	91	94	64-120	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: Duplicate Lab Control Sample
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P241003-DLCS

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/4/24
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS µg/m³	LCS µg/m³	DLCS µg/m³	LCS	DLCS	Acceptance Limits			
141-78-6	Ethyl Acetate	79.6	78.5	81.4	99	102	56-120	3	25	
110-54-3	n-Hexane	42.4	41.7	42.6	98	100	60-125	2	25	
67-66-3	Chloroform	43.2	39.0	41.0	90	95	64-121	5	25	
109-99-9	Tetrahydrofuran (THF)	80.8	78.2	82.5	97	102	67-117	5	25	
107-06-2	1,2-Dichloroethane	41.2	35.9	37.7	87	92	64-138	6	25	
71-55-6	1,1,1-Trichloroethane	42.0	37.2	38.3	89	91	67-125	2	25	
71-43-2	Benzene	41.2	37.7	38.4	92	93	73-128	1	25	
56-23-5	Carbon Tetrachloride	42.0	34.8	36.4	83	87	71-134	5	25	
110-82-7	Cyclohexane	85.6	81.4	83.5	95	98	71-118	3	25	
78-87-5	1,2-Dichloropropane	42.8	36.3	37.2	85	87	68-121	2	25	
75-27-4	Bromodichloromethane	43.6	36.4	37.3	83	86	70-125	4	25	
79-01-6	Trichloroethene	42.8	47.3	47.9	111	112	68-124	0.9	25	
123-91-1	1,4-Dioxane	42.8	41.6	42.1	97	98	76-127	1	25	
142-82-5	n-Heptane	42.8	41.0	42.3	96	99	72-121	3	25	
10061-01-5	cis-1,3-Dichloropropene	42.4	37.6	39.3	89	93	87-137	4	25	
108-10-1	4-Methyl-2-pentanone	85.2	87.6	89.2	103	105	67-137	2	25	
10061-02-6	trans-1,3-Dichloropropene	39.2	35.5	37.1	91	95	73-127	4	25	
79-00-5	1,1,2-Trichloroethane	43.2	36.5	37.5	84	87	71-119	4	25	
108-88-3	Toluene	42.8	39.1	39.8	91	93	64-121	2	25	
591-78-6	2-Hexanone	85.2	86.2	88.1	101	103	70-136	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

Client: EA Engineering, Science, and Technology
Client Sample ID: Duplicate Lab Control Sample
Client Project ID: Heatset / 1602518

ALS Project ID: P2403918
 ALS Sample ID: P241003-DLCS

Test Code: EPA TO-15
Instrument ID: Entech 7200CTS/Agilent 7890B/5977B/MS26
Analyst: Pruthuvi Heenatigala
Sample Type: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 10/4/24
Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount	Result		% Recovery		ALS	RPD	RPD	Data
		LCS / DLCS µg/m³	LCS µg/m³	DLCS µg/m³	LCS	DLCS	Acceptance Limits			
124-48-1	Dibromochloromethane	42.8	33.2	34.2	78	80	67-128	3	25	
106-93-4	1,2-Dibromoethane	41.2	36.6	36.6	89	89	69-129	0	25	
127-18-4	Tetrachloroethene	42.8	37.7	38.1	88	89	55-132	1	25	
108-90-7	Chlorobenzene	43.6	37.3	37.7	86	86	63-124	0	25	
100-41-4	Ethylbenzene	43.6	41.6	42.5	95	97	64-119	2	25	
179601-23-1	m,p-Xylenes	86.4	86.7	87.8	100	102	64-121	2	25	
75-25-2	Bromoform	43.6	33.2	35.1	76	81	63-132	6	25	
100-42-5	Styrene	42.8	43.1	43.9	101	103	71-125	2	25	
95-47-6	o-Xylene	43.2	44.2	44.6	102	103	66-122	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	43.2	35.7	36.5	83	84	71-128	1	25	
98-82-8	Cumene	42.4	41.0	42.0	97	99	66-126	2	25	
622-96-8	4-Ethyltoluene	43.6	46.8	46.9	107	108	67-128	0.9	25	
108-67-8	1,3,5-Trimethylbenzene	43.6	46.0	46.5	106	107	66-125	0.9	25	
95-63-6	1,2,4-Trimethylbenzene	42.4	46.9	47.2	111	111	67-130	0	25	
100-44-7	Benzyl Chloride	86.0	84.6	88.9	98	103	58-151	5	25	
541-73-1	1,3-Dichlorobenzene	42.8	39.1	38.8	91	91	57-135	0	25	
106-46-7	1,4-Dichlorobenzene	42.8	37.9	38.2	89	89	56-129	0	25	
95-50-1	1,2-Dichlorobenzene	42.4	37.1	37.0	88	87	57-138	1	25	
120-82-1	1,2,4-Trichlorobenzene	88.0	77.3	79.6	88	90	50-137	2	25	
91-20-3	Naphthalene	44.0	45.4	46.3	103	105	50-157	2	25	
87-68-3	Hexachlorobutadiene	42.8	34.7	34.7	81	81	50-133	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Method Path : I:\MS26\Methods\
 Method File : R26092324.M
 Title : EPA T0-15 per SOP VOA-T015 (CASS T0-15/GC-MS)
 Last Update : Tue Sep 24 11:22:57 2024
 Response Via : Initial Calibration

Calibration Files

0.1 =09232408.D 0.2 =09232409.D 0.5 =09232410.D 1.0 =09232411.D 5.0 =09232412.D 25 =09232413.D 50 =09232414.D
 100 =09232416.D

	Compound	0.1	0.2	0.5	1.0	5.0	25	50	100	Avg	%RSD
1) IR	Bromochloromethane...	-----ISTD-----									
2) T	Propene	2.190	2.094	1.124	1.334	1.286	1.341	1.370	1.262	1.500	26.95
3) T	Dichlorodifluo...	3.659	3.380	2.051	2.446	2.338	2.342	2.324	2.123	2.583	23.10
4) T	Chloromethane	2.118	1.869	1.184	1.406	1.340	1.333	1.353	1.255	1.482	22.22
5) T	1,2-Dichloro-1...	2.080	1.867	1.101	1.314	1.269	1.282	1.286	1.173	1.422	24.77
6) T	Vinyl Chloride	2.239	2.104	1.366	1.521	1.494	1.500	1.513	1.397	1.642	20.34
7) T	1,3-Butadiene	1.822	1.606	1.059	1.241	1.207	1.235	1.244	1.146	1.320	19.51
8) T	Bromomethane	1.648	1.501	0.921	1.074	1.047	1.049	1.062	0.981	1.160	22.70
9) T	Chloroethane		1.461	0.780	0.823	0.816	0.807	0.817	0.757	0.894	28.04
10) T	Ethanol		1.063	0.610	0.696	0.685	0.678	0.670	0.577	0.711	22.66
11) T	Acetonitrile	2.683	2.236	1.472	1.609	1.578	1.598	1.630	1.509	1.790	24.24
12) T	Acrolein	1.131	1.011	0.618	0.720	0.721	0.742	0.752	0.686	0.797	22.16
13) T	Acetone	3.566	3.209	1.921	2.265	2.163	2.075	1.969	1.571	2.343	29.17
14) T	Trichlorofluor...	3.693	3.237	2.177	2.478	2.372	2.343	2.360	2.150	2.601	21.43
15) T	2-Propanol (Is...		4.368	2.539	2.741	2.538	2.515	2.539	2.240	2.783	25.65
16) T	Acrylonitrile	2.271	1.920	1.241	1.406	1.378	1.380	1.402	1.265	1.533	23.81
17) T	1,1-Dichloroet...	2.550	2.380	1.403	1.693	1.604	1.593	1.634	1.483	1.793	23.82
18) T	2-Methyl-2-Pro...	3.411	3.410	2.194	2.599	2.643	2.698	2.719	2.301	2.747	16.40
19) T	Methylene Chlo...		1.841	1.103	1.269	1.193	1.177	1.200	1.061	1.263	20.88
20) T	3-Chloro-1-pro...	2.062	1.704	1.081	1.308	1.346	1.232	1.235	1.116	1.386	24.07
21) T	Trichlorotrifl...	2.293	1.745	1.098	1.284	1.399	1.191	1.166	0.981	1.395	30.83
22) T	Carbon Disulfide		5.499	3.456	4.073	4.391	3.725	3.520	2.795	3.923	21.87
23) T	trans-1,2-Dich...	2.280	2.239	1.298	1.513	1.485	1.507	1.566	1.170	1.632	25.04
24) T	1,1-Dichloroet...	2.856	2.529	1.570	1.798	1.786	1.792	1.840	1.352	1.941	25.72
25) T	Methyl tert-Bu...	4.250	4.004	2.534	3.129	3.120	3.289	3.375	2.493	3.274	18.96
26) T	Vinyl Acetate	3.186	3.038	1.844	2.253	2.328	2.329	2.082	1.238	2.287	27.24
27) T	2-Butanone (MEK)	3.495	3.111	1.963	2.321	2.299	2.273	2.264	1.965	2.461	22.28
28) T	cis-1,2-Dichlo...	1.931	1.898	1.124	1.395	1.360	1.359	1.387	1.283	1.467	19.74
29) T	Diisopropyl Ether	3.667	3.573	2.265	2.820	2.867	2.789	2.633	2.080	2.837	19.65
30) T	Ethyl Acetate	0.475	0.511	0.315	0.379	0.391	0.390	0.379	0.310	0.394	17.69
31) T	n-Hexane	2.192	2.120	1.334	1.616	1.646	1.631	1.615	1.395	1.694	18.23
32) T	Chloroform	3.021	2.717	1.682	2.017	1.923	1.887	1.883	1.685	2.102	23.49
33) S	1,2-Dichloroet...	1.177	1.192	1.206	1.188	1.203	1.201	1.177	1.178	1.191	1.02
34) T	Tetrahydrofura...	0.863	0.808	0.508	0.656	0.684	0.700	0.718	0.652	0.699	15.29
35) T	Ethyl tert-But...	1.782	1.552	1.024	1.301	1.384	1.394	1.414	1.244	1.387	15.98
36) T	1,2-Dichloroet...	2.227	1.976	1.270	1.454	1.417	1.394	1.431	1.333	1.563	22.02
37) IR	1,4-Difluorobenzen...	-----ISTD-----									
38) T	1,1,1-Trichlor...	0.722	0.642	0.409	0.464	0.459	0.453	0.473	0.432	0.507	22.12
39) T	Benzene	1.873	1.583	1.016	1.193	1.114	1.101	1.140	1.002	1.253	24.72
40) T	Carbon Tetrach...	0.684	0.646	0.400	0.470	0.446	0.445	0.465	0.424	0.498	21.36
41) T	Cyclohexane	0.623	0.550	0.355	0.426	0.438	0.443	0.454	0.391	0.460	18.81
42) T	tert-Amyl Meth...	0.994	0.879	0.582	0.674	0.692	0.721	0.746	0.633	0.740	18.22

Method Path : I:\MS26\Methods\
Method File : R26092324.M

Title	:	EPA T0-15 per SOP VOA-T015 (CASS T0-15/GC-MS)										
43) T	1,2-Dichloropr...	0.413	0.373	0.231	0.267	0.250	0.248	0.259	0.235	0.285	24.20	
44) T	Bromodichlorom...	0.604	0.554	0.349	0.399	0.371	0.380	0.396	0.359	0.426	22.62	
45) T	Trichloroethene	0.586	0.549	0.326	0.385	0.367	0.366	0.381	0.340	0.413	23.82	
46) T	1,4-Dioxane	0.307	0.275	0.194	0.227	0.239	0.242	0.252	0.226	0.245	13.88	
47) T	2,2,4-Trimethy...	1.559	1.409	0.869	1.035	1.047	1.034	1.063	0.936	1.119	21.28	
48) T	Methyl Methacr...	0.160	0.150	0.095	0.119	0.134	0.138	0.146	0.128	0.134	15.23	
49) T	n-Heptane	0.356	0.357	0.225	0.298	0.291	0.287	0.300	0.267	0.298	14.69	
50) T	cis-1,3-Dichlo...	0.644	0.568	0.377	0.441	0.449	0.480	0.511	0.466	0.492	16.76	
51) T	4-Methyl-2-pen...	0.220	0.234	0.161	0.201	0.226	0.231	0.237	0.205	0.214	11.83	
52) T	trans-1,3-Dich...	0.520	0.458	0.294	0.361	0.377	0.408	0.436	0.402	0.407	16.60	
53) T	1,1,2-Trichlor...	0.497	0.426	0.264	0.304	0.294	0.288	0.297	0.267	0.330	25.71	

54) IR	Chlorobenzene-d5 (... -----ISTD-----											
55) S	Toluene-d8 (SS2)	7.734	7.614	7.793	7.852	7.818	7.889	7.799	7.665	7.770	1.20	
56) T	Toluene	1.334	1.221	0.750	0.895	0.856	0.858	0.854	0.734	0.938	E1 23.36	
57) T	2-Hexanone	3.866	3.378	2.450	2.952	3.407	3.523	3.429	2.865	3.234	13.84	
58) T	Dibromochlorom...	4.507	3.764	2.466	2.906	2.762	2.812	2.851	2.546	3.077	22.72	
59) T	1,2-Dibromoethane	3.802	3.535	2.163	2.627	2.544	2.601	2.653	2.389	2.789	20.44	
60) T	n-Butyl Acetate	3.666	3.294	2.349	2.970	3.568	3.894	3.840	3.235	3.352	15.32	
61) T	n-Octane	1.520	1.759	1.161	1.450	1.549	1.575	1.573	1.393	1.498	11.56	
62) T	Tetrachloroethene	4.452	4.440	2.761	3.232	3.040	3.024	3.043	2.696	3.336	21.16	
63) T	Chlorobenzene	1.030	0.868	0.567	0.666	0.632	0.640	0.633	0.549	0.698	E1 23.71	
64) T	Ethylbenzene	1.294	1.124	0.732	0.904	0.932	0.997	0.995	0.856	0.979	E1 17.44	
65) T	m- & p-Xylenes	9.864	8.427	5.762	7.198	7.861	8.033	7.867	6.450	7.683	16.27	
66) T	Bromoform	3.620	3.226	2.042	2.450	2.333	2.369	2.399	2.063	2.563	21.92	
67) T	Styrene	6.716	5.908	3.976	5.201	6.156	6.669	6.718	5.918	5.908	15.91	
68) T	o-Xylene	9.140	8.339	5.706	7.057	7.831	7.858	7.805	6.646	7.548	14.03	
69) T	n-Nonane	3.069	2.864	1.918	2.428	2.808	2.973	2.960	2.608	2.704	14.05	
70) T	1,1,2,2-Tetrac...	5.870	5.244	3.485	3.944	3.759	3.692	3.613	3.088	4.087	23.37	
71) S	Bromofluoroben...	2.843	2.867	2.977	3.046	3.079	3.116	3.078	2.978	2.998	3.36	
72) T	Cumene	1.329	1.260	0.814	0.987	1.005	1.032	1.031	0.882	1.042	E1 16.70	
73) T	alpha-Pinene	4.666	4.455	3.457	4.228	4.692	5.252	5.320	4.663	4.592	12.82	
74) T	n-Propylbenzene	1.389	1.240	0.809	1.053	1.171	1.199	1.182	1.007	1.131	E1 15.39	
75) T	4-Ethyltoluene	1.011	0.958	0.625	0.863	1.000	1.038	1.032	0.885	0.926	E1 14.94	
76) T	1,3,5-Trimethy...	8.854	7.922	5.576	7.427	8.598	8.782	8.632	7.502	7.912	13.92	
77) T	1,2,4-Trimethy...	8.414	7.224	5.357	7.173	8.749	9.126	8.912	7.509	7.808	16.09	
78) T	Benzyl Chloride	6.143	5.672	3.608	4.553	6.032	6.769	6.662	5.465	5.613	19.12	
79) T	1,3-Dichlorobe...	8.481	7.201	4.463	5.617	5.756	5.673	5.477	4.569	5.905	22.65	
80) T	1,4-Dichlorobe...	8.555	6.978	4.394	5.191	5.797	5.772	5.737	5.006	5.929	21.92	
81) T	sec-Butylbenzene	1.239	1.163	0.744	0.999	1.127	1.153	1.136	0.969	1.066	E1 14.75	
82) T	4-Isopropyltol...	0.897	0.909	0.588	0.796	0.968	1.032	1.022	0.879	0.886	E1 16.19	
83) T	1,2-Dichlorobe...	8.449	7.103	4.449	5.604	5.632	5.604	5.587	4.906	5.917	21.55	
84) T	d-Limonene	1.761	1.847	1.347	1.917	2.454	2.703	2.703	2.406	2.143	23.08	
85) T	1,2-Dibromo-3-...	2.764	2.477	1.540	1.839	1.992	2.099	2.153	1.912	2.097	18.15	
86) T	1,2,4-Trichlor...	4.910	3.935	2.196	2.705	3.733	4.342	4.469	3.946	3.780	24.05	
87) T	Naphthalene	0.911	0.683	0.374	0.496	1.022	1.239	1.265	1.104	0.887	E1 37.90	
88) T	Hexachlorobuta...	4.579	3.483	2.422	2.972	2.819	2.890	2.883	2.651	3.087	21.84	
89) T	tert-Butylbenzene	8.607	8.331	5.809	7.350	8.374	8.774	8.634	7.340	7.902	12.84	
90) T	n-Butylbenzene	8.436	7.846	4.970	6.701	8.341	8.873	8.816	7.647	7.704	17.03	

(#) = Out of Range

Data Path : I:\MS26\Data\2024_10\03\
 Data File : 10032401.D
 Acq On : 03 Oct 2024 18:58
 Operator : PH
 Sample : CCV R26100324_5ng
 Misc : S37-08132405/S37-09102401
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 04 10:52:29 2024
 Quant Method : I:\MS26\Methods\R26092324.M
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
 QLast Update : Tue Sep 24 11:22:57 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 IR	Bromochloromethane (IS1)	1.000	1.000	0.0	106	0.00
2 T	Propene	1.500	1.558	-3.9	129	0.00
3 T	Dichlorodifluoromethane (CF	2.583	2.329	9.8	106	0.00
4 T	Chloromethane	1.482	1.416	4.5	112	0.00
5 T	1,2-Dichloro-1,1,2,2-tetra	1.422	1.248	12.2	104	0.00
6 T	Vinyl Chloride	1.642	1.523	7.2	108	0.00
7 T	1,3-Butadiene	1.320	1.303	1.3	115	0.00
8 T	Bromomethane	1.160	1.036	10.7	105	0.00
9 T	Chloroethane	0.894	0.803	10.2	104	0.00
10 T	Ethanol	0.711	0.715	-0.6	111	0.00
11 T	Acetonitrile	1.790	1.681	6.1	113	0.00
12 T	Acrolein	0.797	0.736	7.7	108	0.00
13 T	Acetone	2.343	2.229	4.9	109	0.00
14 T	Trichlorofluoromethane	2.601	2.310	11.2	103	0.00
15 T	2-Propanol (Isopropanol)	2.783	2.579	7.3	108	0.00
16 T	Acrylonitrile	1.533	1.382	9.8	107	0.00
17 T	1,1-Dichloroethene	1.793	1.657	7.6	110	0.00
18 T	2-Methyl-2-Propanol (tert-B	2.747	2.760	-0.5	111	0.00
19 T	Methylene Chloride	1.263	1.298	-2.8	116	0.00
20 T	3-Chloro-1-propene (Allyl C	1.386	1.301	6.1	103	0.00
21 T	Trichlorotrifluoroethane	1.395	1.278	8.4	97	0.00
22 T	Carbon Disulfide	3.923	4.083	-4.1	99	0.00
23 T	trans-1,2-Dichloroethene	1.632	1.478	9.4	106	0.00
24 T	1,1-Dichloroethane	1.941	1.735	10.6	103	0.00
25 T	Methyl tert-Butyl Ether	3.274	2.961	9.6	101	0.00
26 T	Vinyl Acetate	2.287	2.333	-2.0	106	0.00
27 T	2-Butanone (MEK)	2.461	2.255	8.4	104	0.00
28 T	cis-1,2-Dichloroethene	1.467	1.282	12.6	100	0.00
29 T	Diisopropyl Ether	2.837	2.778	2.1	103	0.00
30 T	Ethyl Acetate	0.394	0.384	2.5	104	0.00
31 T	n-Hexane	1.694	1.552	8.4	100	0.00
32 T	Chloroform	2.102	1.815	13.7	100	0.00
33 S	1,2-Dichloroethane-d4(SS1)	1.191	1.209	-1.5	107	0.00
34 T	Tetrahydrofuran (THF)	0.699	0.648	7.3	101	0.00
35 T	Ethyl tert-Butyl Ether	1.387	1.298	6.4	100	0.00
36 T	1,2-Dichloroethane	1.563	1.327	15.1	99	0.00
37 IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	106	0.00
38 T	1,1,1-Trichloroethane	0.507	0.422	16.8	98	0.00
39 T	Benzene	1.253	1.125	10.2	108	0.00
40 T	Carbon Tetrachloride	0.498	0.405	18.7	97	0.00
41 T	Cyclohexane	0.460	0.410	10.9	99	0.00
42 T	tert-Amyl Methyl Ether	0.740	0.662	10.5	102	0.00
43 T	1,2-Dichloropropane	0.285	0.239	16.1	102	0.00
44 T	Bromodichloromethane	0.426	0.354	16.9	102	0.00
45 T	Trichloroethene	0.413	0.343	16.9	99	0.00
46 T	1,4-Dioxane	0.245	0.222	9.4	99	0.00
47 T	2,2,4-Trimethylpentane (Iso	1.119	1.007	10.0	102	0.00
48 T	Methyl Methacrylate	0.134	0.123	8.2	97	0.00
49 T	n-Heptane	0.298	0.277	7.0	102	0.00
50 T	cis-1,3-Dichloropropene	0.492	0.413	16.1	98	0.00
51 T	4-Methyl-2-pentanone	0.214	0.212	0.9	100	0.00
52 T	trans-1,3-Dichloropropene	0.407	0.351	13.8	99	0.00
53 T	1,1,2-Trichloroethane	0.330	0.274	17.0	99	0.00

Data Path : I:\MS26\Data\2024_10\03\
 Data File : 10032401.D
 Acq On : 03 Oct 2024 18:58
 Operator : PH
 Sample : CCV R26100324_5ng
 Misc : S37-08132405/S37-09102401
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 04 10:52:29 2024
 Quant Method : I:\MS26\Methods\R26092324.M
 Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
 QLast Update : Tue Sep 24 11:22:57 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	IR Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	105	0.00
55	S Toluene-d8 (SS2)	7.770	7.766	0.1	105	0.00
56	T Toluene	9.378	8.115	13.5	100	0.00
57	T 2-Hexanone	3.234	3.301	-2.1	102	0.00
58	T Dibromochloromethane	3.077	2.561	16.8	98	0.00
59	T 1,2-Dibromoethane	2.789	2.402	13.9	99	0.00
60	T n-Butyl Acetate	3.352	3.401	-1.5	100	0.00
61	T n-Octane	1.498	1.523	-1.7	104	0.00
62	T Tetrachloroethene	3.336	2.826	15.3	98	0.00
63	T Chlorobenzene	6.981	5.952	14.7	99	0.00
64	T Ethylbenzene	9.794	8.358	14.7	94	0.00
65	T m- & p-Xylenes	7.683	7.227	5.9	97	0.00
66	T Bromoform	2.563	2.049	20.1	93	0.00
67	T Styrene	5.908	5.484	7.2	94	0.00
68	T o-Xylene	7.548	7.230	4.2	97	0.00
69	T n-Nonane	2.704	2.708	-0.1	102	0.00
70	T 1,1,2,2-Tetrachloroethane	4.087	3.556	13.0	100	0.00
71	S Bromofluorobenzene (SS3)	2.998	2.996	0.1	103	0.00
72	T Cumene	10.423	9.183	11.9	96	0.00
73	T alpha-Pinene	4.592	4.206	8.4	94	0.00
74	T n-Propylbenzene	11.314	10.841	4.2	98	0.00
75	T 4-Ethyltoluene	9.265	9.151	1.2	96	0.00
76	T 1,3,5-Trimethylbenzene	7.912	7.875	0.5	97	0.00
77	T 1,2,4-Trimethylbenzene	7.808	8.006	-2.5	96	0.00
78	T Benzyl Chloride	5.613	5.665	-0.9	99	0.00
79	T 1,3-Dichlorobenzene	5.905	5.433	8.0	99	0.00
80	T 1,4-Dichlorobenzene	5.929	5.349	9.8	97	0.00
81	T sec-Butylbenzene	10.663	10.327	3.2	97	0.00
82	T 4-Isopropyltoluene (p-Cymen	8.864	8.718	1.6	95	0.00
83	T 1,2-Dichlorobenzene	5.917	5.249	11.3	98	0.00
84	T d-Limonene	2.143	2.260	-5.5	97	0.00
85	T 1,2-Dibromo-3-Chloropropane	2.097	1.767	15.7	93	0.00
86	T 1,2,4-Trichlorobenzene	3.780	3.195	15.5	90	0.00
87	T Naphthalene	8.867	8.750	1.3	90	0.00
88	T Hexachlorobutadiene	3.087	2.430	21.3	91	0.00
89	T tert-Butylbenzene	7.902	7.538	4.6	95	0.00
90	T n-Butylbenzene	7.704	7.533	2.2	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0