TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 460-39532-1

Job Description: DOW Waterloo

For:
CH2M Hill, Inc.
1034 S Brentwood Blvd
Suite 2300
Richmond Heights, MO 63117

Attention: Ms. Shane Lowe

Approved for release.
Jannel O Franklin
Project Manager I
5/16/2012 3:05 PM

Designee for
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05/16/2012

cc: Ms. Monica Calabria
Ms. Lisa La Fortune

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CASE NARRATIVE

Client: CH2M Hill, Inc.

Project: DOW Waterloo

Report Number: 460-39532-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 4/26/2012 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

Except:

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): Sample time for sample #1 on bottle reads 12:45 / Sample #2 13:30 / Sample #3 15:55 sample #2 has no ID on label.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

HEXAVALENT CHROMIUM

Samples 460-39532-1 through 460-39532-4 were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7199. The samples were analyzed on 04/26/2012.

Samples 460-39532-1(5X) and 460-39532-3(2X) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following samples were received with greater than 50% of holding time expired: MW-21-042512 (460-39532-1), MW-23-042512 (460-39532-2), MW-32-042512 (460-39532-3). As such, the laboratory had insufficient time remaining to perform the analysis within holding time.

No difficulties were encountered during the hexchrome Cr6 analyses.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-39532-1	MW-21-042512	Water	04/25/2012 0911	04/26/2012 0915
460-39532-2	MW-23-042512	Water	04/25/2012 1048	04/26/2012 0915
460-39532-3	MW-32-042512	Water	04/25/2012 1245	04/26/2012 0915
460-39532-4	EB-042512-GW	Water	04/25/2012 1555	04/26/2012 0915

EXECUTIVE SUMMARY - Detections

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
460-39532-1	**MW-21-042512**					
Chromium (hexavalent)		4.3	J H	5.0	ug/L	7199
460-39532-2	**MW-23-042512**					
Chromium (hexavalent)		0.74	J H	1.0	ug/L	7199

METHOD SUMMARY

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Chromium, Hexavalent (IC)	TAL EDI	SW846 7199	

Lab References:

TAL EDI = TestAmerica Edison

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Method	Analyst	Analyst ID
SW846 7199	Kamenetskaya, Raisa	RK

General Chemistry

Client Sample ID: **MW-21-042512**

Lab Sample ID: 460-39532-1 Date Sampled: 04/25/2012 0911

Client Matrix: Water Date Received: 04/26/2012 0915

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium (hexavalent)	4.3	J H	ug/L	2.8	5.0	5.0	7199

Analysis Batch: 460-112060 Analysis Date: 04/26/2012 1651

General Chemistry

Client Sample ID: **MW-23-042512**

Lab Sample ID: 460-39532-2 Date Sampled: 04/25/2012 1048

Client Matrix: Water Date Received: 04/26/2012 0915

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium (hexavalent)	0.74	J H	ug/L	0.56	1.0	1.0	7199

Analysis Batch: 460-112060 Analysis Date: 04/26/2012 1521

General Chemistry

Client Sample ID: **MW-32-042512**

Lab Sample ID: 460-39532-3 Date Sampled: 04/25/2012 1245

Client Matrix: Water Date Received: 04/26/2012 0915

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium (hexavalent)	1.1	U H	ug/L	1.1	2.0	2.0	7199

Analysis Batch: 460-112060 Analysis Date: 04/26/2012 1659

General Chemistry

Client Sample ID: **EB-042512-GW**

Lab Sample ID: 460-39532-4 Date Sampled: 04/25/2012 1555

Client Matrix: Water Date Received: 04/26/2012 0915

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chromium (hexavalent)	0.56	U	ug/L	0.56	1.0	1.0	7199

Analysis Batch: 460-112060 Analysis Date: 04/26/2012 1357

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Method Blank - Batch: 460-111866

Method: 7199
Preparation: N/A

Lab Sample ID:	MB 460-111866/9	Analysis Batch:	460-111866	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4181056.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/18/2012 1056	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium (hexavalent)	0.56	U	0.56	1.0

Lab Control Sample - Batch: 460-111866

Method: 7199
Preparation: N/A

Lab Sample ID:	LCS 460-111866/11	Analysis Batch:	460-111866	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4181113.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/18/2012 1113	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	20.7	20.20	97	85 - 115	

Post Digestion Spike - Batch: 460-111866

Method: 7199
Preparation: N/A

Lab Sample ID:	360-40055-A-6 PDS	Analysis Batch:	460-111866	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4181252.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/18/2012 1252	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	0.56	U	5.00	4.87	97	85 - 115	

Matrix Spike - Batch: 460-111866

Method: 7199
Preparation: N/A

Lab Sample ID:	360-40055-A-6 MS	Analysis Batch:	460-111866	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4181309.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/18/2012 1309	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	0.56	U	40.0	40.44	101	85 - 115	

Duplicate - Batch: 460-111866

Method: 7199
Preparation: N/A

Lab Sample ID:	360-40055-A-6 DU	Analysis Batch:	460-111866	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4181227.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/18/2012 1227	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chromium (hexavalent)	0.56	U	0.56	NC	20	U

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Method Blank - Batch: 460-112060

Method: 7199
Preparation: N/A

Lab Sample ID:	MB 460-112060/9	Analysis Batch:	460-112060	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4261139.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/26/2012 1139	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium (hexavalent)	0.56	U	0.56	1.0

Lab Control Sample - Batch: 460-112060

Method: 7199
Preparation: N/A

Lab Sample ID:	LCS 460-112060/10	Analysis Batch:	460-112060	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4261147.CHW
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/26/2012 1147	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	20.7	20.83	100	85 - 115	

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Post Digestion Spike - Batch: 460-112060

Method: 7199
Preparation: N/A

Lab Sample ID:	180-10163-A-4 PDS ^10	Analysis Batch:	460-112060	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4261554.CHW
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/26/2012 1554	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	5.6	U	50.0	47.16	94	85 - 115	

Matrix Spike - Batch: 460-112060

Method: 7199
Preparation: N/A

Lab Sample ID:	180-10163-A-4 MS ^10	Analysis Batch:	460-112060	Instrument ID:	IC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	4261610.CHW
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/26/2012 1610	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chromium (hexavalent)	5.6	U	400	391.6	98	85 - 115	

DATA REPORTING QUALIFIERS

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	H	Sample was prepped or analyzed beyond the specified holding time

Client: CH2M Hill, Inc. Job Number: 460-39532-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:460-111866					
LCS 460-111866/11	Lab Control Sample	T	Water	7199	
MB 460-111866/9	Method Blank	T	Water	7199	
360-40055-A-6 DU	Duplicate	T	Water	7199	
360-40055-A-6 MS	Matrix Spike	T	Water	7199	
Analysis Batch:460-112060					
LCS 460-112060/10	Lab Control Sample	T	Water	7199	
MB 460-112060/9	Method Blank	T	Water	7199	
180-10163-A-4 MS ^10	Matrix Spike	T	Water	7199	
460-39532-1	MW-21-042512	T	Water	7199	
460-39532-2	MW-23-042512	T	Water	7199	
460-39532-3	MW-32-042512	T	Water	7199	
460-39532-4	EB-042512-GW	T	Water	7199	

Report Basis
T = Total

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Laboratory Chronicle

Lab ID: 460-39532-1 **Client ID:** MW-21-042512

Sample Date/Time: 04/25/2012 09:11 Received Date/Time: 04/26/2012 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	460-39532-A-1 ^5		460-112060		04/26/2012 16:51	5	TAL EDI	RK

Lab ID: 460-39532-2 **Client ID:** MW-23-042512

Sample Date/Time: 04/25/2012 10:48 Received Date/Time: 04/26/2012 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	460-39532-A-2		460-112060		04/26/2012 15:21	1	TAL EDI	RK

Lab ID: 460-39532-3 **Client ID:** MW-32-042512

Sample Date/Time: 04/25/2012 12:45 Received Date/Time: 04/26/2012 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	460-39532-A-3 ^2		460-112060		04/26/2012 16:59	2	TAL EDI	RK

Lab ID: 460-39532-4 **Client ID:** EB-042512-GW

Sample Date/Time: 04/25/2012 15:55 Received Date/Time: 04/26/2012 09:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	460-39532-A-4		460-112060		04/26/2012 13:57	1	TAL EDI	RK

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	MB 460-111866/9		460-111866		04/18/2012 10:56	1	TAL EDI	RK
A:7199	MB 460-112060/9		460-112060		04/26/2012 11:39	1	TAL EDI	RK

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	LCS 460-111866/11		460-111866		04/18/2012 11:13	1	TAL EDI	RK
A:7199	LCS 460-112060/10		460-112060		04/26/2012 11:47	1	TAL EDI	RK

Client: CH2M Hill, Inc. Job Number: 460-39532-1

Laboratory Chronicle

Lab ID: MS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	360-40055-A-6 MS		460-111866		04/18/2012 13:09	1	TAL EDI	RK
A:7199	180-10163-A-4 MS ^10		460-112060		04/26/2012 16:10	10	TAL EDI	RK

Lab ID: DU **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	360-40055-A-6 DU		460-111866		04/18/2012 12:27	1	TAL EDI	RK

Lab ID: PDS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:7199	360-40055-A-6 PDS		460-111866		04/18/2012 12:52	1	TAL EDI	RK
A:7199	180-10163-A-4 PDS ^10		460-112060		04/26/2012 15:54	10	TAL EDI	RK

Lab References:
TAL EDI = TestAmerica Edison

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-39532-1

SDG No.:

Project: DOW Waterloo

Client Sample ID	Lab Sample ID
MW-21-042512	460-39532-1
MW-23-042512	460-39532-2
MW-32-042512	460-39532-3
EB-042512-GW	460-39532-4

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-21-042512 Lab Sample ID: 460-39532-1

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 09:11

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium (hexavalent)	4.3	5.0	2.8	ug/L	J	H	5	7199

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-23-042512 Lab Sample ID: 460-39532-2

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 10:48

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium (hexavalent)	0.74	1.0	0.56	ug/L	J	H	1	7199

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-32-042512 Lab Sample ID: 460-39532-3

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 12:45

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium (hexavalent)	1.1	2.0	1.1	ug/L	U	H	2	7199

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EB-042512-GW
Lab Sample ID: 460-39532-4
Lab Name: TestAmerica Edison
Job No.: 460-39532-1
SDG ID.:
Matrix: Water
Date Sampled: 04/25/2012 15:55
Reporting Basis: WET
Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium (hexavalent)	0.56	1.0	0.56	ug/L	U		1	7199

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Analyst: RK Batch Start Date: 04/18/2012

Reporting Units: ug/L Analytical Batch No.: 111866

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
6	ICV	10:32	Chromium (hexavalent)	24.60	25.0	98	90-110		WThcrIM6_00367
7	ICB	10:40	Chromium (hexavalent)	0.56				U	
18	CCV	12:11	Chromium (hexavalent)	25.14	25.0	101	90-110		WThcrIM6_00367
19	CCB	12:19	Chromium (hexavalent)	0.56				U	
26	CCV	13:17	Chromium (hexavalent)	25.21	25.0	101	90-110		WThcrIM6_00367
27	CCB	13:25	Chromium (hexavalent)	0.56				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Analyst: RK Batch Start Date: 04/26/2012

Reporting Units: ug/L Analytical Batch No.: 112060

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
6	ICV	11:14	Chromium (hexavalent)	24.67	25.0	99	90-110		WThcrIM6_00371
7	ICB	11:22	Chromium (hexavalent)	0.56				U	
19	CCV	13:07	Chromium (hexavalent)	26.00	25.0	104	90-110		WThcrIM6_00371
20	CCB	13:15	Chromium (hexavalent)	0.56				U	
31	CCV	14:47	Chromium (hexavalent)	25.44	25.0	102	90-110		WThcrIM6_00371
32	CCB	14:56	Chromium (hexavalent)	0.56				U	
43	CCV	16:27	Chromium (hexavalent)	25.36	25.0	101	90-110		WThcrIM6_00371
44	CCB	16:35	Chromium (hexavalent)	0.56				U	
49	CCV	17:16	Chromium (hexavalent)	22.51	25.0	90	90-110		WThcrIM6_00371
50	CCB	17:24	Chromium (hexavalent)	0.56				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 111866	Date: 04/18/2012 10:56						
7199	MB 460-111866/9	Chromium (hexavalent)	0.56	U	ug/L	1.0	1
Batch ID: 112060	Date: 04/26/2012 11:39						
7199	MB 460-112060/9	Chromium (hexavalent)	0.56	U	ug/L	1.0	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111866 Date: 04/18/2012 13:09											
7199	360-40055-A-6	Chromium (hexavalent)	0.56	U	ug/L						
7199	360-40055-A-6 MS	Chromium (hexavalent)	40.44		ug/L	40.0	101	85-115			
Batch ID: 112060 Date: 04/26/2012 16:10											
7199	180-10163-A-4 ^10	Chromium (hexavalent)	5.6	U	ug/L						
7199	180-10163-A-4 MS ^10	Chromium (hexavalent)	391.6		ug/L	400	98	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111866 Date: 04/18/2012 12:52											
7199	360-40055-A-6	Chromium (hexavalent)	0.56	U	ug/L						
7199	360-40055-A-6 PDS	Chromium (hexavalent)	4.87		ug/L	5.00	97	85-115			
Batch ID: 112060 Date: 04/26/2012 15:54											
7199	180-10163-A-4 ^10	Chromium (hexavalent)	5.6	U	ug/L						
7199	180-10163-A-4 PDS ^10	Chromium (hexavalent)	47.16		ug/L	50.0	94	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 111866	Date: 04/18/2012 12:27							
7199		360-40055-A-6	Chromium (hexavalent)	0.56	ug/L			U
7199		360-40055-A-6 DU	Chromium (hexavalent)	0.56	ug/L	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 111866	Date: 04/18/2012 11:13										
						LCS Source:	WThcrsLCS_00057				
7199	LCS 460-111866/11	Chromium (hexavalent)	20.20		ug/L	20.7	97	85-115			
Batch ID: 112060	Date: 04/26/2012 11:47										
						LCS Source:	WThcrsLCS_00057				
7199	LCS 460-112060/10	Chromium (hexavalent)	20.83		ug/L	20.7	100	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-39532-1

SDG Number:

Matrix: Water Instrument ID: IC

Method: 7199 MDL Date: 08/06/2010 10:12

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Chromium (hexavalent)		1	0.563

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-39532-1

SDG Number:

Matrix: Water Instrument ID: IC

Method: 7199 XMDL Date: 08/06/2010 10:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Chromium (hexavalent)		1	0.563

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Instrument ID: IC Method: 7199

Start Date: 04/18/2012 09:51 End Date: 04/18/2012 13:25

Lab Sample ID	D / F	Type	Time	Analytes																			
				Cr6																			
ZZZZZZ			09:51																				
ZZZZZZ			09:59																				
ZZZZZZ			10:07																				
ZZZZZZ			10:15																				
ZZZZZZ			10:24																				
ICV 460-111866/6	1		10:32	X																			
ICB 460-111866/7	1		10:40	X																			
ZZZZZZ			10:48																				
MB 460-111866/9	1	T	10:56	X																			
ZZZZZZ			11:05																				
LCS 460-111866/11	1	T	11:13	X																			
ZZZZZZ			11:21																				
ZZZZZZ			11:29																				
ZZZZZZ			11:38																				
ZZZZZZ			11:46																				
ZZZZZZ			11:54																				
ZZZZZZ			12:02																				
CCV 460-111866/18	1		12:11	X																			
CCB 460-111866/19	1		12:19	X																			
360-40055-A-6 DU	1	T	12:27	X																			
ZZZZZZ			12:36																				
ZZZZZZ			12:44																				
360-40055-A-6 PDS	1	T	12:52	X																			
ZZZZZZ			13:01																				
360-40055-A-6 MS	1	T	13:09	X																			
CCV 460-111866/26	1		13:17	X																			
CCB 460-111866/27	1		13:25	X																			

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Instrument ID: IC Method: 7199

Start Date: 04/26/2012 10:33 End Date: 04/26/2012 17:24

Lab Sample ID	D / F	Type	Time	Analytes																				
				Cr6																				
ZZZZZZ			10:33																					
ZZZZZZ			10:41																					
ZZZZZZ			10:50																					
ZZZZZZ			10:58																					
ZZZZZZ			11:06																					
ICV 460-112060/6	1		11:14	X																				
ICB 460-112060/7	1		11:22	X																				
ZZZZZZ			11:31																					
MB 460-112060/9	1	T	11:39	X																				
LCS 460-112060/10	1	T	11:47	X																				
ZZZZZZ			11:56																					
ZZZZZZ			12:04																					
ZZZZZZ			12:17																					
ZZZZZZ			12:25																					
ZZZZZZ			12:34																					
ZZZZZZ			12:42																					
ZZZZZZ			12:50																					
ZZZZZZ			12:59																					
CCV 460-112060/19	1		13:07	X																				
CCB 460-112060/20	1		13:15	X																				
ZZZZZZ			13:24																					
ZZZZZZ			13:32																					
ZZZZZZ			13:41																					
ZZZZZZ			13:49																					
460-39532-4	1	T	13:57	X																				
ZZZZZZ			14:06																					
ZZZZZZ			14:14																					
ZZZZZZ			14:22																					
ZZZZZZ			14:31																					
ZZZZZZ			14:39																					
CCV 460-112060/31	1		14:47	X																				
CCB 460-112060/32	1		14:56	X																				
ZZZZZZ			15:04																					
ZZZZZZ			15:12																					
460-39532-2	1	T	15:21	X																				
ZZZZZZ			15:29																					
ZZZZZZ			15:37																					
ZZZZZZ			15:45																					
180-10163-A-4 PDS ^10	10	T	15:54	X																				
ZZZZZZ			16:02																					
180-10163-A-4 MS ^10	10	T	16:10	X																				
ZZZZZZ			16:18																					

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Instrument ID: IC Method: 7199

Start Date: 04/26/2012 10:33 End Date: 04/26/2012 17:24

Lab Sample ID	D / F	Type	Time	Analytes																			
				Cr6																			
CCV 460-112060/43	1		16:27	X																			
CCB 460-112060/44	1		16:35	X																			
ZZZZZZ			16:43																				
460-39532-1	5	T	16:51	X																			
460-39532-3	2	T	16:59	X																			
ZZZZZZ			17:08																				
CCV 460-112060/49	1		17:16	X																			
CCB 460-112060/50	1		17:24	X																			

Prep Types

T = Total/NA

Report date: 5/8/2012 10:27:34 AM
Printed by: TestAmerica - Edison

Ident: 0
Analysis from: 4/18/2012 9:51:27 AM
File: w4180951.chw Last save: 4/18/2012 10:48:45 AM

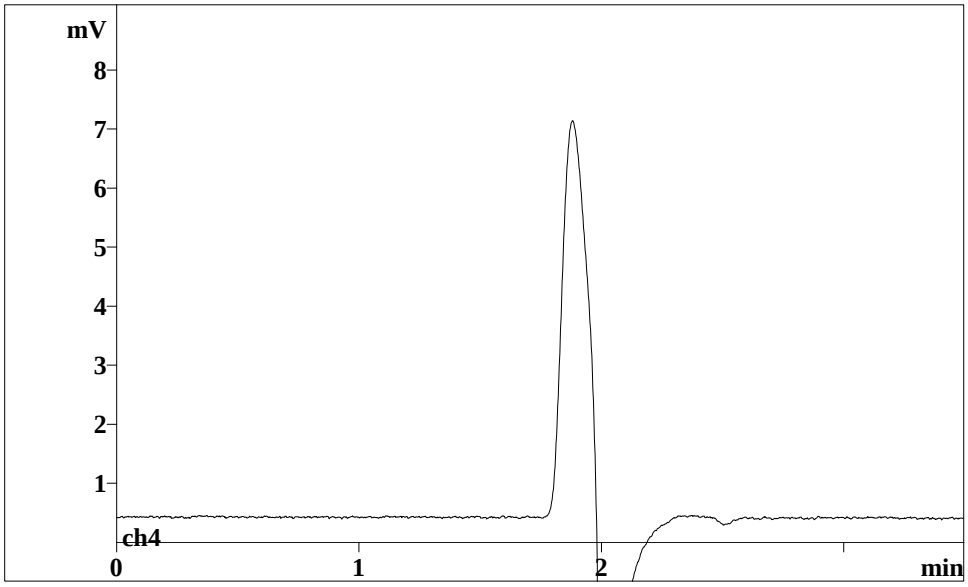
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35982

SAMPLE:
:
Vial number: 1
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/8/2012 10:27:41 AM
Printed by: TestAmerica - Edison

Ident: 1.0
Analysis from: 4/18/2012 9:59:36 AM
File: w4180959.chw Last save: 4/18/2012 10:48:45 AM

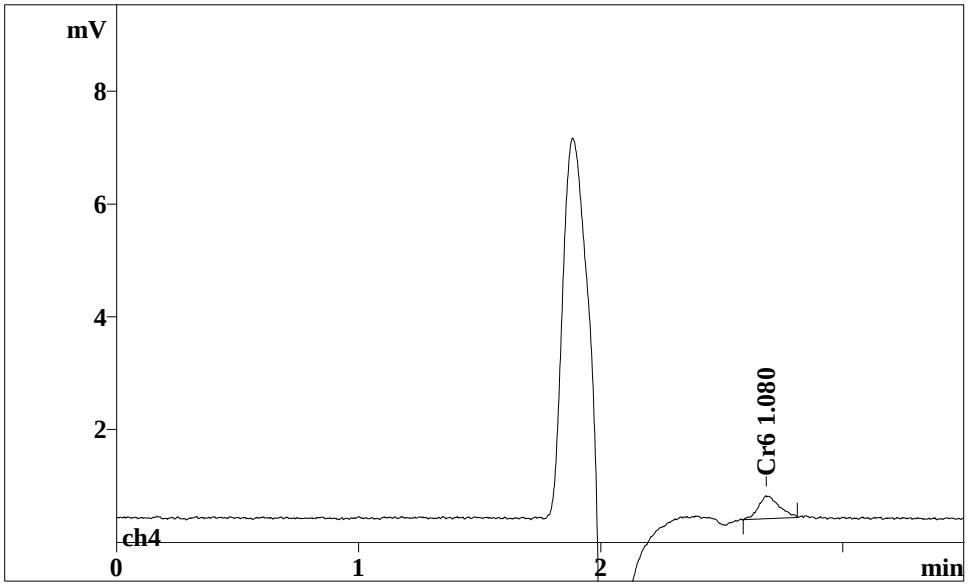
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35983

SAMPLE:
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.088;	0.40;	98.21;	2.408;	100.00;	0.00;	0.00;	46

Report date: 5/8/2012 10:27:45 AM
Printed by: TestAmerica - Edison

Ident: 5.0
Analysis from: 4/18/2012 10:07:44 AM
File: w4181007.chw Last save: 4/18/2012 10:48:45 AM

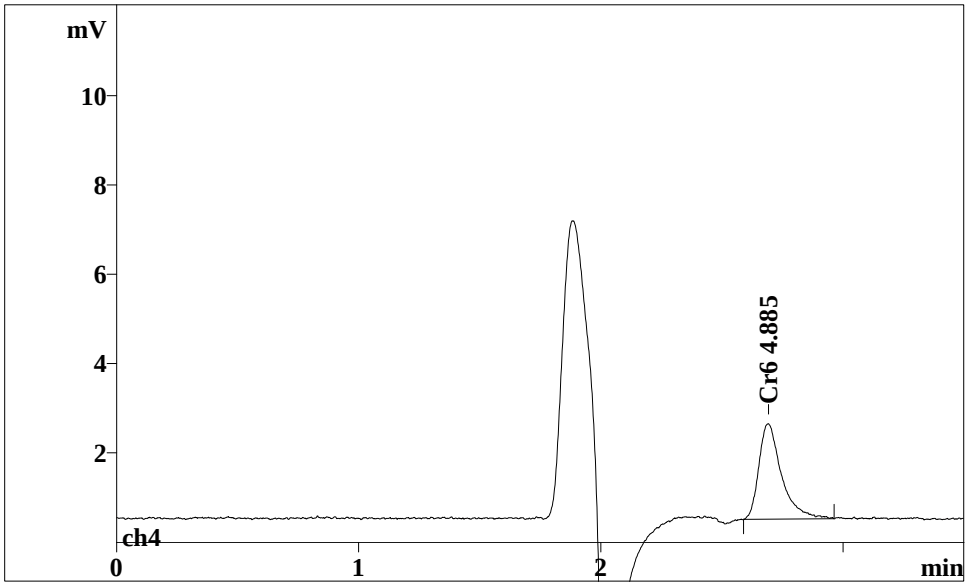
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35984

SAMPLE:
:
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.093;	2.14;	99.92;	13.898;	100.00;	0.00;	0.00;	38

Report date: 5/8/2012 10:27:50 AM
Printed by: TestAmerica - Edison

Ident: 25.0
Analysis from: 4/18/2012 10:15:53 AM
File: w4181015.chw Last save: 4/18/2012 10:48:45 AM

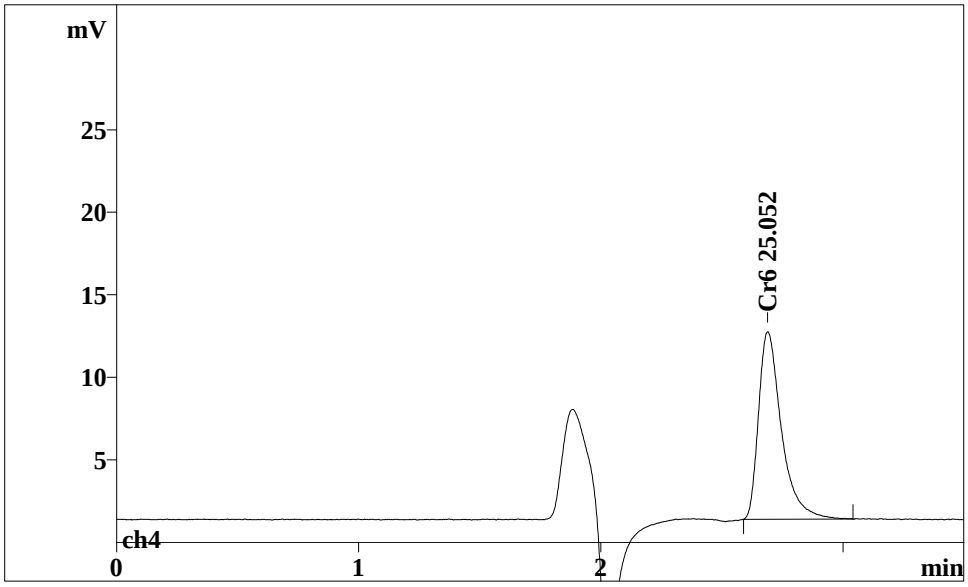
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35985

SAMPLE:
:
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	11.37;	100.02;	74.781;	100.00;	0.00;	0.00;	37

Report date: 5/8/2012 10:27:55 AM
Printed by: TestAmerica - Edison

Ident: 50.0
Analysis from: 4/18/2012 10:24:03 AM
File: w4181024.chw Last save: 4/18/2012 10:48:45 AM

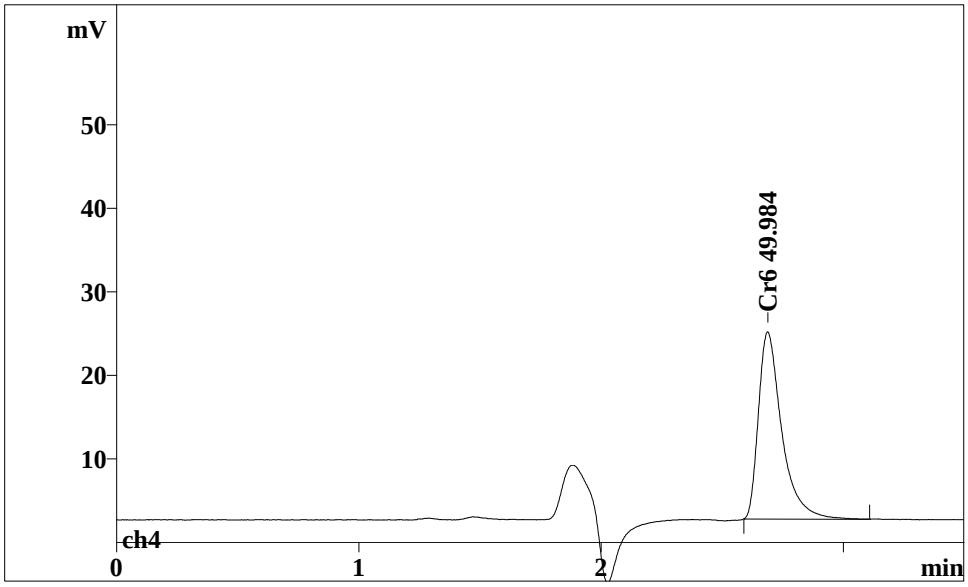
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35986

SAMPLE:
:
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

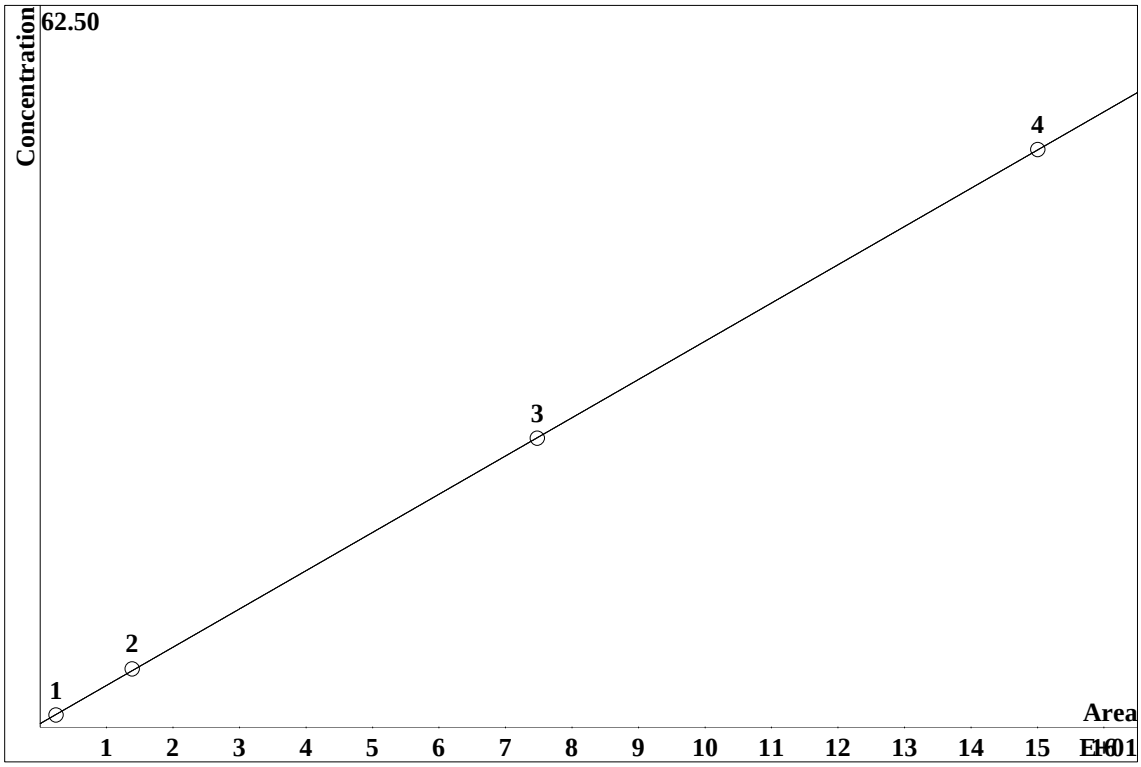
Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.097;	22.43;	99.96;	150.052;	100.00;	0.00;	0.00;	36

CALIBRATION OF COMPONENT Cr6

Method: stl_hexchrome_water5.mtw
Equation: Q = 0.331231·A + 0.281751
RSD: 0.523 %
Correlation coefficient: 0.999993



K3 = 0 K2 = 0 K1 = 0.331231 K0 = 0.281751
Base: Area
Ref.channel: ch4
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1;	0.4066;	2.408;	1;	1;	2.683;	Yes;	w4180959.chw
2;	2.138;	13.9;	5;	1;	2.683;	Yes;	w4181007.chw
3;	11.37;	74.78;	25;	1;	2.683;	Yes;	w4181015.chw
4;	22.44;	150.1;	50;	1;	2.683;	Yes;	w4181024.chw

Report date: 5/8/2012 10:28:08 AM
Printed by: TestAmerica - Edison

Ident: ICV
Analysis from: 4/18/2012 10:32:14 AM
File: w4181032.chw Last save: 4/18/2012 10:48:46 AM

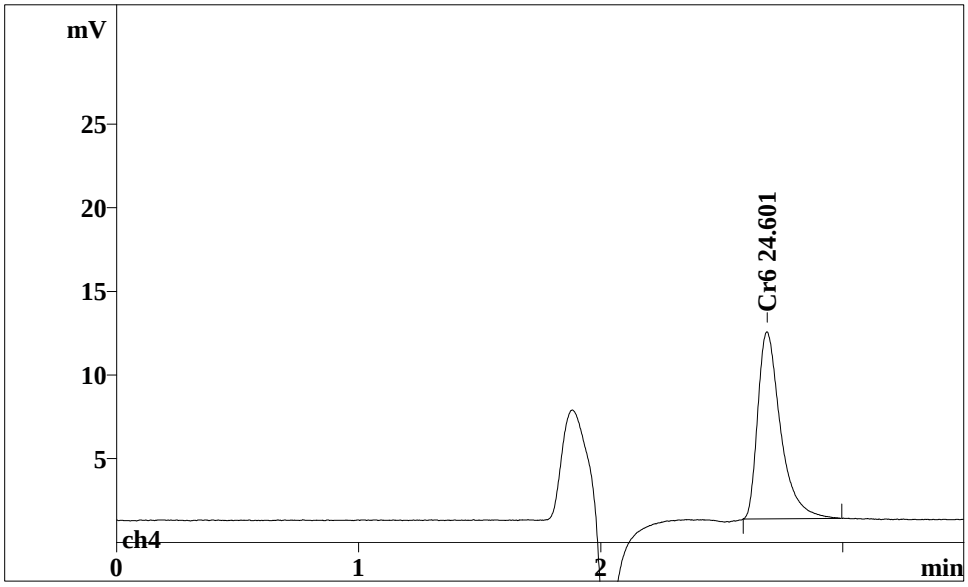
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35987

SAMPLE:
:
Vial number: 6
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	11.19;	99.99;	73.421;	100.00;	0.00;	0.00;	37

Report date: 5/8/2012 10:28:12 AM
Printed by: TestAmerica - Edison

Ident: ICB
Analysis from: 4/18/2012 10:40:26 AM
File: w4181040.chw Last save: 4/18/2012 10:48:46 AM

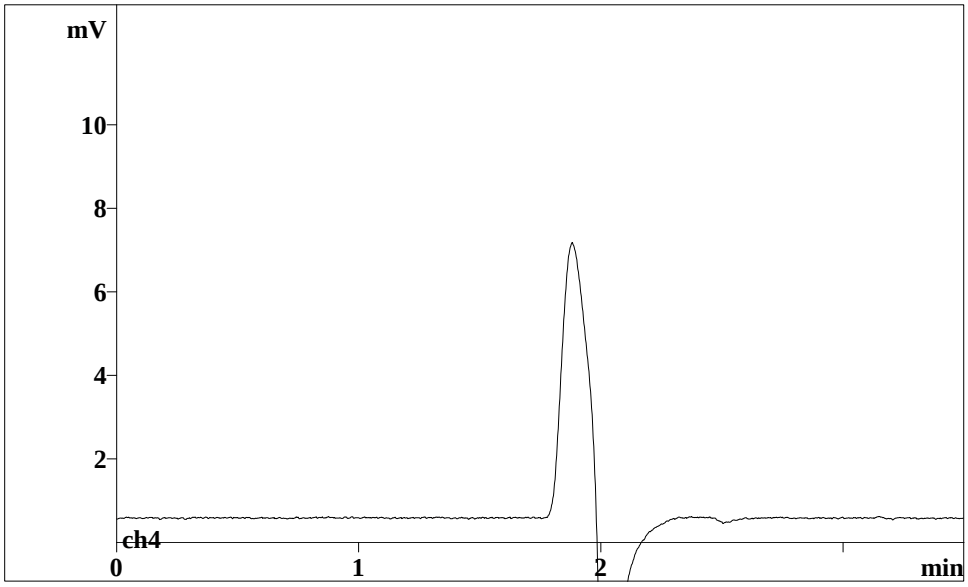
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 9:02:
Run operator: TestAmerica - Edison
Analysis number: 35988

SAMPLE:
:
Vial number: 7
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/8/2012 10:28:19 AM
Printed by: TestAmerica - Edison

Ident: MB
Analysis from: 4/18/2012 10:48:38 AM
File: w4181048.chw Last save: 4/18/2012 10:52:09 AM

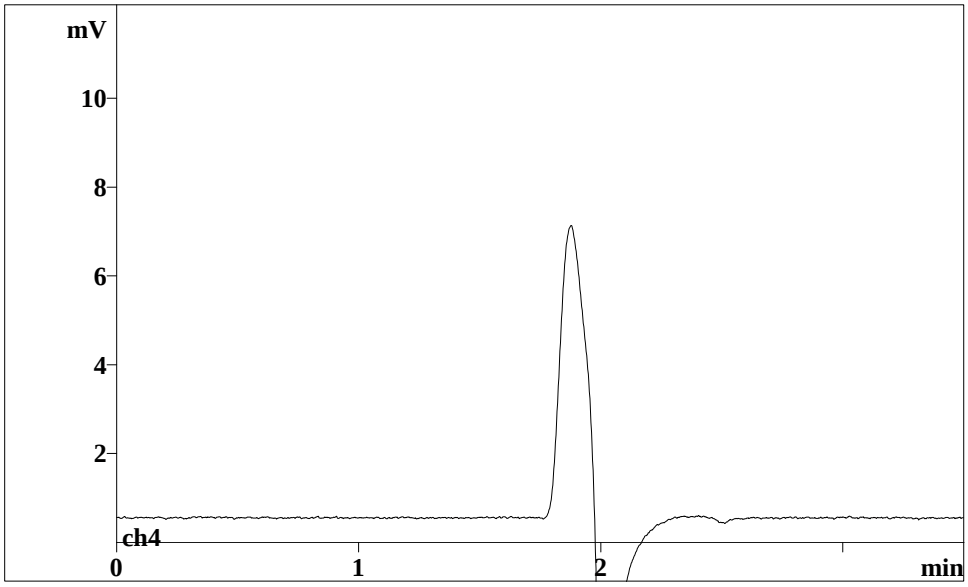
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35989

SAMPLE:
:
Vial number: 8
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:28:27 AM
Printed by: TestAmerica - Edison

Ident: MB
Analysis from: 4/18/2012 10:56:51 AM
File: w4181056.chw Last save: 4/18/2012 11:00:21 AM

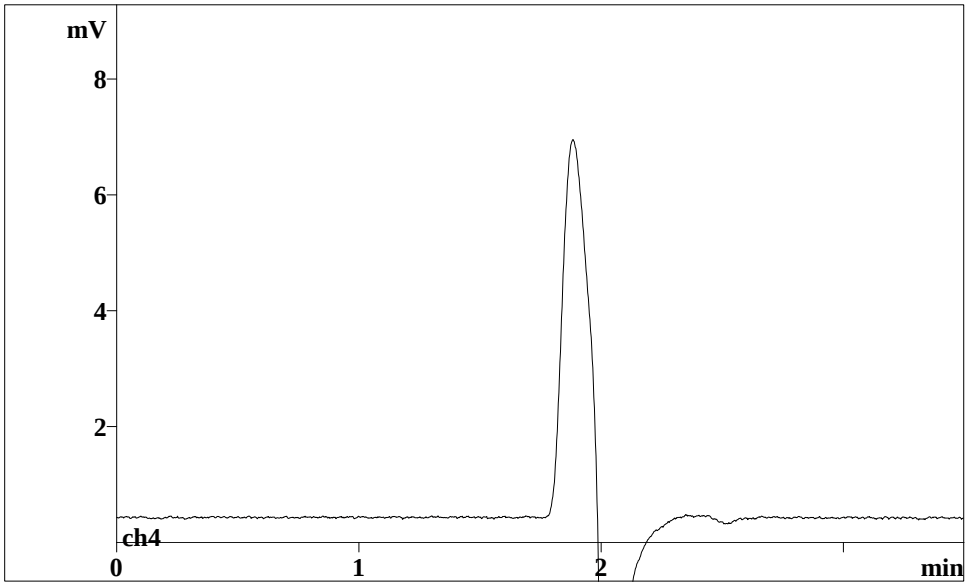
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35990

SAMPLE:
:
Vial number: 9
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/8/2012 10:28:32 AM
Printed by: TestAmerica - Edison

Ident: LCS
Analysis from: 4/18/2012 11:05:04 AM
File: w4181105.chw Last save: 4/18/2012 11:08:34 AM

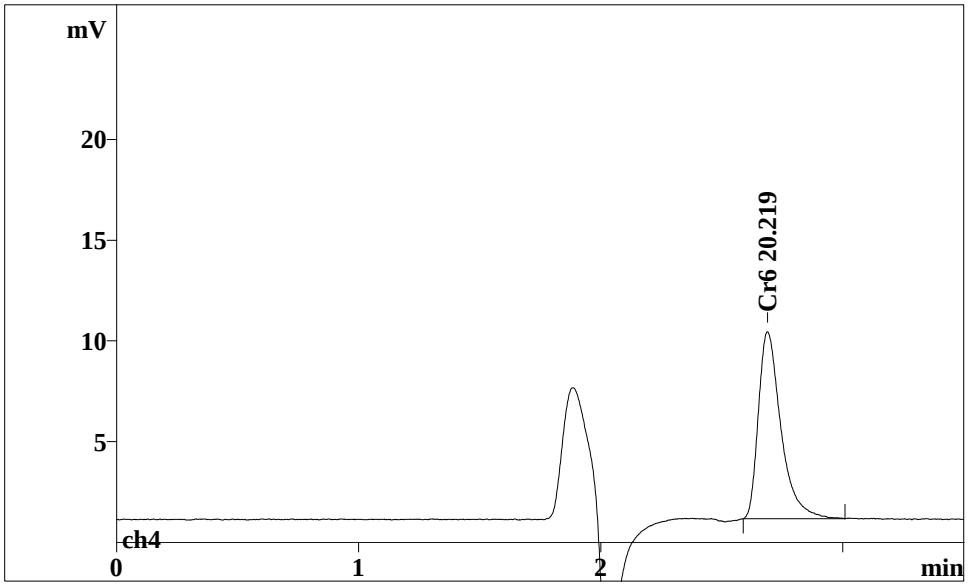
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35991

SAMPLE:
:
Vial number: 10
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.095;	9.28;	99.98;	60.190;	100.00;	0.00;	0.00;	38

Report date: 5/8/2012 10:28:35 AM
Printed by: TestAmerica - Edison

Ident: LCS
Analysis from: 4/18/2012 11:13:18 AM
File: w4181113.chw Last save: 4/18/2012 11:16:49 AM

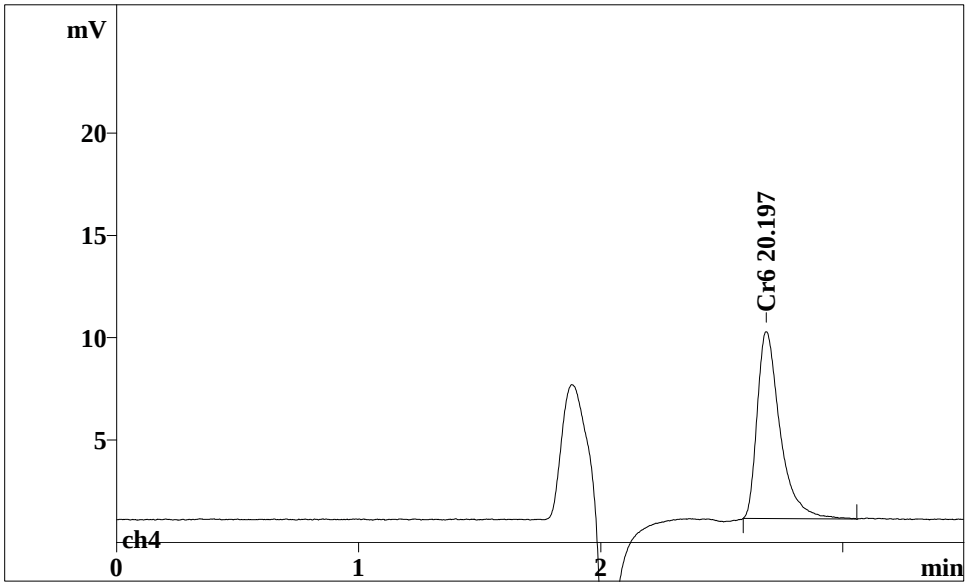
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35992

SAMPLE:
:
Vial number: 11
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.096;	9.14;	100.08;	60.124;	100.00;	0.00;	0.00;	37

Report date: 5/8/2012 10:28:39 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-10@20
Analysis from: 4/18/2012 11:21:33 AM
File: w4181121.chw Last save: 4/18/2012 11:25:03 AM

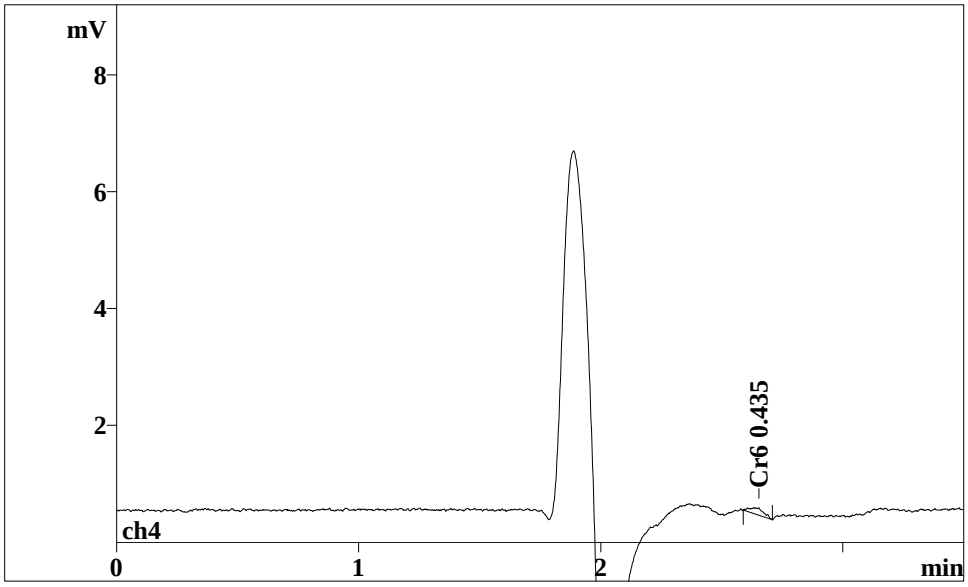
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35993

SAMPLE:
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.65;	0.062;	0.13;	99.77;	0.464;	100.00;	0.00;	0.00;	116

Report date: 5/8/2012 10:28:44 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6
Analysis from: 4/18/2012 11:29:48 AM
File: w4181129.chw Last save: 4/18/2012 11:33:18 AM

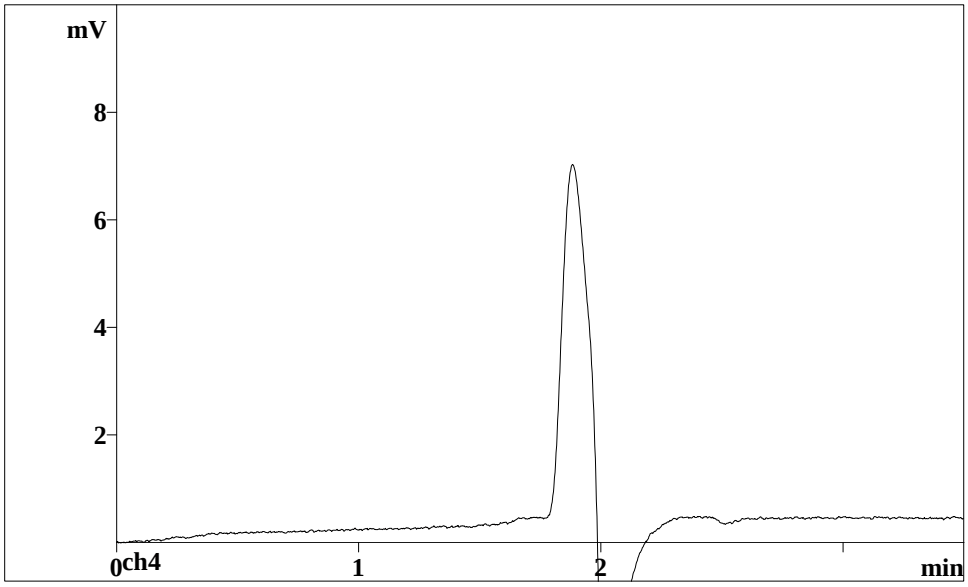
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35994

SAMPLE:
:
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:28:49 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-7@20
Analysis from: 4/18/2012 11:38:03 AM
File: w4181138.chw Last save: 4/18/2012 11:41:34 AM

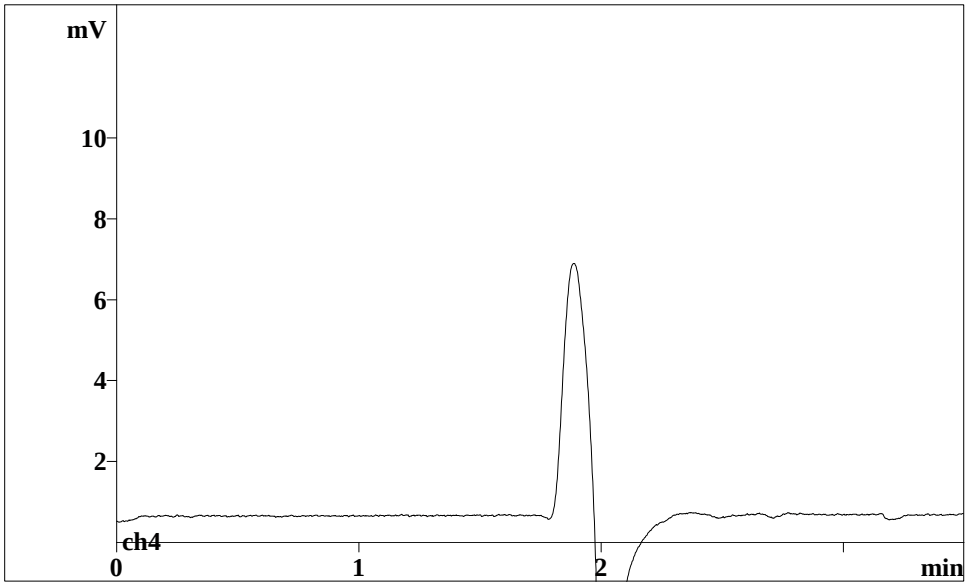
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35995

SAMPLE:
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/8/2012 10:28:53 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-10@20
Analysis from: 4/18/2012 11:46:20 AM
File: w4181146.chw Last save: 4/18/2012 11:49:50 AM

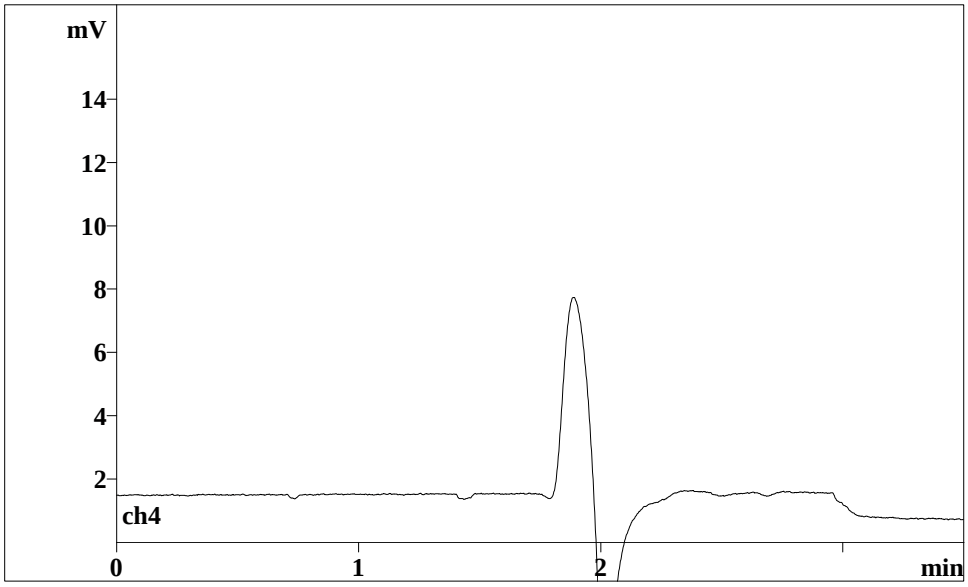
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35996

SAMPLE:
:
Vial number: 15
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/8/2012 10:29:00 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6
Analysis from: 4/18/2012 11:54:37 AM
File: w4181154.chw Last save: 4/18/2012 11:58:07 AM

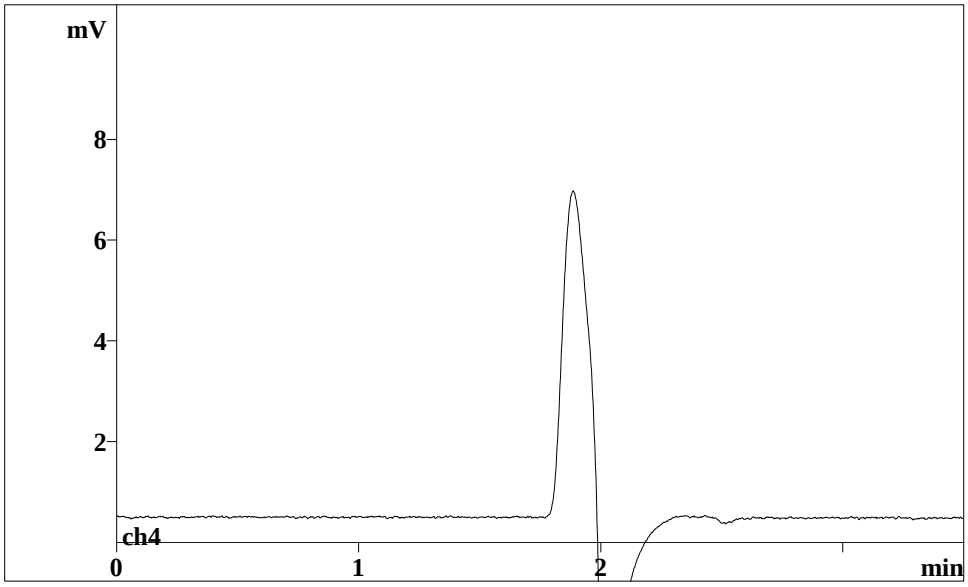
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35997

SAMPLE:
:
Vial number: 16
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:29:04 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-7@20
Analysis from: 4/18/2012 12:02:55 PM
File: w4181202.chw Last save: 4/18/2012 12:06:25 PM

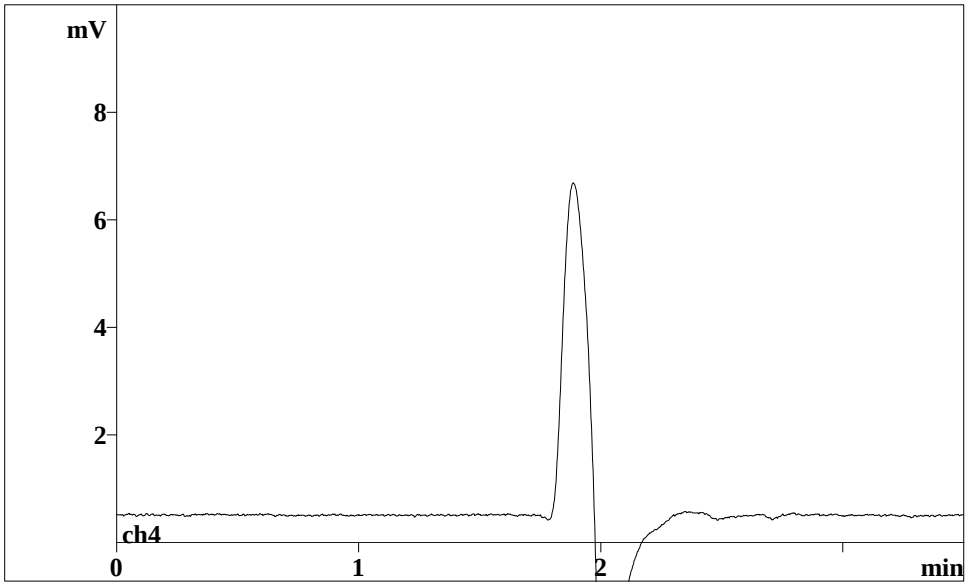
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35998

SAMPLE:
:
Vial number: 17
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:29:08 AM
Printed by: TestAmerica - Edison

Ident: CCV
Analysis from: 4/18/2012 12:11:13 PM
File: w4181211.chw Last save: 4/18/2012 12:14:44 PM

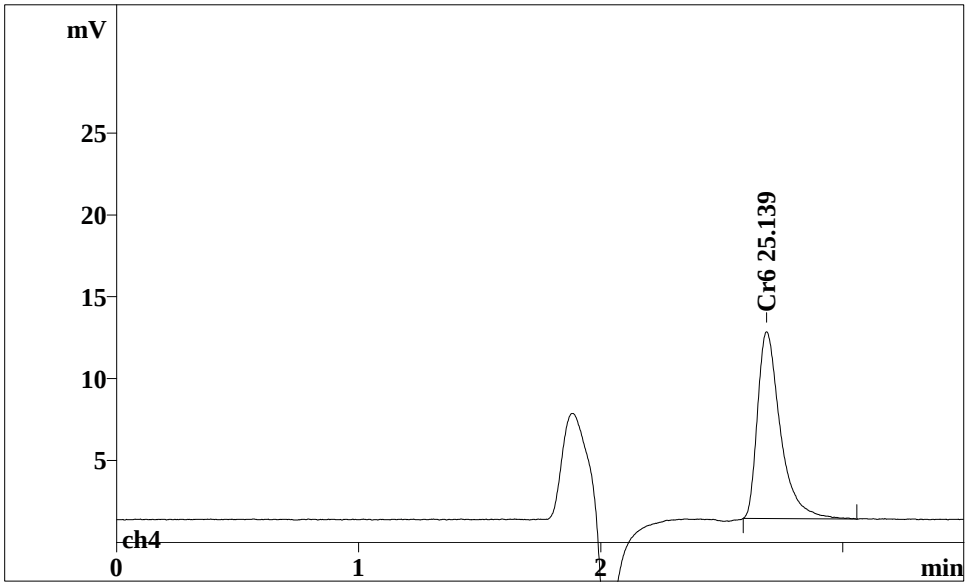
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 35999

SAMPLE:
:
Vial number: 18
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	11.42;	100.02;	75.044;	100.00;	0.00;	0.00;	37

Report date: 5/8/2012 10:29:12 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/18/2012 12:19:32 PM
File: w4181219.chw Last save: 4/18/2012 12:23:02 PM

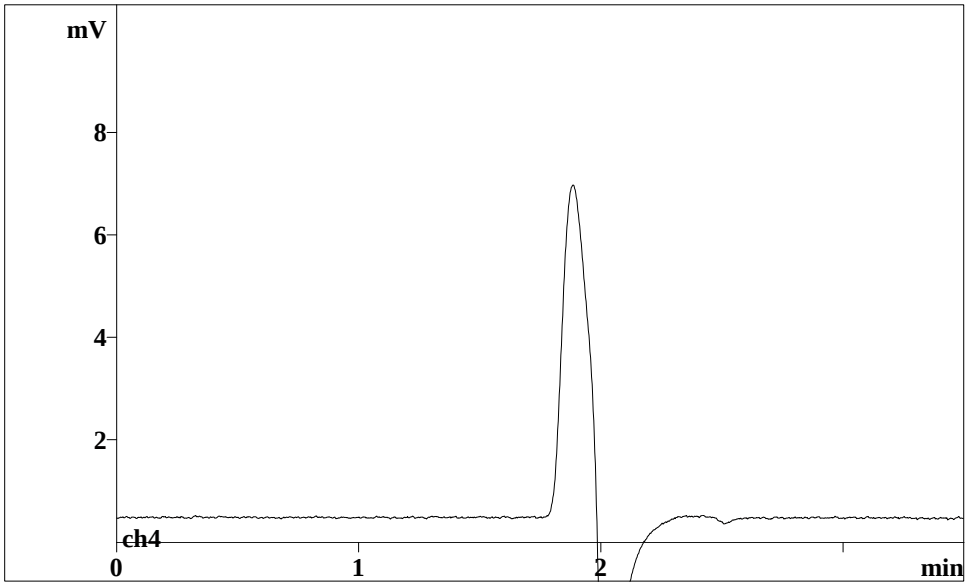
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36000

SAMPLE:
:
Vial number: 19
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:29:17 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 DU
Analysis from: 4/18/2012 12:27:50 PM
File: w4181227.chw Last save: 4/18/2012 12:31:20 PM

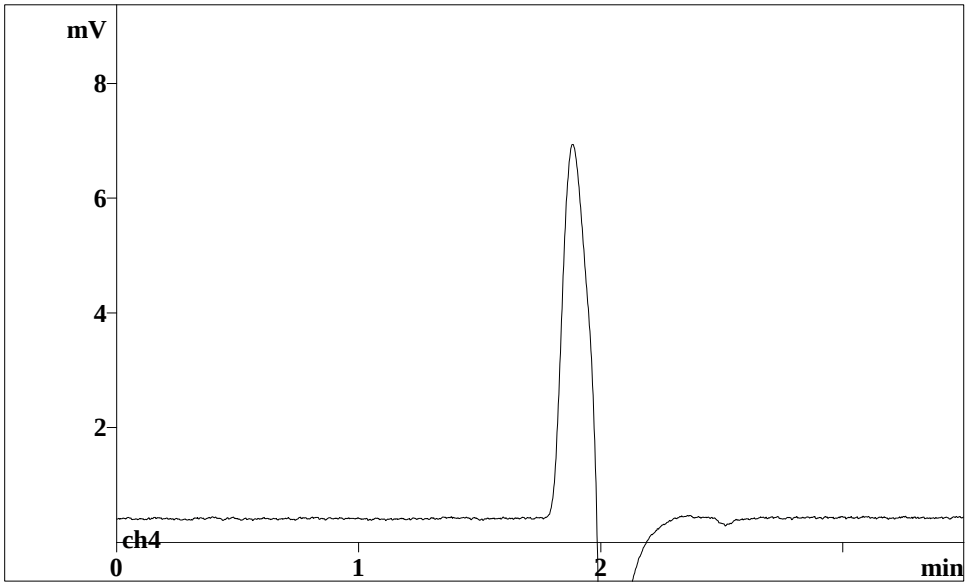
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36001

SAMPLE:
:
Vial number: 20
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Report date: 5/8/2012 10:29:21 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 DU
Analysis from: 4/18/2012 12:36:08 PM
File: w4181236.chw Last save: 4/18/2012 12:39:39 PM

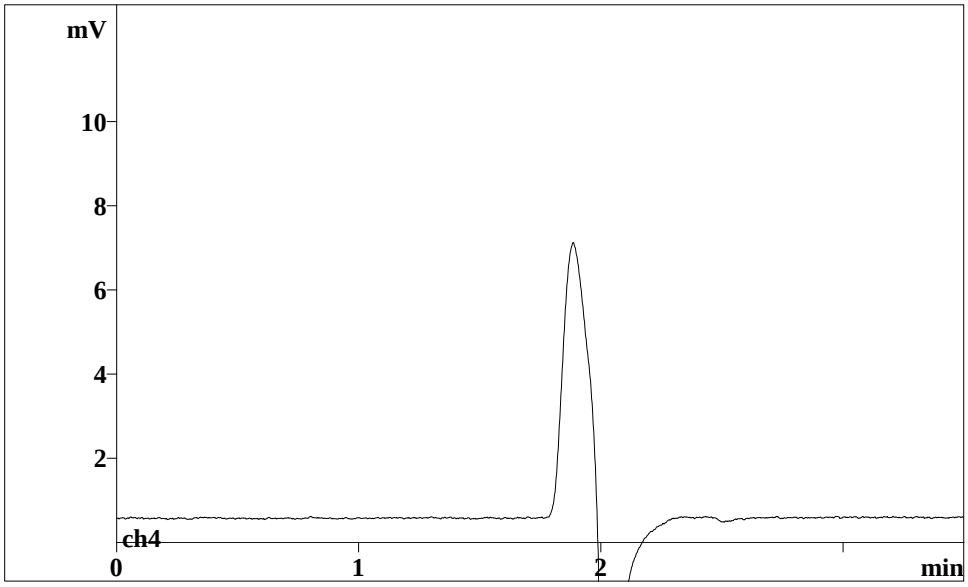
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36002

SAMPLE:
:
Vial number: 21
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/8/2012 10:29:25 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 PS
Analysis from: 4/18/2012 12:44:27 PM
File: w4181244.chw Last save: 4/18/2012 12:47:57 PM

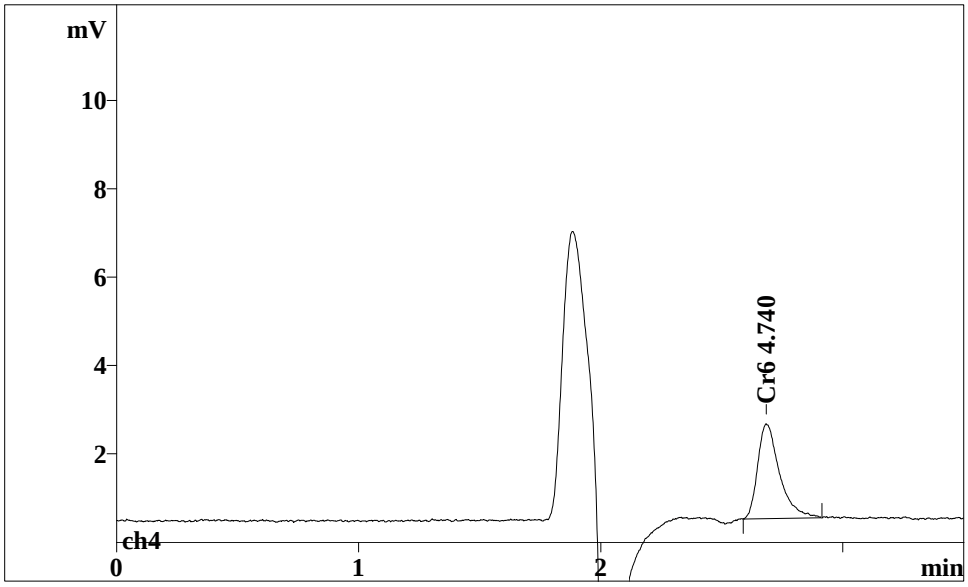
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36003

SAMPLE:
:
Vial number: 22
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.091;	2.14;	99.51;	13.461;	100.00;	0.00;	0.00;	41

Report date: 5/8/2012 10:29:29 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 PS
Analysis from: 4/18/2012 12:52:45 PM
File: w4181252.chw Last save: 4/18/2012 12:56:15 PM

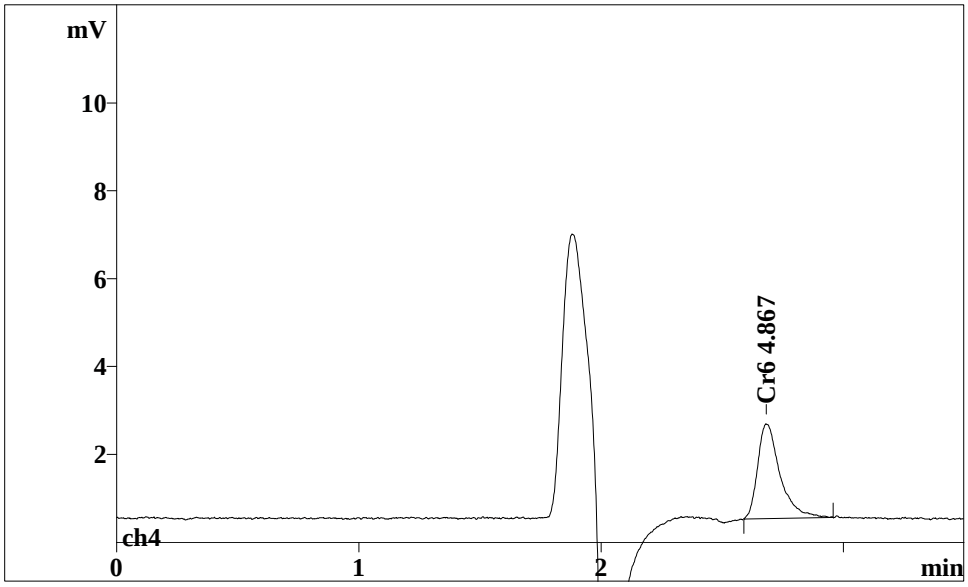
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36004

SAMPLE:
:
Vial number: 23
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.091;	2.15;	99.61;	13.842;	100.00;	0.00;	0.00;	39

Report date: 5/8/2012 10:29:33 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 MS
Analysis from: 4/18/2012 1:01:03 PM
File: w4181301.chw Last save: 4/18/2012 1:04:34 PM

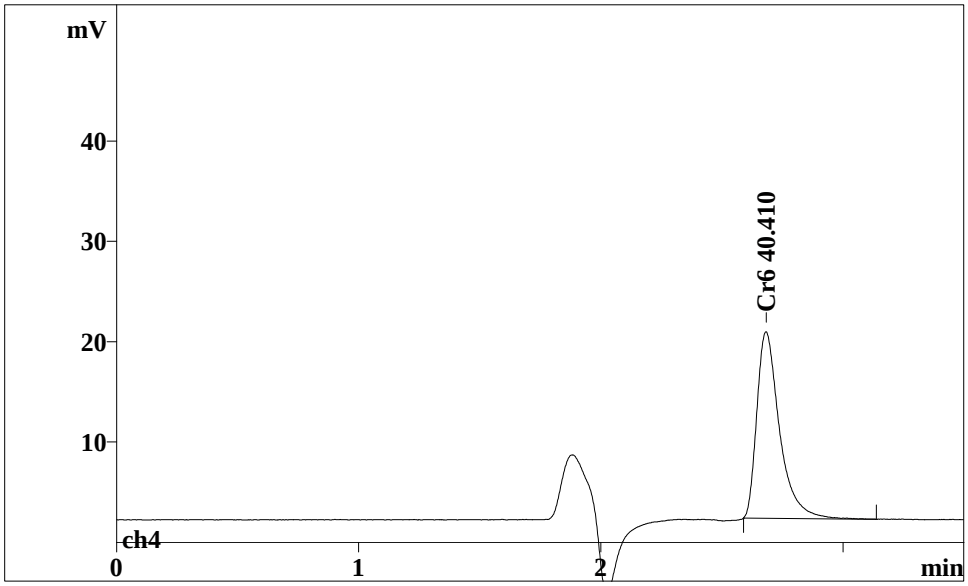
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36005

SAMPLE:
:
Vial number: 24
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.095;	18.60;	100.02;	121.149;	100.00;	0.00;	0.00;	38

Report date: 5/8/2012 10:29:36 AM
Printed by: TestAmerica - Edison

Ident: 360-40055-A-6 MS
Analysis from: 4/18/2012 1:09:22 PM
File: w4181309.chw Last save: 4/18/2012 1:12:52 PM

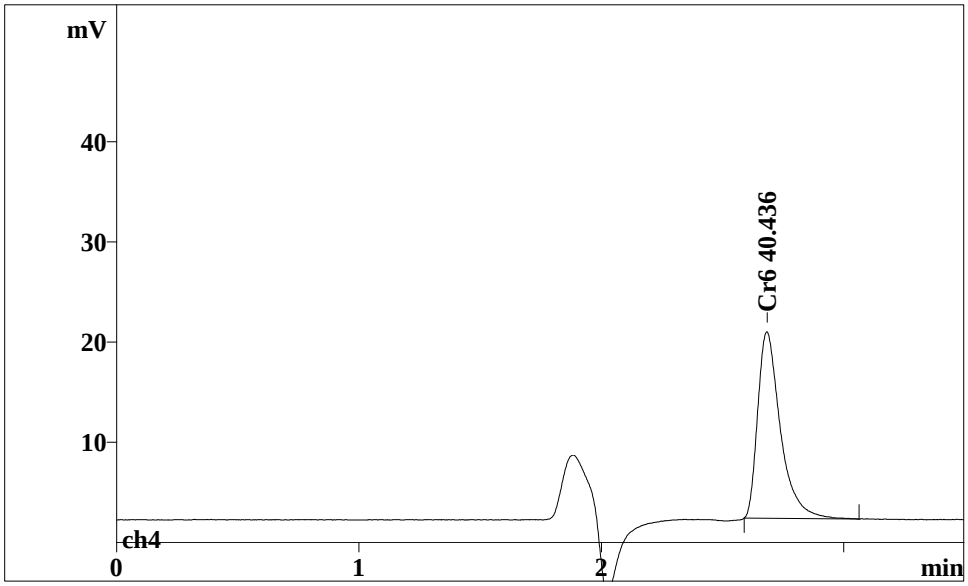
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36006

SAMPLE:
:
Vial number: 25
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.095;	18.62;	99.97;	121.228;	100.00;	0.00;	0.00;	38

Report date: 5/8/2012 10:29:40 AM
Printed by: TestAmerica - Edison

Ident: CCV
Analysis from: 4/18/2012 1:17:40 PM
File: w4181317.chw Last save: 4/18/2012 1:21:10 PM

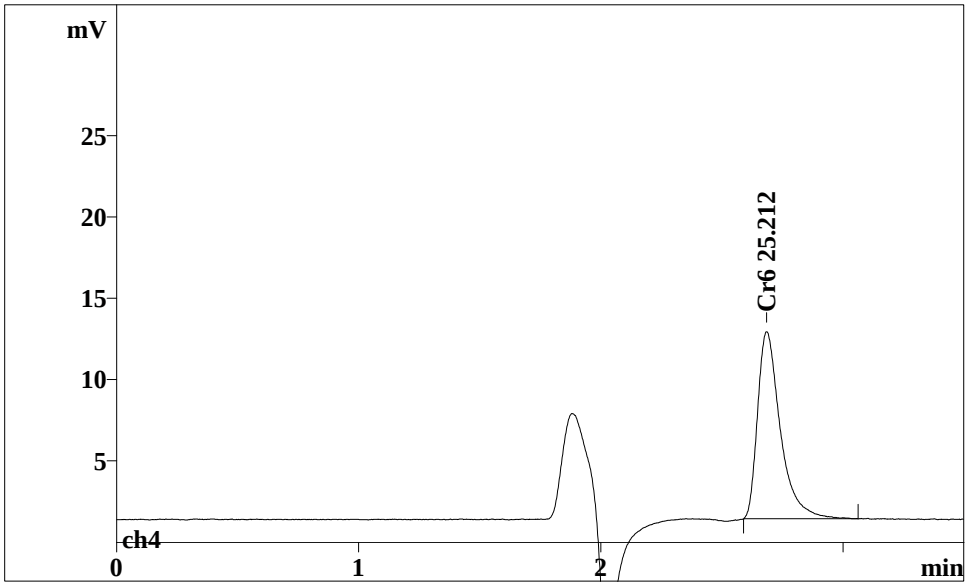
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36007

SAMPLE:
:
Vial number: 26
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.68;	0.095;	11.51;	100.09;	75.265;	100.00;	0.00;	0.00;	38

Report date: 5/8/2012 10:29:45 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/18/2012 1:25:59 PM
File: w4181325.chw Last save: 4/18/2012 1:29:29 PM

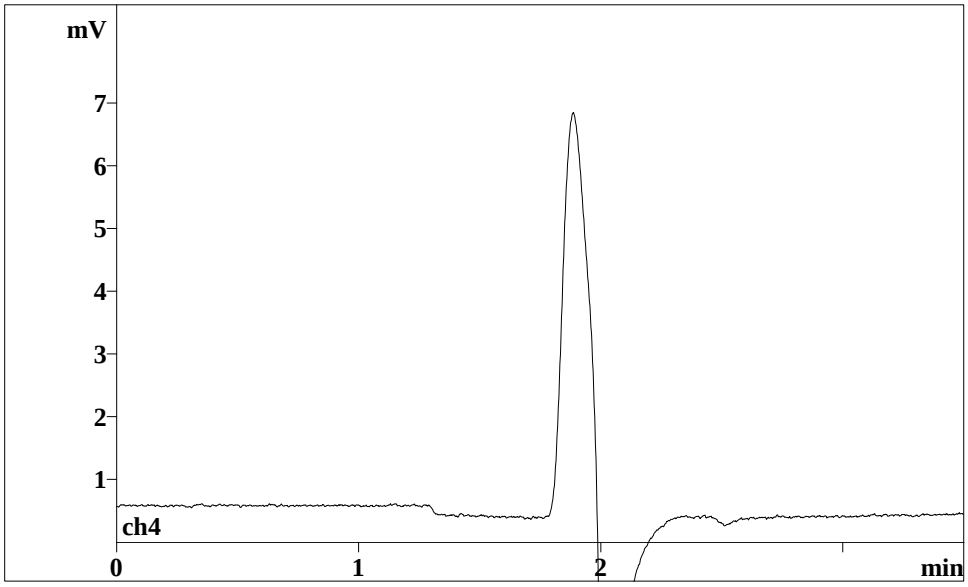
Method: stl_hexchrome_water5.mtw Last save: 4/18/2012 10:49
Run operator: TestAmerica - Edison
Analysis number: 36008

SAMPLE:
:
Vial number: 27
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.0 MPa



No peaks

Dilution Form
Wet Chemistry

Method No.: 7199
Prep Batch: NA
Analytical Batch: 111866

Analyst: RK
Analysis Date: 4/18/12

Job/Sample Number	Dilution Factor	Sample Volume (ml)	Final Volume (ml)	Diluent
360-40055-10	20X	2.5	50	Dilution water
360-40055-7	20X	2.5	50	↓

Report date: 5/9/2012 11:45:48 AM
Printed by: TestAmerica - Edison

Ident: 0.0 ppb
Analysis from: 4/26/2012 10:33:37 AM
File: w4261033.chw Last save: 4/26/2012 11:33:17 AM

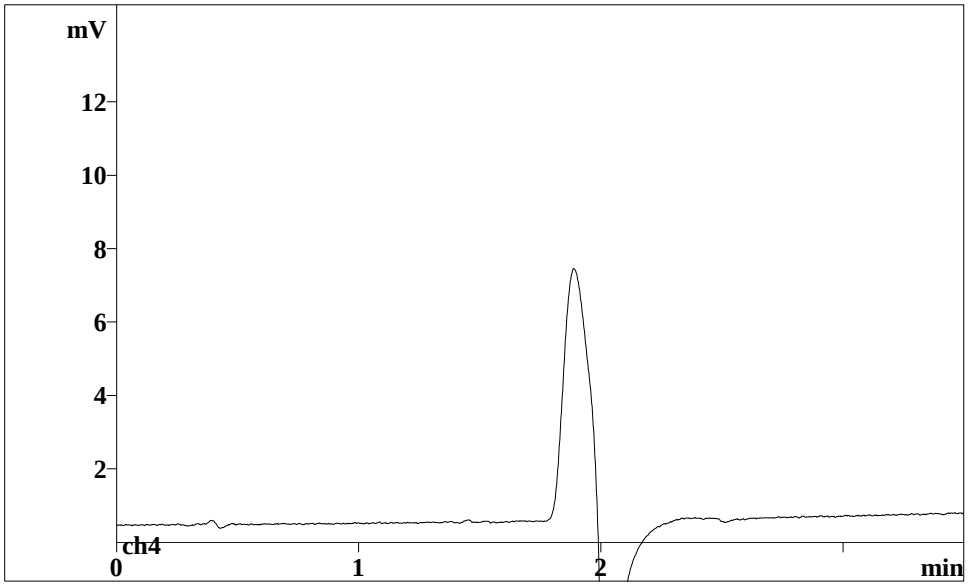
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36175

SAMPLE:
:
Vial number: 1
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No peaks

Report date: 5/9/2012 11:45:56 AM
Printed by: TestAmerica - Edison

Ident: 1.0 ppb
Analysis from: 4/26/2012 10:41:49 AM
File: w4261041.chw Last save: 4/26/2012 11:33:17 AM

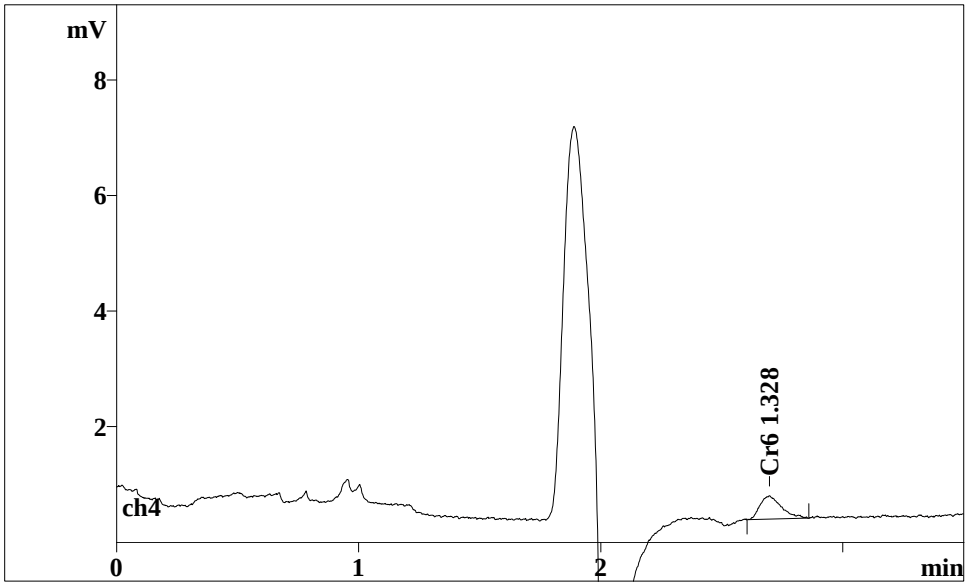
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36176

SAMPLE:
:
Vial number: 2
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.70;	0.097;	0.40;	98.55;	2.509;	100.00;	0.00;	0.00;	42

Report date: 5/9/2012 11:46:00 AM
Printed by: TestAmerica - Edison

Ident: 5.0 ppb
Analysis from: 4/26/2012 10:50:01 AM
File: w4261050.chw Last save: 4/26/2012 11:33:17 AM

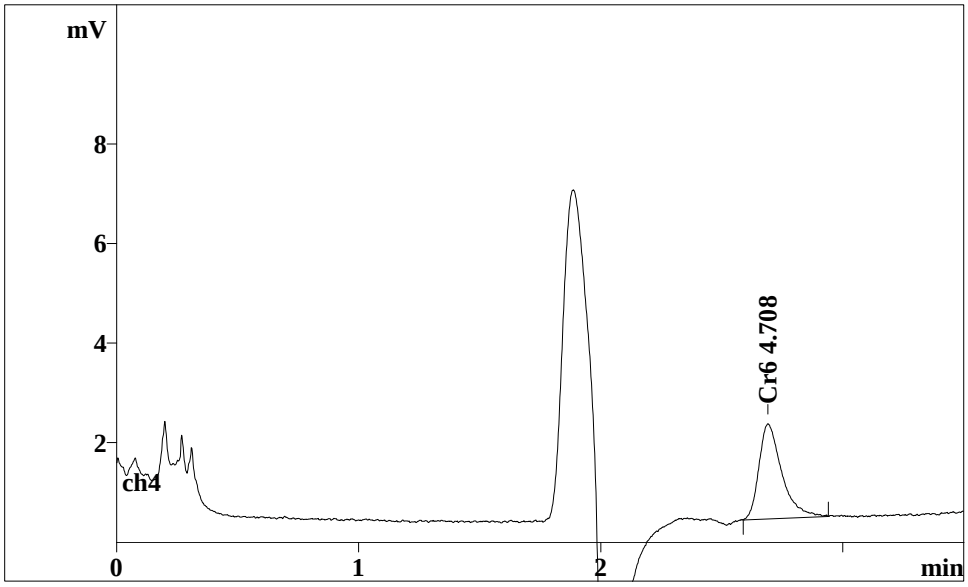
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36177

SAMPLE:
:
Vial number: 3
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	1.91;	99.84;	12.466;	100.00;	0.00;	0.00;	38

Report date: 5/9/2012 11:46:04 AM
Printed by: TestAmerica - Edison

Ident: 25.0 ppb
Analysis from: 4/26/2012 10:58:13 AM
File: w4261058.chw Last save: 4/26/2012 11:33:17 AM

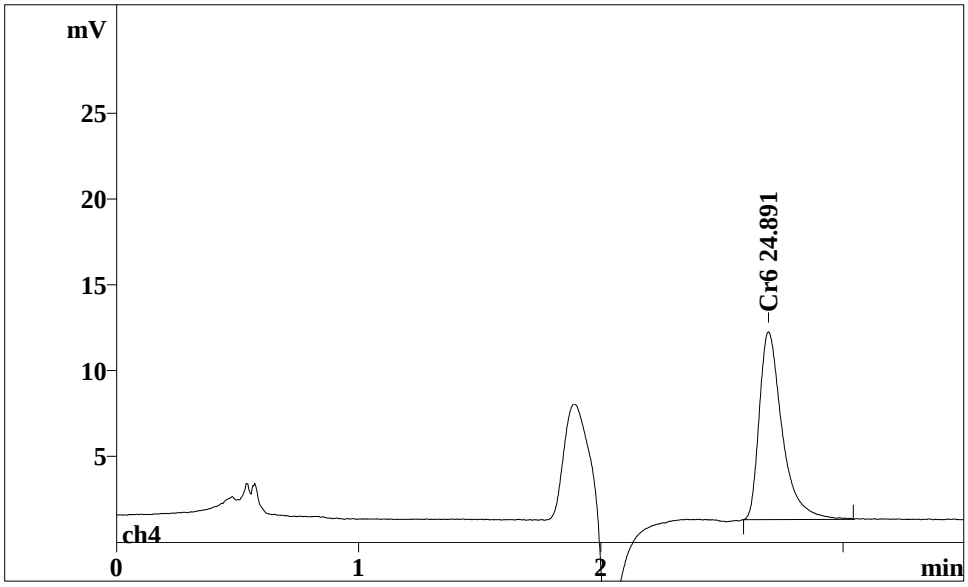
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36178

SAMPLE:
:
Vial number: 4
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	10.96;	99.98;	71.916;	100.00;	0.00;	0.00;	38

Report date: 5/9/2012 11:46:07 AM
Printed by: TestAmerica - Edison

Ident: 50.0 ppb
Analysis from: 4/26/2012 11:06:27 AM
File: w4261106.chw Last save: 4/26/2012 11:33:17 AM

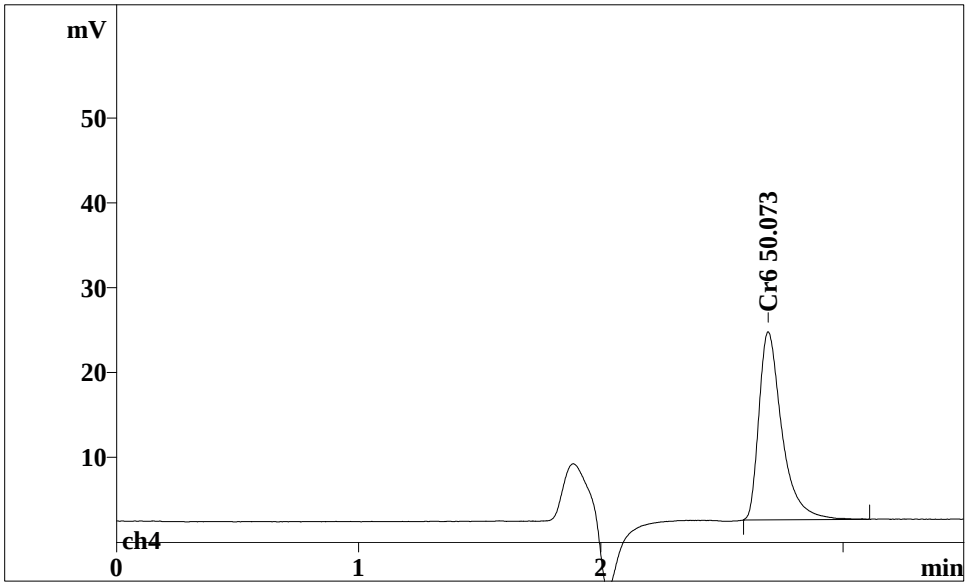
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36179

SAMPLE:
:
Vial number: 5
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

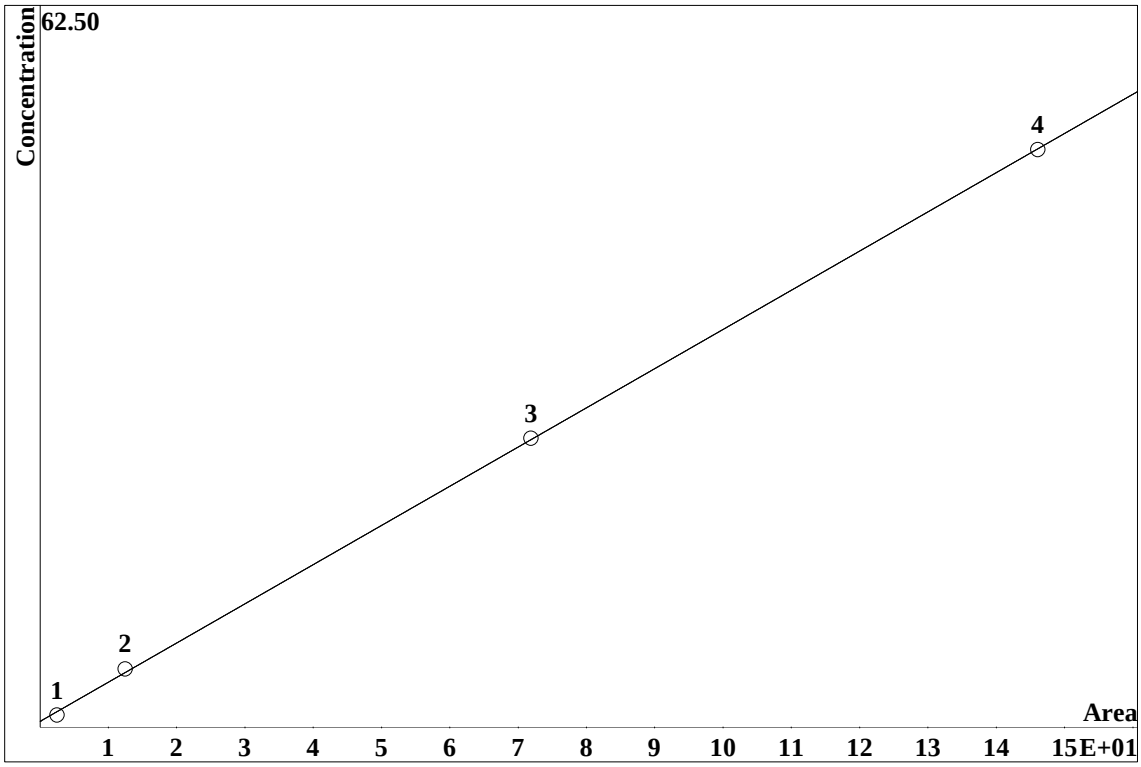
Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	22.16;	99.99;	146.090;	100.00;	0.00;	0.00;	37

CALIBRATION OF COMPONENT Cr6

Method: stl_hexchrome_water5.mtw
Equation: Q = 0.339494·A + 0.476149
RSD: 1.599 %
Correlation coefficient: 0.999931



K3 = 0 K2 = 0 K1 = 0.339494 K0 = 0.476149
Base: Area
Ref.channel: ch4
ISTD:
Formula: Linear
Weight: 1

Level	Height	Area	Conc.	Vol/Dil	Retention	Used	File
1;	0.4056;	2.509;	1;	1;	2.695;	Yes;	w4261041.chw
2;	1.91;	12.47;	5;	1;	2.695;	Yes;	w4261050.chw
3;	10.96;	71.92;	25;	1;	2.695;	Yes;	w4261058.chw
4;	22.17;	146.1;	50;	1;	2.695;	Yes;	w4261106.chw

Report date: 5/9/2012 11:46:17 AM
Printed by: TestAmerica - Edison

Ident: ICV
Analysis from: 4/26/2012 11:14:42 AM
File: w4261114.chw Last save: 4/26/2012 11:33:17 AM

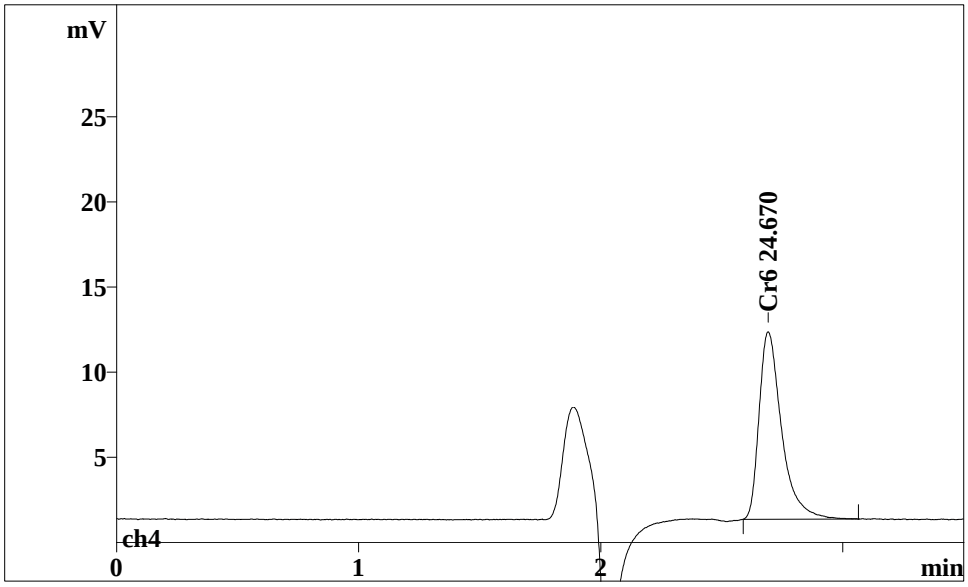
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36180

SAMPLE:
:
Vial number: 6
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.094;	11.02;	99.99;	71.263;	100.00;	0.00;	0.00;	39

Report date: 5/9/2012 11:46:22 AM
Printed by: TestAmerica - Edison

Ident: ICB
Analysis from: 4/26/2012 11:22:58 AM
File: w4261122.chw Last save: 4/26/2012 11:33:17 AM

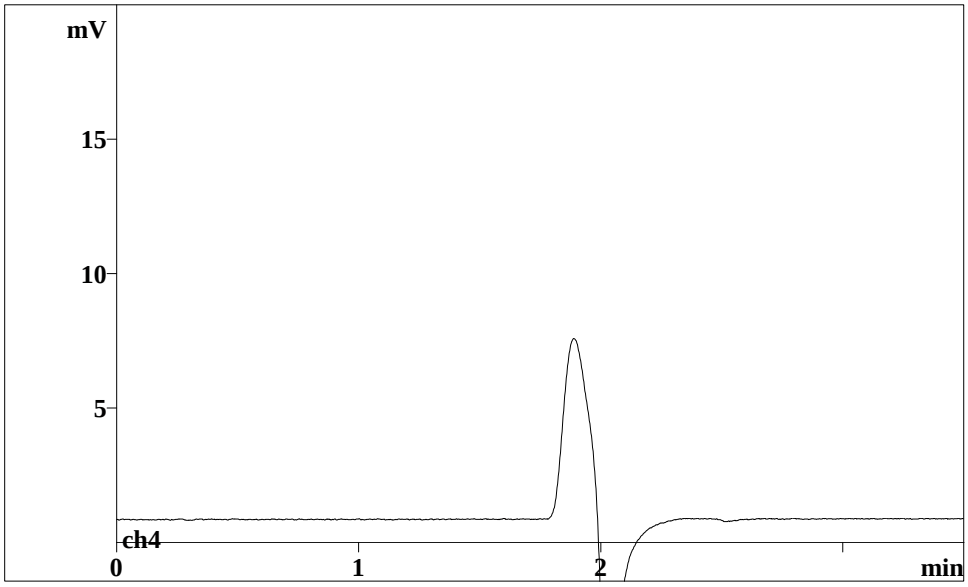
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 10:25
Run operator: TestAmerica - Edison
Analysis number: 36181

SAMPLE:
:
Vial number: 7
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:46:26 AM
Printed by: TestAmerica - Edison

Ident: MB
Analysis from: 4/26/2012 11:31:14 AM
File: w4261131.chw Last save: 4/26/2012 11:34:44 AM

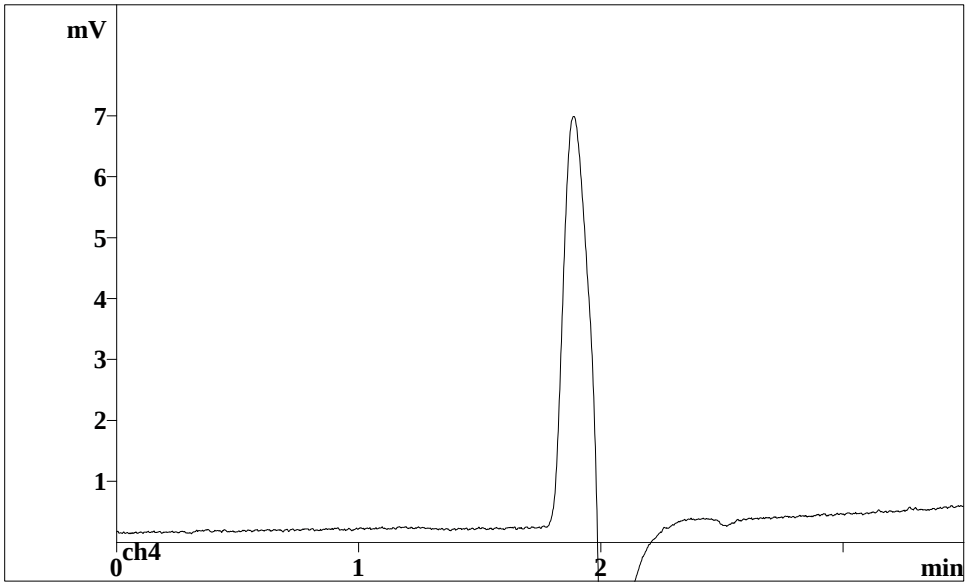
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 11:33
Run operator: TestAmerica - Edison
Analysis number: 36182

SAMPLE:
:
Vial number: 8
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No peaks

Report date: 5/9/2012 11:46:30 AM
Printed by: TestAmerica - Edison

Ident: MB
Analysis from: 4/26/2012 11:39:30 AM
File: w4261139.chw Last save: 4/26/2012 11:43:00 AM

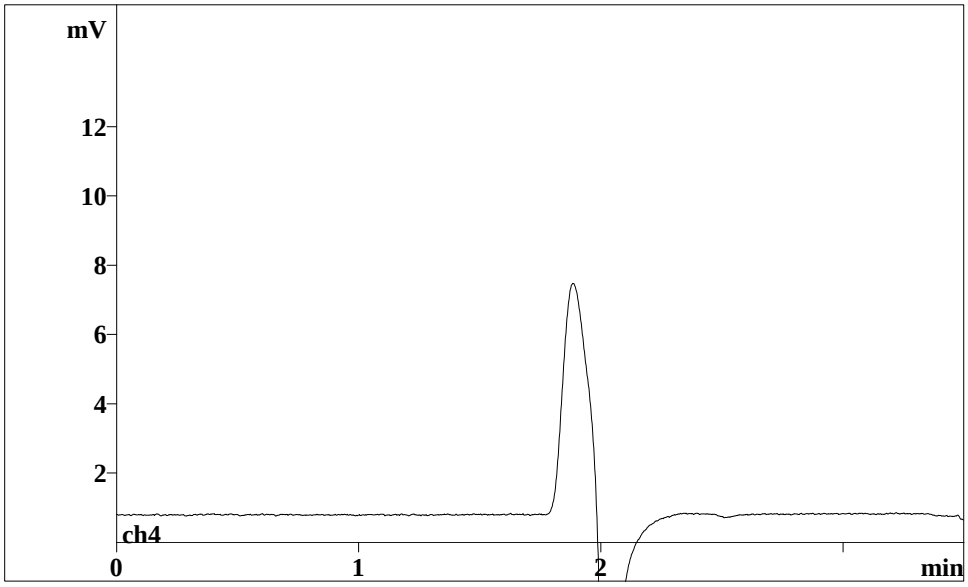
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 11:36
Run operator: TestAmerica - Edison
Analysis number: 36183

SAMPLE:
:
Vial number: 9
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No peaks

Report date: 5/9/2012 11:46:33 AM
Printed by: TestAmerica - Edison

Ident: LCS
Analysis from: 4/26/2012 11:47:47 AM
File: w4261147.chw Last save: 4/26/2012 11:51:18 AM

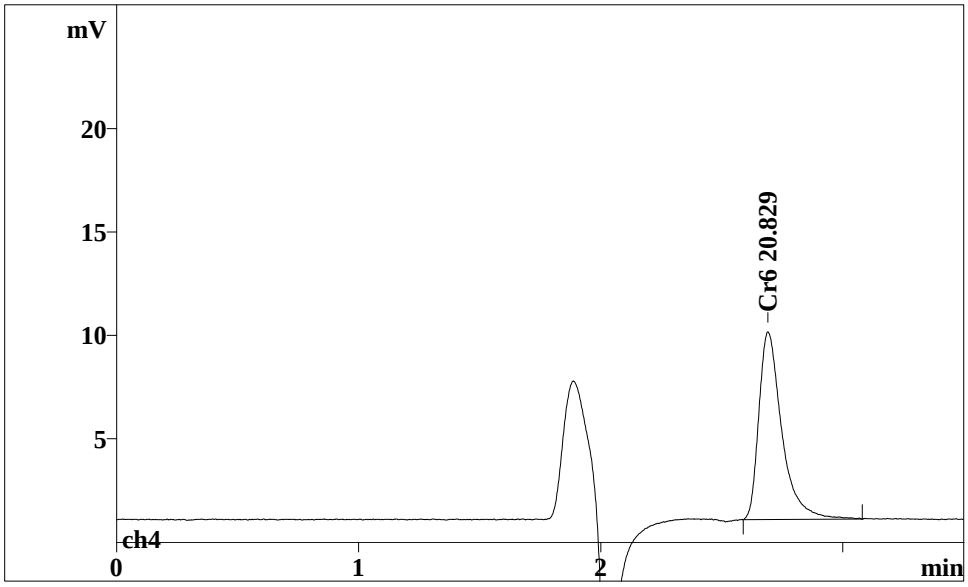
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 11:36
Run operator: TestAmerica - Edison
Analysis number: 36184

SAMPLE:
:
Vial number: 10
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.095;	9.08;	99.93;	59.951;	100.00;	0.00;	0.00;	37

Report date: 5/9/2012 11:46:36 AM
Printed by: TestAmerica - Edison

Ident: LCS
Analysis from: 4/26/2012 11:56:05 AM
File: w4261156.chw Last save: 4/26/2012 11:59:36 AM

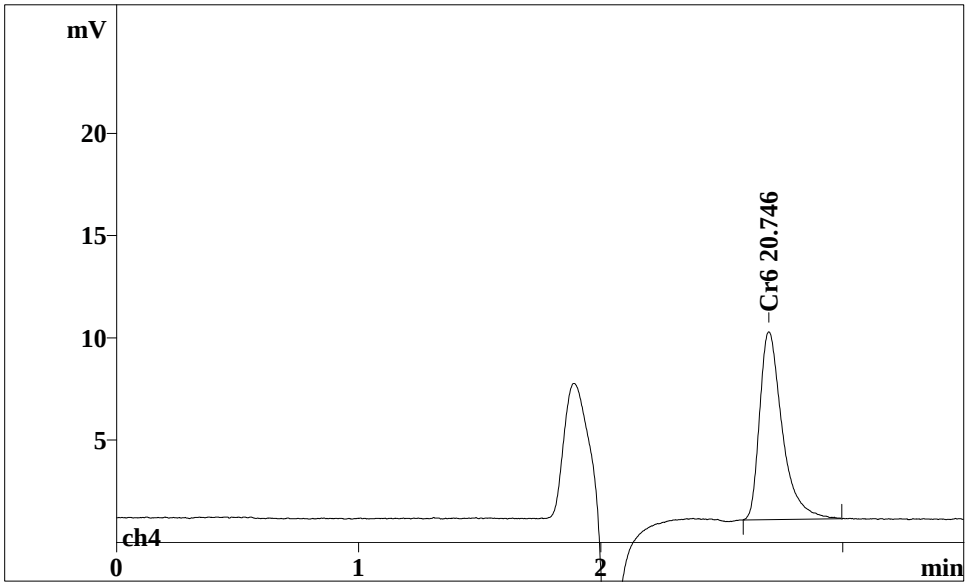
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 11:36
Run operator: TestAmerica - Edison
Analysis number: 36185

SAMPLE:
:
Vial number: 11
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.3 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.095;	9.19;	100.00;	59.707;	100.00;	0.00;	0.00;	38

Report date: 5/9/2012 11:46:41 AM
Printed by: TestAmerica - Edison

Ident: 0042-02
Analysis from: 4/26/2012 12:04:24 PM
File: w4261204.chw Last save: 4/26/2012 12:07:54 PM

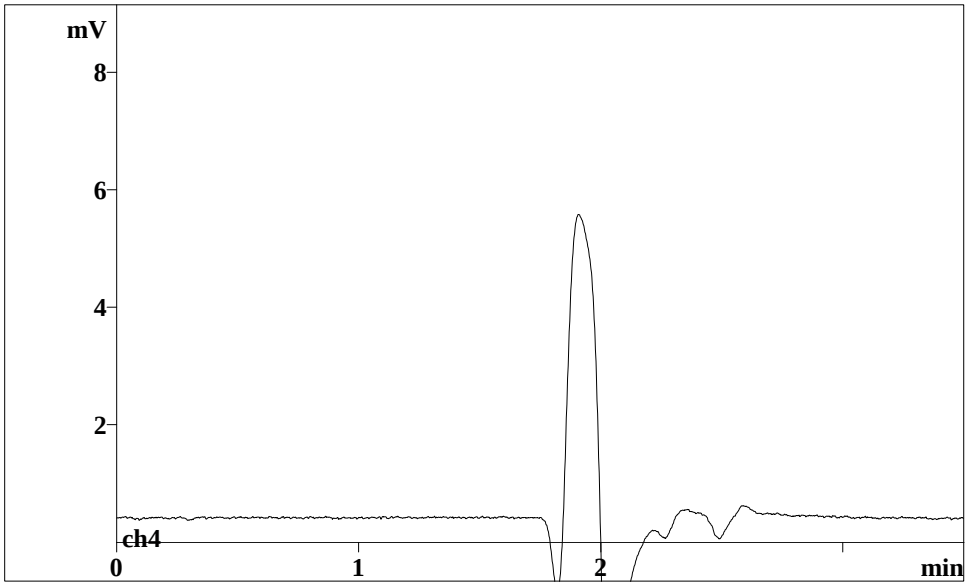
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36186

SAMPLE:
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:46:46 AM
Printed by: TestAmerica - Edison

Ident: 0042-02@10
Analysis from: 4/26/2012 12:17:33 PM
File: w4261217.chw Last save: 4/26/2012 12:21:03 PM

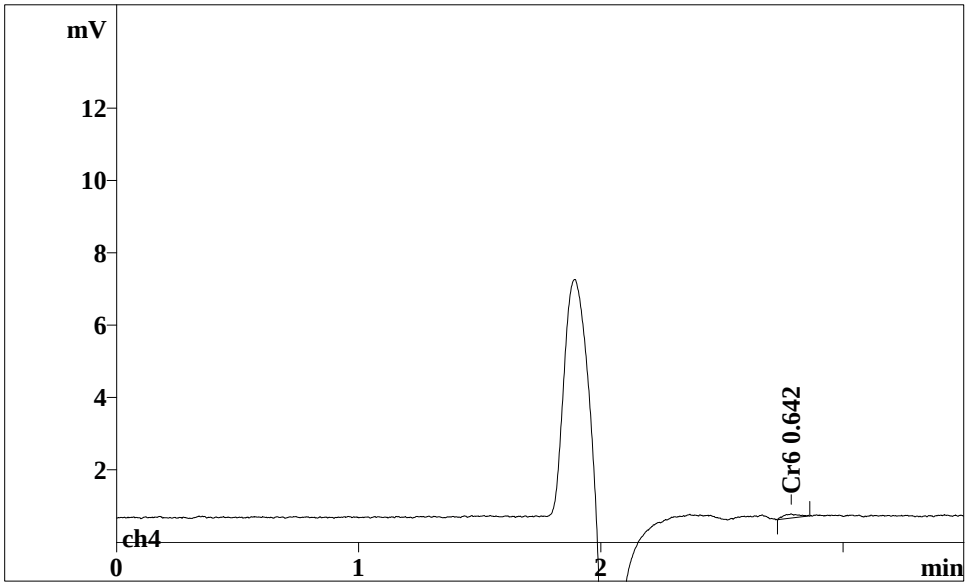
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36187

SAMPLE:
:
Vial number: 12
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.78;	0.074;	0.11;	98.63;	0.489;	100.00;	0.00;	0.00;	99

Report date: 5/9/2012 11:46:49 AM
Printed by: TestAmerica - Edison

Ident: 0042-03@10
Analysis from: 4/26/2012 12:25:53 PM
File: w4261225.chw Last save: 4/26/2012 12:29:23 PM

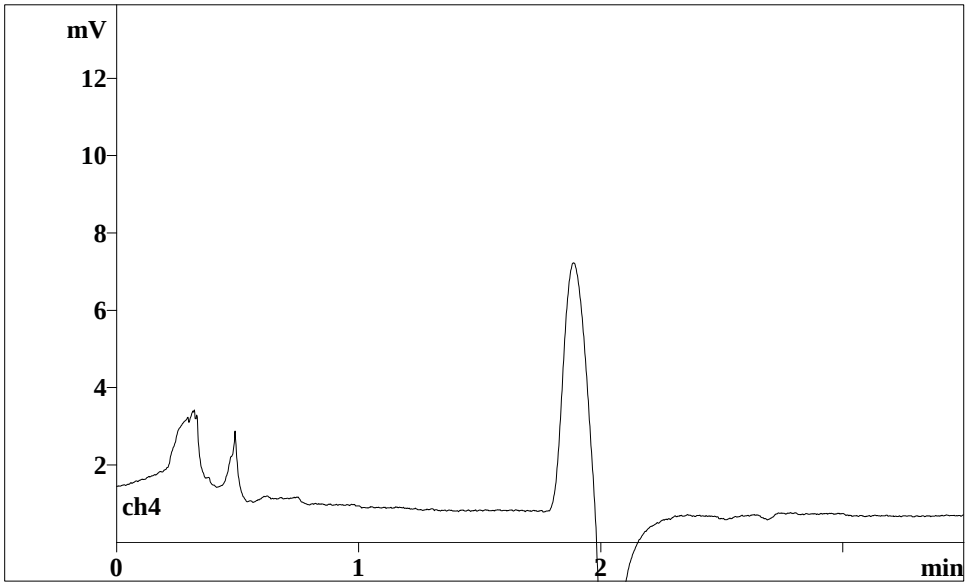
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36188

SAMPLE:
:
Vial number: 13
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:46:54 AM
Printed by: TestAmerica - Edison

Ident: MW-21-042512@50
Analysis from: 4/26/2012 12:34:12 PM
File: w4261234.chw Last save: 4/26/2012 12:37:43 PM

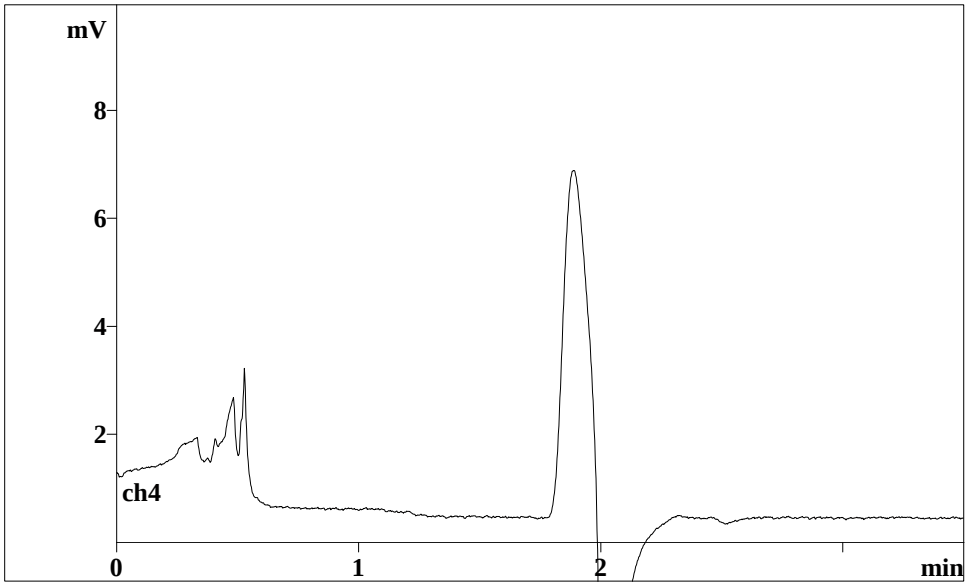
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36189

SAMPLE:
:
Vial number: 14
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:47:01 AM
Printed by: TestAmerica - Edison

Ident: 0042-01@10
Analysis from: 4/26/2012 12:42:33 PM
File: w4261242.chw Last save: 4/26/2012 12:46:03 PM

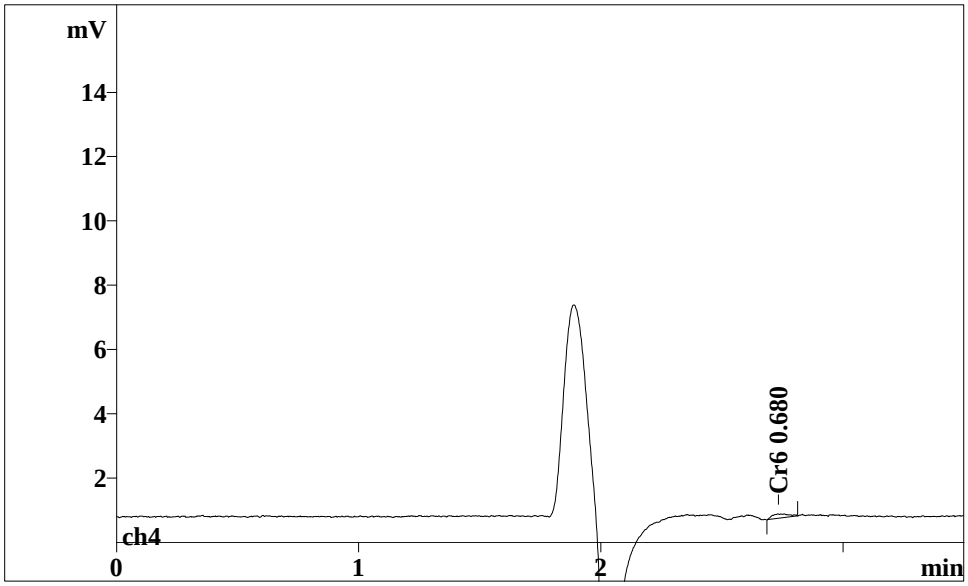
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36190

SAMPLE:
:
Vial number: 15
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.73;	0.071;	0.14;	99.92;	0.602;	100.00;	0.00;	0.00;	88

Report date: 5/9/2012 11:47:05 AM
Printed by: TestAmerica - Edison

Ident: 0042-05@10
Analysis from: 4/26/2012 12:50:53 PM
File: w4261250.chw Last save: 4/26/2012 12:54:23 PM

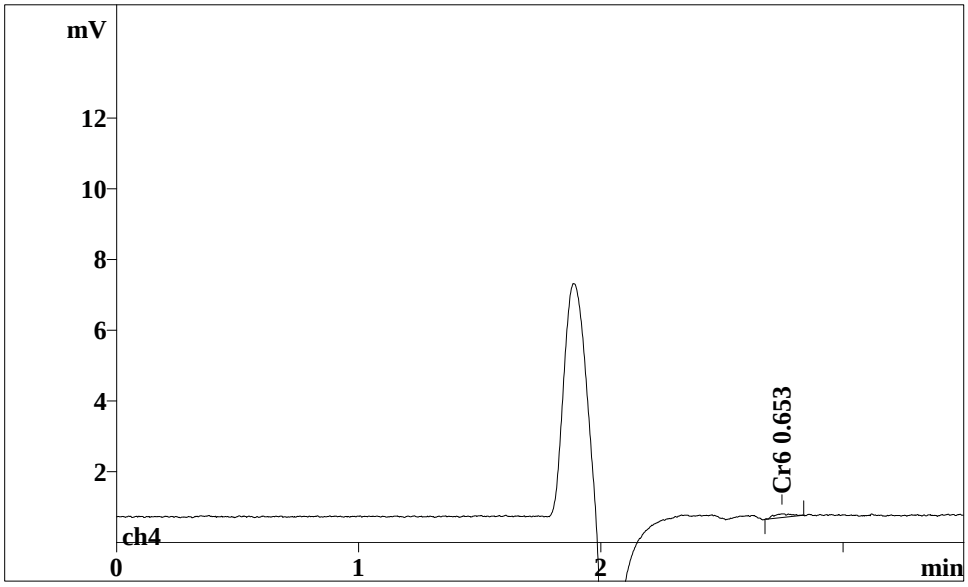
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36191

SAMPLE:
:
Vial number: 16
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.75;	0.086;	0.10;	97.30;	0.521;	100.00;	0.00;	0.00;	71

Report date: 5/9/2012 11:47:09 AM
Printed by: TestAmerica - Edison

Ident: 0042-06@10
Analysis from: 4/26/2012 12:59:14 PM
File: w4261259.chw Last save: 4/26/2012 1:02:45 PM

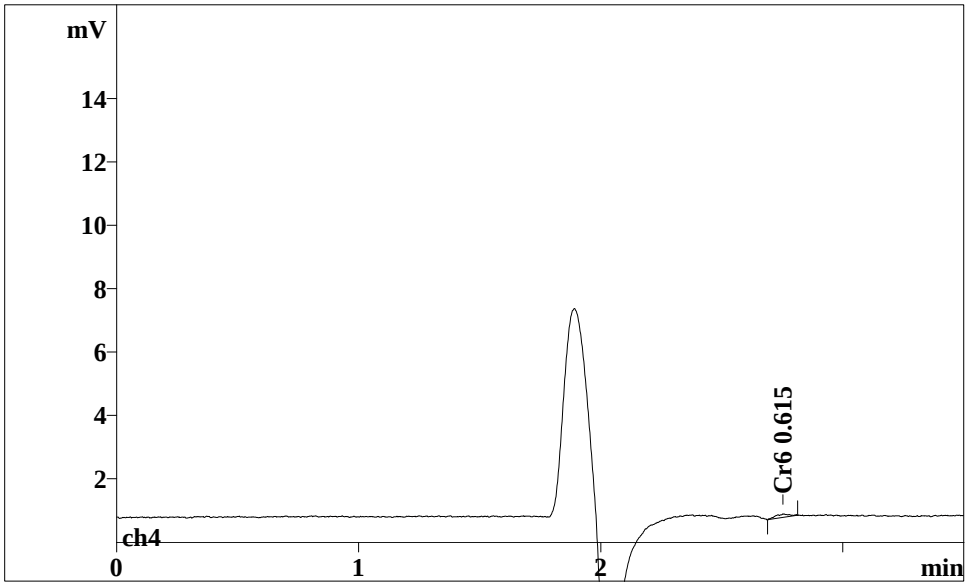
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36192

SAMPLE:
:
Vial number: 17
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.75;	0.065;	0.10;	96.23;	0.408;	100.00;	0.00;	0.00;	119

Report date: 5/9/2012 11:47:47 AM
Printed by: TestAmerica - Edison

Ident: CCV
Analysis from: 4/26/2012 1:07:36 PM
File: w4261307.chw Last save: 4/26/2012 1:11:07 PM

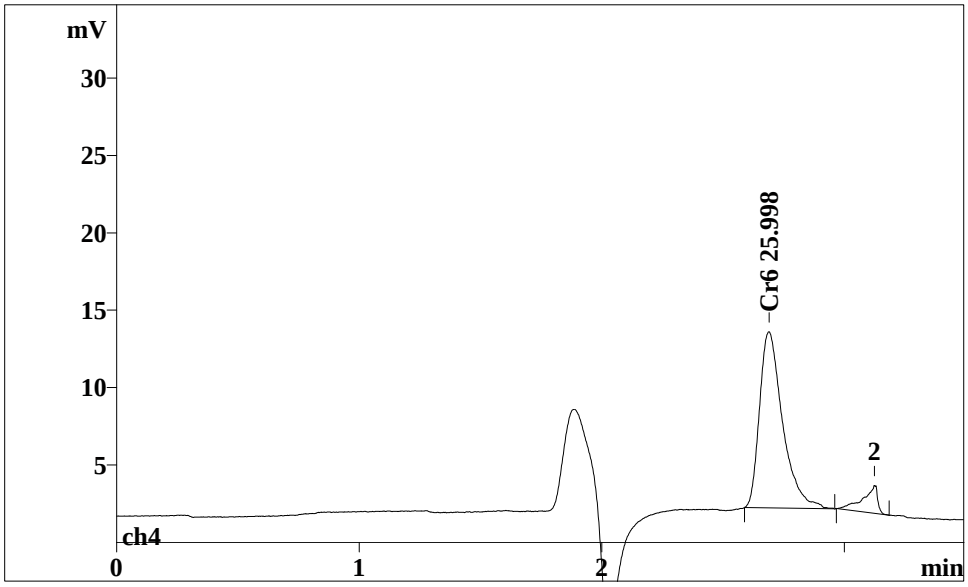
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36193

SAMPLE:
:
Vial number: 18
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.097;	11.39;	86.22;	75.175;	90.77;	0.00;	3.57;	37

Report date: 5/9/2012 11:47:52 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/26/2012 1:15:59 PM
File: w4261315.chw Last save: 4/26/2012 1:19:29 PM

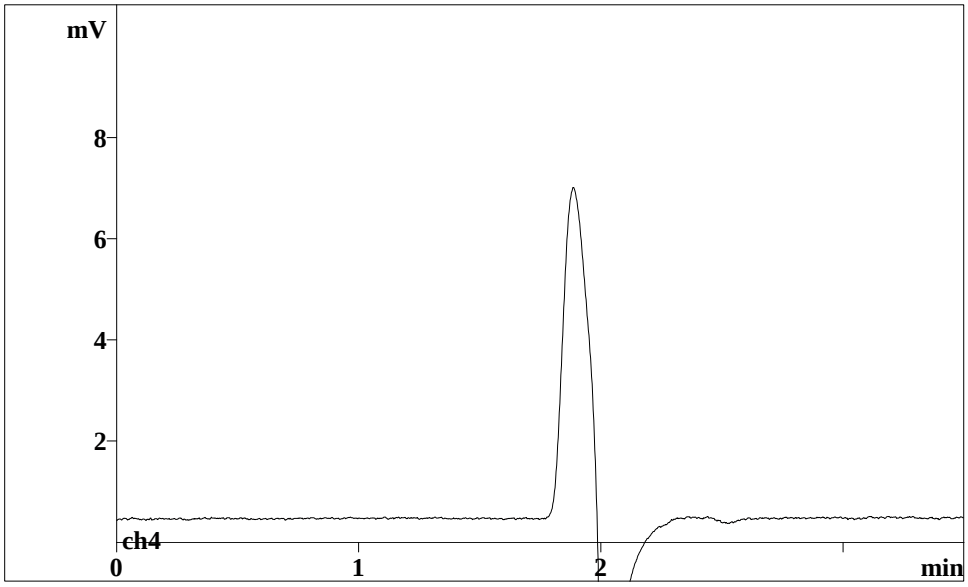
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36194

SAMPLE:
:
Vial number: 19
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:47:57 AM
Printed by: TestAmerica - Edison

Ident: MW-32-042512@20
Analysis from: 4/26/2012 1:24:21 PM
File: w4261324.chw Last save: 4/26/2012 1:27:51 PM

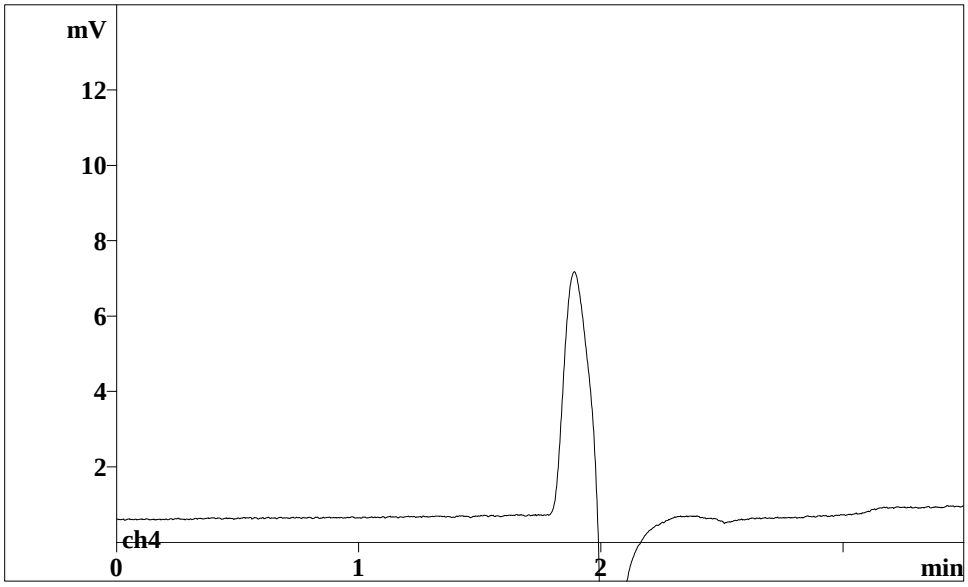
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36195

SAMPLE:
:
Vial number: 20
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:48:02 AM
Printed by: TestAmerica - Edison

Ident: MW-?
Analysis from: 4/26/2012 1:32:43 PM
File: w4261332.chw Last save: 4/26/2012 1:36:13 PM

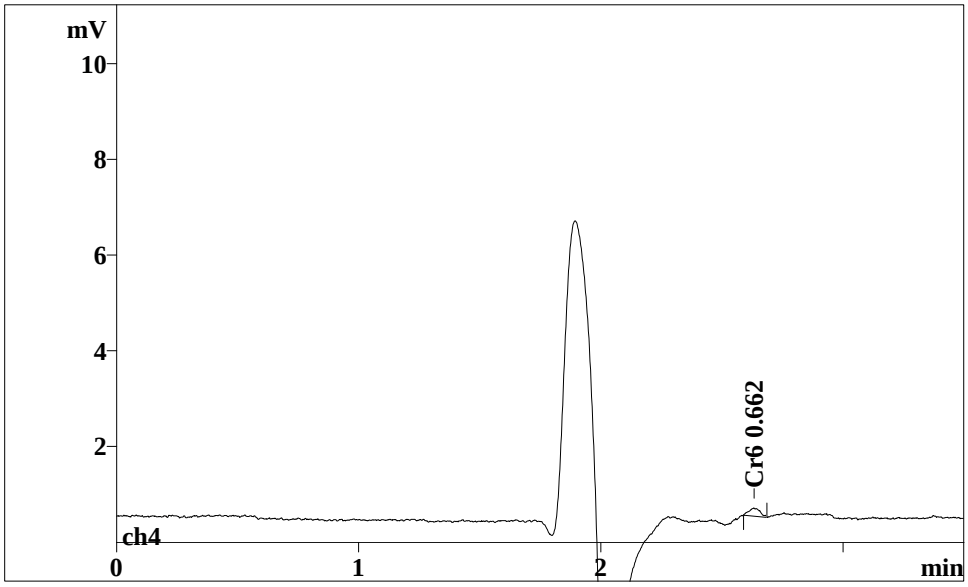
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36196

SAMPLE:
:
Vial number: 21
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.63;	0.051;	0.17;	96.26;	0.547;	100.00;	0.00;	0.00;	160

Report date: 5/9/2012 11:48:06 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10
Analysis from: 4/26/2012 1:41:05 PM
File: w4261341.chw Last save: 4/26/2012 1:44:36 PM

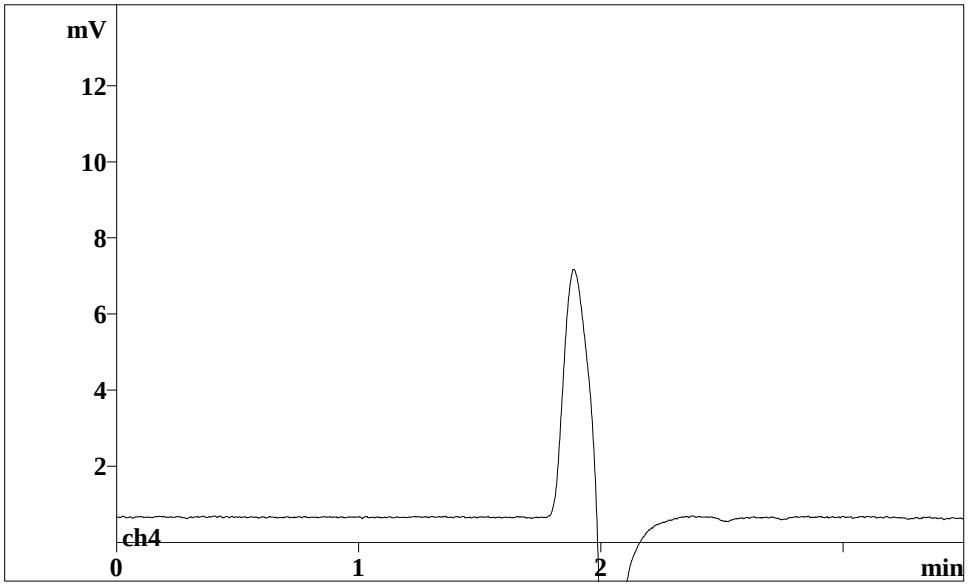
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36197

SAMPLE:
:
Vial number: 22
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:48:11 AM
Printed by: TestAmerica - Edison

Ident: 0042-07@10
Analysis from: 4/26/2012 1:49:27 PM
File: w4261349.chw Last save: 4/26/2012 1:52:57 PM

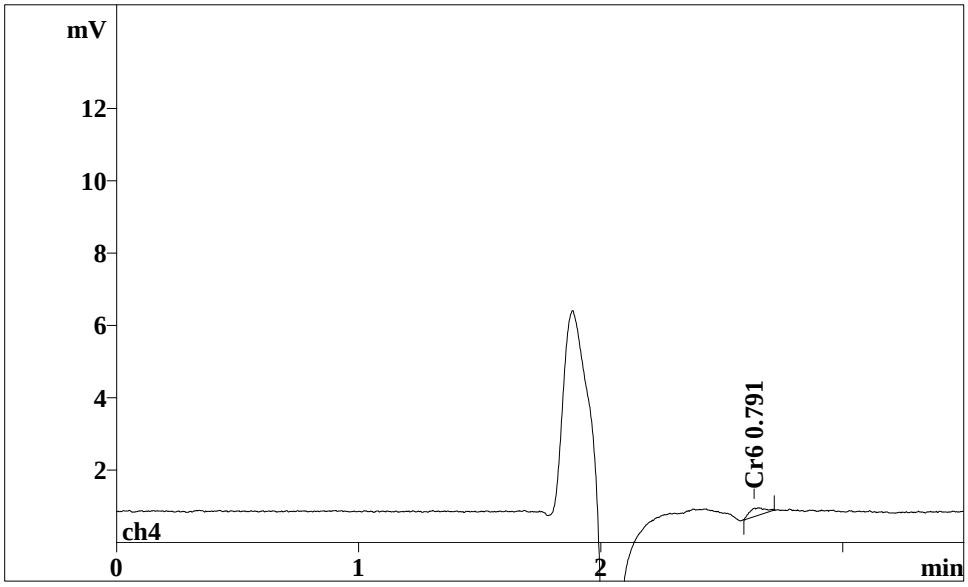
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36198

SAMPLE:
:
Vial number: 23
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.63;	0.070;	0.23;	99.79;	0.928;	100.00;	0.00;	0.00;	94

Report date: 5/9/2012 11:48:15 AM
Printed by: TestAmerica - Edison

Ident: EB-042512-GW
Analysis from: 4/26/2012 1:57:49 PM
File: w4261357.chw Last save: 4/26/2012 2:01:20 PM

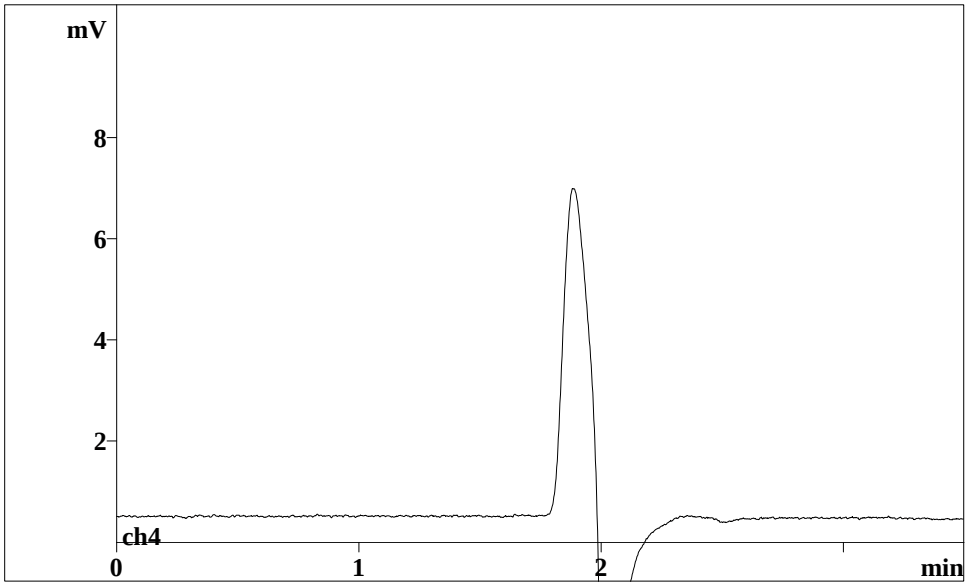
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36199

SAMPLE:
:
Vial number: 24
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:48:19 AM
Printed by: TestAmerica - Edison

Ident: 0042-02@10
Analysis from: 4/26/2012 2:06:11 PM
File: w4261406.chw Last save: 4/26/2012 2:09:42 PM

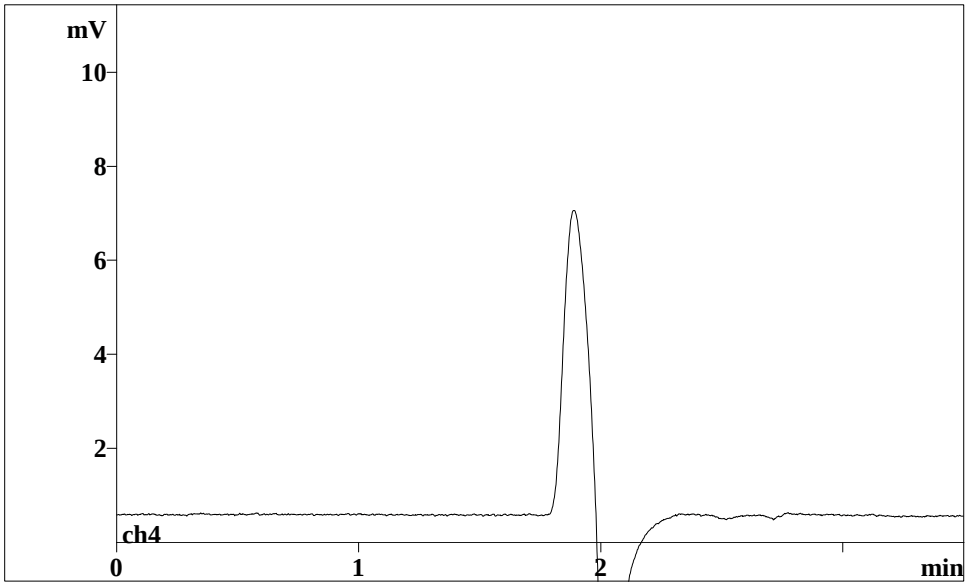
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36200

SAMPLE:
:
Vial number: 25
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:48:24 AM
Printed by: TestAmerica - Edison

Ident: 0042-03@10
Analysis from: 4/26/2012 2:14:33 PM
File: w4261414.chw Last save: 4/26/2012 2:18:04 PM

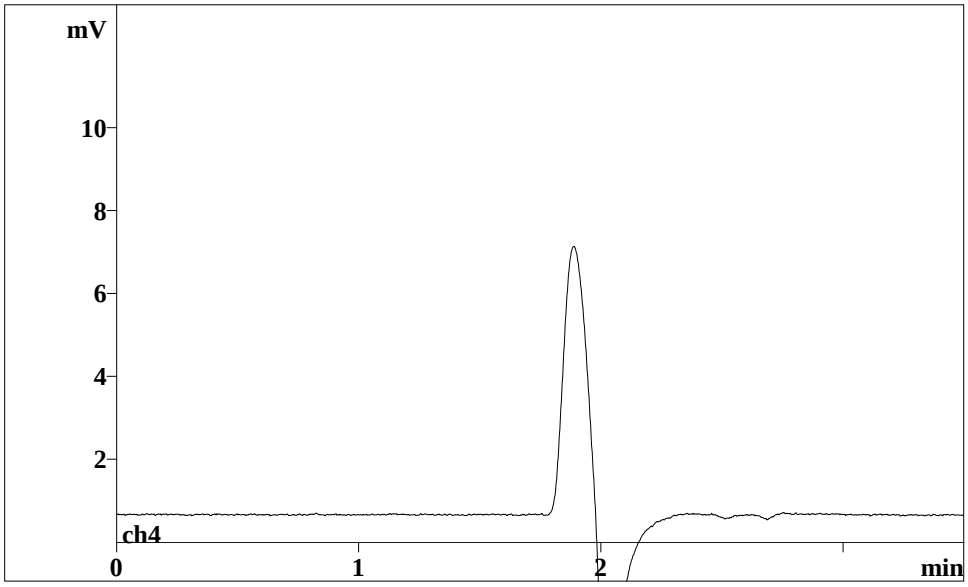
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36201

SAMPLE:
:
Vial number: 26
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:48:29 AM
Printed by: TestAmerica - Edison

Ident: MW-21-042512@50
Analysis from: 4/26/2012 2:22:55 PM
File: w4261422.chw Last save: 4/26/2012 2:26:25 PM

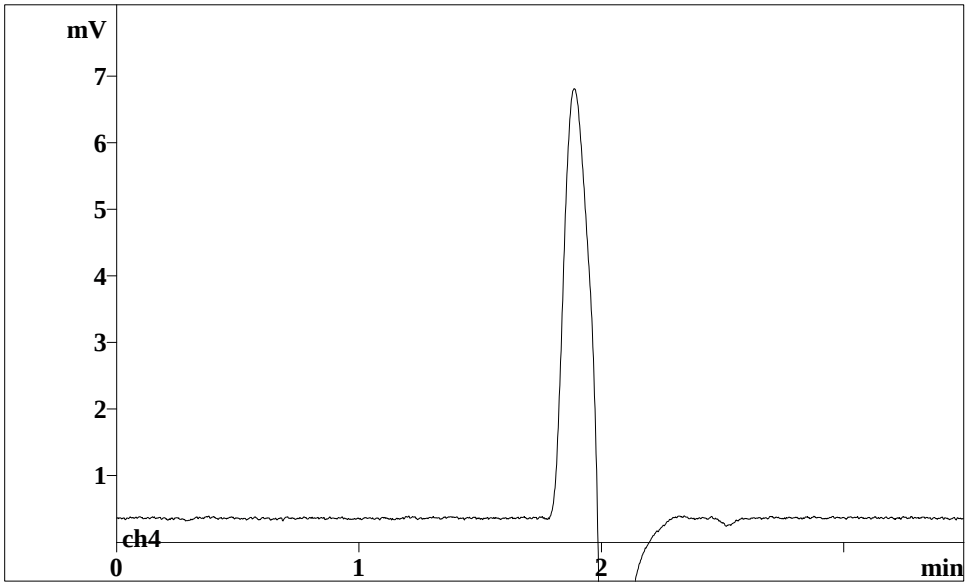
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36202

SAMPLE:
:
Vial number: 27
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:48:33 AM
Printed by: TestAmerica - Edison

Ident: 0042-01@10
Analysis from: 4/26/2012 2:31:16 PM
File: w4261431.chw Last save: 4/26/2012 2:34:46 PM

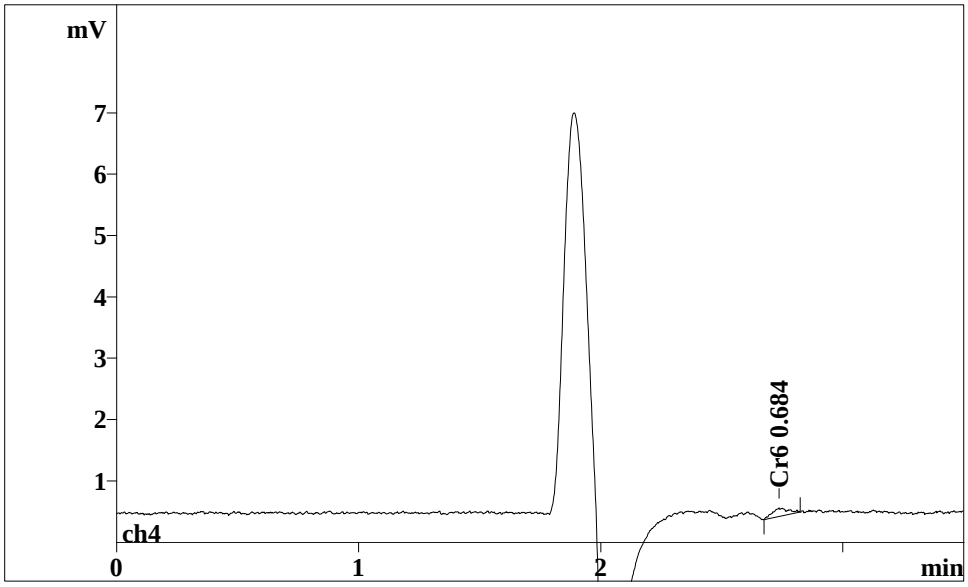
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36203

SAMPLE:
:
Vial number: 28
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.74;	0.061;	0.13;	95.20;	0.611;	100.00;	0.00;	0.00;	90

Report date: 5/9/2012 11:48:37 AM
Printed by: TestAmerica - Edison

Ident: 0042-05@10
Analysis from: 4/26/2012 2:39:37 PM
File: w4261439.chw Last save: 4/26/2012 2:43:07 PM

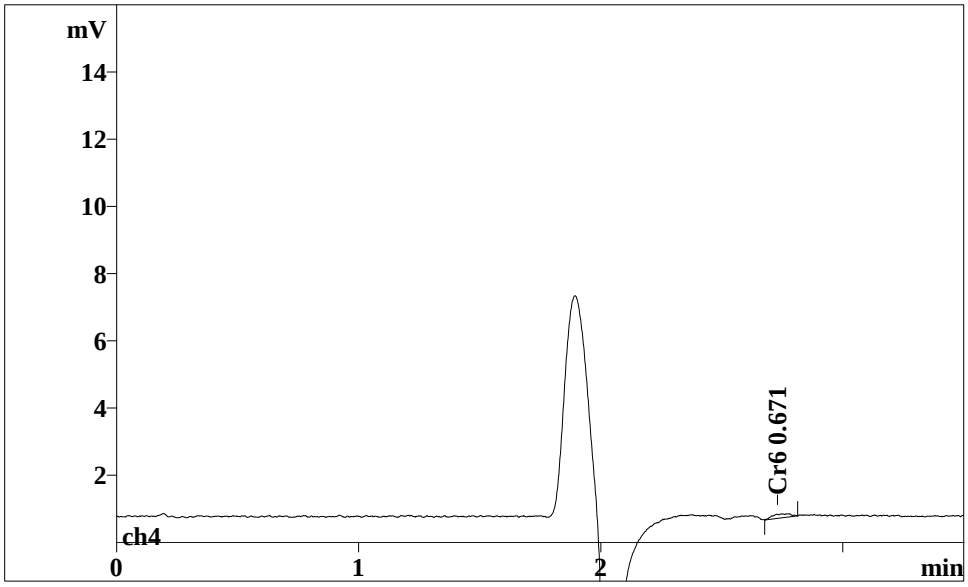
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36204

SAMPLE:
:
Vial number: 29
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.73;	0.085;	0.12;	100.30;	0.573;	100.00;	0.00;	0.00;	74

Report date: 5/9/2012 11:48:40 AM
Printed by: TestAmerica - Edison

Ident: CCV
Analysis from: 4/26/2012 2:47:57 PM
File: w4261447.chw Last save: 4/26/2012 2:51:27 PM

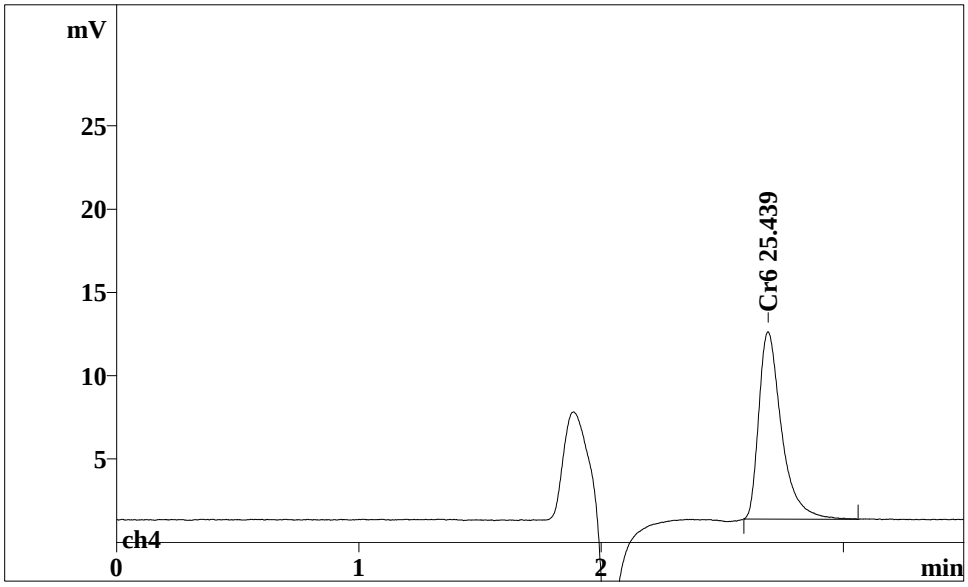
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36205

SAMPLE:
:
Vial number: 30
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.095;	11.26;	100.00;	73.530;	100.00;	0.00;	0.00;	38

Report date: 5/9/2012 11:48:45 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/26/2012 2:56:16 PM
File: w4261456.chw Last save: 4/26/2012 2:59:46 PM

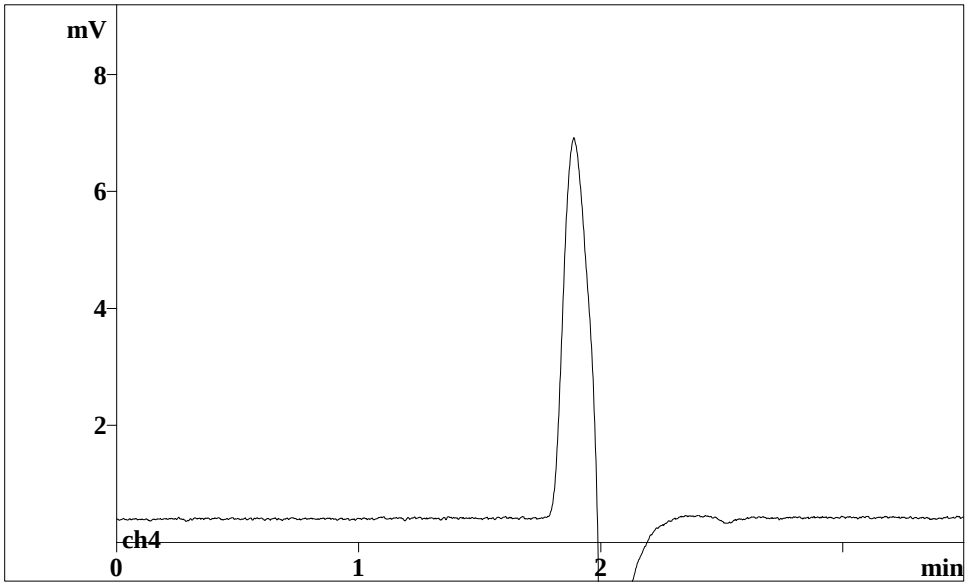
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36206

SAMPLE:
:
Vial number: 31
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:48:49 AM
Printed by: TestAmerica - Edison

Ident: 0042-06@10
Analysis from: 4/26/2012 3:04:34 PM
File: w4261504.chw Last save: 4/26/2012 3:08:05 PM

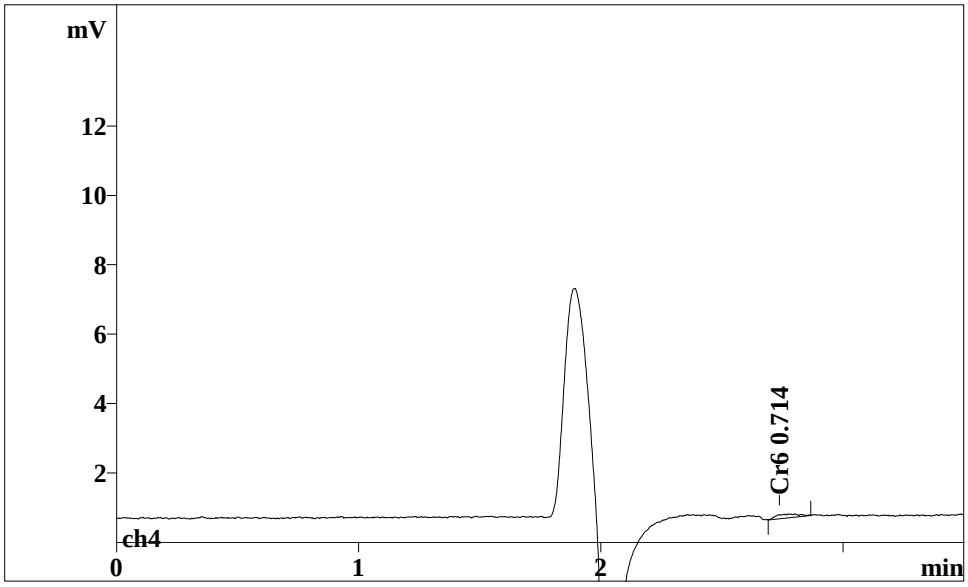
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36207

SAMPLE:
:
Vial number: 32
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.74;	0.098;	0.11;	96.40;	0.700;	100.00;	0.00;	0.00;	48

Report date: 5/9/2012 11:48:54 AM
Printed by: TestAmerica - Edison

Ident: MW-32-042512@20
Analysis from: 4/26/2012 3:12:52 PM
File: w4261512.chw Last save: 4/26/2012 3:16:22 PM

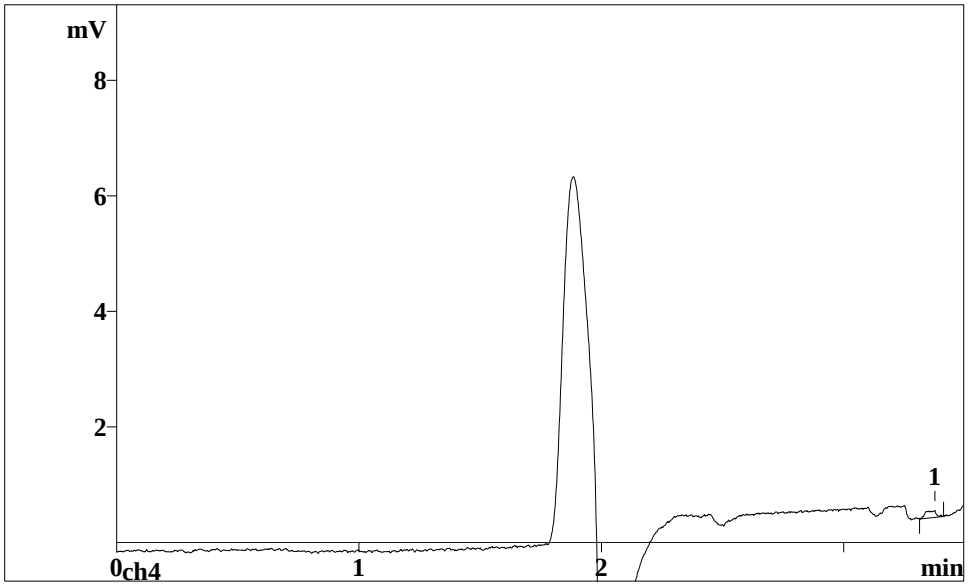
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36208

SAMPLE:
:
Vial number: 33
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;
1;	0.00;	0.000;	0.00;	0.00;	0.000;	0.00;	0.00;	0.00;

Report date: 5/9/2012 11:48:58 AM
Printed by: TestAmerica - Edison

Ident: MW-?
Analysis from: 4/26/2012 3:21:10 PM
File: w4261521.chw Last save: 4/26/2012 3:24:40 PM

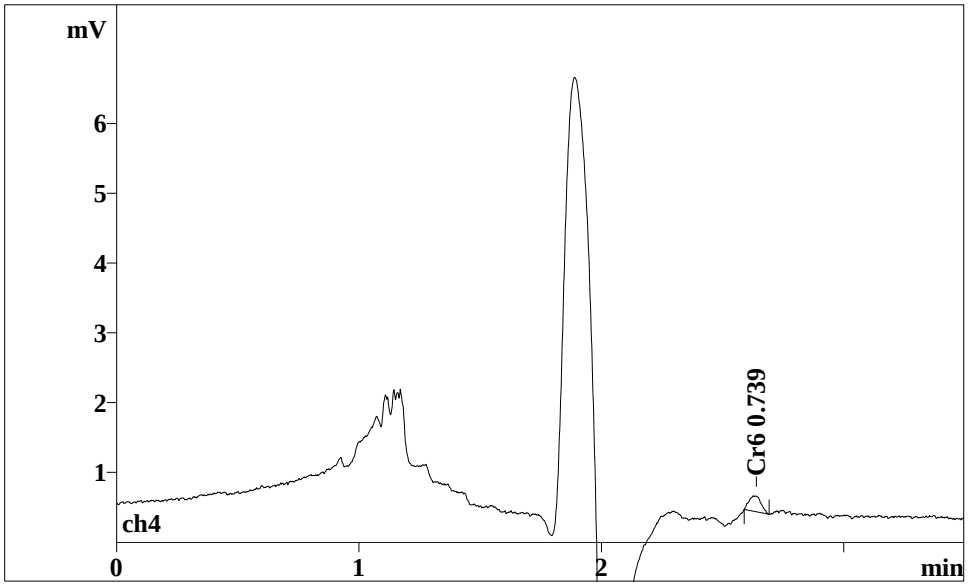
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36209

SAMPLE:
:
Vial number: 34
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.64;	0.056;	0.23;	99.10;	0.775;	100.00;	0.00;	0.00;	136

Report date: 5/9/2012 11:49:03 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10
Analysis from: 4/26/2012 3:29:26 PM
File: w4261529.chw Last save: 4/26/2012 3:32:57 PM

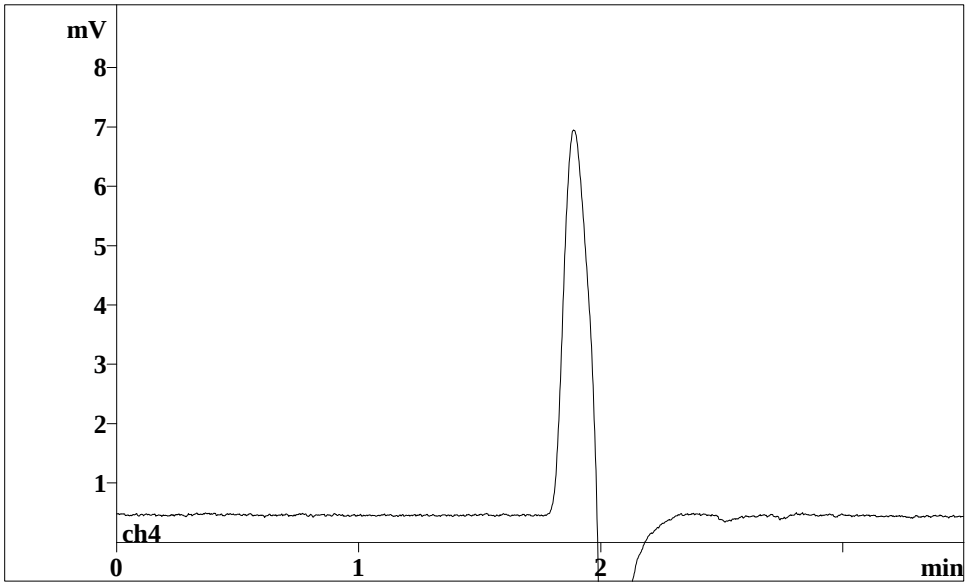
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36210

SAMPLE:
:
Vial number: 35
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:49:06 AM
Printed by: TestAmerica - Edison

Ident: 0042-07@10
Analysis from: 4/26/2012 3:37:43 PM
File: w4261537.chw Last save: 4/26/2012 3:41:13 PM

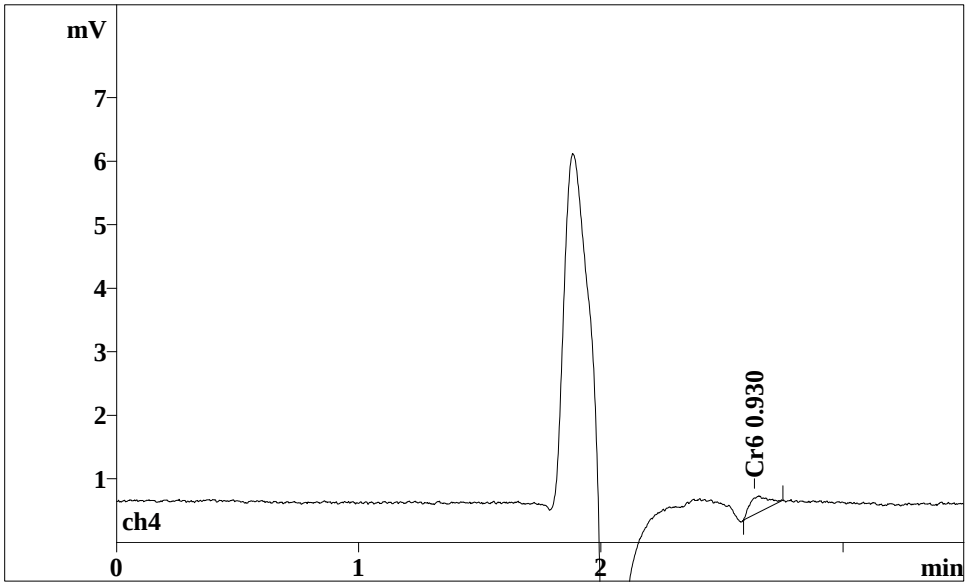
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36211

SAMPLE:
:
Vial number: 36
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.63;	0.083;	0.26;	99.29;	1.338;	100.00;	0.00;	0.00;	58

Report date: 5/9/2012 11:49:10 AM
Printed by: TestAmerica - Edison

Ident: EB-042512-GW
Analysis from: 4/26/2012 3:45:58 PM
File: w4261545.chw Last save: 4/26/2012 3:49:28 PM

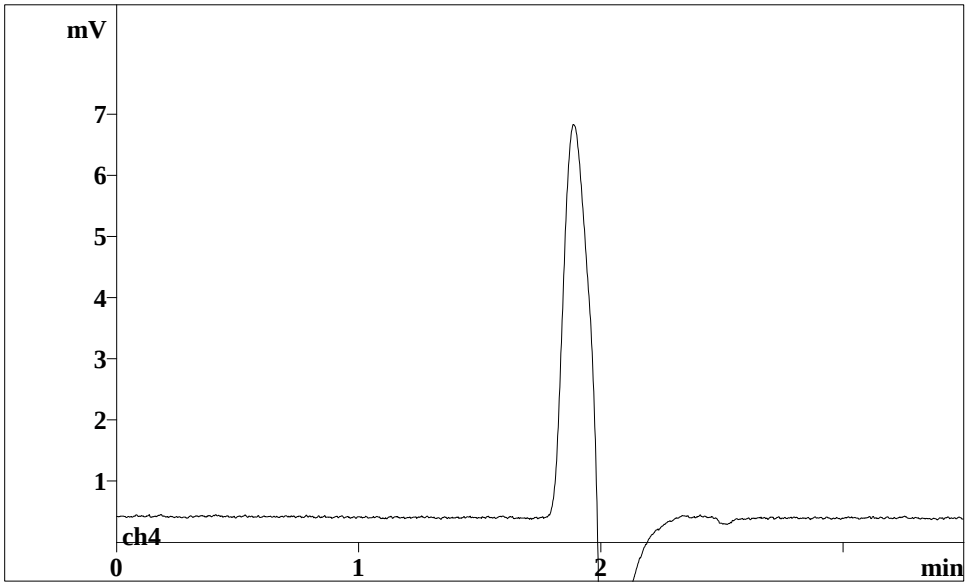
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36212

SAMPLE:
:
Vial number: 37
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:49:14 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10 PS
Analysis from: 4/26/2012 3:54:13 PM
File: w4261554.chw Last save: 4/26/2012 3:57:43 PM

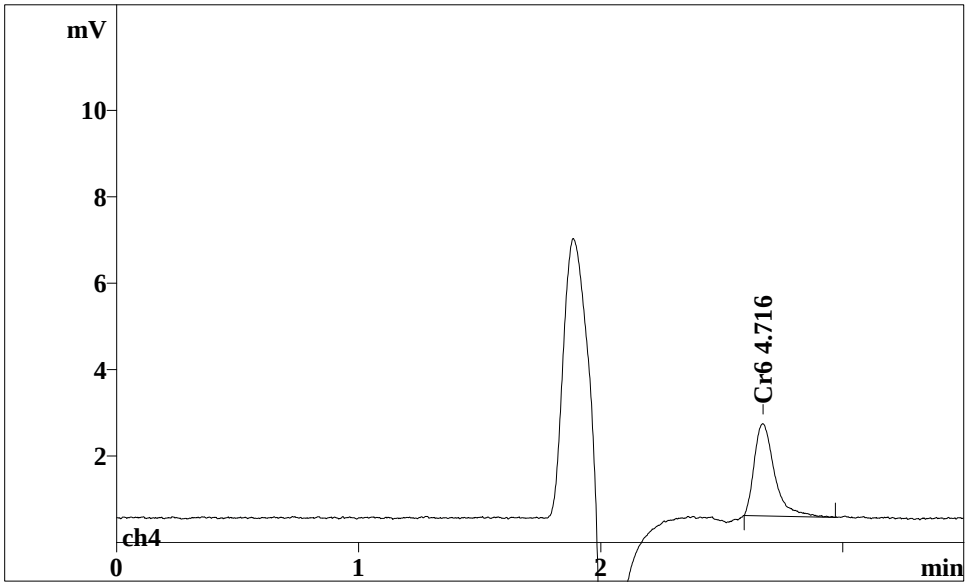
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36213

SAMPLE:
:
Vial number: 38
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.67;	0.085;	2.14;	99.95;	12.489;	100.00;	0.00;	0.00;	47

Report date: 5/9/2012 11:49:18 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10 PS
Analysis from: 4/26/2012 4:02:27 PM
File: w4261602.chw Last save: 4/26/2012 4:05:58 PM

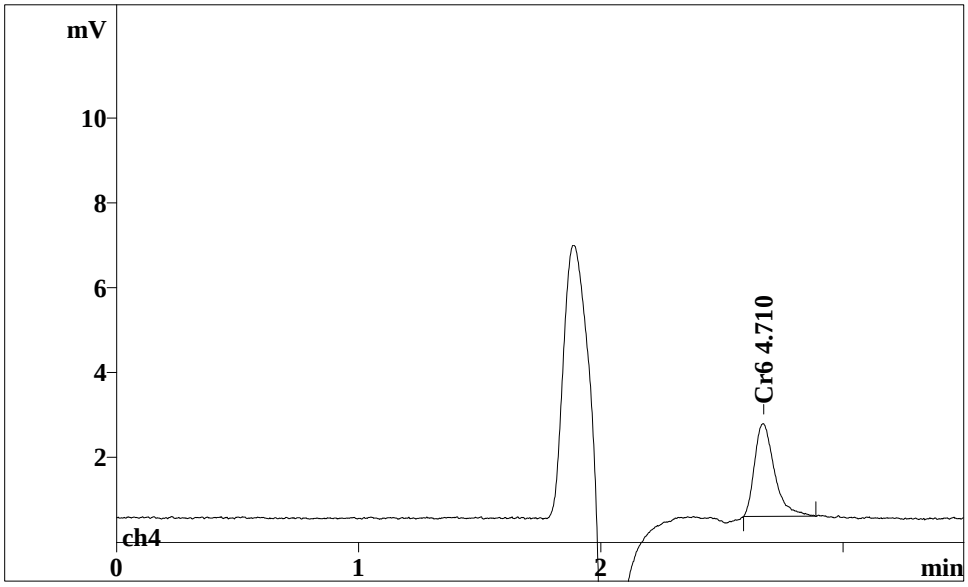
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36214

SAMPLE:
:
Vial number: 39
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.67;	0.085;	2.19;	100.09;	12.470;	100.00;	0.00;	0.00;	49

Report date: 5/9/2012 11:49:22 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10 MS
Analysis from: 4/26/2012 4:10:41 PM
File: w4261610.chw Last save: 4/26/2012 4:14:11 PM

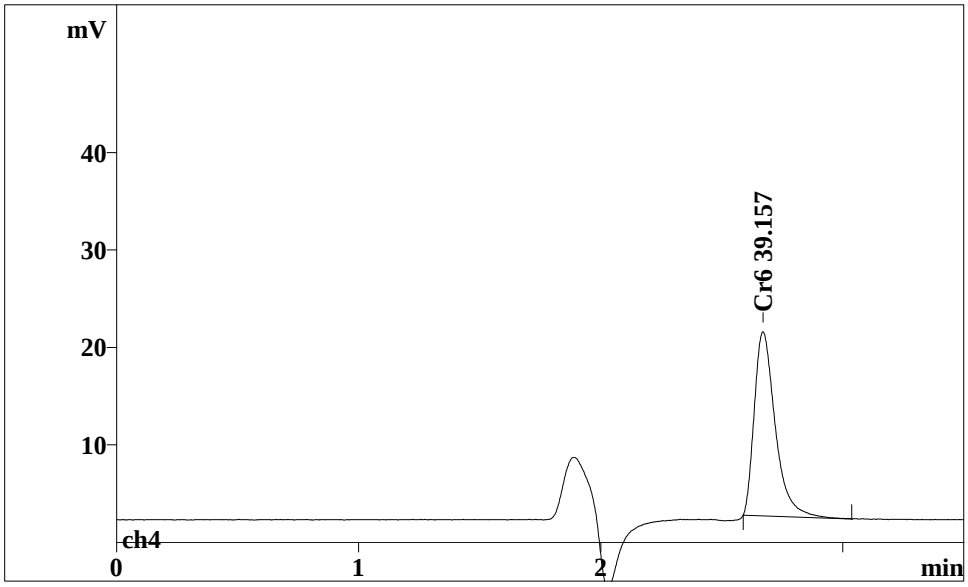
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36215

SAMPLE:
:
Vial number: 40
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.67;	0.090;	18.90;	99.97;	113.936;	100.00;	0.00;	0.00;	44

Report date: 5/9/2012 11:49:26 AM
Printed by: TestAmerica - Edison

Ident: 0042-04@10 MSD
Analysis from: 4/26/2012 4:18:53 PM
File: w4261618.chw Last save: 4/26/2012 4:22:24 PM

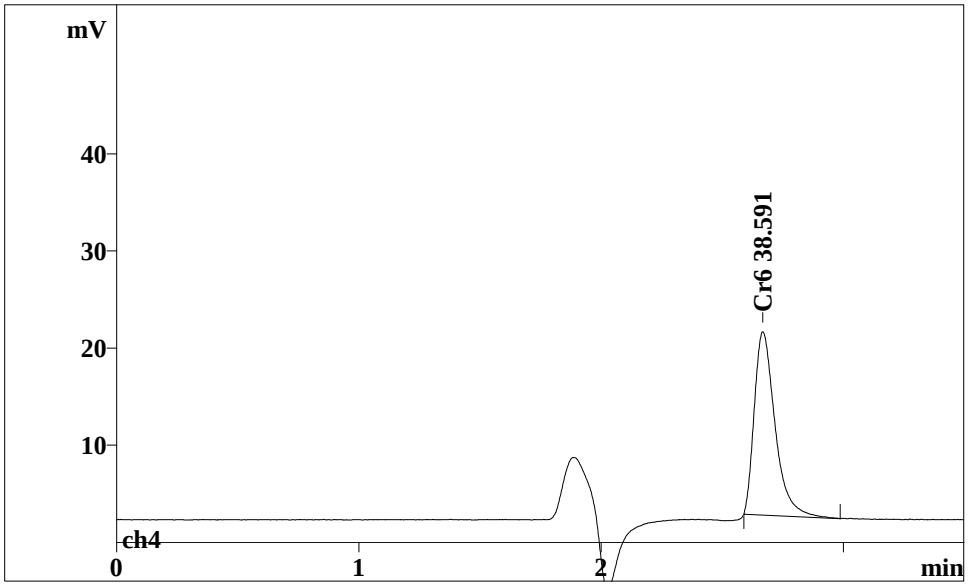
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36216

SAMPLE:
:
Vial number: 41
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.67;	0.089;	18.88;	100.03;	112.269;	100.00;	0.00;	0.00;	45

Report date: 5/9/2012 11:49:30 AM
Printed by: TestAmerica - Edison

Ident: CCV
Analysis from: 4/26/2012 4:27:06 PM
File: w4261627.chw Last save: 4/26/2012 4:30:36 PM

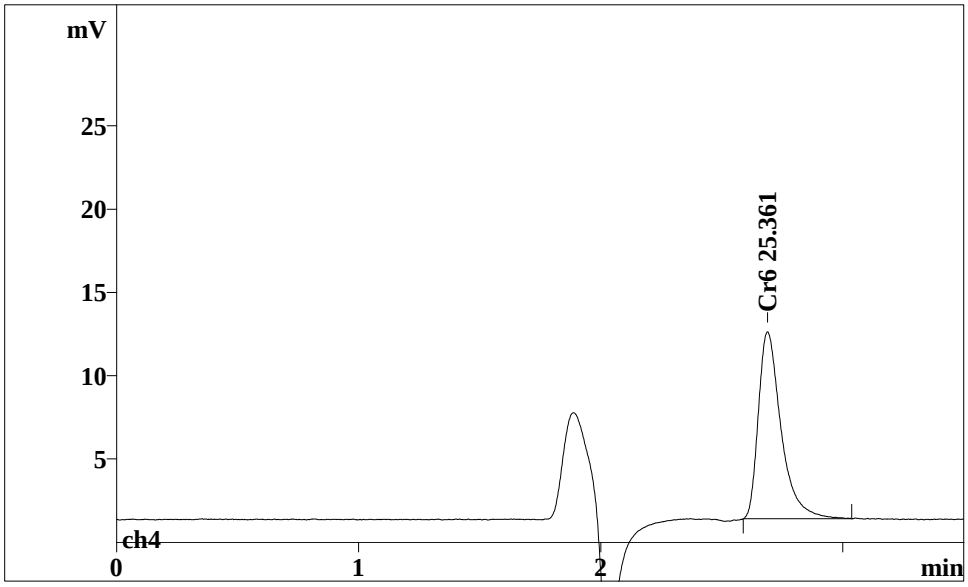
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36217

SAMPLE:
:
Vial number: 42
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.095;	11.23;	99.97;	73.301;	100.00;	0.00;	0.00;	38

Report date: 5/9/2012 11:49:34 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/26/2012 4:35:18 PM
File: w4261635.chw Last save: 4/26/2012 4:38:48 PM

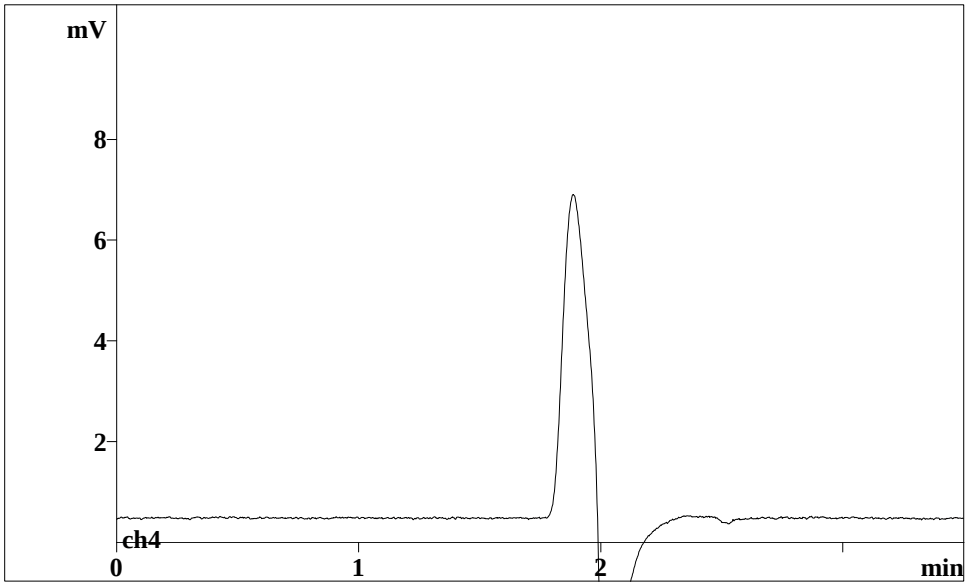
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36218

SAMPLE:
:
Vial number: 43
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Report date: 5/9/2012 11:49:38 AM
Printed by: TestAmerica - Edison

Ident: MW-21@5
Analysis from: 4/26/2012 4:43:29 PM
File: w4261643.chw Last save: 4/26/2012 4:46:59 PM

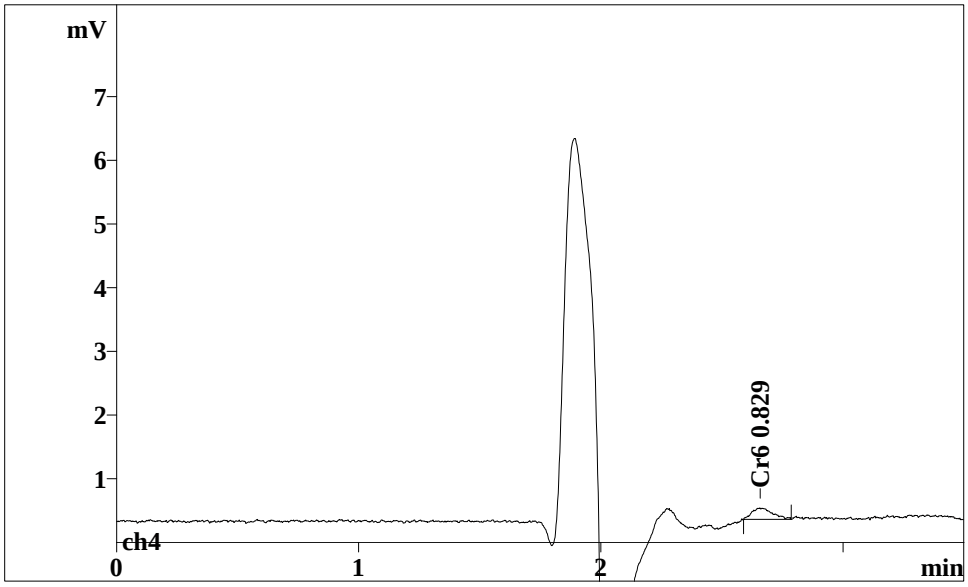
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36219

SAMPLE:
:
Vial number: 44
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.65;	0.090;	0.17;	96.06;	1.041;	100.00;	0.00;	0.00;	47

Report date: 5/9/2012 11:49:43 AM
Printed by: TestAmerica - Edison

Ident: MW-21@5
Analysis from: 4/26/2012 4:51:42 PM
File: w4261651.chw Last save: 4/26/2012 4:55:13 PM

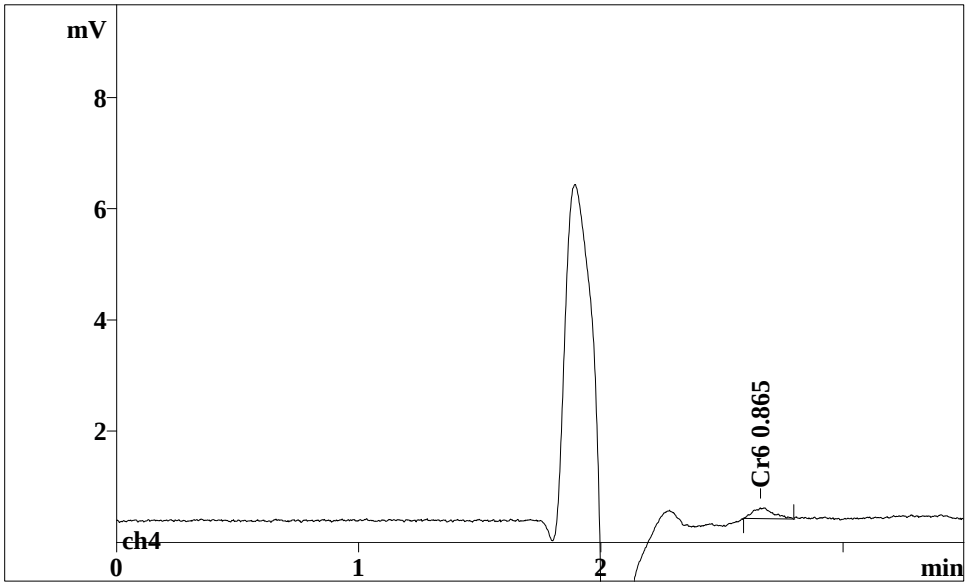
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36220

SAMPLE:
:
Vial number: 45
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.66;	0.089;	0.19;	96.51;	1.146;	100.00;	0.00;	0.00;	44

Report date: 5/9/2012 11:49:47 AM
Printed by: TestAmerica - Edison

Ident: MW-32@2
Analysis from: 4/26/2012 4:59:54 PM
File: w4261659.chw Last save: 4/26/2012 5:03:24 PM

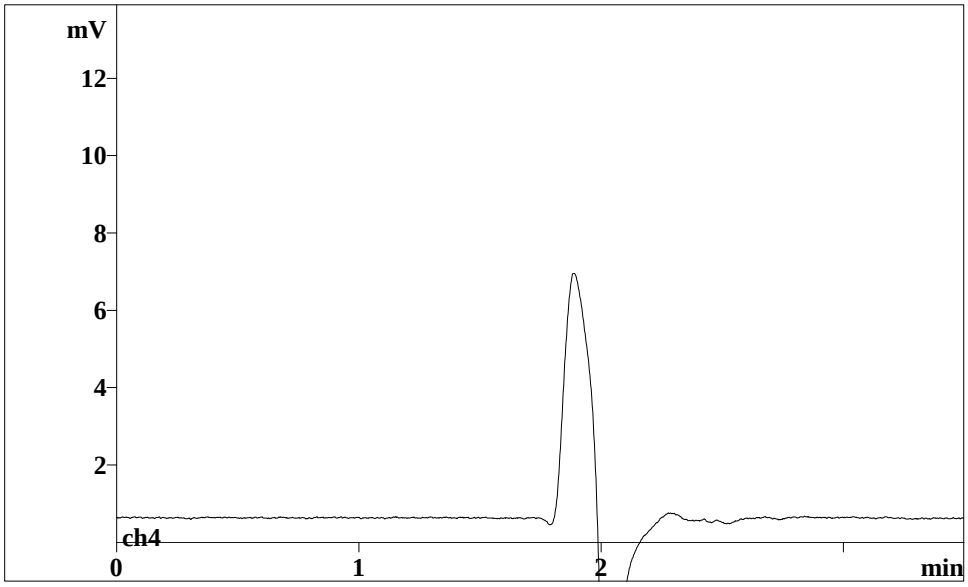
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36221

SAMPLE:
:
Vial number: 46
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:49:51 AM
Printed by: TestAmerica - Edison

Ident: MW-32@2
Analysis from: 4/26/2012 5:08:06 PM
File: w4261708.chw Last save: 4/26/2012 5:11:36 PM

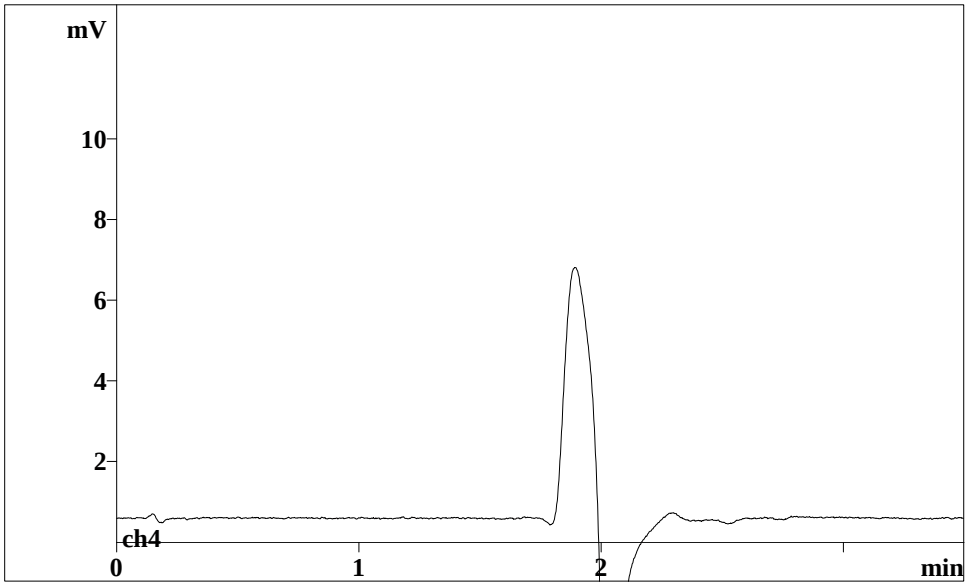
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36222

SAMPLE:
:
Vial number: 47
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.2 MPa



No peaks

Report date: 5/9/2012 11:50:51 AM
Printed by: TestAmerica - Edison

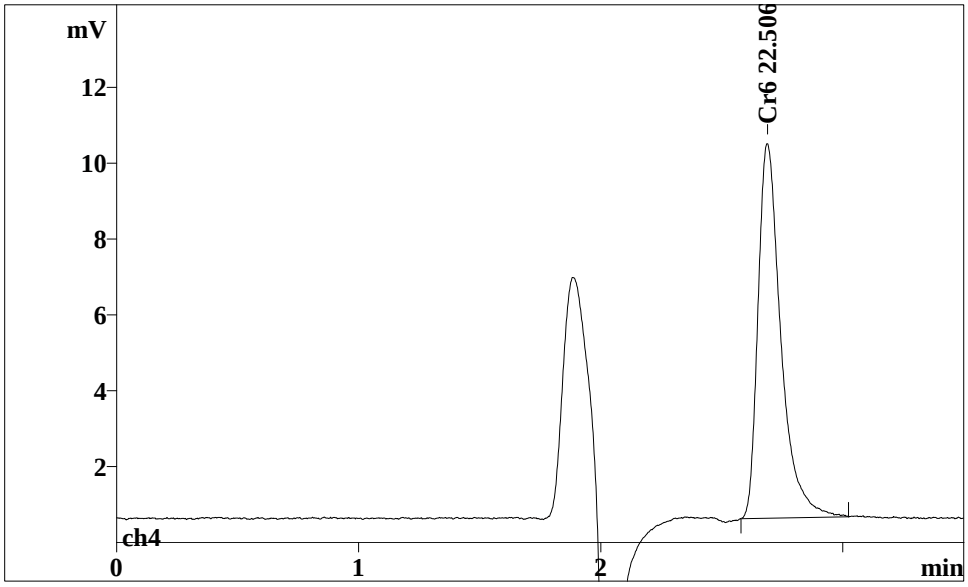
Ident: CCV
Analysis from: 4/26/2012 5:16:19 PM
File: w4261716.chw Last save: 4/26/2012 5:19:49 PM
Modified!
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36223

SAMPLE:
:
Vial number: 48
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No;	Retention;	Width/2;	Height;	Height;	Area;	Area;	K';	Resolution;	
;	min;	min;	mV;	%;	mV*sec;	%;	;	n,n+1;	
1;	2.69;	0.096;	9.89;	100.05;	64.889;	100.00;	0.00;	0.00;	37

Report date: 5/9/2012 11:50:59 AM
Printed by: TestAmerica - Edison

Ident: CCB
Analysis from: 4/26/2012 5:24:32 PM
File: w4261724.chw Last save: 4/26/2012 5:28:02 PM

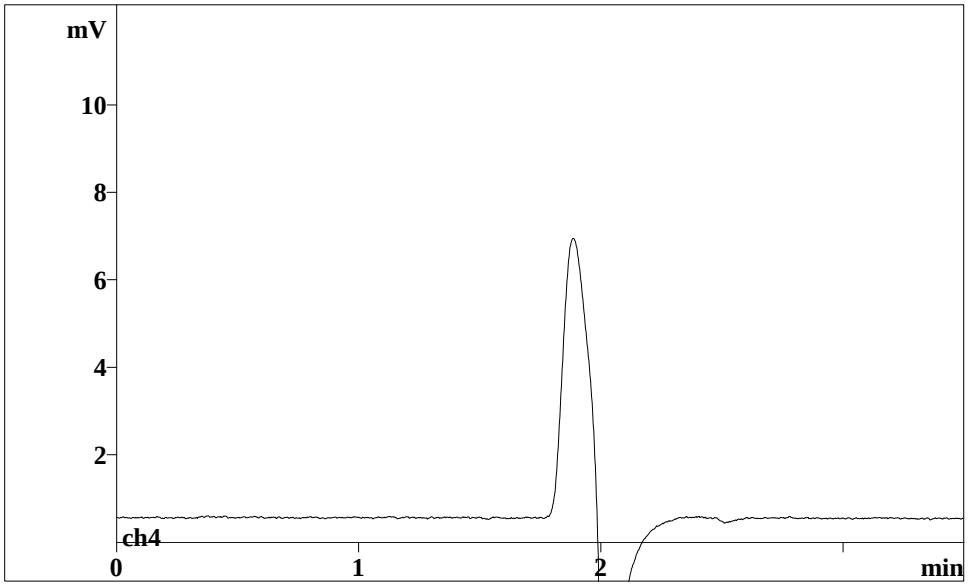
Method: stl_hexchrome_water5.mtw Last save: 4/26/2012 12:03
Run operator: TestAmerica - Edison
Analysis number: 36224

SAMPLE:
:
Vial number: 49
Volume: 1.0 µL
Dilution: 1.00
Amount: 1.0000

COLUMN: A Supp 5-150
Size: 4.6 x 150 mm
Number:
Part.size: 7.0 µm

ELUENT: 250 mM (NH4)SO4 / 100 mM NH4OH

Flow: 0.75 mL/min
Temperature: 35.0°C
Pressure: 7.1 MPa



No peaks

Dilution Form
Wet Chemistry

Method No.: 7199 Analyst: RK

Prep Batch: NA Analysis Date: 4/26/12

Analytical Batch: 112060

Job/Sample Number	Dilution Factor	Sample Volume (ml)	Final Volume (ml)	Diluent
180-10163-2	10X	5	50	Dilution water
180-10163-3	10X	5		
39532-1	50X	1		
180-10163-1	10X	5		
39532-3	20X	2.5		
180-10163-4	10X	5		
180-10163-7	10X	5		
180-10163-4 MS	10X	5		
180-10163-4 PDS	10X	5		
39532-1	5X	10		
39532-3	2X	25		

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Batch Number: 111866 Batch Start Date: 04/18/12 09:51 Batch Analyst: Kamenetskaya, Raisa

Batch Method: 7199 Batch End Date: 04/18/12 13:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	Initial pH	WThcrIM5 00378	WThcrIM6 00367	WThcrsLCS 00057	AnalysisComment
ICV 460-111866/6		7199		100 mL	9.36		2.5 mL		All samples run in duplicate as per the method. Higher result reported as primary, lower result rejected.
ICB 460-111866/7		7199			9.39				Initial pH = pH (in SU between 9 and 9.5) after adjustment with IC buffer reagent
MB 460-111866/9		7199			9.39				
LCS 460-111866/11		7199		100 mL	9.34			0.17 mL	
CCV 460-111866/18		7199		100 mL	9.36		2.5 mL		
CCB 460-111866/19		7199			9.39				
360-40055-A-6 DU		7199	T		9.30				
360-40055-A-6 PDS		7199	T	50 mL	9.34	0.25 mL			
360-40055-A-6 MS		7199	T	50 mL	9.37	2 mL			
CCV 460-111866/26		7199		100 mL	9.36		2.5 mL		
CCB 460-111866/27		7199			9.39				

Batch Notes	
Batch Comment	Cal curve: IC (1717-1720) 12; CCV: IC (1721) 12 exp: 4/18/12
Buffer Lot #	C-7908-12 exp: 8/17/12
Eluent 1 Lot	1186-12 exp: 4/24/12
Filter Lot #	Nalgene Lot # 1062377
pH Meter ID	D
Post Column Reagent Lot	1187-12 exp: 4/22/12

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Batch Number: 111866 Batch Start Date: 04/18/12 09:51 Batch Analyst: Kamenetskaya, Raisa

Batch Method: 7199 Batch End Date: 04/18/12 13:25

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Batch Number: 112060 Batch Start Date: 04/26/12 10:33 Batch Analyst: Kamenetskaya, Raisa

Batch Method: 7199 Batch End Date: 04/26/12 17:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	Initial pH	WThcrIM5 00382	WThcrIM6 00371	WThcrsLCS 00057	AnalysisComment
ICV 460-112060/6		7199		100 mL	9.40		2.5 mL		All samples run in duplicate as per the method. Higher result reported as primary, lower result rejected.
ICB 460-112060/7		7199			9.42				Initial pH = pH (in SU between 9 and 9.5) after adjustment with IC buffer reagent
MB 460-112060/9		7199			9.42				
LCS 460-112060/10		7199		100 mL	9.36			0.17 mL	
CCV 460-112060/19		7199		100 mL	9.40		2.5 mL		
CCB 460-112060/20		7199			9.42				
460-39532-A-4	EB-042512-GW	7199	T		9.39				
CCV 460-112060/31		7199		100 mL	9.40		2.5 mL		
CCB 460-112060/32		7199			9.42				
460-39532-A-2	MW-23-042512	7199	T		9.28				
180-10163-A-4 PDS ^10		7199	T	50 mL	9.46	0.25 mL			
180-10163-A-4 MS ^10		7199	T	50 mL	9.36	2 mL			
CCV 460-112060/43		7199		100 mL	9.40		2.5 mL		
CCB 460-112060/44		7199			9.42				
460-39532-A-1 ^5	MW-21-042512	7199	T		9.29				
460-39532-A-3 ^2	MW-32-042512	7199	T		9.31				
CCV 460-112060/49		7199		100 mL	9.40		2.5 mL		
CCB 460-112060/50		7199			9.42				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-39532-1

SDG No.:

Batch Number: 112060 Batch Start Date: 04/26/12 10:33 Batch Analyst: Kamenetskaya, Raisa

Batch Method: 7199 Batch End Date: 04/26/12 17:24

Batch Notes	
Batch Comment	Cal curve: IC (1747-1750) 12; CCV: IC (1751) 12 exp: 4/26/12
Buffer Lot #	C-7908-12 exp: 8/17/12
Eluent 1 Lot	1195-12 exp: 5/2/12
Filter Lot #	Nalgene Lot # 1062377
pH Meter ID	D
Post Column Reagent Lot	1197-12 exp: 5/1/12

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

CHAIN OF CUSTODY / ANALYSIS REQUEST

042512-2

TestAmerica
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

05/16/2012

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
Dave Newman	**G Sharkey / M Murphy / A Crane**	**Dow Waterloo**
Company: **CH2M HILL**	P.O. # **434426.01.gw.fs**	State (Location of site): NJ: ☐ NY: X Other:
		Regulatory Program:
Address: **119 Cherry Hill Rd Ste 300**	Analysis Turnaround Time: Standard X per contract	LAB USE ONLY Project No:
City: **Parsippany** State: **NJ 07054**	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	Job No: 39632
Phone: **973-316-9300** Fax: **973-334-5847**		

Sample Identification	Date	Time	Matrix	No. of Cont.	Hexavalent Chromium (SW7199)	Sample Numbers
MW-21-042512	4/25/12	9:11	WG	1	X	1
MW-23-042512	4/25/12	10:48	WG	1	X	2
MW-32-042512	4/25/12	12:45	WG	1	X	3
EB-042512-GW	4/25/12	15:55	WG	1	X	4

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:
6 = Other _____, 7 = Other _____ — Water: 1

Special Instructions _____ Water Metals Filtered (Yes/No)? No

Relinquished by	Company	Date / Time	Received by	Company
1)	CH2M HILL	4/25/12	1) Fed Ex	
Relinquished by 2)	Company	Date / Time	Received by 2)	Company 4/26/2012 9:15
Relinquished by 3)	Company	Date / Time	Received by 3) 4/26/2012 9:15	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company Client Custody Seal

Short Hold

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 460-39532-1

Login Number: 39532

List Source: TestAmerica Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	Client Custody Seal received.
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3 ° C IR #50
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.